

Industry & Trade Summary

Crude Petroleum

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PREFACE

In 1991 the United States International Trade Commission initiated its current *Industry and Trade Summary* series of informational reports on the thousands of products imported into and exported from the United States. Each summary addresses a different commodity/industry area and contains information on product uses, U.S. and foreign producers, and customs treatment. Also included is an analysis of the basic factors affecting trends in consumption, production, and trade of the commodity, as well as those bearing on the competitiveness of U.S. industries in domestic and foreign markets.¹

This report on crude petroleum covers the period 1987 through 1991 and represents one of the approximately 250-300 individual reports to be produced in this series during the first half of the 1990s. Listed below are the individual summary reports published to date on the energy and chemicals sector.

<i>USITC publication number</i>	<i>Publication date</i>	<i>Title</i>
2458 (CH-1)	November 1991	Soaps, detergents and surface-active agents
2509 (CH-2)	March 1992	Inorganic acids
2548 (CH-3)	March 1992	Paints, inks, and related items
2578 (CH-4)	November 1992	Crude petroleum

¹ The information and analysis provided in this report are for the purpose of this report only. Nothing in this report should be construed to indicate how the Commission would find in an investigation conducted under statutory authority covering the same or similar subject matter.

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INTRODUCTION

This report contains information regarding U.S. and foreign crude petroleum industries, tariff and nontariff measures, and U.S. and foreign markets. Most of the information in this report is provided in the context of a 5-year (1987-91) time frame.

Crude petroleum is a mixture of hydrocarbons that exists in natural underground reservoirs and is liquid at atmospheric pressure after passing through surface-separating processes. In addition to paraffinic, naphthenic, and aromatic compounds, crude petroleum contains varying amounts of sulfur, nitrogen, oxygen, and other organic and inorganic compounds, such as salts and metals. The presence of sulfur, nitrogen, and metallic compounds is undesirable because these compounds lead to problems in the refining process. These components are either removed from the crude petroleum before it is refined or are converted into compounds, which are relatively harmless. For example, the presence of certain sulfur compounds, such as mercaptans or thiols, results in what is termed a "sour" crude;¹ their removal is called "sweetening."

Crude petroleum is recovered by primary, secondary, and tertiary recovery methods. Primary recovery processes utilize the natural drive of either water or natural gas already present in the underground reservoir to force the crude out of the ground. As the natural drive weakens, the well is usually equipped with a pump which claims additional crude from the reservoir. Secondary processes often involve additional amounts of water or natural gas, which are pumped into the reservoir, forcing the crude up through the producing well. Approximately 90 to 95 percent of the world's crude petroleum is recovered using primary and secondary processes; however, these methods recover only about 35 to 40 percent of the crude in a reservoir. Tertiary methods are used to recover some of the additional crude. These methods usually employ chemical or thermal means to displace crude petroleum from the reservoir or to modify the properties of the contents of the reservoir in order to produce the additional crude. Crude petroleum is then refined to produce petroleum products such as gasoline, fuel oils, jet fuel, and petrochemical feedstocks.

While reserves of crude petroleum are found in many nations, a large share of the world's crude petroleum production is consumed in nations other than those in which it is produced. Thus there is a large volume of trade in crude petroleum. Imports into many developed nations and exports from most producing nations are large items in each of these types of nations' trade balances. For example, crude petroleum accounted for nearly 45 percent of the U.S. trade deficit in 1991.

¹ Crude petroleum is referred to as "sour" when it contains in excess of 1 percent by weight of sulfur.

