

Performance Profiles of Major Energy Producers 2005

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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>	5
<i>Capital Expenditures</i>	8
Oil and Gas Production	17
<i>Oil and Natural Gas Reserve Additions</i>	18
<i>Oil and Natural Gas Reserve Replacement</i>	19
<i>Upstream Income</i>	23
<i>Lifting Costs</i>	23
<i>Finding Costs</i>	25
<i>Exploration, Development, and Production Spending</i>	28
<i>Spending to Replace Oil and Gas Production by the FRS Companies</i>	28
Refining and Marketing	31
<i>U.S. Refining/Marketing</i>	31
<i>Foreign Refining/Marketing</i>	41
The FRS Companies' Importance in the U.S. Economy	45
Overview of 2005 Petroleum and Natural Gas Markets	49
About Performance Profiles and the Financial Reporting System	55
Brief Description of Financial Terms	57
(Glossary available on EIA's Web site at http://www.eia.doe.gov/emeu/perfpro/glossary.html)	
Appendices	
A. The Financial Reporting System (FRS)	59
B. Detailed Statistical Tables	61

Tables

1.	Consolidated Income Statement for FRS Companies and Census' All Manufacturing Companies, 2004-2005	1
2.	Contributions to Net Income by Line of Business for FRS Companies, 2004-2005.....	4
3.	Sources and Uses of Cash for FRS Companies, 2004-2005.....	7
4.	Line-of-Business Contributions to Pretax Cash Flow, Income Taxes, and Cash Flow for FRS Companies, 2004-2005	8
5.	Additions to Investment in Place by Line of Business for FRS Companies, 2004-2005	9
6.	Value of Mergers, Acquisitions, and Related Transactions by FRS Companies, 2005	11
7.	Oil and Gas Production by FRS Companies by Region, 2004-2005.....	17
8.	Oil and Gas Reserve Replacement Rates by FRS Companies, 2002-2004 and 2003-2005	21
9.	Income Components and Financial Ratios in Oil and Natural Gas Production for FRS Companies, 2004 and 2005.....	24
10.	Lifting Costs for FRS Companies by Region, 2004 and 2005	25
11.	Finding Costs by Region for FRS Companies, 2002-2004 and 2003-2005	27
12.	Sales, Prices, Costs, and Margins in U.S. Refining/Marketing for FRS Companies, 2004-2005	32
13.	U.S. Refined Product Margins and Costs per Barrel Sold and Product Sales Volume for FRS Companies, 2004-2005.....	34
14.	U.S. and Foreign Refining/Marketing Financial Items for FRS Companies, 2004-2005	35
15.	U.S. and Foreign Refining/Marketing Investment and Refining Operating Items for FRS Companies, 2004-2005.....	36
16.	Motor Gasoline Distribution and Number of Direct-Supplied Branded Outlets for FRS Companies, 2004-2005	38
17.	U.S. Refinery Configurations of FRS Companies, Selected Years, 1974-2005.....	39
18.	Regional Distribution of Foreign Refinery Capacity for FRS Companies, 2004-2005.....	42
19.	World Petroleum Balance, 2004-2005	50
20.	U.S. Petroleum Balance, 2004-2005	51
21.	U.S. Natural Gas Balance, 2004-2005	53
B1.	Selected U.S. Operating Statistics for FRS Companies and U.S. Industry, 1999-2005	61
B2.	Selected Financial Items for the FRS Companies and All Manufacturing Companies, 2004-2005	62
B3.	Balance Sheet Items and Financial Ratios for FRS Companies and All Manufacturing Companies, 2004-2005.....	63
B4.	Consolidated Balance Sheet for FRS Companies, 1999-2005	64
B5.	Consolidating Statement of Income for FRS Companies, 2005.....	65
B6.	Consolidating Statement of Income for FRS Companies, U.S. and Foreign Petroleum Segments, 2005	66
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, 2005	67
B8.	Return on Investment for Lines of Business for FRS Companies Ranked by Total Energy Assets, 2004-2005.....	69
B9.	Research and Development Expenditures for FRS Companies, 1999-2005	70
B10.	Size Distribution of Net Investment in Place for FRS Companies Ranked by Total Energy Assets, 2005.....	71
B11.	Consolidated Statement of Cash Flows for FRS Companies, 1999-2005	72
B12.	Composition of Income Taxes for FRS Companies, 1999-2005.....	73
B13.	U.S. Taxes Other Than Income Taxes for FRS Companies, 1999-2005.....	74
B14.	Oil and Gas Exploration and Development Expenditures for FRS Companies, United States and Foreign, 1999-2005	75
B15.	Components of U.S. and Foreign Exploration and Development Expenditures for FRS Companies, 2005	76
B16.	Exploration and Development Expenditures by Region for FRS Companies, 1999-2005	77

Tables (continued)

B17.	Production (Lifting) Costs by Region for FRS Companies, 1999-2005	78
B18.	Oil and Gas Acreage for FRS Companies, 1999-2005	79
B19.	U.S. Net Wells Completed for FRS Companies and Industry, and Net In-Progress Wells at Year End for FRS Companies, 1999-2005	80
B20.	U.S. Net Drilling Footage and Net Producing Wells for FRS Companies and Industry, 1999-2005	81
B21.	Foreign Net Wells Completed, In-Progress Wells, and Producing Wells by Region for FRS Companies, 1999-2005	82
B22.	U.S. Net Wells Completed, and Average Depth, Onshore and Offshore, for FRS Companies, 2004 and 2005	84
B23.	Oil and Gas Reserves for FRS Companies and U.S. Industry, 2005	85
B24.	Oil and Gas Reserve Balances by Region for FRS Companies, 2005	86
B25.	Oil and Gas Exploration and Development Expenditures, Reserves, and Production by Region for FRS Companies and Total Industry, 2005 and Percent Change from 2004	88
B26.	U.S. and Foreign Refining/Marketing Sources and Dispositions of Crude Oil and Natural Gas Liquids For FRS Companies, 1999-2005	90
B27.	U.S. Purchases and Sales of Oil, Natural Gas, Other Raw Materials, and Refined Products for FRS Companies, 1999-2005	91
B28.	U.S. and Foreign Petroleum Refining Statistics for FRS Companies, 1999-2005	92
B29.	U.S. and Foreign Refinery Output and Capacity for FRS Companies, Ranked by Total Energy Assets, and Industry, 2005	93
B30.	U.S. Refining/Marketing Dispositions of Refined Products by Channel of Distribution for FRS Companies, 1999-2005	94
B31.	Sales of U.S. Refined Products, by Volume and Price, for FRS Companies Ranked by Total Energy Assets, 2004-2005	95
B32.	U.S. Refining/Marketing Revenues and Costs for FRS Companies, 1999-2005	96
B33.	U.S. Petroleum Refining/Marketing General Operating Expenses for FRS Companies, 1999-2005	97
B34.	U.S. Coal Reserves Balance for FRS Companies, 1999-2005	98
B35.	Consolidating Statement of Income for FRS Companies, U.S. and Foreign Downstream Natural Gas Segments, 2005	99
B36.	Consolidating Statement of Income for FRS Companies, U.S. and Foreign Electric Power Segments, 2005	100

Illustrations

1.	FRS Net Income, 1974-2005	2
2.	Return on Stockholders' Equity for FRS Companies and All Manufacturing Companies, 1974-2005	3
3.	Difference Between FRS and All Manufacturing Companies Return on Stockholders' Equity, 1974-2005	3
4.	Return on Net Investment in Place for U.S. and Foreign Oil and Gas Production, 1977-2005	5
5.	U.S. Refined Product Margins and Costs per Barrel of Petroleum Product Sold for FRS Companies, 1983-2005	6
6.	Return on Net Investment in Place for U.S. and Foreign Refining/Marketing, 1977-2005	6
7.	Cash Flow from Operations and Exploration and Production (E&P) Expenditures for FRS Companies, 1986-2005	10
8.	FRS Worldwide Expenditures for Exploration, Development, and Production, 1981-2005	12
9.	FRS Expenditures for Oil and Natural Gas Exploration by Region, 1996-2005	13
10.	FRS Expenditures for Oil and Natural Gas Development by Region, 1996-2005	14
11.	Crude Oil and Natural Gas Liquids Production by FRS Companies, 1981-2005	18
12.	Natural Gas Production by FRS Companies, 1981-2005	19

Illustrations (continued)

13.	FRS Reserve Additions by Type, 1981-2005.....	20
14.	FRS Reserve Additions by Type and by Region, 2005.....	20
15.	Reserve Replacement by FRS Companies, 1981-1983 to 2003-2005.....	22
16.	Worldwide Reserve Replacement by FRS Companies, 1981-1983 to 2003-2005.....	23
17.	Direct Oil and Gas Lifting Costs for FRS Companies, 1981-2005.....	26
18.	Finding Costs for FRS Companies, 1981-1983 to 2003-2005.....	27
19.	Total Upstream Costs per BOE for FRS Companies, 1981-1983 to 2003-2005.....	28
20.	Worldwide Expenditures for Exploration, Development, and Production by FRS Companies, 1981-2005.....	29
21.	Actual Spending to Find Reserves and Estimated Spending Necessary to Replace Production for FRS Companies, 1983-2005.....	30
22.	Return on Investment in U.S. and Foreign Refining/Marketing, and All Other Lines of Business for FRS Companies, 1979-2005.....	31
23.	Quarterly Average U.S. Motor Gasoline Stocks, 1999-2003 Average, 2004, and 2005.....	33
24.	Quarterly Average U.S. Crude Oil Stocks, 1999-2003 Average, 2004, and 2005.....	34
25.	FRS Company-Operated and Directly Supplied Dealer Outlets, 1986-2005.....	37
26.	Resale Price Difference Between Motor Gasoline and Residual Fuel Oil, 1983-2005.....	40
27.	Price Difference between Light Crude Oil and Heavy Crude Oil, 1983-2005.....	40
28.	Foreign Refining/Marketing Net Income from Consolidated Operations and Unconsolidated Affiliates of FRS Companies, 1977-2005.....	42
29.	Petroleum Consumption by Region, 2000, 2004, and 2005.....	43
30.	Foreign Gross Refining Margins, 2003-2005.....	44
31.	Operating Revenues by Line of Business for FRS Companies, 1983-2005.....	45
32.	Shares of U.S. Energy Production and Refinery Capacity for FRS Companies, 1983-2005.....	46
33.	Imported Refiner Acquisition Cost of Crude Oil and Natural Gas Wellhead Prices, 1972-2005.....	49
34.	Refiner Prices of Petroleum Products for Resale, 1980-2005.....	50
35.	World Oil Consumption, Change from Previous Year, 1996-2005.....	51
36.	U.S. Petroleum Product Consumption, Change from Previous Year, 2003-2005.....	52

Major Findings

This edition of *Performance Profiles* reviews financial and operating data for the calendar year 2005. Although the focus is on 2005 activities and results, it also discusses important trends prior to that time and emerging issues relevant to U.S. energy company operations.

Net Income and Profitability

- The Financial Reporting System (FRS) companies' 2005 net income increased 47 percent from the 2004 level to \$119 billion, the highest net income (in constant dollars) in the history of the FRS survey. Higher prices for crude oil, natural gas, and petroleum products contributed to a 26-percent increase in operating revenues. Operating expenses also increased, by 24 percent, as higher prices stimulated exploration and development activities and pushed costs upward. The larger increase in revenues resulted in a 38-percent increase in operating income. The FRS companies earned a 28.2-percent return on stockholders' equity (ROE) in 2005, surpassing the previous peak of 22.1 percent in 2004. ROE for the FRS companies averaged 7 percentage points higher than that of the Census Bureau's All Manufacturing Companies from 2000 to 2005, reversing an average of 2 percentage points lower from 1985 to 1999.
- Higher crude oil and natural gas wellhead prices made oil and natural gas production the most profitable line of business for the FRS companies in 2005, providing \$89 billion in net income and a return on net investment in place (ROI) of 24.5 percent. Earnings were \$29 billion higher (in constant 2005 dollars) than the previous peak in 2004.
- Net income for the FRS companies' refining/marketing segment increased 30 percent from 2004, to \$29 billion in 2005. Higher demand for petroleum products pushed prices up by more than the increased cost of crude oil. Domestic refinery operating and energy costs increased (on a per-barrel basis), but by less than the increase in the margin between petroleum product prices and crude oil prices. This resulted in a net refined product margin of \$3.51 per barrel in 2005, the highest (in constant 2005 dollars) in the 29-year history of the FRS. The average ROI for domestic and foreign refining/marketing rose to 22.7 percent, also the highest in the history of the FRS survey.

Cash Flow and Uses of Cash

- Cash flow from operations increased in 2005 to \$170 billion, the highest level reported since the FRS began collecting this information in 1986. Encouraged by the high-price environment in 2005, the FRS companies increased the amount of cash raised through disposals of assets by 82 percent over that raised in 2004, to \$36 billion.
 - The largest use of cash was for capital expenditures (measured as additions to investment in place), which increased by \$46 billion from 2004, to \$133 billion in 2005.
 - FRS companies also increased the amount of cash used for non-investment activities in 2005. Dividends to shareholders were the second largest use of cash, increasing 9 percent, to \$40 billion. The largest increase on a percentage basis in use of cash was to buyback company stock, which more than doubled to \$32 billion in 2005.
 - The large increase in cash flow also reduced the need for long-term debt financing. FRS companies increased the amount of cash used to reduce long-term debt by 81 percent in 2005 to \$33 billion. Proceeds from issuing long-term debt also increased, but by a smaller amount. Overall, the ratio of long-term debt to stockholders' equity for FRS companies fell 8 percentage points in 2005 to 37.3 percent, the lowest level since 1983.
 - The overall uses of cash did not keep pace with increases in sources of cash, resulting in an increase in cash balances and cash equivalents of \$14 billion in 2005. Although this was less than the 2004
-

increase, it was the second-highest annual addition to cash balances in the 20 years the FRS has been collecting cash flow information.

E&P Expenditures

- FRS companies report expenditures for exploration, unproved property acquisition, development, proved property acquisition, and production (E&P) for the oil and natural gas production segment. FRS companies were hesitant to increase investments in response to higher cash flow in 2003 and 2004, but in 2005 the increase in E&P expenditures exceeded the increase in cash flow from operations by \$10 billion. E&P expenditures increased \$39 billion (in constant 2005 dollars) over their 2004 level to \$131 billion in 2005. Expenditures for unproved and proved property acquisition accounted for 55 percent of the increase in E&P expenditures, as several large acquisitions occurred.
- Worldwide expenditures for oil and natural gas exploration (not including expenditures for unproved property) by FRS companies increased 21 percent (in constant 2005 dollars) to \$10 billion in 2005, but remained well below the levels of the early 1980s. Development expenditures rose 27 percent from 2004 to \$50 billion in 2005, the highest level in the history of the FRS survey.

Refining/Marketing Capital Expenditures

- Capital expenditures by the FRS companies for refining and marketing increased 49 percent from their 2004 level to \$21 billion in 2005, mostly as the result of mergers and acquisitions. Several companies reported refining/marketing capital expenditures to meet more stringent specifications for petroleum products and to enhance their capability to process heavier crude oil and produce more light products. Expenditures were also required to repair damage from hurricanes.

Oil Production and Reserves

- The FRS companies' worldwide production of oil (crude oil and natural gas liquids [NGL] combined) and natural gas both declined by more than 3 percent in 2005. U.S. offshore production fell substantially, attributable largely to Hurricanes Katrina and Rita. U.S. production of oil by FRS companies declined 7 percent in 2005 and U.S. natural gas production fell 5 percent. Foreign production by FRS companies also declined, by about 1 percent for both oil and natural gas.
- FRS companies' reserve additions through drilling (i.e., excluding purchases and sales of reserves) increased significantly from their low level in 2004, to 5.5 billion barrels in 2005. Reserve revisions of oil rebounded from a large negative position in 2004 to become net positive in 2005.
- The FRS companies' reserve replacement rate for natural gas (averaged over 3 years) has risen steadily for the past several years, reaching 123 percent in 2003-2005 period. Conversely, the reserve replacement rate for oil fell substantially in the 2002-2004 period and declined slightly more in the 2003-2005 period to 63 percent.
- In 2005, the FRS companies accounted for 45 percent of total U.S. crude oil and NGL production and 43 percent of U.S. natural gas production, both having declined slowly over the past several years. FRS companies had 49 percent of U.S. crude oil and NGL proved reserves in 2005 as well as 49 percent of U.S. natural gas reserves. While this was the first year that the FRS share of oil reserves fell below 50 percent, the FRS share of natural gas reserves has increased the past two years.

Finding and Lifting Costs

- Average worldwide finding costs for FRS companies increased 17 percent in the 2003-2005 period relative to the 2002-2004 period, to \$10.73 per barrel of oil equivalent (boe), as high demand for drilling rigs and personnel put upward pressure on costs. Finding costs in the U.S. offshore increased

by 55 percent, due in large part to lower reserve replacement in the 2003-2005 period relative to the 2002-2004 period, which was partly attributable to damage and delays from hurricanes in 2005. Finding costs declined 7 percent in the U.S. onshore region, but rose 42 percent in foreign regions. Lifting (production) costs increased in every FRS region except one, to an average of \$6.87 per boe in 2005. Finding and lifting costs combined increased to \$16.89 per boe in 2003-2005, the highest since the 1985-1987 period (in constant dollars).

Financial Developments

Net Income and Profitability

Net income (including unusual items)¹ for the Financial Reporting System (FRS) companies increased 47 percent from the previous year to \$119 billion dollars in 2005 (**Table 1**), the highest amount (in constant

Table 1. Consolidated Income Statement for FRS Companies and Census' All Manufacturing Companies, 2004-2005
(Billion Dollars)

Income Statement Items	FRS Companies			All Manufacturing Companies		
	2004	2005	Percent Change 2004-2005	2004	2005	Percent Change 2004-2005
Operating Revenues	1060.5	1334.2	25.8	4,934.1	5,400.8	9.5
Operating Expenses	938.0	1165.1	24.2	4,613.6	5,043.2	9.3
Operating Income (Revenues minus Expenses)	122.5	169.1	38.0	320.4	357.7	11.6
Interest Expense	-11.0	-10.7	-3.4	-82.0	-88.0	7.3
Other Revenue (Expense)	17.9	31.9	77.5	209.1	250.3	19.7
Income Tax Expense	-48.4	-71.1	47.0	-99.3	-121.2	22.0
Net Income	81.1	119.2	47.0	348.2	398.8	14.6
Net Income Excluding Unusual Items	82.8	114.5	38.2	NA	NA	

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

NA= not available.

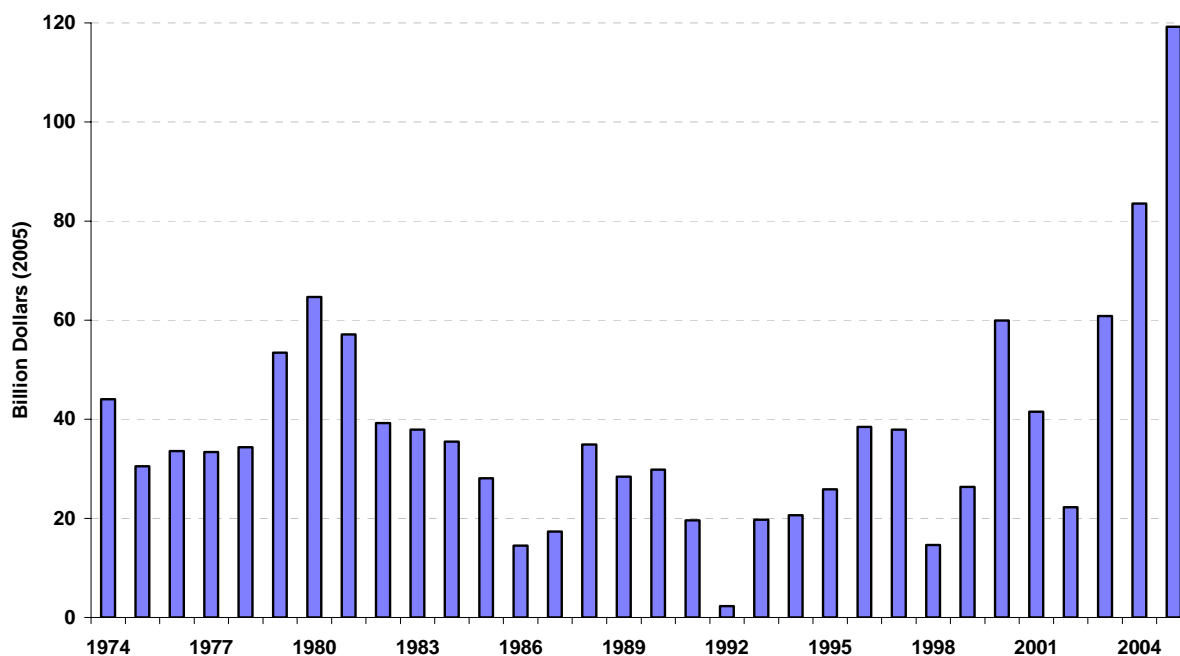
Sources: **FRS Companies:** Energy Information Administration Form EIA-28 (Financial Reporting System); **All Manufacturing Companies:** U.S. Census Bureau, Quarterly Financial Report.

dollars) in the history of the FRS survey (**Figure 1**).² Operating revenues and operating expenses also reached the highest levels ever recorded by the survey. Operating revenues jumped 26 percent on continuing increases in crude oil, natural gas, and petroleum product prices (see the overview of market trends section). Operating expenses rose by 24 percent as higher prices stimulated activity in exploration and development, which pushed costs up as demand for drilling rigs, materials, and personnel increased. Refinery operating expenses also increased, due in part to higher energy costs. The larger increase in revenues resulted in a 38-percent jump in operating income, to \$169 billion in 2005. Excluding unusual items, net income rose 38 percent to \$114 billion.

¹ Unusual items include accounting changes, asset dispositions and write-downs, tax adjustments, etc.

² The composition of the FRS group of companies changes over time, but 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. In 2005, the FRS group consisted of 29 companies. 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 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.

Figure 1. FRS Net Income, 1974-2005



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).

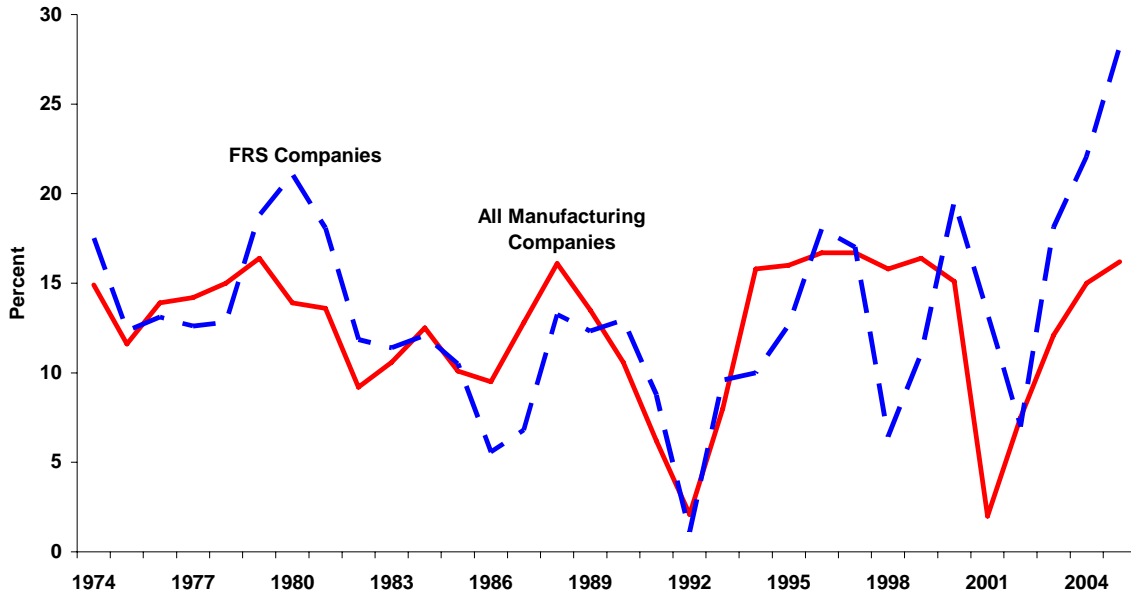
Profitability—the measure of a company’s or an industry’s net income relative to the equity or capital provided by its investors—rose to 28.2 percent, considerably higher than the previous peak of 22.1 percent in 2004 (**Figure 2**). Using the Census Bureau’s All Manufacturing Companies as a benchmark, the FRS companies averaged a substantially higher return on stockholders’ equity for 5 of the past 6 years (**Figure 3**), a trend not seen since the high-price period of 1979 to 1981.

Among the FRS companies’ lines of business and business segments,³ oil and natural gas production continued to be the most profitable, contributing \$89 billion in net income (**Table 2**). Refining/marketing provided an additional \$29 billion in earnings. Net income for the nonenergy line of business in 2005 changed little from 2004, but remained well above the level of the previous 3 years. Higher operating incomes in chemical business segments were the primary reason for the continued strong earnings in nonenergy.

The \$89 billion in net income for the oil and natural gas production segment in 2005 was 52 percent higher than that for the previous year, which had been the highest in the history of the FRS up to that point. The contribution of natural gas production to upstream revenues has become increasingly important as the natural gas share of FRS production has increased and natural gas prices reached record high levels.

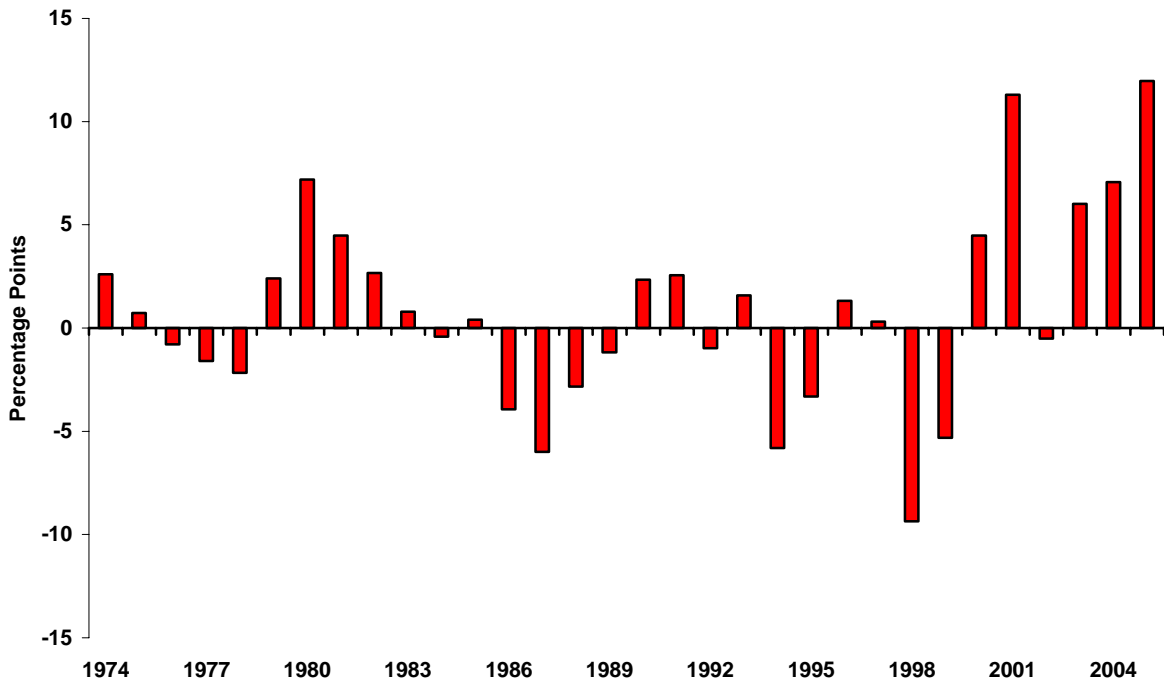
³ The FRS collects financial and operating information for the combined corporate entity as well as by lines of business within the company. The lines of business consist of petroleum, downstream natural gas (including natural gas liquids processing and natural gas pipelines), electric power, nonenergy, and other energy (including coal, nuclear, renewable fuels, and nonconventional fuels). The petroleum line of business is further segmented into production, refining/marketing, crude and petroleum product pipelines (for domestic petroleum), and international marine transport (for foreign petroleum). The production segment of petroleum includes natural gas exploration, development, and production.

Figure 2. Return on Stockholders' Equity for FRS Companies and All Manufacturing Companies, 1974-2005



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, 1974-2005



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.

Table 2. Contributions to Net Income by Line of Business for FRS Companies, 2004-2005
(Million Dollars)

Line of Business	Net Income			Net Income Excluding Unusual Items		
	2004	2005	Percent Change 2004-2005	2004	2005	Percent Change 2004-2005
Petroleum						
U.S. Petroleum						
Oil and Gas Production	30,146	40,496	34.3	30,050	40,479	34.7
Refining/Marketing	15,197	20,963	37.9	15,752	21,595	37.1
Pipelines	414	480	15.9	417	488	17.0
Total U.S. Petroleum	45,757	61,939	35.4	46,219	62,562	35.4
Foreign Petroleum						
Oil and Gas Production	28,592	48,728	70.4	28,116	44,634	58.7
Refining/Marketing ^a	6,953	7,804	12.2	6,941	7,688	10.8
Total Foreign Petroleum	35,548	56,532	59.0	35,060	52,321	49.2
Total Petroleum	81,305	118,471	45.7	81,279	114,883	41.3
Downstream Natural Gas	3,273	2,209	-32.5	3,651	1,951	-46.5
Electric Power	639	355	-44.4	1,061	716	-32.5
Other Energy ^b	1,078	1,036	-3.9	1,026	1,089	6.2
Nonenergy	4,192	4,214	0.5	4,783	4,110	-14.1
Total Allocated	90,487	126,285	39.6	91,800	122,749	33.7
Nontraceable ^c	-9,400	-7,067	--	-8,968	-8,298	--
Consolidated Net Income ^d	81,087	119,218	47.0	82,832	114,451	38.2

^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 -\$1745 million and \$4767 million in 2004 and 2005, respectively.

-- = Not meaningful.

NA = Not available.

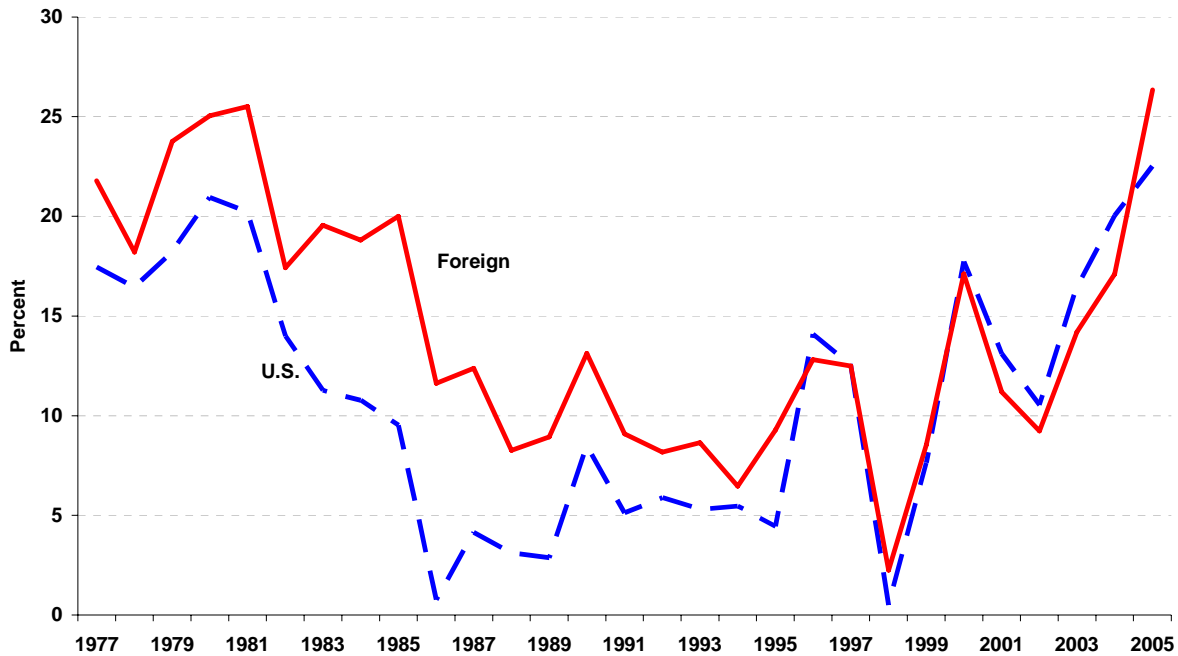
Source: Energy Information Administration, Form EIA-28 (Financial Reporting System).

Return on net investment in place (ROI)⁴ for the oil and natural gas production segment increased to 24.5 percent, the highest in the history of the FRS. For the first time since 1999, the foreign oil and natural gas production segment of the FRS companies provided higher net income and higher ROI than the domestic segment (**Figure 4**).

Net income for the FRS companies' refining/marketing segment increased 30 percent in 2005 (**Table 2**). Refining/marketing has become a significant contributor to net income as higher demand for petroleum products has pushed prices up by more than the increased costs of crude oil. The domestic

⁴ Because stockholders' equity is a corporate concept, the lines of business within the company use ROI as a measure of profitability. ROI is defined as net income divided by net investment in place for that segment. Net investment in place consists of the value of property, plant, and equipment net of depreciation plus investments and advances to unconsolidated affiliates.

Figure 4. Return on Net Investment in Place for U.S. and Foreign Oil and Gas Production, 1977-2005



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

refining/marketing gross margin⁵ increased \$1.58 per barrel to \$9.87 per barrel (\$0.24 per gallon) in 2005, the highest (in constant 2005 dollars) since 1990 (**Figure 5**). Per-barrel operating costs also increased, but by much less, \$0.70 per barrel. As a result, the net refined product margin⁶ rose to \$3.51 per barrel (\$.08 per gallon) in 2005. This was the highest in the history of the FRS, \$0.52 per barrel higher than the previous peak in 2001. Both domestic and foreign ROI exceeded 20 percent in 2005 (**Figure 6**), yielding an overall refining/marketing ROI of 22.7 percent, which was also the highest in the history of the FRS survey.

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 capital expenditures, paying dividends, purchasing company stock, and paying off debt.

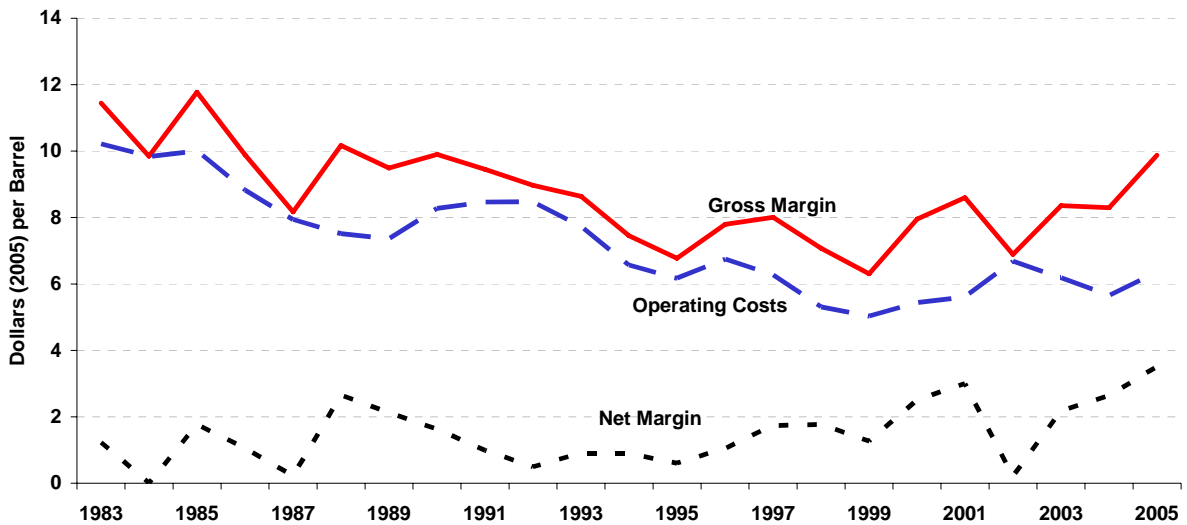
Cash flow from operations⁷ for FRS companies increased 25 percent from the previous year to \$170 billion in 2005 (**Table 3**). This was two and a half times larger than the average annual cash flow (in

⁵ The gross margin is refined product revenues less raw material cost and product purchases divided by refined product sales volume.

⁶ The net refined product margin is the gross margin minus the costs of producing and selling the products.

