

Performance Profiles of Major Energy Producers 2006

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Contents

Contacts	ii
Major Findings	vii
Financial Developments	1
<i>Net Income and Profitability</i>	1
<i>Sources and Uses of Cash</i>	6
<i>Capital Expenditures</i>	8
<i>Regional Exploration and Development Expenditures</i>	9
<i>Refining and Marketing Capital Expenditures</i>	13
Oil and Natural Gas Production	15
<i>Oil and Natural Gas Reserve Additions</i>	15
<i>Oil and Natural Gas Reserve Replacement</i>	17
<i>Upstream Income</i>	20
<i>Lifting Costs</i>	21
<i>Finding Costs</i>	23
<i>Total Costs</i>	25
<i>Spending to Replace Oil and Natural Gas Production by the FRS Companies</i>	25
Refining and Marketing	27
<i>U.S. Refining/Marketing</i>	27
<i>Revenues and Costs</i>	28
<i>Operational Changes</i>	32
<i>Foreign Refining/Marketing</i>	37
<i>Consolidated Operations</i>	39
<i>Unconsolidated Operations</i>	40
About the Financial Reporting System Companies	43
<i>Changes in the Financial Reporting System Companies for the 2006 Reporting Year</i>	43
<i>The FRS Companies' Importance in the U.S. Economy</i>	44
<i>About Performance Profiles and the Financial Reporting System</i>	45
Overview of 2006 Petroleum and Natural Gas Markets	49
Acronyms	53
Brief Description of Financial Terms	55
(Glossary available on EIA's Web site at http://www.eia.doe.gov/emeu/perfpro/glossary.html)	
Appendices	
A. The Financial Reporting System (FRS).....	57
B. Detailed Statistical Tables.....	59

Tables

1.	Consolidated Income Statement for FRS Companies and Census' All Manufacturing Companies, 2005-2006.....	1
2.	Contributions to Net Income by Line of Business for FRS Companies, 2005-2006	4
3.	Sources and Uses of Cash for FRS Companies, 2005-2006	7
4.	Line-of-Business Contributions to Pretax Cash Flow, Income Taxes, and Cash Flow for FRS Companies, 2005-2006.....	7
5.	Additions to Investment in Place by Line of Business for FRS Companies, 2005-2006	9
6.	Value of Mergers, Acquisitions, and Related Transactions by FRS Companies, 2006	11
7.	Oil and Natural Gas Production by FRS Companies by Region, 2005-2006	15
8.	Oil and Natural Gas Reserve Replacement Rates by FRS Companies, 2005 and 2006	18
9.	Income Components and Financial Ratios in Oil and Natural Gas Production for FRS Companies, 2005 and 2006	21
10.	Lifting Costs for FRS Companies by Region, 2005 and 2006.....	22
11.	Finding Costs by Region for FRS Companies, 2003-2005 and 2004-2006.....	24
12.	Total Production Costs by Region for FRS Companies, 2003-2005 and 2004-2006	26
13.	Sales, Prices, Costs, and Margins in U.S. Refining/Marketing for FRS Companies, 2005-2006.....	28
14.	U.S. Refined Product Margins and Costs per Barrel Sold and Product Sales Volume for FRS Companies, 2005-2006	31
15.	U.S. and Foreign Refining/Marketing Financial Items for FRS Companies, 2005-2006.....	32
16.	U.S. and Foreign Refining/Marketing Investment and Refining Operating Items for FRS Companies, 2005-2006	33
17.	Motor Gasoline Distribution and Number of Direct-Supplied Branded Outlets for FRS Companies, 2005-2006.....	35
18.	U.S. Refinery Configurations of FRS Companies, Selected Years, 1974-2006	36
19.	Regional Distribution of Foreign Refinery Capacity for FRS Companies, 2005-2006	38
20.	The FRS Companies in 2006	43
21.	World Petroleum Balance, 2005-2006.....	51
22.	U.S. Petroleum Balance, 2005-2006.....	51
23.	U.S. Natural Gas Balance, 2005-2006	52
B1.	Selected U.S. Operating Statistics for FRS Companies and U.S. Industry, 2000-2006	59
B2.	Selected Financial Items for the FRS Companies and All Manufacturing Companies, 2005-2006.....	60
B3.	Balance Sheet Items and Financial Ratios for FRS Companies and All Manufacturing Companies, 2005-2006	60
B4.	Consolidated Balance Sheet for FRS Companies, 2000-2006.....	61
B5.	Consolidating Statement of Income for FRS Companies, 2006	62
B6.	Consolidating Statement of Income for FRS Companies, U.S. and Foreign Petroleum Segments, 2006.....	63
B7.	Net Property, Plant, and Equipment (PP&E), Additions to PP&E, Investments and Advances, and Depreciation, Depletion, and Amortization (DD&A), by Lines of Business for FRS Companies, 2006.....	64
B8.	Return on Investment for Lines of Business for FRS Companies Ranked by Total Energy Assets, 2005-2006	66
B9.	Research and Development Expenditures for FRS Companies, 2000-2006.....	66
B10.	Size Distribution of Net Investment in Place for FRS Companies Ranked by Total Energy Assets, 2006	67
B11.	Consolidated Statement of Cash Flows for FRS Companies, 2000-2006	68
B12.	Composition of Income Taxes for FRS Companies, 2000-2006	69
B13.	U.S. Taxes Other Than Income Taxes for FRS Companies, 2000-2006	70
B14.	Oil and Natural Gas Exploration and Development Expenditures for FRS Companies, United States and Foreign, 2000-2006.....	70

Tables (continued)

B15.	Components of U.S. and Foreign Exploration and Development Expenditures for FRS Companies, 2006.....	71
B16.	Exploration and Development Expenditures by Region for FRS Companies, 2000-2006.....	72
B17.	Production (Lifting) Costs by Region for FRS Companies, 2000-2006.....	73
B18.	Oil and Natural Gas Acreage for FRS Companies, 2000-2006.....	74
B19.	U.S. Net Wells Completed for FRS Companies and Industry, and Net In-Progress Wells at Year End for FRS Companies, 2000-2006.....	75
B20.	U.S. Net Drilling Footage and Net Producing Wells for FRS Companies and Industry, 2000-2006.....	76
B21.	Foreign Net Wells Completed, In-Progress Wells, and Producing Wells by Region for FRS Companies, 2000-2006.....	77
B22.	U.S. Net Wells Completed, and Average Depth, Onshore and Offshore, for FRS Companies, 2005 and 2006.....	79
B23.	Oil and Natural Gas Reserves for FRS Companies and U.S. Industry, 2006.....	80
B24.	Oil and Natural Gas Reserve Balances by Region for FRS Companies, 2006.....	81
B25.	Oil and Natural Gas Exploration and Development Expenditures, Reserves, and Production by Region for FRS Companies and Total Industry, 2006 and Percent Change from 2005.....	82
B26.	U.S. and Foreign Refining/Marketing Sources and Dispositions of Crude Oil and Natural Gas Liquids For FRS Companies, 2000-2006.....	84
B27.	U.S. Purchases and Sales of Oil, Natural Gas, Other Raw Materials, and Refined Products for FRS Companies, 2000-2006.....	85
B28.	U.S. and Foreign Petroleum Refining Statistics for FRS Companies, 2000-2006.....	86
B29.	U.S. and Foreign Refinery Output and Capacity for FRS Companies, Ranked by Total Energy Assets, and Industry, 2006.....	87
B30.	U.S. Refining/Marketing Dispositions of Refined Products by Channel of Distribution for FRS Companies, 2000-2006.....	88
B31.	Sales of U.S. Refined Products, by Volume and Price, for FRS Companies Ranked by Total Energy Assets, 2005-2006.....	89
B32.	U.S. Refining/Marketing Revenues and Costs for FRS Companies, 2000-2006.....	90
B33.	U.S. Petroleum Refining/Marketing General Operating Expenses for FRS Companies, 2000-2006.....	91
B34.	Consolidating Statement of Income for FRS Companies, U.S. and Foreign Downstream Natural Gas Segments, 2006.....	92
B35.	Consolidating Statement of Income for FRS Companies, U.S. and Foreign Electric Power Segments, 2006.....	93

Illustrations

1.	FRS Net Income, 1974-2006.....	2
2.	Return on Stockholders' Equity for FRS Companies and All Manufacturing Companies, 1974-2006.....	3
3.	Difference Between FRS and All Manufacturing Companies Return on Stockholders' Equity, 1974-2006.....	3
4.	Return on Net Investment in Place for U.S. and Foreign Oil and Natural Gas Production, 1977-2006.....	5
5.	U.S. Refined Product Margins and Costs per Barrel of Petroleum Product Sold for FRS Companies, 1984-2006.....	5
6.	Return on Net Investment in Place for U.S. and Foreign Refining/Marketing, 1977-2006.....	6
7.	Cash Flow from Operations and Exploration and Production (E&P) Expenditures for FRS Companies, 1986-2006.....	10
8.	FRS Worldwide Expenditures for Exploration, Development, and Production, 1981-2006.....	12
9.	FRS Expenditures for Oil and Natural Gas Exploration and Development by Region, 1997-2006.....	13
10.	Worldwide Oil and Natural Gas Production by FRS Companies, 1981-2006.....	16

Illustrations (continued)

11.	Worldwide Reserve Additions by FRS Companies by Type, 1981-2006.....	16
12.	Worldwide Reserve Replacement by FRS Companies, 1991-2006.....	19
13.	Cumulative Reserve Replacement by FRS Companies by Region, 2002-2006	19
14.	Direct Oil and Natural Gas Lifting Costs for FRS Companies, 1981-2006.....	22
15.	Finding Costs for FRS Companies, 1981-1983 to 2004-2006.....	24
16.	Finding Costs for FRS Companies by Region, 1999-2001 and 2004-2006.....	25
17.	Actual Spending to Find Reserves and Estimated Spending Necessary to Replace Production for FRS Companies, 1983-2006	26
18.	Return on Investment in U.S. and Foreign Refining/Marketing, and All Other Lines of Business for FRS Companies, 1980-2006	27
19.	Quarterly Average U.S. Commercial Petroleum Product Stocks, 2000-2004 Average, 2005, and 2006 ...	29
20.	Quarterly Average U.S. Motor Gasoline Stocks, 2000-2004 Average, 2005, and 2006	30
21.	Quarterly Average U.S. Crude Oil Stocks, 2000-2004 Average, 2005, and 2006.....	30
22.	FRS Company-Operated and Direct-Supplied Dealer Outlets, 1988-2006	35
23.	Resale Price Difference Between Motor Gasoline and Residual Fuel Oil, 1983-2006	36
24.	Price Difference between Light Crude Oil and Heavy Crude Oil, 1983-2006	37
25.	Foreign Refining/Marketing Net Income from Consolidated Operations and Unconsolidated Affiliates of FRS Companies, 1977-2006	39
26.	Petroleum Consumption by Region, 2001, 2005, and 2006	40
27.	Foreign Gross Refining Margins, 2004-2006	41
28.	Operating Revenues by Line of Business for FRS Companies, 1984-2006	45
29.	Shares of U.S. Energy Production and Refinery Capacity for FRS Companies, 1984-2006.....	46
30.	Imported Refiner Acquisition Cost of Crude Oil and Natural Gas Wellhead Prices, 1972-2006.....	49
31.	Refiner Prices of Petroleum Products for Resale, 1980-2006.....	50
32.	World Oil Consumption, Change from Previous Year, 1997-2006.....	51
33.	U.S. Petroleum Product Consumption, Change from Previous Year, 2004-2006	52

Major Findings

This edition of *Performance Profiles* reviews financial and operating data for the calendar year 2006. Although the focus is on 2006 activities and results, it also discusses important trends and emerging issues relevant to U.S. energy company operations.

The Financial Reporting System (FRS) companies reported record-high net income for the third consecutive year.

- The FRS companies' 2006 net income increased 7 percent (in constant 2006 dollars) from the 2005 level to \$131 billion, the highest in the history of the FRS survey. Operating revenues increased by 1 percent in 2006 from the 2005 level, driven by increases in crude oil and petroleum product prices, but tempered by a decline in natural gas wellhead prices.
- The FRS companies earned a 27-percent return on stockholders' equity (ROE) in 2006, down slightly from the peak of 28 percent in 2005 but more than 9 percentage points higher than the average ROE for the Census Bureau's All Manufacturing Companies.

Upstream profit growth slowed; downstream continued to set records.

- Among the FRS companies' lines of business and business segments, oil and natural gas production continued to be the most profitable, contributing \$92 billion in net income. This net income was the highest in the history of the FRS survey, although it was only 0.5 percent above the 2005 level. Return on net investment in place (ROI) fell to 20 percent in 2006 from 24 percent in 2005.
- Net income for the FRS companies' refining/marketing segment increased 7 percent from 2005 to \$32 billion in 2006. The net refined product margin rose to \$5.29 per barrel in 2006, which was by far the highest in the history of the FRS, \$1.66 per barrel higher than the previous peak in 2005. Refining/marketing ROI reached 24 percent in 2006, also the highest in the history of the FRS survey.

Capital expenditures increased by \$57 billion in 2006; cash balances remained high.

- Cash flow from operations for the FRS companies increased 10 percent from 2005 to \$194 billion in 2006. Major acquisitions in 2006 resulted in substantial increases in proceeds from long-term debt and equity security offerings, and FRS companies also continued to obtain additional cash by selling off assets.
- The largest use of cash was for capital expenditures, which increased 42 percent from 2005 expenditures to \$195 billion in 2006. FRS companies also used substantial funds to reduce long-term debt and to repurchase their own stock.
- Overall uses of cash exceeded sources in 2006, but despite the decline, balances of cash and marketable securities for FRS companies at the end of 2006 were higher than in any previous year in the survey except 2005.

Expenditures for exploration, development, property acquisition, and production (E&P) exceeded \$200 billion in 2006.

- In contrast to 2003 and 2004, E&P expenditures in 2005 and 2006 rose substantially as drilling activity and drilling costs increased. In 2006, E&P expenditures rose \$68 billion to \$203 billion, surpassing the level of cash flow from operations. Expenditures for unproved and proved property acquisition accounted for 62 percent of the increase in E&P expenditures in 2006, as several large acquisitions occurred.

- Exploration expenditures by FRS companies in 2006 increased to the highest level since 1985. Development expenditures reached the highest level in the history of the FRS survey.

Oil and gas production by FRS Companies increased; their reserve additions failed to keep pace.

- Worldwide production of oil (crude oil and natural gas liquids combined) by FRS companies increased 0.4 percent in 2006 relative to 2005 and production of natural gas rose 1.5 percent, despite decreases in U.S. oil production and U.S. offshore gas production. In 2006, the FRS companies accounted for 44 percent of U.S. oil production, as well as 43 percent of U.S. natural gas production.
- The FRS companies' reserve additions through drilling (excluding purchases and sales of reserves) fell 27 percent from 2005 to 4 billion barrels of oil equivalent (boe) in 2006, driven by large downward revisions of natural gas reserves, combined with lower extensions and discoveries of oil.
- The FRS companies' reserve replacement rate for natural gas was 88 percent in 2006, the first time since 1992 that the FRS companies failed to add sufficient reserves to replace natural gas production. The reserve replacement rate for oil was 59 percent, the fourth time in the past 5 years that the reserve replacement rate for oil among FRS companies fell short of 100 percent. For domestic production and reserves only, the oil reserve replacement rate for the FRS companies was 39 percent in 2006, and the natural gas replacement rate was 101 percent, while the corresponding rates for all producers were 81 percent and 136 percent, respectively.

Finding and lifting costs continued to rise significantly.

- Average worldwide finding costs for the FRS companies increased 51 percent from the previous period to \$17.23 per boe in the 2004–2006 period (finding costs are averaged over a 3-year period). Most of the increase resulted from a rise in exploration and development spending, which was amplified by a decline in reserve additions. All FRS regions exhibited increased finding costs in 2004–2006 from the previous period.
- Finding costs in the U.S. Offshore region increased from \$8.12 per boe in the 1999–2001 period to \$63.71 per boe in the 2004–2006 period. Between these two periods, expenditures increased 42-percent increase, while reserve additions fell 82 percent.
- Lifting costs (also called production costs) increased 17 percent from 2005 to \$8.32 per boe in 2006. Direct lifting costs accounted for 54 percent and production taxes 46 percent of the increase. Finding and lifting costs combined increased 39 percent from 2003–2005 to \$24.29 per boe in 2004–2006.

Refining and marketing capital expenditures remained high; petroleum product sales declined.

- Capital expenditures for the FRS companies' refining/marketing segment worldwide fell 12 percent from 2005 to \$19 billion in 2006. The 2006 value, however, was higher than all but three of the 30 years since the survey began in 1977. Companies reported substantial investments to comply with environmental regulations, to expand capacity and upgrade facilities in order to process heavier types of crude oil, and to enhance their capability to develop and blend biofuels.
- U.S. petroleum product sales by FRS companies declined 5 percent in 2006 relative to 2005. Domestic refinery utilization fell to 92.5 percent in 2006 as refinery output declined while distillation capacity increased. The FRS companies accounted for 81 percent of U.S. refining capacity in 2006.

Financial Developments

The Energy Information Administration's (EIA) *Performance Profiles of Major Energy Producers 2006* provides a financial review and analysis of the domestic and worldwide activities and operations of the major U.S.-based energy-producing companies. *Performance Profiles* examines companies' operations on a consolidated corporate level, by individual lines of business, by major functions within each line of business, and by various geographic regions. The report focuses on annual aggregate changes in profits, cash flow, and investment in the United States and international energy industry, and also explores changes in the majors' exploration and development expenditures, reserve additions, and refining costs and margins. The analysis in this report is based on detailed financial and operating data and information submitted each year to the EIA on Form EIA-28, the Financial Reporting System (FRS).

Net Income and Profitability

Net income for the FRS companies in 2006 reached an all-time high, rising to \$131 billion (**Table 1**), which represents an increase of 7 percent (in constant 2006 dollars)¹ over the 2005 level. It was the third consecutive year that net income for the FRS companies reached a record high (**Figure 1**). The 2006 net income was nearly double the FRS companies' 1980 net income, which had been the highest in the survey for 23 years prior to 2004. Excluding unusual items, net income in 2006 rose by 9 percent.

Income Statement Items	FRS Companies			All Manufacturing Companies		
	2005	2006	Percent Change 2005-2006	2005	2006	Percent Change 2005-2006
Operating Revenues	1376.2	1389.0	0.9	5,571.3	5,790.3	3.9
Operating Expenses	1201.8	1194.3	-0.6	5,202.4	5,380.6	3.4
Operating Income (Revenues minus Expenses)	174.4	194.7	11.6	368.9	409.5	11.0
Interest Expense	-11.0	-11.8	7.3	-90.7	-95.8	5.6
Other Revenue (Expense)	32.9	39.0	18.8	258.2	295.0	14.2
Income Tax Expense	-73.3	-90.4	23.3	-125.0	-134.5	7.6
Net Income	123.0	131.5	6.9	411.4	474.2	15.3
Net Income Excluding Unusual Items	118.1	128.4	8.8	NA	NA	

Note: Sum of components may not equal total due to independent rounding. Percent changes were calculated from unrounded data.

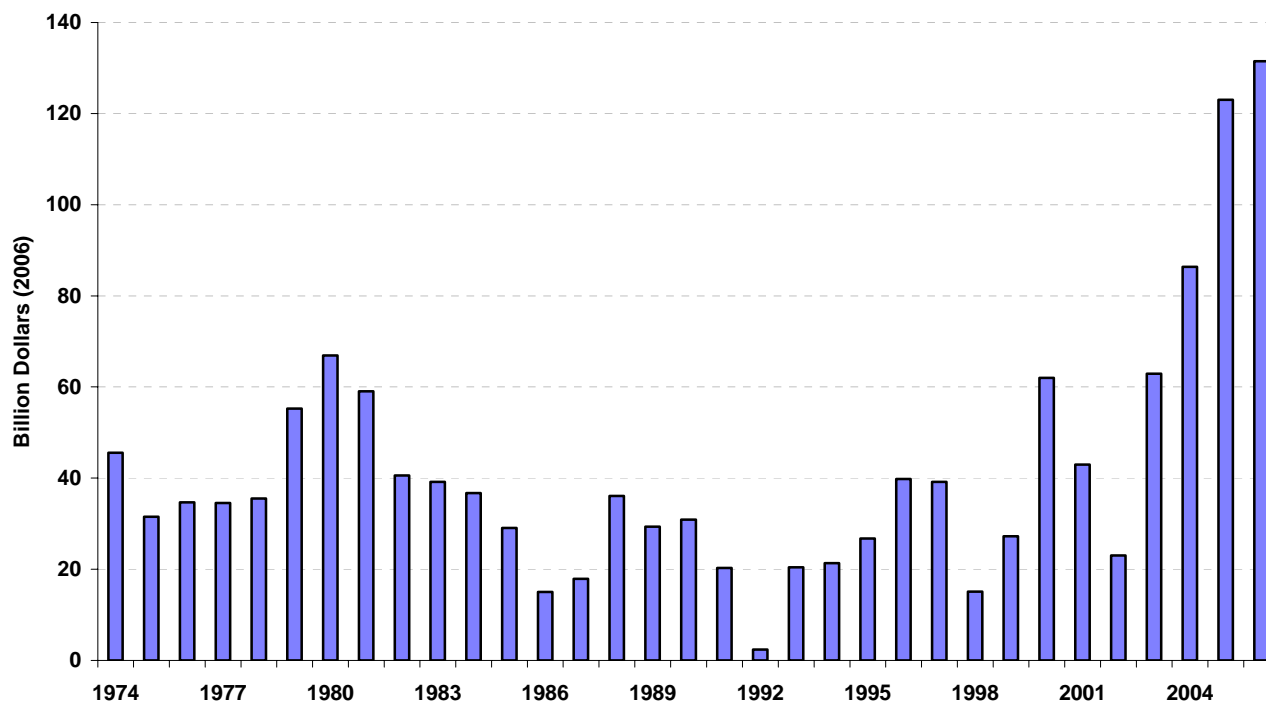
NA= not available.

Sources: **FRS Companies:** Energy Information Administration Form EIA-28 (Financial Reporting System); **All Manufacturing Companies:** U.S. Census Bureau, Quarterly Financial Report.

Operating revenues increased by 1 percent in 2006 from the 2005 level, driven by higher crude oil and petroleum product prices (see the section, Overview of 2006 Petroleum and Natural Gas Markets). Lower natural gas

¹ Unless otherwise indicated, all dollar values and percentage changes in this report are based in constant 2006 dollars, adjusted using the Gross Domestic Product implicit price deflator.

Figure 1. FRS Net Income, 1974-2006



Note: The FRS group of companies has changed incrementally over the years. See footnote 2.

Source: Energy Information Administration, Form EIA-28 (Financial Reporting System).

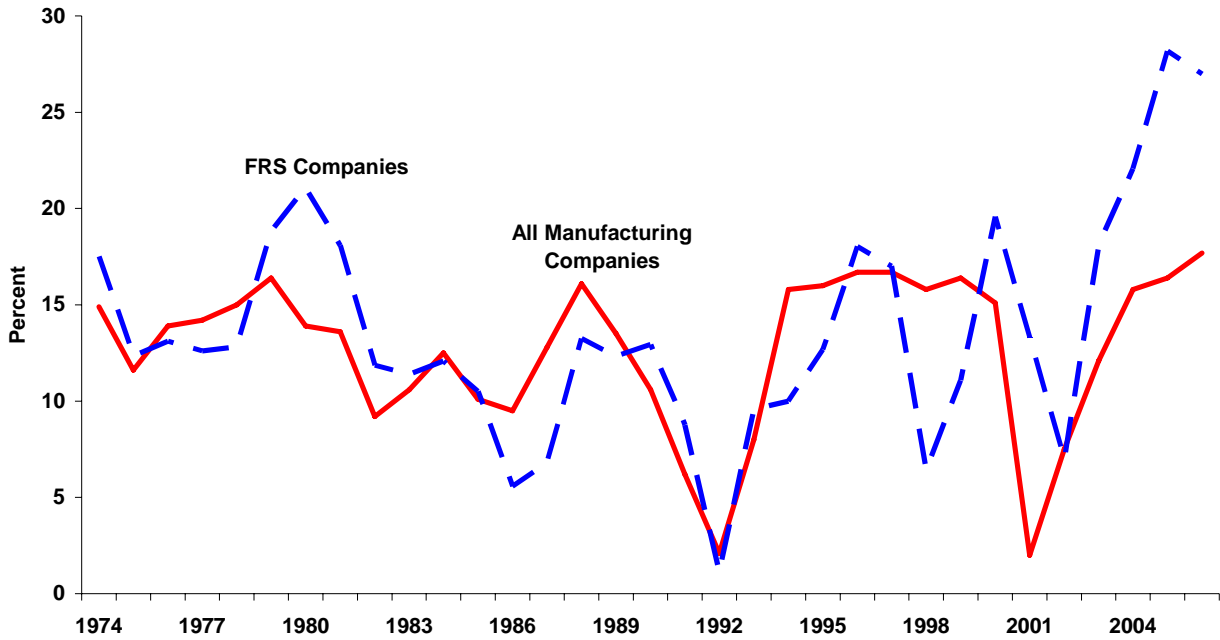
wellhead prices in 2006 moderated the revenue increase compared to that of the previous three years. Operating expenses declined slightly, which further contributed to the rise in net income.

Profitability—the measure of a company’s or an industry’s net income relative to the equity or capital provided by its investors—declined to 27 percent in 2006. Even though the FRS companies’ return on stockholders’ equity (ROE) was lower than in 2005, it was still considerably higher than for any other year in the survey except 2005 (**Figure 2**). The profitability of the FRS companies continued to outpace industry benchmarks (**Figure 3**). The FRS companies’ ROE averaged 7 percentage points higher than that of the Census Bureau’s All Manufacturing Companies from 2000 to 2006, compared to an average 2 percentage points lower from 1985 to 1999.

Among the FRS companies’ lines of business and business segments, oil and natural gas production continued to be the most profitable, contributing \$92 billion in net income (**Table 2**). Refining/marketing provided an additional \$32 billion in earnings. Net income for the nonenergy line of business rose 44 percent from 2005 to \$6 billion in 2006. Higher operating incomes for chemical operations contributed to the strong earnings in nonenergy. Net income in the downstream natural gas line of business also increased significantly, rising to \$4 billion in 2006 as expenses, which include purchases of natural gas from production, fell further than revenues.

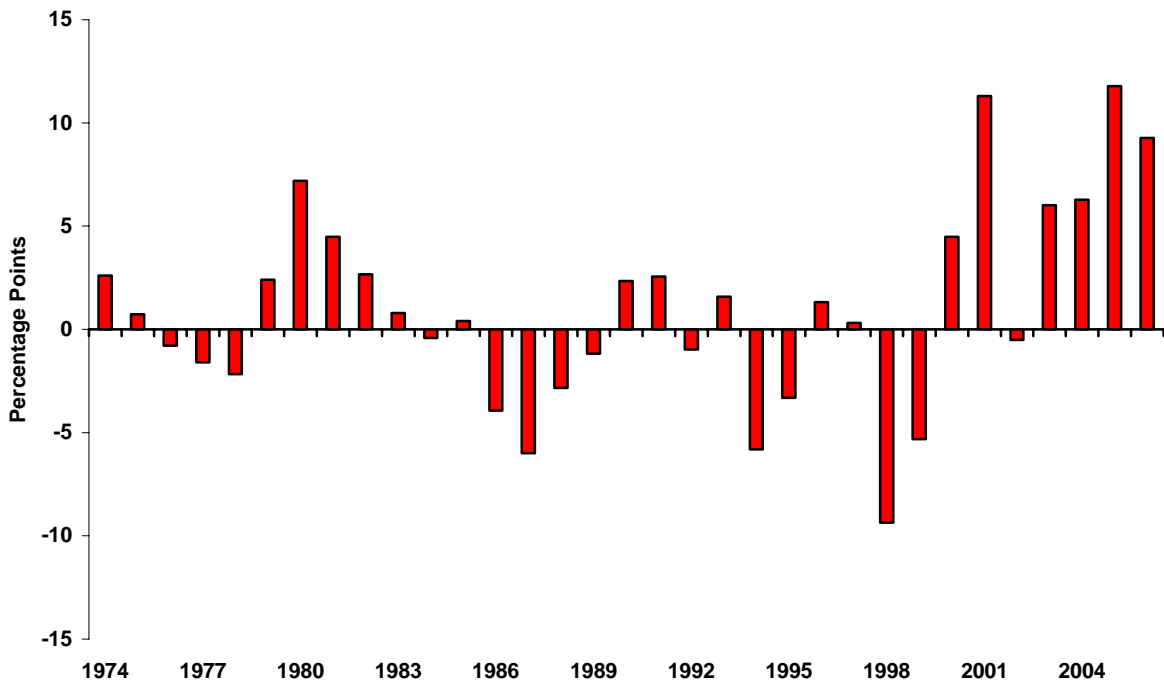
Net income in the oil and natural gas production segment increased by less than 1 percent in 2006 from 2005. Crude oil prices continued to rise in 2006, but natural gas prices fell, resulting in a much smaller increase in 2006 compared to the prior 3 years. Return on net investment in place (ROI) for the oil and natural gas production segment fell to 20 percent in 2006 from 24 percent in 2005. Despite the large decline, the 2006 ROI remained higher than

Figure 2. Return on Stockholders' Equity for FRS Companies and All Manufacturing Companies, 1974-2006



Sources: **FRS Companies:** Energy Information Administration, Form EIA-28 (Financial Reporting System). **All Manufacturing Companies:** U.S. Census Bureau Quarterly Financial Report, All Manufacturing Companies.

Figure 3. Difference Between FRS and All Manufacturing Companies Return on Stockholders' Equity, 1974-2006



Sources: **FRS Companies:** Energy Information Administration, Form EIA-28 (Financial Reporting System). **All Manufacturing Companies:** U.S. Census Bureau Quarterly Financial Report, All Manufacturing Companies.

any other year in the FRS survey except 2005. ROI for domestic oil and natural gas production fell farther than that of foreign production, which considerably widened the spread between foreign and domestic (**Figure 4**).

Table 2. Contributions to Net Income by Line of Business for FRS Companies, 2005-2006
(Million 2006 Dollars)

Line of Business	Net Income			Net Income Excluding Unusual Items		
	2005	2006	Percent Change 2005-2006	2005	2006	Percent Change 2005-2006
Petroleum						
U.S. Petroleum						
Oil and Natural Gas Production	41,774	41,286	-1.2	41,757	40,449	-3.1
Refining/Marketing	21,625	24,313	12.4	22,276	24,657	10.7
Pipelines	495	229	-53.8	503	165	-67.2
Total U.S. Petroleum	63,894	65,828	3.0	64,536	65,271	1.1
Foreign Petroleum						
Oil and Natural Gas Production	50,266	51,186	1.8	46,043	49,837	8.2
Refining/Marketing ^a	8,050	7,549	-6.2	7,930	7,359	-7.2
Total Foreign Petroleum	58,316	58,735	0.7	53,973	57,196	6.0
Total Petroleum	122,210	124,563	1.9	118,509	122,467	3.3
Downstream Natural Gas	2,279	4,349	90.9	2,013	4,466	121.9
Electric Power	366	1,157	215.9	738	1,367	85.2
Other Energy ^b	1,069	567	-46.9	1,124	505	-55.1
Nonenergy	4,347	6,244	43.6	4,239	6,642	56.7
Total Allocated	130,271	136,880	5.1	126,624	135,447	7.0
Nontraceable ^c	-7,290	-5,400	--	-8,560	-7,032	--
Consolidated Net Income ^d	122,981	131,480	6.9	118,063	128,416	8.8

^aInternational Marine is included in Refining/Marketing.

^bThe Other Energy line of business includes coal, nuclear, and non-conventional energy.

^cRevenues and expenses that cannot be directly attributed to a line of business.

^dThe total amount of unusual items was \$4,918 million and \$3,064 million in 2005 and 2006, respectively.

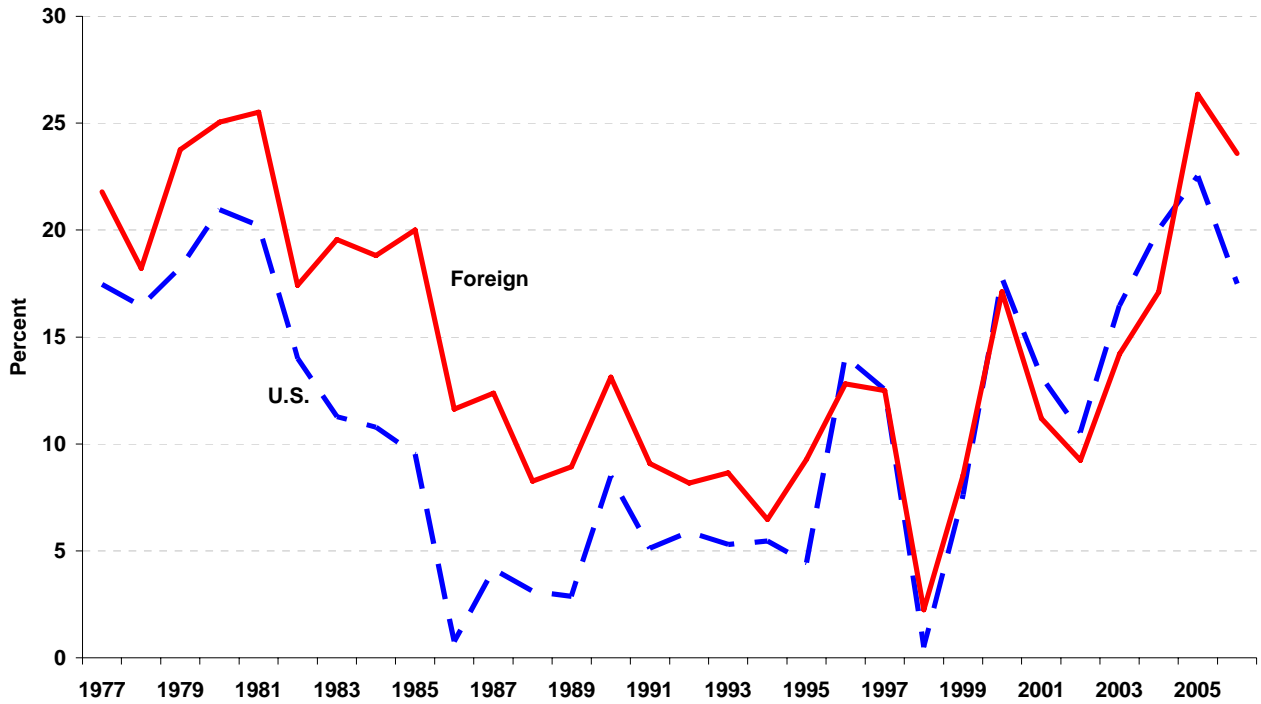
-- = Not meaningful.

NA = Not available.

Source: Energy Information Administration, Form EIA-28 (Financial Reporting System).

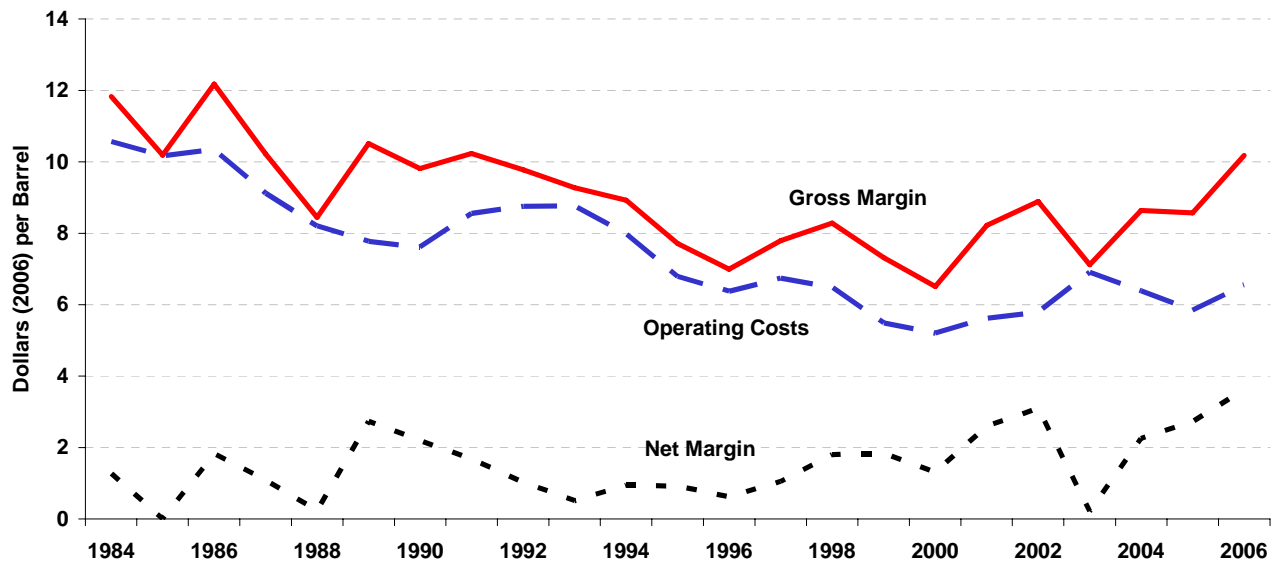
Net income for the FRS companies' refining/marketing segment increased 7 percent in 2006 from 2005. Refining/marketing continues to contribute substantially to net income, as increases in the prices for petroleum products outpace the increased costs of crude oil. The domestic refining/marketing gross margin increased \$1.92 per barrel to \$12.10 per barrel (\$0.29 per gallon) in 2006, the highest amount since 1985 (**Figure 5**). Per-barrel operating costs also increased, but by a much smaller amount. As a result, the net refined product margin rose to \$5.29 per barrel (\$0.13 per gallon) in 2006, which was by far the highest net margin in the history of the FRS, \$1.66 per barrel higher than the previous peak in 2005. Refining/marketing ROI reached 24 percent in 2006, also the highest in the history of the FRS survey, despite a decline in foreign refining/marketing ROI (**Figure 6**). The domestic refining/marketing segment had the highest ROI among all lines of business and business segments designated in the survey.

Figure 4. Return on Net Investment in Place for U.S. and Foreign Oil and Natural Gas Production, 1977-2006



Source: Energy Information Administration, Form EIA-28 (Financial Reporting System).

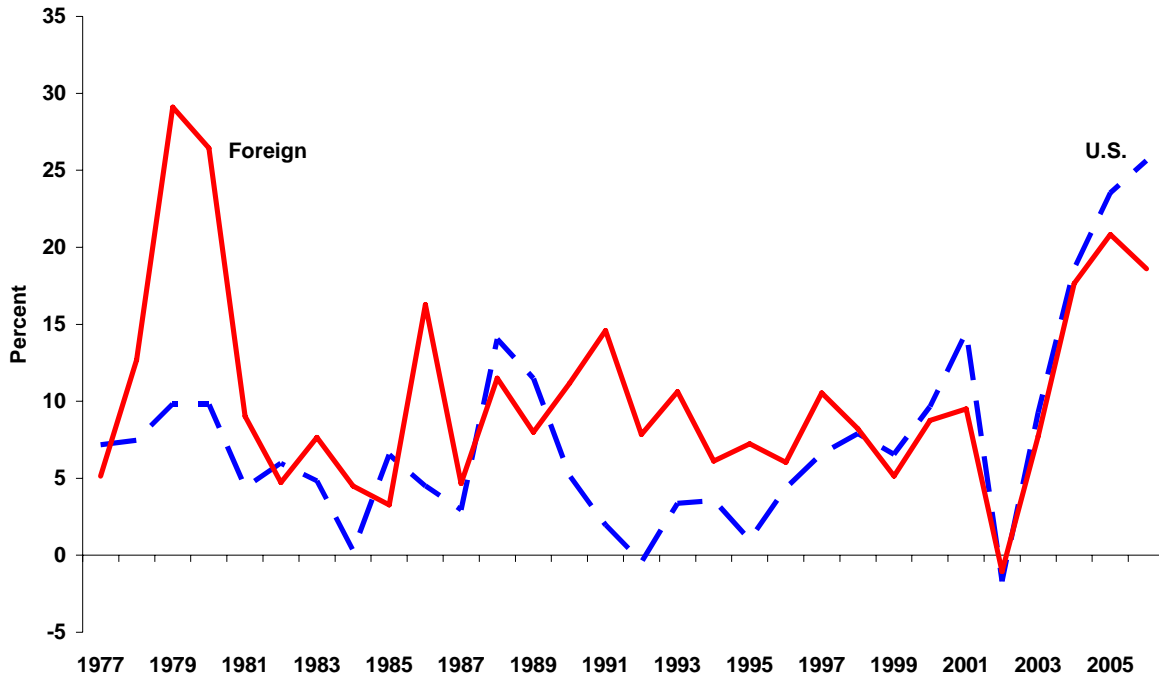
Figure 5. U.S. Refined Product Margins and Costs per Barrel of Petroleum Product Sold for FRS Companies, 1984-2006



Note: The gross margin is refined product revenues less raw material cost and product purchases divided by refined product sales volume.