U.S. INDUSTRY PROFILE

Industry Structure²

The United States ranks ninth in the world in terms of estimated proved reserves of crude petroleum. In the United States, approximately 19,000 companies are involved in the production of crude petroleum. Many are small companies that individually and collectively account for relatively small shares of total U.S. crude petroleum production. Many producers of crude petroleum in the United States are large, multinational companies (such as Exxon, Mobil, and Shell) that are involved both in foreign production and importing into the United States. Most of these companies are also involved in refining and petrochemical production. Industry sources indicate that the 50 largest companies account for about 70 percent of total production; the remaining 30 percent of production is spread among many thousands of companies. There were approximately 395,000 workers involved in crude petroleum and natural gas production in 1991.³

As a result of the severe drop in the per barrel price of crude petroleum in late 1985, U.S. drilling declined from 70,260 wells drilled in 1985 to 39,810 wells drilled in 1986; there were 29,800 wells drilled in 1990 and 26,920 wells drilled in 1991.⁴ The number of wells in operation in the United States declined from 646,626 in 1985 to 587,762 in 1990;⁵ while the number of rotary rigs in operation declined from 1,980 in 1985 to 860 in 1991.⁶ Texas and Oklahoma are the major producing States, together accounting for 46 percent of the total number of producing wells.

The petroleum industry can be either labor- or capital-intensive depending upon the stage of well development. It is labor-intensive during certain stages of well development since employees include scientific and engineering personnel, as well as many nonprofessional personnel possessing mechanical and technical skills. The industry is also capital-intensive during certain stages of well development, utilizing the most sophisticated, high-tech processes and equipment available. As exploration and drilling have moved into the harsh environments of Alaska and offshore,

² Crude petroleum is classified in Standard Industrial Classification (SIC) Industry No. 1311, Crude Petroleum and Natural Gas. Most of the petroleum companies in the United States also produce natural gas because it is often produced simultaneously with crude petroleum from many wells, and, at times, when crude petroleum exploration wells are drilled, natural gas is discovered instead. Therefore, separate data in many areas on the crude petroleum industry are often not available since SIC No. 1311 encompasses both crude petroleum and natural gas.

³ American Petroleum Institute, *Basic Petroleum Data Book*, vol. XI, No. 3 (Sept. 1991), sec. V, table 2c.

⁴ U.S. Department of Energy, *Monthly Energy Review*, Feb. 1992, p. 77.

⁵ American Petroleum Institute, *Basic Petroleum Data Book*, vol. XI, No.3 (Sept. 1991), sec. III, table 18c.

⁶ U.S. Department of Energy, *Monthly Energy Review*, Feb. 1992, p. 76.

and the readily accessible reserves have become depleted, new and more sophisticated recovery technology has been developed and utilized.

In 1989 (the last year for which data are available), U.S. petroleum companies maintained expenditures for exploration, development, and production of \$45.1 billion; the industry paid taxes (including environmental protection costs) totaling \$38.8 billion. Net income in 1989 was \$14.9 billion.⁷

Most crude petroleum is marketed by the large multinational companies that are integrated forward into the production of refined petroleum products; therefore, these firms generally sell or transfer the crude to their own refineries. As a result, there is no role, in the traditional sense, for a middleman in marketing crude in the United States. There are, however, a number of small firms that produce crude petroleum for sale to the larger, integrated firms or market crude through independent distributors or their own sales forces.

Until the early 1980s, the U.S. price of crude petroleum was controlled for reasons of national security.⁸ The U.S. price now follows the world price, which fluctuates wildly with changes in supply and demand. The following tabulation, derived from official statistics of the U.S. Department of Energy, shows the crude petroleum wellhead and refiner acquisition costs of both domestic and imported crude (in dollars per barrel):

Year	Wellhead price	Refiner acquisition cost	
		Domestic	Import
1985	24.09	26.66	26.99
1986	12.51	14.82	14.00
1987	15.40	17.76	18.13
1988	12.58	14.74	14.56
1989	15.86	17.87	18.08
1990	20.03	22.59	21.76
1991	16.62	19.43	18.83

Petroleum-finding costs in the United States average \$4.99 per barrel compared with foreign costs of \$3.97.

The petroleum industry, as stated previously, utilizes sophisticated, high-tech processes to explore for and develop crude petroleum reserves, as well as to protect the environment. Research and development expenditures in the area of environmental protection have increased significantly in the wake of recent spills, such as the Exxon Valdez spill in Alaska's Prince William Sound.

⁷ American Petroleum Institute, *Basic Petroleum Data Book*, vol. XI, No. 3 (Sept. 1991), sec. V.