⁷ Cash flow from operations consists of net income plus expenses that do not require an outlay of cash minus earnings that do not provide a receipt of cash. For energy companies, the largest non-cash item generally is depreciation, depletion, and amortization (DD&A), which is an allowance for the decline in the value of property, plant, and equipment (PP&E), based on accounting principles, recorded as a charge against income. See Table B-11.

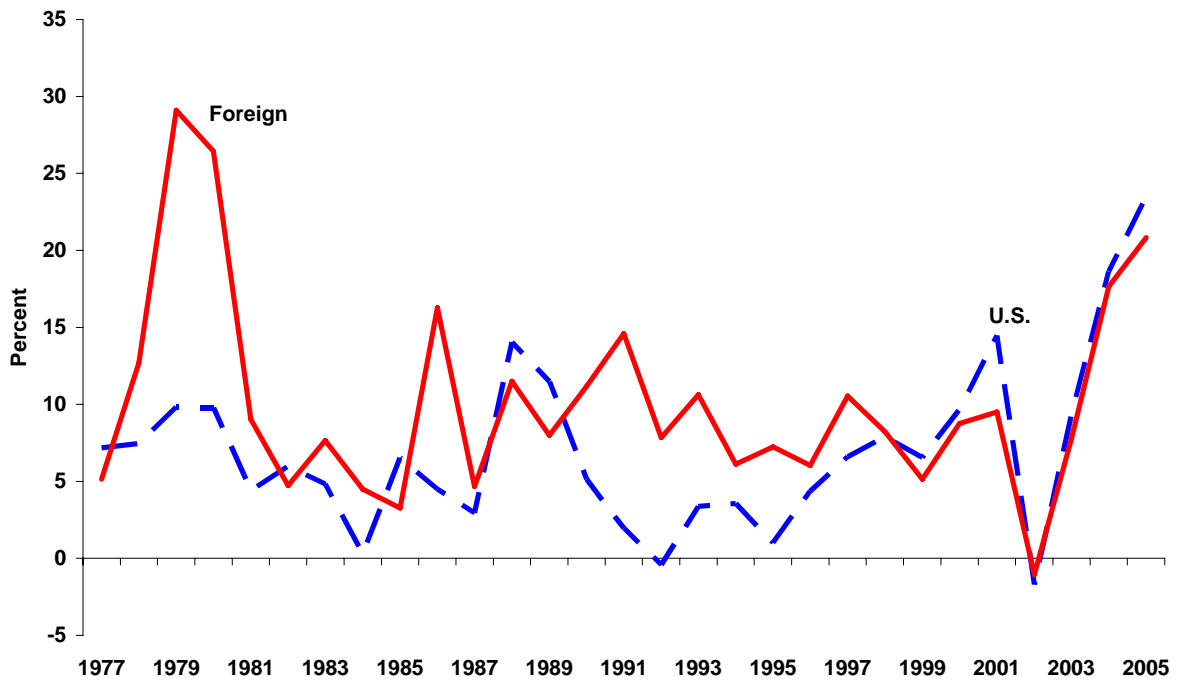
Figure 5. U.S. Refined Product Margins and Costs per Barrel of Petroleum Product Sold for FRS Companies, 1983-2005



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, 1977-2005



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

Table 3. Sources and Uses of Cash for FRS Companies, 2004-2005
(Billion Dollars)

Sources and Uses of Cash	2004	2005	Absolute Change 2004-2005	Percent Change 2004-2005
Main Sources of Cash				
Cash Flow from Operations	135.8	169.9	34.0	25.1
Proceeds from Long-Term Debt	18.5	29.6	11.1	59.9
Proceeds from Disposals of Assets	19.7	35.9	16.2	82.2
Proceeds from Equity Security Offerings	8.1	10.5	2.3	28.8
Main Uses of Cash				
Additions to Investment in Place	86.5	132.9	46.4	53.6
Reductions in Long-Term Debt	18.4	33.3	14.9	80.8
Dividends to Shareholders	36.5	39.7	3.2	8.7
Purchase of Treasury Stock	14.0	31.8	17.8	127.0
Other Investment and Financing Activities, Net	-5.5	6.3	11.8	-214.7
Net Change in Cash and Cash Equivalents	21.2	14.4	-6.8	-32.0

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).

constant 2005 dollars) from 1986 to 1999. Oil and natural gas production contributed 76 percent of the cash flow from operations (on a pre-tax basis) (**Table 4**).

In addition to funds from operations, FRS companies raised cash through disposals of assets, increasing the amount of cash from this source by 82 percent over 2004 to \$36 billion in 2005. Two FRS companies ceased operations in 2005 as other FRS companies acquired them (see the Capital Expenditures section); this contributed to the large increase in disposals of assets. Some companies took advantage of the high-price environment to sell off non-core assets.

Proceeds from equity security offerings increased by a relatively small \$2 billion, to \$10 billion in 2005. The large increase in cash flow reduced the need to raise cash through equity offerings.

The largest use of cash was for capital expenditures (measured as Additions to Investment in Place), which increased by \$46 billion from the previous year to \$133 billion in 2005. The Capital Expenditures section discusses these expenditures in greater detail.

Dividends to shareholders were the second largest use of cash, increasing 9 percent, to \$40 billion. The largest increase on a percentage basis in uses of cash was to buyback company stock. Many companies utilized stock buyback programs as a means to distribute part of the large increase in cash flow back to shareholders. The amount of cash used by FRS companies to repurchase their own stock more than doubled to \$32 billion in 2005.

The large increase in cash flow also reduced the need for long-term debt financing. FRS companies increased the amount of cash used to reduce long-term debt by 81 percent in 2005 to \$33 billion. Proceeds from issuing long-term debt also increased, but by a smaller amount, a 60-percent increase from 2004 to

Table 4. Line-of-Business Contributions to Pretax Cash Flow, Income Taxes, and Cash Flow for FRS Companies, 2004-2005
(Billion Dollars)

Contribution to Pretax Cash Flow ^a	2004	2005	Absolute Change 2004-2005	Percent Change 2004-2005
Petroleum				
Oil and Gas Production	124.3	168.2	43.8	35.2
Refining, Marketing, and Transport	37.3	46.7	9.4	25.3
Downstream Natural Gas	5.6	2.6	-3.1	-54.4
Electric Power	2.2	1.5	-0.7	-30.0
Other Energy ^b	1.2	1.0	-0.2	-15.9
Chemicals	5.1	6.7	1.6	30.7
Other Nonenergy	0.6	-0.8	-1.4	--
Nontraceable	-4.7	-5.9	-1.1	--
Total Contribution to Pretax Cash Flow ^a	171.7	220.0	48.3	28.2
Current Income Taxes	-44.8	-66.9	--	49.5
Other (Net)	8.9	16.8	7.8	87.7
Cash Flow from Operations	135.8	169.9	34.0	25.1

^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).

\$30 billion in 2005. Overall, the ratio of long-term debt to stockholders' equity for FRS companies fell 8 percentage points in 2005 to 37.3 percent (**Table B3**), the lowest since 1983.

The overall uses of cash did not keep up with increases in sources of cash, resulting in an increase in cash balances and cash equivalents of \$14 billion in 2005. Although this was lower than the 2004 increase, it was the second-highest annual addition to cash balances in the 20 years that the FRS has been collecting cash flow information.

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 represent the value of assets acquired in the current time period net of depreciation, and also include investments and advancements to unconsolidated affiliate companies. Capital expenditures are also referred to as Additions to Investment in Place.

The FRS companies' capital expenditures increased 54 percent to \$133 billion in 2005 (**Table 5**). Capital expenditures for oil and natural gas production (domestic and foreign combined) made up 72 percent of the total, while the petroleum line of business, which includes refining and marketing activities and domestic pipelines along with oil and gas production, accounted for 89 percent of the total.

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. Current expenditures as well as capital expenditures are included in the data, but capital expenditures are

**Table 5. Additions to Investment in Place by Line of Business for FRS Companies,
2004-2005**
(Billion Dollars)

Lines of Business	2004	2005	Percent Change 2004-2005	Percent Change Excluding Mergers and Acquisitions 2004-2005
Petroleum				
U.S. Petroleum				
Production	28.9	45.4	57.2	44.8
Refining/Marketing				
Refining	8.1	14.5	79.2	11.2
Marketing	1.3	2.6	97.5	120.6
Transport	1.5	0.6	-63.8	-63.8
Total Refining/Marketing	10.9	17.6	61.4	12.5
Pipelines	2.0	1.7	-15.0	-32.2
Total U.S. Petroleum	41.8	64.8	54.8	30.9
Foreign Petroleum				
Production	29.8	50.8	70.3	22.8
Refining/Marketing ^a	2.9	2.9	0.4	20.7
Total Foreign Petroleum	32.7	53.7	64.0	22.7
Total Petroleum	74.6	118.5	58.9	26.9
Downstream Natural Gas	5.5	6.7	21.7	13.7
Electric Power	1.4	2.2	62.2	11.7
Other Energy ^b	0.8	0.6	-21.0	-21.0
Chemicals	2.5	2.3	-8.8	6.0
Other Nonenergy	-0.1	0.5	--	--
Nontraceable ^c	1.8	2.0	12.0	-10.8
Additions to Investment in Place ^d	86.5	132.9	53.6	24.7
Additions Due to Mergers and Acquisitions	9.4	36.7	291.7	
Total Additions Excluding Mergers and Acquisitions	77.2	96.2	24.7	

^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.

-- = Not meaningful.

NA = Not available.

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

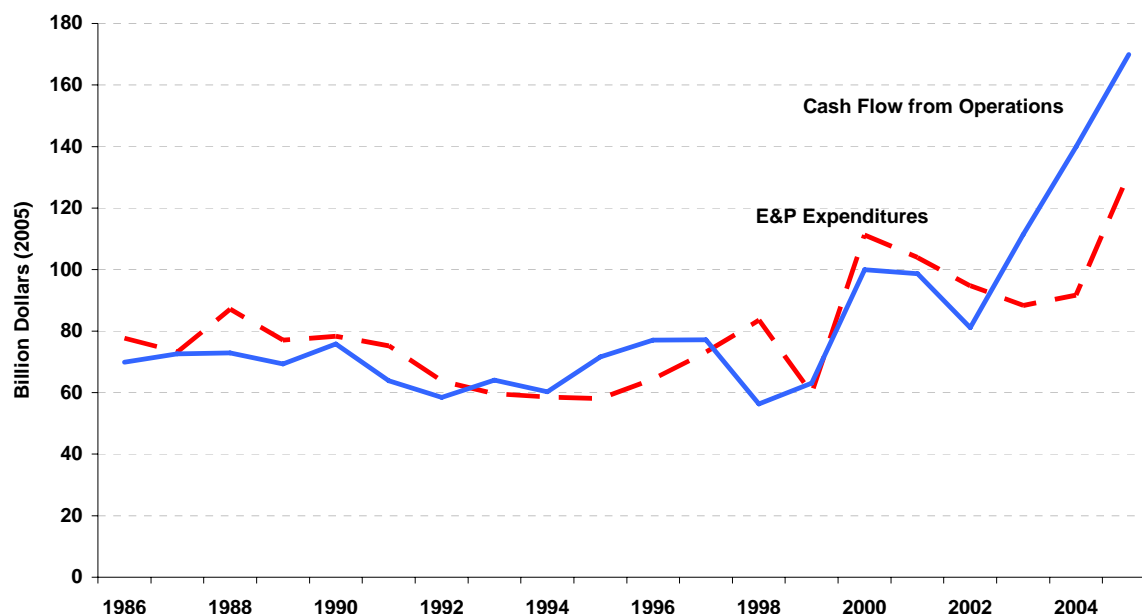
Source: Energy Information Administration, Form EIA-28 (Financial Reporting System).

predominant. Regional breakdowns are also provided.⁸ Exploration and development expenditures provide insight into the regional targets of upstream investment by FRS companies.

⁸ The regions for which separate FRS data are collected include U.S. onshore, U.S. offshore, Canada, Organisation for Economic Co-operation and Development (OECD) Europe, former Soviet Union and Eastern Europe, Africa, Middle East, Other Eastern Hemisphere (primarily Asia Pacific), and Other Western Hemisphere (primarily South America).

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**). Many companies may have been concerned that the higher prices would not last⁹ and continued to base investment decisions on crude oil prices that were much lower than market levels.¹⁰

Figure 7. Cash Flow from Operations and Exploration and Production (E&P) Expenditures for FRS Companies, 1986-2005



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

Companies also indicated that they did not maintain investments at the same rate as increases in cash flow because of limited access to the best prospects, higher tax pressure on oil companies by producing-country governments, shortage of qualified personnel, and strains on the drilling rig supply.¹¹

Cash flow from operations continued its rapid ascent in 2005, rising \$30 billion (in constant 2005 dollars) to \$170 billion as higher oil and natural gas prices increased earnings. In contrast to 2003 and 2004, however, E&P expenditures rose by an even larger amount, \$39 billion, to \$131 billion. Expenditures for unproved and proved property accounted for 55 percent of the increase in E&P expenditures in 2005, as several large acquisitions occurred (**Table 6**). Development expenditures made up 27 percent of the annual increase in E&P expenditures, while production expenditures contributed 14 percent (see the section on production costs). Expenditures for exploration made up just 5 percent of the \$39 billion increase in total E&P expenditures.

From the 2004 level, total exploration expenditures by FRS companies across all regions increased 21 percent to \$10 billion in 2005, but remained well below the levels of the early 1980s (**Figure 8**).

⁹ "Starting to splurge," *The Economist*, October 22, 2005, p. 68.

¹⁰ "Total's Desmarest Defends Cautious Capital Spending Hurdle," *Oil Daily* (September 22, 2005), p. 5.

¹¹ "IFP notes rising outlays for services, equipment," *Oil and Gas Journal* (October 14, 2005), p. 44.

Development expenditures rose 27 percent to \$50 billion in 2005, the highest level in the history of the FRS survey.

Table 6. Value of Mergers, Acquisitions, and Related Transactions by FRS Companies, 2005
(Million Dollars)

Acquiring Company	Merger or Acquisition	Reported Value of Acquisition
Mergers and Acquisitions between FRS Companies		
ChevronTexaco	Merger with Unocal	17,289
Valero	Merger with Premcor	6,116
Occidental	Permian Basin properties from Exxon	972
XTO	West Texas/New Mexico Properties from ExxonMobil	215
Devon	Canadian Iron River properties from ExxonMobil	200
Sunoco	Pipeline System in Texas from Exxon Mobil	100
Other Acquisitions by FRS Companies		
Marathon	Remaining 38% interest in MAP	4,341
Chesapeake	Acquisition of Columbia Natural Resources	2,200
ConocoPhillips	Additional interest in LUKOIL	2,160
XTO	Fort Worth Basin properties from Antero Resources Corp.	1,259
ConocoPhillips	Increased interest in Duke Energy Field Services	1,100
El Paso	Acquisition of producer Medicine Bow Energy	834
ConocoPhillips	Return to Waha concessions in Libya	732
Marathon	Interest in Waha concessions in Libya	732
Dominion	USGen fossil-fired generation facilities	642
ConocoPhillips	Interest in NMNG joint venture with LUKOIL	512
ConocoPhillips	Volume Overriding Royalty Interest with Ponca City	483
Amerada Hess	Controlling interest in Russian joint venture	400
XTO	Producing properties from Plains Exploration	336
Chesapeake	Acquisition of BRG Petroleum	325
Chesapeake	Hollywood Energy III L.P.'s interest in Texas properties	250
ConocoPhillips	Trade of coalbed methane acreage for Texas properties	250
Chesapeake	Producing assets in Texas/Permian Basin	228
Occidental	Chemical facilities from Vulcan Materials Company	214
ConocoPhillips	Equity in North Caspian PSA from British Gas Int'l	200
Chesapeake	Producing assets in Texas/Permian Basin	198
Dominion	Kewaunee nuclear power station	192
Chesapeake	Producing assets in Texas/Permian Basin	139
Occidental	Lease payments for production-sharing contract in Oman	137
Occidental	Payment for re-entry into Libya	133
Equitable	99% interest in Eastern Seven Partners, LP	105

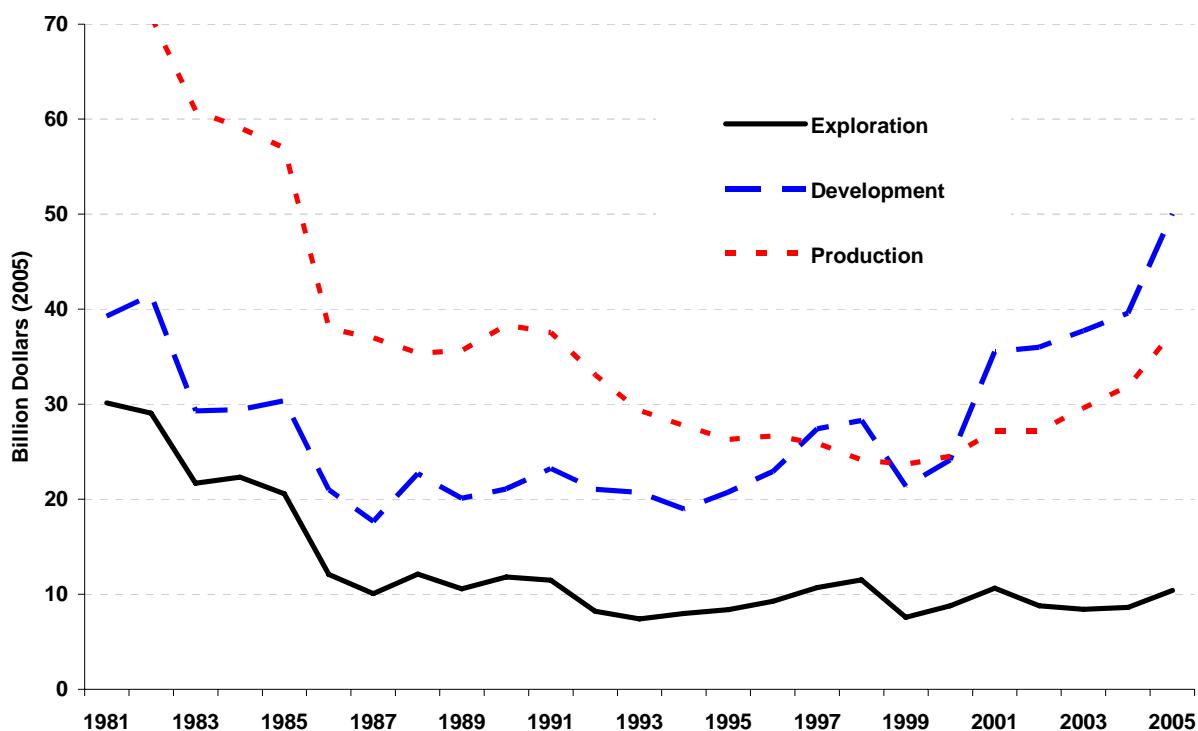
Sources: Company annual reports to shareholders and press releases.

Regionally, despite its maturity as an oil- and natural gas-producing region, the U.S. onshore continues to receive more exploration and development expenditures than any other FRS region. Exploration expenditures increased to \$2.1 billion in 2005 (**Figure 9**), the highest amount since 1991. Expenditures for development, however, predominate in the U.S. onshore region: they rose to \$18.3 billion in 2005 (**Figure 10**), which was 37 percent of FRS companies' development expenditures worldwide.

Chesapeake Energy Corporation is very active in exploration and development in the U.S. onshore region. Chesapeake is one of the largest natural gas producers in the United States, focusing on discovering,

developing, and acquiring onshore natural gas reserves. Chesapeake led the nation in drilling activity in 2005, drilling or participating in nearly 2,000 wells. In addition, Chesapeake invested \$362 million in

Figure 8. FRS Worldwide Expenditures for Exploration, Development, and Production, 1981-2005



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

leasehold and 3-D seismic data in 2005 to identify future drilling opportunities.¹² Chesapeake is looking to expand exploration prospects in the Appalachian basin with its acquisition of Columbia Natural Resources.¹³

Unconventional natural gas has become a very important part of U.S. onshore production. Devon Energy Corporation is one of the companies that has been involved in developing unconventional resources in the U.S. onshore region. Devon began producing natural gas from coal beds in New Mexico’s San Juan Basin in the 1980s. Devon also has a coal bed methane project in the Powder River Basin in Wyoming and is piloting another project in Wyoming’s Wind River Basin. Devon, the largest producer in the Barnett Shale in North Texas, added more reserves than it produced in 2005, indicating that this area will continue to be an important source of natural gas production.¹⁴

EOG Resources maintains an active exploration program in the Barnett Shale, Permian Basin, Rocky Mountain, Mid-Continent, and other areas designed to extend fields and add new prospects to its portfolio.¹⁵ EOG significantly increased its exploration expenditures in 2005, due primarily to geological and geophysical expenditures in the Barnett Shale area.¹⁶ Using horizontal drilling and enhanced

¹² Chesapeake Energy Corporation, 2005 U.S. Securities and Exchange Commission Form 10-K filing, p. 3.

¹³ “Chesapeake expands into ‘underexplored’ Appalachian basin,” *Oil and Gas Journal* (October 24, 2005), p. 31.

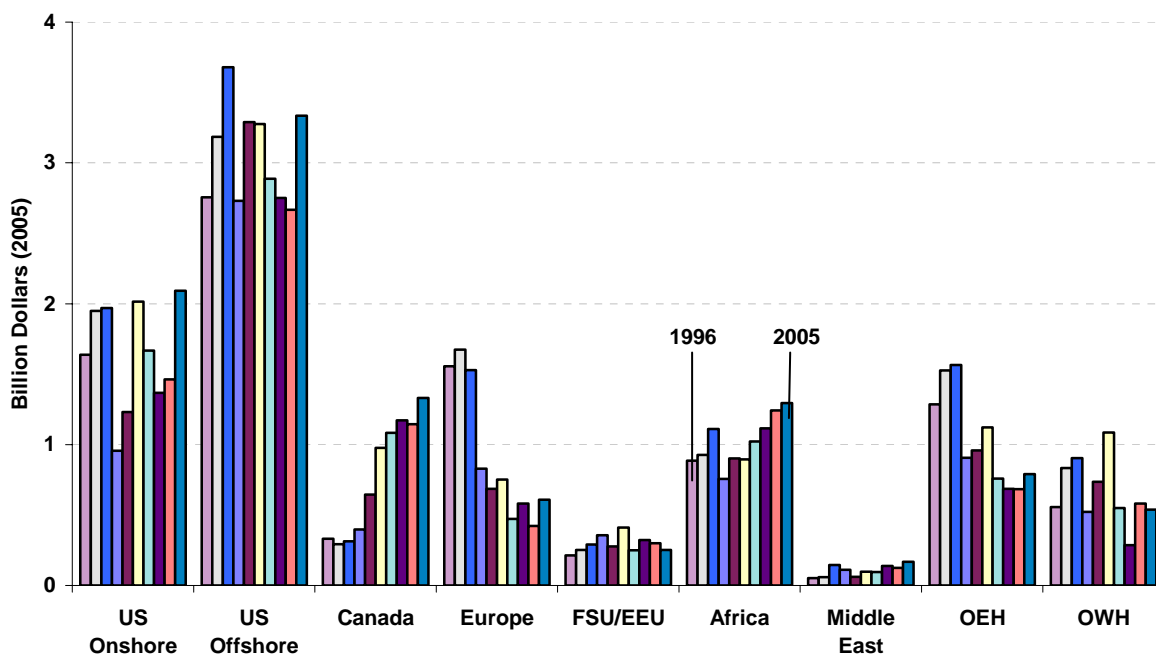
¹⁴ Devon Energy Corporation, *2005 Annual Report*, pp. 11, 20.

¹⁵ EOG Resources, Inc., 2005 U.S. Securities and Exchange Commission Form 10-K filing, pp. 1-2.

¹⁶ EOG Resources, Inc., *2005 Annual Report to Shareholders*, p. 14.

completion technologies, EOG made several significant natural gas discoveries in the Barnett Shale and is

Figure 9. FRS Expenditures for Oil and Natural Gas Exploration by Region, 1996-2005



Note: FSU/EEU is former Soviet Union and Eastern Europe. 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).

positioned to continue to expand production and reserves for several years to come.¹⁷ EOG is also planning to examine the potential of six more shale plays in the United States.¹⁸

After declining for the past 4 years, exploration expenditures by FRS companies in the U.S. offshore region increased 25 percent in 2005 from 2004, reaching their highest level since 1998. An increase in deepwater drilling activity is expected over the next 2 years as companies rush to drill wells before leases expire.¹⁹ Expenditures for development declined in 2005 for the second year in a row after peaking in 2003, which may be due in part to project delays attributable to damage from Hurricanes Katrina and Rita.

Several FRS companies reported increased activity in the Gulf of Mexico in 2005. The deepwater Gulf of Mexico is one of Chevron's "focus areas" for exploration.²⁰ The company participated in five wells in the Gulf of Mexico deepwater exploration program, resulting in two announced discoveries and one successful appraisal well.²¹ Chevron also established a new drilling depth record in the Gulf of Mexico—34,194 feet.²² Chevron's successful production test at its Jack discovery was considered a major

¹⁷ EOG Resources, Inc., *2005 Annual Report to Shareholders*, p. 3 and EOG Resources, Inc., 2005 U.S. Securities and Exchange Commission Form 10-K filing, p. 2.

¹⁸ "EOG Resource Probes Six New Barnett Shale 'Clones,'" *Oil Daily* (May 8, 2006), p. 5.

¹⁹ "Lower Tertiary Exploration Activity to Surge," *Oil Daily* (October 16, 2006), p. 1.

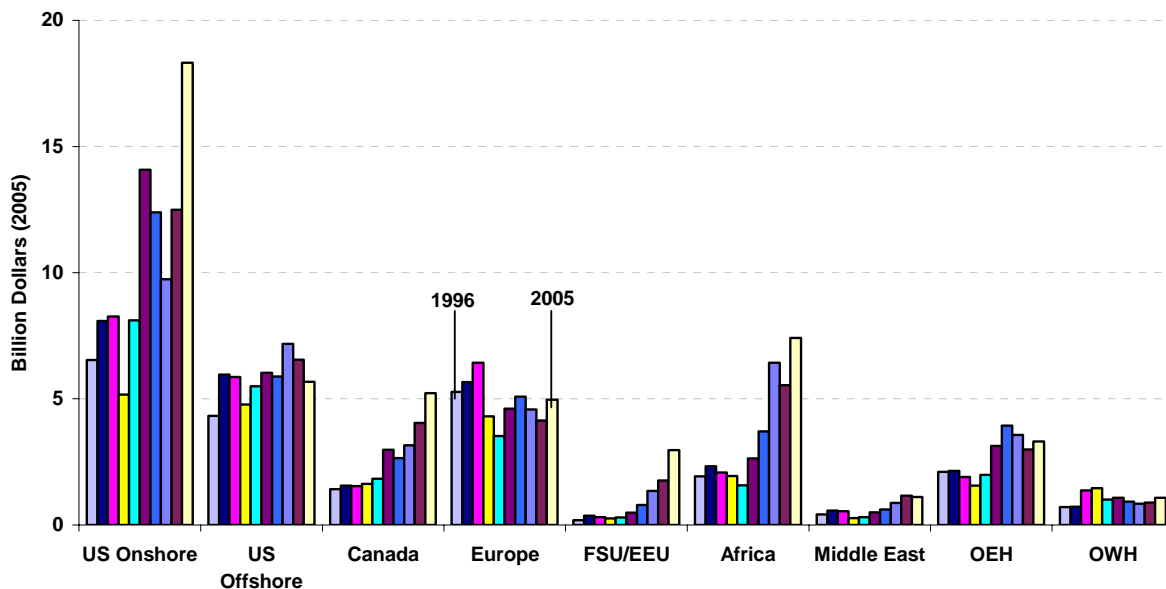
²⁰ Chevron Corporation, *2005 Supplement to the Annual Report*, p. 11.

²¹ Chevron Corporation, 2005 U.S. Securities and Exchange Commission Form 10-K filing, p. 12.

²² Chevron Corporation, *2005 Supplement to the Annual Report*, p. 12.

milestone in the emerging Lower Tertiary play, which is expected to be one of the industry's best bets for large

Figure 10. FRS Expenditures for Oil and Natural Gas Development by Region, 1996-2005



Note: FSU/EEU is former Soviet Union and Eastern Europe. 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).

discoveries.²³ BP made a number of new discoveries in the deepwater Gulf of Mexico in 2005. It expects to add 200,000 barrels per day of deepwater Gulf of Mexico production over the next 2 years through the development of major projects including Atlantis and Thunder Horse.²⁴

Exploration and development expenditures in foreign FRS regions increased 24 percent to \$31 billion in 2005. For the past 3 years, FRS companies have put more exploration and development expenditures into Africa than they have in any other foreign region (**Figures 9 and 10**). ExxonMobil plans to drill 30 wildcat wells between 2005 and 2007 in Angola and Congo and plans to undertake exploration in Chad and deepwater Madagascar.²⁵ Its production base in Africa includes operations in Angola, Chad, Cameroon, Equatorial Guinea, and Nigeria. In addition, ExxonMobil is involved in LNG projects in Nigeria and Angola, and is conducting exploration activities in several other African countries.²⁶ The Kizomba B project in deepwater offshore Angola started production in 2005, ramping up to a current rate of more than 250,000 barrels per day.²⁷ Chevron embarked on a major development program in Angola in an effort to significantly increase production in 2006. Chevron has the largest acreage position in deepwater offshore Nigeria and has several projects expected to begin production over the next 5 years.²⁸

²³ "Jack Discovery Marks Milestone for US Gulf," *Oil Daily* (September 6, 2006), p. 1.

²⁴ BP plc, *Annual Report on Form 20-F 2005*, pp. 33-34.

²⁵ "Majors Turn to Africa for Growth, But Face Mounting Competition," *Oil Daily* (November 10, 2005), p. 5.

²⁶ Exxon Mobil Corporation, *2005 Financial and Operating Overview*, p. 48.

²⁷ Exxon Mobil Corporation, *2005 Financial and Operating Overview*, p. 38.

²⁸ Chevron Corporation, *2005 Supplement to the Annual Report*, pp. 18-22, 38.

Canada continues to receive considerable interest from FRS companies. Exploration and development expenditures have increased steadily over the past several years (**Figures 9 and 10**), reaching \$6.6 billion in 2005. The remaining resources tend to be unconventional, which are much more difficult to produce. Coal bed methane and tight gas sources are estimated to account for more than 25 percent of Canada's current natural gas production.²⁹ Devon is involved in developing unconventional natural gas as well as unconventional oil resources in the oil sands of western Canada. Canada is Devon's second-largest producing area after the U.S. onshore region. Devon expects to begin production at its Jackfish project in the second half of 2007. At the end of 2005, Devon was drilling the first exploratory well in the Beaufort Sea in 15 years.³⁰ Apache Corporation spent \$1.2 billion in exploration and development in Canada in 2005. The company signed a farm-in agreement with ExxonMobil in May 2005 to drill and operate 145 new wells in Alberta over a 36-month period. As part of a separate 2004 farm-in agreement with ExxonMobil, Apache had drilled 457 wells through the end of 2005.³¹

Exploration and development expenditures in the former Soviet Union region increased 56 percent in 2005. ExxonMobil expects its near-term growth in production capacity to be led by offshore West Africa, Russia, and the Caspian.³² ExxonMobil's operations in the Russian/Caspian region accounted for about 3 percent of the company's oil and natural gas production in 2005, but this share is expected to increase as new projects come online. In the Caspian, ExxonMobil is involved in the development of three of the largest fields in the world: Kashagan, Tengiz, and Azeri-Chirag-Gunashli. Production from Azeri-Chirag-Gunashli in the southern Caspian Sea averaged 261,000 barrels per day (gross) in 2005.³³ The first phase of ExxonMobil's Sakhalin 1 project in offshore eastern Russia started production in October 2005 with the capacity to deliver 50,000 barrels per day of oil and 150 million cubic feet of natural gas to the Russian market.³⁴

Capital expenditures by the FRS companies for refining and marketing increased 49 percent (in nominal dollars) from 2004 to \$21 billion in 2005 (**Table 5**), mostly as the result of mergers and acquisitions. Valero acquired Premcor (**Table 6**) to become the second largest U.S. refiner (and largest non-integrated refiner).³⁵ Marathon bought out Ashland's portion to acquire full ownership of Marathon Ashland Petroleum.³⁶

Several companies reported refining/marketing capital expenditures to meet more stringent specifications for petroleum products and to enhance their capability to process heavier crude oil and produce more light products. Expenditures were also required to repair damage from hurricanes. ConocoPhillips reported that its Alliance refinery, which was shut down due to Hurricane Katrina, did not resume operations until January 2006. The Lake Charles and Sweeny refineries, which were shut down because of Hurricane Rita, did not resume full operations until October 2005. ConocoPhillips also reported construction of hydrotreating and coker units to meet clean fuel requirements for low-sulfur gasoline and ultra-low-sulfur diesel fuel.³⁷

²⁹ "Experts Say North America Is Running Out of Cheap Gas," *Oil Daily* (March 14, 2006), p. 4.

³⁰ Devon Energy Corporation, *2005 Annual Report*, pp. 20-21.

³¹ Apache Corporation, 2005 U.S. Securities and Exchange Commission Form 10-K filing, p. 23.

³² Exxon Mobil Corporation, *2005 Financial and Operating Overview*, p. 27.

³³ Exxon Mobil Corporation, *2005 Financial and Operating Overview*, p. 54.

³⁴ Exxon Mobil Corporation, *2005 Financial and Operating Overview*, p. 38.

³⁵ "Aspects of Valero Energy Corp.'s Proposed Acquisition of Premcor Inc.," Energy Information Administration, available on the Internet at <http://www.eia.doe.gov/emeu/finance/mergers/vpindex.html> (October 17, 2006).

³⁶ "Marathon Completes Acquisition of Ashland Inc.'s Interest in Marathon Ashland Petroleum," Marathon Oil Corporation (June 30, 2005). Available on the Internet at <http://www.eia.doe.gov/emeu/finance/mergers/vpindex.html> (November 28, 2006).

³⁷ ConocoPhillips Company, 2005 U.S. Securities and Exchange Commission Form 10-K filing, pp. 24-26.

Higher returns encouraged companies to consider capacity additions. Marathon is conducting a front-end engineering and design (FEED) study for a proposed \$2.2 billion, 180,000 barrel-per-day capacity expansion at its Garyville, Louisiana, refinery.³⁸ Motiva announced that expansion projects under consideration range from 100,000 barrels per day to 325,000 barrels per day.³⁹

³⁸ Marathon Oil Corporation, *2005 Annual Report*, p. 2.

³⁹ Royal Dutch Shell, *2005 Operating and Financial Review*, p. 45.

Oil and Gas Production

Worldwide production of both oil and natural gas by the Financial Reporting System (FRS) companies declined by more than 3 percent in 2005 (Table 7). The region with the largest proportional decline was

Table 7. Oil and Gas Production by FRS Companies by Region, 2004 and 2005

Region	Crude Oil and Natural Gas Liquids (million barrels)			Natural Gas (billion cubic feet)		
	2004	2005	Percent Change	2004	2005	Percent Change
United States						
Onshore	780	758	-2.8	5,985	6,071	1.4
Offshore	427	363	-15.2	2,189	1,703	-22.2
Total United States	1,208	1,121	-7.2	8,174	7,774	-4.9
Foreign						
Canada	203	189	-7.0	1,691	1,560	-7.8
OECD Europe	520	484	-6.9	2,158	2,026	-6.1
Former Soviet Union and Eastern Europe	39	64	65.0	46	56	20.7
Africa	468	500	6.9	276	365	32.1
Middle East	102	97	-5.4	120	134	11.6
Other Eastern Hemisphere	299	284	-4.9	1,712	1,779	3.9
Other Western Hemisphere	112	102	-9.1	1,009	1,027	1.8
Total Foreign	1,743	1,720	-1.3	7,012	6,947	-0.9
Total Worldwide	2,951	2,841	-3.7	15,186	14,721	-3.1

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

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

the U.S. offshore, which experienced double-digit declines in both oil and natural gas. This decline was attributable largely to Hurricanes Katrina and Rita. In addition, FRS companies reported substantial declines in their oil and natural gas production in Canada and Organisation for Economic Co-operation and Development (OECD) Europe. FRS companies experienced increases in their natural gas production in all other regions. However, only two regions showed increases in crude oil and natural gas liquids production by FRS companies: the former Soviet Union and Eastern Europe and Africa. The latter had the second-highest liquids (crude oil and natural gas liquids) production among the FRS companies in 2005, trailing only the U.S. onshore.