Source: Energy Information Administration, Form EIA-28 (Financial Reporting System).

Figure 6. Return on Net Investment in Place for U.S. and Foreign Refining/Marketing, 1977-2006



Source: Energy Information Administration, Form EIA-28 (Financial Reporting System).

Sources and Uses of Cash

Major sources of cash include cash flow from operations, sales of assets, and proceeds from issuing debt or equity. Primary uses of cash include making capital expenditures, paying dividends, purchasing company stock, and paying off debt.

Cash flow from operations for FRS companies increased 10 percent from the previous year to \$194 billion in 2006 (**Table 3**), driven by higher net income and increased allowances for depreciation, depletion, and amortization. Oil and natural gas production contributed 75 percent of the cash flow from operations (on a pre-tax basis), and refining/marketing contributed another 21 percent (**Table 4**).

In addition to funds from operations, FRS companies also raised significant amounts of cash by nearly tripling proceeds from long-term debt (**Table 3**). Meanwhile, funds used to reduce long-term debt increased by 61 percent. Major acquisitions that took place in 2006 (see the Capital Expenditures section) substantially influenced both increases. Overall, the ratio of long-term debt to stockholders' equity for FRS companies declined from 37 percent in 2005 to 35 percent in 2006 (**Table B3**), the lowest level since 1981.

Proceeds from equity security offerings more than doubled to \$23 billion in 2006. This increase also was influenced by merger and acquisition activity. FRS companies obtained additional cash through a 13-percent increase in proceeds from the disposal of assets, as companies took advantage of the high-price environment to sell off noncore assets.

Table 3. Sources and Uses of Cash for FRS Companies, 2005-2006
(Billion 2006 Dollars)

Sources and Uses of Cash	2005	2006	Absolute Change 2005-2006	Percent Change 2005-2006
Main Sources of Cash				
Cash Flow from Operations	175.2	193.6	18.3	10.5
Proceeds from Long-Term Debt	30.6	87.1	56.5	184.8
Proceeds from Disposals of Assets	37.0	41.6	4.6	12.5
Proceeds from Equity Security Offerings	10.8	22.6	11.8	109.4
Main Uses of Cash				
Additions to Investment in Place	137.3	194.7	57.4	41.8
Reductions in Long-Term Debt	34.3	55.2	20.9	60.8
Dividends to Shareholders	41.0	38.5	-2.5	-6.0
Purchase of Treasury Stock	32.8	41.7	8.9	27.2
Other Investment and Financing Activities, Net	6.7	-21.8	-28.5	-424.4
Net Change in Cash and Cash Equivalents	14.9	-7.0	-21.9	-147.3

Note: Sources minus uses plus other investment and financing activities (net) may not equal net change in cash and cash equivalents due to independent rounding.

Percent changes were calculated from unrounded data.

Source: Energy Information Administration, Form EIA-28 (Financial Reporting System).

Table 4. Line-of-Business Contributions to Pretax Cash Flow, Income Taxes, and Cash Flow for FRS Companies, 2005-2006
(Billion 2006 Dollars)

Contribution to Pretax Cash Flow ^a	2005	2006	Absolute Change 2005-2006	Percent Change 2005-2006
Petroleum				
Oil and Natural Gas Production	173.5	190.0	16.5	9.5
Refining, Marketing, and Transport	48.2	52.4	4.2	8.7
Downstream Natural Gas	2.6	7.5	4.9	184.9
Electric Power	1.6	2.1	0.5	34.3
Other Energy ^b	1.0	0.6	-0.4	-37.9
Chemicals	7.2	7.1	0.0	-0.2
Other Nonenergy	-1.1	0.6	1.7	--
Nontraceable	-6.1	-6.1	0.0	0.6
Total Contribution to Pretax Cash Flow ^a	226.9	254.3	27.4	12.1
Current Income Taxes	-69.0	-81.5	--	18.0
Other (Net)	17.3	20.7	3.4	19.6
Cash Flow from Operations	175.2	193.6	18.3	10.5

^aDefined as the sum of operating income, depreciation, depletion, and amortization, and dry hole expense.

^bThe Other Energy line of business includes coal, nuclear, and non-conventional energy.

-- = Not meaningful.

Note: Sum of components may not equal total due to independent rounding. Percent changes were calculated from unrounded data.

Source: Energy Information Administration, Form EIA-28 (Financial Reporting System).

The largest use of cash was for capital expenditures (shown as Additions to Investment in Place on Table 3), which increased by \$57 billion from the previous year to \$195 billion in 2006. The Capital Expenditures section discusses these expenditures in greater detail.

FRS companies continued to use stock buyback programs as a means to distribute part of the large increase in cash flow to shareholders. The amount of cash used by FRS companies to repurchase their own stock rose 27 percent to \$42 billion in 2006. Dividends to shareholders declined 6 percent to 39 billion in 2006.

Overall uses of cash exceeded sources, resulting in a decrease of \$7 billion in cash and cash equivalents. Despite the decline, cash balances remained at historically high levels. Balances of cash and marketable securities for FRS companies at the end of 2006 were higher than any previous year in the survey except 2005.

Capital Expenditures

Companies expend funds to acquire assets such as property, buildings, and equipment that will remain in use for a number of years. Capital expenditures, which represent the value of assets acquired in the current time period net of depreciation, also include investments and advancements to unconsolidated affiliate companies.

The FRS companies' capital expenditures (also referred to as additions to investment in place) increased 42 percent to \$195 billion in 2006 (**Table 5**). Oil and natural gas production (domestic and foreign combined) made up 80 percent of the total, while total petroleum accounted for 90 percent of capital expenditures.

Along with capital expenditures, FRS companies report expenditures for exploration, unproved property, development, proved property, and production (E&P) for the oil and natural gas production segment. The data include current as well as capital expenditures, but capital expenditures are predominant. Regional breakdowns are also provided. Exploration and development expenditures provide insight into the regional targets of upstream investment by FRS companies.

Expenditures for E&P have tended to follow changes in cash flow from operations. In 2003 and 2004, however, large increases in cash flow from operations did not lead to similar increases in E&P expenditures (**Figure 7**). Companies were hesitant to invest because they were concerned that the higher oil and natural gas prices would not last. In contrast, E&P expenditures in 2005 and 2006 rose substantially as expectations increased that the price levels would persist and as the costs of drilling rigs and personnel increased.

In 2006, E&P expenditures rose \$68 billion to \$203 billion, surpassing the level of cash flow from operations, which increased \$18 billion from 2005 to \$194 billion in 2006. Expenditures for unproved and proved property accounted for 62 percent of the increase in E&P expenditures in 2006, as several large acquisitions occurred (**Table 6**). Development expenditures made up 23 percent of the annual increase in E&P expenditures, while production expenditures contributed 11 percent. Expenditures for exploration made up just 4 percent of the increase in total E&P expenditures.

Compared to the 2005 level, exploration expenditures increased 27 percent to \$14 billion. This level of spending on exploration by FRS companies was the highest since 1985 (**Figure 8**). Development expenditures rose 30 percent from 2005 to \$67 billion in 2006, the highest level in the history of the FRS survey.

Table 5. Additions to Investment in Place by Line of Business for FRS Companies, 2005-2006
(Billion 2006 Dollars)

Lines of Business	2005	2006	Percent Change 2005-2006	Percent Change Excluding Mergers and Acquisitions 2005-2006
Petroleum				
U.S. Petroleum				
Oil and Natural Gas Production	46.9	93.3	98.9	26.2
Refining/Marketing				
Refining	15.0	11.0	-27.2	16.6
Marketing	2.7	1.5	-43.8	-43.8
Transport	0.6	0.7	20.3	20.3
Total Refining/Marketing	18.3	13.1	-28.1	2.5
Pipelines	1.8	1.0	-43.2	-33.5
Total U.S. Petroleum	67.0	107.5	60.5	18.5
Foreign Petroleum				
Oil and Natural Gas Production	52.4	62.1	18.6	13.3
Refining/Marketing ^a	3.0	5.7	88.0	42.7
Total Foreign Petroleum	55.4	67.8	22.4	15.5
Total Petroleum	122.4	175.3	43.2	17.1
Downstream Natural Gas	6.9	11.6	68.2	21.0
Electric Power	2.4	1.5	-35.8	-16.9
Other Energy ^b	0.7	0.5	-23.2	-64.9
Chemicals	2.4	2.4	0.6	1.7
Other Nonenergy	0.7	0.8	10.3	-15.3
Nontraceable ^c	1.9	2.5	33.4	61.5
Additions to Investment in Place ^d	137.3	194.7	41.8	16.3
Additions Due to Mergers and Acquisitions	37.9	79.0	108.5	
Total Additions Excluding Mergers and Acquisitions	99.5	115.7	16.3	

^aInternational Marine is included in Refining/Marketing.

^bThe Other Energy line of business includes coal, nuclear, and non-conventional energy.

^cInvestments that cannot be directly attributed to a line of business.

^dAdditions to investment in place = additions to property, plant, and equipment, plus additions to investments and advances.

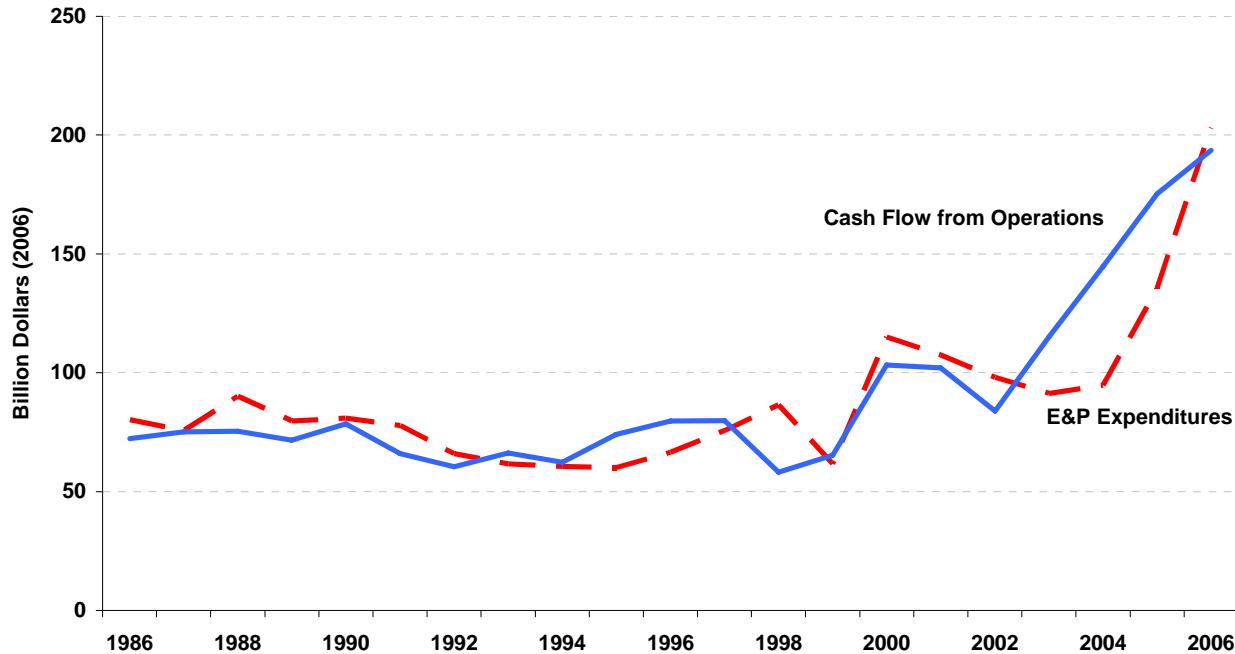
Note: Sum of components may not equal total due to independent rounding. Percent changes were calculated from unrounded data.

Source: Energy Information Administration, Form EIA-28 (Financial Reporting System).

Regional Exploration and Development Expenditures

Regionally, the U.S. Onshore remains an important area for the FRS companies' oil and natural gas operations. Expenditures for exploration and development in the U.S. Onshore region increased 39 percent from 2005 to \$29 billion in 2006 (**Figure 9**), which was more than three times the average annual expenditure level in the 1990s and the highest amount since 1982. Expenditures for development predominate in the U.S. Onshore region—they rose to \$26 billion in 2006, which was 39 percent of FRS companies' development expenditures worldwide.

Figure 7. Cash Flow from Operations and Exploration and Production (E&P) Expenditures for FRS Companies, 1986-2006



Note: E&P expenditures includes exploration, development, production, unproved acreage, and proved acreage expenditures.
 Source: Energy Information Administration, Form EIA-28 (Financial Reporting System).

Chesapeake Energy Corporation focuses its exploration and development program primarily in the onshore United States. Chesapeake is the largest natural gas producer, the most active driller, and most active acquirer of leasehold and producing properties in the U.S. mid-continent. Chesapeake has accumulated a large U.S. onshore leasehold position and 3-D seismic data to help evaluate its acreage inventory. The company estimates that sufficient potential drilling locations exist in this acreage to provide 10 years of future drilling opportunities at current drilling rates.²

The onshore United States is one of Anadarko’s major areas of operations. Anadarko acquired Kerr McGee and Western Gas Resources in 2006, which significantly increased its tight gas and coalbed methane holdings in the Rocky Mountains area. Anadarko also is active in Texas, Louisiana, and Oklahoma, focusing on tight gas, fractured reservoirs, and enhanced oil recovery.³

Exploration and development expenditures in the U.S. Offshore region increased 39 percent from 2005 to \$13 billion in 2006, the highest level since 1982. FRS companies spend more for exploration in the U.S. Offshore region than in any other FRS region. In 2006, exploration expenditures in the U.S. Offshore accounted for 34 percent of FRS exploration expenditures worldwide.

The deepwater Gulf of Mexico is BP’s largest area of growth in the United States, where it is involved in several exploration and development projects, including the Atlantis project and expansion of the Mars and Na Kika fields. The Mars platform, damaged during Hurricane Katrina in 2005, resumed operations in 2006. Repair work continued on the Thunder Horse platform, which is expected to begin production by the end of 2008.⁴ Atlantis began producing oil in October 2007 for “commissioning” purposes, but the timeframe for beginning commercial

² Chesapeake Energy Corporation, 2006 U.S. Securities and Exchange Commission Form 10-K filing, pp. 2–4.

³ Anadarko Petroleum Corporation, 2006 U.S. Securities and Exchange Commission Form 10-K filing, pp. 8–9.

⁴ BP plc, *Annual Report and Accounts 2006*, p. 22.

Table 6. Value of Mergers, Acquisitions, and Related Transactions by FRS Companies, 2006
(Million Dollars)

Acquiring Company	Assets Acquired	Reported Value of Acquisition
ConocoPhillips	Burlington Resources	33,900
Anadarko	Kerr-McGee	19,100
Anadarko	Western Gas Resources	5,425
Occidental	Vintage Petroleum	3,979
ConocoPhillips	Lukoil investment	2,700
Lyondell Chemical	Remaining interest in Houston refinery from CITGO	2,606
Devon	Chief Holdings, LLC	2,200
Occidental	Plains Exploration	861
Apache	BP properties in the Gulf of Mexico	845
Apache	Operations of Pioneer Natural Resources in Argentina	703
ConocoPhillips	Rockies Express pipeline	480
Hess	West Mediterranean Block 1 Concession in Egypt	413
Burlington	T-BAR-X	400
Apache	Interests in seven concessions in the Tierra del Fuego	396
Hess	Waha concessions in Libya	359
Marathon	Leasehold acquisition in the Piceance Basin of Colorado	354
ChevronTexaco	5 percent stake in Reliance Petroleum Ltd.	301
XTO	Producing properties in East Texas and Mississippi	300
Chesapeake	Chaparral Energy	280
Apache	Interest in eight fields in the Permian Basin	269
Chesapeake	Frac Tech Services	254
ConocoPhillips	Refining assets from Societe Generale in the US	215
Sunoco	Minority interest in cokemaking operation	155
Chesapeake	Martex Drilling	150
XTO	Producing properties in the Barnett Shale	108
BP America	Wind power business - Greenlight Energy Inc	98
Dominion	Pablo Energy LLC from Cactus Feeders	91
Chesapeake	Energen Resources	75
Sunoco	Pipeline system from Alon USA Energy	68

Sources: Company annual reports to shareholders and press releases.

operations remains late-2007.⁵ Apache remains enthusiastic about the mature shallow waters of the Gulf of Mexico, buying properties and extending its operations in those areas.⁶ Chevron has extensive operations in both the deepwater Gulf of Mexico and the continental shelf. Chevron continues to pursue deep-gas exploration opportunities, which are high-potential projects but are costly and complex to drill.⁷

Exploration and development expenditures in foreign FRS regions increased 20 percent from 2005 to \$39 billion in 2006.⁸ Expenditures in four regions—Canada, Africa, Other Eastern Hemisphere (i.e., Asia-Pacific), and the Middle East—reached the highest ever in the history of the FRS survey.

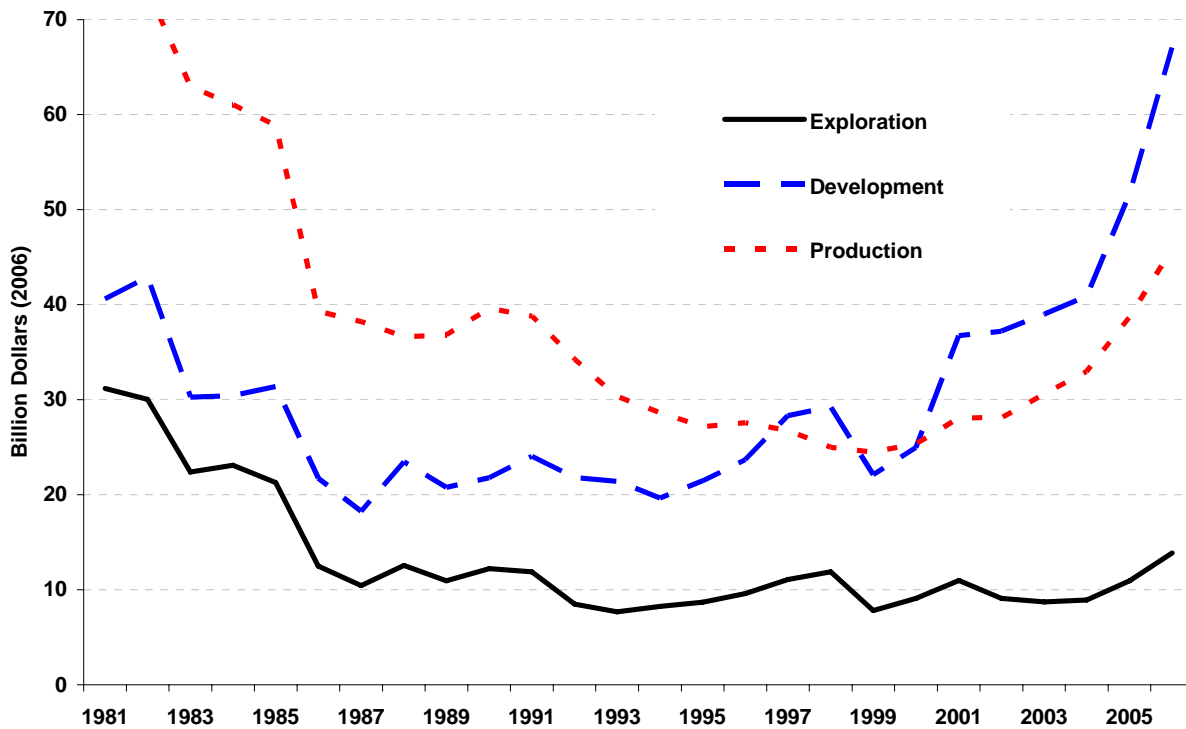
⁵ “BP: Timing for Commercial Atlantis Production Still Late ‘07,” John M. Biers, *DowJones Newswire*, Available on the Internet at http://www.subseaiq.com/News/Articles/200710/BP_Timing_for_Commercial_Atlantis_Produ_6442.aspx (as of October 15, 2007).

⁶ “Apache Buys More US Gulf Assets from BP,” *Oil Daily* (April 20, 2006), p. 1.

⁷ Chevron Corporation, *2006 Supplement to the Annual Report*, p. 15.

⁸ A change in regional definitions occurred in 2006 to keep the FRS survey consistent with other EIA publications. Eastern Europe had previously been combined with the Former Soviet Union but is now combined with the rest of Europe. The Former Soviet Union is a region by itself. As a result, expenditures for Europe will be somewhat higher and expenditures for the Former Soviet Union will be somewhat lower than under the previous definition.

Figure 8. FRS Worldwide Expenditures for Exploration, Development, and Production, 1981-2006



Source: Energy Information Administration, Form EIA-28 (Financial Reporting System).

In 2006, FRS companies put more exploration and development expenditures into Africa than any other foreign region, as they have in every year since 2002. Exploration and development expenditures in Africa increased 23 percent from 2005 to \$11 billion in 2006.

Exxon Mobil had three major projects start production in offshore Nigeria and Angola. One of the projects, Erha North, began producing within 30 months of discovery.⁹ Chevron had several major exploration and development projects underway in West Africa in 2006. The Benguela Belize-Lobito Tomboco project in Angola started production in 2006. Chevron also undertook several infrastructure projects in Angola to eliminate routine flaring and to handle increasing production volumes.¹⁰

Exploration and development expenditures by FRS companies in Canada have nearly doubled since 2002, reaching \$8 billion in 2006. ConocoPhillips continued the development of the Surmont heavy-oil project, and the Syncrude Stage III expansion-mining project. ConocoPhillips also announced a business venture with Encana Corporation to create an integrated North America heavy-oil business.¹¹ Devon's Jackfish oil sands project in Alberta, which has been under construction since 2005, will use a steam-assisted gravity drainage process to bring the bitumen to the surface. Devon projects production to reach 35,000 barrels per day by the end of 2008.¹²

Exploration and development expenditures in the Other Eastern Hemisphere region increased 22 percent from 2005 to \$5 billion in 2006. Chevron continues to expand its natural gas business in Asia. It has extensive exploration and development operations in the Gulf of Thailand and has developed a significant resource base in northwest Australia.¹³

⁹ Exxon Mobil Corporation, *2006 Summary Annual Report*, p. 22.

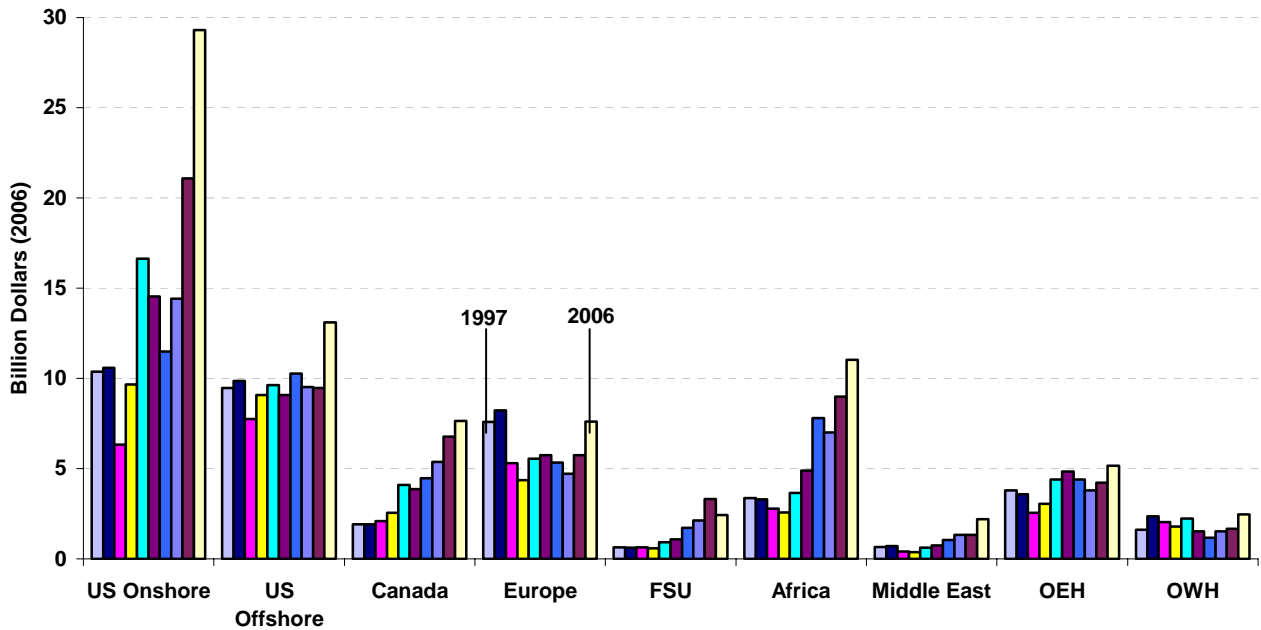
¹⁰ Chevron Corporation, *2006 Supplement to the Annual Report*, p. 18.

¹¹ ConocoPhillips Company, *2006 Annual Report*, pp. 47, 55.

¹² Devon Energy Corporation, *2006 Annual Report*, p. 26.

¹³ Chevron Corporation, *2006 Supplement to the Annual Report*, pp. 23–28.

Figure 9. FRS Expenditures for Oil and Natural Gas Exploration and Development by Region, 1997-2006



Note: FSU is Former Soviet Union. OEH is Other Eastern Hemisphere, which is primarily the Asia Pacific region. OWH is Other Western Hemisphere, which is primarily Central and South America and the Caribbean.
 Source: Energy Information Administration, Form EIA-28 (Financial Reporting System).

Europe also continues to be an important target of the FRS companies' exploration and development expenditures, which reached \$8 billion in 2006. Exxon Mobil is involved in several projects in the North Sea. One project started production in 2006, and several others are close to completion.¹⁴

Refining and Marketing Capital Expenditures

Capital expenditures for the FRS companies' refining/marketing segment worldwide fell 12 percent from 2005 to \$19 billion in 2006 (Table 5). The 2006 value, however, was higher than all but three of the 30 years since the survey began in 1977.

In 2006, complying with environmental regulations remained a key focus of the FRS companies' capital expenditures for the refining/marketing segment. Valero reported \$1.6 billion in capital expenditures related to environmental regulations, with \$990 million of that attributed to Tier II gasoline and diesel standards.¹⁵ ConocoPhillips continued construction of a coker, a new vacuum unit, and revamps of heavy oil and distillate hydrotreaters at the Borger refinery. These projects will enable the refinery to comply with clean fuel regulations for ultra-low-sulfur diesel and low-sulfur gasoline, as well as to comply with required reductions of sulfur dioxide emissions.¹⁶ Exxon Mobil announced completions of several projects to produce lower-sulfur motor fuels, in particular ultra-low-sulfur diesel in North America. Exxon Mobil stated that the use of its proprietary SCANfining technology produces lower-sulfur gasoline with less octane loss. The company continues to invest significantly in

¹⁴ Exxon Mobil Corporation, 2006 Summary Annual Report, pp. 22, 25.

¹⁵ Valero Energy Corporation, 2006 U.S. Securities and Exchange Commission Form 10-K filing, p. 14.

¹⁶ ConocoPhillips Company, 2006 U.S. Securities and Exchange Commission Form 10-K filing, p. 25.

cogeneration facilities, which require substantially less energy and result in lower emissions versus separate conventional steam and power generation.¹⁷

Several FRS companies are investing in biofuels blending and development. Chevron completed the acquisition of a 22-percent interest in Galveston Bay Biodiesel L.P., which is building one of the first large-scale biofuel plants in the United States. Chevron also entered into research alliances with the University of California, Davis, and the Georgia Institute of Technology in 2006. Both are focusing on converting cellulosic biomass into viable transportation fuels.¹⁸ Marathon now has the capacity to store and distribute biodiesel at its Louisville, Kentucky, and St. Paul Park, Minnesota, terminals, and also has formed a 50/50 joint venture to produce ethanol.¹⁹

FRS companies also indicated that a key focus of capital expenditures in the refining/marketing segment was to expand capacity and to upgrade refineries to process heavier crude oils. BP has announced that it has entered the final planning stage to increase the capability of its Whiting refinery to process Canadian heavy crude oil by 260,000 barrels per day. Reconfiguring the refinery also has the potential to increase the production of motor fuels by about 15 percent.²⁰ Marathon's board approved a projected \$3.2 billion expansion of its Garyville refinery in Louisiana, which will increase the crude oil refining capacity of the facility by 73 percent. Upon completion, the refinery will provide an additional 7.5 million gallons per day of clean transportation fuels.²¹ Chevron initiated construction projects at its El Segundo, California, refinery to increase the refinery's heavy, sour crude oil processing capacity.²² Chevron also completed the expansion of the fluid catalytic cracking unit at the company's refinery in Pascagoula, Mississippi, which increased gasoline manufacturing capacity by approximately 10 percent.²³ Exxon Mobil stated that, through low-cost debottlenecking, it has effectively added the equivalent capacity of an average-size refinery every 3 years, and an average-size conversion unit every year, at a fraction of grassroots cost.²⁴

¹⁷ Exxon Mobil Corporation, *2006 Financial and Operating Review*, pp. 68–69.

¹⁸ Chevron Corporation, 2006 U.S. Securities and Exchange Commission Form 10-K filing, p. 30.

¹⁹ Marathon Oil Corporation, *2006 Annual Report*, p. 14.

²⁰ BP plc, Annual Report on 20-F, p. 23.

²¹ Marathon Oil Corporation, *2006 Annual Report*, p. 4.

²² Chevron Corporation, 2006 U.S. Securities and Exchange Commission Form 10-K filing, p. 25.

²³ Chevron Corporation, 2006 U.S. Securities and Exchange Commission Form 10-K filing, p. FS-6.

²⁴ Exxon Mobil Corporation, *2006 Financial and Operating Review*, p. 67.

Oil and Natural Gas Production

Worldwide production of both natural gas and, to a lesser extent, oil (crude oil and natural gas liquids) by the FRS companies increased in 2006 (**Table 7**). Natural gas production increased in every region except the U.S. Offshore (which experienced the largest decline and consists largely of the Gulf of Mexico), Canada, and Europe. However, only three regions showed increases in oil production: Africa (the largest absolute gainer), the Former Soviet Union, and the Middle East.

Table 7. Oil and Natural Gas Production by FRS Companies by Region, 2005 and 2006

Region	Crude Oil and Natural Gas Liquids (million barrels)			Natural Gas (billion cubic feet)		
	2005	2006	Percent Change	2005	2006	Percent Change
United States						
Onshore	758	716	-5.6	6,071	6,409	5.6
Offshore	363	360	-0.7	1,703	1,517	-10.9
Total United States	1,121	1,076	-4.0	7,774	7,926	1.9
Foreign						
Canada	189	164	-13.2	1,560	1,455	-6.7
Europe	484	441	-9.0	2,026	1,886	-6.9
Former Soviet Union	64	86	35.3	56	68	21.8
Africa	500	595	18.8	365	389	6.8
Middle East	97	147	52.3	134	191	42.1
Other Eastern Hemisphere	284	259	-8.9	1,779	1,839	3.3
Other Western Hemisphere	102	84	-17.3	1,027	1,193	16.2
Total Foreign	1,720	1,776	3.2	6,947	7,021	1.1
Total Worldwide	2,841	2,851	0.4	14,721	14,946	1.5

Note: Sum of components may not add to total due to independent rounding.

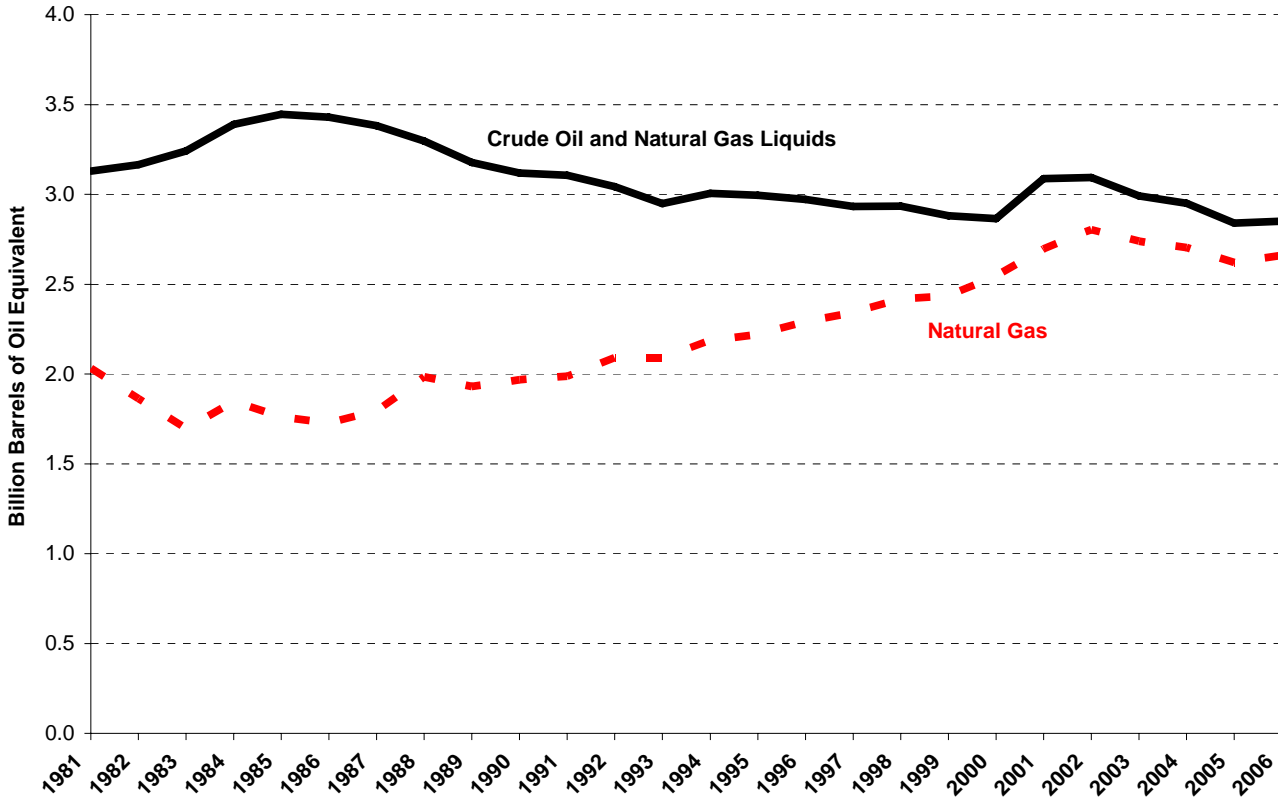
Source: Energy Information Administration, Form EIA-28, (Financial Reporting System).

In general, the production of oil by the FRS companies has been declining slowly since reaching a peak in 1985, while that of natural gas increased steadily through 2002 (**Figure 10**). The increased production in 2006 barely reversed a 3-year trend of annual declines that began in 2003. However, the longstanding trend of natural gas production increasing relative to oil production was not reversed. Since 1987, the gap between oil production and natural gas production, measured on a barrel-of-oil equivalent (boe) basis, widened only once, in 2001. The decline in oil production by the FRS companies runs counter to the long-running worldwide trend of increasing production, while the rise in natural gas production parallels the global trend.

Oil and Natural Gas Reserve Additions

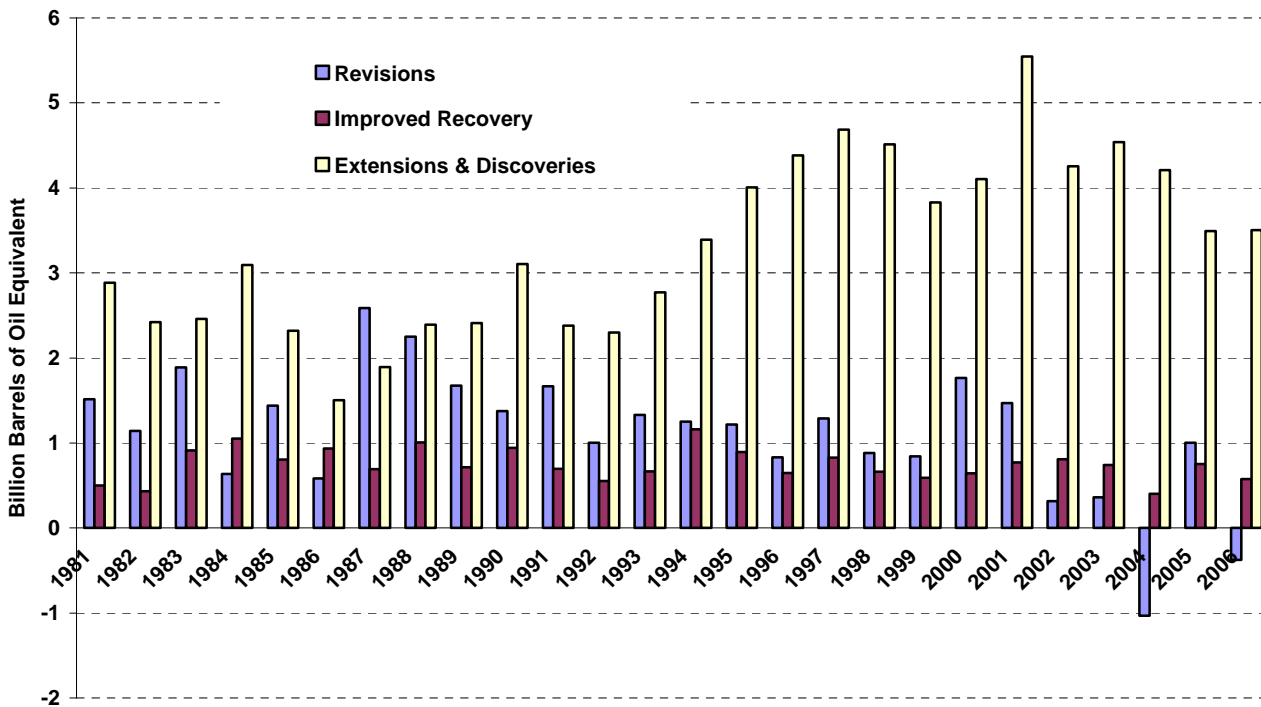
Reserve additions (excluding purchases and sales) are reported in the categories of revisions, improved recovery, and extensions and discoveries. Extensions and discoveries were the largest category of reserve additions in 2006, as they have been in all years except one since 1981 (**Figure 11**). Worldwide reserve additions from extensions and discoveries for the FRS companies essentially were unchanged in 2006 from 2005 levels, remaining at their lowest level since 1994. Reserve revisions were negative in 2006 for the second time in 3 years. Reserve additions from revisions have performed quite poorly in recent years. From 2002 through 2006, reserve revisions averaged

Figure 10. Worldwide Oil and Natural Gas Production by FRS Companies, 1981-2006



Source: Energy Information Administration, Form EIA-28 (Financial Reporting System).

Figure 11. Worldwide Reserve Additions by FRS Companies by Type, 1981-2006



Note: Revisions exclude Alaskan natural gas reserve write-down in 1985 and 1987.

Source: Energy Information Administration Form, EIA-28 (Financial Reporting System).

just 55 million boe additions per year, while from 1981 through 2001 they averaged 1.4 billion boe per year. Reserves added through improved recovery techniques also decreased in 2006, but remained near historical levels.

Oil and Natural Gas Reserve Replacement

The reserve replacement rate is the additional proved reserves found through drilling as a percentage of reserves removed by production. Worldwide reserve replacement rates for both oil and natural gas deteriorated in 2006, although natural gas maintained its superior performance. Oil was replaced at the rate of 59 percent and natural gas at the rate of 88 percent (**Table 8**). Oil replacement rates for the FRS companies were the lowest in Europe and the U.S. Onshore, followed by Africa. In contrast, the companies replaced 259 percent of their oil production in Canada and all or nearly all of their production in the Middle East and in the Former Soviet Union. Natural gas had some of the lowest replacement rates in certain regions, with negative reserve additions in Europe reinforcing, rather than replacing, the decline in reserves caused by production and with replacement rates in the U.S. Offshore and the Other Western Hemisphere (Central and South America) of only 14 percent or less. For natural gas, the FRS companies replaced more than 13 times their production in the Middle East, while they more than replaced their production in the Former Soviet Union, Africa, and the U.S. Onshore.

From 1994 through 2001, the FRS companies replaced all of their worldwide oil and natural gas production and added an additional 7.6 billion boe of reserves. However, from 2002 through 2006, the companies replaced all of their natural gas production and added 2.0 billion boe to reserves, but they did not replace 5.1 billion barrels of their oil production, with most of that deficit occurring in the last 3 years (**Figure 12**). The resulting deficit of worldwide combined oil and natural gas reserve replacement was 3.1 billion boe.²⁵

FRS companies did not replace 2.3 billion barrels of their U.S. oil production, including royalty production, while non-FRS companies replaced all of their U.S. oil production plus adding 1.3 billion barrels of reserves from 2002 through 2006. Note that these data include an estimate of royalty production and reserves, which are not included in FRS data.²⁶ Both FRS and non-FRS companies replaced all of their natural gas production, but FRS companies added only 0.8 boe to natural gas reserves, including royalty reserves, while non-FRS companies added 4.2 boe to reserves.