⁸ The U.S. Government, pursuant to the Emergency Petroleum Allocation Act of 1973, as amended, can impose price controls on domestically produced crude petroleum. Controls were lifted by Executive Order 12287 in 1981, but can be imposed at the discretion of the President and/or Congress in times of emergency or for reasons of national security.

Consumer Characteristics and Factors Affecting Demand

The value of crude petroleum is found in terms of the products made during its refining. Crude is refined into consumer products such as fuel oils and gasoline as well as feedstocks for petrochemicals. There is a close relationship between crude petroleum demand and price. The price increases experienced during the late 1970s and early 1980s resulted in conservation, fuel switching, and research and development into alternate fuels as well as fuel efficiency. The price drop experienced in late 1985 resulted in the abandonment of many of these conservation methods.

FOREIGN INDUSTRY PROFILE

In 1991, total world reserves of crude petroleum were estimated at 991 billion barrels, and production was 59.7 million barrels per day.⁹ The major petroleum-consuming nations are not the principal producers. The petroleum industry is truly a globalized industry. The major multinational petroleum companies dominate world production and trade and are responsible for developing most of the world's reserves of crude petroleum. These multinational firms also developed the technology and processes used worldwide to produce crude petroleum.

Most of the petroleum reserves in the world are owned, developed, and operated by government-owned petroleum companies. The governments of all of the member nations of the Organization of Petroleum Exporting Countries (OPEC),¹⁰ Mexico, and the Commonwealth of Independent States (CIS), primarily Russia, dominate the industry. The following tabulation shows crude petroleum reserves (in millions of barrels), as of January 1, 1992, and production (in thousands of barrels per day) in 1991 for selected nations:¹¹

	Reserves	Production
Saudi Arabia	257,842	8,108
Venezuela	59,100	2,360
Nigeria	17,890	1,940
Indonesia	6,581	1,620
Other OPEC	427,979	9,765
TOTAL OPEC	769,392	23,793
Mexico	51,298	2,680
United States	26,250	7,372
Canada	5,588	1,585
United Kingdom	3,994	1,761
CIS	57,000	9,658

⁹ "Worldwide Report," *Oil and Gas Journal*, Dec. 30, 1991, pp. 48-49, and U.S. Department of Energy, *Monthly Energy Review*, Feb. 1992, pp. 124-125.

¹⁰ OPEC was founded in 1960 by Iran, Iraq, Kuwait, Saudi Arabia, and Venezuela; in 1975, Algeria, Ecuador, Gabon, Indonesia, Libya, Nigeria, Qatar, and the United Arab Emirates joined, bringing membership to 13 nations.

¹¹ "Worldwide Report," *Oil and Gas Journal*, Dec. 30, 1991, pp. 48-49, and U.S. Department of Energy, *Monthly Energy Review*, Feb. 1992, pp. 124-125.

The members of OPEC together account for 78 percent of the world's reserves and 40 percent of the world's production of crude petroleum. OPEC has historically had problems maintaining stability in pricing and supply. Large price increases occurred during 1973-74 and 1979-80, which resulted in decreased demand by the industrialized consuming nations. Supplies of crude were increased as non-OPEC nations such as Mexico and the United Kingdom discovered additional reserves and found it economically feasible to develop these production areas. As a result of this chain of events, during 1985-86, pressured by limited revenues from crude sales, several OPEC nations, notably Saudi Arabia, the largest OPEC producer, began to ignore OPEC production quotas and maximized crude output to regain income losses. The effect was a sudden surge in supply accompanied by a dramatic drop in world crude prices. It was not until late 1988 that Saudi Arabia, the traditional swing producer in OPEC, began to produce within its production quota limits.¹²

Saudi Arabia is the world's second-largest producer and the largest exporter of crude petroleum. The Saudi petroleum industry is dominated by the Government, which retains title to all mineral resources in the nation, sets basic policy, and makes all major decisions regarding production, investment, and pricing. The Government also holds a sole or majority ownership interest in the major operating companies, such as Saudi Aramco, which is charged with the production and exportation of crude.¹³

Another major U.S. supplier of crude petroleum is Mexico. Mexico's petroleum industry is under the sole purview of the state-owned Petroleos Mexicanos (PEMEX). PEMEX has the sole responsibility for the exploration and production of crude petroleum and determines the levels of imports and exports of crude.