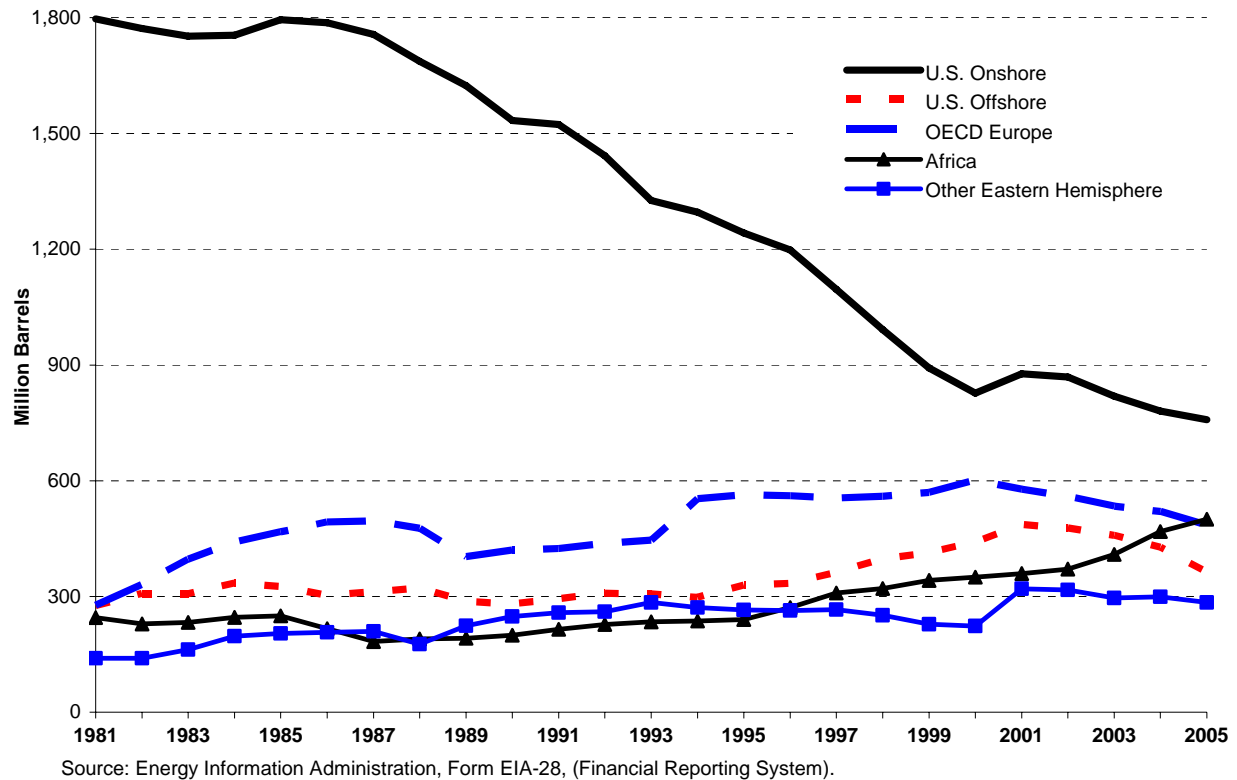
With production climbing steadily since the late 1980s, Africa became the second-largest crude oil and natural gas liquids-producing region for the FRS companies in 2005. ExxonMobil claims it is “one of the largest net producers of hydrocarbons in Africa,” with substantial crude oil and natural gas liquids operations in Nigeria, Angola, and Equatorial Guinea.⁴⁰ From 2002 through 2005, the company’s production of liquids in Africa nearly doubled.⁴¹

⁴⁰ Exxon Mobil Corporation, *2005 Financial & Operating Review*, pp. 48 and 56.

⁴¹ Exxon Mobil Corporation, 2005 Form 10-K, Annual Report to the Securities and Exchange Commission, p. 81, and previous issue.

Production of crude oil and natural gas liquids by the FRS companies has been declining in other regions in which they produce large quantities of liquids—U.S. onshore, OECD Europe, U.S. offshore, and Other Eastern Hemisphere (Asia, excluding the former Soviet Union)—since at least 2000-2001 (**Figure 11**).

Figure 11. Crude Oil and Natural Gas Liquids Production by FRS Companies, 1981-2005



U.S. onshore was the first of these regions to evidence falling production, starting in 1986. From 1985 through 2005, U.S. onshore liquids production by the FRS companies fell 58 percent.

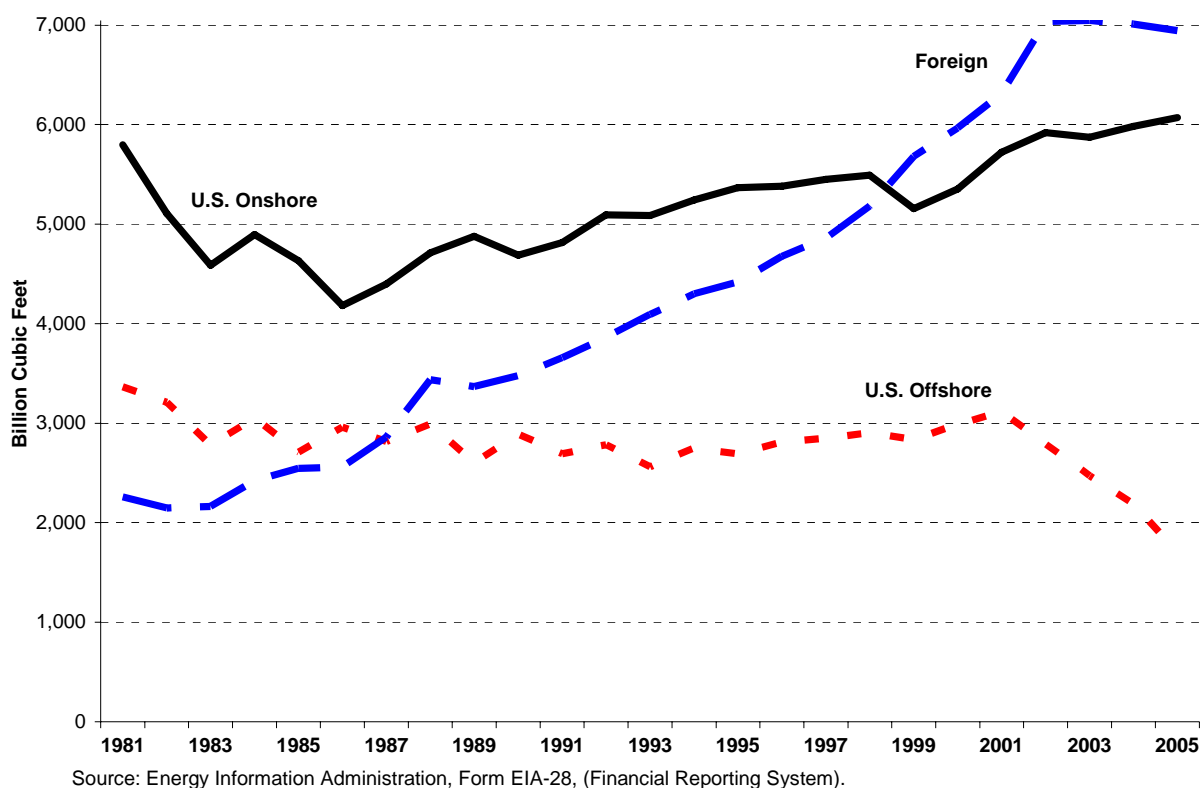
From 1986 through 2005, U.S. onshore natural gas production by the FRS companies grew by 45 percent, while U.S. offshore production fell 45 percent from 2001 through 2005 (**Figure 12**). The two offsetting trends resulted in a small (9 percent) increase in overall domestic natural gas production between 1986 and 2005. In contrast, foreign natural gas production by the FRS companies grew 171 percent from 1986 through 2005, despite slight declines in 2004 and 2005. The Other Eastern Hemisphere (Asia, excluding the former Soviet Union) and Canada regions contributed the most to the growth in foreign production.

Oil and Natural Gas Reserve Additions

FRS companies report three categories of reserve additions: revisions; improved recovery; and extensions and discoveries (**Figure 13**).⁴² Extensions of previously discovered reservoirs or discoveries of new

⁴² Extensions and discoveries are those reserves added by extending the proved area of previously discovered reservoirs or by discovery of new fields or reservoirs. Improved recovery refers to reserves resulting from the application of improved recovery techniques. Reserve revisions are changes (upward or downward) made to

Figure 12. Natural Gas Production by FRS Companies, 1981-2005



reserves have typically provided the largest increase in reserve additions, especially since the early 1990s, and this remained true in 2005. Worldwide reserve additions from extensions and discoveries for FRS companies declined in 2005, however, to the lowest level since 1994. Reserve revisions returned to positive territory in 2005 after turning negative in 2004 for the first time in the history of the FRS survey.⁴³ Reserves added through improved recovery techniques also increased in 2005, returning to levels similar to 2002 and 2003 after declining in 2004 to the lowest level since 1982. Among the FRS regions, the U.S. onshore had the highest reserve additions in all three categories (**Figure 14**). Total reserve additions by FRS companies in Canada were the largest among the foreign regions.

Oil and Natural Gas Reserve Replacement

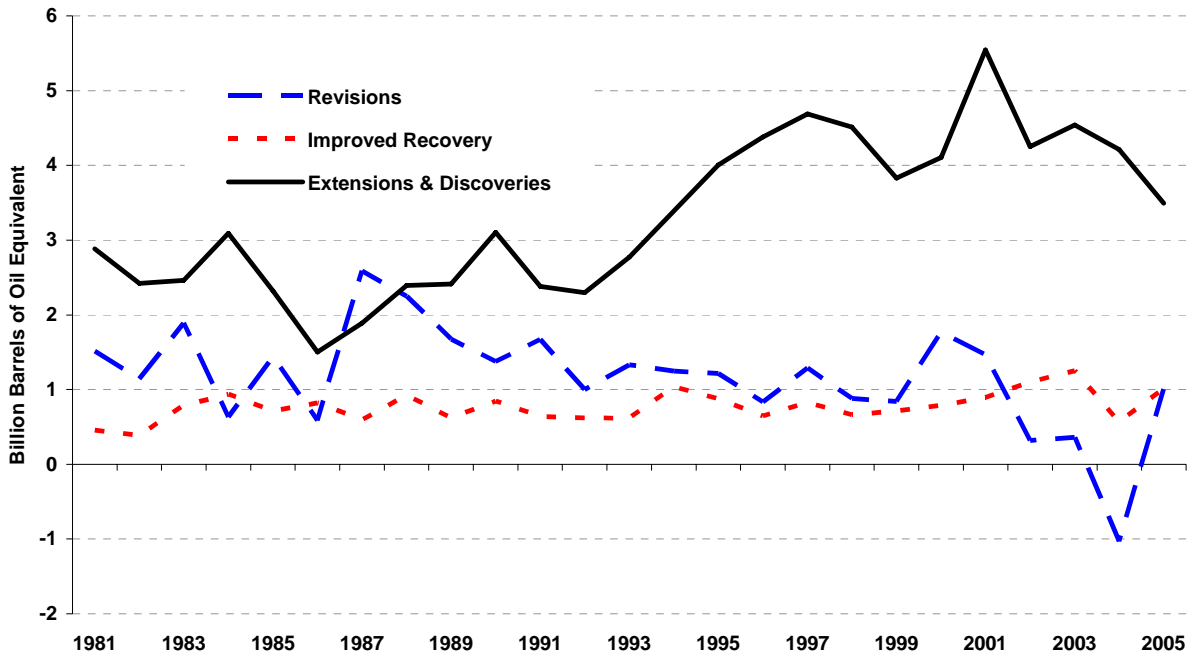
Reserve replacement (additional proved reserves found via the drill bit as a percentage of reserves removed by production) by the FRS companies in individual regions is often highly variable because reserves additions usually occur in large, discrete quantities after oil and natural gas are discovered. Thus, reserve additions can vary considerably from year to year, while production is usually fairly consistent from year to year. To adjust for this disparity, this report measures reserve replacement in overlapping 3-year periods, which can still vary markedly.⁴⁴

previous estimates as a result of new information obtained from development drilling and production history or from changes in economic factors.

⁴³ See Energy Information Administration, *Performance Profiles of Major Energy Producers 2004*, p. 14. (This publication is available on the Internet at <http://www.eia.doe.gov/emeu/perfpro/index.html> [as of October 25, 2005].)

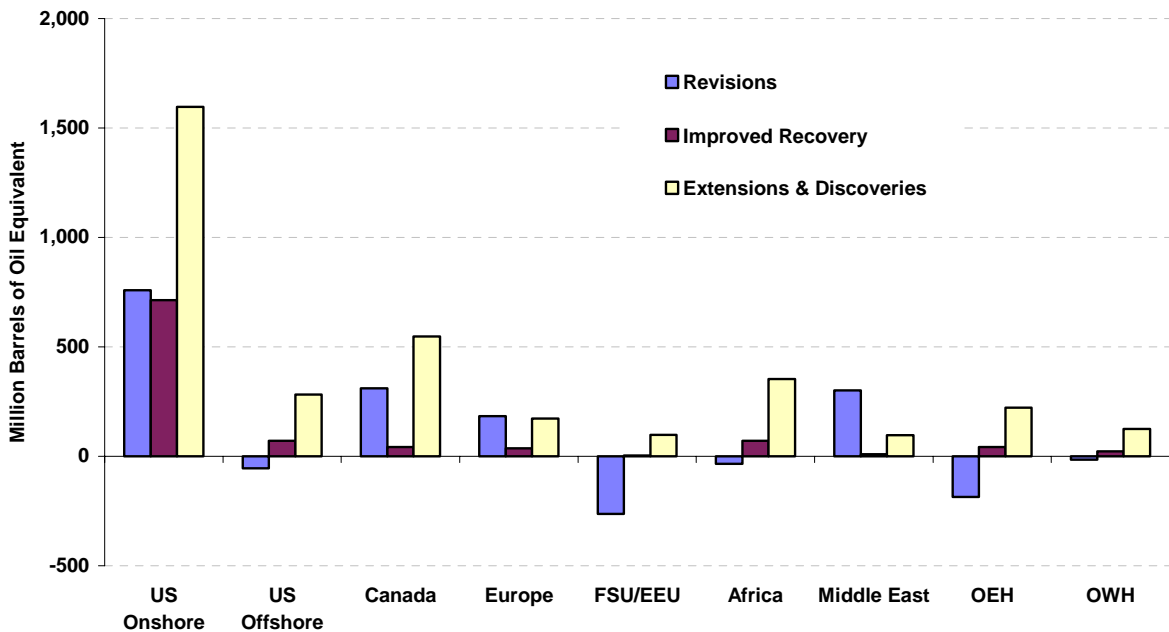
⁴⁴ The same problem occurs with finding costs. See the note in the section on finding costs for further discussion.

Figure 13. FRS Reserve Additions by Type, 1981-2005



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

Figure 14. FRS Reserve Additions by Type and by Region, 2005



Note: FSU/EEU is former Soviet Union and Eastern Europe. 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).

Comparing the 2002-2004 and 2003-2005 periods, individual regions evidenced much variation from period to period, while the worldwide reserve replacement rates by the FRS companies varied little (Table 8). Replacement was greater than production for natural gas, but much less than production for

Table 8. Oil and Gas Reserve Replacement Rates by FRS Companies, 2002 - 2004 and 2003 - 2005

Region	Drillbit Additions to Reserves		Production		Reserve Replacement Rate (percent)	
	2002 - 2004	2003 - 2005	2002 - 2004	2003 - 2005	2002 - 2004	2003 - 2005
Crude Oil and Natural Gas Liquids (million barrels)						
United States						
Onshore	1,986	2,250	2,468	2,358	80	95
Offshore	664	363	1,364	1,249	49	29
Total United States	2,650	2,612	3,832	3,606	69	72
Foreign						
Canada	-108	243	656	610	-16	40
OECD Europe	566	834	1,614	1,538	35	54
Former Soviet Union and Eastern Europe	986	408	101	136	979	301
Africa	1,409	864	1,248	1,378	113	63
Middle East	136	186	331	311	41	60
Other Eastern Hemisphere	286	301	911	879	31	34
Other Western Hemisphere	-18	41	342	325	-5	13
Total Foreign	3,258	2,877	5,204	5,177	63	56
Total Worldwide	5,908	5,490	9,036	8,783	65	63
Natural Gas (billion cubic feet)						
United States						
Onshore	21,158	28,696	17,777	17,928	119	160
Offshore	2,137	1,875	7,453	6,365	29	29
Total United States	23,295	30,571	25,230	24,292	92	126
Foreign						
Canada	3,587	4,422	5,298	4,994	68	89
OECD Europe	3,891	4,122	6,676	6,431	58	64
Former Soviet Union and Eastern Europe	1,234	994	115	140	1,070	712
Africa	6,362	4,050	711	861	895	470
Middle East	1,646	3,321	306	350	538	950
Other Eastern Hemisphere	9,639	7,537	5,371	5,301	179	142
Other Western Hemisphere	4,622	723	2,617	2,929	177	25
Total Foreign	30,981	25,169	21,093	21,006	147	120
Total Worldwide	54,276	55,740	46,324	45,298	117	123

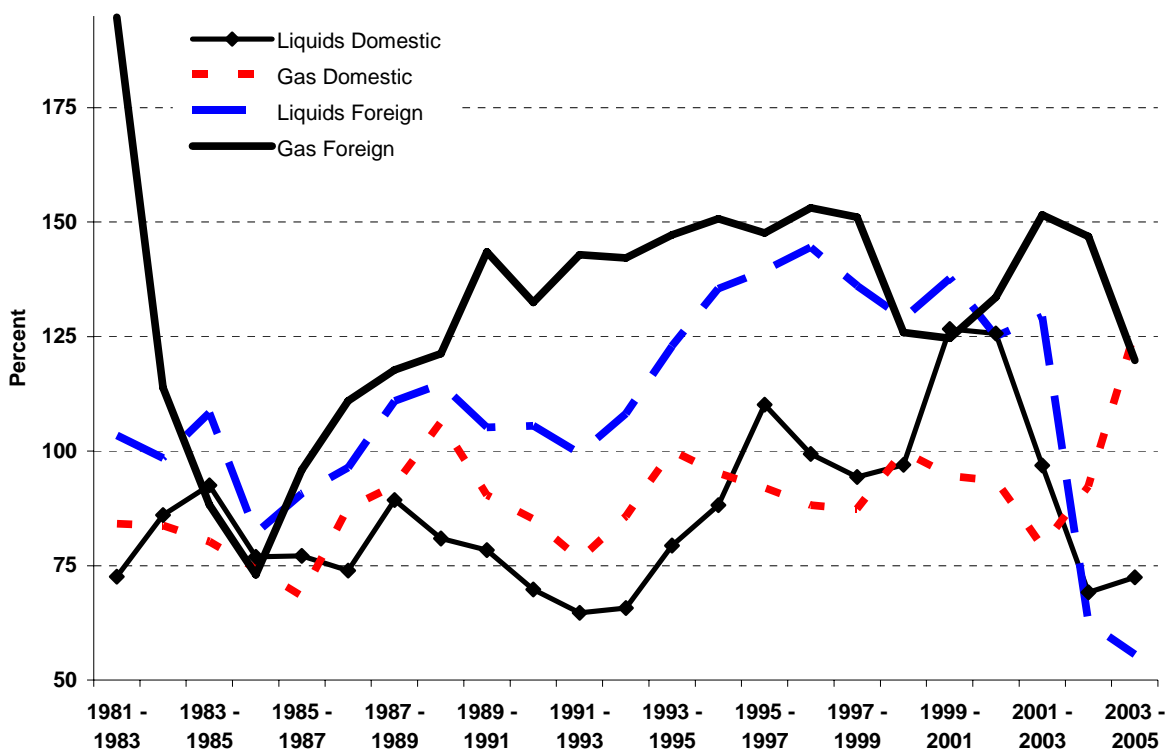
Note: Sum of components may not equal totals due to independent rounding.

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

crude oil and natural gas liquids. In general, the regions where the FRS companies were expanding production the fastest also had the highest replacement rates in the two periods. This was true for the former Soviet Union and Eastern Europe region in both oil and natural gas as well as for Africa in natural gas. Very low replacement rates in both periods were evident in the U.S. offshore for oil and natural gas, and for crude oil and natural gas liquids in the Other Western Hemisphere (Central and South America), Canada, Asia excluding the former Soviet Union, and OECD Europe.

From 1981-1983 through 2001-2003, domestic and foreign reserve replacement rates for the FRS companies generally had been increasing, but they have declined sharply in the last few years, except for domestic natural gas (**Figure 15**). In general, foreign replacement rates have been higher than domestic

Figure 15. Reserve Replacement by FRS Companies, 1981-1983 to 2003-2005

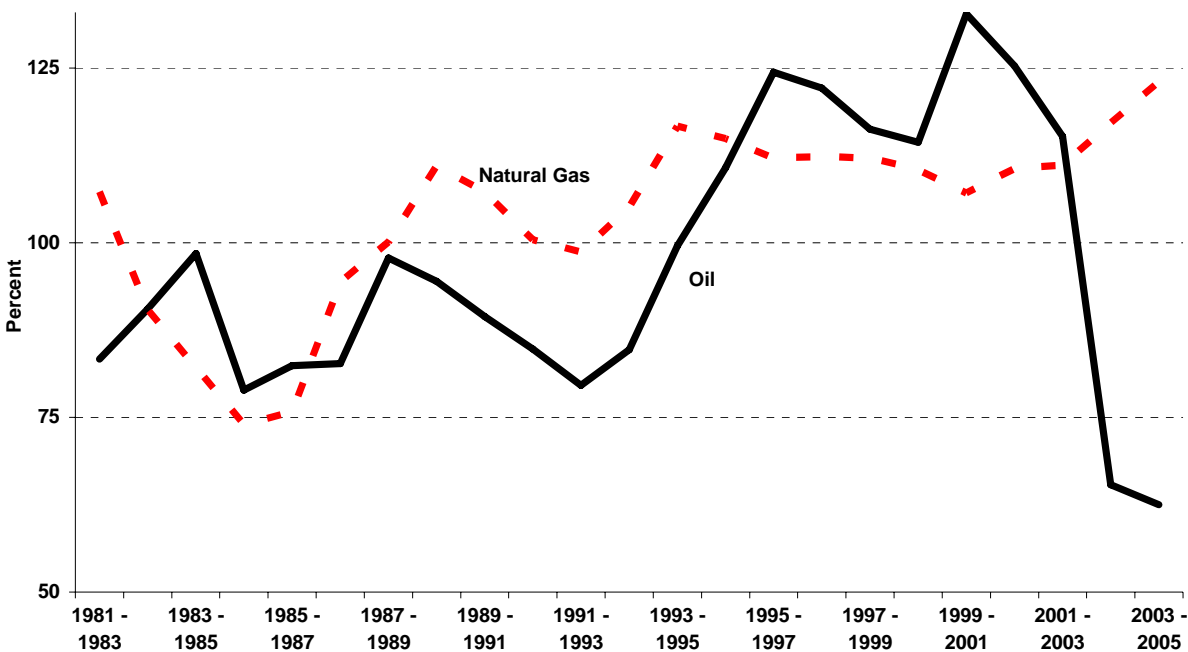


Source: Energy Information Administration Form EIA-28 (Financial Reporting System).

rates for the same type of hydrocarbon. Outside of the United States, the reserve replacement rate for natural gas was usually greater than that for crude oil and natural gas liquids. In the United States, the replacement rates for the two hydrocarbons reversed their relative positions several times.

From 1981 through 2005, the FRS companies replaced 94 percent of their worldwide crude oil and natural gas liquids production and 107 percent of their worldwide natural gas production. However, the worldwide reserve replacement rates for crude oil and natural gas liquids and for natural gas have diverged strongly only in the last two 3-year periods, when the replacement rate for crude oil and natural gas liquids dropped sharply (**Figure 16**). For these two periods, the FRS companies replaced less than two-thirds of their crude and natural gas liquids production (**Table 8**).

Figure 16. Worldwide Reserve Replacement by FRS Companies, 1981-1983 to 2003-2005



Note: To combine oil and gas, natural gas is converted to equivalent barrels of oil at 0.178 barrels per thousand cubic feet.
 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 continued to improve in 2005, with worldwide net income of \$89 billion on worldwide revenues from oil and natural gas sales of \$235 billion (**Table 9**). Both domestic and foreign operating expenses increased from 2004, but for different reasons. For foreign expenses, increased production costs were the major contributors to the escalation. For domestic expenses, a steep increase in “other costs” was the primary contributor. However, these increases were outweighed by the rise in revenues from the sale of oil and natural gas, especially foreign revenues, resulting in strong increases in operating income for 2005. Both domestic and foreign effective income tax rates (income tax expense as a percentage of pretax income) remained relatively stable, as income tax expenses for both regions rose in line with income before taxes.

Lifting Costs

Lifting costs (also called production costs) are the out-of-pocket costs per barrel of oil and natural gas (measured on a barrel-of-oil equivalent [boe] basis) to operate and maintain wells and related equipment and facilities after hydrocarbons have been found, acquired, and developed for production.⁴⁵ Total lifting costs are made up of direct lifting costs and production taxes.

Total production costs for oil and natural gas increased in 2005, while the volume of oil and natural gas produced declined, leading to sharply higher lifting costs that year (**Table 10**). Direct lifting costs were

⁴⁵ Because both oil and natural gas are often produced together, separate lifting costs are not available.

Table 9. Income Components and Financial Ratios in Oil and Natural Gas Production for FRS Companies, 2004 and 2005
(Billion Dollars)

Income Components and Financial Ratios	Worldwide		United States		Foreign	
	2004	2005	2004	2005	2004	2005
Oil and Natural Gas Revenues						
Oil	NA	NA	43.4	57.3	NA	NA
Natural Gas	NA	NA	43.2	54.8	NA	NA
Total Revenues	177.9	235.5	86.6	112.1	91.3	123.4
Expenses						
Depreciation, Depletion, and Amortization	31.1	33.4	16.0	17.0	15.1	16.4
Production Costs	30.9	37.5	15.2	18.4	15.8	19.1
Exploration Expenses	5.0	5.4	4.1	2.4	0.9	3.0
General and Administrative Expenses	3.0	3.0	2.1	2.0	0.9	0.9
Other Costs (Revenues) ^a	17.0	23.6	5.7	12.4	11.3	11.2
Total Operating Expenses	86.6	102.5	42.7	51.7	44.0	50.8
Operating Income	91.3	133.0	43.9	60.3	47.4	72.6
Other Income (Expense) ^b	7.8	16.8	3.1	3.2	4.7	13.6
Income Tax Expense	40.3	60.6	16.8	23.0	23.5	37.6
Net Income	58.7	89.2	30.1	40.5	28.6	48.7
Less Unusual Items	0.6	4.1	0.1	0.0	0.5	4.1
Net Income, Excluding Unusual Items	58.2	85.1	30.1	40.5	28.1	44.6
Unit Values (Dollars per BOE of Production) ^c						
Direct Lifting Costs (Excluding Taxes)	4.31	5.13	4.38	5.39	4.25	4.91
Production Taxes	1.16	1.74	1.32	1.95	1.01	1.57
Percentages						
Return on Investment ^d	18.5	24.5	20.0	22.5	17.1	26.3
Effective Tax Rate ^e	40.8	41.1	35.9	36.2	45.2	44.8

^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 and gain (loss) on disposition of assets.

^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).

up 19 percent, and production taxes were up 50 percent, leading to a 26-percent increase in total lifting costs. These increases were particularly high in the Other Western Hemisphere (Central and South America), the U.S. offshore, Canada, and OECD Europe. The increase for the Other Western Hemisphere lifting costs brought what had been the lowest total costs among the FRS regions more in line with those of the other regions; however, it is still the second lowest. The increase in the U.S. offshore was due partly to a substantial decline in production as a result of Hurricanes Katrina and Rita, but also to higher production costs. The production cost increase was likely the result of an increase in direct lifting costs, because most production taxes in the United States are levied by State and local governments, while most U.S. offshore production is from Federal waters. One reason for the production cost increase may be that companies are drilling in increasingly deeper waters. As recently as 2003, the U.S. offshore had the lowest total lifting costs of any FRS region, but its costs rose to the fifth highest in 2005.

Proportionally, production taxes rose the most in the former Soviet Union and Eastern Europe and in OECD Europe. While this increase made the former Soviet Union and Eastern Europe the region with the highest production taxes, OECD Europe taxes remained below the worldwide average for the FRS companies.

Table 10. Lifting Costs for FRS Companies by Region, 2004 and 2005
(Dollars Per Barrel of Oil Equivalent)

Region	Direct Lifting Costs			Production Taxes			Total		
	2004	2005	Percent Change	2004	2005	Percent Change	2004	2005	Percent Change
United States									
Onshore	--	--	--	--	--	--	6.30	7.70	22.1
Offshore	--	--	--	--	--	--	4.35	6.36	46.0
Total United States	4.38	5.39	23.1	1.32	1.95	47.2	5.70	7.34	28.7
Foreign									
Canada	5.15	6.98	35.7	0.23	0.30	31.2	5.38	7.29	35.5
OECD Europe	4.54	5.71	26.0	0.70	1.37	95.1	5.24	7.08	35.2
Former Soviet Union and Eastern Europe	5.74	5.21	-9.2	1.24	3.15	154.4	6.98	8.36	19.8
Africa	4.06	4.09	0.7	1.51	2.20	46.2	5.57	6.29	13.0
Middle East	4.36	4.81	10.4	0.19	0.14	-27.4	4.56	4.95	8.7
Other Eastern Hemisphere	4.26	3.74	-12.2	1.53	1.94	27.1	5.79	5.69	-1.8
Other Western Hemisphere	1.88	3.17	68.5	1.72	2.38	38.5	3.60	5.55	54.2
Total Foreign	4.25	4.91	15.4	1.01	1.57	54.6	5.27	6.48	22.9
Worldwide Total	4.31	5.13	18.9	1.16	1.74	50.2	5.47	6.87	25.6

-- = 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).

In the longer term, worldwide direct lifting costs continued the increase that began in 2001 (**Figure 17**). However, they are still below the levels of the early 1990s. Domestic and foreign direct lifting costs have been nearly equal since they converged in 1991 and fell for the next decade. The recent levels of direct lifting costs are not surprising given the high prices of oil and natural gas. Producers are willing to spend more to produce oil and natural gas when their prices are higher.

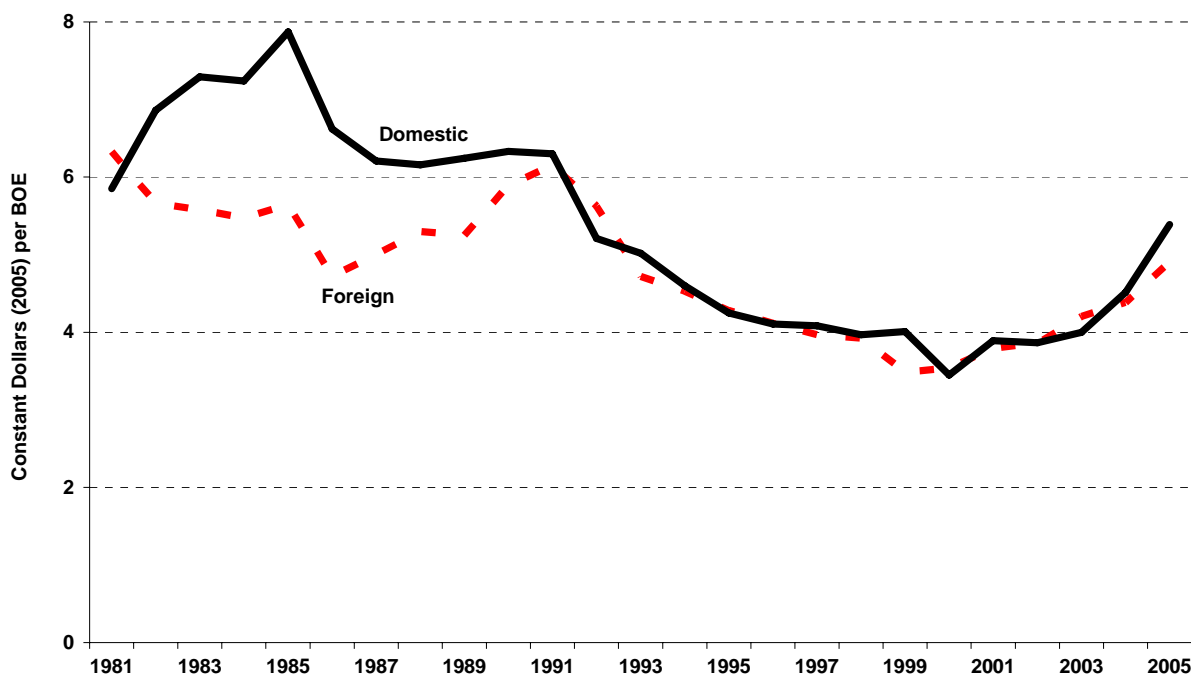
Finding Costs

Finding costs are the costs of adding proven reserves of oil and natural gas via exploration and development activities and the purchase of properties that might contain reserves.⁴⁶ (See the capital expenditures section for a discussion of exploration and development expenditures.) 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 proven 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 proven reserve additions (excluding net purchases of proven reserves) over a specified period of time.⁴⁷

⁴⁶ Alternatively, finding costs are the exploration, development, and property acquisition costs of replacing reserves removed through production.

⁴⁷ One inherent limitation of measuring finding costs this way is that the expenditures and the reserve additions recognized in a particular interval do not usually correspond exactly with each other. Expenditures are usually recognized in the period in which the payment actually occurred. Proven reserves are usually recognized when there is reasonable certainty that they can be produced economically. There is no reason that these must occur in the same

Figure 17. Direct Oil and Gas Lifting Costs for FRS Companies, 1981-2005



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 are generally measured in *Performance Profiles* as a weighted average over a period of 3 years, and, if several years of data are presented, they are usually reported in constant dollars (to facilitate comparisons over time).

Average worldwide finding costs for the FRS companies rose 17 percent in the 2003-2005 period, an increase of \$1.55 per boe (**Table 11**). Because additions to reserves by the drill bit barely changed from the previous period, spending to find reserves accounted for almost all of the increase. Three regions more than doubled their finding costs—the Other Western Hemisphere (Central and South America), the former Soviet Union and Eastern Europe, and Africa—while finding costs decreased in four regions: Canada, the Middle East, OECD Europe, and, to a lesser extent, U.S. onshore. With its increase of 55 percent, the U.S. offshore extended its lead over the other regions in finding costs. Five of the nine FRS regions now have double-digit finding costs.

For the two most recent 3-year periods, the most interesting changes in finding costs are in the United States (**Figure 18**). The finding cost increase for the U.S. offshore, while not as large as in 2002-2004 period, continued its spectacular rise. Since the 2001-2003 period, offshore finding costs have almost quadrupled. Equally remarkable, U.S. onshore costs have fallen 31 percent during the same period.

time period (oil and natural gas wells are often operated over a long time period), so that 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 length of 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 they include increasingly older expenditures and reserves, and costs and technology are constantly changing. The only way to solve the correspondence problem would be 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 far out of date.