From 2002 through 2006 the replacement rates of oil and natural gas varied substantially among different regions of the world (**Figure 13**). The only region in which the FRS companies more than replaced oil production was the Former Soviet Union, while in five additional regions, the U.S. Onshore, Africa, the Middle East, the Other Eastern Hemisphere, and the Other Western Hemisphere, they found more natural gas than they produced. In the other three regions—the U.S. Offshore, Canada, and Europe—the FRS companies replaced neither oil nor natural gas production. The most surprising results here are for the U.S. Offshore, which often is considered a growing area. Comparing the period 1994–2001, when the FRS companies were replacing production successfully with proved reserves, and the period 2002–2006, when they were not, the largest declines in the average annual reserve additions for the U.S. Offshore were extensions and discoveries of natural gas, extensions and discoveries of oil, and revisions of oil. Nonetheless, extensions and discoveries of oil and of natural gas remained the largest contributors to reserve additions in both periods.

²⁵ Purchases, less sales of oil and natural gas reserves, by the FRS companies totaled 0.5 billion boe, but these reserves are not included because they do not add to the worldwide reserve total.

²⁶ For this estimate, royalty production and reserves are assumed to be 1/7 of total production and reserves, a standard proportion for royalty shares in the United States. They must be estimated because non-FRS production and reserves are estimated by subtracting FRS data, which do not include royalty data (as required by financial reporting rules in the United States), from total U.S. data, which include royalty data.

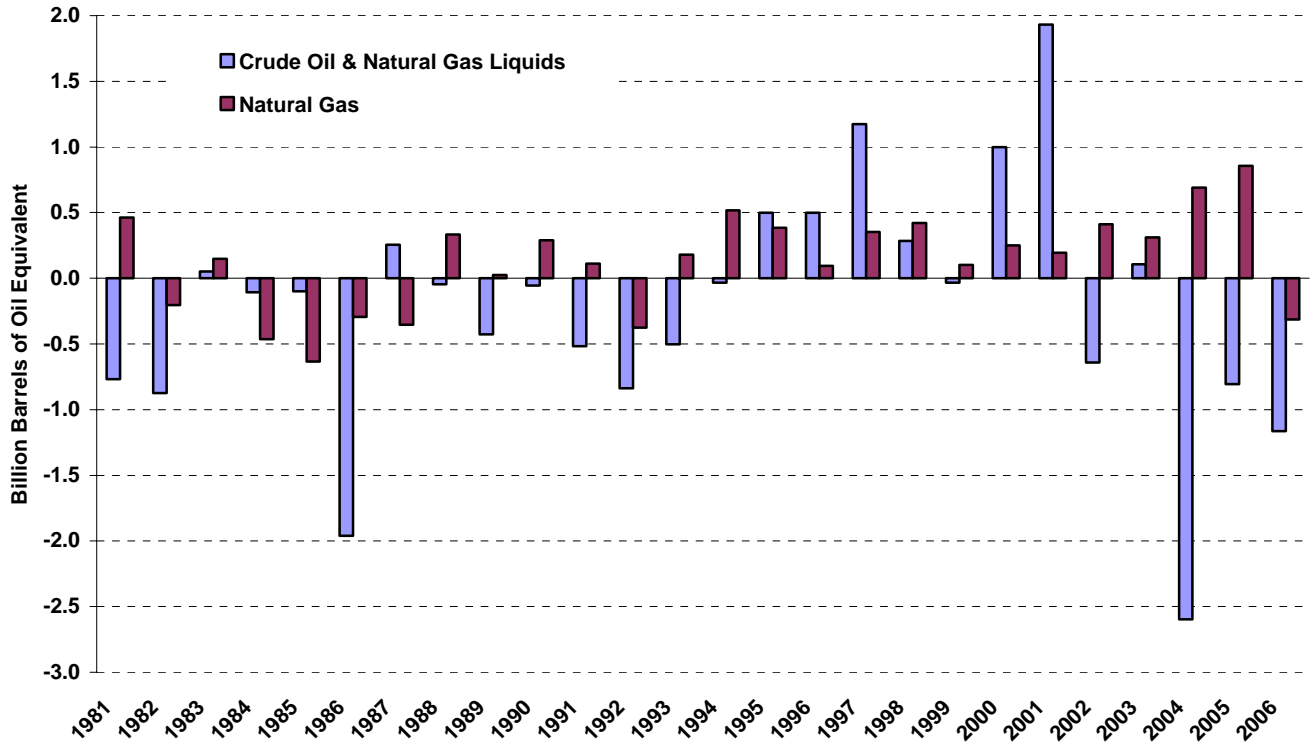
Table 8. Oil and Natural Gas Reserve Replacement Rates by FRS Companies, 2005 and 2006

Region	Drillbit Additions to Reserves		Production		Reserve Replacement Rate (percent)	
	2005	2006	2005	2006	2005	2006
Crude Oil and Natural Gas Liquids (million barrels)						
United States						
Onshore	849	185	758	716	112	26
Offshore	158	230	363	360	44	64
Total United States	1,007	415	1,121	1,076	90	39
Foreign						
Canada	580	425	189	164	307	259
Europe	239	84	484	441	49	19
Former Soviet Union	-185	86	64	86	-290	99
Africa	203	248	500	595	40	42
Middle East	89	147	97	147	92	100
Other Eastern Hemisphere	40	215	284	259	14	83
Other Western Hemisphere	62	69	102	84	61	82
Total Foreign	1,028	1,274	1,720	1,776	60	72
Total Worldwide	2,035	1,689	2,841	2,851	72	59
Natural Gas (billion cubic feet)						
United States						
Onshore	12,469	7,839	6,071	6,409	205	122
Offshore	786	159	1,703	1,517	46	10
Total United States	13,255	7,998	7,774	7,926	170	101
Foreign						
Canada	1,805	1,130	1,560	1,455	116	78
Europe	871	-732	2,026	1,886	43	-39
Former Soviet Union	133	122	56	68	238	179
Africa	1,054	512	365	389	289	132
Middle East	1,790	2,598	134	191	1,335	1,363
Other Eastern Hemisphere	221	1,399	1,779	1,839	12	76
Other Western Hemisphere	396	165	1,027	1,193	39	14
Total Foreign	6,270	5,195	6,947	7,021	90	74
Total Worldwide	19,525	13,192	14,721	14,946	133	88

Note: Sum of components may not equal totals due to independent rounding.

Source: Energy Information Administration, Form EIA-28 (Financial Reporting System).

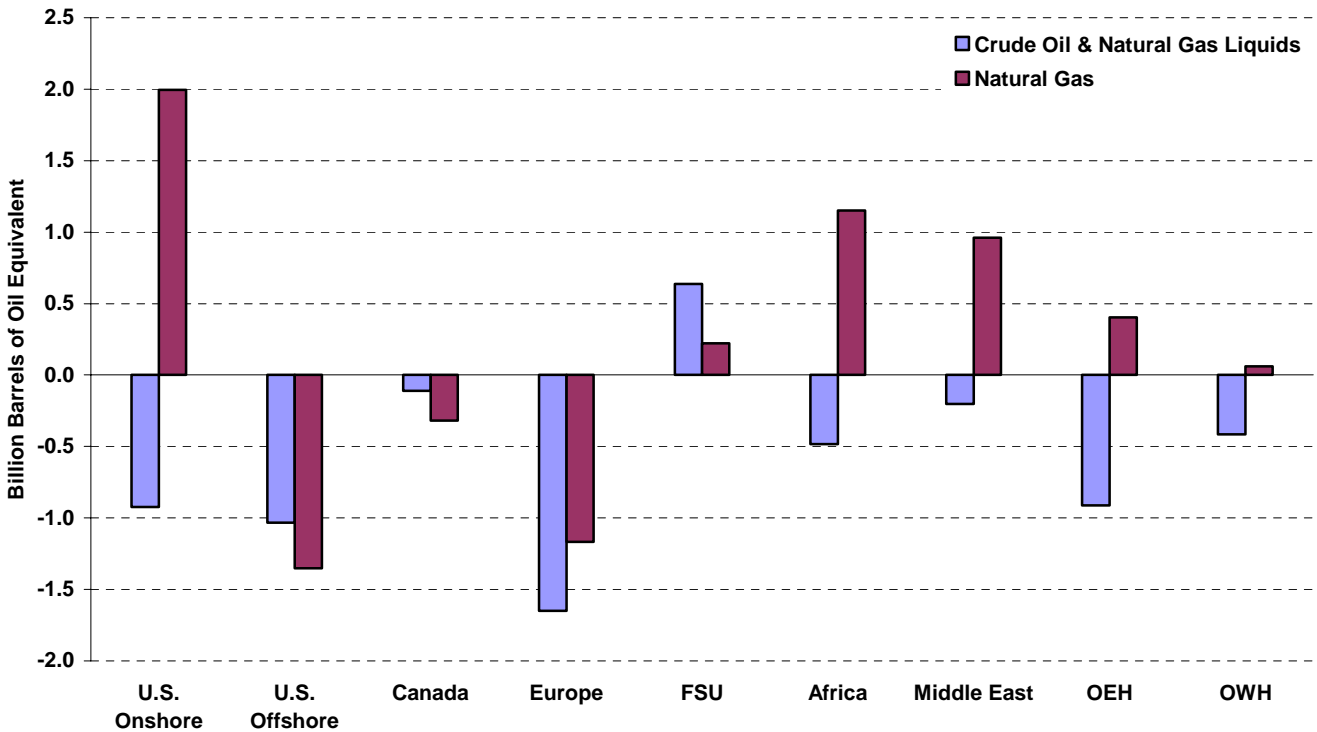
Figure 12. Worldwide Reserve Replacement by FRS Companies, 1991 - 2006



Note: Excludes purchases and sales of reserves.

Source: Energy Information Administration, Form EIA-28 (Financial Reporting System).

Figure 13. Cumulative Reserve Replacement by FRS Companies by Region, 2002 - 2006



Notes: Excludes purchases and sales of reserves. FSU is the former Soviet Union. OEH is Other Eastern Hemisphere. OWH is Other Western Hemisphere.

Source: Energy Information Administration, Form EIA-28 (Financial Reporting System).

Upstream Income

The financial performance of the upstream operations (oil and natural gas exploration, development, and production) of the FRS companies improved slightly in 2006, based on a revenue increase from foreign operations (**Table 9**). While domestic revenue fell slightly, worldwide revenues from the sale of oil and natural gas increased \$22 billion (in constant 2006 dollars),²⁷ while worldwide operating expenses increased \$12 billion. The leading contributor to increased expenses was production spending. However, a \$10-billion-increase in foreign income taxes, which led to a notable increase in the effective foreign income tax rate, largely offset the increase in foreign operating income and resulted in little change in net income. In addition, foreign production taxes per boe of production increased 51 percent. With relatively flat net income and a substantial increase in net investment in place, the worldwide return on investment fell from 24 percent to 20 percent.

Lifting Costs

Lifting costs (also called production costs) are the out-of-pocket costs to operate and maintain wells and related equipment and facilities per boe of oil and natural gas produced after the hydrocarbons have been found, acquired, and developed for production. Because oil and natural gas often are produced together and their production costs often are not split, separate lifting costs for each are not available. Total lifting costs are divided into production taxes and direct lifting costs.

In 2006, total lifting costs for the FRS companies increased \$1.23 per boe of production, with an increase in both the amount of oil and natural gas produced and the total amount of spending on production (**Table 10**). Increases in direct lifting costs accounted for 54 percent of the increase in total lifting costs, even though production taxes rose much faster than direct lifting costs. The largest contributor to increased worldwide direct lifting costs was production spending in the United States, which was up 23 percent in 2006, while Canada showed the highest level of direct lifting costs. Three regions had declines in direct lifting costs resulting from production increases, most notably, the Former Soviet Union, the Middle East, and Africa. The Middle East was the largest contributor to the increase in production taxes, in large part because of a significant change by one FRS respondent. The Former Soviet Union experienced a large decrease in the amount of total production taxes, which also was primarily influenced by a significant change by one FRS respondent. The largest contributor to the increase in worldwide total lifting costs was the U.S. Onshore (on a volume-weighted basis), with Africa a distant second. Decreases in direct lifting costs and especially production taxes combined to propel the Former Soviet Union from first to last place in total lifting costs between 2005 and 2006.

In 2006, worldwide direct lifting costs continued the increase in costs that began in 2000–2001, with domestic lifting costs surging ahead of foreign costs; the two converged in 1991, but began diverging in 2005 (**Figure 14**). The increase in domestic direct lifting costs was driven by spending increases relatively greater than production in the U.S. Onshore. In 2006, domestic direct lifting costs reached levels not seen since 1986. Between 2000 and 2006, domestic lifting costs rose 92 percent, while foreign lifting costs increased only 42 percent.

²⁷ Unless otherwise indicated, all dollar values and percentage changes in this report are based in constant 2006 dollars, adjusted using the Gross Domestic Product implicit price deflator.

Table 9. Income Components and Financial Ratios in Oil and Natural Gas Production for FRS Companies, 2005 and 2006 (Billion 2006 Dollars)

Income Components and Financial Ratios	Worldwide		United States		Foreign	
	2005	2006	2005	2006	2005	2006
Oil and Natural Gas Revenues						
Oil	NA	NA	54.0	59.5	NA	NA
Natural Gas	NA	NA	56.5	49.7	NA	NA
Total Revenues	237.9	259.4	110.6	109.1	127.3	150.2
Expenses						
Depreciation, Depletion, and Amortization	34.5	40.5	17.5	20.7	17.0	19.8
Production Costs	38.7	45.8	19.0	22.6	19.8	23.2
Exploration Expenses	5.8	10.5	2.7	5.8	3.1	4.7
General and Administrative Expenses	3.2	3.4	2.2	2.2	1.0	1.2
Other Costs (Revenues) ^a	19.0	12.9	7.4	-0.3	11.6	13.3
Total Operating Expenses	100.7	112.6	48.3	50.3	52.4	62.3
Operating Income	137.2	146.8	62.2	58.8	74.9	88.0
Other Income (Expense) ^b	17.4	18.4	3.3	6.0	14.1	12.4
Income Tax Expense	62.5	72.7	23.7	23.5	38.7	49.2
Net Income	92.0	92.5	41.8	41.3	50.3	51.2
Less Unusual Items	4.2	2.2	0.0	0.8	4.2	1.3
Net Income, Excluding Unusual Items	87.8	90.3	41.8	40.4	46.0	49.8
Unit Values (Dollars per BOE of Production) ^c						
Direct Lifting Costs (Excluding Taxes)	5.29	5.96	5.56	6.83	5.06	5.25
Production Taxes	1.80	2.36	2.01	2.26	1.62	2.43
Percentages						
Return on Investment ^d	24.5	20.4	22.5	17.5	26.3	23.6
Effective Income Tax Rate ^e	41.1	44.6	36.2	36.3	44.8	50.0

^aOther Costs (Revenues) include Raw Material Purchases. The Production Segment was prohibited from purchasing natural gas and NGLs for resale to third parties and unconsolidated affiliates beginning in 2003.

^bEarnings of unconsolidated affiliates, gain (loss) on disposition of assets, discontinued operations, extraordinary items, and cumulative effect of accounting change.

^cBOE = Barrels of oil equivalent. Natural gas is converted to equivalent barrels of oil at 0.178 barrels per thousand cubic feet.

^dNet Income divided by net investment in place (Net investment in place = net property, plant, and equipment plus investments and advances to unconsolidated affiliates).

^eIncome tax expense divided by pretax income.

NA = Not available.

Note: Sum of components may not equal total due to independent rounding.

Source: Energy Information Administration, Form EIA-28 (Financial Reporting System).

**Table 10. Lifting Costs for FRS Companies by Region, 2005 and 2006
(2006 Dollars Per Barrel of Oil Equivalent)**

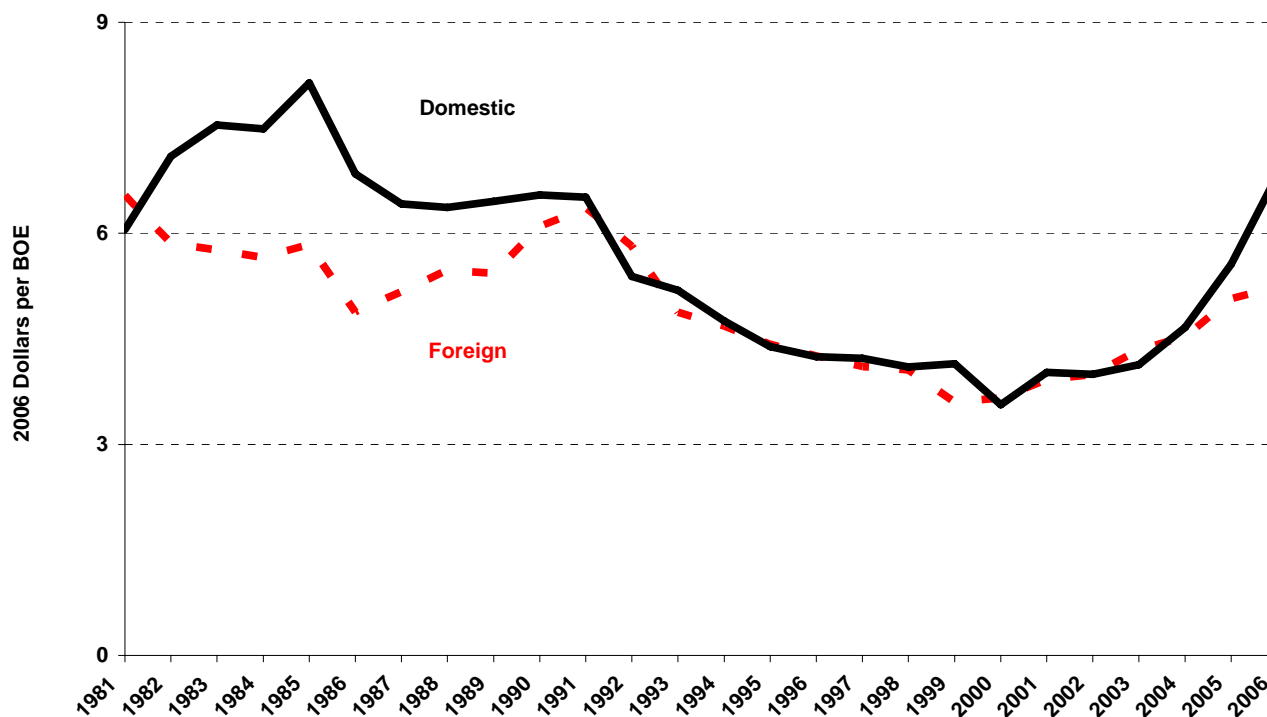
Region	Direct Lifting Costs			Production Taxes			Total		
	2005	2006	Percent Change	2005	2006	Percent Change	2005	2006	Percent Change
United States									
Onshore	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	7.94	9.69	22.0
Offshore	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	6.56	7.32	11.7
Total United States	5.56	6.83	22.8	2.01	2.26	12.4	7.57	9.09	20.0
Foreign									
Canada	7.20	8.29	15.1	0.31	0.34	7.7	7.52	8.63	14.8
Europe	5.89	6.34	7.6	1.41	2.00	42.0	7.30	8.34	14.3
Former Soviet Union	5.38	4.09	-24.0	3.25	0.76	-76.5	8.63	4.85	-43.8
Africa	4.22	4.10	-2.7	2.27	2.75	21.2	6.49	6.86	5.7
Middle East	4.96	4.59	-7.5	0.15	9.94	6,730.3	5.11	14.53	184.4
Other Eastern Hemisphere	3.86	4.32	11.8	2.00	2.15	7.2	5.87	6.47	10.2
Hemisphere	3.27	3.21	-1.9	2.45	2.37	-3.1	5.72	5.58	-2.5
Total Foreign	5.06	5.25	3.6	1.62	2.43	50.5	6.68	7.68	15.0
Worldwide Total	5.29	5.96	12.6	1.80	2.36	31.0	7.09	8.32	17.3

n.a. = Data not available.

Notes: Natural gas is converted to equivalent barrels of oil at 0.178 barrels per thousand cubic feet. Sum of components may not add to total due to independent rounding.

Source: Energy Information Administration, Form EIA-28, (Financial Reporting System).

Figure 14. Direct Oil and Natural Gas Lifting Costs for FRS Companies, 1981-2006



Note: Direct lifting costs are the costs of extracting oil and gas, excluding production taxes. BOE = Barrels of oil equivalent.
Source: Energy Information Administration, Form EIA-28 (Financial Reporting System).

Finding Costs

Finding costs are the costs of adding proved reserves of oil and natural gas through exploration and development activities and by the purchase of properties that might contain reserves.²⁸ These costs are measured for oil and natural gas on a combined basis in units of dollars per boe. Ideally, finding costs would include all costs incurred (no matter when these costs were incurred or recognized on a company's books) in finding any particular proved reserves (not including the purchases of already discovered reserves). In practice, finding costs are actually measured as the ratio of exploration and development expenditures (including expenditures on unproved acreage but excluding expenditures on proved acreage) to proved reserve additions (excluding net purchases of proved reserves) over a specified period of time.²⁹ Finding costs generally are calculated in *Performance Profiles* as a weighted average over a period of 3 years.

Average worldwide finding costs for the FRS companies increased \$5.84 per boe of reserves added in the 2004–2006 period (**Table 11**). Most of the increase came from a rise in exploration and development spending, which was amplified by a drop in reserves found. All FRS regions exhibited an increase in finding costs in 2004–2006.³⁰ The regions with the largest proportional increases were Europe, the U.S. Onshore, the Other Western Hemisphere, and Africa, while the U.S. Offshore was again the highest-cost region. However, the U.S. Onshore, because of its much greater share of worldwide reserve additions and its large increase in spending, contributed much more than the others to the increase in worldwide costs. Other notable contributors to the worldwide increase were much lower reserve additions in Europe and the Former Soviet Union and substantially increased spending in the U.S. Offshore. Only the Middle East had finding costs below \$10 per boe in 2004–2006.

Finding costs in nearly all regions except the U.S. Onshore have exceeded their previous record highs, which were reached in the early 1980s, with the U.S. Offshore setting the pace (**Figure 15**).³¹ As with lifting costs, the recent levels of finding costs are due in part to the high prices of oil and natural gas. Producers are willing to spend more to find oil and natural gas when their prices are higher.

Finding costs for the FRS companies have increased in all regions in recent years (**Figure 16**).³² The U.S. Offshore stands out because its finding costs were the highest in 2004–2006, and it had the largest absolute increase in finding costs between the 1999–2001 and 2004–2006 periods. The most important contributor to this rise was a 76-percent fall in reserve additions from extensions and discoveries of oil. But the largest relative increase was for the Other Western Hemisphere, which had the second highest finding costs in 2004–2006. In this case, a fall in reserve additions from natural gas extensions and discoveries was the major cause of the rise in finding costs. Africa and Europe also had large absolute and relative increases between the two periods, with the increase in the former coming primarily from a rise in expenditures for development. In the latter, three important

²⁸ Alternatively, finding costs are the exploration, development, and unproved property acquisition costs of replacing reserves removed through production.

²⁹ One inherent limitation of measuring finding costs in this way is that the expenditures and the reserve additions recognized in a particular interval usually do not correspond exactly with each other. Expenditures usually are recognized in the period in which the payment actually occurred. Proved reserves usually are recognized when there is reasonable certainty that they can be produced economically. There is no reason that these activities must occur in the same time period (oil and natural gas wells often are operated over a long time period); therefore, some expenditures may not be recognized in the same time period in which their corresponding reserves are recognized. One way to moderate this limitation is to increase the time period over which finding costs are measured, allowing reserve additions and exploration and development expenditures to match more closely. However, the longer the time period over which finding costs are measured, the more out of date they become, because the costs include increasingly older expenditures and reserves, and costs and technology are continually changing. The only way to solve the correspondence problem is to calculate an average finding cost for all oil and natural gas produced by a well after it is permanently shut in, but then many costs included would be considerably out of date.

³⁰ Largely because negative revisions to oil reserves in 2004–2006 were not offset by other reserve additions, the Former Soviet Union had total reserve additions of less than zero in 2004–2006, rendering its finding cost calculation for that period meaningless.

³¹ Finding costs in the Middle East have practically reached their historical high level; see preceding note.

³² See note 29.

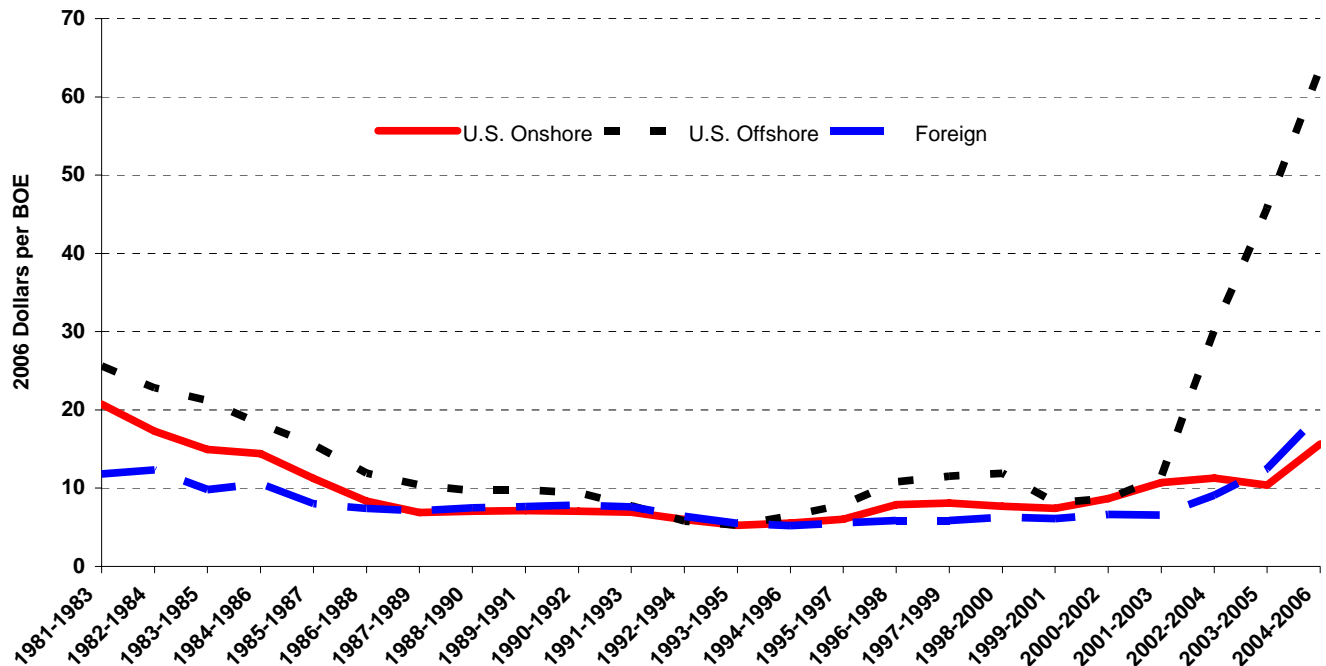
Table 11. Finding Costs by Region for FRS Companies, 2003-2005 and 2004-2006 (2006 Dollars per Barrel of Oil Equivalent)

Region	2003-2005	2004-2006	Percent Change
United States			
Onshore	7.05	11.34	60.9
Offshore	45.76	63.71	39.2
Total United States	10.40	15.62	50.2
Foreign			
Canada	17.43	19.39	11.2
Europe	10.26	22.79	122.1
Former Soviet Union	13.74	NM	NM
Africa	16.19	25.66	58.5
Middle East	4.95	5.26	6.3
Other Eastern Hemisphere	9.50	12.59	32.6
Other Western Hemisphere	26.56	42.59	60.4
Total Foreign	12.46	19.51	56.6
Worldwide	11.38	17.23	51.3

Notes: NM = Not meaningful. The above figures are 3-year weighted averages of exploration and development expenditures, excluding expenditures for proven acreage, divided by reserve additions, excluding net purchases of reserves. Natural gas is converted to equivalent barrels of oil at 0.178 barrels per thousand cubic feet. Sum of components may not add to total due to independent rounding.

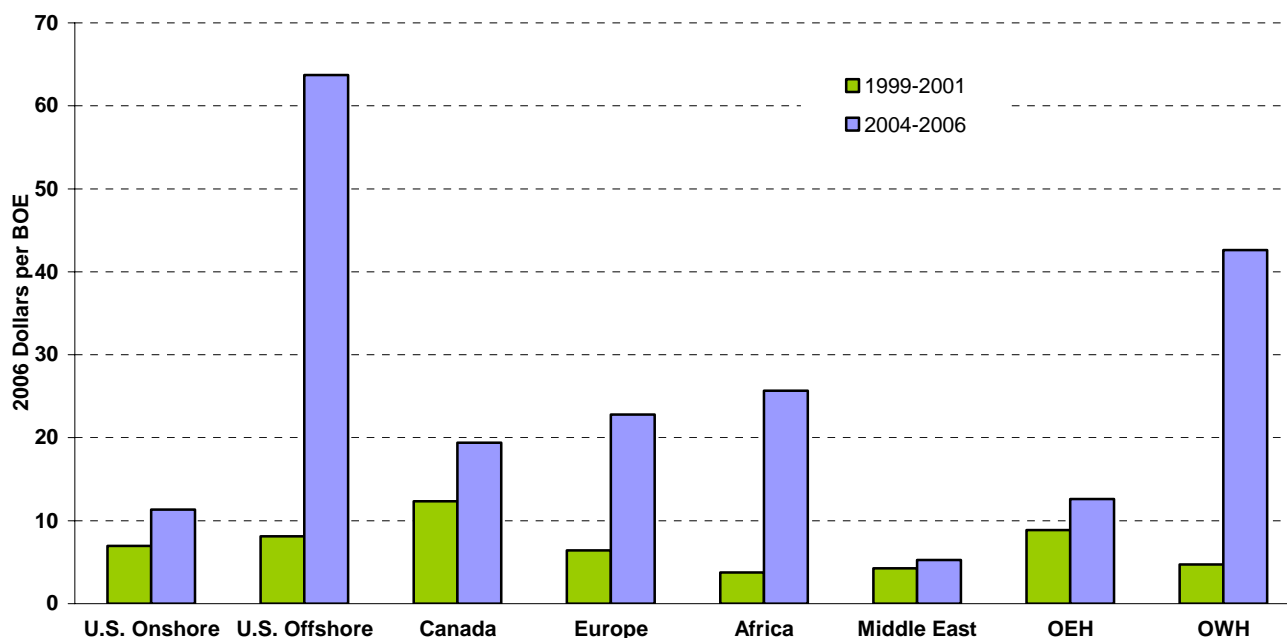
Source: Energy Information Administration, Form EIA-28 (Financial Reporting System).

Figure 15. Finding Costs for FRS Companies, 1981-1983 to 2004-2006



Notes: Costs are the quotient of costs and reserve additions for each three-year period. BOE = Barrels of oil equivalent. Source: Energy Information Administration, Form EIA-28 (Financial Reporting System).

Figure 16. Finding Costs for FRS Companies by Region, 1999-2001 and 2004-2006



Notes: Costs are the quotient of costs and reserve additions for each three-year period. OEH is Other Eastern Hemisphere. OWH is Other Western Hemisphere. BOE = Barrels of oil equivalent.
 Source: Energy Information Administration, Form EIA-28 (Financial Reporting System).

factors were involved—a fall in reserve additions from natural gas revisions, a rise in expenditures for development, and a fall in reserve additions from oil extensions and discoveries. The four remaining regions, led by the Middle East, had much less dramatic growth in relative and absolute finding costs between the two periods.

Total Costs

Total costs, the sum of finding and lifting costs, for the FRS companies increased substantially in all regions in the 2004–2006 period (**Table 12**).³³ Worldwide, total costs rose \$6.84 per boe to \$24.29 per boe. Total costs ranged from \$14.31 in the Middle East to \$69.75 in the U.S. Offshore in 2004–2006. Because finding costs now have become so much greater than lifting costs, except in the Middle East and the U.S. Onshore, finding costs dominate the results in this table.

Spending to Replace Oil and Natural Gas Production by the FRS Companies

Using the actual finding costs and production levels of the FRS companies, the cost of finding additional reserves through drilling that are sufficient to replace production for any given year can be estimated. That is, finding costs times production equals the estimated expenditures necessary to replace that production. This calculation uses the annual production and three-year (ending in the production year) real finding costs. Actual exploration and development spending for new reserves exceeded the estimated cost to replace production in 2006 by 10 percent (**Figure 17**). In fact, actual spending to find reserves has exceeded the estimated amount necessary to replace production in 10 of the past 12 years. However, in the five years ending in 2006, the FRS companies have more than replaced their production with found reserves only twice, while they replaced production in all 7 preceding years. This suggests that, when finding costs are rising rapidly, as they have been in the past few years, the estimating procedure used here understates the amount of spending necessary to replace production.

³³ See note 29.

Table 12. Total Production Costs by Region for FRS Companies, 2003-2005 and 2004-2006 (2006 Dollars per Barrel of Oil Equivalent)

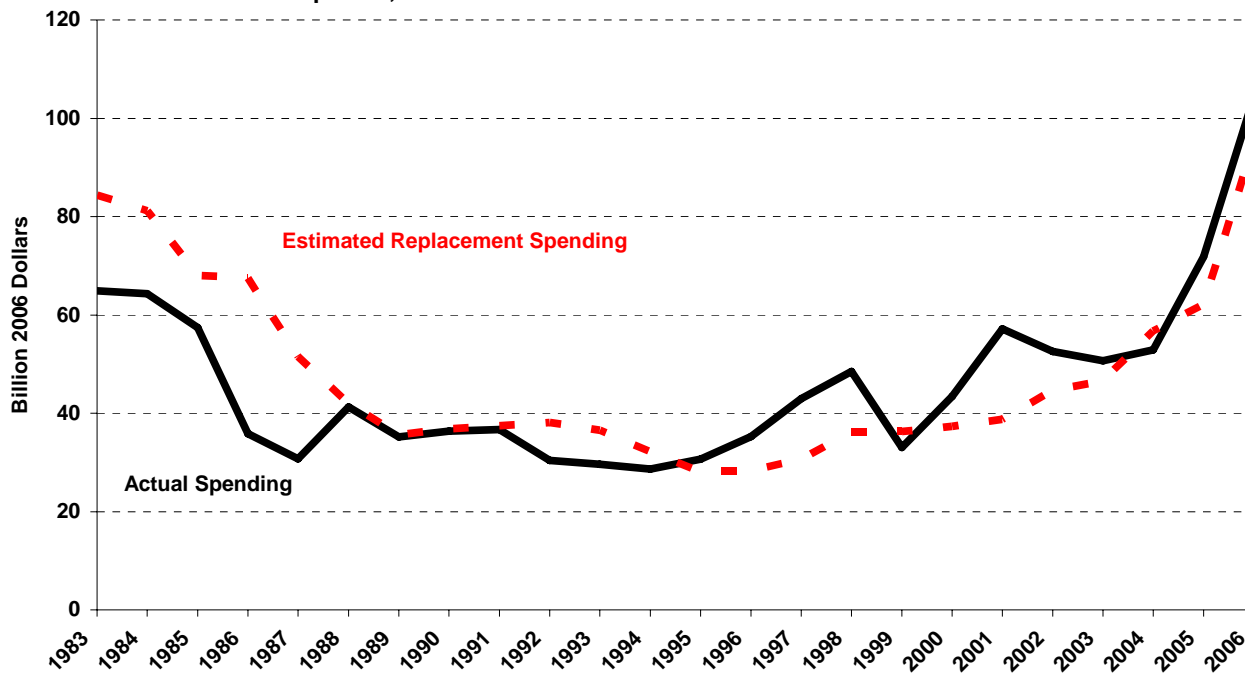
Region	2003-2005	2004-2006	Percent Change
United States			
Onshore	14.00	19.46	39.0
Offshore	50.56	69.75	37.9
Total United States	16.70	23.16	38.7
Foreign			
Canada	23.84	26.59	11.5
Europe	16.43	29.79	81.3
Former Soviet Union	21.29	NM	NM
Africa	22.26	32.13	44.3
Middle East	9.78	14.31	46.4
Other Eastern Hemisphere	14.98	18.76	25.2
Other Western Hemisphere	31.06	47.63	53.4
Total Foreign	18.33	26.17	42.8
Worldwide	17.45	24.29	39.2

NM = Not meaningful.

Notes: The above figures are 3-year weighted averages of exploration, development, and production expenditures, excluding expenditures for proven acreage, divided by reserve additions, excluding net purchases of reserves. Natural gas is converted to equivalent barrels of oil at 0.178 barrels per thousand cubic feet. Sum of components may not add to total due to independent rounding.

Source: Energy Information Administration, Form EIA-28 (Financial Reporting System).

Figure 17. Actual Spending to Find Reserves and Estimated Spending Necessary to Replace Production for FRS Companies, 1983 - 2006



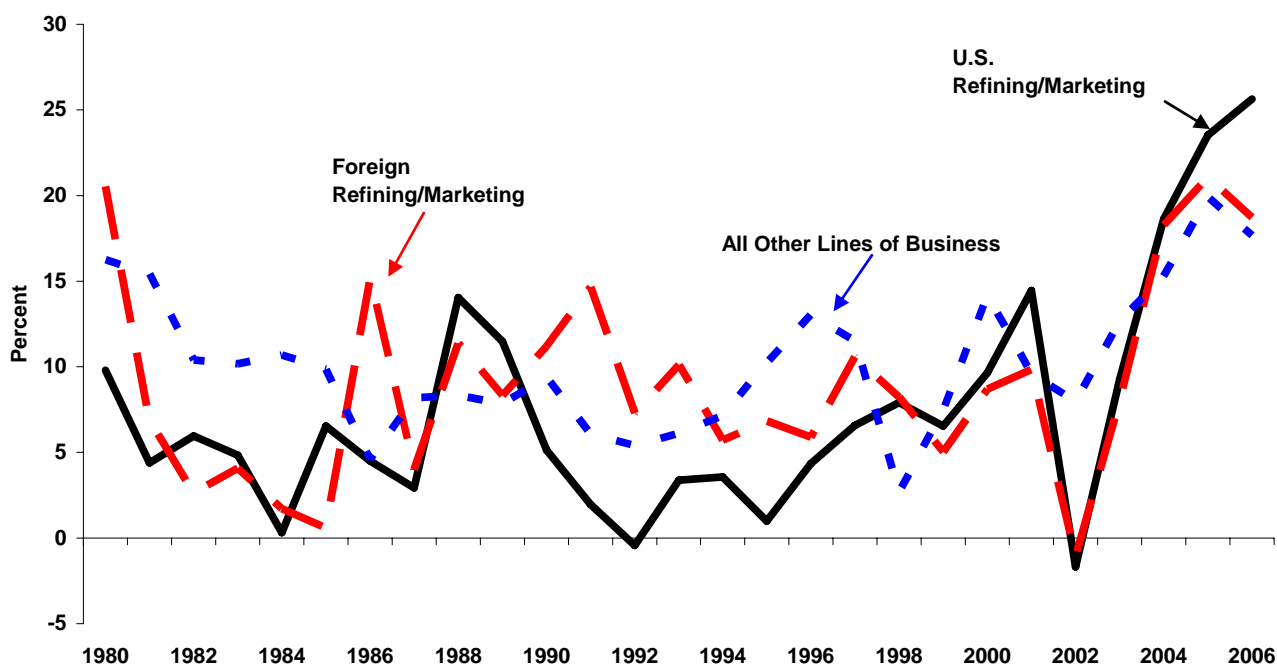
Source: Energy Information Administration, Form EIA-28 (Financial Reporting System).

Refining and Marketing

U.S. Refining/Marketing

The average profitability (contribution to net income divided by net investment in place) of U.S. refining/marketing operations of the FRS companies reached 26 percent in 2006, the highest level in the history of the FRS survey. The new high exceeded the previous record—registered in 2005—by 2 percentage points, but was only 4 years removed from the all-time low for return on investment (since 1977) of -2 percent in 2002 (Figure 18). The recent history of the FRS companies' U.S. refining/marketing profitability has been one of consistent increases as they generated an above-average 9 percent in 2003, which was followed by all-time highs in 2004, 2005, and 2006. The ongoing cost-cutting efforts that characterized the domestic refining/marketing operations of the FRS companies in the 1990s and were a major contributor to the profitability of the period apparently have been less successful in recent years. Per-barrel operating costs increased in 2006 relative to the previous year (Table 13), as has occurred in five of the past 7 years.³⁴

Figure 18. Return on Investment in U.S. and Foreign Refining/Marketing, and All Other Lines of Business for FRS Companies, 1980-2006



Source: Energy Information Administration, Form EIA-28 (Financial Reporting System).

An examination of the net refined product margin (net margin), which has been found to be strongly correlated with profitability,³⁵ can illuminate the reasons underlying changes in the profitability of U.S. refining/marketing operations. The net margin is the gross margin (essentially the difference between petroleum product prices and crude oil costs)³⁶ minus out-of-pocket operating costs per barrel of refined product sold. The net margin measures

³⁴ Unless otherwise indicated, all dollar values and percentage changes in this report are based in constant 2006 dollars, adjusted using the Gross Domestic Product implicit price deflator.