U.S. TRADE MEASURES

Table 1 shows the rates of duty, as of January 1, 1992, applicable to imports of crude petroleum under the Harmonized Tariff Schedule of the United States (HTS). The table shows the column 1 rates of duty for countries considered for general or most-favored-nation (MFN) treatment, as well as duty rates under column 1 for countries qualifying under special tariff programs.¹⁴

¹² The term "swing" producer refers to Saudi Arabia's role as the nation which increases or decreases its production in order to maintain the total OPEC production quota.

¹³ Originally, ARAMCO was founded by four U.S. companies (Chevron, Texaco, Exxon, and Mobil). It was purchased by the Saudi Government in 1976 and converted into an entirely Saudi company. It now manages the fields, pipelines, and export facilities, including tankers, throughout the nation. It is governed by a Supreme Council headed by the King.

¹⁴ See appendix A for an explanation of rate of duty columns.

Crude petroleum testing under 25 degrees A.P.I.¹⁵ is classified under HTS item 2709.00.10, with a column 1 rate of duty of 5.25 cents per barrel; crude testing 25 degrees A.P.I. or more is classified under HTS item 2709.00.20 with a column 1 rate of duty of 10.5 cents per barrel. Imports of crude petroleum are not eligible for duty-free treatment under the provisions of the Generalized System of Preferences (GSP) or the Caribbean Basin Economic Recovery Act (CBERA). U.S. imports of crude petroleum are duty-free under the provisions of the United States-Canada Free-Trade Agreement and the United States-Israel Free-Trade Area Implementation Act. There are no known significant domestic nontariff import restrictions on crude petroleum.

FOREIGN TRADE MEASURES

Duty rates on crude petroleum throughout the world are relatively low; however, U.S. crude production does not enter the world market as U.S. exports are prohibited (see U.S. Export section for further information).

U.S. MARKET

Consumption

Historically U.S. consumption of crude petroleum increases as prices decrease. When crude prices have been high, conservation methods, such as fuel-efficient automobiles and alternate fuel usage, are utilized; when prices are low, these methods are usually abandoned. U.S. consumption of crude petroleum has increased rapidly since the per barrel price of crude began to fall in late 1985. During the period, U.S. production declined, and the conservation methods adopted during the 1970s were abandoned in favor of cheaper imported petroleum. U.S. apparent consumption increased from 12.9 million barrels per day in 1987 to 13.1 million barrels per day in 1991. The share of domestic consumption accounted for by imports rose sharply from a low of 27 percent in 1985 to 44 percent in 1991 (see figure 1 and table 2).

Production

U.S. production of crude petroleum declined during 1987-91 as a result of the sharp decrease in the per barrel price, which began in late 1985. In 1985, the United States produced 8.97 million barrels of crude petroleum per day (see figure 2 and table 2). As a result of price decreases from an average \$25 per barrel in 1985 to \$12.51 per barrel in 1986, U.S. exploration and drilling decreased significantly. Wells drilled decreased from 34,940 in 1985 to 10,540 in 1991. The

¹⁵ A.P.I. is the American Petroleum Institute scale used to measure the specific gravity of the petroleum in degrees. On the A.P.I. scale, crude with the least specific gravity has the highest A.P.I. gravity. Other things being equal, the higher the A.P.I. gravity, the greater the value of the crude. Most crudes range from 27 degrees to 35 degrees.

Table 1

Crude petroleum: Harmonized Tariff Schedule subheading; description; U.S. col. 1 rate of duty as of Jan. 1, 1992; U.S. exports, 1991; and U.S. imports, 1991