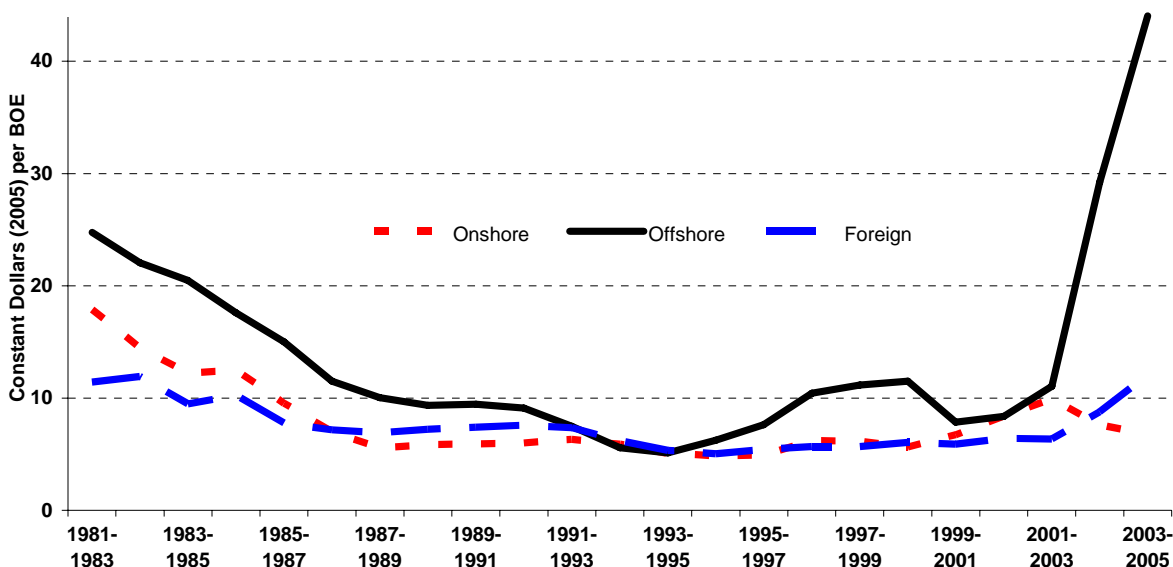
Table 11. Finding Costs by Region for FRS Companies, 2002-2004 and 2003-2005
(Dollars per Barrel of Oil Equivalent)

Region	2002-2004	2003-2005	Percent Change
United States			
Onshore	7.18	6.67	-7.1
Offshore	27.66	42.74	54.5
Total United States	10.33	9.79	-5.2
Foreign			
Canada	26.07	16.46	-36.9
OECD Europe	12.16	9.66	-20.5
Former Soviet Union and Eastern Europe	4.30	13.00	202.3
Africa	7.55	15.25	102.0
Middle East	6.76	4.67	-30.9
Other Eastern Hemisphere	6.18	8.98	45.4
Other Western Hemisphere	4.98	25.06	403.6
Total Foreign	8.30	11.76	41.7
Worldwide	9.18	10.73	16.8

Notes: The above figures are 3-year weighted averages of exploration and development expenditures (current dollars), 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 18. Finding Costs for FRS Companies, 1981-1983 to 2003-2005



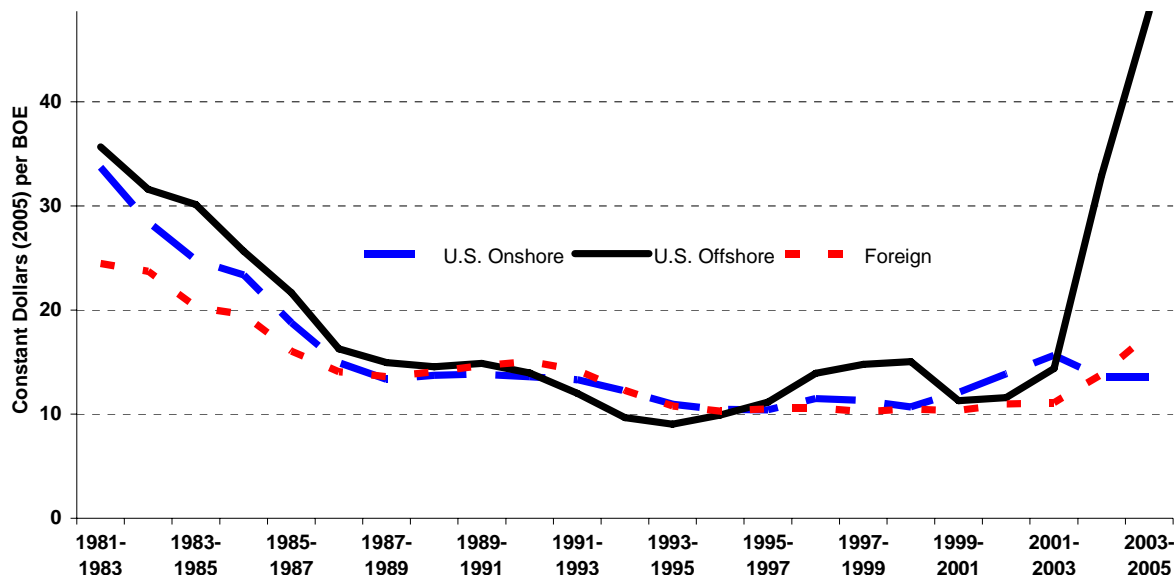
Notes: Costs are the quotient of costs and reserve additions for each three-year period. BOE = Barrels of oil equivalent.

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

Foreign finding costs have almost doubled since 2001-2003, and now join the U.S. offshore in recording their highest level in the history of the FRS survey.

The sum of finding and production costs for the FRS companies increased substantially in the U.S. offshore region to \$48.70 per boe in the 2003-2005 period (**Figure 19**). The foreign region average also

Figure 19. Total Upstream Costs per BOE for FRS Companies, 1981-1983 to 2003-2005



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).

increased significantly in the 2003-2005 period. It was 73 percent higher in 2003-2005 than the low point in 1997-1999. Total upstream costs in the U.S. onshore region in 2003-2005 changed little from the previous period.

Exploration, Development, and Production Spending

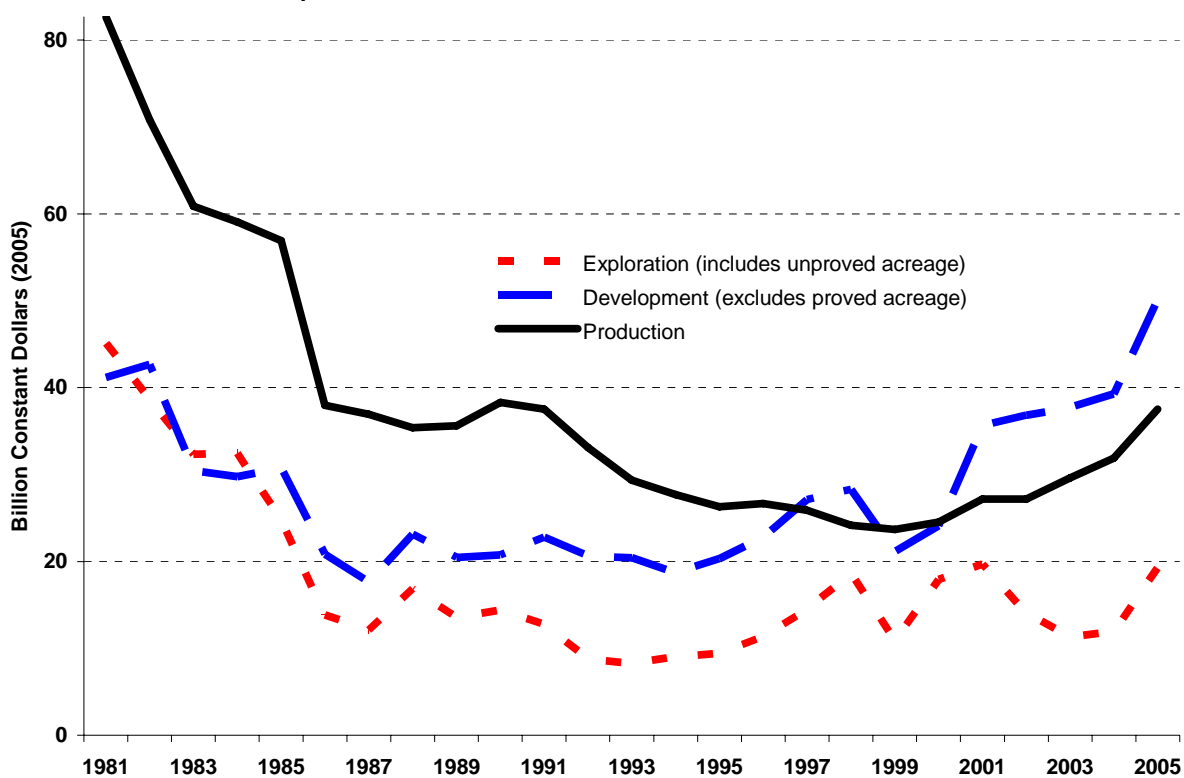
Total exploration, development, and production spending all increased markedly in 2005, with worldwide exploration expenditures (including unproved acreage) increasing 62 percent and development spending (excluding proved acreage) reaching its highest level in the history of the FRS survey (**Figure 20**). Production spending (including production taxes) and development spending have increased annually since 1999, while exploration spending increased in 2004 and 2005, after falling in 2002 and 2003. As a result, both exploration spending was about the same level in 2005 as it had been in 2001. In fact, exploration and development spending have been rising every year since 1993-1994, except for large declines in 1999 and the previously mentioned exploration declines in 2002 and 2003.

Spending to Replace Oil and Gas Production by the FRS Companies

Using historical finding costs and production levels of the FRS companies, the cost of finding additional reserves via the drill bit sufficient to replace production for any given year can be estimated.⁴⁸ Actual exploration and development spending for new reserves not only exceeded the estimated cost to replace

⁴⁸ That is, finding costs times production equals the estimated expenditures necessary to replace production. For the calculation presented here, annual production and 3-year real finding costs are used.

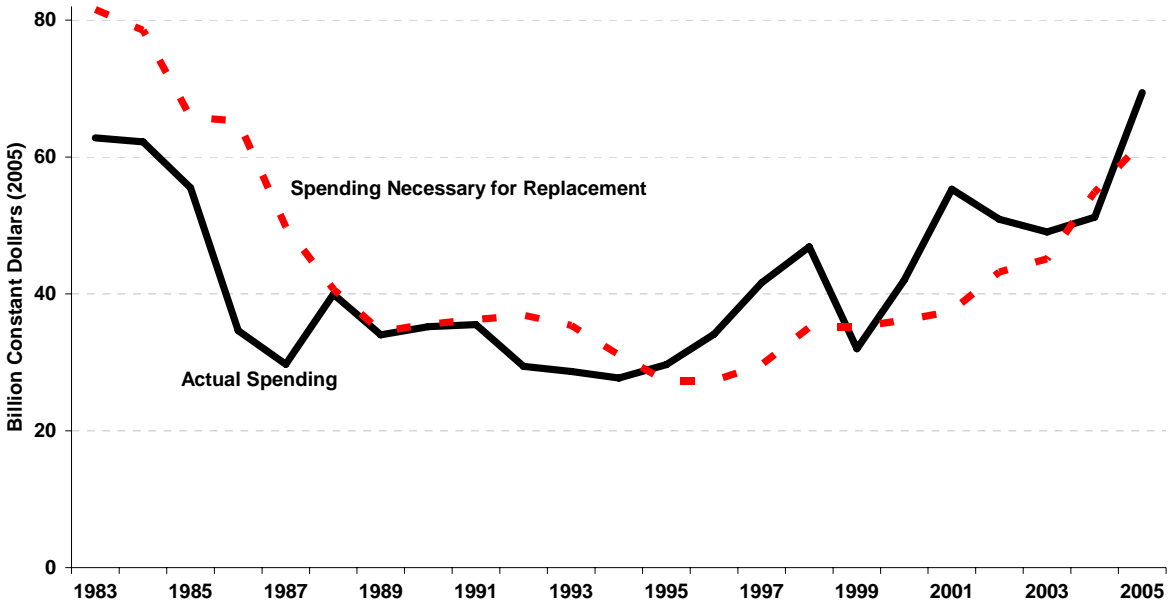
Figure 20. Worldwide Expenditures for Exploration, Development, and Production by FRS Companies, 1981-2005



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

production in 2005, but also reached its highest level in 23 years (**Figure 21**). Actual spending has exceeded the estimated amount necessary to replace production in 9 of the past 11 years. This is in marked contrast to the years from 1983 through 1994, when actual spending never exceeded the amount necessary to replace production.

Figure 21. Actual Spending to Find Reserves and Estimated Spending Necessary to Replace Production for FRS Companies, 1983 - 2005



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

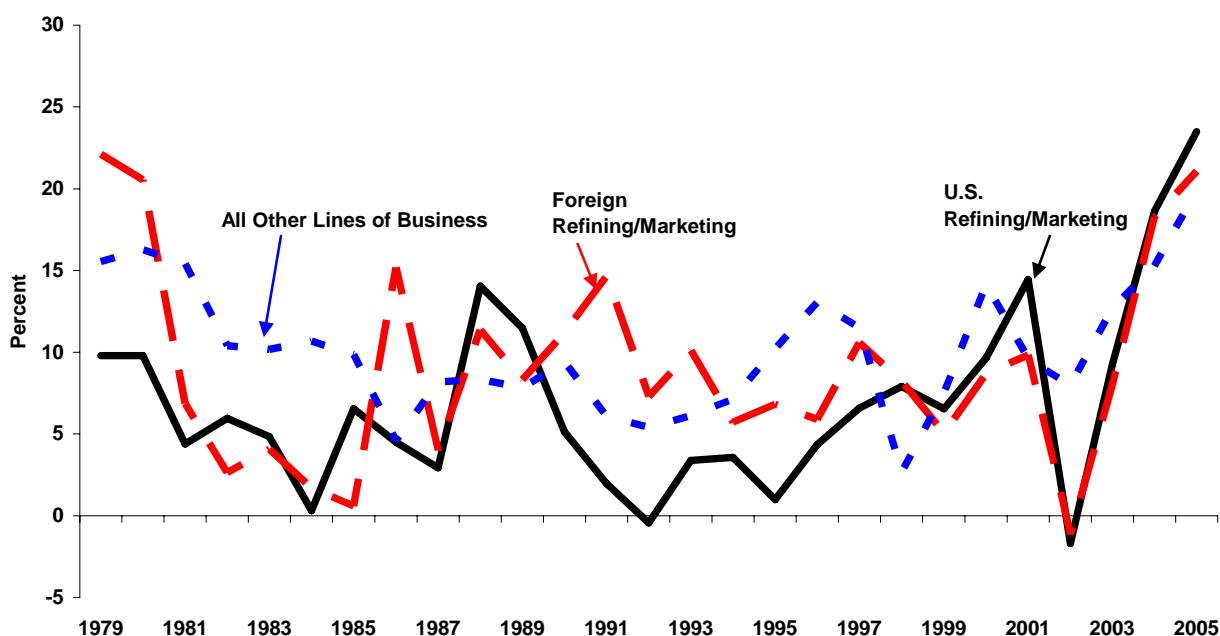
Refining and Marketing

U.S. Refining/Marketing

Profitability

The average profitability of U.S. refining/marketing operations of the FRS companies reached 24 percent in 2005, the highest level since 1977 when FRS data were first collected. The new high exceeded the previous record—registered in 2004—by almost 5 percentage points, and more than doubled the 9-percent return on investment of 2003 (Figure 22). An above-average 9 percent in 2003 was followed by new all-time highs in

Figure 22. Return on Investment in U.S. and Foreign Refining/Marketing, and All Other Lines of Business for FRS Companies, 1979-2005



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

both 2004 and 2005. The ongoing cost-cutting efforts that have characterized the domestic refining/marketing operations of the FRS companies since the 1990s, which contributed to the profitability of the current and previous decades, were overwhelmed by higher natural gas prices in 2005, which led to much higher operating costs in 2005 compared to 2004.

The change in the profitability of U.S. refining/marketing operations can be explored by examining the net refined product margin (net margin), which is highly correlated with profitability.⁴⁹ The net margin is the gross margin (essentially the difference between petroleum product prices and crude oil costs)⁵⁰ minus out-

⁴⁹ 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*.

⁵⁰ 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.

of-pocket operating costs per barrel of refined product sold. The net margin measures before-tax cash earnings from the production and sale of refined products.⁵¹ The \$3.51-per-barrel net margin of 2005 was the highest (in terms of 2005 dollars) in the 29-year history of the FRS (**Figure 5**), exceeding the previous high of 2001 by exactly \$0.52.

The average gross refining margin reported by the FRS companies increased 23 percent compared to 2004 (**Table 12**). The average price received for petroleum products increased \$17.00 per barrel, while raw

Table 12. Sales, Prices, Costs, and Margins in U.S. Refining/Marketing for FRS Companies, 2004-2005

	2004	2005	Percent Change 2004-2005
Refined Product Sales (Million Barrels per Day)	22.8	22.4	-2.0
	(Dollars per Barrel)		
Gasoline Average Price	54.70	71.13	30.0
Distillate Average Price	49.42	72.04	45.8
Other Products Average Price	36.60	47.53	29.8
All Refined Products Average Price	49.96	66.96	34.0
Less: Raw Materials Costs and Product Purchases	41.91	57.08	36.2
Equals: Gross Refining Margin	8.05	9.87	22.6
Less: Direct Operating Costs	5.49	6.36	15.8
Equals: Net Refining Margin ^a	2.56	3.51	37.1
Reseller/wholesaler spread (dealer price - wholesale price)	4.86	2.19	-55.0
Retailer spread (company-operated price - dealer price)	8.79	5.64	-35.9

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

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

materials and purchased product costs rose \$15.17 per barrel, which resulted in a \$1.82-per-barrel increase in the gross refining margin.

Revenues and Costs

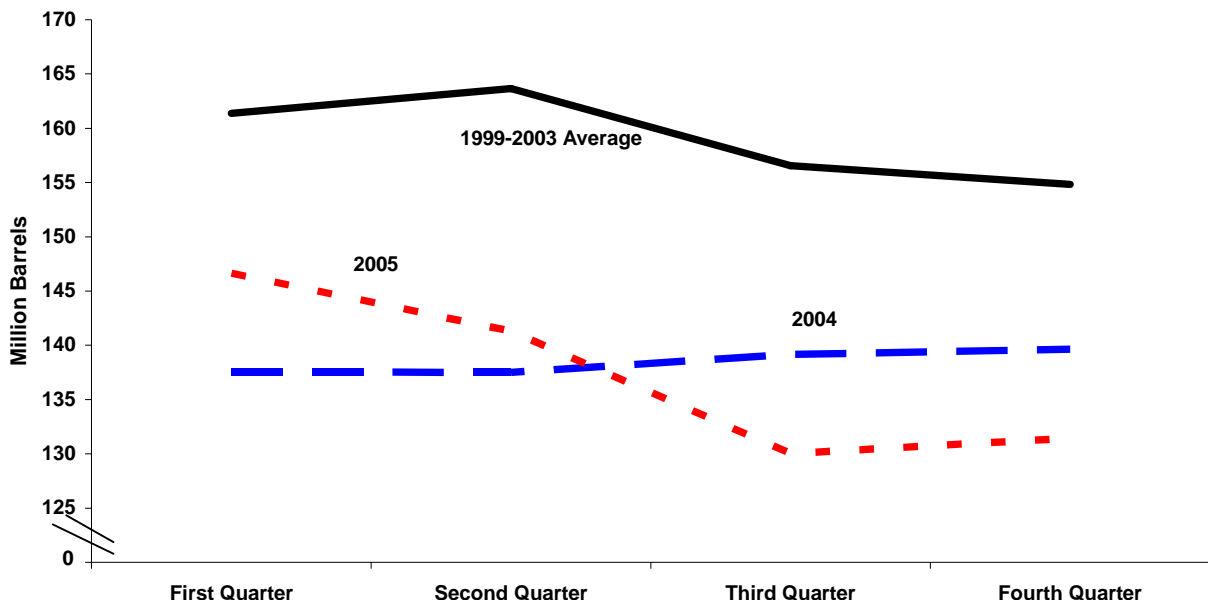
Higher crude oil prices in 2005 (compared to 2004) put upward pressure on petroleum product prices. Similarly, industry-wide stocks of motor gasoline were much lower during the second half of 2005 relative to both 2004 and the 5-year average over the 1999 through 2003 period (**Figure 23**)⁵² and put upward pressure on product prices. Further, the effects⁵³ of Hurricanes Katrina and Rita during the second half of 2005, and especially during the fourth quarter, affected the production and distribution of petroleum products, elevating the supply curve and driving prices higher. Despite U.S. crude oil stock levels reaching historically high levels during all of 2005 relative to 2004 and most of 2005 relative to the averages for the

⁵¹ The net margin excludes peripheral activities such as non-petroleum product sales at convenience stores.

⁵² The stock levels of 2005 were 7 percent and 6 percent lower in the third and fourth quarters of 2005 relative to the same quarters of 2004, and lower in each quarter relative to the average for the period of 1999 through 2003, varying from a low of 9 percent in the first quarter to a high of 17 percent in the third quarter.

⁵³ Domestic crude oil production was 13 percent lower in the fourth quarter of 2005 than in the fourth quarter of 2004, imports of petroleum products were 53 percent higher, and demand for petroleum products was 11 percent lower (Energy Information Administration, *Short-Term Energy Outlook* (December 6, 2005 and October 10, 2006), Table 5). Further, refinery runs for the FRS companies were approximately 8 percent lower in the fourth quarter of 2005 than in the fourth quarter of 2004 (see Energy Information Administration, "Financial News for Major Energy Companies") (http://www.eia.doe.gov/emeu/perfpro/news_m/q405.pdf, as of October 20, 2006).

Figure 23. Quarterly Average U.S. Motor Gasoline Stocks, 1999-2003 Average, 2004, and 2005



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

1999 through 2003 period (**Figure 24**), crude oil and higher raw material costs for FRS companies⁵⁴ rose 36 percent (**Table 12**).

Petroleum product sales declined a relatively slight 2 percent in 2005 relative to 2004 (**Table 12**). The product sales are chiefly composed of motor gasoline and distillate, which decreased 5 percent and increased 1 percent, respectively, while other products increased by 2 percent (**Table 13**). The result of essentially unchanged sales and higher petroleum product prices was a 31-percent increase in domestic petroleum product sales revenues (**Table 14**). Operating costs increased by a slightly smaller percentage from a smaller base than did sales revenues (**Table 14**). This combination of increases in revenues and costs resulted in a 40-percent increase in operating income in 2005 than in 2004 (\$28.9 billion and \$20.6 billion, respectively) and almost a 40-percent increase in net income relative to a year earlier (\$21.0 billion and \$15.2 billion, respectively).

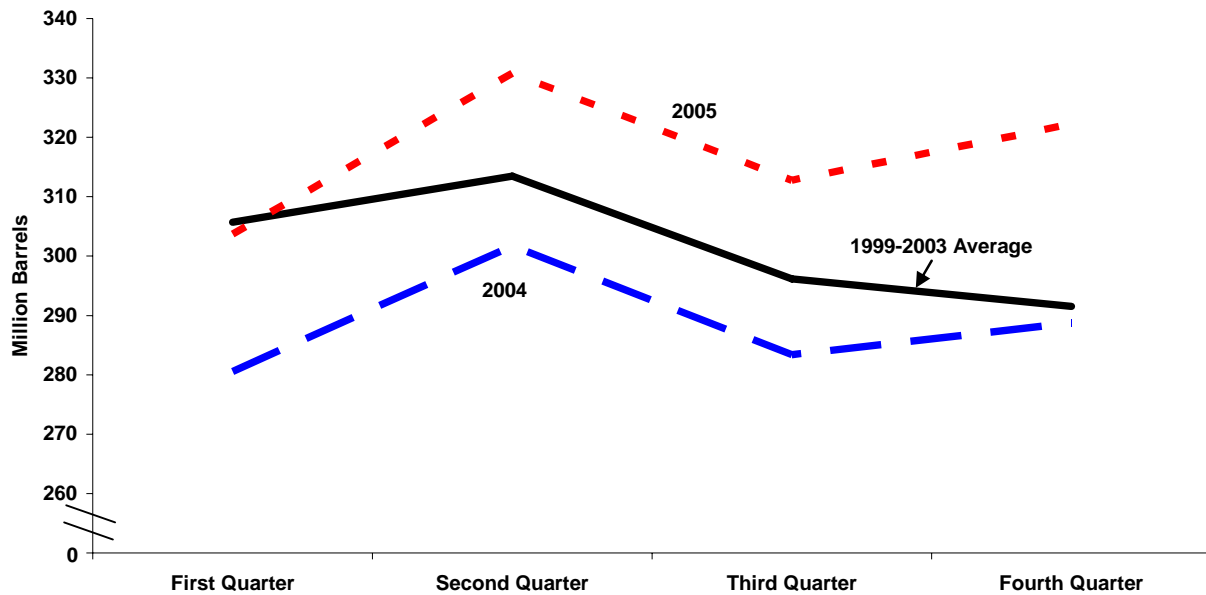
Overall operating expenses increased 30 percent between 2004 and 2005 (**Table 14**). However, those operating expenses most closely associated with refining and marketing operations on a per-barrel basis increased by a smaller 16 percent between 2004 and 2005 (**Table 12**). In particular, operating expenses associated with refining (energy costs and other operating costs) increased,⁵⁵ while marketing costs fell slightly (by 2 percent, or \$0.03 per barrel) (**Table 13**).

Continued efforts by the FRS companies to reduce their energy costs were unsuccessful in 2005, as they increased by \$0.34 per barrel (24 percent). Much of the explanation for higher energy costs is the 31-percent

⁵⁴ Energy Information Administration, *Annual Energy Review 2005*, DOE/EIA-0384 (2005) (Washington, D.C., July 27, 2006), Table 5.21 (Composite Refiner Acquisition Cost). This table is available on the Internet at <http://www.eia.doe.gov/emeu/aer/petro.html> (as of September 22, 2006).

⁵⁵ Refining energy costs rose, but other refining costs fell, with the net effect that overall refining costs fell 4 percent between 2004 and 2005.

Figure 24. Quarterly Average U.S. Crude Oil Stocks, 1999-2003 Average, 2004, and 2005



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

Table 13. U.S. Refined Product Margins and Costs per Barrel Sold and Product Sales Volume for FRS Companies, 2004-2005

	2004	2005	Percent Change 2004 - 2005
(Dollars per Barrel)			
Gross Margin	8.05	9.87	22.6
- Marketing Costs	1.55	1.52	-2.1
- Energy Costs	1.44	1.78	24.3
- Other Operating Costs	2.50	3.06	22.1
= Net Margin	2.56	3.51	37.1
(Million Barrels)			
Product Sales Volume			
Motor Gasoline	12,335	11,720	-5.0
Distillate	6,360	6,434	1.2
Other Products	4,127	4,203	1.8
Total	22,822	22,358	-2.0

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

Table 14. U.S. and Foreign Refining and Marketing^a Financial Items for FRS Companies, 2004-2005
(Million Dollars)

	2004	2005	Percent Change 2004-2005
Domestic Refining/Marketing Operations			
Refined Product Sales Revenue	416,133	546,398	31.3
Other Revenue ^b	15,431	17,379	12.6
Operating Expense ^{b, c}	410,917	534,890	30.2
Operating Income ^c	20,647	28,887	39.9
Net Income, excluding unusual Items	15,525	21,594	39.1
Unusual Items	-328	-631	--
Net Income	15,197	20,963	37.9
Foreign Refining/Marketing Operations^a			
Refined Product Sales Revenue	215,776	264,735	22.7
Other Revenue ^b	11,101	12,391	11.6
Operating Expense ^{b, c}	218,718	267,772	22.4
Operating Income ^c	8,159	9,354	14.6
Net Income, excluding unusual Items	6,941	7,920	--
Unusual Items	12	-116	--
Net Income	6,953	7,804	12.2

^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).

increase in natural gas prices in 2005 relative to 2004.⁵⁶ However, refinery output fell only slightly (0.3 percent, **Table 15**) and put scant downward pressure on energy costs. FRS companies continue their efforts to contain energy costs through cogeneration projects,⁵⁷ which have been one of the major approaches taken to reduce energy costs over the last few years.⁵⁸

Other operating costs related to refining increased between 2004 and 2005, from \$2.50 per barrel to \$3.06 per barrel (**Table 13**), which nearly mirrored the decline between 2003 and 2004. Several factors contributed to this increase. Recent mergers and major transactions required adjustments of operations and corporate

⁵⁶ Energy Information Administration, *Annual Energy Review 2005*, DOE/EIA-0384 (2005) (Washington, D.C., July 27, 2006), Table 6.7 (Nominal Wellhead Price). This table is available on the Internet at <http://www.eia.doe.gov/emeu/aer/natgas.html> (as of September 22, 2006).

⁵⁷ During 2005 Exxon Mobil started up cogeneration facilities at its Baytown, Texas refinery (Exxon Mobil Corporation, "ExxonMobil Announces Start up of Cogeneration Facility in Baytown," (March 29, 2005)). ExxonMobil also noted that "... installation of new generation units at the Beaumont refinery in Texas, as well as at a gas-processing facility in Wyoming, increased cogeneration capacity by 400 megawatts to a total of 3700 megawatts" (ExxonMobil Corporation, *2005 Financial and Operating Review*, p. 41).

⁵⁸ See for example, Energy Information Administration, *Performance Profiles of Major Energy Producers 2001*, DOE/EIA-0206 (2001) (Washington, DC, January 2003), p. 43. (This publication is available on the Internet from a link at <http://www.eia.doe.gov/emeu/finance/histlib.html> (as of December 2, 2005).)

Table 15. U.S. and Foreign Refining and Marketing Investment and Refining Operating Items for FRS Companies, 2004-2005

	2004	2005	Percent Change 2004-2005
	(Billion Dollars)		
U.S. Refining Additions to Investment in Place	8.1	14.5	79.2
U.S. Marketing and Transportation Additions to Investment in Place	2.8	3.1	10.3
Foreign Refining/Marketing Additions to Investment in Place	2.9	2.9	0.4
	13.9	20.6	48.5
	(Thousand Barrels per Day)		
U.S. Refining Capacity	14,409	14,532	0.9
U.S. Refinery Output	15,082	15,039	-0.3
Foreign Refining Capacity	5,698	5,633	-1.1
Foreign Refinery Output	4,905	5,134	4.7
	(Percent)		
U.S. Refinery Utilization Rate ¹	96.5	95.0	(2)
Foreign Refinery Utilization Rate ¹	88.3	89.0	(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).

cultures, which tend to elevate operating costs. Additionally, Hurricanes Katrina and Rita caused substantial stock changes and other adjustments, which tend to elevate operating costs. Finally, environmental spending to comply with the Clean Air Act Amendments of 1990 continues, along with spending to comply with methyl tertiary butyl ether (MTBE) prohibitions and ethanol requirements.⁵⁹

Operational Changes

Retrenchment of marketing operations continued through both selective investment⁶⁰ in outlets in profitable areas and sales of marginal outlets,⁶¹ which contributed to the \$0.03-per-barrel reduction in marketing costs between 2004 and 2005 (**Table 13**). Higher costs of extensive re-branding the marketing outlets of some companies were offset by cost reductions from reduced marketing networks.⁶² In particular, branded

⁵⁹ Although we have no estimate of the significance of the environmental spending in 2004's "other operating costs," some companies (e.g., ConocoPhillips, *2004 Annual Report*, p. 49) mentioned environmental expenses of more than \$600 million during 2004. Additionally, a recent study that examined these is available on EIA's web site at http://www.eia.doe.gov/emeu/perfpro/ref_pi2/index.html.

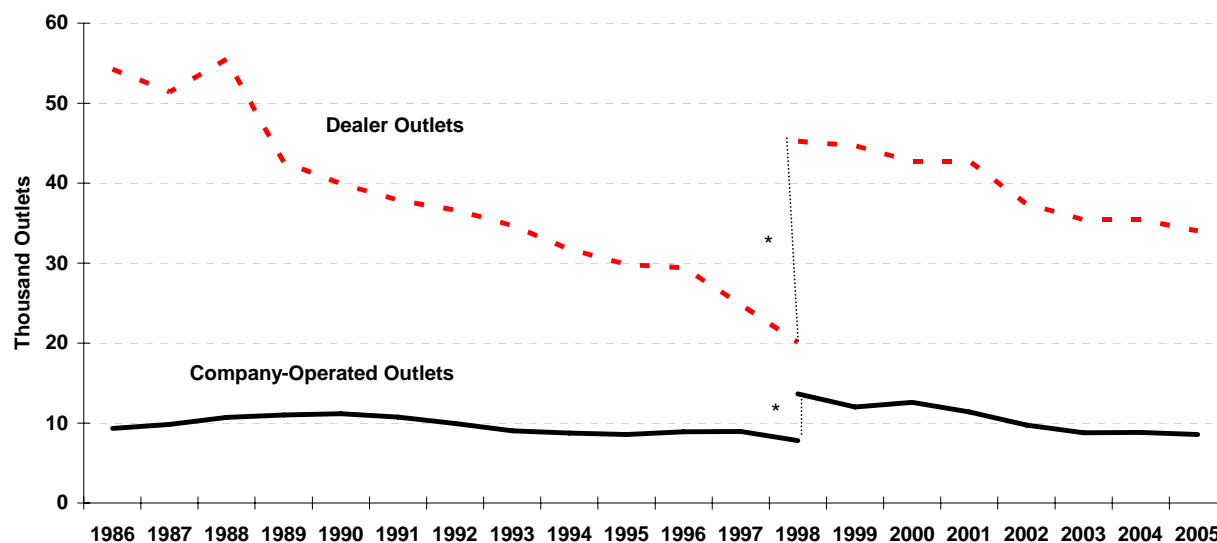
⁶⁰ For example, see ExxonMobil Corporation, "ExxonMobil Expands Availability of 'ewiz' Financial Services Kiosks at on the Run Convenience Stores; ewiz Kiosks Provide Convenient Way to Pay Bills and Conduct Other Financial Services" (July 19, 2005).

⁶¹ BP divested "... a number of regional retail networks in the US" (BP, plc, 2005 Annual Report on Form 20-F, p. F-49); Chevron indicated that it divested more than 700 retail sites around the world (p. 49, 2005 Supplement to the Annual Report); ConocoPhillips sold several Mobil-branded retail outlets on the East Coast (ConocoPhillips Company, 2005 U.S. Securities and Exchange Commission Form 10-K filing, p. 126); and Sunoco continued its selective reduction of company-owned or leased outlets (Sunoco, Inc., 2005 U.S. Securities and Exchange Commission Form 10-K filing, p. 2).

⁶² Chevron expanded its Texaco-branded retailer-owned network by approximately 600 sites during 2005 (Chevron Corporation, *2005 Supplement to the Annual Report*, p. 49, and ChevronTexaco Corporation, *2004 Annual Report*, p. 30); Sunoco is re-branding Mobil stations acquired in 2004 to Sunoco gasoline and APlus convenience stores over time (Sunoco, Inc., 2005 U.S. Securities and Exchange Commission Form 10-K filing, p. 9); and Valero is converting

marketing outlets directly supplied by the FRS companies declined again in 2005 (Figure 25), falling 4 percent to 42,628 (Table 16). Company-operated outlets were reduced (3 percent) in 2005, while dealer

Figure 25. Company-Operated and Dealer Outlets for FRS Companies, 1986-2005



*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).

outlets were reduced slightly more, by 4 percent. Efforts to eliminate marginal outlets tend to increase average productivity of the remaining outlets, which is measured by average outlet monthly motor gasoline sales volume.⁶³ However, productivity actually fell 3 percent across all directly supplied FRS outlets between 2004 and 2005 as Hurricanes Katrina and Rita caused shutdowns of both refineries⁶⁴ and retail outlets and negatively affected efforts to supply some outlets with petroleum products.

Meanwhile, refinery capacity reported by the FRS companies increased by almost 1 percent (Table 15) as expansions in the capacity of many refineries⁶⁵ offset Shell's sale of its 66,000-barrel-per-day (bpd) Bakersfield, California, refinery to Flying J^{66,67} and Valero's sale of its 32,000-bpd Commerce City,

Diamond Shamrock outlets to Valero-branded outlets (Valero Corporation, 2005 U.S. Securities and Exchange Commission Form 10-K filing, p. 38).

⁶³ However, some of the FRS companies have noted in the past that these efforts can be frustrated if productive dealers elect to change brands.

⁶⁴ For example, ConocoPhillips' Alliance, Louisiana refinery was shut down in anticipation of Hurricane Katrina in late August 2005 and remained shut through the end of the year. Meanwhile, its Lake Charles, Louisiana refinery "... was shut down in anticipation of Hurricane Rita in September 2005, resumed operations in mid-October, and returned to full operations in November" (ConocoPhillips Company, 2005 U.S. Securities and Exchange Commission Form 10-K filing, pp. 24-25).

⁶⁵ For example, CITGO expanded its Lake Charles, Louisiana refinery (CITGO Petroleum Corporation, "Citgo boosts Louisiana refinery capacity" (April 21, 2005)); BP expanded its Whiting, Indiana refinery (BP plc, "BP to add hydrotreater at Whiting refinery" (April 21, 2005)); Chevron expanded the fluid catalytic cracking unit at its Pascagoula, Mississippi refinery (Chevron Corporation, 2005 *Supplement to the Annual Report*, p. 1).

⁶⁶ Flying J Inc. is a vertically integrated refiner that operates several truck stops throughout the United States. For more information, see the company's web site at <http://www.flyingj.com> (as of October 19, 2006).

Table 16. Motor Gasoline Distribution and Number of Direct-Supplied Branded Outlets for FRS Companies, 2004-2005

	2004	2005	Percent Change 2004-2005
(Million Barrels)			
Third-Party Volume			
Wholesale	2,344.0	2,221.1	-5.2
Retail			
Dealer	909.2	845.3	-7.0
Company-Operated	534.0	503.6	-5.7
Total Retail	1,443.2	1,349.0	-6.5
Direct	635.6	644.1	1.3
Total Third-Party Volume	4,422.8	4,214.2	-4.7
Intersegment Volume	79.4	63.7	-19.8
(Number of Direct-Supplied Branded Outlets)			
Dealer Outlets	35,406	34,043	-3.8
Company-Operated Outlets	8,848	8,585	-3.0
Total Retail Outlets	44,254	42,628	-3.7
(Thousand Gallons per Month)			
Average Monthly Outlet Volume			
Dealers	89.9	86.9	-3.3
Company-Operated	211.2	205.3	-2.8
All Direct-Supplied Outlets	114.1	110.8	-3.0

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

Colorado, refinery to Suncor Energy Inc.'s U.S. affiliate.⁶⁸ One major intra-FRS transaction⁶⁹ shifted assets around as Valero acquired Premcor and its four refineries (total capacity of 768,400 bpd)⁷⁰ for approximately \$8 billion as of September 1, 2005.⁷¹ Refinery upgrades, mainly to meet Phase II-compliant petroleum products⁷² or to increase the ability to process heavier and/or higher sulfur crude oil,⁷³ increased

⁶⁷ The sale of the refinery was announced on January 10, 2005. The amount of the sale was not disclosed. See "Shell Reaches Agreement To Sell Bakersfield Refinery To Flying J" (January 10, 2005) (<http://www.flyingj.com/company/press/refinery.html>, as of October 19, 2006).