³⁵ The net margin is highly correlated with return on investment. The latest estimation of the relationship between refining margins and profitability is that the correlation coefficient is 0.93. See "Refining Margins as Predictors of Profitability" in Chapter 4 of *Performance Profiles of Major Energy Producers 2003*.

³⁶ More precisely, gross margins are calculated, on a per-barrel basis, by taking refined product revenues minus purchases of raw materials input to refining and refined product purchases.

Table 13. Sales, Prices, Costs, and Margins in U.S. Refining/Marketing for FRS Companies, 2005-2006

	2005	2006	Percent Change 2005-2006
Refined Product Sales (Million Barrels per Day)	22.4	21.3	-4.6
	(2006 Dollars per Barrel)		
Gasoline Average Price	73.38	83.79	14.2
Distillate Average Price	74.31	83.23	12.0
Other Products Average Price	49.03	58.50	19.3
All Refined Products Average Price	69.07	79.08	14.5
Less: Raw Materials Costs and Product Purchases	58.89	66.98	13.7
Equals: Gross Refining Margin	10.18	12.10	18.8
Less: Direct Operating Costs	6.56	6.81	3.8
Equals: Net Refining Margin ^a	3.62	5.29	45.9
Reseller/wholesaler spread (dealer price - wholesale price)	2.25	3.43	52.3
Retailer spread (company-operated price - dealer price)	5.81	4.88	-16.0

^aSee Appendix B, Table B32, for the components to calculate the refined product margin.

Source: Energy Information Administration, Form EIA-28 (Financial Reporting System).

before-tax cash earnings from the production and sale of refined products.³⁷ The \$5.29-per-barrel net margin of 2006 was the highest (in terms of 2006 dollars) in the 30-year history of the FRS (**Figure 5**), exceeding the previous high of 2005 by \$1.66.

The average gross refining margin reported by the FRS companies in 2006 increased 19 percent compared to 2005 (**Table 13**). The average price received for petroleum products in 2006 (\$79.08 per barrel) increased \$10.01 relative to the 2005 value after adjusting for general price changes between 2005 and 2006, while raw materials and purchased product costs rose \$8.09 per barrel to \$66.98. These changes resulted in a \$1.92-per-barrel increase in the gross refining margin to \$12.10.

Revenues and Costs

Higher crude oil prices in 2006 (compared to 2005) put upward pressure on petroleum product prices. However, industry-wide stocks of petroleum products were consistently higher through 2006 than in 2005 (**Figure 19**),³⁸ while motor gasoline stocks were much lower during all of 2006 than in 2005 (**Figure 20**).³⁹ The former tended to put downward pressure on all product prices, while the latter tended to put upward pressure on motor gasoline prices. Furthermore, recovery from the effects⁴⁰ of Hurricanes Katrina and Rita on production and distribution of petroleum products was incomplete relative to the levels of 2004. Thus, supply effects, which had driven prices higher in 2005, continued in 2006. Despite U.S. crude oil stock levels reaching historically high levels during all of 2006 relative to 2005 (**Figure 21**), which tends to put downward pressure on crude oil prices, raw material and purchased product costs for FRS companies rose 14 percent (**Table 13**). Additionally, problems with the U.S. refining system⁴¹ put upward pressure on product prices and contributed to higher crude oil stock levels.

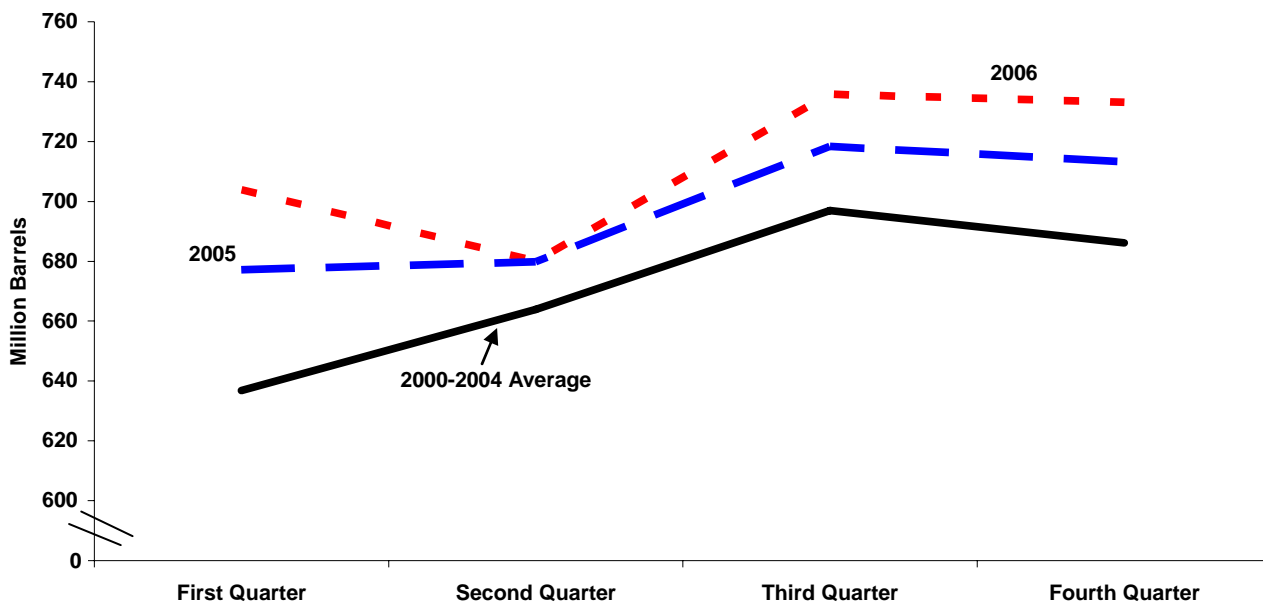
³⁷ The net margin excludes peripheral activities such as non-petroleum product sales at convenience stores.

³⁸ The stock levels of all petroleum products in 2006 were higher in each quarter relative to both 2005, varying from a low of less than 0.1 percent in the second quarter to a high of 4 percent in the first quarter, and the average for the period of 2000 through 2004, varying from a low of 2 percent in the second quarter to a high of 11 percent in the first quarter.

³⁹ The stock levels of motor gasoline in 2006 were lower in each quarter relative to both 2005, varying from a low of 3 percent in the first quarter to a high of 16 percent in the second quarter, and the average for the period of 2000 through 2004, varying from a low of 7 percent in the first quarter to a high of 24 percent in both the second and fourth quarters.

⁴⁰ Domestic crude oil production during 2006 recovered somewhat from the devastating effects of Hurricanes Rita and Katrina as overall U.S. production was 0.4 percent greater than in 2005 (but more than 5 percent lower relative to 2004 (Energy Information Administration, *Short-Term Energy Outlook*, Table 5a (December 6, 2005 and December 12, 2006)).

Figure 19. Quarterly Average U.S. Commercial Petroleum Product Stocks, 2000-2004 Average, 2005, and 2006



Source: Energy Information Administration, *Petroleum Supply Monthly*, DOE/EIA-0109 (Various issues, Washington, DC), Table 51.

Petroleum product sales declined 5 percent in 2006 relative to 2005 (**Table 13**). The product sales are composed chiefly of motor gasoline and distillate, which decreased 5 percent and 2 percent, respectively, but all categories of petroleum product sales declined in 2006 relative to 2005 (**Table 14**). The result of lower sales and higher petroleum product prices was a 9-percent increase in domestic petroleum product sales revenues (**Table 15**). Meanwhile, operating costs increased by a slightly smaller amount than did sales revenues. This combination of increases in revenues and costs resulted in a 14-percent increase in operating income in 2006 over that of 2005 (\$33.8 billion and \$29.8 billion, respectively) and a 12-percent increase in net income relative to a year earlier (\$24.3 billion and \$21.6 billion, respectively).

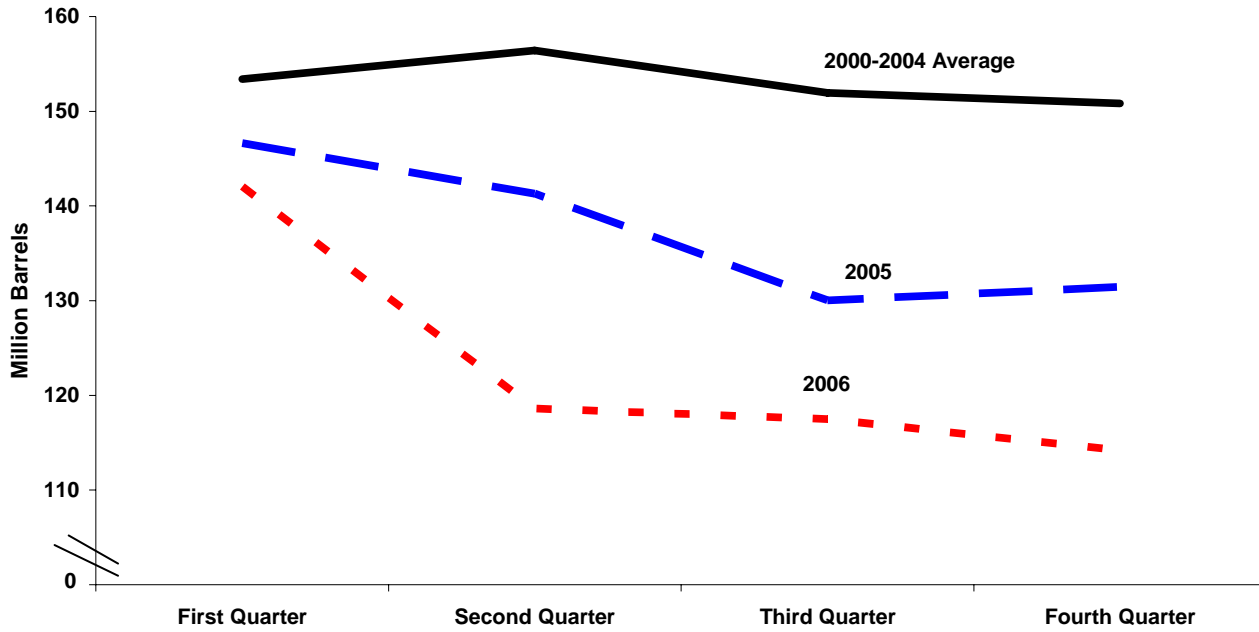
Overall domestic operating expenses increased 8 percent between 2005 and 2006 (**Table 15**). Similarly, those operating expenses most closely associated with refining and marketing operations on a per-barrel basis increased by 4 percent between 2005 and 2006 (**Table 13**). More particularly, operating expenses associated with refining (energy costs and other operating costs) increased by \$0.40⁴² per barrel, while marketing costs fell by \$0.15 per barrel (10 percent) (**Table 14**).

However, the production of the first half of the year was decidedly lower than in the first half of 2005, but increased each quarter relative to the previous quarter (see Energy Information Administration, *Short-Term Energy Outlook*, Table 5a (December 12, 2006 and August 7, 2007). Furthermore, refinery runs for the FRS companies were 6 percent lower in the first quarter of 2006 than in the first quarter of 2005 and 4 percent lower in the second quarter of 2006 compared to the second quarter of 2005 (see Energy Information Administration, “Financial News for Major Energy Companies”) (http://www.eia.doe.gov/emeu/perfpro/news_m/q106.pdf and http://www.eia.doe.gov/emeu/perfpro/news_m/q206.pdf, as of September 7, 2007).

⁴¹ “FTC: Market Factors Explain ’06 Gasoline Price Spurt,” *Oil and Gas Journal*, Volume 105, Number 34 (September 10, 2007); and “Market Watch: Hot weather drives up natural gas prices,” *Oil and Gas Journal Online* (July 21, 2006) at http://www.ogj.com/articles/email_screen.cfm?ARTICLE_ID=260608 (as of October 11, 2007).

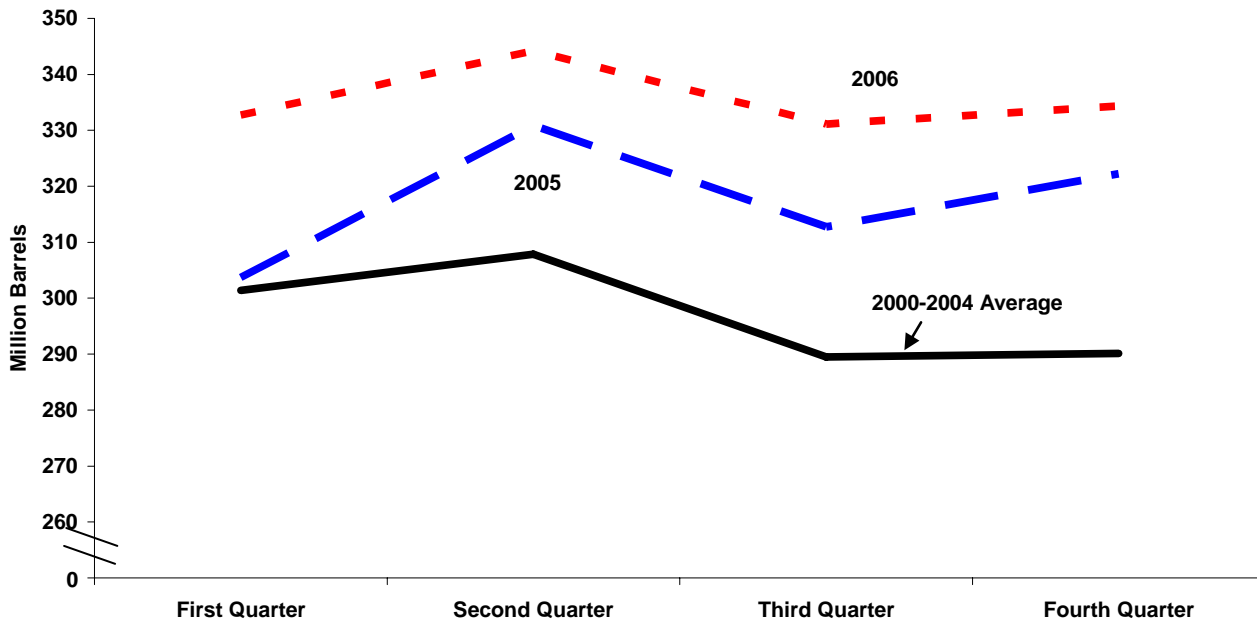
⁴² Refining energy costs fell by \$0.14 per barrel, but other refining costs increased by \$0.54 per barrel with the net effect of an 8 percent increase between 2005 and 2006.

Figure 20. Quarterly Average U.S. Motor Gasoline Stocks, 2000-2004 Average, 2005, and 2006



Source: Energy Information Administration, *Petroleum Supply Monthly*, DOE/EIA-0109 (Various issues, Washington, DC), Table 51.

Figure 21. Quarterly Average U.S. Crude Oil Stocks, 2000-2004 Average, 2005, and 2006



Source: Energy Information Administration, *Petroleum Supply Monthly*, DOE/EIA-0109 (Various issues, Washington, DC), Table 51.

Table 14. U.S. Refined Product Margins and Costs per Barrel Sold and Product Sales Volume for FRS Companies, 2005-2006

	2005	2006	Percent Change 2005 - 2006
	(2006 Dollars per Barrel)		
Gross Margin	10.18	12.10	18.8
- Marketing Costs	1.56	1.41	-9.9
- Energy Costs	1.88	1.74	-7.4
- Other Operating Costs	3.12	3.66	17.4
= Net Margin	3.62	5.29	45.9
	(Million Barrels)		
Product Sales Volume			
Motor Gasoline	11,720	11,190	-4.5
Distillate	6,434	6,313	-1.9
Other Products	4,203	3,835	-8.7
Total	22,358	21,339	-4.6

Source: Energy Information Administration, Form EIA-28 (Financial Reporting System).

Continued efforts by the FRS companies to reduce their energy costs were successful in 2006, as costs decreased by \$0.14 per barrel (7 percent). Much of the explanation for lower energy costs is the 17-percent decrease in natural gas wellhead prices in 2006 relative to 2005 after adjusting for inflation. Further, refinery output fell slightly (2 percent, **Table 16**), putting downward pressure on the overall level of costs (but not necessarily costs per barrel of output). FRS companies continue their efforts to contain energy costs through cogeneration projects,⁴³ which have been one major approach taken to reduce energy costs over the last few years.⁴⁴

Other operating costs related to refining increased between 2005 and 2006, from \$3.12 per barrel to \$3.66 per barrel after adjusting for inflation (**Table 14**). Several factors contributed to this increase. Recent mergers and major transactions required adjustments of operations and corporate cultures, which tend to elevate operating costs. Additionally, adjustments to the effects of Hurricanes Katrina and Rita continued to occur through much of 2006, which elevated operating costs. Finally, adjustments to comply with the Clean Air Act Amendments of 1990 and the replacement of methyl tertiary butyl ether (MTBE) with ethanol have increased operating costs.⁴⁵

⁴³ During 2006, Exxon Mobil noted, “We continue to make significant investments in cogeneration facilities, which require substantially less energy and result in lower emissions versus separate conventional steam and power generation. In addition to the large facility we recently started up at Beaumont, Texas, we have several cogeneration facilities being progressed for start-up in future years (Exxon Mobil Corporation, *2006 Financial and Operating Review*, p. 68).”

⁴⁴ See for example, Energy Information Administration, *Performance Profiles of Major Energy Producers 2001*, DOE/EIA-0206 (2001) (Washington, D.C., January 2003), p. 43. (This publication is available on the Internet through a link at <http://www.eia.doe.gov/emeu/finance/histlib.html> (as of October 7, 2007).)

⁴⁵ Although we have no estimate of the significance of the environmental spending in 2006 for other operating costs, several companies indicated that their operating expenses attributable to environmental cost had increased. For example, Marathon reported that its 2006 operating costs attributable to environmental compliance were about 28 percent higher than in 2005 (Marathon Corporation, 2006 U.S. Securities and Exchange Commission Form 10-K, p. 51), while Valero reported that its 2006 environmental operating costs were approximately 13 percent higher than in 2005 (Valero Energy Corporation, 2006 U.S. Securities and Exchange Commission Form 10-K, p. 85). Also see a recent EIA study that examined the effect of environmental compliance on operating costs, which is available on EIA’s Web site at http://www.eia.doe.gov/emeu/perfpro/ref_pi2/index.html.

Table 15. U.S. and Foreign Refining/Marketing^a Financial Items for FRS Companies, 2005-2006
(2006 Million Dollars)

	2005	2006	Percent Change 2005-2006
Domestic Refining/Marketing Operations			
Refined Product Sales Revenue	563,644	615,905	9.3
Other Revenue ^b	17,928	11,050	-38.4
Operating Expense ^{b, c}	551,773	593,107	7.5
Operating Income ^c	29,799	33,848	13.6
Net Income, excluding unusual Items	22,277	24,657	10.7
Unusual Items	-652	-344	--
Net Income	21,625	24,313	12.4
Foreign Refining/Marketing Operations^a			
Refined Product Sales Revenue	273,091	277,026	1.4
Other Revenue ^b	12,782	11,175	-12.6
Operating Expense ^{b, c}	276,224	278,479	0.8
Operating Income ^c	9,649	9,722	0.8
Net Income, excluding unusual Items	7,931	7,359	-7.2
Unusual Items	120	190	58.8
Net Income	8,050	7,549	-6.2

^aIn order to prevent disclosure of company-level data the International Marine business segment has been combined with Foreign Refining/Marketing for this presentation. Relative to Foreign Refining/Marketing, International Marine is about one-tenth the size and has little material effect on the overall results of Foreign Refining/Marketing.

^bRaw materials revenues are netted against total operating expense.

^cExcludes Unusual Items.

-- = Not meaningful.

Source: Energy Information Administration, Form EIA-28 (Financial Reporting System).

Operational Changes

Retrenchment of marketing operations continued through both selective investment⁴⁶ in outlets in profitable areas and sales of marginal outlets,⁴⁷ which contributed to the \$0.15-per-barrel reduction in marketing costs between 2005 and 2006 (**Table 14**). In particular, branded marketing outlets directly supplied by the FRS companies declined again in 2006 (**Figure 22**), falling 9 percent to 38,797 (**Table 17**). Company-operated outlets were reduced (8 percent) in 2006, while dealer outlets were reduced slightly more, by 9 percent. Efforts to eliminate

⁴⁶ For example, Exxon Mobil has a strategy of “selective investment [that] is complemented by equally selective divestments that high-grade our asset base and optimize returns (2006 *Financial and Operating Review*, p. 71).” Shell Oil Company sold a number of assets in the United States during 2006 “[a]s part of [its] ... ongoing portfolio management (Royal Dutch Shell, 2006 *Annual Review and Summary Financial Statements*, p. 25).” Sunoco sold 338 retail sites during the 2004–2006 period “under a retail portfolio management ... program to selectively reduce the Company’s invested capital in Company-owned or leased sites, ... convert[ing the divested outlets] to contract dealers or distributors (Sunoco Inc., 2006 U.S. Securities and Exchange Commission Form 10-K, pp. 9–10).”

⁴⁷ Chevron indicated that its strategy is to increase its sales of motor fuel volumes “while reducing the number of company-owned sites in favor of ownership by third parties,” which resulted in a divestiture of more than 450 sites in 2006 and almost 2,800 outlets since the beginning of 2003 (Chevron Corporation, 2006 *Supplement to the Annual Report*, p. 51).” Exxon Mobil indicated that its corporate strategy is to combine selective investment and portfolio highgrading to increase its profitability of our business, which has reduced its number of retail service stations by nearly 20 percent since 2002 (Exxon Mobil Corporation, 2006 *Financial and Operating Review*, p. 71).

marginal outlets will tend to increase average productivity of the remaining outlets,⁴⁸ which is measured by the outlets' average monthly motor gasoline sales volume. This anticipated result was borne out by the changes in productivity between 2005 and 2006 of both company-operated and dealer outlets, which increased by 5 percent and 8 percent, respectively.

Table 16. U.S. and Foreign Refining/Marketing Investment and Refining Operating Items for FRS Companies, 2005-2006

	2005	2006	Percent Change 2005-2006
	(2006 Billion Dollars)		
U.S. Refining Additions to Investment in Place	15.0	11.0	-27.2
U.S. Marketing and Transportation Additions to Investment in Place	3.2	2.2	-32.5
Foreign Refining/Marketing Additions to Investment in Place	3.0	5.7	88.0
	21.3	18.9	-11.6
	(Thousand Barrels per Day)		
U.S. Refining Capacity	14,532	14,652	0.8
U.S. Refinery Output	15,039	14,726	-2.1
Foreign Refining Capacity	5,633	5,924	5.2
Foreign Refinery Output	5,134	5,164	0.6
	(Percent)		
U.S. Refinery Utilization Rate ¹	95.0	92.5	(2)
Foreign Refinery Utilization Rate ¹	89.0	88.2	(2)

¹Refinery utilization rate is calculated by dividing runs to stills at own refineries by the average of the year beginning and year ending crude oil distillation capacity.

²Not meaningful.

Source: Energy Information Administration, Form EIA-28 (Financial Reporting System).

Meanwhile, refinery capacity reported by the FRS companies increased by almost 1 percent (**Table 16**) due to marginal expansions in the capacity of many refineries,⁴⁹ as the only transaction involving FRS U.S. refineries entailed CITGO's divestiture of its share of the Lyondell-CITGO refinery partnership to Lyondell Chemical,⁵⁰ making Lyondell Chemical the FRS respondent company rather than the joint venture. Additions to U.S. refining net investment in place included refinery upgrades, which were mainly to meet Phase II-compliant petroleum products⁵¹ or to increase the ability to process heavier and/or higher sulfur crude oil.⁵² The combination of

⁴⁸ However, some FRS companies have noted in the past that these efforts can be frustrated if productive dealers elect to change brands.

⁴⁹ For example, Chevron "completed an expansion of the Pascagoula, Mississippi, refinery's Fluid Catalytic Cracking Unit to increase the production of gasoline and other light products (Chevron Corporation, 2006 U.S. Securities and Exchange Commission Form 10-K, p. 25)," ConocoPhillips' "[c]apital spending for R&M ... was primarily for acquiring additional crude oil refining capacity, clean fuels projects to meet new environmental standards, refinery-upgrade projects to improve product yields, the operating integrity of key processing units, as well as for safety projects (2006 U.S. Securities and Exchange Commission Form 10-K, p. 84)," and Exxon Mobil's "capital expenditures are focused on selective ... investments that ... enhance refinery capacity (Exxon Mobil Corporation, 2006 *Financial and Operating Review*, p. 68)."

⁵⁰ The sale closed on August 16, 2006, but was made retroactive to July 31, 2006 (Lyondell Chemical, 2006 U.S. Securities and Exchange Commission Form 10-K, p. 1).

⁵¹ For example, Hess reported that "[c]apital expenditures to comply with low-sulfur gasoline requirements at Port Reading were \$72 million, of which \$23 million was spent in 2005 and the remainder was spent in 2006 (2006 U.S. Securities and Exchange Commission Form 10-K filing, p. 37), while Exxon Mobil reported "[d]ownstream capital expenditures were \$2.7 billion in 2006, up more than 9 percent versus 2005, reflecting the additional investment required to meet low-sulfur fuel and regulatory requirements (2006 *Financial and Operating Review*, p. 65)." Also see a recent EIA study that examined the effect of environmental compliance on capital expenditures (and operating costs), which is available on EIA's Web site at http://www.eia.doe.gov/emeu/perfpro/ref_pi2/index.html.

transactions, environmental investment, and turnaround spending resulted in a 27-percent decrease in U.S. refining additions to net investment in place (**Table 16**), chiefly due to the absence of any major acquisitions and, in some cases, to reduced capital investment for environmental compliance.⁵³ However, several companies noted substantial investment in various aspects of ethanol (production and blending)⁵⁴ and biodiesel (research, production, distribution, and storage)⁵⁵ as part of their environmental compliance investment.

Successful efforts to increase the complexity of the FRS refineries during the last several years (**Table 18**) allow the FRS companies to refine a wide range of crude oils, thus enabling them to take advantage of price differences between the relatively lower-cost heavy crude oils and the relatively higher-cost light crude oils⁵⁶ and transform them into relatively higher-priced, light products. The price of lighter products (represented by the price of motor gasoline) increased \$3.20 per barrel relative to the price of heavier products (represented by the price of residual

⁵² Several companies noted such investment. BP “announced that it had entered the final planning stage of a \$3-billion investment in Canadian heavy crude oil processing capability at its Whiting, [Indiana] ... refinery (BP plc, 2006 Annual Report on Form 20-F, p. 23).” Chevron announced in 2006 that it completed “an expansion of the Pascagoula, Mississippi, refinery’s Fluid Catalytic Cracking Unit to increase the production of gasoline and other light products” and began “construction projects ... at the El Segundo, California, refinery to increase heavy, sour crude oil processing capacity (Chevron Corporation, 2006 U.S. Securities and Exchange Commission Form 10-K, p. 25).” ConocoPhillips stated that one of the major aims of its capital spending over a three-year period ending on December 31, 2006 was “refinery-upgrade projects to improve product yields (ConocoPhillips, 2006 U.S. Securities and Exchange Commission Form 10-K, p. 84).” Exxon Mobil’s “capital expenditures ... lower operating costs, and produce higher-value products ... using lower-cost raw materials ... [in addition to expanding] refinery capacity and yield (Exxon Mobil Corporation, 2006 *Financial and Operating Review*, p. 68).” Marathon “[c]ompleted a 26,000 barrel per calendar day expansion of the Detroit, Mich., refinery (2006 *Fact Book*, p. 4).” Sunoco “initiated an alkylation process improvement project at its Philadelphia refinery’s HF alkylation unit (Sunoco Inc., 2006 U.S. Securities and Exchange Commission Form 10-K, p. 8).” Tesoro spent \$124 million during 2006 “transforming an existing fluid coker unit at the Golden Eagle refinery into a delayed coker (Tesoro Corporation, 2006 U.S. Securities and Exchange Commission Form 10-K, p. 11).”

⁵³ For example, Marathon stated that its “[e]nvironmental expenditures for each of the last three years were: \$166 million, \$390 million, and \$433 million in 2006, 2005, and 2004, respectively (Marathon Corporation, 2006 U.S. Securities and Exchange Commission Form 10-K, p. 51), while other companies reported higher capital spending due to environmental compliance, such as Exxon Mobil, which noted that “[d]ownstream capital expenditures were \$2.7 billion in 2006, up more than 9 percent versus 2005, reflecting the additional investment required to meet low-sulfur fuel and regulatory requirements (Exxon Mobil Corporation, 2006 *Financial and Operating Review*, p. 65),” and Lyondell, which reported that “[c]apital expenditures by Houston Refining (on a 100% basis) for regulatory compliance in 2006, 2005, and 2004 were \$134 million, \$106 million and \$31 million, respectively (Lyondell Chemical, 2006 U.S. Securities and Exchange Commission Form 10-K, p. 79).”

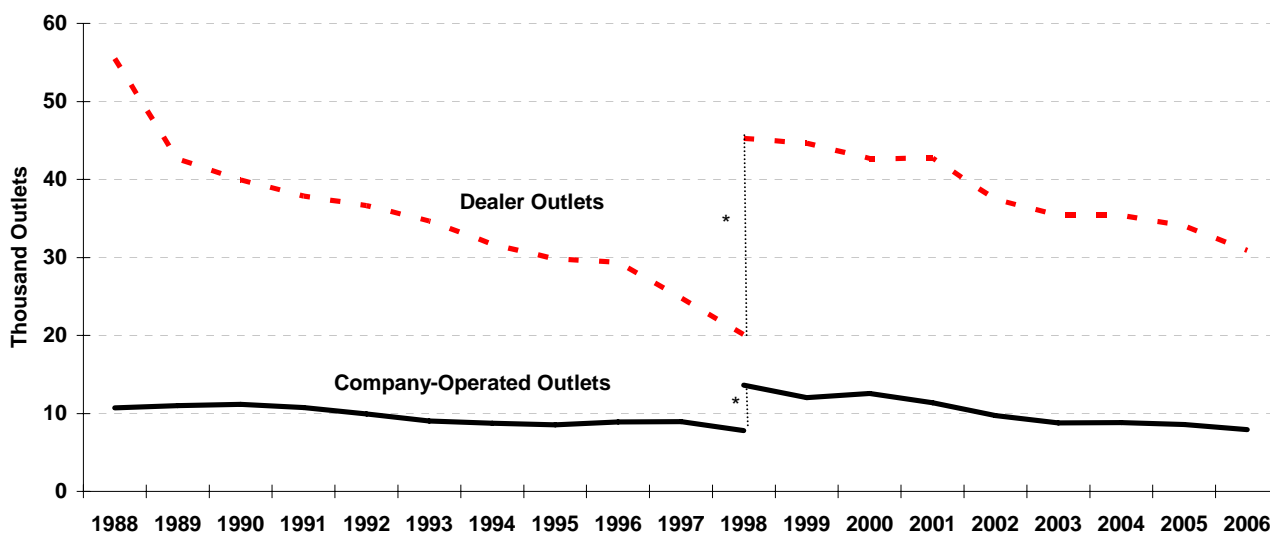
⁵⁴ Marathon “formed a 50/50 joint venture to produce ethanol (Marathon Corporation, 2006 *Annual Report*, p. 14),” while Exxon Mobil “installed a number of projects at our terminals in Texas, the Mid-Atlantic, and the Northeast to blend ethanol into motor gasoline to meet new U.S. renewable fuels standards (Exxon Mobil Corporation, 2006 *Financial and Operating Review*, p. 69).”

⁵⁵ Chevron acquired “a 22 percent interest in Galveston Bay Biodiesel L.P., which is building one of the first large-scale biofuel plants in the United States” and “entered into research alliances with the University of California, Davis, and the Georgia Institute of Technology” to convert “cellulosic biomass into viable transportation fuels (Chevron Corporation, 2006 U.S. Securities and Exchange Commission Form 10-K, p. 30).” Additionally, Marathon “now has the capacity to store and distribute biodiesel at its Louisville, Kentucky, and St. Paul Park, Minnesota, terminals (Marathon Corporation, 2006 *Annual Report*, p. 14).”

⁵⁶ The efforts continue. For example, BP “announced that it had entered the final planning stage of a \$3-billion investment in Canadian heavy crude oil processing capability at its Whiting, [Indiana] ... refinery (BP plc., 2006 Annual Report on Form 20-F, p. 23).” Chevron announced in 2006 that it completed “an expansion of the Pascagoula, Mississippi, refinery’s Fluid Catalytic Cracking Unit to increase the production of gasoline and other light products” and began “construction projects ... at the El Segundo, California, refinery to increase heavy, sour crude oil processing capacity (Chevron Corporation, 2006 U.S. Securities and Exchange Commission Form 10-K, p. 25).” ConocoPhillips noted that one of the major aims of its capital spending over a three-year period ending on December 31, 2006, was “refinery-upgrade projects to improve product yields (ConocoPhillips, 2006 U.S. Securities and Exchange Commission Form 10-K, p. 84).” Exxon Mobil indicated that its “capital expenditures are focused on ... investments [to] ... lower operating costs, and produce higher-value products ... using lower-cost raw materials (2006 *Financial and Operating Review*, p. 68).” Tesoro indicated that it spent \$124 million during 2006 for transforming an existing fluid coker unit at the Golden Eagle refinery into a delayed coker (Tesoro Corporation, 2006 U.S. Securities and Exchange Commission Form 10-K, p. 11).

fuel oil) (Figure 23). Similarly, during 2005 the price of light crude oil relative to heavy crude increased (Figure 24), raising the discount paid for heavy crude oil from \$15.84 per barrel in 2005 to \$16.03 per barrel in 2006, both in terms of 2006 dollars. These price movements favored companies with complex refineries and provided additional incentives for companies to expand their capability to process heavy crude oil.

Figure 22. Company-Operated and Direct-Supplied Dealer Outlets for FRS Companies, 1988-2006



*The addition of 11 companies to the group of U.S. majors in 1998, the largest single-year change in the history of the Financial Reporting System, resulted in the vertical displacement of the series in 1998.

Note: Only outlets directly supplied by the FRS companies are included here.

Source: Energy Information Administration, Form EIA-28 (Financial Reporting System).

Table 17. Motor Gasoline Distribution and Number of Direct-Supplied Branded Outlets for FRS Companies, 2005-2006

	2005	2006	Percent Change 2005-2006
	(Million Barrels)		
Third-Party Volume			
Wholesale	2,221.1	2,119.5	-4.6
Retail			
Dealer	845.3	828.4	-2.0
Company-Operated	503.6	487.2	-3.3
Total Retail	1,349.0	1,315.6	-2.5
Direct	644.1	589.4	-8.5
Total Third-Party Volume	4,214.2	4,024.5	-4.5
Intersegment Volume	63.7	59.8	-6.0
	(Number of Direct-Supplied Branded Outlets)		
Dealer Outlets	33,998	30,870	-9.2
Company-Operated Outlets	8,585	7,927	-7.7
Total Retail Outlets	42,583	38,797	-8.9
	(Thousand Gallons per Month)		
Average Monthly Outlet Volume			
Dealers	87.0	93.9	7.9
Company-Operated	205.3	215.1	4.8
All Direct-Supplied Outlets	110.9	118.7	7.0

Source: Energy Information Administration, Form EIA-28 (Financial Reporting System).

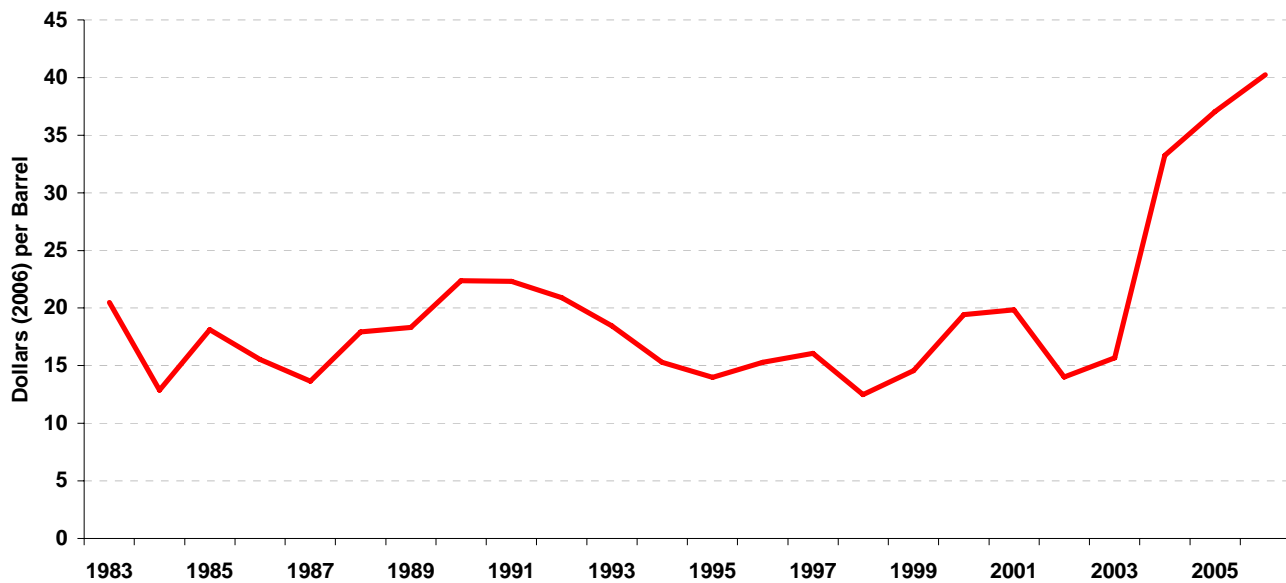
Table 18. U.S. Refinery Configurations of FRS Companies, Selected Years, 1974-2006
(Percent)

FRS Companies	Downstream Capacity as a Percent of Crude Distillation Capacity												
	1974	1981	1993	1996	1997	1999	2000	2001	2002	2003	2004	2005	2006
Integrated Refiners													
Coking	n.c.	n.c.	n.c.	13.0	12.6	12.9	13.9	14.1	15.8	15.4	15.7	15.4	15.4
Catalytic cracking	27.7	30.4	36.5	33.8	35.9	35.8	35.6	35.2	33.0	33.4	33.7	33.7	33.9
Catalytic reforming	17.6	22.4	25.8	24.9	23.4	22.3	22.4	22.2	21.8	21.8	21.8	21.4	21.7
Hydro cracking	5.6	5.7	9.6	9.6	9.6	10.9	11.0	10.9	10.7	10.4	10.7	10.5	11.0
Catalytic hydrotreating	n.c.	n.c.	n.c.	n.c.	n.c.	n.c.	n.c.	n.c.	n.c.	n.c.	79.5	82.3	85.8
Alkylation	4.8	5.3	7.7	6.8	7.5	7.4	7.4	7.2	7.1	7.2	7.3	7.3	7.5
Non-Integrated Refiners (includes CITGO and Motiva)													
Coking	n.c.	n.c.	n.c.	11.0	12.7	12.0	12.1	12.4	12.0	13.5	14.7	14.3	14.4
Catalytic cracking	n.c.	n.c.	n.c.	29.8	34.1	34.0	35.5	35.5	36.3	36.7	38.4	37.2	37.2
Catalytic reforming	n.c.	n.c.	n.c.	18.9	21.5	22.5	21.9	21.7	21.4	21.1	21.8	20.4	20.1
Hydro cracking	n.c.	n.c.	n.c.	6.3	7.8	8.6	8.6	8.4	7.8	8.5	8.7	8.1	8.3
Catalytic hydrotreating	n.c.	n.c.	n.c.	n.c.	n.c.	n.c.	n.c.	n.c.	n.c.	n.c.	71.4	72.7	73.7
Alkylation	n.c.	n.c.	n.c.	6.0	6.8	6.0	6.3	6.3	6.4	6.4	6.9	6.6	6.6

n.c.: Information not collected.

Sources: Oil and Gas Journal, "Worldwide Refinery Report," 1974, 1981, 1993, 1996, 1997, 1999, 2000, 2001, 2002, 2003, 2004, 2005, and 2006.