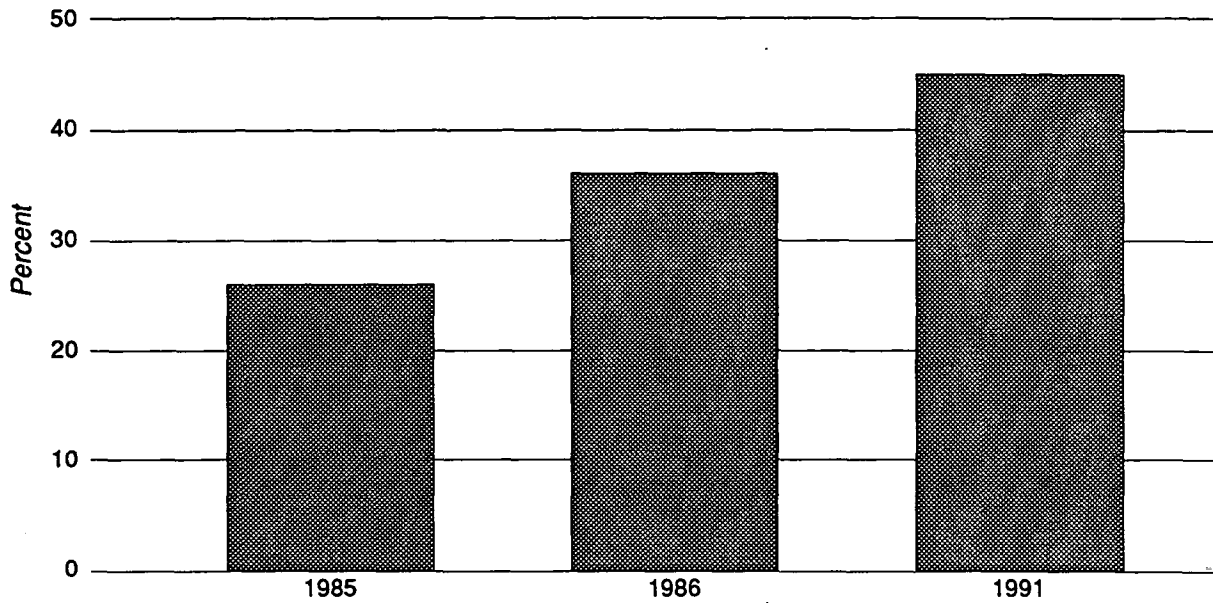
HTS subheading	Brief description	Col. 1 rate of duty As of Jan. 1, 1992		U.S. exports, 1991	U.S. imports, 1991
		General	Special ¹		
— Million dollars —					
2709.00	Petroleum oils and oils obtained from bituminous minerals, crude:				
2709.00.10	Testing under 25 degrees A.P.I.	5.25¢/bbl.	Free (IL) 1¢/bbl. (CA)	35	31,151
2709.00.20	Testing 25 degrees A.P.I. or more	10.5¢/bbl.	Free (IL) 2.1¢/bbl. (CA)	(²)	6,223

¹ Programs under which special tariff treatment may be provided, and the corresponding symbols for such programs as they are indicated in the "Special" subcolumn, are as follows: Generalized System of Preferences (A); Automotive Products Trade Act (B); Agreement on Trade in Civil Aircraft (C); United States-Canada Free-Trade Agreement (CA); Caribbean Basin Economic Recovery Act (E); and United States-Israel Free-Trade Area (IL).

² U.S. exports totaled \$13,000 in 1991.

Source: U.S. exports and imports compiled from official statistics of the U.S. Department of Commerce.

Figure 1
U.S. imports of crude petroleum as a share of domestic consumption, 1985, 1986, and 1991



Source: Compiled from official statistics of the U.S. Department of Energy.