⁶⁸ The sale closed on June 1, 2005. See Valero Energy Corporation, "Suncor Energy acquires second refinery near Denver, Colorado Purchase expands Suncor's downstream capacity, a key step in oil sands growth strategy" (June 1, 2005). Available on the Internet at http://www.valero.com/NewsRoom/News+Releases/NR_2005-06-01.htm (as of October 19, 2006).

⁶⁹ This transaction reduced the number of FRS companies with refining assets by one as Premcor no longer exists.

⁷⁰ Energy Information Administration, *Refinery Capacity Report* (June 15, 2006). Available on the Internet at http://www.eia.doe.gov/oil_gas/petroleum/data_publications/refinery_capacity_data/refcapacity.html (as of October 19, 2006).

⁷¹ Valero Energy Corporation, "Valero Energy Corporation Completes Merger With Premcor Inc., Creating The Largest Refining Company In North America" (September 1, 2005). Available on the Internet at http://www.valero.com/NewsRoom/News+Releases/NR_20050901.htm (as of October 19, 2006).

⁷² For example, Amerada Hess made unspecified investments in its Port Reading, New Jersey refinery (see, Amerada Hess Corporation, 2005 U.S. Securities and Exchange Commission Form 10-K filing, pp. 19-20); BP added a hydrotreater in order to produce low-sulfur diesel (see BP plc, "BP to add hydrotreater at Whiting refinery" (April 21, 2005)); Lyondell-CITGO made expenditures to meet low sulfur fuels regulations and to reduce emissions at its refinery (Lyondell Corporation, 2005 U.S. Securities and Exchange Commission Form 10-K filing, p. 63); Marathon made low-sulfur fuel investments (Marathon, 2005 *Annual Report*, p. 12); and Tesoro made unspecified investments of \$28 million "... to meet the revised gasoline standard (Tesoro Corporation, 2005 U.S. Securities and Exchange Commission Form 10-K filing, p. 11).

additions to U.S. refining net investment in place. The combination of transactions, environmental investment, and turnaround spending contributed to an 79-percent increase in U.S. refining additions to net investment in place, most of which was attributable to Valero's acquisition of Premcor (**Table 15**).⁷⁴

Successful efforts to increase the complexity of the FRS refineries during the last several years (**Table 17**) allow the FRS companies to refine a wide range of crude oils, which has enabled them to take advantage of

Table 17. U.S. Refinery Configurations of FRS Companies, Selected Years, 1974-2005
(Percent)

FRS Companies	Downstream Capacity as a Percent of Crude Distillation Capacity											
	1974	1981	1993	1996	1997	1999	2000	2001	2002	2003	2004	2005
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
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
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
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
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
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
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
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
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
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
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
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

n.c.: Information not collected.

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

price differences between the relatively lower-cost heavy crude oils and the relatively higher-cost light crude oils⁷⁵ and transform them into relatively higher-priced, light products. The price of lighter products (represented by the price of motor gasoline) increased \$4.11 per barrel relative to the price of heavier products (represented by the price of residual fuel oil) (**Figure 26**). Similarly, during 2005 the price of light crude oil relative to heavy crude increased (**Figure 27**), raising the discount paid for heavy crude oil from \$10.48 per barrel in 2004 to \$15.27 per barrel in 2005. These price movements favored companies with complex refineries and provided additional incentives for companies to expand their capability to process heavy crude oil.

Summary

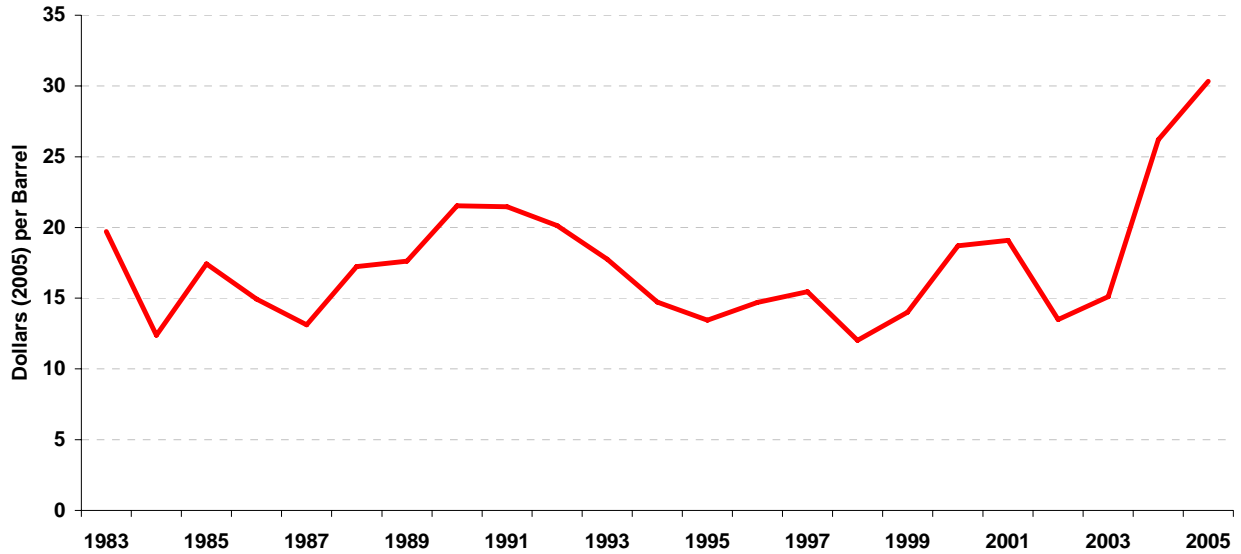
The year 2005 was the most profitable in the 29-year history of the FRS and followed a recent series of unusually profitable years, which were broken in 2002 by the most unprofitable year in the history of the FRS. The primary reason for the increased profitability of the FRS U.S. refining/marketing operations in 2005 relative to 2004 was that the gross refining margin, which increased by \$1.82 per barrel, increased more than did operating costs, which increased \$0.87 per barrel. Increases in energy costs and other

⁷³ Among the companies that noted such investment were ConocoPhillips (ConocoPhillips Company, 2005 U.S. Securities and Exchange Commission Form 10-K filing, p. 26).

⁷⁴ Some of the companies mentioned that capital spending increased, but gave no reasons for the change, for example, Amerada Hess (Amerada Hess Corporation, 2004 U.S. Securities and Exchange Commission Form 10-K filing, p. 45).

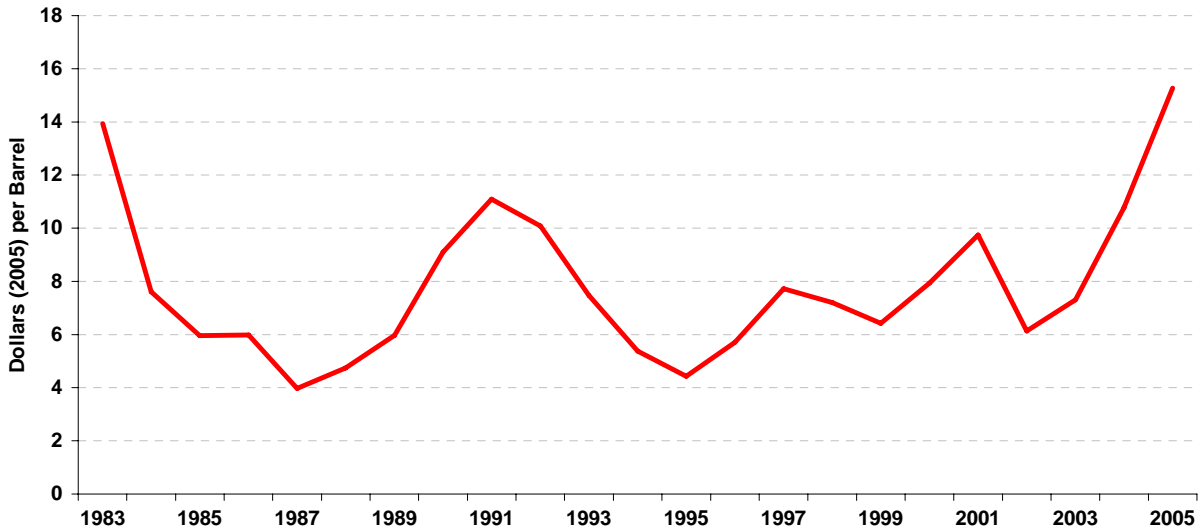
⁷⁵ The efforts continue. For example, ConocoPhillips (ConocoPhillips Company, 2004 Annual Report, p. 48), Premcor (Premcor Inc., 2004 U.S. Securities and Exchange Commission Form 10-K filing, p. 4), and Valero (Valero Energy Corporation, 2004 U.S. Securities and Exchange Commission Form 10-K filing, p. 27) all made investments or acquisitions during 2004 that increased the company's ability to process heavier, lower-cost crude oil.

Figure 26. Resale Price Difference Between Motor Gasoline and Residual Fuel Oil, 1983-2005



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 27. Price Difference Between Light Crude Oil and Heavy Crude Oil, 1983-2005



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.

operating costs (by a total of \$0.90 per barrel) overwhelmed slightly lower marketing costs (which fell by \$0.03 per barrel). The combination of these changes resulted in an increase of approximately \$1.00 per

barrel in the net refining margin, which was a 37-percent increase relative to 2004. FRS cost-cutting efforts over the last several years continued in 2005, but with less success than in many recent years. However, these efforts, such as rationalization of the FRS companies' motor gasoline retailing operations (and the resulting decline in marketing costs), suggest that FRS companies continue to attempt to withstand the vicissitudes of their industry by placing a floor on their profitability.

Foreign Refining/Marketing⁷⁶

Profitability

Three years after recording the lowest profitability (-1 percent) in the 29-year history of the FRS, companies reported a near all-time high for return on net investment in place of foreign refining/marketing operations. The average profit rate of 21 percent was 3 percentage points higher than that of 2004, and the second-highest in the history of the FRS, trailing only 1979's 22 percent (**Figure 22**). Refined product and other revenue increased by approximately \$49 billion relative to 2004, but were largely offset by a \$49-billion increase in operating expense, resulting in a \$1.0-billion increase (15 percent) in operating income and an \$850-million increase (12 percent) in net income (**Table 14**).

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 affiliate⁷⁷ (a joint venture, for example, is usually an unconsolidated affiliate from the perspective of at least one of the partners⁷⁸). 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, where the parent company's proportional share of the affiliate's net income is reported.

Historically, almost half of the FRS consolidated foreign refinery capacity is located in Europe, 49 percent in 2005, 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, 69 percent of FRS unconsolidated foreign refinery capacity was in Asia in 2005 (**Table 18**).

The increase in net income between 2004 and 2005 in FRS foreign refining/marketing operations was due to large increases from both consolidated and unconsolidated operations (**Figure 28**). Worldwide petroleum demand increased (**Figure 29**) by approximately 2 percent, contributing to greater earnings. Additionally, the companies identified numerous reasons for the increased profitability of FRS foreign refining/marketing

⁷⁶ The International Marine business segment has been combined with Foreign Refining/Marketing for this report to prevent disclosure of company-level data. Relative to Foreign Refining/Marketing (in terms of revenue or net investment in place), International Marine is about one-tenth the size and has little material effect on the overall results of Foreign Refining/Marketing.

⁷⁷ 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.

⁷⁸ 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.

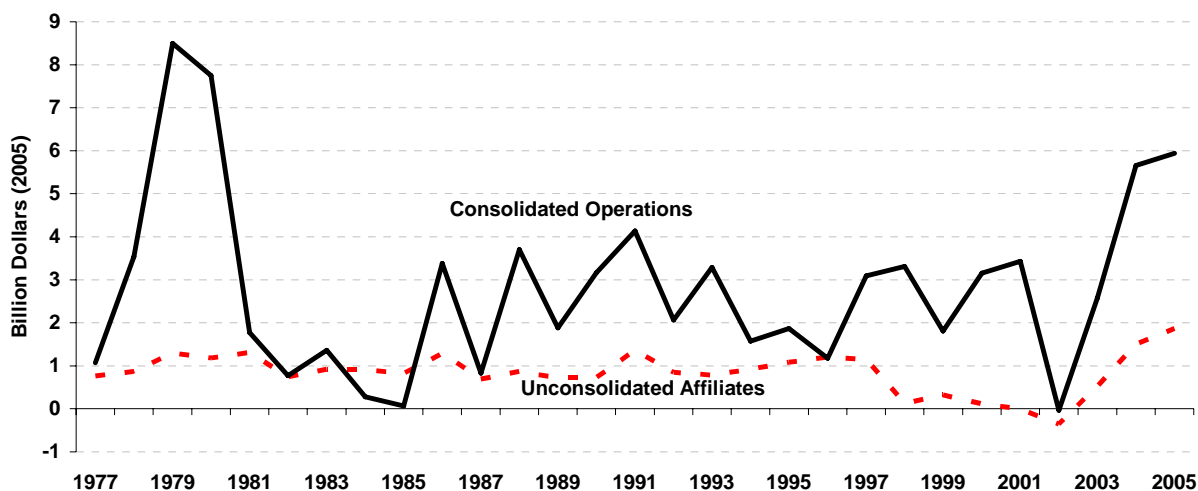
Table 18. Regional Distribution of Foreign Refinery Capacity for FRS Companies, 2004-2005
(Percent)

	Consolidated Operations		Unconsolidated Affiliates	
	2004	2005	2004	2005
Europe	48.0	48.7	17.0	16.9
Asia	26.5	25.7	69.1	68.5
Latin America	9.1	9.0	0.6	0.6
Canada	13.9	14.1	0.0	0.0
Other	2.5	2.5	13.2	13.9
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.

Figure 28. Foreign Refining and Marketing Net Income^a from Consolidated Operations and Unconsolidated Affiliates of FRS Companies, 1977-2005



^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).

operations (both consolidated and unconsolidated) in public statements, including increased product sales,⁷⁹ improved refining margins,⁸⁰ greater production volumes and more profitable marketing operations,⁸¹ greater average refinery capacity,⁸² and higher utilization rates⁸³ (Table 15).

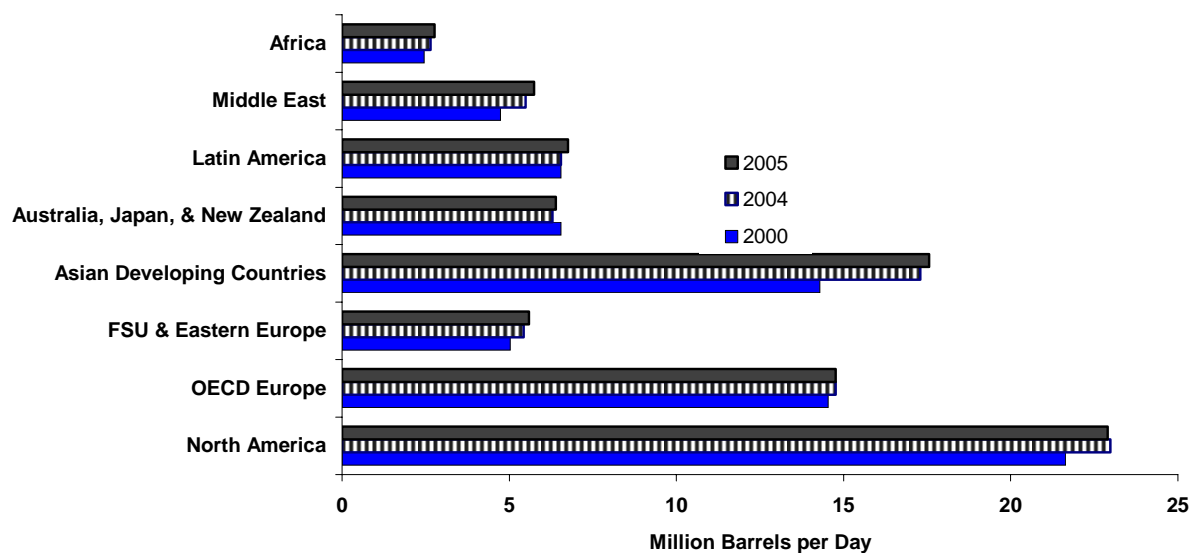
⁷⁹ Exxon Mobil Corporation, 2005 U.S. Securities and Exchange Commission Form 10-K filing, p. 34.

⁸⁰ ConocoPhillips Company, 2005 U.S. Securities and Exchange Commission Form 10-K filing, p. 64; and Exxon Mobil Corporation, U.S. Securities and Exchange Commission Form 10-K filing, p. 34.

⁸¹ ConocoPhillips Company, 2005 U.S. Securities and Exchange Commission Form 10-K filing, p. 65.

⁸² Chevron's Caltex affiliate had a full year of 50-percent ownership of the Singapore Refining Company, which was increased from 33 percent to 50 percent in July 2004 (Chevron Corporation, 2005 U.S. Securities and Exchange Commission Form 10-K filing, p. 25). Similarly, Valero had a full year of ownership of its Aruba refinery, which was

Figure 29. Petroleum Consumption by Region, 2000, 2004, and 2005



Note: OECD stands for the Organisation for Economic Co-operation and Development.
 Source: BP plc, *BP Statistical Review of World Energy* (June 2006), p. 11.

Consolidated Operations

Earnings from the FRS companies' consolidated operations increased (**Figure 28**) almost \$450 million (8 percent) between 2004 and 2005, providing \$5,940 million of net income. The FRS consolidated operations generated higher earnings by "... enhancing its European assets" (likely upgrading marketing outlets),⁸⁴ reducing its costs by divesting non-core retail assets,⁸⁵ and expanding refinery capacity.

Higher earnings from consolidated FRS foreign refining/marketing operations occurred within a difficult industry environment of lower refining margins and flat European petroleum demand. Europe's consumption of petroleum (**Figure 29**) remained unchanged between 2004 and 2005. Further, European refining margins (represented by the Rotterdam/Brent gross refining margin) were consistently lower during 2005 than during 2004 (**Figure 30**), with few exceptions (September and October). The result was that the average margin for 2005 was \$0.54 per barrel lower than the average margin for 2004.

Unconsolidated Operations

During 2005, the FRS companies' unconsolidated affiliates generated \$1,864 million of net income, which was 28 percent higher than the level of 2004 and was the highest level in the 29-year history of the FRS (in 2005 dollars). Company public disclosures included some reasons for the higher earnings generated by the Asian operations of the FRS companies, which included increased refinery runs⁸⁶ and higher refining

acquired in May 2005 (Valero Energy Corporation, 2005 U.S. Securities and Exchange Commission Form 10-K filing, p. 72).

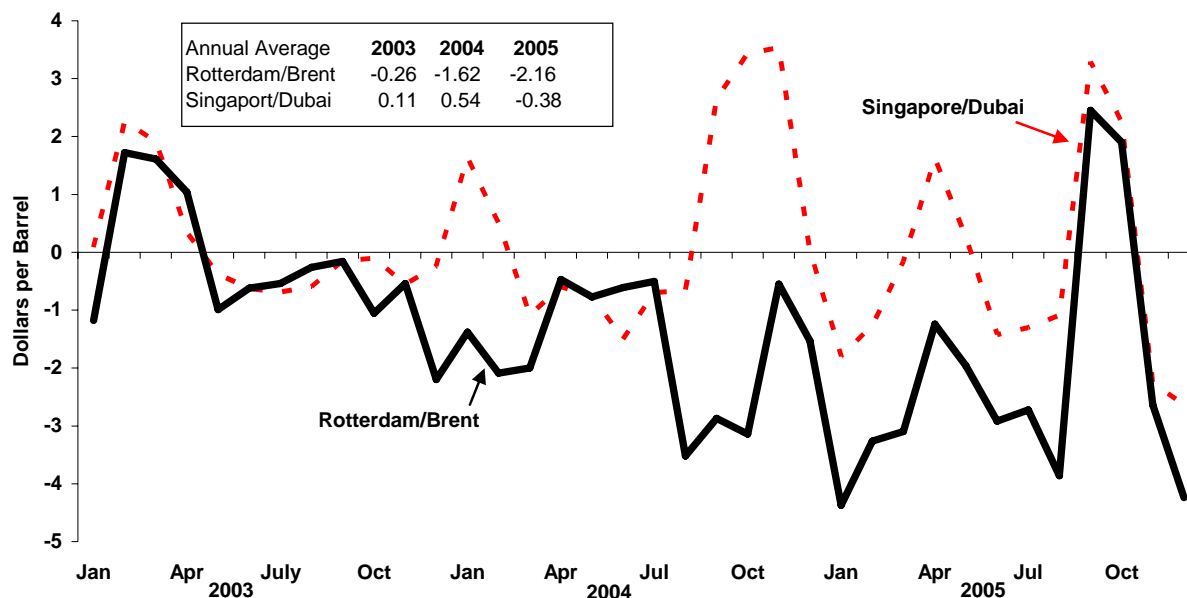
⁸³ ConocoPhillips Company, 2005 U.S. Securities and Exchange Commission Form 10-K filing, p. 65.

⁸⁴ Exxon Mobil, *2005 Financial and Operating Review*, p. 71.

⁸⁵ ChevronTexaco Corporation, *2004 Annual Report*, p. 30.

⁸⁶ Chevron's Caltex affiliate had a full year of 50-percent ownership of the Singapore Refining Company, which was increased from 33 percent to 50 percent in July 2004 (Chevron Corporation, 2005 U.S. Securities and Exchange Commission Form 10-K filing, p. 25).

Figure 30. Foreign Gross Refining Margins, 2003-2005



Sources: Energy Intelligence Group, *Oil Market Intelligence* **2003**: January 2004 and July 2003, p. 12; **2004**: January 2005 and July 2004, p. 12; and **2005**: January 2006 and July 2005, p. 12.

margins received by some companies.⁸⁷ Additionally, cost cutting⁸⁸ and expansion⁸⁹ contributed to higher earnings.

Higher 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 2004 and 2005 (**Figure 29**) by 2 percent. This factor further contributed to higher earnings for FRS unconsolidated foreign refining/marketing operations.

However, industry-wide Asia refining margins of 2005 were lower than those of 2004 for more than half of the year (except for March through June and September) (**Figure 30**). The mid-year increase in refining margins (relative to 2004) was insufficient to elevate the average annual gross refining margin in Asia (represented by the Singapore/Dubai gross refining margin) for 2005 above that of 2004, leaving it \$0.92 per barrel lower, which put downward pressure on the earnings from unconsolidated operations.

Summary

Thus, FRS companies' foreign refining/marketing earnings increased substantially despite essentially unchanged petroleum product consumption and decreases in industry gross refining margins in both of the two major regions in which the FRS companies operate – Europe and Asia. However, expansion/enhancement of operations and cost-cutting figured prominently in the increased earnings and near-record profitability of FRS foreign refining/marketing operations in 2005 (relative to 2004).

⁸⁷ Chevron Corporation, 2005 U.S. Securities and Exchange Commission Form 10-K filing, p. FS-4.

⁸⁸ ConocoPhillips Company, 2005 U.S. Securities and Exchange Commission Form 10-K filing, p. 31.

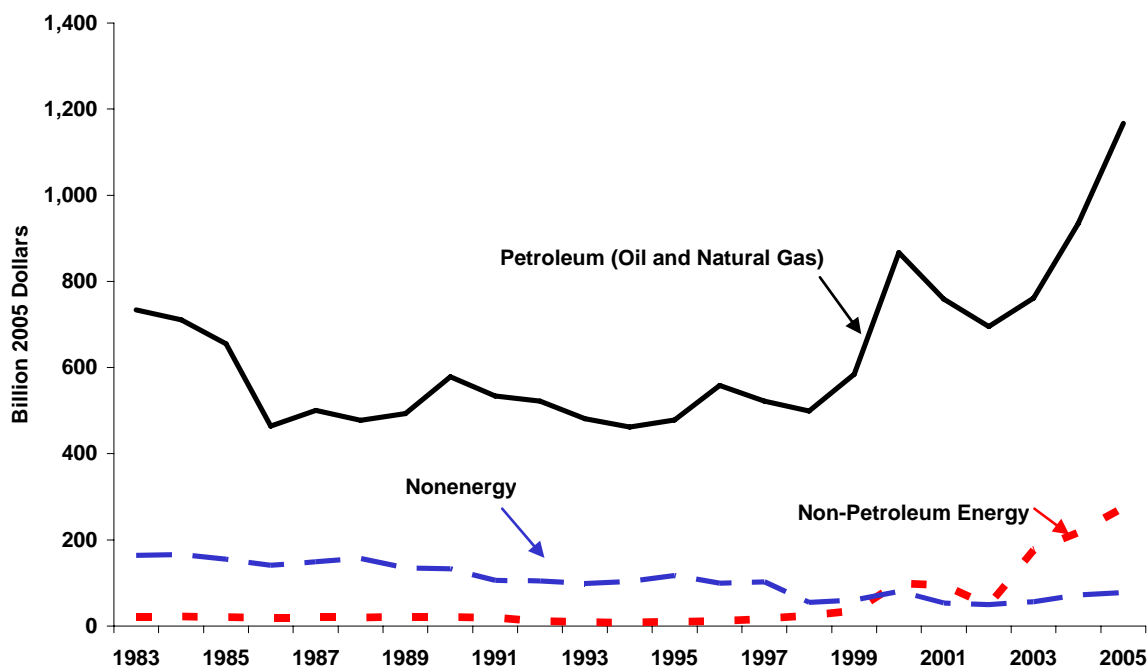
⁸⁹ Exxon Mobil increased its foreign downstream capital expenditures due to economic growth in Asia (Exxon Mobil Corporation, 2005 *Financial and Operating Review*, p. 65).

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

For the 2005 reporting year, 29 major energy companies reported their financial and operating data to the Energy Information Administration's (EIA) Financial Reporting System (FRS) on Form EIA-28.⁹⁰ These companies (referred to as the FRS companies in this report) occupy a significant position in the U.S.⁹¹ economy. In 2005, operating revenues of the FRS companies totaled \$1,334 billion, which is equal to 15 percent of the \$9.1 trillion in revenues of the Fortune 500 corporations.⁹²

The reporting companies engage in a wide range of business activities, but their most important activities are in the energy sector. About 95 percent, or \$1,442 billion, of allocated operating revenues⁹³ were derived from energy lines of business. Nearly all of these revenues were derived from the companies' core petroleum operations (**Figure 31**). (For the purposes of this report, the petroleum line of business

Figure 31. Operating Revenues by Line of Business for FRS Companies, 1983-2005



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

⁹⁰ Aggregate time series data from Form EIA-28 for 1977 through 2005 and previous editions of this report can be obtained from the EIA (see <http://www.eia.doe.gov/emeu/finance/page2.html>).

⁹¹ For the purposes of this report, the term "United States" typically includes the 50 states, the District of Columbia, Puerto Rico, and the U.S. Virgin Islands.

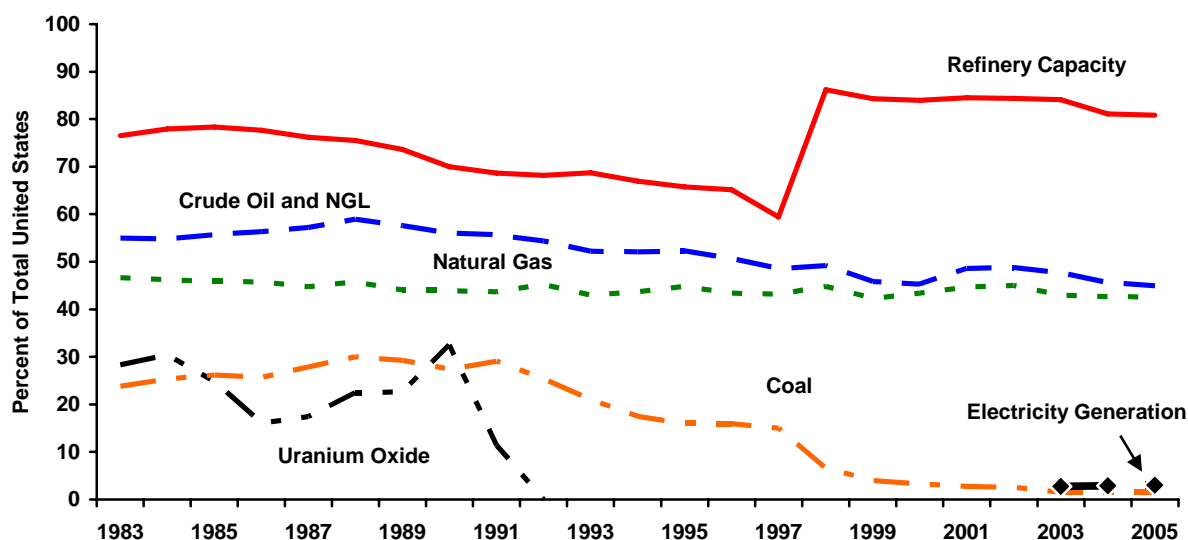
⁹² The Fortune 500 is a list of the 500 largest U.S. corporations, ranked by revenues, published annually by Fortune magazine (see http://money.cnn.com/magazines/fortune/fortune500/full_list/ (as of October 17, 2006)).

⁹³ The sum of allocated operating revenue (\$1,521 billion) exceeds corporate operating revenue (\$1,334 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, the revenue from inter-segment sales are eliminated in calculating corporate operating revenue, which only includes sales by the company to third parties.

includes natural gas exploration, development, and production, but not downstream natural gas, which became a separate FRS line of business beginning with the 2003 reporting year, as did electric power.⁹⁴)

In 2005, the FRS companies accounted for 45 percent of total U.S. crude oil and NGL production,⁹⁵ 43 percent of natural gas production, 81 percent of U.S. refining capacity, 3 percent of U.S. electricity generation, and 2 percent of U.S. coal production (**Figure 32**). About 79 percent of the FRS companies'

Figure 32. Shares of U.S. Energy Production^a and Refinery Capacity for FRS Companies, 1983-2005



^aOil and 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.

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).

assets and 82 percent of new investments during 2005 were devoted to sustaining various aspects of petroleum production, processing, transportation, and marketing.

Energy production other than oil and natural gas has been a relatively small, but growing, part of the FRS companies' operations since 1994. During 2005, the combined operating revenues of the downstream natural gas, electricity, and other energy operations⁹⁶ of the FRS companies totaled \$275 billion, or 18 percent of allocated revenues. Increased activity in downstream natural gas and electricity more than

⁹⁴ Generally accepted accounting principles (GAAP) for the United States do not require that energy companies separately account 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.

⁹⁵ Note that U.S. totals include royalty production, while the FRS companies' production levels do not. Thus, the FRS companies' share of crude oil and NGL production and natural gas production are somewhat understated by these calculations.

⁹⁶ 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 has been merged with that of the alternate energy operations, although the operating information related to coal continues to be collected.

offset the continued decline in coal activity by the FRS companies, which began in 1994 and essentially continues to the present.⁹⁷ The growing importance of downstream natural gas and electric power operations to the FRS companies resulted in the addition of each as a separate line of business beginning with the 2003 reporting year.

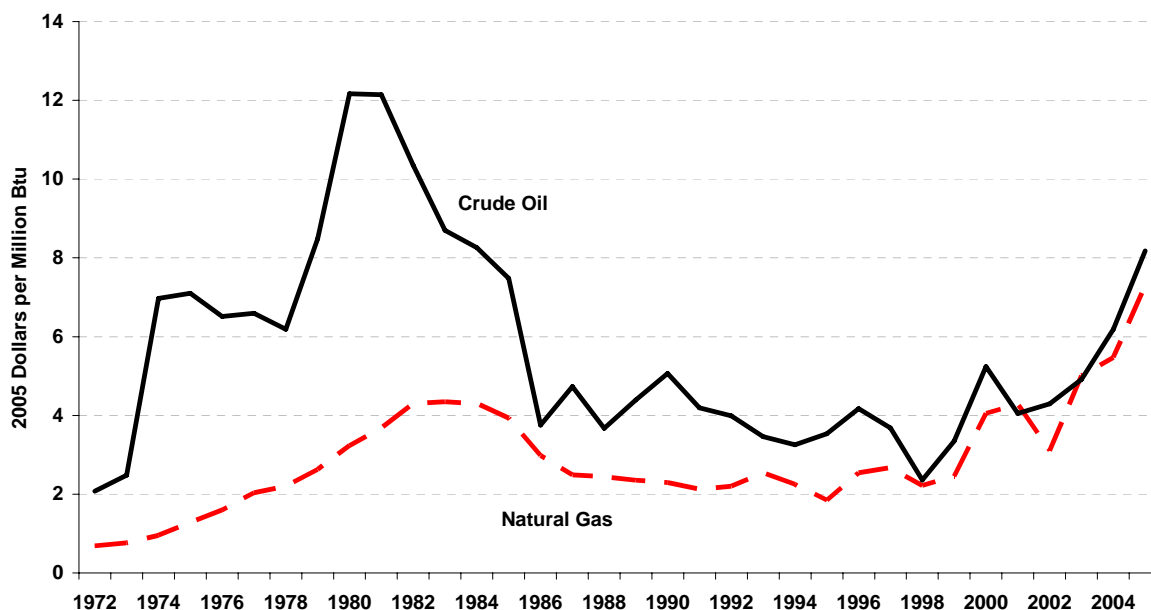
Nonenergy businesses, mainly chemicals, accounted for 5 percent, or \$78 billion, of the FRS companies' allocated revenues in 2003. During the 1980s, the FRS companies were major producers of domestic uranium. However, no FRS company has produced uranium oxide domestically since 1991.

⁹⁷ In particular the FRS companies accounted for 29 percent of U.S. coal production in 1991, 15 percent in 1997, 7 percent in 1998, 2.5 percent in 2002, and 1.6 percent for each of the past 3 years. These declines were due largely to the lack of profitability attributable to the coal operations of the FRS companies compared to other FRS operations, averaging a 4-percent annual return over the period 1977–2002. Beginning in 2003 profitability for coal operations alone can no longer be calculated due to changes in Form EIA-28.

Overview of 2005 Petroleum and Natural Gas Markets

The FRS companies' financial results for 2005 were driven primarily by substantially higher prices for crude oil, natural gas, and petroleum products. Crude oil prices (imported refiner acquisition cost) increased 32 percent from 2004 (in constant 2005 dollars), to \$48.86 per barrel, the highest level since 1984.⁹⁸ Natural gas wellhead prices increased 34 percent to \$7.51 per thousand cubic feet (mcf) in 2005.⁹⁹ Although crude oil prices remained higher on a Btu basis in 2005, natural gas prices have risen by nearly the same amount as crude oil since 1998 (**Figure 33**).

Figure 33. Imported Refiner Acquisition Cost of Crude Oil and Natural Gas Wellhead Prices, 1972-2005



Source: Crude Oil Price: Energy Information Administration, *Monthly Energy Review*, DOE/EIA-0034 (2006/09) (Washington, DC, September 2006), Table 9.1; Natural Gas Price: Energy Information Administration, *Monthly Energy Review*, DOE/EIA-0034 (2006/09) (Washington, DC, September 2006), Table 9.11; Heat Content Factors: Energy Information Administration, *Monthly Energy Review*, DOE/EIA-0034 (2006/09) (Washington, DC, September 2006), Tables A2 and A4.

Gross refining margins increased in 2005 as petroleum product prices rose by more than the increase in crude oil prices (on a per-unit basis). Petroleum product prices rose sharply in the second half of the year following Hurricanes Katrina and Rita.¹⁰⁰ For the first time since EIA began collecting these data in 1978, annual average distillate and jet fuel prices were higher than gasoline prices (**Figure 34**). Gasoline (refiner sales for resale) averaged \$1.67 per gallon in 2005, up 26 percent from 2004 (in constant 2005 dollars). Distillate and jet fuel prices reached their highest levels since 1981. They each averaged \$1.72 per gallon in 2005, 42 percent and 38 percent higher, respectively, than prices in 2004.