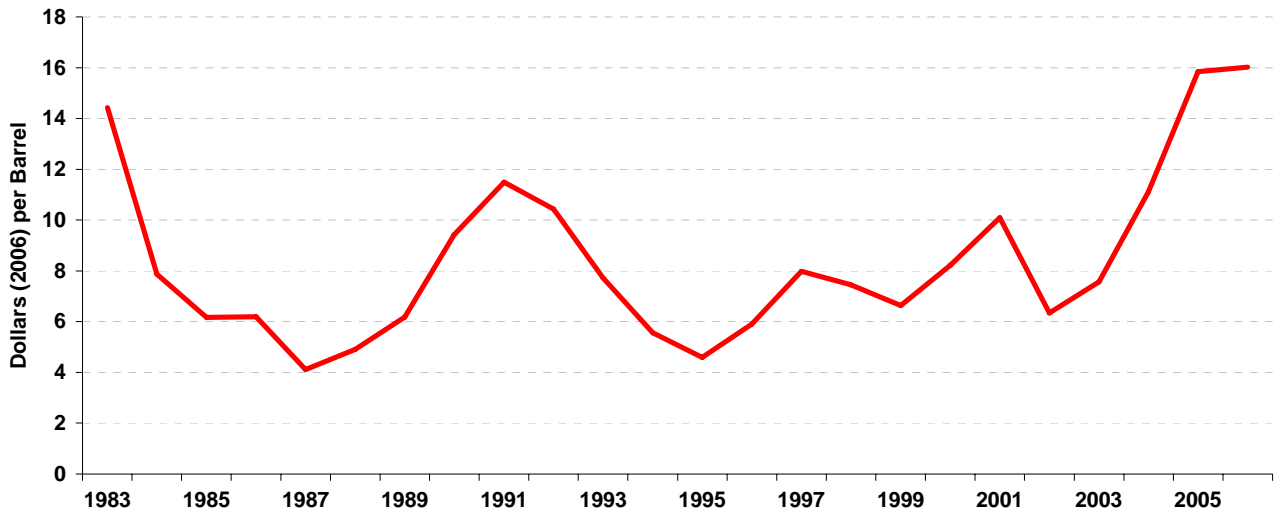
Figure 23. Resale Price Difference Between Motor Gasoline and Residual Fuel Oil, 1983-2006



Note: Motor gasoline tends to sell for a higher price per barrel than does residual fuel oil. Thus, the vertical distance of the line in the figure from the horizontal axis indicates the premium paid for motor gasoline relative to residual fuel oil.

Source: Energy Information Administration, *Petroleum Marketing Monthly*, DOE/EIA-0380, Table 4.

Figure 24. Price Difference Between Light Crude Oil and Heavy Crude Oil, 1983-2006



Note: Light crude oil tends to sell for a higher price per barrel than does heavy crude oil. Thus, the vertical distance of the line in the figure from the horizontal axis indicates the premium paid for light crude oil relative to heavy crude oil. The more expensive light crude oil is defined here as having an API gravity of 40.1 or greater and heavy crude oil is defined as having an API gravity of 20 or less.

Source: Energy Information Administration, *Petroleum Marketing Monthly*, DOE/EIA-0380, Tables 27 and 28 (2006 and earlier), and Tables 24 and 25 (2007).

The year 2006 was the most profitable in the 30-year history of the FRS and followed a recent series of unusually profitable years, which were broken in 2002 by the most unprofitable year in the history of the FRS. The primary reason for the increased profitability of the FRS U.S. refining/marketing operations in 2006 relative to 2005 was that the gross refining margin increased (by \$1.92 per barrel), while operating costs increased less (by \$0.25 per barrel). Decreases in energy costs and marketing costs (by a total of \$0.29 per barrel) were overwhelmed by higher other operating costs (which increased by \$0.54 per barrel). The combination of these changes resulted in an increase of \$1.67 per barrel in the net refining margin, which was a 46-percent increase relative to 2005. FRS cost-cutting efforts have been less successful over the last several years but continue through actions such as rationalization of the FRS companies' motor gasoline retailing operations (and the resulting decline in marketing costs) and suggest that the FRS companies continue to attempt to withstand the vicissitudes of their industry by focusing on the factors that they can most easily control.

Foreign Refining/Marketing⁵⁷

Four years after recording the lowest profitability (-1 percent) in the 30-year history of the FRS, companies reported the fourth-highest all-time high for return on net investment in place of foreign refining/marketing operations. The average profit rate of 19 percent was 2 percentage points lower than in 2005, which was the second-highest in the history of the FRS (**Figure 18**). Refined product and other revenue increased by slightly more than \$2 billion relative to 2005, but were largely offset by more than a \$2-billion increase in operating expense, resulting in less than a \$100-million increase (1 percent) in operating income and a \$500-million decrease (6 percent) in net income (**Table 15**).

⁵⁷ For this presentation, the International Marine business segment has been combined with Foreign Refining/Marketing to prevent disclosure of company-level data. Relative to Foreign Refining/Marketing, International Marine is about one-tenth the size and has little material effect on the overall results of Foreign Refining/Marketing.

The FRS companies derive their foreign refining/marketing earnings from two sources: consolidated operations and unconsolidated affiliates. A fully consolidated affiliate is directly controlled by the parent corporation (although it could be owned by several companies, with the parent corporation owning more than 50 percent). In addition, all operating financial information about a fully consolidated affiliate (such as revenues) is reported in the public financial disclosures of the parent corporation. Conversely, the corporate parent of an unconsolidated affiliate usually owns 50 percent, or less, of the affiliate, and does not directly control the affiliate⁵⁸ (a joint venture, for example, is usually an unconsolidated affiliate from the perspective of at least one of the partners⁵⁹). Essentially, the unconsolidated affiliate is more of a property or holding of the parent corporation than a company that the parent actually operates. The effect on financial operations of an unconsolidated affiliate can be seen only on the parent corporation's income statement, on which the parent company reports its proportional share of the affiliate's net income.

Historically, approximately half of the FRS consolidated foreign refinery capacity is located in Europe, 52 percent in 2006, with most of the remaining consolidated refinery capacity in Asia. Meanwhile, the operations of the FRS companies' unconsolidated foreign refining/marketing affiliates have been mainly in Asia. Chevron owns much of the FRS Asian refinery capacity, most of which is unconsolidated. In fact, 71 percent of FRS unconsolidated foreign refinery capacity was in Asia in 2006 (**Table 19**).

Table 19. Regional Distribution of Foreign Refinery Capacity for FRS Companies, 2005-2006
(Percent)

	Consolidated Operations		Unconsolidated Affiliates	
	2005	2006	2005	2006
Europe	48.7	51.7	16.9	16.4
Asia	25.7	24.2	68.5	70.7
Latin America	9.0	8.5	0.6	0.3
Canada	14.1	13.3	0.0	0.0
Other	2.5	2.4	13.9	12.7
Grand Total	100.0	100.0	100.0	100.0

Note: The region denoted as "Other" includes Africa and the Middle East.
Sources: Company Annual Reports and filings of U.S. Securities and Exchange Commission Form 10-K.

The decrease in net income between 2005 and 2006 in FRS foreign refining/marketing operations was due to a decrease in income from unconsolidated operations and despite an increase in income from consolidated operations (**Figure 25**). The former decreased by \$620 million, while the latter increased by \$372 million. Worldwide petroleum demand increased (**Figure 26**) by less than 1 percent, contributing slightly to greater earnings. Additionally, the companies identified numerous reasons for the decreased profitability of FRS unconsolidated and overall foreign refining/marketing operations in public statements, including reduced refining margins,⁶⁰ lower refinery utilization rates⁶¹ and throughput,⁶² and costs incurred ahead of completion of refinery upgrading (i.e., increased cost with no offsetting change in revenues) operations,⁶³ despite increased sales volumes,⁶⁴ margins received,⁶⁵ and refinery capacity (**Table 16**).

⁵⁸ The actual percentage of ownership necessary to convey control of an entity is open to debate and, for some purposes, can be as little as 10 percent.

⁵⁹ The Caltex joint venture was an unconsolidated affiliate for both of its parents, Chevron and Texaco, until their merger in 2002. However, most of the refinery capacity of Caltex (which was retained as an operating entity) is unconsolidated because Caltex generally owns less than 50 percent of each refinery in which it has ownership.

⁶⁰ ConocoPhillips, 2006 U.S. Securities and Exchange Commission Form 10-K, p. 65.

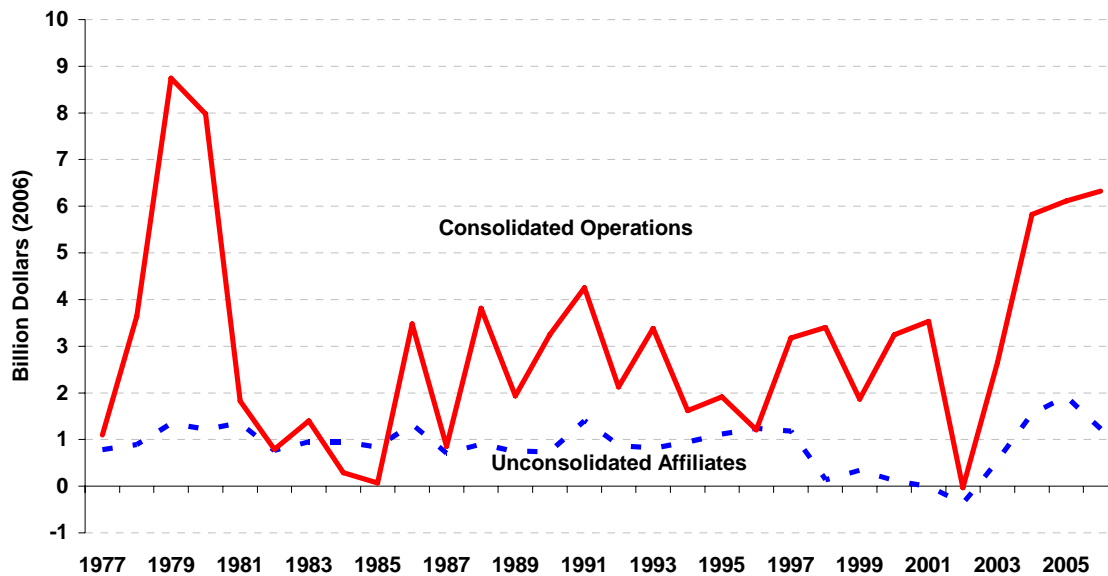
⁶¹ ConocoPhillips, 2006 U.S. Securities and Exchange Commission Form 10-K, p. 65.

⁶² Exxon Mobil Corporation, 2006 U.S. Securities and Exchange Commission Form 10-K, p. 38.

⁶³ ConocoPhillips, 2006 U.S. Securities and Exchange Commission Form 10-K, p. 65.

⁶⁴ ConocoPhillips, 2006 U.S. Securities and Exchange Commission Form 10-K, p. 65.

Figure 25. Foreign Refining/Marketing Net Income^a from Consolidated Operations and Unconsolidated Affiliates of FRS Companies, 1977-2006



^aThe International Marine business segment has been combined with Foreign Refining/Marketing for the years 2003 - 2005 in order to prevent disclosure of company-level data. Relative to Foreign Refining/Marketing, International Marine is about one-tenth the size and has little material effect on the overall results of Foreign Refining/Marketing.

Source: Energy Information Administration, Form EIA-28 (Financial Reporting System).

Consolidated Operations

Earnings from the FRS companies' consolidated operations increased (**Figure 25**) about \$372 million (3 percent) between 2005 and 2006, providing \$6,323 million of net income. The FRS consolidated operations generated higher earnings by selectively upgrading (or expanding the number of) marketing outlets,⁶⁶ reducing its costs by divesting non-core retail assets⁶⁷ and expanding refinery capacity.⁶⁸

Higher earnings from consolidated FRS foreign refining/marketing operations occurred within a difficult industry environment of lower refining margins and essentially unchanged (**Figure 26**) (0.3 percent lower) European petroleum demand. Further, European refining margins (represented by the Rotterdam/Brent gross refining margin) were consistently lower during 2006 than during 2005 (**Figure 27**), without exception. As a result, the average margin for all of 2006 was \$1.94 per barrel lower than the average margin for 2005.

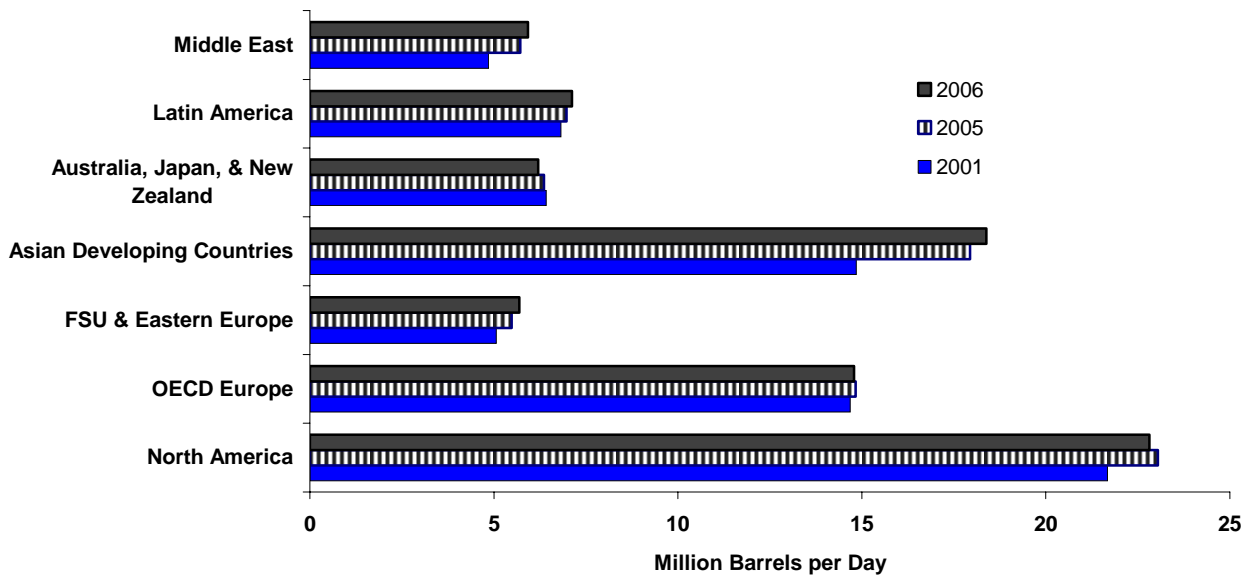
⁶⁵ Chevron Corporation, 2006 U.S. Securities and Exchange Commission Form 10-K, p. FS-8 and Exxon Mobil Corporation, 2006 U.S. Securities and Exchange Commission Form 10-K, p. 38.

⁶⁶Exxon Mobil "is ... build[ing] premier oil-change service centers in key markets around the globe, including the United States, Japan, Egypt, and China (Exxon Mobil Corporation, 2006 *Financial and Operating Review*, p. 73)."

⁶⁷Chevron "[e]xited fuels marketing ... in Scandinavia, Paraguay and Ecuador ... [and] sold its 50 percent share in the Hydro Texaco joint venture and its network of service stations across Scandinavia (Chevron Corporation, 2006 *Supplement to the Annual Report*, pp. 49 and 51)."

⁶⁸ For example, ConocoPhillips acquired "the Wilhelmshaven refinery in Germany, ... [and] upgrade[d] and increase[d] the profitability of ... [its] existing assets, including a replacement reformer at ... [the] Humber refinery in the United Kingdom (2006 U.S. Securities and Exchange Commission Form 10-K, p. 84)." Meanwhile, Exxon Mobil "increase[d] the capacity of ... [its] refineries through low-cost debottlenecks (Exxon Mobil Corporation, 2006 *Financial and Operating Review*, p. 67)."

Figure 26. Petroleum Consumption by Region, 2001, 2005, and 2006



Note: OECD stands for the Organisation for Economic Co-operation and Development.
 Source: BP plc, *BP Statistical Review of World Energy* (June 2007), p. 11.

Unconsolidated Operations

During 2006, the FRS companies' unconsolidated affiliates generated \$1,226 million of net income, which was 36 percent lower than the all-time high of \$1,919 million (in 2006 dollars), which was established in 2005. Company public disclosures included some reasons for the lower earnings generated by the Asian operations of the FRS companies, which included increased taxes⁶⁹ and lower refinery throughput,⁷⁰ despite higher margins reported⁷¹ by some companies.

Lower earnings occurred in a mixed industry environment. Consumption of petroleum products in Asia (combining Asian Developing Countries with Australia, Japan, and New Zealand) increased between 2005 and 2006 (**Figure 26**) by a slight 1 percent. However, higher industry-wide refining margins put scant upward pressure on earnings for FRS unconsolidated foreign refining/marketing operations.

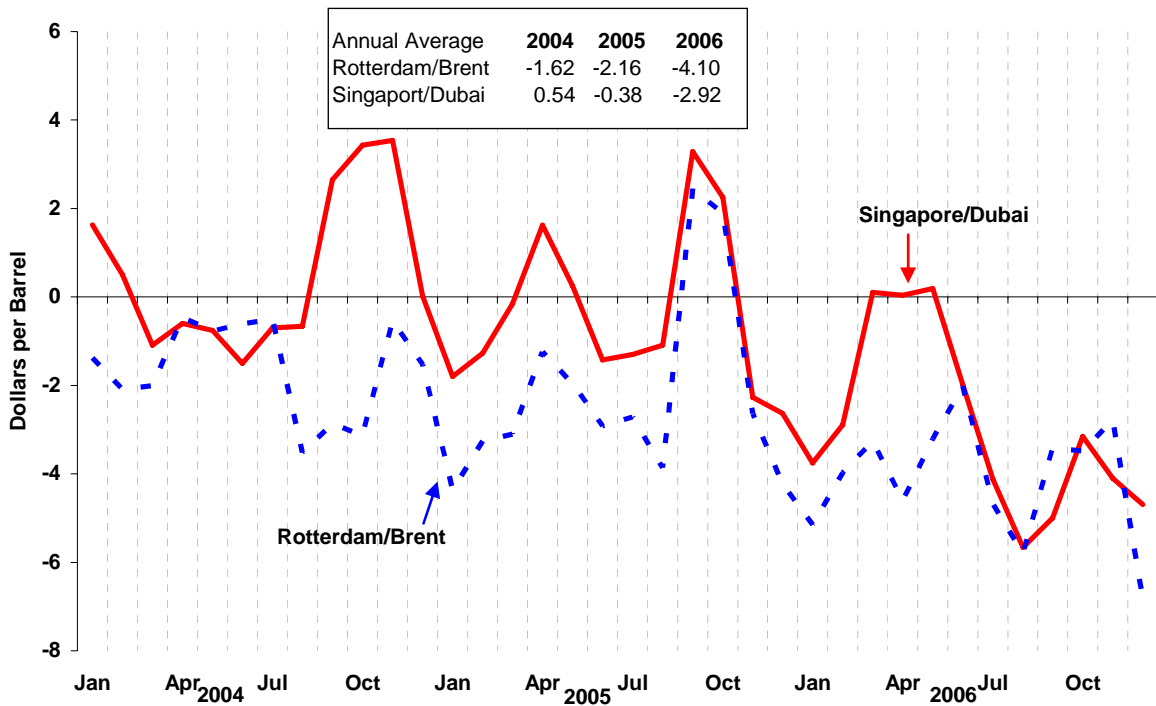
However, industry-wide Asian refining margins of 2006 were lower than those of 2005 for almost the entire year (**Figure 27**) (except for June). The mid-year increase in refining margins (relative to 2005) was insufficient to elevate the average annual gross refining margin in Asia (represented by the Singapore/Dubai gross refining margin) for 2006 above that of 2005, leaving it \$2.54 per barrel lower, which put downward pressure on the earnings from unconsolidated operations.

⁶⁹ ConocoPhillips, 2006 U.S. Securities and Exchange Commission Form 10-K, p. 60.

⁷⁰ Exxon Mobil Corporation, 2006 U.S. Securities and Exchange Commission Form 10-K, p. 38.

⁷¹ Chevron Corporation, 2006 U.S. Securities and Exchange Commission Form 10-K, p. FS-8 and Exxon Mobil Corporation, 2006 U.S. Securities and Exchange Commission Form 10-K, p. 38.

Figure 27. Foreign Gross Refining Margins, 2004-2006



Sources: Energy Intelligence Group, *Oil Market Intelligence* **2004**: January 2005 and July 2004, p. 12; **2005**: January 2006 and July 2005, p. 12; and **2006**: January 2007 and July 2006, p. 12.

FRS companies' foreign refining/marketing earnings decreased slightly due to essentially unchanged petroleum product consumption and a decrease in industry gross refining margins in both major regions in which the FRS companies operate—Europe and Asia. However, expansion and enhancement of operations and cost-cutting measures figured prominently in the increased consolidated earnings (relative to 2005) and near-record profitability of FRS foreign refining/marketing operations in 2006.

About the Financial Reporting System Companies

Changes in the Financial Reporting System Companies for the 2006 Reporting Year

For the 2006 reporting year, 27 major energy companies (**Table 20**) reported their financial and operating data to the EIA FRS on Form EIA-28. These companies (referred to as the FRS companies in this report) were two fewer in number than in 2005 with the departure of Premcor (acquired by Valero) and Unocal (acquired by Chevron). Although both Premcor and Unocal were acquired during 2005, both submitted partial-year submissions for 2005, which covered the period January 1 through the date that each was acquired. Similarly, Burlington Resources was acquired by ConocoPhillips on March 31, but submitted a partial-year submission for 2006. Lastly, Kerr-McGee was acquired by Anadarko Petroleum on August 10, but also submitted a partial-year submission for 2006.⁷²

Table 20. The FRS Companies in 2006

Amerada Hess Corporation	Exxon Mobil Corporation
Anadarko Petroleum Corporation	Kerr-McGee Corporation
Apache Corporation	Lyondell Chemical Corporation
BP America, Inc.	Marathon Oil Corporation
Burlington Resources, Inc.	Motiva Enterprises, L.L.C.
Chesapeake Energy Corporation	Occidental Petroleum Corporation
Chevron Corporation	Shell Oil Company
CITGO Petroleum Corporation	Sunoco, Inc.
ConocoPhillips	Tesoro Petroleum Corporation
Devon Energy Corporation	The Williams Companies, Inc.
Dominion Resources	Total Holdings USA, Inc.
El Paso Corporation	Valero Energy Corp.
EOG Resources, Inc.	XTO Energy, Inc.
Equitable Resources, Inc.	

Note: See Appendix A for a link to the list of FRS respondents from 1974 forward. Three of the FRS companies are owned by foreign companies: BP America—owned by BP plc; Total Holdings USA—owned by Total S.A.; and Shell Oil—owned by Royal Dutch Shell plc..

These changes basically represent the movement of assets within the group of FRS companies and, by including the partial-year submissions, EIA is able to maximize the amount of information that is collected for the assets involved in such mid-year transactions and thereby improve the ability of the FRS to reflect complete financial results achieved with FRS assets during each reporting year.

The last change in the FRS group for 2006 resulted from Lyondell Chemical buying out its partner's (CITGO) ownership in the LYONDELL-CITGO Refining L.P. (effective July 31, 2006). Thus, Lyondell Chemical has supplanted LYONDELL-CITGO Refining L.P. as the FRS respondent beginning with the 2006 reporting year. Although this change may appear to be purely one of semantics, it also expands the nonenergy assets of the FRS companies.

Although the composition of the FRS group of companies changes over time, the changes are usually incremental. A company is added to the survey when, through growth or acquisition, it meets the criteria classifying it as a major energy company. Typically no more than two companies are added to the survey in any given year. The new companies are usually relatively small compared to the existing FRS group, so the effect on the aggregate totals is marginal. The year 1998 was an exception. Because of a change in the FRS criteria, 11 companies were added to the FRS group. Companies rarely exit unless through merger, in which case the assets of the exiting

⁷² More information about mergers and acquisitions is available on the EIA website at <http://www.eia.doe.gov/emeu/finance/mergers.html>.

company are absorbed into the surviving company. Thus, despite occasional year-to-year changes in the FRS group composition, comparisons are still meaningful and informative.

The FRS Companies' Importance in the U.S. Economy

The FRS companies occupy a significant position in the U.S.⁷³ economy. In 2006, operating revenues of the FRS companies totaled \$1,389 billion, which is equal to 14 percent of the \$9.897 billion in revenues of the Fortune 500 corporations.^{74, 75}

The reporting companies engage in a wide range of business activities, but their most important activities are in the energy sector. They derived about 94 percent, or \$1,499.3 billion, of allocated operating revenues⁷⁶ from energy lines of business and derived nearly all of these revenues from their core petroleum operations (**Figure 28**). A majority of these companies are multinational, with 40 percent of the majors' net investment located abroad. Worldwide petroleum and natural gas market developments are of primary importance to these companies' financial performance.

The FRS collects financial and operating information for the combined corporate entity, as well as by lines of business within the company. The lines of business consist of petroleum, downstream natural gas (including NGL processing and natural gas pipelines), electric power, nonenergy, and other energy (including coal, nuclear, renewable fuels, and nonconventional fuels). The petroleum line of business is further segmented into production (including oil and natural gas exploration, development, and production), refining/marketing, crude and petroleum product pipelines (for domestic petroleum), and international marine transport (for foreign petroleum). Generally accepted accounting principles for the United States do not require that energy companies account separately for costs of oil production and natural gas production in company financial records. Various exploration and development costs cannot easily or separately be assigned to either oil production or natural gas production.

In 2006, the FRS companies accounted for 44 percent of total U.S. crude oil and NGL production,⁷⁷ 43 percent of natural gas production, 81 percent of U.S. refining capacity, and 3 percent of U.S. electricity net generation (**Figure 29**). During 2006, these companies devoted about 80 percent of their assets and 90 percent of new investments to sustaining various aspects of petroleum production, processing, transportation, and marketing.

Energy production other than petroleum has been a relatively small, but growing, part of the FRS companies' operations since 1994. During 2006, the combined operating revenues of the downstream natural gas, electricity, and other energy operations⁷⁸ of the FRS companies totaled \$266 billion, or 17 percent of allocated revenues. Increased activity in downstream natural gas and electricity more than offset the continued decline in coal activity by the FRS companies, which began in 1994, continued through the 2004 reporting year, and for which data are no longer collected separately. The growing importance of downstream natural gas and electric power operations

⁷³ For the purposes of this report, the term "United States" includes the 50 states, the District of Columbia, Puerto Rico, and the U.S. Virgin Islands.

⁷⁴ Unless otherwise indicated, all dollar values and percentage changes in this report are based in constant 2006 dollars, adjusted using the Gross Domestic Product implicit price deflator.

⁷⁵ The Fortune 500 is a list of the 500 largest U.S. corporations, ranked by revenues, published annually by *Fortune* magazine (<http://money.cnn.com/magazines/fortune/fortune500/2007/> as of October 10, 2007).

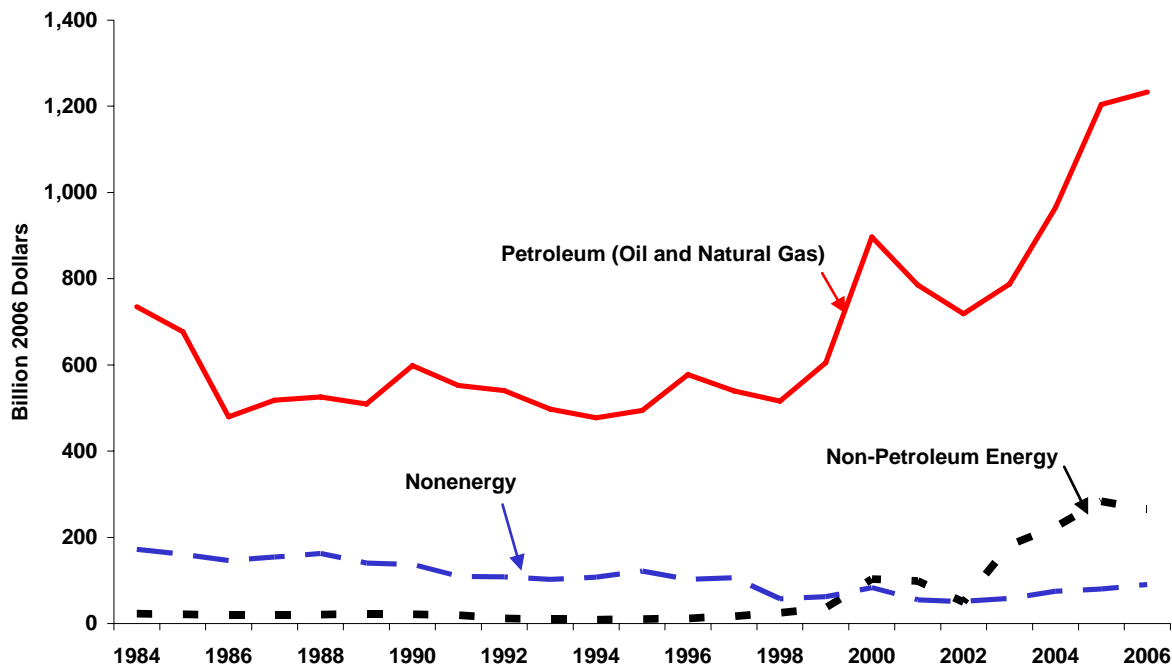
⁷⁶ The sum of allocated operating revenue (\$1,590 billion) exceeds corporate operating revenue (\$1,389 billion) because allocated revenues include revenues from sales within the company and between different lines of business, in addition to the revenue from sales by the company to third parties (i.e., those outside the company). However, revenues from inter-segment sales are eliminated in calculating corporate operating revenue, which includes only sales by the company to third parties.

⁷⁷ Note that U.S. totals include royalty production, while the FRS companies' production levels do not. Thus, these calculations understate the FRS companies' share of crude oil and NGL production and natural gas production.

⁷⁸ Beginning with the 2003-reporting year, "other energy" operations include coal operations. Prior to 2003, coal was a separate line of business. Financial information for coal operations now is merged with that of the alternative energy operations.

to the FRS companies resulted in the addition of each as a separate line of business beginning with the 2003 reporting year.

Figure 28. Operating Revenues by Line of Business for FRS Companies, 1984-2006



Source: Energy Information Administration, Form EIA-28 (Financial Reporting System).

Nonenergy businesses, mainly chemicals, accounted for 6 percent, or \$91 billion, of the FRS companies' allocated revenues in 2006. During the 1980s, the FRS companies were major producers of domestic uranium. However, no FRS company has produced uranium oxide domestically since 1991.

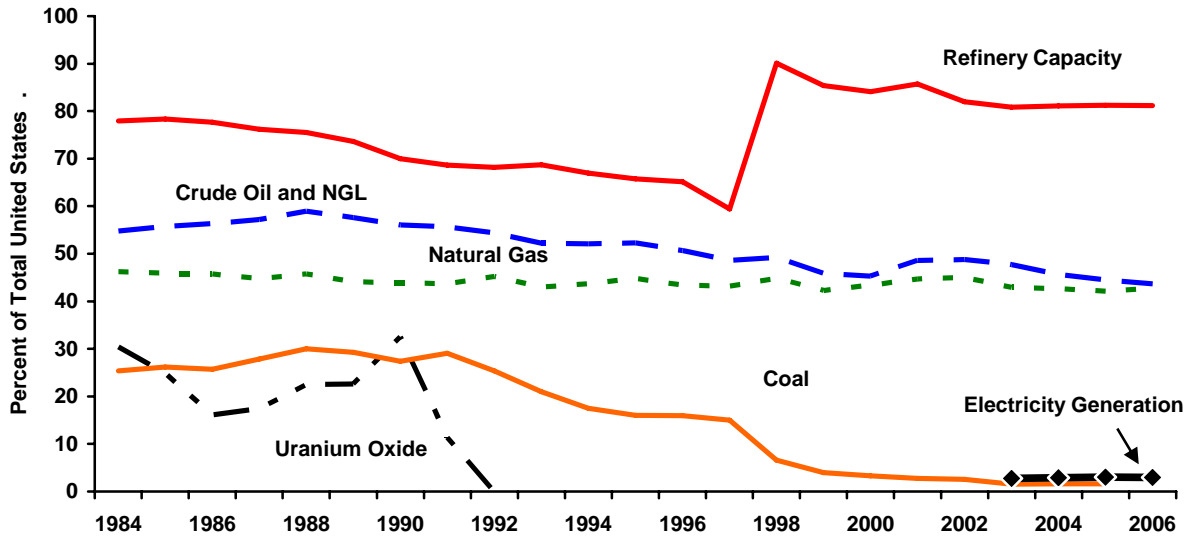
About Performance Profiles and the Financial Reporting System

The EIA's *Performance Profiles of Major Energy Producers* is a comprehensive annual financial review and analysis of the domestic and worldwide activities and operations of the major U.S.-based energy-producing companies. *Performance Profiles* primarily examines companies' operations on a consolidated corporate level, by individual lines of business, by major functions within each line of business, and by various geographic regions. The review focuses on annual aggregate changes in profits, cash flow, and investment in the United States and international energy industry resulting from major energy companies' current operations. *Performance Profiles* also explores changes in the majors' exploration and development expenditures and their success in finding and developing oil and natural gas reserves. The analysis in this report is based on detailed financial and operating data and information submitted each year to the EIA on Form EIA-28, the FRS. The FRS companies derive the bulk of their revenues and income from petroleum operations, which includes natural gas production. EIA supplements the FRS data with additional information from the companies' annual reports and press releases, disclosures to the U.S. Securities and Exchange Commission, news reports and articles, and various complementary energy industry data sets.

Authorities. The information in *Performance Profiles* responds to the requirements of the FRS, which are set forth in Public Law (P.L.) 95-91, the Department of Energy Organization Act of 1977. The EIA considers the

U.S.-based energy companies that respond to FRS Form EIA-28 to be U.S. majors. Per the requirements of P.L. 95-91, the EIA Administrator designates major energy-producing companies, selecting them from publicly available data as respondents to the FRS. Currently, the EIA Administrator uses the following selection criteria: U.S.-based publicly owned companies or U.S.-based subsidiaries of publicly owned foreign companies that have at least 1 percent of either production or reserves of oil (crude oil and natural gas liquids) or natural gas in the United States, or 1 percent of either refining capacity or petroleum product sales in the United States.

Figure 29. Shares of U.S. Energy Production^a and Refinery Capacity for FRS Companies, 1984-2006



^aOil and natural gas production for the FRS companies includes only the production that is owned by the FRS companies; it does not include any interests not owned by the FRS companies (e.g., royalty interests owned by others). Total production for the United States includes the interests of all owners.

Note: The FRS companies last produced uranium in 1991 and coal production data were last collected in 2005.

Sources: Table B1; Total industry uranium oxide production is from Energy Information Administration, *Uranium Industry Annual 1992*, DOE/EIA-0478(92) (Washington, DC, October 1993).

Confidentiality. The EIA collects the information in accordance with the confidential information protection provisions of Title 5, Subtitle A, P.L. 107-347 and other applicable Federal laws and uses it for statistical purposes only. EIA keeps survey responses confidential and does not disclose the responses in identifiable form to anyone other than employees or agents without consent of the company. However, the EIA selects names of the companies based on publicly available information, which is not confidential and is publicly released.

Uniqueness of FRS. Because the EIA collects Form EIA-28 data on a uniform, segmented basis, the comparability of information across energy lines of business is unique to the FRS. For example, the FRS enables comparison of petroleum activities of the major U.S. energy companies (and financial returns attributable to these activities) to activities in other lines of energy business (such as coal and alternative energy, downstream natural gas, and electric power) or nonenergy areas (such as chemicals). Similarly, the FRS enables comparison of financial returns and operating results from domestic activities to results from foreign activities and operations.

Related EIA Reports. Other energy financial analysis reports are listed at <http://www.eia.doe.gov/emeu/finance/pubs.html>. Previously, *Performance Profiles* included a separate chapter on foreign investment trends and transactions in U.S. energy resources, assets, and companies. However, EIA now publishes this report, *Foreign Direct Investment in U.S. Energy*, to provide an assessment of the degree of foreign ownership of energy assets in the United States, as required under Section 657, Subpart 8, of the U.S. Department of Energy Organization Act (P.L. 95-91), which requires an annual report to Congress that presents “a summary

of activities in the United States by companies which are foreign owned or controlled and which own or control United States energy sources and supplies.”

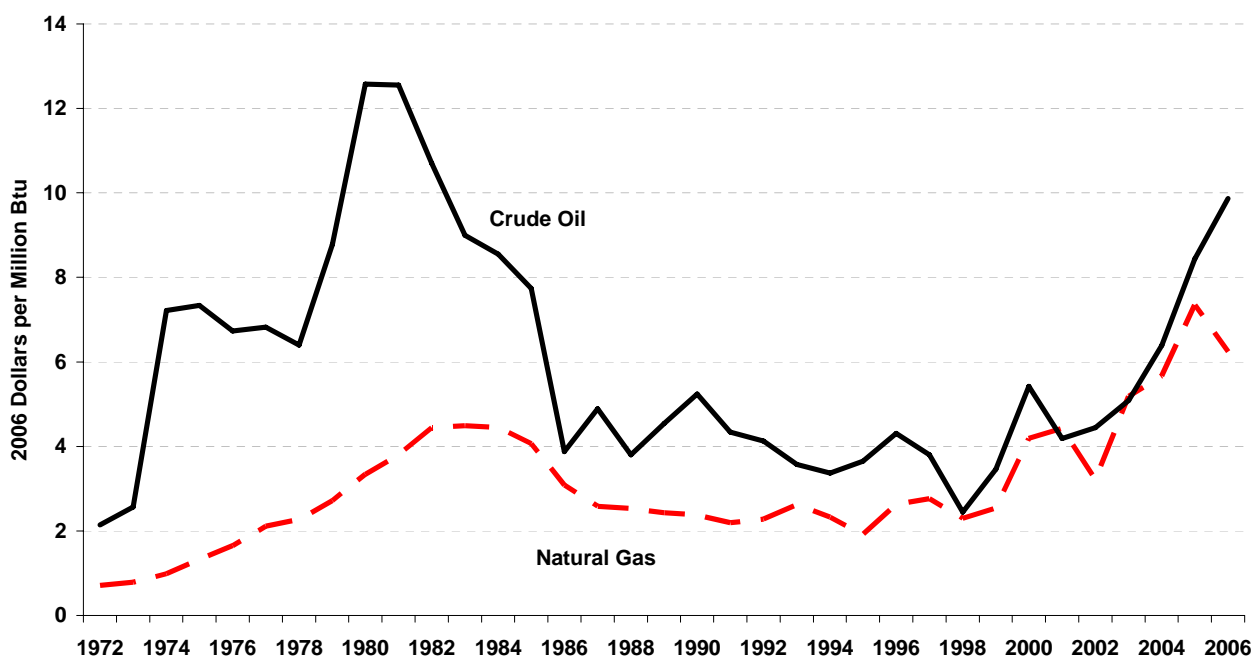
Additional Information. Also see Appendix A of *Performance Profiles* for information concerning the format of Form EIA-28, important financial reporting concepts and accounting principles, and other information about the FRS. For a glossary of terms and definitions used in this report, see <http://www.eia.doe.gov/emeu/perfpro/glossary.html>. The FRS Web site (<http://www.eia.doe.gov/emeu/finance>) provides information about P.L. 95-91 and Form EIA-28 and access to other related financial information.

Data File Information. Historical FRS data are available from EIA’s File Transfer Protocol (FTP) site. These data cover the years 1977 through 2006 and are published in EIA’s annual editions of *Performance Profiles of Major Energy Producers*. These data are of two types: 1) aggregate data from the FRS survey form, and 2) multiyear tables from Appendix B of *Performance Profiles of Major Energy Producers*. FRS 1977–2006 data files can be downloaded from the EIA FTP site by accessing the following EIA Web site: <http://www.eia.doe.gov/emeu/finance/page2.html>. For further assistance, please contact the National Energy Information Center by telephone at 202-586-8800, by fax at 202-586-0727, by TTY at 202-586-1181, or by e-mail at infoctr@eia.doe.gov. For further information on FRS data, please contact Greg Filas by telephone at 202-586-1347, by fax at 202-586-9753, or by e-mail at greg.filas@eia.doe.gov.

Overview of 2006 Petroleum and Natural Gas Markets

The FRS companies' financial results for 2006 were driven by substantially higher prices for crude oil and petroleum products, tempered by a decline in the price of natural gas. Crude oil prices (imported refiner acquisition cost) increased 17 percent from 2005 (in constant 2006 dollars),⁷⁹ to \$59.02 per barrel, the highest level since 1982.⁸⁰ Natural gas wellhead prices decreased 15 percent to \$6.42 per thousand cubic feet (mcf) in 2006.⁸¹ Together, these changes caused the difference between crude oil and natural gas prices (constant 2006 dollars) on a million British thermal unit (Btu) basis to exceed \$2 for the first time since 1992. A gap exceeding \$2 had been the norm from 1974 through 1992 (**Figure 30**).

Figure 30. Imported Refiner Acquisition Cost of Crude Oil and Natural Gas Wellhead Prices, 1972-2006



Source: Crude Oil Price: Energy Information Administration, *Monthly Energy Review*, DOE/EIA-0035 (2007/09) (Washington, DC, September 2007), Table 9.1; Natural Gas Price: Energy Information Administration, *Monthly Energy Review*, DOE/EIA-0035 (2007/09) (Washington, DC, September 2007), Table 9.11; Heat Content Factors: Energy Information Administration, *Monthly Energy Review*, DOE/EIA-0035 (2007/09) (Washington, DC, September 2007), Tables A2 and A4.