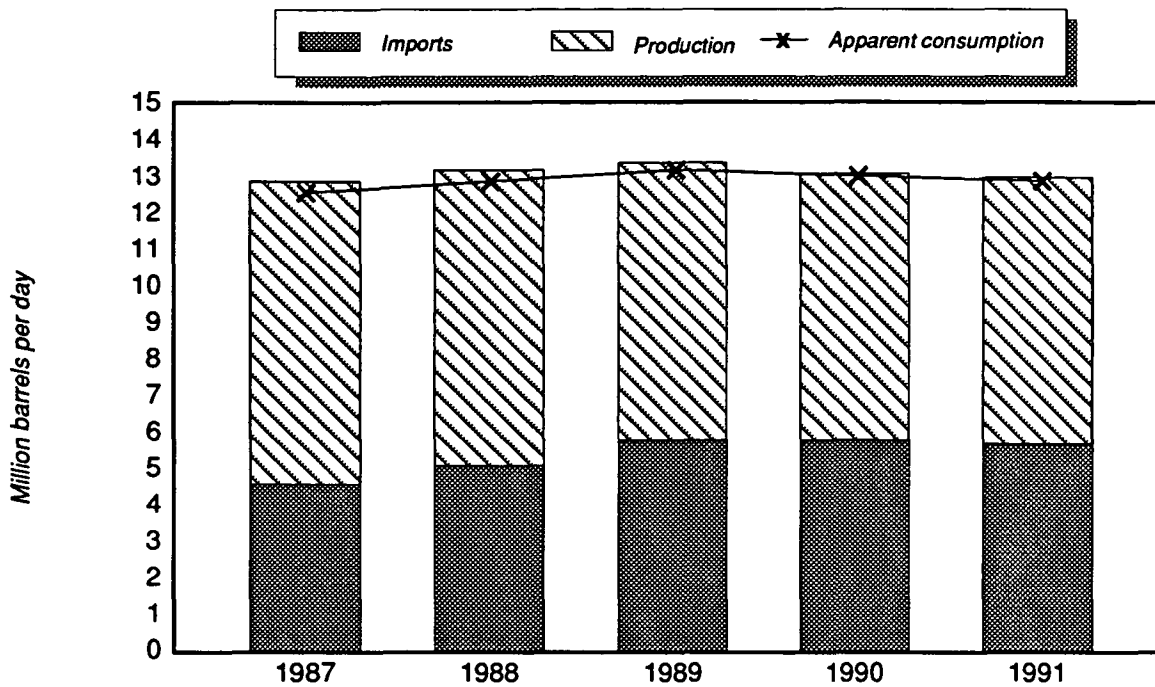
Table 2
Crude petroleum:¹ U.S. production, exports of domestic merchandise, imports for consumption, and apparent consumption, 1987-91

Year	Production	Exports	Imports	Apparent consumption	Ratio of imports to consumption
					Percent
<i>Thousands of barrels per-day</i>					
1987	8,349	151	4,674	12,872	36
1988	8,140	155	5,107	13,092	39
1989	7,613	142	5,843	13,314	44
1990	7,355	109	5,894	13,140	45
1991	7,372	115	5,791	13,048	44

¹ Trade trends for crude petroleum are presented in quantity because, as a result of the decrease in crude prices, value data show incorrect trends.

Source: Compiled from official statistics of the U.S. Department of Energy.

Figure 2
Crude petroleum: U.S. imports, production, and apparent consumption,¹ 1987-91



¹ Apparent Consumption = Production + Imports-Exports.

Note.— U.S. exports of crude petroleum are prohibited.

Source: Compiled from official statistics of the U.S. Department of Energy.

number of onshore and offshore rigs in operation decreased from 2,000 per week in 1985 to 860 per week in 1991.¹⁶

Imports

U.S. imports of crude petroleum increased from 4.7 million barrels per day in 1987 to 5.8 million barrels per day in 1991 (see figure 2 and table 3). The increase is attributed to the decrease in price of imports from an average of \$25.84 per barrel in 1985 to \$12.52 per barrel in 1986; the price increased to an average of \$17.00 per barrel in 1991.

The major sources of U.S. imports of crude petroleum are the OPEC-member nations, accounting for 59 percent of total imports in 1991 compared with 41 percent in 1985 (see figure 3). Saudi Arabia is the major source of imports of crude petroleum, followed by Nigeria and Venezuela. The leading non-OPEC source of U.S. imports is Mexico.

The United States also imports crude petroleum for storage in the Strategic Petroleum Reserve (SPR). The SPR was established in 1975 in response to a growing U.S. vulnerability to market disruptions that

threatened U.S. supplies of crude petroleum. Storage sites for the SPR are salt domes located in Texas and Louisiana. U.S. imports of crude petroleum for storage in the SPR decreased from 118,000 barrels per day in 1985 to 27,000 barrels per day in 1990; imports for SPR storage were halted in September 1990. Mexico supplied over 44 percent of the U.S. imports of crude petroleum for the SPR during the period.