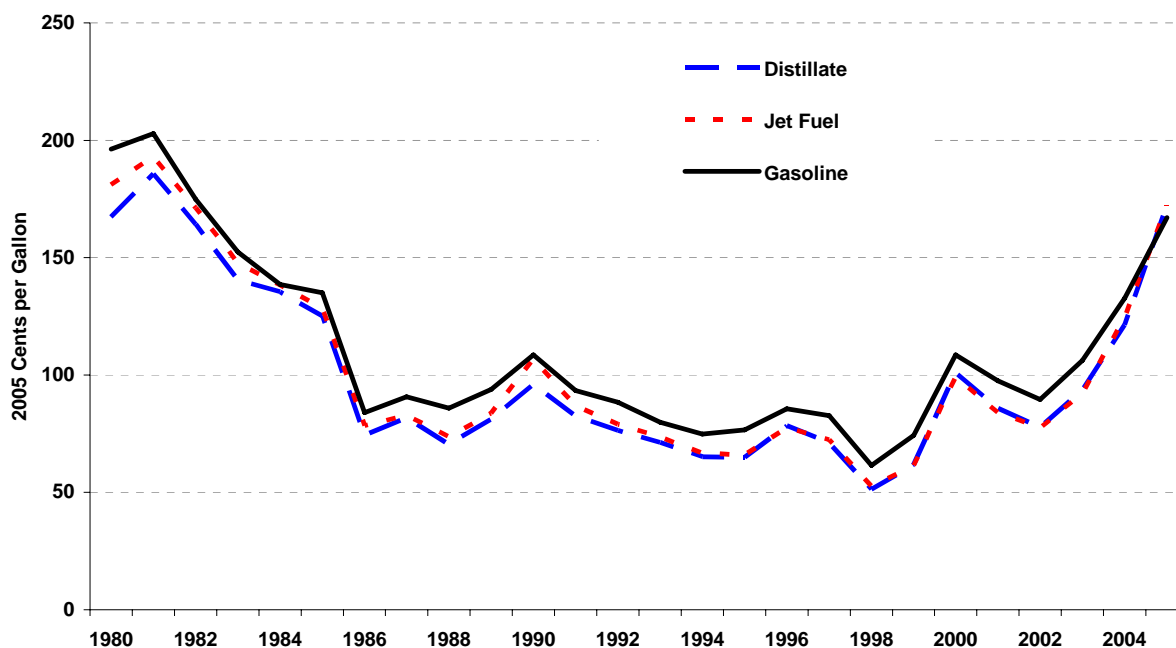
Despite higher prices, world oil demand increased 1.4 million barrels per day (mmbd) (1.7 percent) from the 2004 level to 83.8 mmbd in 2005 (**Table 19**). This was about half of the increase for 2004 (**Figure 35**)

⁹⁸ Energy Information Administration, *Monthly Energy Review*, DOE/EIA-0034 (2006/09) (Washington, DC, September 2006), Table 9.1.

⁹⁹ Energy Information Administration, *Monthly Energy Review*, DOE/EIA-0034 (2006/09) (Washington, DC, September 2006), Table 9.11.

¹⁰⁰ Energy Information Administration, *Monthly Energy Review* (September 2006), Table 9.7.

Figure 34. Refiner Prices of Petroleum Products for Resale, 1980-2005



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 5, 2006).

Table 19. World Petroleum Balance, 2004–2005
(Million Barrels per Day)

	Quarterly 2005				Annual	
	Q1	Q2	Q3	Q4	2004	2005
Demand	84.3	82.4	83.2	85.5	82.5	83.8
Supply	84.1	84.7	84.2	84.4	83.0	84.3
Supply from Inventories	0.1	-2.2	-1.0	1.1	-0.6	-0.5

Note: Supply from Inventories includes statistical discrepancy.

Source: Energy Information Administration, *International Petroleum Monthly* (September 2006), Table 2.1.

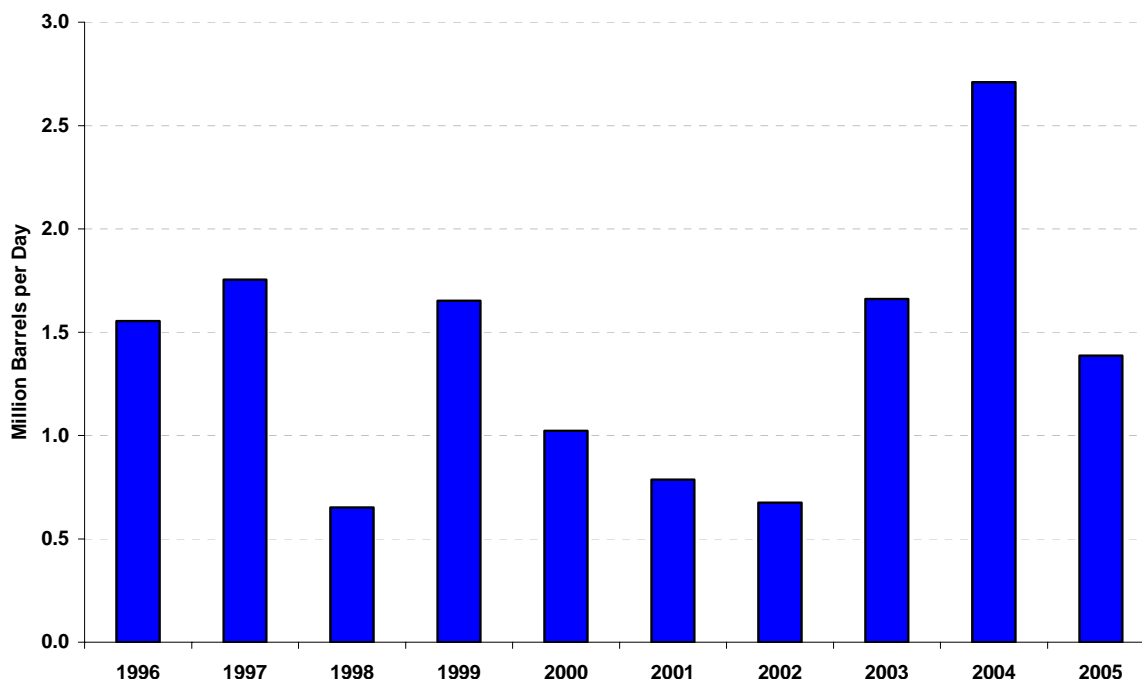
but nearly the same as the average annual increase from 1995 to 2004. Supply (which includes the production of crude oil, NGLs and other liquids, and refinery processing gain) remained higher than demand, which resulted in an increase in petroleum inventories of 0.5 mmbd in 2005. Non-OPEC (Organization of the Petroleum Exporting Countries) supply fell in 2005 for the first time since 1993,¹⁰¹ primarily as a result of declines in production in the United States and the North Sea.¹⁰² Worldwide reserve additions replaced 122 percent of crude oil and NGL production in 2005. The reserve replacement rate for non-OPEC countries was 109 percent.¹⁰³

¹⁰¹ Calculated from Energy Information Administration, *International Petroleum Monthly* (September 2006), Table 4.4.

¹⁰² Energy Information Administration, *International Petroleum Monthly* (September 2006), Tables 4.1b and 4.1c.

¹⁰³ Calculated from reserves and production data in BP plc, *BP Statistical Review of World Energy* (June 2006), pp. 6, 8.

Figure 35. World Oil Consumption, Change from Previous Year, 1996-2005



Source: Energy Information Administration, *International Petroleum Monthly*, September 2006, Table 4.6, available on the Internet at <http://www.eia.doe.gov/ipm/> (as of October 5, 2006).

Growth in petroleum product demand (represented by petroleum product supplied) slowed considerably in the United States in 2005. It increased by only 0.3 percent over the previous year, to 20.8 mmbd (**Table 20**). This was only about one-tenth of the increase in 2004. Increases in demand for gasoline, distillate, jet

Table 20. U.S. Petroleum Balance, 2004–2005
(Million Barrels per Day)

	Quarterly 2005				Annual	
	Q1	Q2	Q3	Q4	2004	2005
Demand	20.8	20.6	20.9	20.8	20.7	20.8
Crude Oil Production	5.5	5.5	4.9	4.8	5.4	5.2
NGL Production	1.9	1.8	1.7	1.5	1.8	1.7
Other Inputs	1.5	1.6	1.5	1.4	1.6	1.5
Net Imports	12.2	12.5	12.5	13.0	12.1	12.5
Supply from Inventories	-0.2	-0.9	0.4	0.1	-0.2	-0.1

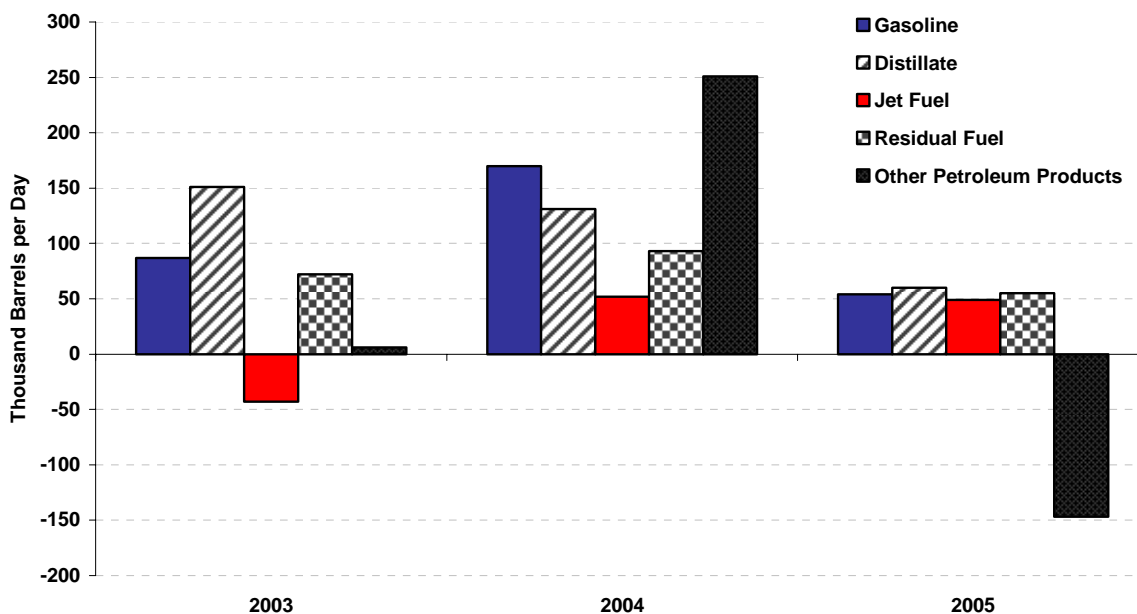
Note: Other Inputs includes adjustments, other liquids production and refinery processing gain.

Source: Calculated from Energy Information Administration, *Monthly Energy Review*, DOE-EIA-0034 (2006/9) (Washington, DC, September 2006), Tables 3.1a and 3.1b.

fuel, and residual fuel offset a decline in “other petroleum products” (**Figure 36**), which was led by a 102,000 barrel-per-day decline in demand for liquefied petroleum gases (LPG) and a 58,000 barrel-per-day decline in demand for petrochemical feedstock.

With Hurricanes Katrina and Rita affecting a substantial portion of oil and gas production in the U.S. Gulf of Mexico, domestic crude oil production fell 241,000 barrels per day (4.4 percent) in 2005 from 2004, and NGL production declined 92,000 barrels per day (5.1 percent). Net imports of petroleum increased by 452,000 barrels per day (3.7 percent) in 2005, sufficient to meet demand and to add 145,000 barrels per day to crude oil and petroleum product inventories.

Figure 36. U. S. Petroleum Product Consumption, Change from Previous Year, 2003-2005



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 5, 2006).

Crude oil reserve additions in the United States in 2005 outpaced production for the first time since 2002. Producers also added more NGL reserves in 2004 and 2005 than they produced. The combined reserve replacement rate for crude oil and NGLs was 125 percent in 2005.¹⁰⁴

Several refineries were also affected by hurricane damage. U.S. refinery output declined in 2005 by 14,000 barrels per day (0.1 percent) from 2004. Reflective of the decline in demand, refinery production of LPG and petrochemical feedstock fell in 2005. Refinery production of residual fuel declined, and imports increased to meet demand. Distillate output increased 3.7 percent from 2004, while the output of other products showed little change.¹⁰⁵

Natural gas demand in the United States fell 2.5 percent in 2005 to 21.9 trillion cubic feet (**Table 21**) as natural gas prices reached their highest levels on record. Domestic natural gas production, also affected by Hurricanes Katrina and Rita, fell 2.7 percent in 2005 from 2004. Natural gas imports increased by 5.7 percent, nearly bringing supply and demand into balance for the year.

Natural gas reserve additions in the United States increased 34 percent from the previous year to 30.3 trillion cubic feet in 2005, representing a reserve replacement rate of 164 percent.¹⁰⁶

¹⁰⁴ 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 2005 Annual Report* (September 2006), p. 3.

¹⁰⁵ Energy Information Administration, http://tonto.eia.doe.gov/dnav/pet/xls/pet_pnp_refp_dc_nus_mbbldpd_a.xls.

¹⁰⁶ 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 2005 Annual Report* (September 2006), p. 3.

Table 21. U.S. Natural Gas Balance, 2004–2005
(Trillion Cubic Feet)

	Quarterly 2005				Annual	
	Q1	Q2	Q3	Q4	2004	2005
Demand	7.0	4.8	4.8	5.4	22.4	21.9
Natural Gas Production	4.7	4.7	4.5	4.4	18.8	18.2
Other Inputs	0.0	0.2	0.1	-0.4	0.4	0.0
Net Imports	0.9	0.8	0.9	1.0	3.4	3.6
Supply from Inventories	1.4	-0.9	-0.7	0.3	-0.1	0.0

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

Source: Energy Information Administration, *Monthly Energy Review*, DOE-EIA-0034 (2006/9)
(Washington, DC, September 2006), Table 4.1.

About Performance Profiles and the Financial Reporting System

The Energy Information Administration's (EIA) *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. *Performance Profiles* focuses on annual aggregate changes in profits, cash flow, and investment in the U.S. 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 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 Financial Reporting System (FRS). The FRS Companies derive the bulk of their revenues and income from petroleum operations, which includes natural gas production. 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. EIA supplements the FRS data with additional information from company 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.

The FRS Companies in 2005	
Amerada Hess Corporation	Kerr-McGee Corporation
Anadarko Petroleum Corporation	LYONDELL-CITGO Refining, L.P.
Apache Corporation	Marathon Oil Corporation
BP America, Inc.	Motiva Enterprises, L.L.C.
Burlington Resources, Inc.	Occidental Petroleum Corporation
Chesapeake Energy Corporation	Premcor, Inc.
Chevron Corporation	Shell Oil Company
CITGO Petroleum Corporation	Sunoco, Inc.
ConocoPhillips Company	Tesoro Petroleum Corporation
Devon Energy Corporation	Total Holdings USA, Inc.
Dominion Resources	Unocal Corporation
El Paso Corporation	The Williams Companies, Inc.
EOG Resources, Inc.	Valero Energy Corp.
Equitable Resources, Inc.	XTO Energy, Inc.
Exxon Mobil Corporation	

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..

Authorities. The information in *Performance Profiles* responds to the requirements of the FRS, which are set forth in P.L. 95-91, the Department of Energy Organization Act of 1977. The U.S.-based energy companies that respond to the Financial Reporting System (FRS) [Form EIA-28](#) are considered to be U.S. majors by the EIA. Per the requirements of P.L. 95-91, the EIA Administrator designates "major energy-producing companies" and selects 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 had at least one percent of either production or reserves of oil (crude oil and natural gas liquids) or natural gas in the United States, or one percent of either refining capacity or petroleum product sales in the United States.

Confidentiality. The information is collected in accordance with the confidential information protection provisions of Title 5, Subtitle A, Public Law 107-347 and other applicable Federal laws and is used for statistical purposes only. The survey responses are kept confidential and are not disclosed in identifiable form to anyone other than employees or agents without consent of the company. The names of the companies selected, though, are based on publicly available information, are not confidential, and are publicly released.

Uniqueness of FRS. Because the Form EIA-28 data are collected by the EIA 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 (Public Law 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, 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 2005 and are published in EIA's annual editions of *Performance Profiles of Major Energy Producers*. There are two sets of data: (1) aggregate data from the FRS survey form; and (2) multiyear tables from Appendix B of *Performance Profiles of Major Energy Producers*. FRS 1977–2005 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.

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.

Capital Expenditure: Funds (including cash) used by a company to acquire or upgrade physical assets such as property, industrial buildings, or equipment.

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.

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.¹⁰⁷

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.

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

¹⁰⁷ See the dictionary on Investopedia.com for additional information. Investopedia.com can be found at <http://www.investopedia.com> (as of November 14, 2006).

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.

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.

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>).
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Appendix B

Detailed Statistical Tables

Table B1. Selected U.S. Operating Statistics for FRS Companies and U.S. Industry, 1999-2005							
Operating Statistics	1999	2000	2001	2002	2003	2004	2005
Petroleum and Natural Gas							
Net Production							
Crude Oil and Natural Gas Liquids (million barrels)							
FRS Companies	1,305.7	1,267.9	1,363.2	1,346.4	1,277.8	1,207.8	1,120.8
U.S. Industry ¹	2,848.0	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	45.8	45.3	48.6	48.8	47.7	45.6	44.5
Natural Gas (billion cubic feet)							
FRS Companies	7,994.1	8,340.1	8,838.0	8,712.5	8,343.6	8,174.0	7,774.5
U.S. Industry ¹	18,928.0	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	42.2	43.4	44.7	45.0	43.0	42.6	42.1
Net Imports							
Crude Oil and Natural Gas Liquids (million barrels)							
FRS Companies	474.9	324.1	716.1	630.5	737.8	918.4	732.5
U.S. Industry ¹	3,366.4	3,527.0	3,620.1	3,523.2	3,539.0	3,909.7	-
FRS as a Percent of U.S. Industry	14.1	9.2	19.8	17.9	20.8	23.5	-
Refinery Capacity (thousand barrels per day)							
FRS Companies	14,158.0	14,424.0	15,153.0	14,198.0	14,279.0	14,409.0	14,532.0
U.S. Industry ¹	16,787.0	17,177.4	17,367.4	17,338.9	17,500.0	17,729.0	-
FRS as a Percent of U.S. Industry	84.3	84.0	87.2	81.9	81.6	81.3	-
Refinery Output ² (thousand barrels per day)							
FRS Companies	14,639.0	14,499.0	15,022.0	14,761.0	14,683.0	15,176.0	15,118.0
U.S. Industry ¹	17,493.1	17,763.2	17,688.9	17,654.5	17,969.5	18,584.0	-
FRS as a Percent of U.S. Industry	83.7	81.6	84.9	83.6	81.7	81.7	-
Electric Power							
Net Summer Capacity (million kilowatts)							
FRS Companies	-	-	-	-	-	33.7	34.0
U.S. Industry	785.9	811.7	848.3	905.3	948.4	962.9	-
FRS as a Percent of U.S. Industry	-	-	-	-	-	3.5	-
Net Generation (billion kilowatthours)							
FRS Companies	-	-	-	-	-	115.4	121.6
U.S. Industry	3,694.8	3,802.1	3,736.6	3,858.5	3,883.2	3,970.6	-
FRS as a Percent of U.S. Industry	-	-	-	-	-	2.9	-
Coal Production (million tons)							
FRS Companies	44.0	34.6	31.3	27.8	16.8	18.1	18.0
U.S. Industry ¹	1,100.4	1,073.6	1,127.7	1,093.3	1,071.8	1,111.1	1,130.8
FRS as a Percent of U.S. Industry	4.0	3.2	2.8	2.5	1.6	1.6	1.6

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 2005 Annual Report, November 2006). 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. total for crude oil, natural gas liquids and LRGs field production is 2,517 million barrels in 2005. (See Energy Information Administration, Petroleum Supply Annual 2005, Volume I (October 2006), Table 1.) For dry natural gas production, the official Energy Information Administration U.S. totals are 18,244 billion cubic feet in 2005 and 18,757 billion cubic feet in 2004. (See Energy Information Administration, Natural Gas Monthly, October 2006, 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, 2005 Annual Report (November 2006). 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, 2004 and 2005. 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, 2004-2005

Selected Financial Items	FRS Companies		All Manufacturing Companies	
	2004	2005	2004	2005
Income Statement	(billion dollars)			
Operating Revenues	1,060.5	1,334.2	4,934.1	5,400.8
Operating Expenses	-938.0	-1,165.1	-4,613.6	-5,043.2
Operating Income	122.5	169.1	320.4	357.7
Interest Expense	-11.0	-10.7	-82.0	-88.0
Other Income ¹	17.9	31.9	291.1	338.3
Income Taxes	-48.4	-71.1	99.4	121.2
Net Income	81.1	119.2	348.2	398.8

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, 2004-2005

	FRS Companies		All Manufacturing Companies	
	2004	2005	2004	2005
Balance Sheet				
(billion dollars)				
Assets				
Current Assets	228.6	297.0	1,696.7	1,938.6
Noncurrent Assets				
Property, Plant, and Equipment (PP&E)				
Gross	956.9	1,002.5	2,397.7	2,483.1
and Amortization (DD&A)	-444.7	-450.5	1,286.4	1,335.1
Net PP&E	512.2	551.9	1,111.3	1,148.0
Investments and Advances	65.4	74.8	-	-
Other Noncurrent Assets	112.1	124.2	-	-
Subtotal Noncurrent Assets	689.7	750.9	3,841.5	3,857.7
Total Assets	918.3	1,047.9	5,538.1	5,796.3
Liabilities and Stockholders Equity				
Liabilities				
Current Liabilities	190.8	255.9	1,319.1	1,420.8
Long-Term Debt	166.3	158.0	1,042.4	1,033.5
Other Long-Term Items	181.6	201.0	-	-
Minority Interest	12.3	9.8	-	-
Subtotal Liabilities and Other Items	550.9	624.6	3,223.9	3,337.9
Stockholders' Equity				
Retained Earnings	262.9	334.7	1,241.9	1,458.9
Other Equity	104.4	88.5	1,072.3	999.6
Subtotal Stockholders' Equity	367.4	423.2	2,314.2	2,458.5
Total Liabilities and Stockholders' Equity	918.3	1,047.9	5,538.1	5,796.3
Financial Ratios				
(percent)				
Net Income/Stockholders' Equity	22.1	28.2	15.0	16.2
Net Income plus Interest/Total Invested Capital	17.3	22.3	12.8	13.9
Dividends/Net Cash Flow from Operations	26.9	23.4	-	-
Long-term Debt/Stockholders' Equity	45.3	37.3	45.0	42.0

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, 1999-2005							
(Billion Dollars)							
Balance Sheet Items	1999	2000	2001	2002	2003	2004	2005
Assets							
Current Assets:							
Cash & Marketable Securities	12.2	18.7	18.6	19.5	27.0	55.6	69.8
Trade Accounts & Notes Receivable	68.1	98.6	71.4	78.7	84.9	112.1	122.9
Inventories:							
Raw Materials & Products	23.3	25.6	23.4	23.2	26.8	29.5	33.4
Materials & Supplies	3.9	4.4	7.3	7.6	5.6	6.2	6.9
Other Current Assets	13.4	49.1	26.7	27.4	20.6	25.2	63.9
Total Current Assets	121.0	196.5	147.5	156.3	164.9	228.6	297.0
Non-current Assets:							
Property, Plant & Equipment (PP&E)							
Gross PP&E	708.0	757.2	806.0	826.3	866.4	956.9	1,002.5
Depletion, and Amortization	-355.5	-351.6	-373.6	-379.6	-396.2	-444.7	-450.5
Net PP&E	352.5	405.5	432.4	446.6	470.1	512.2	551.9
Investments & Advances to Unconsolidated Affiliates	58.2	62.3	57.3	53.9	54.5	65.4	74.8
Other Non-current Assets	39.6	86.9	97.9	115.7	99.0	112.1	124.2
Total Non-current Assets	450.3	554.8	587.5	616.2	623.6	689.7	750.9
Total Assets	571.3	751.2	735.0	772.5	788.5	918.3	1,047.9
Liabilities & Stockholders' Equity							
Liabilities							
Current Liabilities							
Trade Accounts & Notes Payable	79.4	102.4	90.6	91.8	88.2	111.7	134.8
Other Current Liabilities	51.9	96.4	69.2	64.9	62.5	79.1	121.1
Long-Term Debt	104.0	120.0	132.0	154.0	148.9	166.3	158.0
Deferred Income Tax Credits	53.1	68.2	77.0	76.1	83.2	94.2	101.4
Other Deferred Credits	18.8	34.1	23.3	27.9	28.5	30.8	33.8
Other Long-Term Items	42.6	41.2	43.7	52.1	49.7	56.6	65.8
Minority Interest in Consolidated Affiliates	15.2	17.1	15.5	11.0	10.4	12.3	9.8
Total Liabilities	364.9	479.5	451.3	477.8	471.4	550.9	624.6
Stockholders' Equity:							
Retained Earnings	170.6	199.2	209.7	206.1	218.7	262.9	334.7
Other Equity	35.7	72.5	74.0	88.7	98.4	104.4	88.5
Total Stockholders' Equity	206.3	271.8	283.7	294.7	317.1	367.4	423.2
Total Liabilities & Stockholders' Equity	571.3	751.2	735.0	772.5	788.5	918.3	1,047.9
Memo:							
Foreign Currency Translation Adjustment							
Cumulative at Year End	-2.7	-3.0	-5.1	-2.0	2.8	8.0	5.0
Foreign Currency Translation Adjustment							
for the Current Year	-0.3	-2.1	-1.0	3.1	7.2	4.3	-3.0

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

Table B5. Consolidating Statement of Income for FRS Companies, 2005
(Million Dollars)

Income Statement Items	Consol- idated	Eliminations & Non- traceables	Petroleum	Coal, Nuclear, & Non- conventional Energy ¹	Down- stream Natural Gas	Electric Power	Non- energy
Operating Revenues	1,334,212	-186,297	1,167,596	4,011	239,458	31,609	77,835
Operating Expenses							
General Operating Expenses	1,100,648	-184,162	947,388	2,968	234,792	29,366	70,296
Depreciation, Depletion, & Allowance	49,133	W	41,648	W	2,910	674	2,754
General & Administrative	15,321	W	7,078	W	2,099	708	1,658
Total Operating Expenses	1,165,102	-179,447	996,114	3,178	239,801	30,748	74,708
Operating Income	169,110	-6,850	171,482	833	-343	861	3,127
Other Revenue & (Expense)							
Earnings of Unconsolidated Affiliates	21,707	-427	16,953	W	2,305	W	2,492
Other Dividend & Interest Income	4,038	4,038	-	-	-	-	-
Property, Plant, & Equipment	4,714	1,133	3,300	W	48	W	252
Interest Expenses & Financial Charges	-10,662	-10,662	-	-	-	-	-
Minority Interest in Income	-2,787	-2,787	-	-	-	-	-
Foreign Currency Translation Effects	-277	-277	-	-	-	-	-
Other Revenue & (Expense)	2,089	2,089	-	-	-	-	-
Total Other Revenue & (Expense)	18,822	-6,893	20,253	338	2,353	27	2,744
Pretax Income	187,932	-13,743	191,735	1,171	2,010	888	5,871
Income Tax Expense	71,094	-6,706	75,534	135	54	407	1,670
Discontinued Operations of Accounting Changes	2,524	-21	2,398	0	W	W	W
	-144	-9	-128	0	W	W	W
Net Income	119,218	-7,067	118,471	1,036	2,209	355	4,214

¹Beginning in 2003, Coal is combined with Other Energy (Nuclear and Nonconventional Energy).

- = 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, 2005
(Million Dollars)

Income Statement Items	U.S. Petroleum				Foreign Petroleum		
	Consolidated	Production	Refining/Marketing	Pipe-lines ¹	Consolidated	Production	Refining/Marketing & Int'l Marine ²
Operating Revenues							
Raw Material Sales	216,047	112,057	145,894	W	162,896	123,407	125,425
Refined Products Sales	545,287	0	546,398	0	262,905	0	264,735
Transportation Revenues	2,453	W	1,511	2,712	2,124	W	5,575
Management and Processing Fees	1,446	W	1,368	W	2,262	W	2,283
Other	12,895	-2,266	14,500	767	4,398	-87	4,533
Total Operating Revenues	778,128	110,226	709,671	7,746	434,585	123,658	402,551
Operating Expenses							
General Operating Expenses	660,438	30,902	671,976	7,075	332,067	33,634	390,057
Depreciation, Depletion, & Allowance	22,826	16,983	5,538	305	18,822	16,444	2,378
General & Administrative	5,378	2,014	3,270	94	1,700	938	762
Total Operating Expenses	688,642	49,899	680,784	7,474	352,589	51,016	393,197
Operating Income	89,486	60,327	28,887	272	81,996	72,642	9,354
Other Revenue & (Expense)							
Earnings of Unconsolidated Affiliates	5,781	2,581	2,969	231	11,172	9,308	1,864
Gain(Loss) on Disposition of Property, Plant, & Equipment	1,297	605	441	251	2,003	1,938	65
Total Other Revenue & (Expense)	7,078	3,186	3,410	482	13,175	11,246	1,929
Pretax Income	96,564	63,513	32,297	754	95,171	83,888	11,283
Income Tax Expense	34,504	23,015	11,215	274	41,030	37,557	3,473
Discontinued Operations	W	W	W	0	W	W	W
Extraordinary Items and Cumulative Effect of Accounting Changes	W	W	W	0	W	W	W
Contribution To Net Income	61,939	40,496	20,963	480	56,532	48,728	7,804

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, 2005
(Million Dollars)

	Year End Balance		Activity During Year		
	Net PP&E	Investments & Advances	Additions to PP&E	Additions to Investments & Advances	DD&A
Petroleum					
United States					
Production	173,986	5,820	44,439	1,001	16,983
Refining/Marketing					
Refining	61,598	6,162	14,228	291	3,683
Marketing	15,813	1,293	2,154	403	1,591
Refining/Marketing Transport					
Pipelines	1,541	441	193	46	86
Marine	1,292	W	124	W	74
Other	578	W	167	W	104
Total U.S. Refining/Marketing	80,822	8,412	16,866	762	5,538
Rate Regulated Pipelines					
Refined Products	3,138	707	470	92	167
Crude Oil and Liquids	3,516	870	520	636	138
Total Rate Regulated Pipelines	6,654	1,577	990	728	305
Total U.S. Petroleum	261,462	15,809	62,295	2,491	22,826
Foreign					
Production	156,932	28,032	44,542	6,209	16,444
Refining/Marketing & International Marine ¹					
	30,362	6,680	2,569	380	2,378
Total Foreign Petroleum	187,294	34,712	47,111	6,589	18,822
Total Petroleum	448,756	50,521	109,406	9,080	41,648
Downstream Natural Gas					
United States					
Processing and Gathering					
NGL Production	2,886	1,366	393	W	160
Other Processing and Gathering	4,655	W	399	W	606
LNG Import/Export Facilities	841	W	259	W	24
Total Processing and Gathering	8,382	1,373	1,051	1,044	790
Marketing/Trading	3,034	W	W	W	153
Transmission					
Pipelines	15,788	1,746	1,708	57	634
Storage	1,213	W	68	0	63
Other	5,126	W	118	0	117
Total Transmission	22,127	1,763	1,894	57	814
Total Distribution	2,465	W	W	W	97
Total U.S. Downstream Natural Gas	36,008	3,167	3,210	1,131	1,854
Total Foreign Downstream Natural Gas	10,959	4,621	2,134	239	1,056
Total Downstream Natural Gas	46,967	7,788	5,344	1,370	2,910

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, 2005 (Continued)
(Million Dollars)

	Year End Balance		Activity During Year		
	Net PP&E	Investments & Advances	Additions to PP&E	Additions to Investments & Advances	DD&A
Electric Power					
United States					
Generation					
Regulated	W	W	W	W	W
Non-Regulated	W	W	W	W	W
Total Generation	9,983	743	W	W	309
Marketing/Trading	W	W	W	W	W
Transmission	W	W	W	0	W
Distribution	W	W	W	0	W
Total U.S. Electric Power	15,856	755	W	W	586
Total Foreign Electric Power	1,879	2,460	W	W	88
Total Electric Power	17,735	3,215	2,181	59	674
Nuclear, Nonconventional, & Coal					
Foreign					
United States	W	W	W	W	W
Total Nuclear, Nonconventional, & Coal	4,169	488	575	W	W
Nonenergy					
Foreign Chemicals	6,691	3,901	489	169	W
U.S. Chemicals	14,668	5,312	1,588	W	2,056
Foreign Other Nonenergy	W	2,193	W	W	W
U.S. Other Nonenergy	W	957	W	304	111
Total Nonenergy	23,675	12,363	2,343	515	2,754
Nontraceable	10,609	440	1,810	158	W
Consolidated	551,911	74,815	121,659	11,242	49,133

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, 2004-2005
(Percent)

Line of Business	All FRS		Top Four		Five through Twelve		All Other	
	2004	2005	2004	2005	2004	2005	2004	2005
Petroleum	18.2	23.7	19.4	24.6	16.0	21.3	16.8	24.0
U.S. Petroleum	18.9	22.3	21.4	24.0	16.7	20.8	17.2	21.5
Oil and Gas Production	20.0	22.5	26.0	27.0	17.0	20.0	15.0	18.9
Refining/Marketing	18.6	23.5	17.6	20.8	16.9	23.3	20.8	29.4
Pipelines	4.4	5.8	5.1	7.6	-10.8	-3.8	8.7	8.1
Foreign Petroleum	17.3	25.5	18.1	25.0	14.2	22.7	15.7	32.5
Oil and Gas Production	17.1	26.3	18.0	26.2	14.2	21.2	15.6	33.5
Refining/Marketing	17.6	20.8	17.7	19.8	0.0	40.3	16.2	6.9
International Marine	W	W	W	W	0.0	0.0	0.0	0.0
Downstream Natural Gas¹	5.9	4.0	13.7	11.8	4.9	3.5	-7.5	-4.8
Electric Power¹	3.1	1.7	0.8	-0.9	3.8	2.3	W	W
Nuclear, Nonconventional, & Coal	24.7	22.2	29.0	24.6	-13.5	-21.7	W	W
Nonenergy	10.7	11.7	13.1	14.9	1.4	-2.9	10.1	13.2

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, 1999-2005							
(Million Dollars)							
	1999	2000	2001	2002	2003	2004	2005
Sources of R&D Funds							
Federal Government	27	W	W	W	W	12	W
Internal Company	1,377	1,316	1,542	1,742	1,523	1,508	1,719
Other Sources	20	W	W	W	W	25	W
Total Sources	1,424	1,326	1,570	1,753	1,534	1,545	1,744
Breakdown of R&D Expenditures							
Oil & Gas Recovery	430	453	592	464	370	507	617
Gas to Liquids	-	-	-	-	52	38	85
Other Petroleum	345	327	376	656	357	267	318
Coal Gasification/Liquefaction	W	W	W	0	W	W	W
Other Coal	W	W	0	0	0	0	0
Downstream Natural Gas	-	-	-	-	7	0	0
Wind Generation	-	-	-	-	0	0	0
Solar Generation	-	-	-	-	4	W	W
Distributed Generation	-	-	-	-	0	0	0
Fuel Cells	-	-	-	-	7	10	W
Other Nonconventional Energy	34	W	W	59	54	113	199
Nonenergy	538	452	526	517	676	606	504
Unassigned	W	W	W	W	W	0	W
Total Expenditures	1,424	1,326	1,570	1,753	1,534	1,545	1,744
<p>- = Data not available prior to 2003. W = Data withheld to avoid disclosure. Source: Energy Information Administration, Form EIA-28 (Financial Reporting System).</p>							

**Table B10. Size Distribution of Net Investment in Place for FRS Companies
Ranked by Total Energy Assets, 2005
(Percent)**