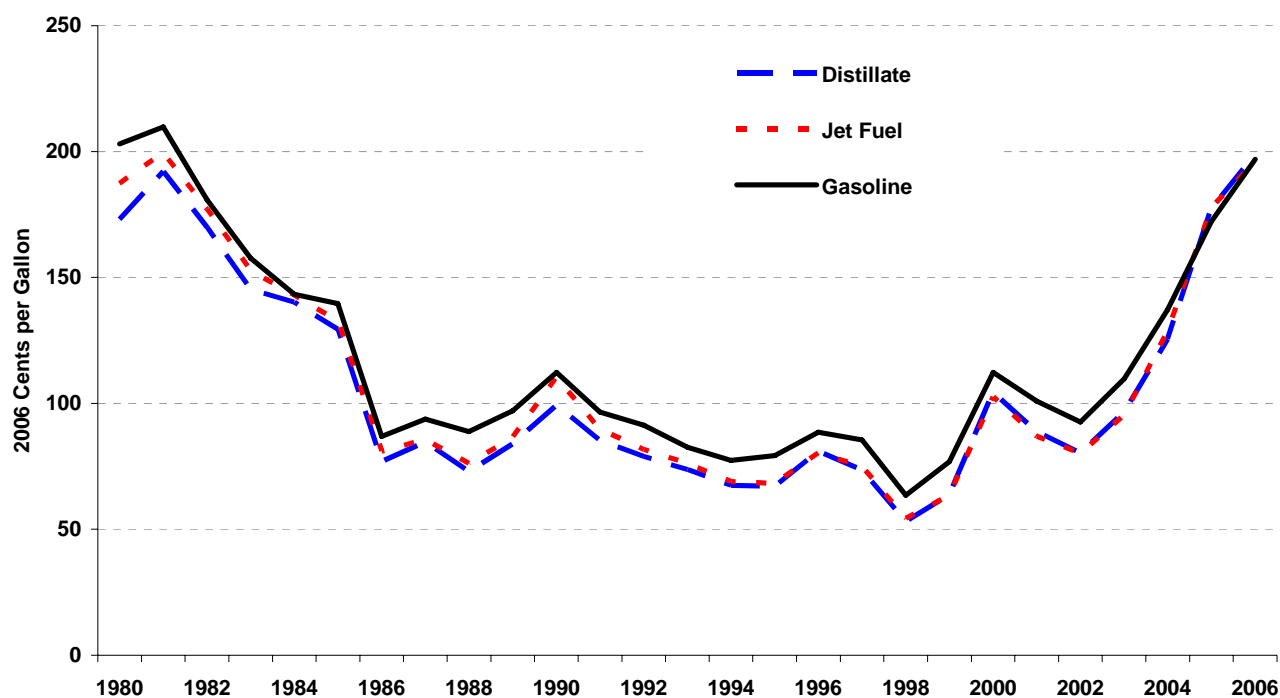
Gross refining margins increased in 2006 as petroleum product prices rose by more than the increase in crude oil prices. In 2006, distillate prices grew 12 percent to the highest level EIA has ever reported (**Figure 31**). In 2005, gasoline and jet fuel prices had reached their highest levels since 1981 and repeated that feat in 2006 with increases of 14 and 10 percent, respectively. Gasoline, distillate, and jet fuel prices were tightly bunched in 2006, at \$1.97, \$1.99, and \$1.96 per gallon, respectively.

⁷⁹ Unless otherwise indicated, all dollar values and percentage changes in this report are based in constant 2006 dollars, adjusted using the Gross Domestic Product implicit price deflator.

⁸⁰ Energy Information Administration, *Monthly Energy Review*, DOE/EIA-0035 (2007/09) (Washington, DC, September 2006), Table 9.1.

⁸¹ Energy Information Administration, *Monthly Energy Review*, DOE/EIA-0035 (2007/09) (Washington, DC, September 2006), Table 9.11.

Figure 31. Refiner Prices of Petroleum Products for Resale, 1980-2006



Source: Energy Information Administration, Refiner Petroleum Product Prices by Sales Type, available on the Internet at http://tonto.eia.doe.gov/dnav/pet/xls/pet_pri_refoth_dcu_nus_a.xls (as of October 9, 2007).

World oil demand increased 0.8 million barrels per day (mmbd) (1.0 percent) from the 2005 level to 84.5 mmbd in 2006 (**Table 21**). The rate of increase has dropped each of the last two years (**Figure 32**). Supply includes the production of crude oil, natural gas liquids (NGL) and other liquids, and refinery processing gain and was 84.7 mmbd in 2006. Although supply was nearly unchanged from 2005, it remained higher than demand and resulted in an increase in petroleum inventories of 0.2 mmbd in 2006. Worldwide reserve additions replaced 96 percent of crude oil and NGL production in 2006. The reserve replacement rate for non-OPEC countries was 92 percent.⁸²

Petroleum product demand (represented by petroleum product supplied) dropped 0.6 percent in the United States in 2006 to 20.7 mmbd (**Table 22**). The first decline since 2001, it follows the previous year's slowdown in growth to 0.3 percent. This decline in overall petroleum product demand was led by a 231,000 barrel-per-day decline in consumption of residual fuel (**Figure 33**).

Domestic crude oil production fell 42,000 barrels per day (0.8 percent) in 2006 from 2005, while NGL production grew 18,000 barrels per day (1.1 percent). Net imports of petroleum decreased by 159,000 barrels per day (1.3 percent) in 2006, but this level was still sufficient to meet demand and to add 60,000 barrels per day to crude oil and petroleum product inventories.

Crude oil and NGL reserve additions in the United States in 2006 fell short of production for the year, so that the combined reserve replacement rate for crude oil and NGLs was 81 percent.⁸³

⁸² Calculated from reserves and production data in BP plc, *BP Statistical Review of World Energy* (June 2007), pp. 6, 8.

⁸³ Reserve additions include revisions and adjustments, net sales and acquisitions, and total discoveries. Energy Information Administration, *Advance Summary U.S. Crude Oil, Natural Gas, and Natural Gas Liquids Reserves 2006 Annual Report* (September 2007), p. 3.

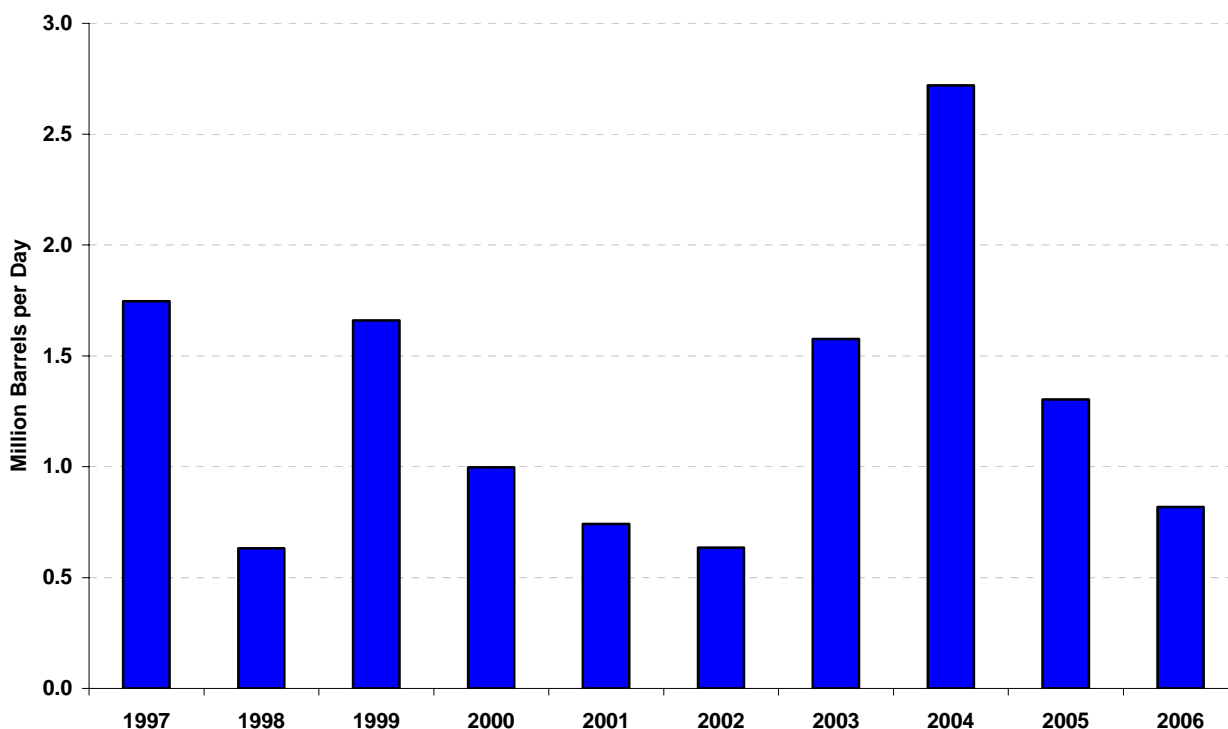
Table 21. World Petroleum Balance, 2005–2006
(Million Barrels per Day)

	Quarterly 2006				Annual	
	Q1	Q2	Q3	Q4	2005	2006
Demand	85.1	83.2	84.0	85.5	83.6	84.5
Supply	84.4	84.3	85.2	84.7	84.6	84.7
Supply from Inventories	0.7	-1.0	-1.2	0.8	-1.0	-0.2

Note: Supply from Inventories includes statistical discrepancy.

Source: Energy Information Administration, *International Petroleum Monthly* (August 2007), Table 2.1.

Figure 32. World Oil Consumption, Change from Previous Year, 1997-2006



Source: Energy Information Administration, *International Petroleum Monthly*, August 2007, Table 4.6, available on the Internet at <http://www.eia.doe.gov/ipm/> (as of October 9, 2007).

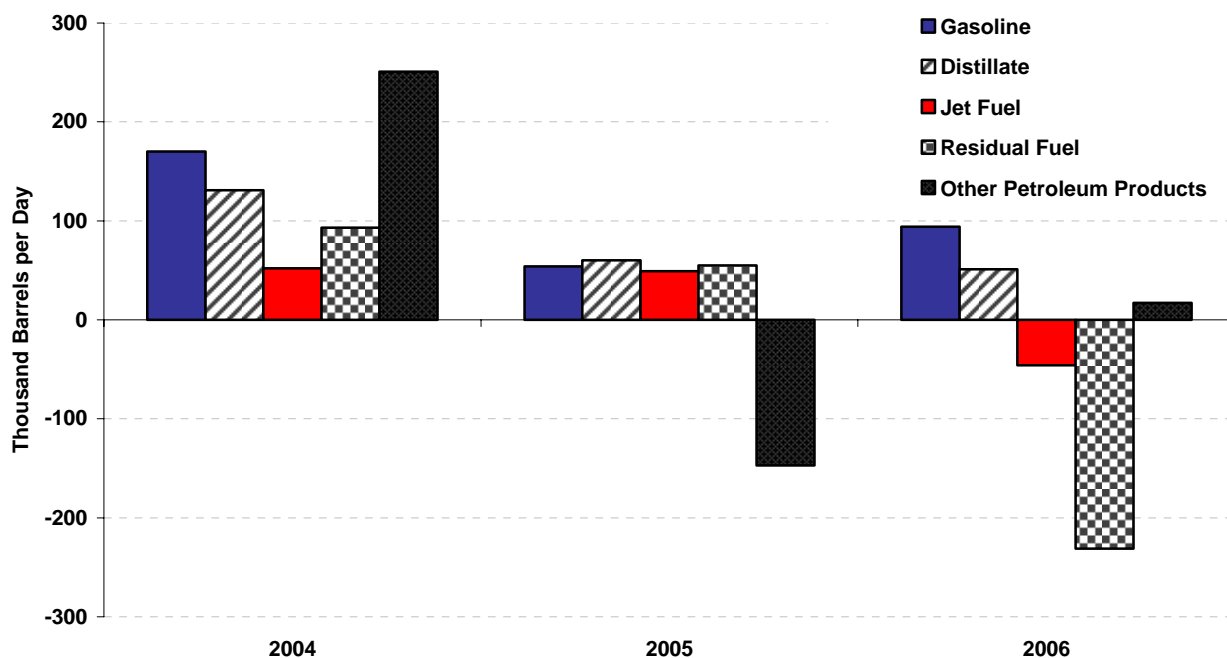
Table 22. U.S. Petroleum Balance, 2005–2006
(Million Barrels per Day)

	Quarterly 2006				Annual	
	Q1	Q2	Q3	Q4	2005	2006
Demand	20.4	20.5	20.8	20.7	20.8	20.7
Crude Oil Production	5.0	5.1	5.2	5.2	5.2	5.1
NGL Production	1.7	1.7	1.8	1.8	1.7	1.7
Other Inputs	1.5	1.5	1.6	1.4	1.5	1.5
Net Imports	12.1	12.5	12.9	11.6	12.5	12.4
Supply from Inventories	0.0	-0.4	-0.6	0.7	-0.1	-0.1

Note: Other Inputs includes adjustments and refinery processing gain.

Source: Calculated from Energy Information Administration, *Monthly Energy Review*, DOE-EIA-0035 (2007/09) (Washington, DC, September 2007), Tables 3.1a and 3.1b.

Figure 33. U. S. Petroleum Product Consumption, Change from Previous Year, 2004-2006



Source: Calculated from Energy Information Administration, Petroleum Product Supplied Data, available on the Internet at http://tonto.eia.doe.gov/dnav/pet/xls/pet_cons_psup_dc_nus_mbbldpd_a.xls (as of October 9, 2007).

U.S. refineries, recovering somewhat from hurricane damage sustained in 2005, increased output in 2006 by 175,000 barrels per day (1.0 percent) from 2005.⁸⁴ That output, combined with the decline in petroleum product demand, led to the 1.3-percent drop in net imports of petroleum mentioned earlier.

Natural gas demand in the United States fell 1.9 percent in 2006 to 21.8 trillion cubic feet (**Table 23**). Domestic natural gas production recovered from Hurricanes Katrina and Rita, increasing 2.5 percent in 2006 over 2005 production. Natural gas imports decreased by 4.1 percent, nearly bringing supply and demand into balance for the year.

Table 23. U.S. Natural Gas Balance, 2005–2006
(Trillion Cubic Feet)

	Quarterly 2006				Annual	
	Q1	Q2	Q3	Q4	2005	2006
Demand	6.5	4.8	5.0	5.5	22.2	21.8
Natural Gas Production	4.5	4.6	4.7	4.7	18.1	18.5
Other Inputs	0.1	0.3	0.1	-0.3	0.5	0.3
Net Imports	0.8	0.9	0.9	0.9	3.6	3.5
Supply from Inventories	0.9	-0.9	-0.7	0.3	0.1	-0.4

Note: Other Inputs includes supplemental gaseous fuels and the balancing item.

Source: Energy Information Administration, *Monthly Energy Review*, DOE-EIA-0035 (2007/09) (Washington, DC, September 2007), Table 4.1.

⁸⁴ Calculated from Energy Information Administration, U.S. Refinery and Blender Net Production Data, available on the Internet at http://tonto.eia.doe.gov/dnav/pet/xls/pet_pnp_refp_dc_nus_mbbldpd_a.xls (as of October 10, 2007).

Acronyms

boe	barrels of oil equivalent
Btu	British thermal unit
DD&A	depreciation, depletion, and amortization
DOE	Department of Energy
E&P	exploration and production
EIA	Energy Information Administration
FRS	Financial Reporting System
FTP	File Transfer Protocol
mcf	thousand cubic feet
mmbd	million barrels per day
MTBE	methyl tertiary butyl ether
NGL	natural gas liquids
OPEC	Organization of the Petroleum Exporting Countries
P.L.	Public Law
PP&E	property, plant, and equipment
ROE	return on equity
ROI	return on net investment in place

Brief Description of Financial Terms

For additional information, see the Glossary on page 39 of the Form EIA-28 instructions, available at http://www.eia.doe.gov/emeu/perfpro/form/eia28_instructions_2004.pdf.

Additions to Investment in Place: See Capital Expenditure.

Capital Expenditure: Also referred to as Additions to Investment in Place. Funds (including cash) used by a company to acquire or upgrade physical assets such as property, industrial buildings, or equipment. Additions to property, plant and equipment as well as year's additions to investments and advances to unconsolidated affiliates are investment.

Cash Flow From Operations: The amount of cash a company generates from operations, defined as net income after taxes plus depreciation and other noncash expenses.

Development Expenditures: Costs of developmental wells, facilities and support equipment used to access and prepare oil and gas deposits for production.

Exploration Expenditures: Costs of locating oil and gas deposits, including the costs of retaining and carrying undeveloped property, geological and geophysical costs, and the costs of drilling and equipping exploratory wells.

Finding Costs: The per-barrel costs of adding oil or gas proved reserves.

Gross Refining Margin: The difference between the revenue from the sale of petroleum products (e.g., motor gasoline) and the cost of the raw materials (e.g., crude oil) used to produce the products.

Lifting (Production) Costs: See Production Costs.

Lines of Business: The FRS lines of business consist of petroleum, downstream natural gas (including NGL processing and natural gas pipelines), electric power, nonenergy, and other energy (including coal, nuclear, renewable fuels, and nonconventional fuels). The petroleum line of business is further segmented into production (including oil and natural gas exploration, development, and production), refining/marketing, crude and petroleum product pipelines (for domestic petroleum), and international marine transport (for foreign petroleum).

Net Income: A company's total earnings, or profit. Net income is calculated by taking revenues less the cost of doing business, depreciation, interest, taxes and other expenses. This number is an important measure of how profitable the company is over a period of time.⁸⁵

Net Investment In Place: The sum of long-term assets of the company after adjusting for the age of the assets.

Net Refining Margin: The difference between the gross refining margin and the costs of producing and selling the petroleum products (e.g., refining energy costs and selling costs).

Production (Lifting) Costs: The per-barrel costs associated with the extraction of a mineral reserve from a producing property.

⁸⁵ See the dictionary on Investopedia.com for additional information. Investopedia.com can be found at <http://www.investopedia.com> (as of October 31, 2007).

Production Expenditures: The costs of extracting oil and gas from oil and gas deposits.

Profitability: Both of these measures are used to get a balanced look at how a company or an industry is performing in terms of earnings relative to investments. They are also usually compared to other companies within the same industry, or when measuring an industry, to other similar industries. Two of the major measures of profitability are:

- **Return on Equity (ROE):** Net income divided by shareholders' equity. ROE measures performance (i.e., net income) relative to the value of stockholders' equity (retained earnings plus other equity) in the company.
- **Return on Investment (ROI):** Net income divided by net investment in place. ROI measures performance relative to the value of investments **by** the company in property, plant and equipment (PP&E) (long-term capital assets) that are used to engage in its revenue producing operations. ROI can be used to measure the performance of an individual project or business segment within a company. In this report, net investment in place also includes investments and advances to unconsolidated affiliates.

Regions: The FRS regions consist of U.S. Onshore, U.S. Offshore, Canada, Europe, Former Soviet Union, Africa, Middle East, Other Eastern Hemisphere (primarily Asia Pacific), and Other Western Hemisphere (primarily South America).

Reserve Additions: The amount of oil and gas reserves added in a year.

Reserve Replacement Ratio: The amount of oil and gas reserves added in a year divided by the amount of oil and gas produced during that same year.

Reserves-to-Production Ratio: The number of years that oil and gas reserves would last at the current production rate.

Unusual Items: Accounting changes, asset dispositions and write-downs, tax adjustments, and related items that affect net income but are not part of normal operations.

Appendix A

The Financial Reporting System (FRS)

The legislation establishing the Financial Reporting System (FRS) requires the reporting of individual company financial and operating data to be on a "uniform and standardized basis" so that the data can be aggregated and comparisons can be made across companies and groups of companies.

The legislation also required the Energy Information Administration (EIA) to consult with the U.S. Securities and Exchange Commission in an effort to be consistent with other Federal financial accounting practices.

Accordingly, the FRS reporting form (Form EIA-28) necessarily incorporates a number of specific energy financial accounting principles and conventions. Details on these financial accounting concepts and principles can be found on the EIA Worldwide Web site at <http://www.eia.doe.gov/emeu/perfpro/appenda.html>. In particular, the interested reader is referenced to the following subheadings:

- *Survey Format* (see <http://www.eia.doe.gov/emeu/perfpro/appenda.html#rptfmt>),
- *Petroleum Segment Overview* (see <http://www.eia.doe.gov/emeu/perfpro/appenda.html#petovw>),
- *Selection of Reporting Companies* (see <http://www.eia.doe.gov/emeu/perfpro/appenda.html#criteria>),
- *Financial Analysis Guide* (see <http://www.eia.doe.gov/emeu/perfpro/appenda.html#faguide>),
- *Accounting Practices* (see <http://www.eia.doe.gov/emeu/perfpro/appenda.html#acctpr>).

Appendix B

Table B1. Selected U.S. Operating Statistics for FRS Companies and U.S. Industry, 2000-2006

Operating Statistics	2000	2001	2002	2003	2004	2005	2006
Petroleum and Natural Gas							
Net Production							
Crude Oil and Natural Gas Liquids (million barrels)							
FRS Companies	1,267.9	1,363.2	1,346.4	1,277.8	1,207.8	1,120.8	1,075.7
U.S. Industry ¹	2,801.0	2,805.0	2,759.0	2,679.0	2,646.0	2,521.0	-
FRS as a Percent of U.S. Industry	45.3	48.6	48.8	47.7	45.6	44.5	-
Natural Gas (billion cubic feet)							
FRS Companies	8,340.1	8,838.0	8,712.5	8,343.6	8,174.0	7,774.5	7,925.5
U.S. Industry ¹	19,219.0	19,779.0	19,353.0	19,425.0	19,168.0	18,458.0	-
FRS as a Percent of U.S. Industry	43.4	44.7	45.0	43.0	42.6	42.1	-
Net Imports							
Crude Oil and Natural Gas Liquids (million barrels)							
FRS Companies	324.1	716.1	630.5	737.8	918.4	732.5	657.7
U.S. Industry ¹	3,527.0	3,620.1	3,523.2	3,539.0	3,909.7	3,988.7	-
FRS as a Percent of U.S. Industry	9.2	19.8	17.9	20.8	23.5	18.4	-
Refinery Capacity (thousand barrels per day)							
FRS Companies	14,424.0	15,153.0	14,198.0	14,279.0	14,409.0	14,532.0	14,652.0
U.S. Industry ¹	17,177.4	17,367.4	17,338.9	17,500.0	17,729.0	17,912.0	-
FRS as a Percent of U.S. Industry	84.0	87.2	81.9	81.6	81.3	81.1	-
Refinery Output ² (thousand barrels per day)							
FRS Companies	14,499.0	15,022.0	14,761.0	14,683.0	15,176.0	15,118.0	14,819.0
U.S. Industry ¹	17,763.2	17,688.9	17,654.5	17,969.5	18,297.0	18,252.0	-
FRS as a Percent of U.S. Industry	81.6	84.9	83.6	81.7	82.9	82.8	-
Electric Power							
Net Summer Capacity (million kilowatts)							
FRS Companies	-	-	-	28.9	33.7	34.0	34.4
U.S. Industry	811.7	848.3	905.3	948.4	962.9	978.0	-
FRS as a Percent of U.S. Industry	-	-	-	3.0	3.5	3.5	-
Net Generation (billion kilowatthours)							
FRS Companies	-	-	-	107.5	112.4	121.6	119.9
U.S. Industry	3,802.1	3,736.6	3,858.5	3,883.2	3,970.6	4,054.7	-
FRS as a Percent of U.S. Industry	-	-	-	2.8	2.8	3.0	-

¹ U.S. area is defined to include the 50 States, District of Columbia, U.S. Virgin Islands, and Puerto Rico.

² For FRS companies, includes refinery output at own refineries for own account and at others' refineries for own account.

- = Not available.

Note: The data for total U.S. production of crude oil and natural gas liquids and natural gas (dry) utilized in this report are taken from Energy Information Administration, Form EIA-23 (Annual Survey of Domestic Oil and Gas Reserves); see U.S. Crude Oil, Natural Gas, and Natural Gas Liquids Reserves 2004 Annual Report November 2005). This source is utilized in order to preserve consistency between production reported in the context of oil and gas reserves and reserve additions and production reported elsewhere in this report. However, the official Energy Information Administration U.S. totals for crude oil and natural gas plant production are 2,800 million barrels in 2004 and 2,855 million barrels in 2003. (See Energy Information Administration, Petroleum Supply Annual 2004, Volume I (June 2005), p. 2.) For dry natural gas production, the official Energy Information Administration U.S. totals are 18,666 billion cubic feet in 2004 and 19,036 billion cubic feet in 2003. (See Energy Information Administration, Natural Gas Monthly, December 2005, Table 1.)

Sources: Industry data - Petroleum net production: Energy Information Administration (EIA), Form EIA-23; see U.S. Crude Oil, Natural Gas, and Natural Gas Liquids Reserves, 2004 Annual Report (November 2005). Net imports: data compiled for the International Energy Agency by the Petroleum Supply Division, Office of Oil and Gas, EIA. Refinery capacity and refinery output: EIA, Forms EIA-820 (Annual Refinery Report) and EIA-810 (Monthly Refinery Report); see Petroleum Supply Annual, 2003 and 2004. Electric capacity and electric generation: EIA, Form EIA-860, Annual Electric Generator Reports; Form EIA-867, Annual Nonutility Power Producer Report; Form EIA-860A, Annual Electric Generator Report—Utility; Form EIA-860B, Annual Electric Generator Report—Nonutility; Form EIA-906 and Form EIA-759, Power Plant Reports.

FRS companies' data - Energy Information Administration, Form EIA-28 (Financial Reporting System).

Table B2. Selected Financial Items for the FRS Companies and All Manufacturing Companies, 2005-2006

Selected Financial Items	FRS Companies		All Manufacturing Companies	
	2005	2006	2005	2006
Income Statement	(billion dollars)			
Operating Revenues	1,334.1	1,389.0	5,400.8	5,790.3
Operating Expenses	-1,165.0	-1,194.3	-5,043.2	-5,380.6
Operating Income	169.1	194.7	357.7	409.5
Interest Expense	-10.7	-11.8	-88.0	-95.8
Other Income ¹	31.9	39.0	250.3	295.0
Income Taxes	-71.1	-90.4	-121.2	-134.5
Net Income	119.2	131.5	398.8	474.2

¹ "Other Income" includes other revenue and expense (excluding interest expense), discontinued operations, extraordinary items, and accounting changes.

Sources: All Manufacturing Companies: U.S. Census Bureau, Quarterly Financial Report. FRS companies' data - Energy Information Administration, Form EIA-28 (Financial Reporting System).

Table B3. Balance Sheet Items and Financial Ratios for FRS Companies and All Manufacturing Companies, 2005-2006

	FRS Companies		All Manufacturing Companies	
	2005	2006	2005	2006
Balance Sheet	(billion dollars)			
Assets	(billion dollars)			
Current Assets	297.0	291.7	1,938.6	2,018.3
Noncurrent Assets				
Property, Plant, and Equipment (PP&E)				
Gross	1,002.5	1,130.6	2,483.1	2,567.7
and Amortization (DD&A)	-450.5	-473.8	1,335.1	1,382.0
Net PP&E	551.9	656.8	1,148.0	1,185.8
Investments and Advances	74.8	84.8	-	-
Other Noncurrent Assets	124.2	131.3	-	-
Subtotal Noncurrent Assets	750.9	872.8	3,857.7	4,274.4
Total Assets	1,047.9	1,164.6	5,796.3	6,292.7
Liabilities and Stockholders Equity				
Liabilities				
Current Liabilities	255.9	271.2	1,420.8	1,485.1
Long-Term Debt	158.0	169.4	1,033.5	1,120.8
Other Long-Term Items	201.0	225.7	-	-
Minority Interest	9.8	10.7	-	-
Subtotal Liabilities and Other Items	624.6	677.0	3,337.9	3,564.7
Stockholders' Equity				
Retained Earnings	334.7	416.7	1,458.9	1,699.2
Other Equity	88.5	70.8	999.6	1,028.7
Subtotal Stockholders' Equity	423.2	487.5	2,458.5	2,728.0
Total Liabilities and Stockholders' Equity	1,047.9	1,164.6	5,796.3	6,292.7
Financial Ratios	(percent)			
Net Income/Stockholders' Equity	28.2	27.0	16.2	17.4
Net Income plus Interest/Total Invested Capital	22.3	21.8	13.9	9.8
Dividends/Net Cash Flow from Operations	23.4	19.9	-	-
Long-term Debt/Stockholders' Equity	37.3	34.7	42.0	41.1

- = Not available.

Sources: All Manufacturing Companies: U.S. Census Bureau, Quarterly Financial Report. FRS companies' data - Energy Information Administration, Form EIA-28 (Financial Reporting System).

Table B4. Consolidated Balance Sheet for FRS Companies, 2000-2006

(Billion Dollars)

Balance Sheet Items	2000	2001	2002	2003	2004	2005	2006
Assets							
Current Assets:							
Cash & Marketable Securities	18.7	18.6	19.5	27.0	55.6	69.8	62.9
Trade Accounts & Notes Receivable	98.6	71.4	78.7	84.9	112.1	122.9	127.5
Inventories:							
Raw Materials & Products	25.6	23.4	23.2	26.8	29.5	33.4	38.3
Materials & Supplies	4.4	7.3	7.6	5.6	6.2	6.9	8.1
Other Current Assets	49.1	26.7	27.4	20.6	25.2	63.9	54.9
Total Current Assets	196.5	147.5	156.3	164.9	228.6	297.0	291.7
Non-current Assets:							
Property, Plant & Equipment (PP&E)							
Gross PP&E	757.2	806.0	826.3	866.4	956.9	1,002.5	1,130.6
Depletion, and Amortization	-351.6	-373.6	-379.6	-396.2	-444.7	-450.5	-473.8
Net PP&E	405.5	432.4	446.6	470.1	512.2	551.9	656.8
Investments & Advances to Unconsolidated Affiliates	62.3	57.3	53.9	54.5	65.4	74.8	84.8
Other Non-current Assets	86.9	97.9	115.7	99.0	112.1	124.2	131.3
Total Non-current Assets	554.8	587.5	616.2	623.6	689.7	750.9	872.8
Total Assets	751.2	735.0	772.5	788.5	918.3	1,047.9	1,164.6
Liabilities & Stockholders' Equity							
Liabilities							
Current Liabilities							
Trade Accounts & Notes Payable	102.4	90.6	91.8	88.2	111.7	134.8	148.0
Other Current Liabilities	96.4	69.2	64.9	62.5	79.1	121.1	123.1
Long-Term Debt	120.0	132.0	154.0	148.9	166.3	158.0	169.4
Deferred Income Tax Credits	68.2	77.0	76.1	83.2	94.2	101.4	123.2
Other Deferred Credits	34.1	23.3	27.9	28.5	30.8	33.8	32.5
Other Long-Term Items	41.2	43.7	52.1	49.7	56.6	65.8	70.0
Minority Interest in Consolidated Affiliates	17.1	15.5	11.0	10.4	12.3	9.8	10.7
Total Liabilities	479.5	451.3	477.8	471.4	550.9	624.6	677.0
Stockholders' Equity:							
Retained Earnings	199.2	209.7	206.1	218.7	262.9	334.7	416.7
Other Equity	72.5	74.0	88.7	98.4	104.4	88.5	70.8
Total Stockholders' Equity	271.8	283.7	294.7	317.1	367.4	423.2	487.5
Total Liabilities & Stockholders' Equity	751.2	735.0	772.5	788.5	918.3	1,047.9	1,164.6
Memo:							
Foreign Currency Translation Adjustment							
Cumulative at Year End	-3.0	-5.1	-2.0	2.8	8.0	5.0	7.3
Foreign Currency Translation Adjustment							
for the Current Year	-2.1	-1.0	3.1	7.2	4.3	-3.0	3.8

Source: Energy Information Administration, Form EIA-28 (Financial Reporting System).

Table B5. Consolidating Statement of Income for FRS Companies, 2006
(Million Dollars)

Income Statement Items	Consolidated	Eliminations & Non-traceables	Petroleum	Other Energy	Downstream Natural Gas	Electric Power	Non-energy
Operating Revenues	1,388,960	-200,994	1,233,339	3,949	229,179	32,874	90,613
Operating Expenses							
General Operating Expenses	1,120,747	-198,536	985,143	3,265	220,107	30,066	80,702
Depreciation, Depletion, & Allowance	56,919	W	49,304	W	3,200	752	2,527
General & Administrative	16,608	W	8,520	W	1,527	681	2,207
Total Operating Expenses	1,194,274	-193,940	1,042,967	3,478	224,834	31,499	85,436
Operating Income	194,686	-7,054	190,372	471	4,345	1,375	5,177
Other Revenue & (Expense)							
Earnings of Unconsolidated Affiliates	22,376	-330	16,693	W	2,343	W	3,065
Other Dividend & Interest Income	5,774	5,774	-	-	-	-	-
Gain/Loss on Disposition of Property, Plant, & Equipment	5,505	16	4,897	W	8	W	510
Interest Expenses & Financial Charges	-11,802	-11,802	-	-	-	-	-
Minority Interest in Income	-2,139	-2,139	-	-	-	-	-
Foreign Currency Translation Effects	85	85	-	-	-	-	-
Other Revenue & (Expense)	5,423	5,423	-	-	-	-	-
Total Other Revenue & (Expense)	25,222	-2,973	21,590	136	2,351	543	3,575
Pretax Income	219,908	-10,027	211,962	607	6,696	1,918	8,752
Income Tax Expense	90,445	-4,681	89,536	40	2,350	551	2,649
Discontinued Operations	W	W	2,137	0	W	W	141
of Accounting Changes	W	W	0	0	W	W	0
Net Income	131,480	-5,400	124,563	567	4,349	1,157	6,244

- = Not available.

W = Data withheld to avoid disclosure.

Note: Sum of components may not equal total due to independent rounding, eliminations, and nontraceables.

Source: Energy Information Administration, Form EIA-28 (Financial Reporting System).

Table B6. Consolidating Statement of Income for FRS Companies, U.S. and Foreign Petroleum Segments, 2006
(Million Dollars)

Income Statement Items	U.S. Petroleum				Foreign Petroleum		
	Consolidated	Production	Refining/Marketing	Pipelines ¹	Consolidated	Production	Refining/Marketing & Int'l Marine ²
Operating Revenues							
Raw Material Sales	186,563	109,149	126,444	W	185,786	150,224	154,436
Refined Products Sales	615,214	W	615,905	0	275,672	W	277,026
Transportation Revenues	1,161	73	779	2,999	2,370	66	6,211
Management and Processing Fees	1,958	W	1,911	W	2,255	322	2,182
Other	11,612	3,274	8,360	638	5,127	2,364	2,782
Total Operating Revenues	816,508	112,894	753,399	9,250	471,210	153,214	442,637
Operating Expenses							
General Operating Expenses	689,933	31,167	709,050	8,751	349,589	44,245	429,985
Depreciation, Depletion, & Allowance	27,127	20,675	6,097	355	22,177	19,809	2,368
General & Administrative	6,769	2,240	4,404	125	1,751	1,189	562
Total Operating Expenses	723,829	54,082	719,551	9,231	373,517	65,243	432,915
Operating Income	92,679	58,812	33,848	19	97,693	87,971	9,722
Other Revenue & (Expense)							
Earnings of Unconsolidated Affiliates	6,329	3,218	2,866	245	10,364	9,138	1,226
Property, Plant, & Equipment	3,387	2,712	615	60	1,510	1,229	281
Total Other Revenue & (Expense)	9,716	5,930	3,481	305	11,874	10,367	1,507
Pretax Income	102,395	64,742	37,329	324	109,567	98,338	11,229
Income Tax Expense	36,642	23,497	13,050	95	52,894	49,214	3,680
Discontinued Operations	W	W	W	0	2,062	2,062	0
Effect of Accounting Changes	W	W	W	0	0	0	0
Contribution To Net Income	65,828	41,286	24,313	229	58,735	51,186	7,549

¹Beginning in 2003, natural gas and natural gas liquids pipelines are part of the downstream natural gas line of business. See Table B35.

²Foreign Refining/Marketing and International Marine are combined to avoid disclosure.

W = Data withheld to avoid disclosure.

Source: Energy Information Administration, Form EIA-28 (Financial Reporting System).

Table B7. Net Property, Plant, and Equipment (PP&E), Additions to PP&E, Investments and Advances, and Depreciation, Depletion, and Amortization (DD&A), by Lines of Business for FRS Companies, 2006
(Million Dollars)

	Year End Balance		Activity During Year		
	Net PP&E	Investments & Advances to Unconsolidated Affiliates	Additions to PP&E	Additions to Investments & Advances to Unconsolidated Affiliates	DD&A
Petroleum					
United States					
Production	229,560	6,458	92,873	447	20,675
Refining/Marketing					
Refining	67,612	6,212	10,505	447	4,217
Marketing	15,178	1,149	1,487	11	1,645
Refining/Marketing Transport					
Pipelines	1,564	502	295	75	100
Marine	1,332	W	121	W	76
Other	741	W	197	W	59
Total U.S. Refining/Marketing	86,427	8,404	12,605	536	6,097
Rate Regulated Pipelines					
Refined Products	3,512	392	544	14	194
Crude Oil and Liquids	3,708	958	395	52	161
Total Rate Regulated Pipelines	7,220	1,350	939	66	355
Total U.S. Petroleum	323,207	16,212	106,417	1,049	27,127
Foreign					
Production	181,407	35,667	54,783	7,301	19,809
Refining/Marketing & International Marine ¹	32,609	7,724	5,043	676	2,368
Total Foreign Petroleum	214,016	43,391	59,826	7,977	22,177
Total Petroleum	537,223	59,603	166,243	9,026	49,304
Downstream Natural Gas					
United States					
Processing:					
NGL Production	3,221	1,235	217	0	203
Other Processing	9,313	W	W	0	561
LNG Import/Export Facilities	913	W	W	W	30
Total Processing	13,447	1,284	5,712	W	794
Marketing/Trading	3,147	W	W	W	196
Transmission:					
Pipelines	17,007	1,607	2,137	0	684
Storage	1,386	W	127	W	60
Other	5,817	W	445	0	128
Total Transmission	24,210	1,724	2,709	W	872
Total Distribution	2,575	W	W	W	74
Total U.S. Downstream Natural Gas	43,379	3,044	8,800	63	1,936
Total Foreign Downstream Natural Gas	13,077	4,934	2,700	86	1,264
Total Downstream Natural Gas	56,456	7,978	11,500	149	3,200

¹Foreign Refining/Marketing and International Marine combined to avoid disclosure.

W = Data withheld to avoid disclosure.

Source: Energy Information Administration, Form EIA-28 (Financial Reporting System).

Table B7. Net Property, Plant, and Equipment (PP&E), Additions to PP&E, Investments and Advances, and Depreciation, Depletion, and Amortization (DD&A), by Lines of Business for FRS Companies, 2006 (Continued)
(Million Dollars)

	Year End Balance		Activity During Year		
	Net PP&E	Investments & Advances to Unconsolidated Affiliates	Additions to PP&E	Additions to Investments & Advances to Unconsolidated Affiliates	DD&A
Electric Power					
United States:					
Generation	9,961	735	761	0	367
Marketing/Trading	W	0	W	0	W
Transmission	W	0	W	0	W
Distribution	W	0	W	0	W
Total U.S. Electric Power	16,053	735	1,279	0	681
Total Foreign Electric Power	1,654	2,099	W	W	71
Total Electric Power	17,707	2,834	W	W	752
Other Energy					
U.S. Nonconventional Oil	784	603	163	118	11
Other U.S.	649	27	50	W	56
Total Worldwide Other Energy	4,442	649	384	W	167
Nonenergy					
Foreign Chemicals	8,390	4,054	688	-87	781
U.S. Chemicals	19,012	6,079	1,735	108	1,617
Foreign Other Nonenergy	W	2,093	W	-61	W
U.S. Other Nonenergy	W	656	W	108	W
Total Nonenergy	29,763	12,882	3,137	68	2,527
Nontraceable	11,162	842	1,928	613	969
Consolidated	656,753	84,788	184,648	10,035	56,919

W = Data withheld to avoid disclosure.

Source: Energy Information Administration, Form EIA-28 (Financial Reporting System).

Table B8. Return on Investment for Lines of Business for FRS Companies Ranked by Total Energy Assets, 2005-2006
(Percent)

Line of Business	All FRS		Top Four		Five through Twelve		All Other	
	2005	2006	2005	2006	2005	2006	2005	2006
Petroleum	23.7	20.9	24.6	22.4	21.3	19.1	24.0	18.4
U.S. Petroleum	22.4	19.4	24.0	21.9	20.8	16.9	21.5	19.0
Oil and Natural Gas Production	22.5	17.5	27.0	21.6	20.0	13.8	18.9	16.6
Refining/Marketing	23.5	25.6	20.8	25.1	23.3	25.9	29.6	26.2
Pipelines	5.8	2.7	7.6	4.5	-3.8	-12.5	8.1	7.8
Foreign Petroleum	25.5	22.8	25.0	22.8	22.7	27.8	32.5	15.9
Oil and Natural Gas Production	26.3	23.6	26.2	23.8	21.2	28.2	33.5	15.7
Refining/Marketing	20.8	18.6	19.8	18.1	40.3	23.6	6.9	390.9
International Marine	W	W	W	W	0.0	0.0	0.0	0.0
Downstream Natural Gas¹	4.0	6.7	11.8	9.4	3.5	5.7	-4.8	6.2
Electric Power¹	1.7	5.6	-0.9	16.8	2.3	5.3	0.7	-83.9
Nuclear, Nonconventional, & Coal	22.2	11.1	24.6	15.4	-21.7	-43.6	25.0	12.7
Nonenergy	11.6	14.6	14.9	22.2	-2.9	-3.4	12.7	9.7

¹The downstream natural gas and electric power lines of business were added to the EIA-28 survey form beginning with the 2003 reporting year.