FOREIGN MARKETS

Foreign Market Profile

Saudi Arabia is a major factor in the world crude petroleum market as well as within OPEC. Internally, crude remains the mainspring of the Saudi economy. In 1990, crude accounted for about 35 percent of the Saudi gross domestic product, 80 percent of government revenues, and 90 percent of total export earnings.¹⁷ In response to the Iraqi invasion of Kuwait, Saudi Arabia increased its exploration and production in an effort to secure adequate supplies of OPEC crude to the world market. Historically, Saudi Arabia had usually remained within its OPEC production quotas; however, after the invasion of Kuwait, Saudi Arabia, along with Venezuela,

¹⁶ U.S. Department of Energy, *Monthly Energy Review*, Feb. 1992, pp. 76-77.

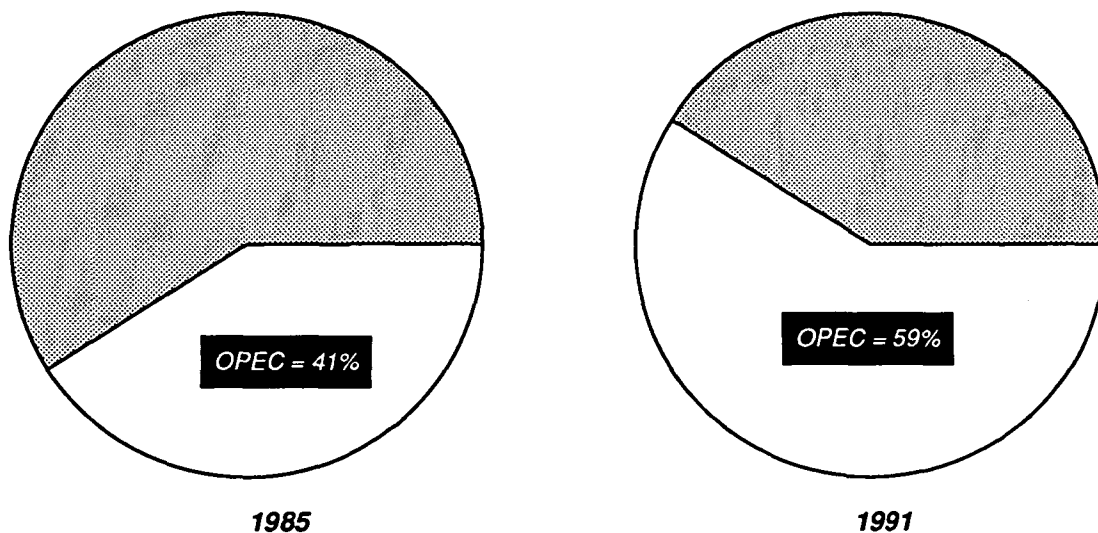
¹⁷ U.S. Department of State, "1991 Oil Survey," *Airgram*, June 29, 1991, sec. II.

Table 3
Crude petroleum: U.S. Imports for consumption, by principal sources, 1987-91
(1,000 barrels per day)

Source	1987	1988	1989	1990	1991
Saudi Arabia	642	911	1,116	1,195	1,698
Nigeria	529	607	800	784	682
Venezuela	488	439	495	666	658
Mexico	602	674	716	689	757
Canada	608	681	630	643	750
Angola	180	203	279	236	254
Colombia	115	106	136	140	125
United Kingdom	304	254	160	155	106
Indonesia	262	186	158	98	102
All other	944	1,046	1,353	1,288	650
Total	4,674	5,107	5,843	5,894	5,782

Source: Compiled from official statistics of the U.S. Department of Energy.

Figure 3
OPEC's share of total U.S. crude imports, 1985 and 1991



Source: Compiled from official statistics of the U.S. Department of Energy.

abandoned the quotas. Saudi crude pricing maintains an official selling price, adjusted monthly, linked to a variety of marker¹⁸ crudes. Sales to the Far East are based on Oman and Dubai crude prices; prices for the European market are based on North Sea Brent crude; and sales to North America are based on Alaska North Slope (ANS) prices. Marketing is carried out through Saudi Aramco.¹⁹

¹⁸ A marker crude is one which is representative of the types of crude from a certain area or nation.