Line of Business	Top Four	Five through Twelve	All Other	All FRS
Petroleum	58.2	22.2	19.5	100.0
United States	42.9	29.8	27.3	100.0
Production	40.7	28.5	30.8	100.0
Refining/Marketing	44.7	33.7	21.7	100.0
Refining	43.0	35.4	21.6	100.0
Marketing	50.3	26.1	23.6	100.0
Rate Regulated Pipelines	73.8	16.1	10.1	100.0
Foreign	77.3	12.8	9.9	100.0
Production	74.4	14.1	11.4	100.0
Refining/Marketing	91.3	6.3	2.3	100.0
International Marine	100.0	0.0	0.0	100.0
Downstream Natural Gas	27.2	51.8	21.0	100.0
U.S. Downstream Natural Gas	11.6	61.1	27.3	100.0
Processing and Gathering	34.1	36.9	29.0	100.0
Marketing/Trading	25.8	72.4	1.8	100.0
Transmission	1.7	67.9	30.4	100.0
Distribution	0.0	77.8	22.2	100.0
Foreign Downstream Natural Gas	66.6	28.4	5.1	100.0
Electric Power	17.3	81.3	1.4	100.0
U.S. Electric Power	3.6	94.7	1.7	100.0
Generation	5.5	91.9	2.5	100.0
Marketing/Trading	10.5	5.3	84.2	100.0
Transmission	0.0	100.0	0.0	100.0
Distribution	0.0	100.0	0.0	100.0
Foreign Electric Power	69.9	30.1	0.0	100.0
Generation	69.9	30.1	0.0	100.0
Marketing/Trading	0.0	0.0	0.0	100.0
Transmission	0.0	0.0	0.0	100.0
Distribution	0.0	0.0	0.0	100.0
Nuclear, Nonconventional, & Coal	87.3	5.2	7.5	100.0
Nonenergy	65.2	16.4	18.4	100.0
Chemicals	65.1	14.1	20.8	100.0
Other Nonenergy	65.9	29.2	4.8	100.0
Consolidated	55.1	26.2	18.7	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, 1999-2005 (Million Dollars)							
Cash Flows ¹	1999	2000	2001	2002	2003	2004	2005
Cash Flows From Operations							
Net Income	22,866	53,192	37,735	20,592	57,427	81,087	119,218
Minority Interest in Income	1,161	1,912	2,172	1,068	1,719	2,105	2,787
Noncash Items:							
Depreciation, Depletion, & Allowance	32,452	37,621	46,377	45,529	43,854	47,179	49,133
Dry Hole Expense, This Year	1,808	1,328	2,344	1,925	1,668	1,951	1,757
Deferred Income Taxes	-25	5,611	3,145	-143	6,033	3,999	4,217
Recognized Undistributed (Earnings)/Losses of Unconsolidated Affiliates	136	-3,319	-318	1,144	-1,429	-4,553	-5,384
(Gain)/Loss on Disposition of Property, Plant, & Equipment (PP&E)	-1,922	-2,065	-1,176	-1,374	-1,908	-1,780	-4,714
Changes in Operating Assets and Liabilities and Other Noncash Items	-2,259	-6,269	2,848	-636	-661	6,725	2,678
Other Cash Items, Net	581	629	-3,490	6,847	-1,585	-870	183
Net Cash Flow From Operations	54,798	88,640	89,637	74,952	105,118	135,843	169,875
Cash Flows From Investing Activities							
Additions to PP&E:							
Due to Mergers and Acquisitions	-5,961	-49,722	-40,971	-34,175	-11,367	-10,122	-37,420
Other	-44,775	-52,470	-59,313	-57,170	-65,054	-69,766	-84,239
Total Additions to PP&E	-50,736	-102,192	-100,284	-91,345	-76,421	-79,888	-121,659
Additions to Investments and Advances	-6,874	-7,156	-10,086	-7,529	-3,542	-6,651	-11,242
Proceeds From Disposals of PP&E	13,267	26,663	7,683	15,186	16,112	19,690	35,869
Other Investment Activities, Net	3,523	8,742	8,406	29,572	4,572	4,863	22,904
Cash Flow From Investing Activities	-40,820	-73,943	-94,281	-54,116	-59,279	-61,986	-74,128
Cash Flows From Financing Activities							
Proceeds From Long-Term Debt	29,862	33,292	54,987	34,094	26,352	18,532	29,637
Proceeds From Equity Security Offerings	3,557	30,606	6,267	4,878	8,397	8,126	10,467
Reductions in Long-Term Debt	-24,988	-29,323	-34,264	-27,863	-26,222	-18,412	-33,290
Purchase of Treasury Stock	-424	-5,362	-7,474	-4,680	-6,059	-14,011	-31,800
Dividends to Shareholders	-16,081	-18,981	-17,132	-17,744	-42,808	-36,541	-39,729
Other Financing Activities, Including Net Change in Short-Term Debt	-3,377	-17,205	3,848	-7,063	2,496	-11,212	-15,727
Cash Flow From Financing Activities	-11,451	-6,973	6,232	-18,378	-37,844	-53,518	-80,442
Effect of Exchange Rate on Cash	-24	-119	-308	571	816	869	-893
Net Increase/(Decrease) in Cash and Cash Equivalents	2,503	7,605	1,280	3,029	8,811	21,208	14,412

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, 1999-2005

(Million Dollars)

	1999	2000	2001	2002	2003	2004	2005
Income Taxes (as per Financial Statements)							
Current Paid or Accrued:							
U.S. Federal, before Investment Tax Credit & Alternative Minimum Tax	1,375	11,705	8,812	390	7,516	16,147	24,808
U.S. Federal Investment Tax Credit	-90	-129	-246	-245	-236	-201	-323
Effect of Alternative Minimum Tax	445	-1,222	-632	69	-330	-459	-305
U.S. State & Local Income Taxes	371	1,338	1,067	478	1,094	2,052	3,468
Foreign Income Taxes							
Canada	597	1,765	1,139	1,236	1,567	2,381	3,428
Europe and Former Soviet Union ¹	3,110	7,002	6,515	5,619	6,858	11,199	15,799
Africa	1,607	3,617	3,057	2,884	3,851	6,086	9,674
Middle East	1,286	2,380	1,937	1,753	2,115	2,674	3,902
Other Eastern Hemisphere	1,679	2,214	1,676	1,674	2,763	3,017	3,488
Other Western Hemisphere	346	900	695	669	1,127	1,871	2,980
Total Foreign	8,625	17,878	15,019	13,835	18,281	27,228	39,271
Total Current	10,726	29,570	24,020	14,527	26,325	44,767	66,919
Deferred							
U.S. Federal, before Investment Tax Credit	1,480	3,168	2,403	241	4,770	2,222	1,530
U.S. Federal Investment Tax Credit	-14	-78	-10	-18	-17	-17	-17
Effect of Alternative Minimum Tax	-415	1,233	650	-69	335	445	303
U.S. State & Local Income Taxes	136	221	26	76	310	93	100
Foreign	-1,075	910	567	-191	569	847	2,259
Total Deferred	112	5,454	3,636	39	5,967	3,590	4,175
Total Income Tax Expense	10,838	35,024	27,656	14,566	32,292	48,357	71,094
Reconciliation of Accrued U.S. Federal Income Tax Expense To Statutory Rate							
Consolidated Pretax Income/(Loss)	33,837	86,702	68,246	36,171	89,522	128,969	187,932
Less: Foreign Source Income not Subject to U.S. Tax	2,160	13,355	8,918	8,816	17,818	28,635	38,441
Equals: Income Subject to U.S. Tax	31,677	73,347	59,328	27,355	71,704	100,334	149,491
Less: U.S. State & Local Income Taxes	486	1,497	895	345	955	2,092	3,584
Less: Applicable Foreign Income Taxes Deducted	107	353	82	252	315	330	573
Equals: Pretax Income Subject to U.S. Tax	31,084	71,497	58,351	26,758	70,434	97,912	145,334
Tax Provision Based on Previous Line	10,902	25,032	20,438	9,363	24,657	33,943	50,846
Increase/(Decrease) in Taxes Due To:							
Foreign Tax Credits Recognized	-5,963	-9,787	-8,513	-7,283	-11,385	-14,646	-22,659
U.S. Federal Investment Tax Credit Recognized	-98	-129	-486	-245	-257	-239	-418
Statutory Depletion	-8	-3	-1	-3	-6	-6	-10
Effect of Alternative Minimum Tax	23	11	16	0	0	-13	0
Other	-2,068	-447	-582	-1,462	-963	-898	-1,755
Actual U.S. Federal Tax Provision (Refund)	2,788	14,677	10,872	370	12,046	18,141	26,004

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

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

Table B13. U.S. Taxes Other Than Income Taxes for FRS Companies, 1999-2005
(Million Dollars)

	1999	2000	2001	2002	2003	2004	2005
Production Taxes							
Oil and Gas Production	1,674	2,604	2,506	2,187	3,127	3,525	4,881
Coal, Nuclear, & Nonconventional Energy	43	W	W	35	W	34	33
Other ¹	0	W	W	0	W	0	0
Total Production Taxes	1,717	2,635	2,543	2,222	3,154	3,559	4,914
Superfund	W	W	W	W	W	W	W
Import Duties	W	W	W	W	W	W	W
Sales, Use, and Property	2,268	2,356	2,373	2,360	2,023	2,422	2,734
Payroll	1,289	1,259	1,193	1,121	1,134	1,188	1,315
Other Taxes	467	789	546	378	403	615	543
Total Taxes Paid (Other Than Income Taxes)	5,825	7,162	6,741	6,156	5,067	5,637	7,221
Excise Taxes Collected	46,293	47,084	44,310	43,464	41,907	45,406	47,207

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 Gas Exploration and Development Expenditures for FRS Companies, United States and Foreign, 1999-2005
(Million Dollars)

	1999	2000	2001	2002	2003	2004	2005
United States							
Exploration							
Acquisition of Unproved Acreage	633	4,010	3,527	2,281	1,389	2,575	3,755
Geological and Geophysical	621	849	758	821	659	859	985
Drilling and Equipping ¹	1,921	2,550	3,276	2,555	2,525	2,277	3,420
Other	659	610	770	832	703	871	1,021
Total Exploration	3,834	8,019	8,331	6,489	5,276	6,582	9,181
Development							
Acquisition of Proved Acreage	1,144	27,939	7,383	7,572	6,051	7,586	13,495
Lease Equipment	2,431	1,907	3,818	3,325	3,636	3,841	3,501
Drilling and Equipping ¹	5,022	8,788	11,671	10,711	10,581	12,871	17,967
Other ²	1,056	1,391	2,655	3,715	1,652	1,533	2,245
Total Development	9,653	40,025	25,527	25,323	21,920	25,831	37,208
Total U.S. Exploration and Development	13,487	48,044	33,858	31,812	27,196	32,413	46,389
Foreign							
Exploration							
Acquisition of Unproved Acreage	2,252	4,105	4,696	2,588	1,346	610	5,130
Geological and Geophysical	885	875	1,028	939	866	965	988
Drilling and Equipping ¹	1,579	1,824	2,677	2,108	2,243	2,528	2,743
Other	903	1,087	1,146	864	949	875	1,253
Total Exploration	5,619	7,891	9,547	6,499	5,404	4,978	10,114
Development							
Acquisition of Proved Acreage	2,083	11,644	12,186	8,600	3,060	468	10,740
Lease Equipment	2,142	1,842	3,186	2,538	4,701	4,670	5,731
Drilling and Equipping ¹	5,143	5,057	7,060	8,040	9,793	11,277	13,490
Other ²	2,531	2,364	3,965	5,695	5,250	3,931	7,183
Total Development	11,899	20,907	26,397	24,873	22,804	20,346	37,144
Total Foreign Exploration and Development	17,518	28,798	35,944	31,372	28,208	25,324	47,258

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, 2005
(Million Dollars)

	Worldwide	United States			Foreign
		Total	Onshore	Offshore	
Exploration and Development Expenditures					
Exploration Expenditures					
Unproved Acreage	8,885	3,755	3,028	727	5,130
Drilling and Equipping:					
Completed Well Costs	-	2,298	1,103	1,195	-
Work-in-progress Adjustment	-	1,122	325		-
Total Drilling and Equipping	6,163	3,420	1,428	1,992	2,743
Geological and Geophysical	1,973	985	369	616	988
Other, Including Direct Overhead	2,274	1,021	295	726	1,253
Total Exploration Expenditures	19,295	9,181	5,120	4,061	10,114
Development Expenditures					
Proved Acreage (Including Mergers and Acquisitions)	24,235	13,495	12,054	1,441	10,740
Drilling and Equipping:					
Completed Well Costs	-	14,401	12,392	2,009	-
Work-in-progress Adjustment	-	3,566	2,249	1,317	-
Total Drilling and Equipping	31,457	17,967	14,641	3,326	13,490
Lease Equipment	9,232	3,501	1,840	1,661	5,731
Other Development					
Support Equipment	833	199	156	43	634
Other, Including Direct Overhead	8,595	2,046	1,404	642	6,549
Total Development Expenditures	74,352	37,208	30,095	7,113	37,144
Total Exploration and Development Expenditures	93,647	46,389	35,215	11,174	47,258

- = Not available.

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

Table B16. Exploration and Development Expenditures by Region for FRS Companies, 1999-2005							
(Million Dollars)							
	1999	2000	2001	2002	2003	2004	2005
Exploration Expenditures							
U.S. Onshore	1,174	4,136	4,779	3,023	1,813	3,271	5,120
U.S. Offshore	2,660	3,883	3,552	3,466	3,463	3,311	4,061
Total United States	3,834	8,019	8,331	6,489	5,276	6,582	9,181
Canada	420	1,184	3,899	1,694	1,311	1,313	1,869
OECD Europe	767	869	756	1,223	629	414	841
Former Soviet Union and E. Europe	354	317	374	470	691	294	588
Africa	1,268	910	1,579	1,292	1,645	1,345	2,131
Middle East	96	56	197	121	132	127	313
Other Eastern Hemisphere	1,192	1,675	1,478	1,121	662	884	3,789
Other Western Hemisphere	1,522	2,880	1,264	578	334	601	583
Total Foreign	5,619	7,891	9,547	6,499	5,404	4,978	10,114
Worldwide Exploration Expenditures	9,453	15,910	17,878	12,988	10,680	11,560	19,295
Development Expenditures							
U.S. Onshore	5,396	22,953	19,465	19,307	12,930	18,612	30,095
U.S. Offshore	4,257	17,072	6,062	6,016	8,990	7,219	7,113
Total United States	9,653	40,025	25,527	25,323	21,920	25,831	37,208
Canada	1,636	3,697	11,425	4,993	3,592	3,991	7,206
OECD Europe	3,370	6,651	4,617	8,571	5,101	3,994	5,246
Former Soviet Union and E. Europe	252	576	507	803	1,429	1,748	5,672
Africa	1,826	1,809	3,968	3,799	7,542	5,558	8,577
Middle East	297	494	542	653	844	1,144	1,139
Other Eastern Hemisphere	2,250	5,112	3,513	5,074	3,499	2,877	8,222
Other Western Hemisphere	2,268	2,568	1,826	980	797	1,034	1,082
Total Foreign	11,899	20,907	26,397	24,873	22,804	20,346	37,144
Worldwide Development Expenditures	21,552	60,932	51,924	50,196	44,724	46,177	74,352
Total Exploration and Development Expenditures							
U.S. Onshore	6,570	27,089	24,244	22,330	14,743	21,883	35,215
U.S. Offshore	6,917	20,955	9,614	9,482	12,453	10,530	11,174
Total United States	13,487	48,044	33,858	31,812	27,196	32,413	46,389
Canada	2,056	4,881	15,324	6,687	4,903	5,304	9,075
OECD Europe	4,137	7,520	5,373	9,794	5,730	4,408	6,087
Former Soviet Union and E. Europe	606	893	881	1,273	2,120	2,042	6,260
Africa	3,094	2,719	5,547	5,091	9,187	6,903	10,708
Middle East	393	550	739	774	976	1,271	1,452
Other Eastern Hemisphere	3,442	6,787	4,991	6,195	4,161	3,761	12,011
Other Western Hemisphere	3,790	5,448	3,090	1,558	1,131	1,635	1,665
Total Foreign	17,518	28,798	35,944	31,372	28,208	25,324	47,258
Worldwide Exploration and Development Expenditures	31,005	76,842	69,802	63,184	55,404	57,737	93,647

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

Table B17. Production (Lifting) Costs by Region for FRS Companies, 1999-2005 (Million Dollars)							
	1999	2000	2001	2002	2003	2004	2005
United States							
Taxes Other Than Income Taxes	1,674	2,604	2,506	2,187	3,127	3,525	4,881
Other Costs	9,494	8,417	10,377	10,345	10,424	11,663	13,502
Total Production Costs	11,168	11,021	12,883	12,532	13,551	15,188	18,383
U.S. Onshore	8,039	8,254	9,838	9,650	10,549	11,630	14,151
U.S. Offshore	3,129	2,767	3,045	2,882	3,002	3,558	4,232
Canada							
Royalty Expenses	W	W	0	0	0	0	0
Taxes Other Than Income Taxes	W	W	105	109	119	117	142
Other Costs	1,120	1,379	1,842	2,303	2,818	2,596	3,259
Total Production Costs	1,252	1,496	1,947	2,412	2,937	2,713	3,401
OECD Europe							
Royalty Expenses	62	W	W	49	W	W	0
Taxes Other Than Income Taxes	330	W	W	456	W	W	1,154
Other Costs	3,666	3,485	3,496	3,416	4,098	4,101	4,828
Total Production Costs	4,058	4,025	4,151	3,921	4,884	4,734	5,982
Former Soviet Union and E. Europe							
Royalty Expenses	W	W	W	0	0	W	14
Taxes Other Than Income Taxes	W	W	W	0	30	W	218
Other Costs	111	179	155	111	177	269	384
Total Production Costs	148	196	191	111	207	327	616
Africa							
Royalty Expenses	W	W	W	0	0	0	W
Taxes Other Than Income Taxes	W	W	W	377	590	779	W
Other Costs	1,153	1,208	1,384	1,730	1,743	2,101	2,312
Total Production Costs	1,268	1,784	1,847	2,107	2,333	2,880	3,557
Middle East							
Royalty Expenses	112	137	0	0	0	0	0
Taxes Other Than Income Taxes	77	75	55	46	20	24	17
Other Costs	235	175	407	502	516	539	580
Total Production Costs	424	387	462	548	536	563	597
Other Eastern Hemisphere							
Royalty Expenses and							
Taxes Other Than Income Taxes	507	618	527	580	675	922	1,167
Other Costs	1,097	1,392	1,931	2,002	1,836	2,573	2,250
Total Production Costs	1,604	2,010	2,458	2,582	2,511	3,495	3,417
Other Western Hemisphere							
Royalty Expenses and							
Taxes Other Than Income Taxes	184	304	143	276	392	500	676
Other Costs	443	533	600	633	578	549	903
Total Production Costs	627	837	743	909	970	1,049	1,579
Total Foreign							
Royalty Expenses	384	437	153	150	W	W	W
Taxes Other Than Income Taxes	1,172	1,947	1,831	1,743	W	W	W
Other Costs	7,825	8,351	9,815	10,697	11,766	12,728	14,516
Total Production Costs	9,381	10,735	11,799	12,590	14,378	15,761	19,149

W = Data withheld to avoid disclosure.
Source: Energy Information Administration, Form EIA-28 (Financial Reporting System).

Table B18. Oil and Gas Acreage for FRS Companies, 1999-2005							
(Thousand Acres)							
	1999	2000	2001	2002	2003	2004	2005
Net Acreage							
U.S. Onshore							
Developed	25,895	31,760	34,332	37,103	36,721	38,287	636,435
Undeveloped	25,880	37,657	43,293	40,280	42,891	39,891	1,369,098
U.S. Offshore							
Developed	4,988	5,383	5,881	5,281	5,375	5,520	367,681
Undeveloped	24,940	21,483	20,933	21,929	20,875	22,006	514,904
Foreign							
Developed	26,337	32,535	32,903	37,603	33,952	33,561	52,215
Undeveloped	416,209	416,941	424,465	429,394	312,769	273,697	646,718
Gross Acreage							
U.S. Onshore							
Developed	45,978	57,626	63,721	69,641	65,367	64,704	1,034,205
Undeveloped	42,325	59,295	69,790	64,841	66,918	62,194	1,811,095
U.S. Offshore							
Developed	9,534	10,588	11,317	9,802	9,331	9,818	538,881
Undeveloped	35,689	31,609	30,523	32,384	31,134	32,548	571,203
Foreign							
Developed	59,247	71,330	70,112	81,171	70,516	65,597	127,446
Undeveloped	835,615	882,761	834,500	799,007	608,666	532,672	1,702,468

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, 1999-2005

	1999	2000	2001	2002	2003	2004	2005
Number of Net Wells Completed During Year for FRS Companies							
Onshore							
Net Exploratory Wells							
Dry Holes	93	86	122	119	93	86	65
Oil Wells	26	19	59	21	19	27	29
Gas Wells	105	217	351	164	164	226	294
Total Exploratory Wells	225	321	533	304	275	338	388
Net Development Wells							
Dry Holes	162	229	266	220	225	197	222
Oil Wells	1,130	1,775	1,815	1,187	1,567	2,005	2,006
Gas Wells	1,519	2,927	5,226	4,982	5,539	6,246	7,248
Total Development Wells	2,812	4,930	7,307	6,389	7,331	8,448	9,476
Offshore							
Net Exploratory Wells							
Dry Holes	59	73	63	52	43	39	33
Oil Wells	28	28	39	35	20	11	11
Gas Wells	61	59	63	53	36	29	24
Total Exploratory Wells	148	159	165	140	98	78	67
Net Development Wells							
Dry Holes	26	29	38	38	13	14	16
Oil Wells	145	128	240	135	95	85	99
Gas Wells	153	157	170	134	75	73	56
Total Development Wells	324	315	448	307	183	172	172
Total United States							
Net Exploratory Wells							
Dry Holes	153	158	185	171	135	125	98
Oil Wells	54	47	98	56	38	37	39
Gas Wells	166	275	415	217	199	254	318
Total Exploratory Wells	372	480	698	443	373	416	455
Net Development Wells							
Dry Holes	188	258	305	259	238	211	239
Oil Wells	1,275	1,903	2,054	1,321	1,662	2,090	2,105
Gas Wells	1,672	3,084	5,396	5,116	5,614	6,319	7,304
Total Development Wells	3,136	5,245	7,755	6,696	7,514	8,620	9,648
Number of Net Wells Completed During Year for Total Industry							
Net Exploratory Wells							
Dry Holes	1,195	1,288	1,692	1,253	1,149	1,200	1,577
Oil Wells	157	268	322	236	300	353	429
Gas Wells	539	607	988	668	743	1,323	1,452
Total Exploratory Wells	1,891	2,163	3,002	2,157	2,192	2,876	3,458
Net Development Wells							
Dry Holes	2,217	2,737	2,392	2,328	2,226	2,274	3,067
Oil Wells	4,019	7,090	7,738	5,822	6,331	7,350	9,404
Gas Wells	10,338	15,848	21,095	15,487	17,142	20,493	25,945
Total Development Wells	16,574	25,675	31,225	23,637	25,699	30,117	38,418
Number of Net In-Progress Wells At Year End for FRS Companies							
Onshore							
Exploratory Wells							
Exploratory Wells	40	70	85	66	84	126	134
Development Wells							
Development Wells	464	716	1,052	1,315	1,209	1,785	2,162
Total In-Progress Wells	504	786	1,138	1,381	1,293	1,911	2,295
Offshore							
Exploratory Wells							
Exploratory Wells	68	50	56	55	46	52	58
Development Wells							
Development Wells	87	110	63	47	78	108	87
Total In-Progress Wells	155	160	118	102	124	159	145
Total United States							
Exploratory Wells							
Exploratory Wells	108	120	141	120	130	177	192
Development Wells							
Development Wells	551	826	1,115	1,362	1,286	1,893	2,249
Total In-Progress Wells	659	946	1,256	1,482	1,416	2,071	2,441

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

Sources: Industry data - Energy Information Administration, *Monthly Energy Review*, October 2006, 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, 1999-2005

	1999	2000	2001	2002	2003	2004	2005
FRS Companies							
Onshore	(thousand feet)						
Exploratory Well Footage							
Dry Hole Footage	921	955	1,085	1,000	823	821	640
Oil Well Footage	312	199	397	141	152	273	374
Gas Well Footage	1,150	1,399	2,016	1,284	1,655	2,213	3,019
Total Exploratory Footage	2,383	2,553	3,498	2,425	2,630	3,307	4,033
Development Well Footage							
Dry Hole Footage	1,252	1,597	2,029	1,716	1,507	1,475	1,599
Oil Well Footage	4,449	9,374	9,435	6,928	8,716	10,352	10,314
Gas Well Footage	12,291	20,516	26,653	32,078	40,507	44,999	53,568
Total Development Footage	17,992	31,487	38,117	40,722	50,730	56,827	65,481
Offshore							
Exploratory Well Footage							
Dry Hole Footage	848	1,151	1,004	652	628	632	616
Oil Well Footage	434	364	551	589	289	167	184
Gas Well Footage	1,002	1,141	759	697	504	391	309
Total Exploratory Footage	2,284	2,656	2,314	1,938	1,421	1,191	1,110
Development Well Footage							
Dry Hole Footage	199	411	353	369	165	163	161
Oil Well Footage	1,280	1,505	2,260	1,362	1,216	833	966
Gas Well Footage	1,295	1,899	1,917	1,370	905	834	685
Total Development Footage	2,774	3,815	4,530	3,101	2,286	1,830	1,812
Total United States							
Exploratory Well Footage							
Dry Hole Footage	1,769	2,107	2,089	1,652	1,451	1,453	1,256
Oil Well Footage	746	563	948	730	441	440	558
Gas Well Footage	2,152	2,540	2,775	1,981	2,159	2,605	3,328
Total Exploratory Footage	4,667	5,209	5,812	4,363	4,051	4,498	5,142
Development Well Footage							
Dry Hole Footage	1,451	2,008	2,382	2,085	1,672	1,638	1,760
Oil Well Footage	5,729	10,879	11,695	8,290	9,932	11,185	11,280
Gas Well Footage	13,586	22,415	28,570	33,448	41,412	45,833	54,253
Total Development Footage	20,766	35,303	42,647	43,823	53,016	58,656	67,293
Total Industry							
Exploratory Well Footage							
Dry Hole Footage	7,646	8,965	11,312	8,587	8,826	-	-
Oil Well Footage	1,045	1,918	2,435	1,611	1,996	-	-
Gas Well Footage	3,315	4,518	6,909	5,062	5,912	-	-
Total Exploratory Footage	12,006	15,422	20,656	15,260	16,734	-	-
Development Well Footage							
Dry Hole Footage	12,508	14,145	14,013	12,098	14,739	-	-
Oil Well Footage	17,705	31,681	36,334	26,401	30,002	-	-
Gas Well Footage	52,204	75,736	102,922	87,326	110,559	-	-
Total Development Footage	82,417	121,563	153,269	125,825	155,300	-	-
Number of Net Producing Wells for FRS Companies	(number of wells)						
Onshore							
Oil Wells	58,987	68,274	66,667	69,021	71,863	69,048	67,632
Gas Wells	44,880	64,696	82,083	89,102	105,439	116,741	125,681
Total Producing Wells	103,867	132,970	148,750	158,123	177,302	185,789	193,313
Offshore							
Oil Wells	2,855	3,536	4,738	4,384	3,777	3,187	2,562
Gas Wells	2,707	3,111	3,606	3,011	2,306	2,264	1,697
Total Producing Wells	5,562	6,647	8,344	7,395	6,083	5,450	4,258
Total United States							
Oil Wells	61,842	71,810	71,405	73,405	75,640	72,234	70,193
Gas Wells	47,587	67,807	85,689	92,113	107,744	119,005	127,378
Total Producing Wells	109,429	139,617	157,094	165,518	183,384	191,239	197,571

- = 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, 1999-2005							
	1999	2000	2001	2002	2003	2004	2005
Canada							
Net Wells Completed During Year							
Exploratory Wells							
Dry Holes	36.4	126.3	106.4	156.6	146.4	106.1	174.2
Oil Wells	25.8	23.3	63.1	74.0	51.0	46.7	23.6
Gas Wells	127.5	194.2	165.9	329.4	454.6	263.6	536.4
Total Exploratory Wells	189.7	343.8	335.4	560.0	652.0	416.4	734.2
Development Wells							
Dry Holes	58.3	138.2	228.8	151.2	161.4	160.3	85.4
Oil Wells	352.1	373.3	818.1	794.1	586.4	547.0	493.5
Gas Wells	758.7	891.5	2,025.1	2,381.1	2,651.9	3,657.6	3,319.8
Total Development Wells	1,169.1	1,403.0	3,072.1	3,326.4	3,399.7	4,364.9	3,898.7
Net In-Progress Wells at Year End	76.3	116.8	307.2	190.0	275.8	274.3	459.2
Net Producing Wells							
Oil Wells	10,155.9	12,094.8	17,640.5	14,203.0	13,167.6	12,287.0	10,637.6
Gas Wells	10,038.7	15,242.7	25,230.5	26,434.9	28,418.4	31,906.3	33,387.3
Total Producing Wells	20,194.6	27,337.5	42,870.9	40,637.9	41,586.0	44,193.2	44,024.9
Europe and Former Soviet Union ¹							
Net Wells Completed During Year							
Exploratory Wells							
Dry Holes	15.4	15.7	15.6	11.2	12.7	17.0	19.4
Oil Wells	9.2	5.2	25.9	5.3	6.1	6.6	6.7
Gas Wells	4.0	6.4	8.6	3.1	3.5	2.9	3.2
Total Exploratory Wells	28.6	27.3	50.1	19.6	22.3	26.5	29.3
Development Wells							
Dry Holes	2.6	10.3	5.4	4.6	6.0	10.1	5.9
Oil Wells	75.4	67.7	91.8	63.0	98.6	97.4	138.6
Gas Wells	30.4	30.4	31.8	41.2	23.0	20.8	17.8
Total Development Wells	108.4	108.4	129.0	108.8	127.6	128.3	162.3
Net In-Progress Wells at Year End	31.6	63.7	69.3	38.7	49.1	39.1	65.6
Net Producing Wells							
Oil Wells	1,218.8	1,431.3	1,478.2	1,225.7	1,325.3	1,376.1	1,352.9
Gas Wells	626.6	737.7	717.2	788.7	639.1	616.0	612.0
Total Producing Wells	1,845.4	2,169.0	2,195.4	2,014.4	1,964.4	1,992.1	1,964.9
Africa and Middle East							
Net Wells Completed During Year							
Exploratory Wells							
Dry Holes	14.9	37.2	21.9	26.8	25.2	23.7	22.9
Oil Wells	9.9	W	W	W	29.1	27.6	W
Gas Wells	10.0	W	W	W	5.6	3.3	W
Total Exploratory Wells	34.8	50.7	50.9	67.5	59.9	54.6	59.0
Development Wells							
Dry Holes	5.8	W	W	11.3	13.2	8.5	14.3
Oil Wells	206.3	239.3	159.8	209.4	293.7	307.6	341.7
Gas Wells	8.6	W	W	13.5	8.7	19.3	12.3
Total Development Wells	220.7	252.0	186.9	234.2	315.6	335.4	368.3
Net In-Progress Wells at Year End	36.8	35.2	35.4	57.0	64.6	64.0	67.1
Net Producing Wells							
Oil Wells	1,969.8	1,954.1	2,063.8	2,209.2	2,357.1	2,780.1	3,150.4
Gas Wells	83.2	79.0	121.2	140.2	152.0	140.6	150.1
Total Producing Wells	2,053.0	2,033.1	2,185.0	2,349.4	2,509.1	2,920.7	3,300.5

See footnotes at end of table.

Table B21. Foreign Net Wells Completed, In-Progress Wells, and Producing Wells by Region for FRS Companies, 1999-2005 (Continued)

	1999	2000	2001	2002	2003	2004	2005
Other Eastern Hemisphere							
Net Wells Completed During Year							
Exploratory Wells							
Dry Holes	35.4	40.7	39.1	36.8	37.2	26.9	21.9
Oil Wells	41.6	31.3	19.9	11.0	8.9	14.9	18.2
Gas Wells	16.0	20.7	42.3	26.6	13.4	21.9	4.8
Total Exploratory Wells	93.0	92.7	101.3	74.4	59.5	63.7	44.9
Development Wells							
Dry Holes	1.9	4.4	7.1	3.0	2.5	3.6	7.7
Oil Wells	82.4	140.6	595.3	554.8	649.6	341.5	250.0
Gas Wells	104.5	113.5	117.0	201.7	147.9	103.4	123.8
Total Development Wells	188.8	258.5	719.4	759.5	800.0	448.5	381.5
Net In-Progress Wells at Year End	56.2	80.5	67.1	30.9	50.5	41.9	26.0
Net Producing Wells							
Oil Wells	1,654.2	1,950.2	7,852.9	7,458.6	7,794.1	7,900.2	7,774.9
Gas Wells	882.2	927.4	1,090.3	1,288.8	1,275.4	1,146.4	594.4
Total Producing Wells	2,536.4	2,877.6	8,943.2	8,747.4	9,069.5	9,046.6	8,369.3
Other Western Hemisphere							
Net Wells Completed During Year							
Exploratory Wells							
Dry Holes	7.9	14.5	31.9	13.2	10.7	11.2	12.4
Oil Wells	3.2	W	W	W	3.8	W	13.2
Gas Wells	3.8	W	W	W	0.0	W	5.5
Total Exploratory Wells	14.9	23.4	40.0	21.3	14.5	16.3	31.1
Development Wells							
Dry Holes	W	W	W	W	W	W	5.4
Oil Wells	81.4	205.8	240.5	217.0	218.0	216.9	225.9
Gas Wells	W	W	W	W	W	W	23.1
Total Development Wells	91.7	245.0	262.9	245.1	236.2	237.9	254.4
Net In-Progress Wells at Year End	27.2	31.3	47.4	31.6	8.6	19.5	18.0
Net Producing Wells							
Oil Wells	2,426.5	2,597.2	2,580.2	2,439.6	2,721.4	2,880.2	2,715.6
Gas Wells	161.4	253.1	262.7	274.0	288.5	311.0	308.7
Total Producing Wells	2,587.9	2,850.3	2,842.9	2,713.6	3,009.9	3,191.2	3,024.3
Total Foreign							
Net Wells Completed During Year							
Exploratory Wells							
Dry Holes	110.0	234.4	214.9	244.6	232.2	184.9	250.8
Oil Wells	89.7	74.1	136.0	134.3	98.9	98.8	96.8
Gas Wells	161.3	229.4	226.8	363.9	477.1	293.9	550.9
Total Exploratory Wells	361.0	537.9	577.7	742.8	808.2	577.5	898.5
Development Wells							
Dry Holes	70.1	156.7	252.5	171.2	184.3	183.8	118.7
Oil Wells	797.6	1,026.7	1,905.5	1,838.3	1,846.3	1,510.4	1,449.7
Gas Wells	911.0	1,083.5	2,212.2	2,664.5	2,848.5	3,820.7	3,496.8
Total Development Wells	1,778.7	2,266.9	4,370.3	4,674.0	4,879.1	5,514.9	5,065.2
Net In-Progress Wells at Year End	228.1	327.5	526.4	348.2	448.6	438.8	635.9
Net Producing Wells							
Oil Wells	17,425.2	20,027.6	31,615.6	27,536.1	27,365.5	27,223.6	25,631.4
Gas Wells	11,792.1	17,239.9	27,421.9	28,926.6	30,773.4	34,120.2	35,052.5
Total Producing Wells	29,217.3	37,267.5	59,037.4	56,462.7	58,138.9	61,343.8	60,683.9

¹OECD Europe combined with the former Soviet Union and Eastern Europe 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, 2004 and 2005

	Total United States			U.S. Onshore			U.S. Offshore		
	2004	2005	Percent Change	2004	2005	Percent Change	2004	2005	Percent Change
Exploration Wells									
Oil Wells									
Wells Completed	37.2	39.3	5.6	26.7	28.6	7.1	10.5	10.7	1.9
Average Depth (thousand feet)	11.8	14.2	20.1	10.2	13.1	27.9	15.9	17.2	8.1
Gas Wells									
Wells Completed	254.3	318.1	25.1	225.7	294.1	30.3	28.6	24.0	-16.0
Average Depth (thousand feet)	10.2	10.5	2.1	9.8	10.3	4.7	13.7	12.9	-6.0
Dry Holes									
Wells Completed	124.7	97.7	-21.6	86.0	65.0	-24.4	38.7	32.7	-15.5
Average Depth (thousand feet)	11.7	12.9	10.3	9.5	9.8	3.1	16.3	18.9	15.4
Development Wells									
Oil Wells									
Wells Completed	2,090.1	2,104.8	0.7	2,004.9	2,005.9	0.1	85.2	98.9	16.1
Average Depth (thousand feet)	5.4	5.4	0.1	5.2	5.1	-0.4	9.8	9.8	-0.1
Gas Wells									
Wells Completed	6,318.8	7,304.2	15.6	6,246.1	7,248.0	16.0	72.7	56.2	-22.7
Average Depth (thousand feet)	7.3	7.4	2.4	7.2	7.4	2.6	11.5	12.2	6.3
Dry Holes									
Wells Completed	211.2	238.6	13.0	197.2	222.2	12.7	14.0	16.4	17.1
Average Depth (thousand feet)	7.8	7.4	-4.9	7.5	7.2	-3.8	11.6	9.8	-15.7

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

Table B23. Oil and Gas Reserves for FRS Companies and U.S. Industry, 2005

	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	23,585.0	2,770.0	0.0	1,931.0	24,424.0	143.4
FRS Companies	11,051.5	849.2	8.2	758.2	11,150.8	112.0
All Other	12,533.5	1,920.8	-8.2	1,172.8	13,273.2	163.8
U.S. Offshore						
Total Industry	5,714.0	374.0	0.0	590.0	5,498.0	63.4
FRS Companies	3,791.5	158.3	-20.5	362.6	3,566.7	43.7
All Other	1,922.5	215.7	20.5	227.4	1,931.3	94.9
U.S. Total						
Total Industry	29,299.0	3,144.0	0.0	2,521.0	29,922.0	124.7
FRS Companies	14,843.0	1,007.5	-12.3	1,120.8	14,717.4	89.9
All Other	14,456.0	2,136.5	12.3	1,400.2	15,204.6	152.6
FRS Companies' Foreign Oil Reserves						
Canada	1,327.2	579.7	-127.5	189.0	1,590.3	306.7
Europe	3,438.4	239.5	-97.5	484.3	3,096.0	49.4
FSU and Eastern Europe	1,874.9	-184.8	61.7	63.7	1,688.1	-290.0
Africa	5,662.6	202.5	370.9	500.4	5,735.7	40.5
Middle East	669.2	W	W	96.6	651.8	91.9
Other Eastern Hemisphere	2,241.1	40.0	-37.1	284.1	1,959.9	14.1
Other Western Hemisphere	1,161.9	W	W	101.7	1,076.6	61.0
Total Foreign	16,375.3	1,027.7	115.5	1,719.9	15,798.5	59.8
Worldwide Total for FRS Companies	31,218.3	2,035.2	103.2	2,840.7	30,516.0	71.6
Dry Natural Gas						
(billion cubic feet)						
U.S. Onshore						
Total Industry	172,453.0	28,712.0	0.0	15,384.0	185,781.0	186.6
FRS Companies	78,182.9	12,468.7	2,776.9	6,071.1	87,357.4	205.4
All Other	94,270.1	16,243.3	-2,776.9	9,312.9	98,423.6	174.4
U.S. Offshore						
Total Industry	20,060.0	1,618.0	0.0	3,074.0	18,604.0	52.6
FRS Companies	13,163.5	786.3	-175.3	1,703.4	12,071.2	46.2
All Other	6,896.5	831.7	175.3	1,370.6	6,532.8	60.7
U.S. Total						
Total Industry	192,513.0	30,330.0	0.0	18,458.0	204,385.0	164.3
FRS Companies	91,346.4	13,255.0	2,601.6	7,774.5	99,428.6	170.5
All Other	101,166.6	17,075.0	-2,601.6	10,683.5	104,956.4	159.8
FRS Companies' Foreign Gas Reserves						
Canada	13,509.7	1,805.2	-590.7	1,559.9	13,164.2	115.7
Europe	18,089.5	871.3	-1,654.9	2,025.8	15,280.1	43.0
FSU and Eastern Europe	2,134.4	133.0	38.2	55.8	2,249.8	238.3
Africa	10,291.2	1,054.1	1.8	364.7	10,982.4	289.0
Middle East	2,003.6	W	W	134.1	3,340.3	1,334.9
Other Eastern Hemisphere	27,914.3	220.8	-593.1	1,779.2	25,762.8	12.4
Other Western Hemisphere	18,124.5	W	W	1,027.0	17,265.5	38.5
Total Foreign	92,067.1	6,270.3	-3,345.6	6,946.6	88,045.2	90.3
Worldwide Total for FRS Companies	183,413.6	19,525.2	-744.0	14,721.1	187,473.8	132.6

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

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*, 2004 and 2005 (November 2005 and November 2006). FRS companies' data - Energy Information Administration, Form EIA-28 (Financial Reporting System).