W = Data withheld to avoid disclosure.

Note: Return on investment measured as contribution to net income/net investment in place.

Source: Energy Information Administration, Form EIA-28 (Financial Reporting System).

Table B9. Research and Development Expenditures for FRS Companies, 2000-2006
(Million Dollars)

	2000	2001	2002	2003	2004	2005	2006
Sources of R&D Funds							
Federal Government	4	W	W	W	12	W	W
Internal Company	1,316	1,542	1,742	1,523	1,508	1,719	2,057
Other Sources	6	W	W	W	25	W	W
Total Sources	1,326	1,570	1,753	1,534	1,545	1,744	2,162
Breakdown of R&D Expenditures							
Oil & Natural Gas Recovery	453	592	464	370	507	617	794
Gas to Liquids	0	0	0	52	38	85	W
Other Petroleum	327	376	656	357	267	318	389
Coal Gasification/Liquefaction	W	W	W	W	W	W	W
Other Coal	0	W	0	0	0	0	0
Downstream Natural Gas	0	0	0	7	0	0	W
Wind Generation	0	0	0	0	0	0	0
Solar Generation	0	0	0	4	W	W	W
Distributed Generation	0	0	0	0	0	0	0
Fuel Cells	0	0	0	7	10	W	W
Other Nonconventional Energy	W	W	59	54	113	199	396
Nonenergy	452	526	517	676	606	504	498
Unassigned	W	W	W	W	0	W	W
Total Expenditures	1,326	1,570	1,753	1,534	1,545	1,744	2,162

- = Data not available prior to 2003.

W = Data withheld to avoid disclosure.

Source: Energy Information Administration, Form EIA-28 (Financial Reporting System).

**Table B10. Size Distribution of Net Investment in Place for FRS Companies
Ranked by Total Energy Assets, 2006
(Percent)**

Line of Business	Top Four	Five through Twelve	All Other	All FRS
Petroleum	57.6	25.6	16.8	100.0
United States	40.4	36.1	23.5	100.0
Production	38.3	37.2	24.5	100.0
Refining/Marketing	42.4	35.3	22.3	100.0
Refining	39.7	37.2	23.1	100.0
Marketing	53.1	24.7	22.2	100.0
Rate Regulated Pipelines	74.9	13.0	12.0	100.0
Foreign	80.3	11.7	8.0	100.0
Production	77.8	12.7	9.5	100.0
Refining/Marketing	93.5	6.5	0.0	100.0
International Marine	100.0	0.0	0.0	100.0
Downstream Natural Gas	25.3	54.7	20.0	100.0
U.S. Downstream Natural Gas	9.7	64.1	26.2	100.0
Processing	21.0	56.6	22.4	100.0
Marketing/Trading	31.6	66.4	2.0	100.0
Transmission	1.6	66.8	31.7	100.0
Distribution	0.0	77.7	22.3	100.0
Foreign Downstream Natural Gas	65.5	30.2	4.2	100.0
Electric Power	18.9	79.0	2.1	100.0
U.S. Electric Power	4.0	93.5	2.5	100.0
Generation	6.2	89.9	3.9	100.0
Marketing/Trading	0.0	28.6	71.4	100.0
Transmission	0.0	100.0	0.0	100.0
Distribution	0.0	100.0	0.0	100.0
Foreign Electric Power	85.7	14.3	0.0	100.0
Other Energy	85.4	6.9	7.7	100.0
Nonenergy	54.1	14.2	31.6	100.0
Chemicals	53.5	11.8	34.7	100.0
Other Nonenergy	58.9	31.7	9.4	100.0
Consolidated	53.9	28.6	17.4	100.0

Note: Sum of components may not equal total due to independent rounding, eliminations, and nontraceables.
Source: Energy Information Administration, Form EIA-28 (Financial Reporting System).

Table B11. Consolidated Statement of Cash Flows for FRS Companies, 2000-2006

(Million Dollars)

Cash Flows ¹	2000	2001	2002	2003	2004	2005	2006
Cash Flows From Operations							
Net Income	53,192	37,735	20,592	57,427	81,087	119,218	131,480
Minority Interest in Income	1,912	2,172	1,068	1,719	2,105	2,787	2,139
Noncash Items:							
Depreciation, Depletion, & Allowance	37,621	46,377	45,529	43,854	47,179	49,133	56,919
Dry Hole Expense, This Year	1,328	2,344	1,925	1,668	1,951	1,757	2,727
Deferred Income Taxes	5,611	3,145	-143	6,033	3,999	4,217	9,073
Recognized Undistributed (Earnings)/Losses of Unconsolidated Affiliates	-3,319	-318	1,144	-1,429	-4,553	-5,384	-3,846
(Gain)/Loss on Disposition of Property, Plant, & Equipment (PP&E)	-2,065	-1,176	-1,374	-1,908	-1,780	-4,714	-5,505
Changes in Operating Assets and Liabilities and Other Noncash Items	-6,269	2,848	-636	-661	6,725	2,678	-8,678
Other Cash Items, Net	629	-3,490	6,847	-1,585	-870	183	9,264
Net Cash Flow From Operations	88,640	89,637	74,952	105,118	135,843	169,875	193,573
Cash Flows From Investing Activities							
Additions to PP&E:							
Due to Mergers and Acquisitions	-49,722	-40,971	-34,175	-11,367	-10,122	-37,420	-79,641
Other	-52,470	-59,313	-57,170	-65,054	-69,766	-84,239	-105,007
Total Additions to PP&E	-102,192	-100,284	-91,345	-76,421	-79,888	-121,659	-184,648
Additions to Investments and Advances	-7,156	-10,086	-7,529	-3,542	-6,180	-11,464	-10,035
Proceeds From Disposals of PP&E	26,663	7,683	15,186	16,112	19,690	35,869	41,640
Other Investment Activities, Net	8,742	8,406	29,572	4,572	4,392	23,126	-21,193
Cash Flow From Investing Activities	-73,943	-94,281	-54,116	-59,279	-61,986	-74,128	-174,236
Cash Flows From Financing Activities							
Proceeds From Long-Term Debt	33,292	54,987	34,094	26,352	18,532	29,637	87,077
Proceeds From Equity Security Offerings	30,606	6,267	4,878	8,397	8,126	10,467	22,607
Reductions in Long-Term Debt	-29,323	-34,264	-27,863	-26,222	-18,412	-33,290	-55,227
Purchase of Treasury Stock	-5,362	-7,474	-4,680	-6,059	-14,011	-31,800	-41,722
Dividends to Shareholders	-18,981	-17,132	-17,744	-42,808	-36,541	-39,729	-38,520
Other Financing Activities, Including Net Change in Short-Term Debt	-17,205	3,848	-7,063	2,496	-11,212	-15,727	-1,572
Cash Flow From Financing Activities	-6,973	6,232	-18,378	-37,844	-53,518	-80,442	-27,357
Effect of Exchange Rate on Cash	-119	-308	571	816	869	-893	993
Net Increase/(Decrease) in Cash and Cash Equivalents	7,605	1,280	3,029	8,811	21,208	14,412	-7,027

¹ Items that add to cash are positive, and items that use cash are shown as negative values.

Source: Energy Information Administration, Form EIA-28 (Financial Reporting System).

Table B12. Composition of Income Taxes for FRS Companies, 2000-2006

(Million Dollars)

	2000	2001	2002	2003	2004	2005	2006
Income Taxes (as per Financial Statements)							
Current Paid or Accrued:							
U.S. Federal, before Investment Tax Credit & Alternative Minimum Tax	11,705	8,812	390	7,516	16,147	24,808	25,210
U.S. Federal Investment Tax Credit	-129	-246	-245	-236	-201	-323	-127
Effect of Alternative Minimum Tax	-1,222	-632	69	-330	-459	-305	-146
U.S. State & Local Income Taxes	1,338	1,067	478	1,094	2,052	3,468	3,112
Foreign Income Taxes							
Canada	1,765	1,139	1,236	1,567	2,381	3,428	3,110
Europe ¹	6,972	6,371	5,576	6,700	11,072	15,328	19,193
Former Soviet Union ²	30	144	43	158	127	471	1,040
Africa	3,617	3,057	2,884	3,851	6,086	9,674	16,417
Middle East	2,380	1,937	1,753	2,115	2,674	3,902	6,073
Other Eastern Hemisphere	2,214	1,676	1,674	2,763	3,017	3,488	5,396
Other Western Hemisphere	900	695	669	1,127	1,871	2,980	2,206
Total Foreign	17,878	15,019	13,835	18,281	27,228	39,271	53,435
Total Current	29,570	24,020	14,527	26,325	44,767	66,919	81,484
Deferred							
U.S. Federal, before Investment Tax Credit	3,168	2,403	241	4,770	2,222	1,530	6,753
U.S. Federal Investment Tax Credit	-78	-10	-18	-17	-17	-17	-14
Effect of Alternative Minimum Tax	1,233	650	-69	335	445	303	162
U.S. State & Local Income Taxes	221	26	76	310	93	100	925
Foreign	910	567	-191	569	847	2,259	1,135
Total Deferred	5,454	3,636	39	5,967	3,590	4,175	8,961
Total Income Tax Expense	35,024	27,656	14,566	32,292	48,357	71,094	90,445
Reconciliation of Accrued U.S. Federal Income Tax Expense To Statutory Rate							
Consolidated Pretax Income/(Loss)	86,702	68,246	36,171	89,522	128,969	187,932	219,908
Less: Foreign Source Income not Subject to U.S. Tax	13,355	8,918	8,816	17,818	28,635	38,441	29,496
Equals: Income Subject to U.S. Tax	73,347	59,328	27,355	71,704	100,334	149,491	190,412
Less: U.S. State & Local Income Taxes	1,497	895	345	955	2,092	3,584	3,990
Less: Applicable Foreign Income Taxes Deducted	353	82	252	315	330	573	1,618
Equals: Pretax Income Subject to U.S. Tax	71,497	58,351	26,758	70,434	97,912	145,334	184,804
Tax Provision Based on Previous Line	25,032	20,438	9,363	24,657	33,943	50,846	64,650
Increase/(Decrease) in Taxes Due To:							
Foreign Tax Credits Recognized	-9,787	-8,513	-7,283	-11,385	-14,646	-22,659	-31,012
U.S. Federal Investment Tax Credit Recognized	-129	-486	-245	-257	-239	-418	-336
Statutory Depletion	-3	-1	-3	-6	-6	-10	-10
Effect of Alternative Minimum Tax	11	16	0	0	-13	0	5
Other	-447	-582	-1,462	-963	-898	-1,755	-1,462
Actual U.S. Federal Tax Provision (Refund)	14,677	10,872	370	12,046	18,141	26,004	31,835

¹ Prior to 2006, this region comprised of European member countries of the OECD.² Prior to 2006, this region comprised of the Former Soviet Union and East Europe.

Source: Energy Information Administration, Form EIA-28 (Financial Reporting System).

Table B13. U.S. Taxes Other Than Income Taxes for FRS Companies, 2000-2006

(Million Dollars)

	2000	2001	2002	2003	2004	2005	2006
Production Taxes							
Oil and Natural Gas Production	2,604	2,506	2,187	3,127	3,525	4,881	5,619
Other Energy	W	W	35	W	34	33	W
Other ¹	W	W	0	W	0	0	W
Total Production Taxes	2,635	2,543	2,222	3,154	3,559	4,914	5,648
Superfund	W	W	W	W	W	W	W
Import Duties	W	W	W	W	W	W	W
Sales, Use, and Property	2,356	2,373	2,360	2,023	2,422	2,734	3,102
Payroll	1,259	1,193	1,121	1,134	1,188	1,315	1,431
Other Taxes	789	546	378	403	615	543	656
Total Taxes Paid (Other Than Income Taxes)	7,162	6,741	6,156	5,067	5,637	7,221	8,251
Excise Taxes Collected	47,084	44,310	43,464	41,907	45,406	47,207	48,113

¹ Nonenergy, and beginning in 2003, Downstream Natural Gas.

W = Data withheld to avoid disclosure.

Source: Energy Information Administration, Form EIA-28 (Financial Reporting System).

Table B14. Oil and Natural Gas Exploration and Development Expenditures for FRS Companies, United States and Foreign, 2000-2006

(Million Dollars)

	2000	2001	2002	2003	2004	2005	2006
United States							
Exploration							
Acquisition of Unproved Acreage	4,010	3,527	2,281	1,389	2,575	3,755	19,046
Geological and Geophysical	849	758	821	659	859	985	1,250
Drilling and Equipping ¹	2,550	3,276	2,555	2,525	2,277	3,616	5,552
Other	610	770	832	703	871	1,021	1,114
Total Exploration	8,019	8,331	6,489	5,276	6,582	9,377	26,962
Development							
Acquisition of Proved Acreage	27,939	7,383	7,572	6,051	7,586	13,495	36,769
Lease Equipment	1,907	3,818	3,325	3,636	3,841	3,501	5,240
Drilling and Equipping ¹	8,788	11,671	10,711	10,581	12,871	17,967	25,781
Other ²	1,391	2,655	3,715	1,652	1,533	2,245	3,292
Total Development	40,025	25,527	25,323	21,920	25,831	37,208	71,082
Total U.S. Exploration and Development	48,044	33,858	31,812	27,196	32,413	46,585	98,044
Foreign							
Exploration							
Acquisition of Unproved Acreage	4,105	4,696	2,588	1,346	610	5,130	4,454
Geological and Geophysical	875	1,028	939	866	965	988	1,265
Drilling and Equipping ¹	1,824	2,677	2,108	2,243	2,528	2,743	3,393
Other	1,087	1,146	864	949	875	1,253	1,300
Total Exploration	7,891	9,547	6,499	5,404	4,978	10,114	10,412
Development							
Acquisition of Proved Acreage	11,644	12,186	8,600	3,060	468	10,740	16,002
Lease Equipment	1,842	3,186	2,538	4,701	4,670	5,731	5,997
Drilling and Equipping ¹	5,057	7,060	8,040	9,793	11,277	13,490	16,175
Other ²	2,364	3,965	5,695	5,250	3,931	7,183	10,476
Total Development	20,907	26,397	24,873	22,804	20,346	37,144	48,650
Total Foreign Exploration and Development	28,798	35,944	31,372	28,208	25,324	47,258	59,062

¹ Expenditure incurred in a given year not cumulative (includes work-in-progress adjustment).² Includes support equipment.

Source: Energy Information Administration, Form EIA-28 (Financial Reporting System).

Table B15. Components of U.S. and Foreign Exploration and Development Expenditures for FRS Companies, 2006
(Million Dollars)

	Worldwide	United States			Foreign
		Total	Onshore	Offshore	
Exploration and Development Expenditures					
Exploration Expenditures					
Unproved Acreage	23,500	19,046	12,201	6,845	4,454
Drilling and Equipping:					
Completed Well Costs	-	4,629	1,766	2,863	-
Work-in-progress Adjustment	-	923	384		-
Total Drilling and Equipping	8,945	5,552	2,150	3,402	3,393
Geological and Geophysical	2,515	1,250	660	590	1,265
Other, Including Direct Overhead	2,414	1,114	449	665	1,300
Total Exploration Expenditures	37,374	26,962	15,460	11,502	10,412
Development Expenditures					
Proved Acreage (Including Mergers and Acquisitions)	52,771	36,769	30,892	5,877	16,002
Drilling and Equipping:					
Completed Well Costs	-	21,557	18,645	2,912	-
Work-in-progress Adjustment	-	4,224	2,350	1,874	-
Total Drilling and Equipping	41,956	25,781	20,995	4,786	16,175
Lease Equipment	11,237	5,240	2,616	2,624	5,997
Other Development					
Support Equipment	936	408	249	159	528
Other, Including Direct Overhead	12,832	2,884	1,892	992	9,948
Total Development Expenditures	119,732	71,082	56,644	14,438	48,650
Total Exploration and Development Expenditures	157,106	98,044	72,104	25,940	59,062

- = Not available.

Source: Energy Information Administration, Form EIA-28 (Financial Reporting System).

Table B16. Exploration and Development Expenditures by Region for FRS Companies, 2000-2006

(Million Dollars)

	2000	2001	2002	2003	2004	2005	2006
Exploration Expenditures							
U.S. Onshore	4,136	4,779	3,023	1,813	3,271	5,145	15,460
U.S. Offshore	3,883	3,552	3,466	3,463	3,311	4,232	11,502
Total United States	8,019	8,331	6,489	5,276	6,582	9,377	26,962
Canada	1,184	3,899	1,694	1,311	1,313	1,869	2,119
Europe ¹	869	756	1,223	629	414	841	1,001
Former Soviet Union ²	317	374	470	691	294	588	151
Africa	910	1,579	1,292	1,645	1,345	2,131	2,377
Middle East	56	197	121	132	127	313	465
Other Eastern Hemisphere	1,675	1,478	1,121	662	884	3,789	1,373
Other Western Hemisphere	2,880	1,264	578	334	601	583	2,926
Total Foreign	7,891	9,547	6,499	5,404	4,978	10,114	10,412
Worldwide Exploration Expenditures	15,910	17,878	12,988	10,680	11,560	19,491	37,374
Development Expenditures							
U.S. Onshore	22,953	19,465	19,307	12,930	18,612	30,095	56,644
U.S. Offshore	17,072	6,062	6,016	8,990	7,219	7,113	14,438
Total United States	40,025	25,527	25,323	21,920	25,831	37,208	71,082
Canada	3,697	11,425	4,993	3,592	3,991	7,206	14,864
Europe ¹	6,651	4,617	8,571	5,101	3,994	5,246	8,000
Former Soviet Union ²	576	507	803	1,429	1,748	5,672	2,265
Africa	1,809	3,968	3,799	7,542	5,558	8,577	10,484
Middle East	494	542	653	844	1,144	1,139	2,681
Other Eastern Hemisphere	5,112	3,513	5,074	3,499	2,877	8,222	5,135
Other Western Hemisphere	2,568	1,826	980	797	1,034	1,082	5,221
Total Foreign	20,907	26,397	24,873	22,804	20,346	37,144	48,650
Worldwide Development Expenditures	60,932	51,924	50,196	44,724	46,177	74,352	119,732
Total Exploration and Development Expenditures							
U.S. Onshore	27,089	24,244	22,330	14,743	21,883	35,240	72,104
U.S. Offshore	20,955	9,614	9,482	12,453	10,530	11,345	25,940
Total United States	48,044	33,858	31,812	27,196	32,413	46,585	98,044
Canada	4,881	15,324	6,687	4,903	5,304	9,075	16,983
Europe ¹	7,520	5,373	9,794	5,730	4,408	6,087	9,001
Former Soviet Union ²	893	881	1,273	2,120	2,042	6,260	2,416
Africa	2,719	5,547	5,091	9,187	6,903	10,708	12,861
Middle East	550	739	774	976	1,271	1,452	3,146
Other Eastern Hemisphere	6,787	4,991	6,195	4,161	3,761	12,011	6,508
Other Western Hemisphere	5,448	3,090	1,558	1,131	1,635	1,665	8,147
Total Foreign	28,798	35,944	31,372	28,208	25,324	47,258	59,062
Worldwide Exploration and Development Expenditures	76,842	69,802	63,184	55,404	57,737	93,843	157,106

¹ Prior to 2006, this region comprised of European member countries of the OECD.² Prior to 2006, this region comprised of the Former Soviet Union and East Europe.

Source: Energy Information Administration, Form EIA-28 (Financial Reporting System).

Table B17. Production (Lifting) Costs by Region for FRS Companies, 2000-2006

(Million Dollars)

	2000	2001	2002	2003	2004	2005	2006
United States							
Taxes Other Than Income Taxes	2,604	2,506	2,187	3,127	3,525	4,881	5,619
Other Costs	8,417	10,377	10,345	10,424	11,663	13,502	16,977
Total Production Costs	11,021	12,883	12,532	13,551	15,188	18,383	22,596
U.S. Onshore	8,254	9,838	9,650	10,549	11,630	14,151	17,982
U.S. Offshore	2,767	3,045	2,882	3,002	3,558	4,232	4,614
Canada							
Royalty Expenses	W	0	0	0	0	0	0
Taxes Other Than Income Taxes	W	105	109	119	117	142	143
Other Costs	1,379	1,842	2,303	2,818	2,596	3,259	3,507
Total Production Costs	1,496	1,947	2,412	2,937	2,713	3,401	3,650
Europe¹							
Royalty Expenses	W	W	49	W	W	0	W
Taxes Other Than Income Taxes	W	W	456	W	W	1,154	W
Other Costs	3,485	3,496	3,416	4,098	4,101	4,828	4,925
Total Production Costs	4,025	4,151	3,921	4,884	4,734	5,982	6,478
Former Soviet Union²							
Royalty Expenses	W	W	0	0	W	14	0
Taxes Other Than Income Taxes	W	W	0	30	W	218	75
Other Costs	179	155	111	177	269	384	402
Total Production Costs	196	191	111	207	327	616	477
Africa							
Royalty Expenses	W	W	0	0	0	W	W
Taxes Other Than Income Taxes	W	W	377	590	779	W	W
Other Costs	1,208	1,384	1,730	1,743	2,101	2,312	2,725
Total Production Costs	1,784	1,847	2,107	2,333	2,880	3,557	4,553
Middle East							
Royalty Expenses	137	0	0	0	0	0	0
Taxes Other Than Income Taxes	75	55	46	20	24	17	1,800
Other Costs	175	407	502	516	539	580	832
Total Production Costs	387	462	548	536	563	597	2,632
Other Eastern Hemisphere							
Royalty Expenses and							
Taxes Other Than Income Taxes	618	527	580	675	922	1,167	1,259
Other Costs	1,392	1,931	2,002	1,836	2,573	2,250	2,531
Total Production Costs	2,010	2,458	2,582	2,511	3,495	3,417	3,790
Other Western Hemisphere							
Royalty Expenses and							
Taxes Other Than Income Taxes	304	143	276	392	500	676	704
Other Costs	533	600	633	578	549	903	952
Total Production Costs	837	743	909	970	1,049	1,579	1,656
Total Foreign							
Royalty Expenses	437	153	150	W	W	W	266
Taxes Other Than Income Taxes	1,947	1,831	1,743	W	W	W	7,096
Other Costs	8,351	9,815	10,697	11,766	12,728	14,516	15,874
Total Production Costs	10,735	11,799	12,590	14,378	15,761	19,149	23,236

¹Prior to 2006, consisted of only European members of the OECD.²Prior to 2006, also included East Europe.

W = Data withheld to avoid disclosure.

Source: Energy Information Administration, Form EIA-28 (Financial Reporting System).

Table B18. Oil and Natural Gas Acreage for FRS Companies, 2000-2006

(Thousand Acres)

	2000	2001	2002	2003	2004	2005	2006
Net Acreage							
U.S. Onshore							
Developed	31,760	34,332	37,103	36,721	38,287	636,435	39,682
Undeveloped	37,657	43,293	40,280	42,891	39,891	1,369,098	48,650
U.S. Offshore							
Developed	5,383	5,881	5,281	5,375	5,520	367,681	4,544
Undeveloped	21,483	20,933	21,929	20,875	22,006	514,904	18,755
Foreign							
Developed	32,535	32,903	37,603	33,952	33,561	52,215	36,572
Undeveloped	416,941	424,465	429,394	312,769	273,697	646,718	291,292
Gross Acreage							
U.S. Onshore							
Developed	57,626	63,721	69,641	65,367	64,704	1,034,205	62,892
Undeveloped	59,295	69,790	64,841	66,918	62,194	1,811,095	75,411
U.S. Offshore							
Developed	10,588	11,317	9,802	9,331	9,818	538,881	7,306
Undeveloped	31,609	30,523	32,384	31,134	32,548	571,203	26,915
Foreign							
Developed	71,330	70,112	81,171	70,516	65,597	127,446	92,075
Undeveloped	882,761	834,500	799,007	608,666	532,672	1,702,468	509,714

Source: Energy Information Administration, Form EIA-28 (Financial Reporting System).

Table B19. U.S. Net Wells Completed for FRS Companies and Industry, and Net in-Progress Wells at Year End for FRS Companies, 2000-2006

	2000	2001	2002	2003	2004	2005	2006
Number of Net Wells Completed During Year for FRS Companies							
Onshore							
Net Exploratory Wells							
Dry Holes	86	122	119	93	86	65	64
Oil Wells	19	59	21	19	27	29	12
Natural Gas Wells	217	351	164	164	226	294	360
Total Exploratory Wells	321	533	304	275	338	388	435
Net Development Wells							
Dry Holes	229	266	220	225	197	222	184
Oil Wells	1,775	1,815	1,187	1,567	2,005	2,006	2,274
Natural Gas Wells	2,927	5,226	4,982	5,539	6,246	7,248	8,737
Total Development Wells	4,930	7,307	6,389	7,331	8,448	9,476	11,194
Offshore							
Net Exploratory Wells							
Dry Holes	73	63	52	43	39	33	30
Oil Wells	28	39	35	20	11	11	10
Natural Gas Wells	59	63	53	36	29	24	22
Total Exploratory Wells	159	165	140	98	78	67	63
Net Development Wells							
Dry Holes	29	38	38	13	14	16	15
Oil Wells	128	240	135	95	85	99	102
Natural Gas Wells	157	170	134	75	73	56	62
Total Development Wells	315	448	307	183	172	172	178
Total United States							
Net Exploratory Wells							
Dry Holes	158	185	171	135	125	98	94
Oil Wells	47	98	56	38	37	39	22
Natural Gas Wells	275	415	217	199	254	318	383
Total Exploratory Wells	480	698	443	373	416	455	498
Net Development Wells							
Dry Holes	258	305	259	238	211	239	199
Oil Wells	1,903	2,054	1,321	1,662	2,090	2,105	2,375
Gas Wells	3,084	5,396	5,116	5,614	6,319	7,304	8,798
Total Development Wells	5,245	7,755	6,696	7,514	8,620	9,648	11,373
Number of Net Wells Completed During Year for Total Industry							
Net Exploratory Wells							
Dry Holes	1,288	1,716	1,283	1,266	1,200	1,577	-
Oil Wells	268	330	239	326	353	429	-
Natural Gas Wells	607	972	701	892	1,323	1,452	-
Total Exploratory Wells	2,163	3,018	2,223	2,484	2,876	3,458	-
Net Development Wells							
Dry Holes	2,737	2,716	2,327	2,422	2,274	3,067	-
Oil Wells	7,090	7,856	5,987	7,139	7,350	9,404	-
Natural Gas Wells	15,848	20,431	16,027	18,630	20,493	25,945	-
Total Development Wells	25,675	31,003	24,341	28,191	30,117	38,418	-
Number of Net In-Progress Wells At Year End for FRS Companies							
Onshore							
Exploratory Wells							
Exploratory Wells	70	85	66	84	126	134	184
Development Wells							
Development Wells	716	1,052	1,315	1,209	1,785	2,162	2,133
Total In-Progress Wells	786	1,138	1,381	1,293	1,911	2,295	2,317
Offshore							
Exploratory Wells							
Exploratory Wells	50	56	55	46	52	58	25
Development Wells							
Development Wells	110	63	47	78	108	87	73
Total In-Progress Wells	160	118	102	124	159	145	98
Total United States							
Exploratory Wells							
Exploratory Wells	120	141	120	130	177	192	209
Development Wells							
Development Wells	826	1,115	1,362	1,286	1,893	2,249	2,206
Total In-Progress Wells	946	1,256	1,482	1,416	2,071	2,441	2,415

Note: Sum of components may not equal total due to independent rounding.

- = Not available.

Sources: Industry data - Energy Information Administration, *Monthly Energy Review*, December 2005, Table 5.2. Crude Oil and Natural Gas Wells Drilled.

FRS companies' data - Energy Information Administration, Form EIA-28 (Financial Reporting System).

Table B20. U.S. Net Drilling Footage and Net Producing Wells For FRS Companies and Industry, 2000-2006

	2000	2001	2002	2003	2004	2005	2006
FRS Companies							
Onshore	(thousand feet)						
Exploratory Well Footage							
Dry Hole Footage	955	1,085	1,000	823	821	640	660
Oil Well Footage	199	397	141	152	273	374	132
Natural Gas Well Footage	1,399	2,016	1,284	1,655	2,213	3,019	2,988
Total Exploratory Footage	2,553	3,498	2,425	2,630	3,307	4,033	3,780
Development Well Footage							
Dry Hole Footage	1,597	2,029	1,716	1,507	1,475	1,599	1,403
Oil Well Footage	9,374	9,435	6,928	8,716	10,352	10,314	12,705
Natural Gas Well Footage	20,516	26,653	32,078	40,507	44,999	53,568	65,745
Total Development Footage	31,487	38,117	40,722	50,730	56,827	65,481	79,853
Offshore							
Exploratory Well Footage							
Dry Hole Footage	1,151	1,004	652	628	632	616	507
Oil Well Footage	364	551	589	289	167	184	180
Natural Gas Well Footage	1,141	759	697	504	391	309	303
Total Exploratory Footage	2,656	2,314	1,938	1,421	1,191	1,110	990
Development Well Footage							
Dry Hole Footage	411	353	369	165	163	161	135
Oil Well Footage	1,505	2,260	1,362	1,216	833	966	895
Natural Gas Well Footage	1,899	1,917	1,370	905	834	685	746
Total Development Footage	3,815	4,530	3,101	2,286	1,830	1,812	1,776
Total United States							
Exploratory Well Footage							
Dry Hole Footage	2,107	2,089	1,652	1,451	1,453	1,256	1,167
Oil Well Footage	563	948	730	441	440	558	312
Natural Gas Well Footage	2,540	2,775	1,981	2,159	2,605	3,328	3,291
Total Exploratory Footage	5,209	5,812	4,363	4,051	4,498	5,142	4,770
Development Well Footage							
Dry Hole Footage	2,008	2,382	2,085	1,672	1,638	1,760	1,538
Oil Well Footage	10,879	11,695	8,290	9,932	11,185	11,280	13,600
Natural Gas Well Footage	22,415	28,570	33,448	41,412	45,833	54,253	66,491
Total Development Footage	35,303	42,647	43,823	53,016	58,656	67,293	81,629
Total Industry							
Exploratory Well Footage							
Dry Hole Footage	8,965	11,312	8,587	8,826	-	-	-
Oil Well Footage	1,918	2,435	1,611	1,996	-	-	-
Natural Gas Well Footage	4,518	6,909	5,062	5,912	-	-	-
Total Exploratory Footage	15,422	20,656	15,260	16,734	-	-	-
Development Well Footage							
Dry Hole Footage	14,145	14,013	12,098	14,739	-	-	-
Oil Well Footage	31,681	36,334	26,401	30,002	-	-	-
Natural Gas Well Footage	75,736	102,922	87,326	110,559	-	-	-
Total Development Footage	121,563	153,269	125,825	155,300	-	-	-
Number of Net Producing Wells for FRS Companies							
	(number of wells)						
Onshore							
Oil Wells	68,274	66,667	69,021	71,863	69,048	67,632	74,817
Natural Gas Wells	64,696	82,083	89,102	105,439	116,741	125,681	137,862
Total Producing Wells	132,970	148,750	158,123	177,302	185,789	193,313	212,679
Offshore							
Oil Wells	3,536	4,738	4,384	3,777	3,187	2,562	2,453
Natural Gas Wells	3,111	3,606	3,011	2,306	2,264	1,697	1,317
Total Producing Wells	6,647	8,344	7,395	6,083	5,450	4,258	3,770
Total United States							
Oil Wells	71,810	71,405	73,405	75,640	72,234	70,193	77,270
Natural Gas Wells	67,807	85,689	92,113	107,744	119,005	127,378	139,179
Total Producing Wells	139,617	157,094	165,518	183,384	191,239	197,571	216,450

- = Not available.

Note: Sum of components may not equal total due to independent rounding.

footage total to the annual footage published in the Energy Information Administration's *Monthly Energy Review*, October 2004, p. 84.

FRS companies' data - Energy Information Administration, Form EIA-28 (Financial Reporting System).

Table B21. Foreign Net Wells Completed, In-Progress Wells, and Producing Wells by Region for FRS Companies, 2000-2006

	2000	2001	2002	2003	2004	2005	2006
Canada							
Net Wells Completed During Year							
Exploratory Wells							
Dry Holes	126.3	106.4	156.6	146.4	106.1	174.2	37.9
Oil Wells	23.3	63.1	74.0	51.0	46.7	23.6	23.9
Natural Gas Wells	194.2	165.9	329.4	454.6	263.6	536.4	202.2
Total Exploratory Wells	343.8	335.4	560.0	652.0	416.4	734.2	264.0
Development Wells							
Dry Holes	138.2	228.8	151.2	161.4	160.3	85.4	173.5
Oil Wells	373.3	818.1	794.1	586.4	547.0	493.5	734.3
Natural Gas Wells	891.5	2,025.1	2,381.1	2,651.9	3,657.6	3,319.8	3,206.4
Total Development Wells	1,403.0	3,072.1	3,326.4	3,399.7	4,364.9	3,898.7	4,114.2
Net In-Progress Wells at Year End	116.8	307.2	190.0	275.8	274.3	459.2	336.5
Net Producing Wells							
Oil Wells	12,094.8	17,640.5	14,203.0	13,167.6	12,287.0	10,637.6	10,028.2
Natural Gas Wells	15,242.7	25,230.5	26,434.9	28,418.4	31,906.3	33,387.3	32,287.4
Total Producing Wells	27,337.5	42,870.9	40,637.9	41,586.0	44,193.2	44,024.9	42,315.6
Europe and Former Soviet Union ¹							
Net Wells Completed During Year							
Exploratory Wells							
Dry Holes	15.7	15.6	11.2	12.7	17.0	19.4	8.6
Oil Wells	5.2	25.9	5.3	6.1	W	W	19.3
Natural Gas Wells	6.4	8.6	3.1	3.5	W	W	2.2
Total Exploratory Wells	27.3	50.1	19.6	22.3	26.5	29.3	30.1
Development Wells							
Dry Holes	10.3	5.4	W	W	W	5.9	3.6
Oil Wells	67.7	91.8	63.0	98.6	97.4	138.6	106.7
Natural Gas Wells	30.4	31.8	W	W	W	17.8	13.4
Total Development Wells	108.4	129.0	108.8	127.6	128.3	162.3	123.7
Net In-Progress Wells at Year End	63.7	69.3	38.7	49.1	39.1	65.6	44.2
Net Producing Wells							
Oil Wells	1,431.3	1,478.2	1,225.7	1,325.3	1,376.1	1,352.9	1,118.4
Natural Gas Wells	737.7	717.2	788.7	639.1	616.0	612.0	545.2
Total Producing Wells	2,169.0	2,195.4	2,014.4	1,964.4	1,992.1	1,964.9	1,663.6
Africa and Middle East							
Net Wells Completed During Year							
Exploratory Wells							
Dry Holes	37.2	21.9	26.8	25.2	23.7	22.9	20.1
Oil Wells	W	W	W	29.1	27.6	W	22.4
Natural Gas Wells	W	W	W	5.6	3.3	W	6.7
Total Exploratory Wells	50.7	50.9	67.5	59.9	54.6	59.0	49.2
Development Wells							
Dry Holes	W	W	11.3	13.2	8.5	14.3	17.9
Oil Wells	239.3	159.8	209.4	293.7	307.6	341.7	354.4
Natural Gas Wells	W	W	13.5	8.7	19.3	12.3	16.3
Total Development Wells	252.0	186.9	234.2	315.6	335.4	368.3	388.6
Net In-Progress Wells at Year End	35.2	35.4	57.0	64.6	64.0	67.1	84.3
Net Producing Wells							
Oil Wells	1,954.1	2,063.8	2,209.2	2,357.1	2,780.1	3,150.4	3,394.4
Natural Gas Wells	79.0	121.2	140.2	152.0	140.6	150.1	139.1
Total Producing Wells	2,033.1	2,185.0	2,349.4	2,509.1	2,920.7	3,300.5	3,533.5

See footnotes at end of table.

Table B21. Foreign Net Wells Completed, In-Progress Wells, and Producing Wells by Region for FRS Companies, 2000-2006 (Continued)

	2000	2001	2002	2003	2004	2005	2006
Other Eastern Hemisphere							
Net Wells Completed During Year							
Exploratory Wells							
Dry Holes	40.7	39.1	36.8	37.2	26.9	21.9	22.7
Oil Wells	31.3	19.9	11.0	8.9	14.9	18.2	12.1
Natural Gas Wells	20.7	42.3	26.6	13.4	21.9	4.8	19.9
Total Exploratory Wells	92.7	101.3	74.4	59.5	63.7	44.9	54.7
Development Wells							
Dry Holes	4.4	7.1	3.0	2.5	3.6	7.7	2.7
Oil Wells	140.6	595.3	554.8	649.6	341.5	250.0	356.0
Natural Gas Wells	113.5	117.0	201.7	147.9	103.4	123.8	193.6
Total Development Wells	258.5	719.4	759.5	800.0	448.5	381.5	552.3
Net In-Progress Wells at Year End	80.5	67.1	30.9	50.5	41.9	26.0	84.3
Net Producing Wells							
Oil Wells	1,950.2	7,852.9	7,458.6	7,794.1	7,900.2	7,774.9	8,190.8
Natural Gas Wells	927.4	1,090.3	1,288.8	1,275.4	1,146.4	594.4	1,059.3
Total Producing Wells	2,877.6	8,943.2	8,747.4	9,069.5	9,046.6	8,369.3	9,250.1
Other Western Hemisphere							
Net Wells Completed During Year							
Exploratory Wells							
Dry Holes	14.5	31.9	13.2	10.7	11.2	12.4	12.7
Oil Wells	W	W	W	3.8	W	13.2	18.4
Natural Gas Wells	W	W	W	0.0	W	5.5	9.1
Total Exploratory Wells	23.4	40.0	21.3	14.5	16.3	31.1	40.2
Development Wells							
Dry Holes	W	W	W	W	W	5.4	8.2
Oil Wells	205.8	240.5	217.0	218.0	216.9	225.9	359.3
Natural Gas Wells	W	W	W	W	W	23.1	35.5
Total Development Wells	245.0	262.9	245.1	236.2	237.9	254.4	403.0
Net In-Progress Wells at Year End	31.3	47.4	31.6	8.6	19.5	18.0	25.6
Net Producing Wells							
Oil Wells	2,597.2	2,580.2	2,439.6	2,721.4	2,880.2	2,715.6	5,175.7
Natural Gas Wells	253.1	262.7	274.0	288.5	311.0	308.7	740.6
Total Producing Wells	2,850.3	2,842.9	2,713.6	3,009.9	3,191.2	3,024.3	5,916.3
Total Foreign							
Net Wells Completed During Year							
Exploratory Wells							
Dry Holes	234.4	214.9	244.6	232.2	184.9	250.8	102.0
Oil Wells	74.1	136.0	134.3	98.9	98.8	96.8	96.1
Natural Gas Wells	229.4	226.8	363.9	477.1	293.9	550.9	240.1
Total Exploratory Wells	537.9	577.7	742.8	808.2	577.5	898.5	438.2
Development Wells							
Dry Holes	156.7	252.5	171.2	184.3	183.8	118.7	205.9
Oil Wells	1,026.7	1,905.5	1,838.3	1,846.3	1,510.4	1,449.7	1,910.7
Natural Gas Wells	1,083.5	2,212.2	2,664.5	2,848.5	3,820.7	3,496.8	3,465.2
Total Development Wells	2,266.9	4,370.3	4,674.0	4,879.1	5,514.9	5,065.2	5,581.8
Net In-Progress Wells at Year End	327.5	526.4	348.2	448.6	438.8	635.9	574.9
Net Producing Wells							
Oil Wells	20,027.6	31,615.6	27,536.1	27,365.5	27,223.6	25,631.4	27,907.5
Natural Gas Wells	17,239.9	27,421.9	28,926.6	30,773.4	34,120.2	35,052.5	34,771.6
Total Producing Wells	37,267.5	59,037.4	56,462.7	58,138.9	61,343.8	60,683.9	62,679.1

¹Europe combined with the former Soviet Union to avoid disclosure.

W = data withheld to avoid disclosure.

Source: Energy Information Administration, Form EIA-28 (Financial Reporting System).

Table B22. U.S. Net Wells Completed, and Average Depth, Onshore and Offshore, for FRS Companies, 2005 and 2006

	Total United States			U.S. Onshore			U.S. Offshore		
	2005	2006	Percent Change	2005	2006	Percent Change	2005	2006	Percent Change
Exploration Wells									
Oil Wells									
Wells Completed	39.3	21.6	-45.0	28.6	11.6	-59.4	10.7	10.0	-6.5
Average Depth (thousand feet)	14.2	14.4	1.7	13.1	11.4	-13.1	17.2	18.0	4.7
Natural Gas Wells									
Wells Completed	318.1	382.6	20.3	294.1	360.3	22.5	24.0	22.3	-7.1
Average Depth (thousand feet)	10.5	8.6	-17.8	10.3	8.3	-19.2	12.9	13.6	5.5
Dry Holes									
Wells Completed	97.7	93.9	-3.9	65.0	63.5	-2.3	32.7	30.4	-7.0
Average Depth (thousand feet)	12.9	12.4	-3.3	9.8	10.4	5.6	18.9	16.7	-11.5
Development Wells									
Oil Wells									
Wells Completed	2,104.8	2,375.4	12.9	2,005.9	2,273.6	13.3	98.9	101.8	2.9
Average Depth (thousand feet)	5.4	5.7	6.8	5.1	5.6	8.7	9.8	8.8	-10.0
Natural Gas Wells									
Wells Completed	7,304.2	8,798.2	20.5	7,248.0	8,736.7	20.5	56.2	61.5	9.4
Average Depth (thousand feet)	7.4	7.6	1.7	7.4	7.5	1.8	12.2	12.1	-0.5
Dry Holes									
Wells Completed	238.6	198.9	-16.6	222.2	183.9	-17.2	16.4	15.0	-8.5
Average Depth (thousand feet)	7.4	7.7	4.8	7.2	7.6	6.0	9.8	9.0	-8.3

Source: Energy Information Administration, Form EIA-28 (Financial Reporting System).

Table B23. Oil and Natural Gas Reserves for FRS Companies and U.S. Industry, 2006

	Beginning Reserves	Plus Reserve Additions ¹	Plus Net Purchases	Less Production	Equals Ending Reserves	Replacement Rate (percent)
Crude Oil and Natural Gas Liquids	(million barrels)					
U.S. Onshore						
Total Industry	-	-	-	-	-	-
FRS Companies	11,150.7	184.5	49.7	715.6	10,669.4	25.8
All Other	-	-	-	-	-	-
U.S. Offshore						
Total Industry	-	-	-	-	-	-
FRS Companies	3,566.7	230.2	-39.5	360.1	3,397.2	63.9
All Other	-	-	-	-	-	-
U.S. Total						
Total Industry	-	-	-	-	-	-
FRS Companies	14,717.4	414.7	10.1	1,075.7	14,066.6	38.6
All Other	-	-	-	-	-	-
FRS Companies' Foreign Oil Reserves						
Canada	1,590.3	425.4	-65.5	164.1	1,786.2	259.2
Europe	3,181.8	83.6	-6.9	440.6	2,817.9	19.0
Former Soviet Union	1,602.4	W	W	86.2	1,556.3	W
Africa	5,735.7	248.2	137.0	594.6	5,526.4	41.7
Middle East	651.8	W	W	147.2	1,389.8	W
Other Eastern Hemisphere	1,959.9	215.5	-6.8	258.8	1,909.8	83.3
Other Western Hemisphere	1,076.6	68.8	-66.6	84.2	994.7	81.8
Total Foreign	15,798.5	1,273.9	684.2	1,775.6	15,981.0	71.7
Worldwide Total for FRS Companies	30,516.0	1,688.6	694.3	2,851.3	30,047.6	59.2
Dry Natural Gas	(billion cubic feet)					
U.S. Onshore						
Total Industry	-	-	-	-	-	-
FRS Companies	87,357.4	7,839.2	2,251.7	6,408.5	91,039.8	122.3
All Other	-	-	-	-	-	-
U.S. Offshore						
Total Industry	-	-	-	-	-	-
FRS Companies	12,071.2	158.5	-423.9	1,517.0	10,288.8	10.5
All Other	-	-	-	-	-	-
U.S. Total						
Total Industry	-	-	-	-	-	-
FRS Companies	99,428.6	7,997.7	1,827.8	7,925.5	101,328.6	100.9
All Other	-	-	-	-	-	-
FRS Companies' Foreign Natural Gas Reserves						
Canada	13,164.2	1,130.5	-1,322.0	1,454.8	11,517.8	77.7
Europe	15,280.1	-732.0	36.6	1,886.0	12,698.7	-38.8
Former Soviet Union	2,249.8	121.5	0.0	68.0	2,303.3	178.7
Africa	10,982.4	W	W	W	11,033.8	W
Middle East	3,340.3	W	W	W	5,841.3	W
Other Eastern Hemisphere	25,762.8	1,399.0	15.5	1,838.6	25,338.7	76.1
Other Western Hemisphere	17,265.5	165.4	487.8	1,193.4	16,725.3	13.9
Total Foreign	88,045.2	5,194.6	-760.1	7,020.8	85,458.9	74.0
Worldwide Total for FRS Companies	187,473.8	13,192.3	1,067.7	14,946.3	186,787.5	88.3

¹ Includes revisions of previous estimates, improved recovery, and extensions and discoveries.

- = Not available.

Sources: Industry data - Energy Information Administration Form EIA-23 (Annual Survey of Domestic Oil and Gas Reserves); see *U.S. Crude Oil, Natural Gas, and Natural Gas Liquids Reserves Annual Report*, 2003 and 2004 (November 2004 and November 2005). FRS companies' data - Energy Information Administration, Form EIA-28 (Financial Reporting System).

Table B24. Oil and Natural Gas Reserve Balances by Region for FRS Companies, 2006

Reserves Statistics	Worldwide Total	United States			Total Foreign
		Total	Onshore	Offshore	
Crude Oil and Natural Gas Liquids (million barrels)					
Beginning of Period	30,516	14,717	11,151	3,567	15,799
Revisions of Previous Estimates	202	-286	-284	-1	487
Improved Recovery	489	308	242	66	181
Purchases of Minerals-in-Place	2,251	998	806	192	1,252
Extensions & Discoveries	998	392	227	165	606
Production	-2,851	-1,076	-716	-360	-1,776
Sales of Minerals-in-Place	-1,556	-988	-756	-231	-568
End of period	30,048	14,067	10,669	3,397	15,981
Proportionate Interest in Investee Reserves	--	--	--	--	8,192
Natural Gas Reserves (billion cubic feet)					
Beginning of Period	187,474	99,429	87,357	12,071	88,045
Revisions of Previous Estimates	-3,245	-2,992	-2,606	-385	-253
Improved Recovery	2,366	1,911	1,887	24	455
Purchases of Minerals-in-Place	15,527	11,659	10,931	728	3,869
Extensions & Discoveries	14,072	9,078	8,558	520	4,993
Production	-14,946	-7,926	-6,409	-1,517	-7,021
Sales of Minerals-in-Place	-14,460	-9,831	-8,679	-1,152	-4,629
End of Period	186,787	101,329	91,040	10,289	85,459
Proportionate Interest in Investee Reserves	--	--	--	--	45,411

See footnotes at end of table.

Table B24. Oil and Natural Gas Reserve Balances by Region for FRS Companies, 2006 (Continued)

Reserves Statistics	Foreign						
	Total	Canada	Europe	Former Soviet Union	Africa and Middle East	Other Eastern Hemisphere	Other Western Hemisphere
Crude Oil and Natural Gas Liquids (million barrels)							
Beginning of Period	15,799	1,590	3,182	1,602	6,388	1,960	1,077
Revisions of Previous Estimates	487	275	-30	81	70	91	1
Improved Recovery	181	W	28	0	W	74	W
Purchases of Minerals-in-Place	1,253	72	13	0	917	54	197
Extensions & Discoveries	606	W	13	W	283	51	W
Production	-1,776	-164	-441	-86	-742	-259	-84
Sales of Minerals-in-Place	-568	-138	-20	W	W	-61	-263
End of period	15,981	1,786	2,818	1,556	6,916	1,910	995
Proportionate Interest in Investee Reserves	8,192	0	W	4,562	1,507	W	1,956
Natural Gas Reserves (billion cubic feet)							
Beginning of Period	88,045	13,164	15,280	2,250	14,323	25,763	17,265
Revisions of Previous Estimates	-253	W	-974	122	374	495	W
Improved Recovery	455	W	25	0	24	77	W
Purchases of Minerals-in-Place	3,869	2,466	472	0	W	W	774
Extensions & Discoveries	4,993	1,046	217	0	2,712	828	191
Production	-7,021	-1,455	-1,886	-68	-580	-1,839	-1,193
Sales of Minerals-in-Place	-4,629	-3,788	-436	0	W	W	-286
End of Period	85,459	11,518	12,699	2,303	16,875	25,339	16,725
Proportionate Interest in Investee Reserves	45,411	0	W	5,556	W	W	2,809

-- = Not applicable.

W = Data withheld to avoid disclosure.

Source: Energy Information Administration, Form EIA-28 (Financial Reporting System).

Table B25. Oil and Natural Gas Exploration and Development Expenditures, Reserves, and Production by Region for FRS Companies and Total Industry, 2006 and Percent Change from 2005

	United States			Foreign Total
	Total	Onshore	Offshore	
Exploration and Development Expenditures	(million dollars)			
FRS Companies	98,044.0	72,104.0	25,940.0	59,062.0
Percent Change	110.5	104.6	128.6	25.0
Wells Completed				
FRS Companies	11,870.6	11,629.6	241.0	6,020.0
Percent Change	17.5	17.9	0.9	0.9
Industry	0.0	0.0	0.0	0.0
Percent Change	-100.0	0.0	0.0	-100.0
Success Rate¹	(percent)			
FRS Companies	97.5	97.9	81.2	94.9
Industry	0.0	0.0	0.0	0.0
Crude Oil and NGL Production²	(million barrels)			
FRS Companies	1,075.7	715.6	360.1	1,822.9
Percent Change	-4.0	-5.6	-0.7	3.4
Industry	0.0	0.0	0.0	0.0
Percent Change	-100.0	-100.0	-100.0	-100.0
Crude Oil and NGL Reserve Interests³	(million barrels)			
FRS Companies	14,066.6	10,669.4	3,397.2	24,531.4
Percent Change	-4.4	-4.3	-4.8	2.2
Natural Gas Production	(billion cubic feet)			
FRS Companies	7,925.5	6,408.5	1,517.0	7,020.8
Percent Change	1.9	5.6	-10.9	1.1
Industry	0.0	0.0	0.0	0.0
Percent Change	-100.0	-100.0	-100.0	-100.0
Natural Gas Reserve Interests	(billion cubic feet)			
FRS Companies	101,328.6	91,039.8	10,288.8	130,869.6
Percent Change	1.9	4.2	-14.8	-0.3

See footnotes at end of table.

Table B25. Oil and Natural Gas Exploration and Development Expenditures, Reserves, and Production by Region for FRS Companies and Total Industry, 2006 and Percent Change from 2005 (Continued)

	Foreign						
	Total	Canada	Europe & Former Soviet Union ⁴	Africa	Middle East	Other Eastern Hemisphere	Other Western Hemisphere
Exploration and Development Expenditures (million dollars)							
FRS Companies	59,062.0	16,983.0	11,417.0	12,861.0	3,146.0	6,508.0	8,147.0
Percent Change	25.0	87.1	-7.5	20.1	116.7	-45.8	389.3
Wells Completed							
FRS Companies	6,020.0	4,378.2	153.8	339.9	97.9	607.0	443.2
Percent Change	0.9	-5.5	-19.7	25.3	-37.2	42.4	55.2
Industry	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Percent Change	-100.0	-100.0	-100.0	-100.0	-100.0	-100.0	-100.0
Success Rate¹ (percent)							
FRS Companies	94.9	95.2	92.1	91.1	91.9	95.8	95.3
Industry	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Crude Oil and NGL Production² (million barrels)							
FRS Companies	1,822.9	164.1	526.7	594.6	194.4	258.8	84.2
Percent Change	3.4	-13.2	-3.9	18.8	39.4	-8.9	-17.3
Industry	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Percent Change	-100.0	-100.0	-100.0	-100.0	-100.0	-100.0	-100.0
Crude Oil and NGL Reserve Interests³ (million barrels)							
FRS Companies	24,531.4	1,786.2	9,102.6	5,526.4	3,255.2	1,910.4	2,950.7
Percent Change	2.2	12.3	-1.8	-3.7	28.7	-2.6	0.9
Natural Gas Production (billion cubic feet)							
FRS Companies	7,020.8	1,454.8	1,954.1	389.4	190.6	1,838.6	1,193.4
Percent Change	1.1	-6.7	-6.1	6.8	42.1	3.3	16.2
Industry	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Percent Change	-100.0	-100.0	-100.0	-100.0	-100.0	-100.0	-100.0
Natural Gas Reserve Interests (billion cubic feet)							
FRS Companies	130,869.6	11,517.8	34,779.2	11,033.8	28,590.2	25,413.8	19,534.7
Percent Change	-0.3	-12.5	-7.6	0.5	21.6	-1.6	-2.7

¹Success Rate defined as the total number of successful well completions during the period divided by the total number of wells drilled.

²Crude oil plus natural gas liquids. Foreign includes ownership interest production and foreign access production.

³Foreign includes net ownership interest reserves (65.1 percent of total foreign) and "Other Access" reserves (34.9 percent of total foreign).

"Other Access" reserves include proportional interest in investee reserves and foreign access reserves.

⁴Europe combined with the former Soviet Union to avoid disclosure.

- = Not available.

Sources: Reserve additions, U.S. - Energy Information Administration Form EIA-23 (Annual Survey of Domestic Oil and Gas Reserves); see *U.S. Crude Oil, Natural Gas, and Natural Gas Liquids Reserves*, 2003, and 2004 Annual Reports. Reserve Additions, Foreign - *British Petroleum Statistical Review of World Energy 2004 and 2005*. Wells Completed, Foreign - *World Oil*, September 2004 and September 2005. FRS companies' data - Energy Information Administration, Form EIA-28 (Financial Reporting System).

Table B26. U.S. and Foreign Refining/Marketing Sources and Dispositions of Crude Oil and Natural Gas Liquids for FRS Companies, 2000-2006
(million barrels)

	2000	2001	2002	2003	2004	2005	2006
U.S. Refining/Marketing							
Sources							
Acquisitions from U.S. Production Segment	1,238	1,358	1,368	1,195	982	972	916
Purchases from Other U.S. Segments and Unconsolidated Affiliates	2,149	2,629	1,709	1,130	646	456	383
Purchases from Third Parties	5,340	3,679	4,219	4,784	5,323	5,623	5,049
Net Transfers from Foreign Refining/Marketing Segment	324	716	631	738	918	732	658
Total Sources	9,050	8,383	7,926	7,847	7,869	7,784	7,005
Dispositions							
Net Change in Inventories	-4	-1	-28	30	19	4	-12
Input to Refineries	4,690	4,668	4,715	4,791	4,967	4,937	4,984
Sales to:							
Unaffiliated Third Parties	4,281	3,391	3,056	2,655	2,764	2,726	1,952
Other Segments Excluding Foreign Refining/Marketing	84	325	183	372	119	117	81
Total Dispositions	9,050	8,383	7,926	7,847	7,869	7,784	7,005
Foreign Refining/Marketing							
Sources							
Acquisitions from Foreign Production Segment	1,585	1,661	1,590	1,502	1,635	1,635	1,673
Purchases							
Other Foreign Segments	W	W	W	W	W	W	W
Unconsolidated Affiliates	W	W	W	W	W	W	W
Unaffiliated Third Parties							
Foreign Access	W	W	W	W	W	W	W
Foreign Governments (Open Market)	W	W	W	W	W	W	W
Other Unaffiliated Third Parties	2,165	2,459	1,626	1,816	1,953	1,923	1,930
Net Transfers to U.S. Refining/Marketing Segment	-324	-716	-631	-738	-918	-732	-658
Total Sources	4,067	4,200	3,287	3,328	3,624	3,724	3,744
Dispositions							
Net Change in Inventories	10	-2	0	17	-4	1	-7
Input to Refineries	1,673	1,682	1,639	1,646	1,768	1,805	1,838
Sales	2,384	2,520	1,647	1,666	1,860	1,918	1,912
Total Dispositions	4,067	4,200	3,287	3,328	3,624	3,724	3,744

W = Data withheld to avoid disclosure.

Source: Energy Information Administration, Form EIA-28 (Financial Reporting System).

Table B27. U.S. Purchases and Sales of Oil, Natural Gas, Other Raw Materials, and Refined Products for FRS Companies, 2000-2006

	2000	2001	2002	2003	2004	2005	2006
Purchases							
U.S. Refining/Marketing Segment	Values (million dollars)						
Raw Materials							
Crude Oil and NGL	253,092	192,228	186,121	218,773	294,984	399,778	420,708
Natural Gas	58,679	38,947	33,744	2,289	1,253	1,775	4,299
Other Raw Materials	8,395	7,852	7,950	11,436	19,087	20,808	24,155
Total Raw Materials	320,166	239,027	227,815	232,498	315,324	422,361	449,162
Refined Products							
Motor Gasoline	65,488	64,609	60,909	68,285	95,908	119,818	124,651
Distillate Fuels	35,116	31,323	27,027	27,457	33,321	51,480	53,738
Other Refined Products	17,036	18,895	15,553	18,285	22,543	26,272	25,972
Total Refined Products	117,640	114,827	103,489	114,027	151,772	197,570	204,361
U.S. Production Segment							
Crude Oil and NGL	4,794	1,979	721	1,272	1,425	W	W
Natural Gas	12,208	14,113	11,785	1,896	0	0	0
Total Raw Materials	17,002	16,092	12,506	3,168	1,425	W	W
Sales							
U.S. Refining/Marketing Segment							
Raw Materials							
Crude Oil and NGL	121,118	86,675	75,278	85,746	110,499	148,751	123,692
Natural Gas	56,482	37,648	32,882	W	0	0	0
Other Raw Materials	2,403	2,203	944	W	3,421	2,363	W
Total Raw Materials	180,003	126,526	109,104	89,728	113,920	151,114	W
Refined Products							
Motor Gasoline	176,394	167,735	160,010	182,344	246,270	304,304	342,209
Distillate Fuels	91,998	83,702	75,136	86,015	114,728	169,187	191,805
Other Refined Products	42,269	40,172	37,044	46,749	55,135	72,907	81,891
Total Refined Products	310,661	291,609	272,190	315,108	416,133	546,398	615,905
U.S. Production Segment							
Crude Oil and NGL	38,314	31,613	30,967	35,074	43,395	52,393	59,468
Natural Gas	40,719	47,390	40,118	39,612	43,185	54,788	49,681
Total Raw Materials	79,033	79,003	71,085	74,686	86,580	107,181	109,149
Purchases							
U.S. Refining/Marketing Segment	Volumes						
Raw Materials							
Crude Oil and NGL (million barrels)	9,050	8,383	7,926	7,847	7,869	7,784	7,005
Natural Gas (billion cubic feet)	13,323	9,147	10,458	441	224	240	661
Refined Products (million barrels)							
Motor Gasoline	1,708	1,892	1,886	1,811	1,896	1,763	1,549
Distillate Fuels	943	987	952	780	689	723	664
Other Refined Products	535	625	583	542	572	494	345
Total Refined Products	3,186	3,504	3,420	3,133	3,157	2,980	2,558
U.S. Production Segment							
Crude Oil and NGL (million barrels)	200	88	37	47	44	W	W
Natural Gas (billion cubic feet)	3,276	3,461	3,956	365	0	0	0
Sales							
U.S. Refining/Marketing Segment							
Raw Materials							
Crude Oil and NGL (million barrels)	4,365	3,716	3,239	3,026	2,883	2,843	2,033
Natural Gas (billion cubic feet)	13,001	8,460	9,783	W	0	0	0
Refined Products (million barrels)							
Motor Gasoline	4,286	4,539	4,598	4,354	4,502	4,278	4,084
Distillate Fuels	2,444	2,540	2,465	2,288	2,321	2,349	2,304
Other Refined Products	1,405	1,528	1,332	1,422	1,506	1,534	1,400
Total Refined Products	8,135	8,606	8,395	8,064	8,330	8,161	7,789
U.S. Production Segment							
Crude Oil and NGL (million barrels)	1,484	1,498	1,433	1,336	1,237	1,077	1,059
Natural Gas (billion cubic feet)	11,348	11,957	13,078	8,466	7,959	7,556	7,781

Note: Beginning in 2003, purchases of natural gas by the Petroleum line of business are for own use only, and sales of natural gas are to the downstream natural gas line of business.

Source: Energy Information Administration, Form EIA-28 (Financial Reporting System).

Table B28. U.S. and Foreign Petroleum Refining Statistics for FRS Companies, 2000-2006

	2000	2001	2002	2003	2004	2005	2006
U.S. Refining							
Runs to Stills	(thousand barrels per calendar day)						
At Own Refineries	13,361	13,875	13,307	13,278	13,786	13,742	13,520
By Refineries of Others	86	105	80	84	87	73	86
Total Runs to Stills	13,447	13,980	13,387	13,362	13,873	13,815	13,606
Refinery Output at Own Refineries and Refineries of Others							
Reformulated Motor Gasoline	2,129	2,061	1,991	1,726	1,707	1,723	1,066
Oxygenated Motor Gasoline	412	588	552	515	574	283	109
Other Motor Gasoline	4,207	4,373	4,456	4,695	4,809	4,992	5,643
Total Motor Gasoline	6,748	7,022	6,999	6,936	7,090	6,998	6,818
Distillate Fuels	4,376	4,331	4,167	4,398	4,595	4,648	4,552
Other Refined Products	3,375	3,669	3,595	3,349	3,491	3,472	3,449
Total Refinery Output	14,499	15,022	14,761	14,683	15,176	15,118	14,819
Refinery Capacity at End of Year	14,424	15,153	14,198	14,279	14,409	14,532	14,652
(number of refineries)							
Number of Wholly-Owned Refineries	90	99	84	79	79	76	76
Foreign Refining							
Runs to Stills	(thousand barrels per calendar day)						
At Own Refineries	4,513	4,620	4,778	4,550	4,886	5,043	5,094
By Refineries of Others	403	339	325	370	375	372	356
Total Runs to Stills	4,916	4,959	5,103	4,920	5,261	5,415	5,450
Refinery Output at Own Refineries							
Motor Gasoline	1,295	1,293	1,427	1,400	1,445	1,500	1,459
Distillate Fuels	1,738	1,744	2,041	1,971	2,054	2,088	2,132
Other Refined Products	1,717	1,729	1,405	1,251	1,406	1,546	1,573
Total Refinery Output at Own Refineries	4,750	4,766	4,873	4,622	4,905	5,134	5,164
Refinery Output at Refineries of Others							
Motor Gasoline	123	120	117	125	129	161	116
Distillate Fuels	171	155	175	180	181	209	164
Other Refined Products	80	84	70	73	83	99	83
Total Refinery Output at Refineries of Others	374	359	362	378	393	469	363
Total Refinery Output	5,124	5,125	5,235	5,000	5,298	5,603	5,527
Refinery Capacity at End of Year	5,134	5,572	5,642	5,374	5,698	5,633	5,924
(number of refineries)							
Number of Wholly-Owned Refineries	18	23	22	19	19	19	20
Number of Partially-Owned Refineries	18	18	19	19	19	19	19

Source: Energy Information Administration, Form EIA-28 (Financial Reporting System).

Table B29. U.S. and Foreign Refinery Output and Capacity for FRS Companies, Ranked by Total Energy Assets, and Industry, 2006
(Thousand Barrels per Day)

Refined Product Statistics ¹	FRS Companies				Total Industry	FRS Percent of Industry
	All FRS	Top Four	Five through Twelve ²	All Other ²		
United States						
Refinery Output Volume ³	14,819	6,578	4,520	3,721	-	-
Percent Gasoline						
Reformulated/Oxygenated	7.9	7.5	6.1	10.9	-	-
Other	38.1	36.9	45.4	31.2	-	-
Percent Distillate	30.7	31.8	29.0	30.8	-	-
Percent Other	23.3	23.7	19.5	27.1	-	-
Refinery Capacity						
Years Change (Net)	120	56	0	64	-	(5)
At Year End	14,652	6,615	4,466	3,571	-	-
Utilization Rate ⁴	92.7	87.3	94.6	100.2	-	(5)
Foreign						
Refinery Output Volume ³	5,527	5,141	(2)	386	-	(5)
Percent Gasoline	28.5	28.5	(2)	28.5	-	(5)
Percent Distillate	41.5	41.8	(2)	38.6	-	(5)
Percent Other	30.0	29.7	(2)	32.9	-	(5)
Refinery Capacity						
Years Change (Net)	291	291	(2)	0	-	(5)
At Year End	5,924	5,434	(2)	490	-	-
Utilization Rate ⁵	88.2	88.8	(2)	81.2	-	(5)

¹U.S. FRS and U.S. industry data include operations in Puerto Rico and the U.S. Virgin Islands. Foreign FRS and foreign industry data exclude operations in Puerto Rico and the U.S. Virgin Islands.

²For foreign FRS, the "Five through Twelve" and "All Other" groups are combined to avoid disclosure.

³For FRS companies, includes refinery output at own refineries for own account and at others' refineries for own account.

⁴Defined as average daily crude runs at own refineries, for own account, and for account of others, divided by average daily crude distillation capacity.

⁵Not meaningful.

- = Not available.

Note: Sum of components may not equal total due to independent rounding.

Sources: Industry data, U.S. - Refinery output and refinery capacity: Energy Information Administration, Forms EIA-820 (Annual Refinery Report) and EIA-810 (Monthly Refinery Report); see *Petroleum Supply Annual*, 2003 and 2004. Industry data, Foreign - Refinery Capacity: *British Petroleum Statistical Review of World Energy*, 2004 and 2005. FRS companies data - Energy Information Administration, Form EIA-28 (Financial Reporting System).

Table B30. U.S. Refining/Marketing Dispositions of Refined Products by Channel of Distribution for FRS Companies, 2000-2006

U.S. Dispositions	2000	2001	2002	2003	2004	2005	2006
Motor Gasoline							
Values (million dollars)							
Intersegment Sales	1,802	2,521	3,500	1,700	4,029	4,339	4,886
U.S. Third-Party Sales							
Wholesale-Resellers	83,203	69,799	68,576	99,798	122,484	154,551	173,735
Company Operated Automotive Outlets	24,870	22,843	18,662	21,185	35,191	38,984	43,990
Company Lessee and Open Automotive Outlets	48,693	45,798	41,774	35,767	51,928	60,669	70,750
Other (Industrial, Commercial and Other Retail)	17,826	26,774	27,498	23,894	32,638	45,761	48,848
Total Third-Party Sales	174,592	165,214	156,510	180,644	242,241	299,965	337,323
Total Motor Gasoline Sales	176,394	167,735	160,010	182,344	246,270	304,304	342,209
Distillate Fuels							
Intersegment Sales	444	535	2,387	1,057	2,142	2,649	3,385
Third-Party Sales	91,554	83,167	72,749	84,958	112,586	166,538	188,420
Total Distillate Fuels Sales	91,998	83,702	75,136	86,015	114,728	169,187	191,805
Other Refined Products							
Intersegment Sales	6,078	7,386	4,474	4,235	6,973	9,446	10,302
Third-Party Sales	36,191	32,786	32,570	42,514	48,162	63,461	71,589
Total Other Refined Products Sales	42,269	40,172	37,044	46,749	55,135	72,907	81,891
Total U.S. Refined Products							
Intersegment Sales	8,324	10,442	10,361	6,992	13,144	16,434	18,573
Third-Party Sales	302,337	281,167	261,829	308,116	402,989	529,964	597,332
Total U.S. Refined Products Sales	310,661	291,609	272,190	315,108	416,133	546,398	615,905
Motor Gasoline							
Volumes (million barrels)							
Intersegment Sales	47	79	101	45	79	64	60
U.S. Third-Party Sales							
Wholesale-Resellers	2,126	1,956	2,045	2,508	2,344	2,221	2,119
Company Operated Automotive Outlets	543	545	464	432	534	504	487
Company Lessee and Open Automotive Outlets	1,105	1,182	1,167	797	909	845	828
Other (Industrial, Commercial and Other Retail)	465	777	820	572	636	644	589
Total Third-Party Sales	4,239	4,460	4,496	4,309	4,423	4,214	4,025
Total Motor Gasoline Sales	4,286	4,539	4,598	4,354	4,502	4,278	4,084
Distillate Fuels							
Intersegment Sales	13	17	85	30	45	39	43
Third-Party Sales	2,430	2,522	2,380	2,258	2,276	2,309	2,262
Total Distillate Fuels Sales	2,444	2,540	2,465	2,288	2,321	2,349	2,304
Other Refined Products							
Intersegment Sales	213	258	162	125	160	176	153
Third-Party Sales	1,191	1,269	1,170	1,298	1,346	1,358	1,247
Total Other Refined Products Sales	1,405	1,528	1,332	1,422	1,506	1,534	1,400
Total U.S. Refined Products							
Intersegment Sales	274	354	348	200	285	279	256
Third-Party Sales	7,861	8,252	8,046	7,864	8,045	7,881	7,533
Total U.S. Refined Products Sales	8,135	8,606	8,395	8,064	8,330	8,161	7,789
Number of Active Automotive Outlets at Year End							
Number of Automotive Outlets							
Company Operated	12,583	11,380	9,745	8,804	8,848	8,585	7,927
Lessee Dealers	16,953	11,474	9,347	8,746	8,223	6,746	6,123
Open Dealers	25,707	31,231	28,056	26,657	27,183	27,252	24,747
Total Outlets	55,243	54,085	47,148	44,207	44,254	42,583	38,797

Source: Energy Information Administration, Form EIA-28 (Financial Reporting System).

Table B31. Sales of U.S. Refined Products, by Volume and Price, for FRS Companies Ranked by Total Energy Assets, 2005-2006
(Million Barrels and Dollars per Barrel)

Product Distribution Channel	All FRS		Top Four		Five through Twelve		All Other	
	Volume	Price	Volume	Price	Volume	Price	Volume	Price
Gasoline								
Intra-Company Sales								
2006	59.8	81.69	28.8	82.19	W	W	W	W
2005	63.7	68.16	W	W	W	W	W	W
Percent Change	-6.0	19.9	W	W	W	W	W	W
Wholesale/Resellers								
2006	2,119.5	81.97	982.2	81.95	661.0	80.85	476.3	83.58
2005	2,221.1	69.58	1,025.0	70.76	612.8	69.76	583.3	67.34
Percent Change	-4.6	17.8	-4.2	15.8	7.9	15.9	-18.3	24.1
Dealer-Operated Outlets								
2006	828.4	85.40	364.0	86.66	(2)	(2)	464.4	84.42
2005	845.3	71.77	372.8	72.54	(2)	(2)	472.5	71.16
Percent Change	-2.0	19.0	-2.4	19.5	(2)	(2)	-1.7	18.6
Company-Operated Outlets								
2006	487.2	90.29	242.4	90.47	(2)	(2)	244.9	90.11
2005	503.6	77.40	254.3	77.70	(2)	(2)	249.4	77.11
Percent Change	-3.3	16.6	-4.7	16.4	(2)	(2)	-1.8	16.9
Other ¹								
2006	589.4	82.88	354.2	84.25	(2)	(2)	235.2	80.82
2005	644.1	71.04	364.2	72.90	(2)	(2)	280.0	68.63
Percent Change	-8.5	16.7	-2.7	15.6	(2)	(2)	-16.0	17.8
Total Gasoline								
2006	4,084.3	83.79	1,971.6	84.28	1,094.9	82.23	1,017.9	84.50
2005	4,277.9	71.13	2,041.0	72.30	1,077.4	70.74	1,159.5	69.45
Percent Change	-4.5	17.8	-3.4	16.6	1.6	16.2	-12.2	21.7
Distillate								
2006	2,304.4	83.23	1,015.2	83.29	618.1	82.94	671.1	83.42
2005	2,348.6	72.04	1,044.0	72.01	579.6	72.78	725.0	71.49
Percent Change	-1.9	15.5	-2.8	15.7	6.6	14.0	-7.4	16.7
All Other Products								
2006	1,399.9	58.50	655.9	59.96	357.9	53.81	386.1	60.37
2005	1,534.0	47.53	618.0	50.72	514.8	44.61	401.2	46.35
Percent Change	-8.7	23.1	6.1	18.2	-30.5	20.6	-3.8	30.2
Total Refined Products								
2006	7,788.6	79.08	3,642.7	79.63	2,070.9	77.53	2,075.0	79.66
2005	8,160.5	66.96	3,703.0	68.62	2,171.8	65.09	2,285.8	66.04
Percent Change	-4.6	18.1	-1.6	16.0	-4.6	19.1	-9.2	20.6

¹Includes direct sales to industrial and commercial customers and sales to unconsolidated affiliates.

²Five through Twelve and All Other groups combined for dealer-operated outlets, company-operated outlets, and other, to avoid disclosure.

W = Data withheld to avoid disclosure.

Note: Sum of components may not equal total due to independent rounding.

Source: Energy Information Administration, Form EIA-28 (Financial Reporting System).

Table B32. U.S. Refining/Marketing Revenues and Costs for FRS Companies, 2000-2006

(Million Dollars)

Revenues and Costs	2000	2001	2002	2003	2004	2005	2006
Refined Product Revenues	310,661	291,609	272,190	315,108	416,133	546,398	615,905
Refined Product Costs							
Raw Materials Processed ¹	135,624	109,565	115,277	137,486	197,294	268,271	317,339
Refinery Energy Expense	10,838	11,321	9,178	11,415	11,964	14,862	13,555
Other Refinery Expense	10,635	12,274	16,202	14,842	14,762	16,673	18,296
Product Purchases	117,640	114,827	103,489	114,027	151,772	197,570	204,361
Other Product Supply Expense	6,655	6,552	12,562	9,792	6,096	7,975	10,182
Marketing Expense ²	11,128	13,672	13,889	10,959	12,898	12,372	10,980
Total Refined Product Costs	292,520	268,211	270,597	298,521	394,786	517,723	574,713
Refined Product Margin	18,141	23,398	1,593	16,587	21,347	28,675	41,192
Refined Products Sold (million barrels)	8,134.7	8,606.3	8,394.7	8,063.7	8,329.9	8,160.5	7,788.6
Dollars per Barrel Margin ³	2.23	2.72	0.19	2.06	2.56	3.51	5.29
Other Refining/Marketing Revenues ⁴	14,196	16,918	15,878	10,674	14,014	16,011	9,139
Other Refining/Marketing Expenses							
Depreciation, Depletion, & Allowance	4,712	5,259	5,617	6,138	5,574	5,538	6,097
Other ⁵	16,865	18,683	12,811	10,908	9,140	10,261	10,386
Total Other Expenses	21,577	23,942	18,428	17,046	14,714	15,799	16,483
Refining/Marketing Operating Income	10,760	16,374	-957	10,215	20,647	28,887	33,848
Miscellaneous Revenue & Expense ⁶	1,265	1,866	1,002	1,384	2,044	3,292	3,481
Less Income Taxes	4,360	6,271	67	4,165	7,580	11,215	13,050
Refining/Marketing Net Income	7,659	11,951	-1,350	7,434	15,197	20,963	24,313

¹Represents reported cost of raw materials processed at refineries, less any profit from raw material trades or exchanges by refining/marketing.

²Excludes costs of nonfuel goods and services and tires, batteries, and accessories (TBA).

³Dollars per barrel of refined product sold.

⁴Includes revenues from transportation services supplied (non-federally regulated), TBA sales, and miscellaneous.

⁵Includes general and administrative expenses, research and development costs, costs of transportation services supplied to others, and expenses for TBA.

⁶Includes other revenue and expense items, extraordinary items, and cumulative effect of accounting changes.

Source: Energy Information Administration, Form EIA-28 (Financial Reporting System).

Table B33. U.S. Petroleum Refining/Marketing General Operating Expenses for FRS Companies, 2000-2006
(Million Dollars)

General Operating Expenses	2000	2001	2002	2003	2004	2005	2006
Raw Material Supply							
Raw Material Purchases	320,166	239,027	227,815	232,498	315,324	422,361	449,162
Other Raw Material Supply Expense	2,371	4,196	4,520	3,218	4,031	7,044	4,732
Total Raw Material Supply Expense	322,537	243,223	232,335	235,716	319,355	429,405	453,894
Less: Cost of Raw Materials Input To Refining	139,931	114,400	121,192	146,446	200,952	274,749	323,757
Net Raw Material Supply	182,606	128,823	111,143	89,270	118,403	154,656	130,137
Refining							
Raw Materials Input to Refining	139,931	114,400	121,192	146,446	200,952	274,749	323,757
Less: Raw Material Used as Refinery Fuel	6,910	7,132	7,954	8,502	8,141	10,020	10,111
Refinery Process Energy Expense	10,838	11,321	9,178	11,415	11,964	14,862	13,555
Other Refining Operating Expenses	13,675	14,657	17,459	16,143	16,179	18,041	20,207
Refined Product Purchases	117,640	114,827	103,489	114,027	151,772	197,570	204,361
Other Refined Product Supply Expenses	6,655	6,552	12,562	9,792	6,096	7,975	10,182
Total Refining	281,829	254,625	255,926	289,321	378,822	503,177	561,951
Marketing							
Cost of Other Products Sold	7,342	9,797	8,677	7,067	5,372	6,686	5,731
Other Marketing Expenses	11,128	13,672	13,889	10,959	12,898	12,372	10,980
Subtotal	18,470	23,469	22,566	18,026	18,270	19,058	16,711
Expense of Transport Services for Others	3,691	4,002	439	559	336	305	251
Total Marketing	22,161	27,471	23,005	18,585	18,606	19,363	16,962
Total U.S. Refining/Marketing Segment General Operating Expenses	486,596	410,919	390,074	397,176	515,831	677,196	709,050

Source: Energy Information Administration, Form EIA-28 (Financial Reporting System).

Table B34. Consolidating Statement of Income for FRS Companies, U.S. and Foreign Downstream Natural Gas Segments, 2006
(Million Dollars)

Income Statement Items	U.S. Downstream Natural Gas					Consolidated Foreign
	Consolidated	Processing	Marketing/ Trading	Transmission	Distribution	
Operating Revenues						
Natural Gas Sales	143,289	27,395	134,763	-	2,679	43,968
LNG Products Sales	872	W	W	-	W	2,509
NGL Products Sales	19,630	11,706	11,402	-	0	9,342
Transportation Sales	5,482	214	W	4,826	W	222
Other Product Sales	32	W	W	W	W	W
Trading/Derivatives	1,368	0	1,368	0	0	1,608
Management and Processing Fees	2,281	1,697	W	W	0	W
Other Revenues	4,736	1,529	2,659	458	W	350
Total Operating Revenues	177,690	42,927	151,500	5,348	3,352	58,123
Operating Expenses						
General Operating Expenses	170,041	41,040	150,442	1,826	2,170	56,700
Depreciation, Depletion, & Allowance	1,936	W	196	872	W	1,264
General & Administrative	1,407	W	418	680	W	120
Total Operating Expenses	173,384	42,006	151,056	3,378	2,381	58,084
Operating Income	4,306	921	444	1,970	971	39
Other Revenue & (Expense)						
Earnings of Unconsolidated Affiliates	W	W	-21	W	W	W
Gain(Loss) on Disposition of Property, Plant, & Equipment	W	W	-2	W	0	W
Total Other Revenue & (Expense)	871	646	-23	246	W	1,480
Pretax Income	5,177	1,567	421	2,216	973	1,519
Income Tax Expense	2,080	544	150	1,026	360	270
Discontinued Operations	W	W	0	0	0	0
Effect of Accounting Changes	W	W	0	0	0	0
Contribution To Net Income	3,100	1,026	271	1,190	613	1,249

- = Not available.

W = Data withheld to avoid disclosure.

Source: Energy Information Administration, Form EIA-28 (Financial Reporting System).

**Table B35. Consolidating Statement of Income for FRS Companies, U.S. and Foreign
Electric Power Segments, 2006**
(Million Dollars)

Income Statement Items	U.S. Electric Power			Consolidated Foreign
	Consolidated	Generation	Marketing/ Trading	
Operating Revenues				
Power Sales	30,056	5,582	23,685	2,138
Transportation Sales	W	-	W	0
Other Product Sales	W	-	W	W
Trading/Derivatives	-256	-	-256	0
Other Revenues	309	127	W	W
Total Operating Revenues	30,612	5,709	23,813	2,262
Operating Expenses				
General Operating Expenses	27,532	4,264	23,293	2,534
Depreciation, Depletion, & Allowance	681	367	W	71
General & Administrative	619	355	W	62
Total Operating Expenses	28,832	4,986	23,455	2,667
Operating Income	1,780	723	358	-405
Other Revenue & (Expense)				
Earnings of Unconsolidated Affiliates	W	W	-61	355
Gain(Loss) on Disposition of Property, Plant, & Equipment	W	W	0	W
Income Tax Expense	W	311	-109	W
Contribution To Net Income	W	485	406	W

W = Data withheld to avoid disclosure.

Note: Sum of components may not equal total due to independent rounding, eliminations, and nontraceables.

Source: Energy Information Administration, Form EIA-28 (Financial Reporting System).