Table B24. Oil and Gas Reserve Balances by Region for FRS Companies, 2005

Reserves Statistics	Worldwide Total	United States			Total Foreign
		Total	Onshore	Offshore	
Crude Oil and Natural Gas Liquids					
(million barrels)					
Beginning of Period	31,218	14,843	11,051	3,792	16,375
Revisions of Previous Estimates	71	106	188	-82	-35
Improved Recovery	640	445	376	70	194
Purchases of Minerals-in-Place	1,401	386	319	68	1,015
Extensions & Discoveries	1,325	456	285	171	868
Production	-2,841	-1,121	-758	-363	-1,720
Sales of Minerals-in-Place	-1,298	-398	-310	-88	-899
End of period	30,516	14,717	11,151	3,567	15,799
Proportionate Interest in Investee Reserves	--	--	--	--	7,788
Natural Gas Reserves					
(billion cubic feet)					
Beginning of Period	183,414	91,346	78,183	13,164	92,067
Revisions of Previous Estimates	5,236	3,360	W	W	1,877
Improved Recovery	2,103	1,909	W	W	194
Purchases of Minerals-in-Place	9,499	4,856	4,594	262	4,642
Extensions & Discoveries	12,186	7,987	7,366	621	4,199
Production	-14,721	-7,774	-6,071	-1,703	-6,947
Sales of Minerals-in-Place	-10,243	-2,255	-1,818	-437	-7,988
End of Period	187,474	99,429	87,357	12,071	88,045
Proportionate Interest in Investee Reserves	--	--	--	--	43,187

See footnotes at end of table.

Table B24. Oil and Gas Reserve Balances by Region for FRS Companies, 2005 (Continued)

Reserves Statistics	Foreign					
	Total	Canada	Europe and Former Soviet Union ¹	Africa and Middle East	Other Eastern Hemisphere	Other Western Hemisphere
Crude Oil and Natural Gas Liquids (million barrels)						
Beginning of Period	16,375	1,327	5,313	6,332	2,241	1,162
Revisions of Previous Estimates	-35	335	-129	-115	-92	-34
Improved Recovery	194	27	31	W	W	W
Purchases of Minerals-in-Place	1,015	63	396	414	W	W
Extensions & Discoveries	868	218	152	330	90	79
Production	-1,720	-189	-548	-597	-284	-102
Sales of Minerals-in-Place	-899	-191	-432	W	-178	W
End of period	15,799	1,590	4,784	6,388	1,960	1,077
Proportionate Interest in Investee Reserves	7,788	W	4,487	1,451	W	1,849
Natural Gas Reserves (billion cubic feet)						
Beginning of Period	92,067	13,510	20,224	12,295	27,914	18,124
Revisions of Previous Estimates	1,877	-136	282	2,148	-522	105
Improved Recovery	194	88	W	W	W	W
Purchases of Minerals-in-Place	4,642	289	W	W	4,176	0
Extensions & Discoveries	4,199	1,854	670	675	W	W
Production	-6,947	-1,560	-2,082	-499	-1,779	-1,027
Sales of Minerals-in-Place	-7,988	-880	-1,767	W	-4,769	W
End of Period	88,045	13,164	17,530	14,323	25,763	17,265
Proportionate Interest in Investee Reserves	43,187	0	20,126	W	W	2,808

¹ OECD Europe combined with the former Soviet Union and Eastern Europe to avoid disclosure. Prior to 1993, only OECD Europe is included in this region.

-- = Not applicable.

W = Data withheld to avoid disclosure.

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

Table B25. Oil and Gas Exploration and Development Expenditures, Reserves, and Production by Region for FRS Companies and Total Industry, 2005 and Percent Change from 2004

	United States			Foreign Total
	Total	Onshore	Offshore	
Exploration and Development Expenditures	(million dollars)			
FRS Companies	46,389.0	35,215.0	11,174.0	47,258.0
Percent Change	43.1	60.9	6.1	86.6
Wells Completed				
FRS Companies	10,102.7	9,863.8	238.9	5,963.7
Percent Change	11.8	12.3	-4.3	-2.1
Industry	41,874.0	-	-	-
Percent Change	26.9	-	-	-
Success Rate¹	(percent)			
FRS Companies	96.7	97.1	79.4	93.8
Industry	88.9	-	-	-
Crude Oil and NGL Production²	(million barrels)			
FRS Companies	1,120.8	758.2	362.6	1,762.7
Percent Change	-7.2	-2.8	-15.2	-1.3
Industry	2,521.0	1,931.0	590.0	27,104.2
Percent Change	-4.7	-1.3	-14.4	1.4
Interests³	(million barrels)			
FRS Companies	14,717.4	11,150.8	3,566.7	24,012.2
Percent Change	-0.8	0.9	-5.9	-0.2
Natural Gas Production	(billion cubic feet)			
FRS Companies	7,774.5	6,071.1	1,703.4	6,946.6
Percent Change	-4.9	1.4	-22.2	-0.9
Industry	18,458.0	15,384.0	3,074.0	78,976.7
Percent Change	-3.7	2.0	-24.9	4.1
Natural Gas Reserve Interests	(billion cubic feet)			
FRS Companies	99,428.6	87,357.4	12,071.2	131,232.0
Percent Change	8.8	11.7	-8.3	1.7

See footnotes at end of table.

Table B25. Oil and Gas Exploration and Development Expenditures, Reserves, and Production by Region for FRS Companies and Total Industry, 2005 and Percent Change from 2004 (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	47,258.0	9,075.0	12,347.0	10,708.0	1,452.0	12,011.0	1,665.0
Percent Change	86.6	71.1	91.4	55.1	14.2	219.4	1.8
Wells Completed							
FRS Companies	5,963.7	4,632.9	191.6	271.3	156.0	426.4	285.5
Percent Change	-2.1	-3.1	23.8	-1.7	36.8	-16.8	12.3
Industry	-	-	-	-	-	-	-
Percent Change	-	-	-	-	-	-	-
Success Rate¹ (percent)							
FRS Companies	93.8	94.4	86.8	89.2	95.0	93.1	93.8
Industry	-	-	-	-	-	-	-
Crude Oil and NGL Production² (million barrels)							
FRS Companies	1,762.7	189.0	548.0	500.4	139.5	284.1	101.7
Percent Change	-1.3	-7.0	-1.9	6.9	-3.6	-4.9	-9.1
Industry	27,104.2	1,112.2	6,399.9	3,589.8	9,168.4	2,920.0	3,913.9
Percent Change	1.4	-1.5	-0.6	5.9	2.0	0.6	1.0
Crude Oil and NGL Reserve Interests³ (million barrels)							
FRS Companies	24,012.2	1,590.3	9,270.8	5,735.7	2,529.0	1,960.7	2,925.6
Percent Change	-0.2	19.8	-1.1	1.3	9.5	-13.1	-6.6
Natural Gas Production (billion cubic feet)							
FRS Companies	6,946.6	1,559.9	2,081.6	364.7	134.1	1,779.2	1,027.0
Percent Change	-0.9	-7.8	-5.5	32.1	11.6	3.9	1.8
Industry	78,976.7	6,548.2	37,456.8	5,753.9	10,325.3	12,711.5	6,181.0
Percent Change	4.1	1.5	0.9	12.3	4.5	11.4	5.4
Natural Gas Reserve Interests (billion cubic feet)							
FRS Companies	131,232.0	13,164.2	37,656.3	10,982.4	23,516.7	25,838.8	20,073.5
Percent Change	1.7	-2.6	-7.8	6.7	52.1	-8.0	-3.6

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 (65.8 percent of total foreign) and "Other Access" reserves (34.2 percent of total foreign).

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

⁴OECD Europe combined with the former Soviet Union and Eastern Europe 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, 2004*, and 2005 Annual Reports. Reserve Additions, Foreign - *British Petroleum Statistical Review of World Energy 2005 and 2006*. Wells Completed, Foreign - *World Oil*, September 2005 and September 2006. 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, 1999-2005
(million barrels)

	1999	2000	2001	2002	2003	2004	2005
U.S. Refining/Marketing							
Sources							
Acquisitions from U.S. Production Segment	1,516	1,238	1,358	1,368	1,195	982	972
Purchases from Other U.S. Segments and Unconsolidated Affiliates	2,181	2,149	2,629	1,709	1,130	646	456
Purchases from Third Parties	5,205	5,340	3,679	4,219	4,784	5,323	5,525
Net Transfers from Foreign Refining/Marketing Segment	475	324	716	631	738	918	732
Total Sources	9,377	9,050	8,383	7,926	7,847	7,869	7,686
Dispositions							
Net Change in Inventories	-1	-4	-1	-28	30	19	4
Input to Refineries	4,872	4,690	4,668	4,715	4,791	4,967	4,937
Sales to:							
Unaffiliated Third Parties	4,147	4,281	3,391	3,056	2,655	2,764	2,627
Other Segments Excluding Foreign Refining/Marketing	359	84	325	183	372	119	117
Total Dispositions	9,377	9,050	8,383	7,926	7,847	7,869	7,686
Foreign Refining/Marketing							
Sources							
Acquisitions from Foreign Production Segment	1,462	1,585	1,661	1,590	1,502	1,635	1,635
Purchases							
Other Foreign Segments	W	W	W	W	W	41	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	2,244	2,165	2,459	1,626	1,816	1,953	1,923
Net Transfers to U.S. Refining/Marketing Segment	-475	-324	-716	-631	-738	-918	-732
Total Sources	4,307	4,067	4,200	3,287	3,328	3,624	3,724
Dispositions							
Net Change in Inventories	-19	10	-2	0	17	-4	1
Input to Refineries	1,641	1,673	1,682	1,639	1,646	1,768	1,805
Sales	2,685	2,384	2,520	1,647	1,666	1,860	1,918
Total Dispositions	4,307	4,067	4,200	3,287	3,328	3,624	3,724

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, 1999-2005

	1999	2000	2001	2002	2003	2004	2005
Purchases							
U.S. Refining/Marketing Segment	Values (million dollars)						
Raw Materials							
Crude Oil and NGL	152,880	253,092	192,228	186,121	218,773	294,984	395,234
Natural Gas	20,387	58,679	38,947	33,744	2,289	1,253	1,775
Other Raw Materials	5,705	8,395	7,852	7,950	11,436	19,087	20,808
Total Raw Materials	178,972	320,166	239,027	227,815	232,498	315,324	417,817
Refined Products							
Motor Gasoline	36,095	65,488	64,609	60,791	68,149	95,785	120,001
Distillate Fuels	17,433	35,116	31,323	27,238	27,702	33,557	51,269
Other Refined Products	9,963	17,036	18,895	15,460	18,176	22,430	26,300
Total Refined Products	63,491	117,640	114,827	103,489	114,027	151,772	197,570
U.S. Production Segment							
Crude Oil and NGL	5,695	4,794	1,979	721	1,272	1,425	W
Natural Gas	8,608	12,208	14,113	11,785	1,896	0	0
Total Raw Materials	14,303	17,002	16,092	12,506	3,168	1,425	W
Sales							
U.S. Refining/Marketing Segment	Volumes						
Raw Materials							
Crude Oil and NGL	72,955	121,118	86,675	75,278	85,746	110,499	143,531
Natural Gas	20,023	56,482	37,648	32,882	W	0	0
Other Raw Materials	1,576	2,403	2,203	944	W	3,421	2,363
Total Raw Materials	94,554	180,003	126,526	109,104	89,728	113,920	145,894
Refined Products							
Motor Gasoline	109,301	176,394	167,735	160,010	182,344	246,270	304,304
Distillate Fuels	51,810	91,998	83,702	75,136	86,015	114,728	169,187
Other Refined Products	28,506	42,269	40,172	37,044	46,749	55,135	72,907
Total Refined Products	189,617	310,661	291,609	272,190	315,108	416,133	546,398
U.S. Production Segment							
Crude Oil and NGL	25,186	38,314	31,613	30,967	35,074	43,395	57,269
Natural Gas	23,178	40,719	47,390	40,118	39,612	43,185	54,788
Total Raw Materials	48,364	79,033	79,003	71,085	74,686	86,580	112,057
Purchases							
U.S. Refining/Marketing Segment	Volumes						
Raw Materials							
Crude Oil and NGL (million barrels)	9,377	9,050	8,383	7,926	7,847	7,869	7,686
Natural Gas (billion cubic feet)	9,285	13,323	9,147	10,458	441	224	240
Refined Products (million barrels)							
Motor Gasoline	1,533	1,708	1,892	1,886	1,811	1,896	1,763
Distillate Fuels	837	943	987	952	780	689	723
Other Refined Products	446	535	625	583	542	572	494
Total Refined Products	2,815	3,186	3,504	3,420	3,133	3,157	2,980
U.S. Production Segment							
Crude Oil and NGL (million barrels)	367	200	88	37	47	44	W
Natural Gas (billion cubic feet)	3,835	3,276	3,461	3,956	365	0	0
Sales							
U.S. Refining/Marketing Segment	Volumes						
Raw Materials							
Crude Oil and NGL (million barrels)	4,506	4,365	3,716	3,239	3,026	2,883	2,745
Natural Gas (billion cubic feet)	8,834	13,001	8,460	9,783	W	0	0
Refined Products (million barrels)							
Motor Gasoline	4,070	4,286	4,539	4,598	4,354	4,502	4,278
Distillate Fuels	2,344	2,444	2,540	2,465	2,288	2,321	2,349
Other Refined Products	1,407	1,405	1,528	1,332	1,422	1,506	1,534
Total Refined Products	7,820	8,135	8,606	8,395	8,064	8,330	8,161
U.S. Production Segment							
Crude Oil and NGL (million barrels)	1,667	1,484	1,498	1,433	1,336	1,237	1,156
Natural Gas (billion cubic feet)	10,952	11,348	11,957	13,078	8,466	7,959	7,556

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, 1999-2005							
	1999	2000	2001	2002	2003	2004	2005
U.S. Refining							
Runs to Stills	(thousand barrels per calendar day)						
At Own Refineries	13,476	13,361	13,875	13,307	13,278	13,786	13,742
By Refineries of Others	82	86	105	80	84	87	73
Total Runs to Stills	13,558	13,447	13,980	13,387	13,362	13,873	13,815
Refinery Output at Own Refineries and Refineries of Others							
Reformulated Motor Gasoline	1,792	2,129	2,061	1,991	1,726	1,707	1,723
Oxygenated Motor Gasoline	609	412	588	552	515	574	283
Other Motor Gasoline	4,588	4,207	4,373	4,456	4,695	4,809	4,992
Total Motor Gasoline	6,989	6,748	7,022	6,999	6,936	7,090	6,998
Distillate Fuels	4,167	4,376	4,331	4,167	4,398	4,595	4,648
Other Refined Products	3,483	3,375	3,669	3,595	3,349	3,491	3,472
Total Refinery Output	14,639	14,499	15,022	14,761	14,683	15,176	15,118
Refinery Capacity at End of Year	14,158	14,424	15,153	14,198	14,279	14,409	14,532
(number of refineries)							
Number of Wholly-Owned Refineries	94	90	99	84	79	79	76
Foreign Refining							
Runs to Stills	(thousand barrels per calendar day)						
At Own Refineries	4,407	4,513	4,620	4,778	4,550	4,886	5,043
By Refineries of Others	397	403	339	325	370	375	372
Total Runs to Stills	4,804	4,916	4,959	5,103	4,920	5,261	5,415
Refinery Output at Own Refineries							
Motor Gasoline	1,247	1,295	1,293	1,427	1,400	1,445	1,500
Distillate Fuels	1,901	1,738	1,744	2,041	1,971	2,054	2,088
Other Refined Products	1,315	1,717	1,729	1,405	1,251	1,406	1,546
Total Refinery Output at Own Refineries	4,463	4,750	4,766	4,873	4,622	4,905	5,134
Refinery Output at Refineries of Others							
Motor Gasoline	122	123	120	117	125	129	161
Distillate Fuels	135	171	155	175	180	181	209
Other Refined Products	146	80	84	70	73	83	99
Total Refinery Output at Refineries of Others	403	374	359	362	378	393	469
Total Refinery Output	4,866	5,124	5,125	5,235	5,000	5,298	5,603
Refinery Capacity at End of Year	4,930	5,134	5,572	5,642	5,374	5,698	5,633
(number of refineries)							
Number of Wholly-Owned Refineries	19	18	23	22	19	19	19
Number of Partially-Owned Refineries	18	18	18	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, 2005
(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	15,118	6,707	4,008	4,403	-	-
Percent Gasoline						
Reformulated/Oxygenated	13.3	9.8	14.9	17.1	-	-
Other	33.0	35.2	36.7	26.3	-	-
Percent Distillate	30.7	31.9	28.0	31.5	-	-
Percent Other	23.0	23.1	20.4	25.1	-	-
Refinery Capacity						
Years Change (Net)	123	20	2,726	-2,623	-	-
At Year End	14,532	6,559	4,466	3,507	-	-
Utilization Rate ⁴	95.0	88.8	120.6	86.8	-	-
Foreign						
Refinery Output Volume ³	5,603	5,185	0	418	-	-
Percent Gasoline	29.6	29.9	0.0	26.1	-	-
Percent Distillate	41.0	41.2	0.0	38.5	-	-
Percent Other	29.4	28.9	0.0	35.4	-	-
Refinery Capacity						
Years Change (Net)	-65	-55	0	-10	-	-
At Year End	5,633	5,143	0	490	-	-
Utilization Rate ⁴	89.0	89.2	0.0	87.3	-	-

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*, 2004 and 2005. Industry data, Foreign - Refinery Capacity: *British Petroleum Statistical Review of World Energy*, 2005 and 2006.

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, 1999-2005

U.S. Dispositions	1999	2000	2001	2002	2003	2004	2005
Motor Gasoline							
Values (million dollars)							
Intersegment Sales	1,521	1,802	2,521	3,500	1,700	4,029	4,339
U.S. Third-Party Sales							
Wholesale-Resellers	51,908	83,203	69,799	68,576	99,798	122,484	154,551
Company Operated Automotive Outlets	17,334	24,870	22,843	18,662	21,185	35,191	38,984
Company Lessee and Open Automotive Outlets	29,434	48,693	45,798	41,774	35,767	51,928	60,669
Other (Industrial, Commercial and Other Retail)	9,104	17,826	26,774	27,498	23,894	32,638	45,761
Total Third-Party Sales	107,780	174,592	165,214	156,510	180,644	242,241	299,965
Total Motor Gasoline Sales	109,301	176,394	167,735	160,010	182,344	246,270	304,304
Distillate Fuels							
Intersegment Sales	708	444	535	2,387	1,057	2,142	2,649
Third-Party Sales	51,102	91,554	83,167	72,749	84,958	112,586	166,538
Total Distillate Fuels Sales	51,810	91,998	83,702	75,136	86,015	114,728	169,187
Other Refined Products							
Intersegment Sales	2,779	6,078	7,386	4,474	4,235	6,973	9,446
Third-Party Sales	25,727	36,191	32,786	32,570	42,514	48,162	63,461
Total Other Refined Products Sales	28,506	42,269	40,172	37,044	46,749	55,135	72,907
Total U.S. Refined Products							
Intersegment Sales	5,008	8,324	10,442	10,361	6,992	13,144	16,434
Third-Party Sales	184,609	302,337	281,167	261,829	308,116	402,989	529,964
Total U.S. Refined Products Sales	189,617	310,661	291,609	272,190	315,108	416,133	546,398
Motor Gasoline							
Volumes (million barrels)							
Intersegment Sales	66	47	79	101	45	79	64
U.S. Third-Party Sales							
Wholesale-Resellers	2,059	2,126	1,956	2,045	2,508	2,344	2,221
Company Operated Automotive Outlets	540	543	545	464	432	534	504
Company Lessee and Open Automotive Outlets	1,006	1,105	1,182	1,167	797	909	845
Other (Industrial, Commercial and Other Retail)	399	465	777	820	572	636	644
Total Third-Party Sales	4,004	4,239	4,460	4,496	4,309	4,423	4,214
Total Motor Gasoline Sales	4,070	4,286	4,539	4,598	4,354	4,502	4,278
Distillate Fuels							
Intersegment Sales	33	13	17	85	30	45	39
Third-Party Sales	2,310	2,430	2,522	2,380	2,258	2,276	2,309
Total Distillate Fuels Sales	2,344	2,444	2,540	2,465	2,288	2,321	2,349
Other Refined Products							
Intersegment Sales	153	213	258	162	125	160	176
Third-Party Sales	1,254	1,191	1,269	1,170	1,298	1,346	1,358
Total Other Refined Products Sales	1,407	1,405	1,528	1,332	1,422	1,506	1,534
Total U.S. Refined Products							
Intersegment Sales	252	274	354	348	200	285	279
Third-Party Sales	7,568	7,861	8,252	8,046	7,864	8,045	7,881
Total U.S. Refined Products Sales	7,820	8,135	8,606	8,395	8,064	8,330	8,161
Number of Active Automotive Outlets at Year End							
Number of Automotive Outlets							
Company Operated	12,018	12,583	11,380	9,745	8,804	8,848	8,585
Lessee Dealers	17,847	16,953	11,474	9,347	8,746	8,223	6,791
Open Dealers	26,805	25,707	31,231	28,056	26,657	27,183	27,252
Total Outlets	56,670	55,243	54,085	47,148	44,207	44,254	42,628

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, 2004-2005
(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								
2005	63.7	68.16	W	W	W	W	W	W
2004	79.4	50.77	36.0	49.92	42.5	51.45	W	W
Percent Change	-19.8	34.3	W	W	W	W	W	W
Wholesale/Resellers								
2005	2,221.1	69.58	1,025.0	70.76	612.8	69.76	583.3	67.34
2004	2,344.0	52.25	1,060.3	53.18	215.2	53.50	1,068.4	51.08
Percent Change	-5.2	33.2	-3.3	33.0	184.8	30.4	-45.4	31.8
Dealer-Operated Outlets								
2005	845.3	71.77	372.8	72.54	(2)	(2)	472.5	71.16
2004	909.2	57.11	435.5	59.38	(2)	(2)	473.8	55.02
Percent Change	-7.0	25.7	-14.4	22.2	(2)	(2)	-0.3	29.3
Company-Operated Outlets								
2005	503.6	77.40	W	W	(2)	(2)	W	W
2004	534.0	65.90	292.4	69.02	(2)	(2)	241.6	62.13
Percent Change	-5.7	17.5	W	W	(2)	(2)	W	W
Other ¹								
2005	644.1	71.04	364.2	72.90	(2)	(2)	280.0	68.63
2004	635.6	51.35	356.5	51.38	(2)	(2)	279.2	51.32
Percent Change	1.3	38.4	2.2	41.9	(2)	(2)	0.3	33.7
Total Gasoline								
2005	4,277.9	71.13	2,041.0	72.30	1,077.4	70.74	1,159.5	69.45
2004	4,502.2	54.70	2,180.7	56.20	602.0	54.59	1,719.6	52.84
Percent Change	-5.0	30.0	-6.4	28.7	79.0	29.6	-32.6	31.4
Distillate								
2005	2,348.6	72.04	1,044.0	72.01	579.6	72.78	725.0	71.49
2004	2,321.5	49.42	993.3	49.86	329.2	49.34	999.0	49.01
Percent Change	1.2	45.8	5.1	44.4	76.1	47.5	-27.4	45.9
All Other Products								
2005	1,534.0	47.53	618.0	50.72	514.8	44.61	401.2	46.35
2004	1,506.3	36.60	606.3	38.27	165.4	32.67	734.6	36.12
Percent Change	1.8	29.8	1.9	32.5	211.3	36.6	-45.4	28.3
Total Refined Products								
2005	8,160.5	66.96	3,703.0	68.62	2,171.8	65.09	2,285.8	66.04
2004	8,329.9	49.96	3,780.3	51.66	1,096.5	49.71	3,453.1	48.18
Percent Change	-2.0	34.0	-2.0	32.8	98.1	31.0	-33.8	37.1

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, 1999-2005
(Million Dollars)

Revenues and Costs	1999	2000	2001	2002	2003	2004	2005
Refined Product Revenues	189,617	310,661	291,609	272,190	315,108	416,133	546,398
Refined Product Costs							
Raw Materials Processed ¹	83,348	135,624	109,565	115,277	137,486	197,294	268,271
Refinery Energy Expense	6,427	10,838	11,321	9,178	11,415	11,964	14,563
Other Refinery Expense	11,734	10,635	12,274	16,202	14,842	14,762	16,673
Product Purchases	63,491	117,640	114,827	103,489	114,027	151,772	197,570
Other Product Supply Expense	4,915	6,655	6,552	12,562	9,792	6,096	8,274
Marketing Expense ²	11,100	11,128	13,672	13,889	10,959	12,898	12,372
Total Refined Product Costs	181,015	292,520	268,211	270,597	298,521	394,786	517,723
Refined Product Margin	8,602	18,141	23,398	1,593	16,587	21,347	28,675
Refined Products Sold (million barrels)	7,820.2	8,134.7	8,606.3	8,394.7	8,063.7	8,329.9	8,160.5
Dollars per Barrel Margin ³	1.10	2.23	2.72	0.19	2.06	2.56	3.51
Other Refining/Marketing Revenues ⁴	14,282	14,196	16,918	15,878	10,674	14,014	16,011
Other Refining/Marketing Expenses							
Depreciation, Depletion, & Allowance	5,273	4,712	5,259	5,617	6,138	5,574	5,538
Other ⁵	12,546	16,865	18,683	12,811	10,908	9,140	10,261
Total Other Expenses	17,819	21,577	23,942	18,428	17,046	14,714	15,799
Refining/Marketing Operating Income	5,065	10,760	16,374	-957	10,215	20,647	28,887
Miscellaneous Revenue & Expense ⁶	1,367	1,265	1,866	1,002	1,384	2,044	3,292
Less Income Taxes	1,714	4,360	6,271	67	4,165	7,580	11,215
Refining/Marketing Net Income	4,883	7,659	11,951	-1,350	7,434	15,197	20,963

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, 1999-2005
(Million Dollars)

General Operating Expenses	1999	2000	2001	2002	2003	2004	2005
Raw Material Supply							
Raw Material Purchases	178,972	320,166	239,027	227,815	232,498	315,324	417,817
Other Raw Material Supply Expense	3,184	2,371	4,196	4,520	3,218	4,031	6,368
Total Raw Material Supply Expense	182,156	322,537	243,223	232,335	235,716	319,355	424,185
Less: Cost of Raw Materials Input To Refining	85,270	139,931	114,400	121,192	146,446	200,952	274,749
Net Raw Material Supply	96,886	182,606	128,823	111,143	89,270	118,403	149,436
Refining							
Raw Materials Input to Refining	85,270	139,931	114,400	121,192	146,446	200,952	274,749
Less: Raw Material Used as Refinery Fuel	4,254	6,910	7,132	7,954	8,502	8,141	10,020
Refinery Process Energy Expense	6,427	10,838	11,321	9,178	11,415	11,964	14,563
Other Refining Operating Expenses	12,928	13,675	14,657	17,459	16,143	16,179	18,041
Refined Product Purchases	63,491	117,640	114,827	103,489	114,027	151,772	197,570
Other Refined Product Supply Expenses	4,915	6,655	6,552	12,562	9,792	6,096	8,274
Total Refining	168,777	281,829	254,625	255,926	289,321	378,822	503,177
Marketing							
Cost of Other Products Sold	5,305	7,342	9,797	8,677	7,067	5,372	6,686
Other Marketing Expenses	11,100	11,128	13,672	13,889	10,959	12,898	12,372
Subtotal	16,405	18,470	23,469	22,566	18,026	18,270	19,058
Expense of Transport Services for Others	4,191	3,691	4,002	439	559	336	305
Total Marketing	20,596	22,161	27,471	23,005	18,585	18,606	19,363
Total U.S. Refining/Marketing Segment							
General Operating Expenses	286,259	486,596	410,919	390,074	397,176	515,831	671,976

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

Table B34. U.S. Coal Reserves Balance for FRS Companies, 1999-2005 (Million Tons)							
Reserves and Production Statistics	1999	2000	2001	2002	2003	2004	2005
Changes to U.S. Coal Reserves							
Beginning of Period	5,334	4,344	2,465	1,256	697	544	520
Changes due to:							
Leases/Purchases of Minerals-in-Place	W	W	W	W	W	W	W
Corporate Mergers and Acquisitions	W	W	W	W	W	W	0
Other Reserve Changes	-25	-58	-354	27	W	0	W
Production	-44	-35	-31	-28	-17	-18	-18
Dispositions of Minerals-in-Place	-802	-1,799	W	W	W	W	0
End of Period Reserves	4,507	2,465	1,256	793	544	520	674
Weighted Average Annual Production Capacity	55	47	38	38	22	22	22
Reserves and Production:							
Total United States							
FRS Companies' Reserves	4,507	2,465	1,256	793	544	520	674
FRS Companies' Production	44	35	31	28	17	18	18
U.S. Industry Production	1,100	1,074	1,128	1,093	1,072	1,111	1,131
Region							
East							
FRS Companies' Reserves	1,676	1,034	557	227	W	W	W
FRS Companies' Production	21	20	16	14	W	W	W
U.S. Industry Production	426	420	433	399	376	394	400
Midwest							
FRS Companies' Reserves	1,055	W	W	W	W	W	W
FRS Companies' Production	W	W	W	W	W	W	W
U.S. Industry Production	104	87	95	93	89	90	93
West							
FRS Companies' Reserves	1,776	W	W	W	W	W	W
FRS Companies' Production	W	W	W	W	W	W	W
U.S. Industry Production	571	566	597	601	603	627	638
Mining Method							
Underground							
FRS Companies' Reserves	1,853	1,752	W	W	W	W	W
FRS Companies' Production	21	21	W	W	W	W	W
U.S. Industry Production	392	374	381	357	353	368	387
Surface							
FRS Companies' Reserves	2,654	713	W	W	W	W	W
FRS Companies' Production	23	14	W	W	W	W	W
U.S. Industry Production	709	700	747	736	718	744	762
W = Data withheld to avoid disclosure. Sources: Coal production: 1997-2000--Energy Information Administration, <i>Coal Industry Annual</i> , annual reports; 2001-2005 - EIA, <i>Annual Coal Report</i> , annual reports. FRS Companies' data - Energy Information Administration, Form EIA-28 (Financial Reporting System).							

Table B35. Consolidating Statement of Income for FRS Companies, U.S. and Foreign Downstream Natural Gas Segments, 2005
(Million Dollars)

Income Statement Items	U.S. Downstream Natural Gas					Consolidated Foreign
	Consolidated	Processing and Gathering	Marketing/ Trading	Transmission	Distribution	
Operating Revenues						
Natural Gas Sales	151,462	30,806	145,736	-	3,096	57,828
NGL Products Sales	19,188	13,069	10,325	-	0	8,940
Transportation Sales	5,242	148	W	4,759	W	199
Other Product Sales	W	-	W	-	-	0
Trading/Derivatives	W	0	39	0	0	W
Management and Processing Fees	517	494	23	0	0	W
Other Revenues	3,303	1,131	1,607	477	W	717
Total Operating Revenues	179,728	45,648	157,743	5,236	3,595	67,981
Operating Expenses						
General Operating Expenses	175,722	45,353	158,539	1,316	3,008	67,321
Depreciation, Depletion, & Allowance	1,854	790	153	814	W	1,056
General & Administrative	1,978	154	521	1,168	W	121
Total Operating Expenses	179,554	46,297	159,213	3,298	3,240	68,498
Operating Income	174	-649	-1,470	1,938	355	-517
Other Revenue & (Expense)						
Earnings of Unconsolidated Affiliates	W	1,143	-12	230	W	W
Gain(Loss) on Disposition of Property, Plant, & Equipment	W	-4	6	41	0	W
Total Other Revenue & (Expense)	1,419	1,139	-6	271	W	934
Pretax Income	1,593	490	-1,476	2,209	370	417
Income Tax Expense	345	120	-701	792	134	-291
Discontinued Operations	W	W	W	W	0	0
Effect of Accounting Changes	W	W	W	W	0	0
Contribution To Net Income	1,501	620	-774	1,419	236	708

- = Not available.

W = Data withheld to avoid disclosure.

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

Table B36. Consolidating Statement of Income for FRS Companies, U.S. and Foreign Electric Power Segments, 2005
(Million Dollars)

Income Statement Items	U.S. Electric Power			Consolidated Foreign
	Consolidated	Non-Regulated Generation	Marketing/ Trading	
Operating Revenues				
Power Sales	29,693	2,619	24,682	945
Transportation Sales	W	0	0	0
Other Product Sales	W	0	W	0
Trading/Derivatives	-94	0	-94	0
Other Revenues	435	33	W	123
Total Operating Revenues	30,556	2,652	25,161	1,068
Operating Expenses				
General Operating Expenses	28,263	2,476	24,662	1,118
Depreciation, Depletion, & Allowance	586	87	W	88
General & Administrative	631	202	W	77
Total Operating Expenses	29,480	2,765	24,762	1,283
Operating Income	1,076	-113	399	-215
Other Revenue & (Expense)				
Earnings of Unconsolidated Affiliates	W	W	W	355
Gain(Loss) on Disposition of Property, Plant, & Equipment	W	W	0	0
Income Tax Expense	362	-60	159	45
Contribution To Net Income	386	151	-334	-31

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).