¹⁹ Ibid., sec. VI.

Like Saudi Arabia and Venezuela, Mexico also increased its production of crude petroleum to prevent a shortage of crude on the world market as a result of the invasion of Kuwait. Crude petroleum is one of the primary sources of revenue for Mexico. In order to remain competitive, Mexico prices its crude based on the spot market price for similar quality crudes. The spot market price is followed in order to assure that Mexico's three grades of crude arrive in the United States, based on West Texas Intermediate and ANS crude, and in Europe, based on Brent crude. All crude

production is marketed through Petroleos Mexicanos Internacional (PMI), an arm of PEMEX.

U.S. Exports

U.S. exports of crude petroleum are prohibited, except as approved by the U.S. Government.²⁰ ANS crude petroleum can be exported to an adjacent foreign country to be refined and consumed therein in exchange for the same quantity of crude petroleum being exported from that country to the United States provided: (1) that the exchange will result in lower prices for consumers of petroleum products in the United States; (2) within 3 months of the exchange, the transaction results in lower acquisition costs to the refiner than the refiner would have to pay for domestically produced crude; and (3) at least 75 percent of such savings in cost must be reflected in wholesale and retail prices of products refined from such imported crude.

U.S. exports of crude petroleum decreased from 151,000 barrels per day in 1987 to 116,000 barrels per day in 1991 (table 4). Canada has historically been the only consistent market for exports of crude petroleum. These exports are part of a commercial exchange agreement between U.S. and Canadian refiners, and approved by the Secretary of the U.S. Department of Energy. Beginning in 1987, small shipments of ANS crude petroleum were approved for export to the Republic of Korea, Taiwan, and Australia.

U.S. TRADE BALANCE

The United States maintains a negative balance of trade in terms of crude petroleum since exports are generally prohibited. The trade deficit in crude petroleum increased from \$29.0 billion in 1987 to \$43.7 billion in 1990 and decreased to \$37.3 billion in 1991 (see table 5). Total value for U.S. imports of crude petroleum in 1990 amounted to \$43.8 billion, the largest of any imported product into the United States. This total declined slightly to \$37.4 billion in 1991. Crude petroleum annually accounts for approximately 45 percent of the total U.S. trade deficit.

²⁰ The export of crude petroleum can be restricted by the President under sec. 103 of the "Energy Policy and Conservation Act," Public Law 94-163, Dec. 22, 1975. In matters of export control of crude petroleum, the President acts through the Secretary of Commerce, who imposes such restrictions as necessary to be consistent with the national interest and the purposes of this act. The Secretary enforces this provision of the act through the requirement of validated export licenses. The rules governing these exports are set forth in sec. 377.6, "Petroleum and Petroleum Products," U.S. Department of Commerce, *Export Administration Regulations*, Dec. 7, 1981.

U.S. exports of crude petroleum can also be controlled by three other acts: the "Export Administration Act of 1979," Public Law 96-72, Sept. 29, 1979; the "Naval Petroleum Reserves Production Act of 1976," Public Law 94-258, Apr. 5, 1976; and the "Trans-Alaska Pipeline Authorization Act," Public Law 93-153, Nov. 16, 1973.

Table 4
Crude petroleum: U.S. exports of domestic merchandise by principal markets, 1987-91

Market	(1,000 barrels per day)				
	1987	1988	1989	1990	1991
Canada	148	152	139	107	114
All other	3	3	3	2	2
Total	151	155	142	109	116

Source: Compiled from official statistics of the U.S. Department of Energy.

Table 5
Crude petroleum: U.S. exports of domestic merchandise, imports for consumption, and merchandise trade balance, by selected countries and country groups, 1987-91¹

(Million dollars)

Item	1987	1988	1989	1990	1991
U.S. exports of domestic merchandise:					
Saudi Arabia	0	0	0	0	0
Nigeria	0	0	0	0	0
Canada	106	61	49	171	34
Mexico	0	0	0	0	0
Venezuela	0	0	0	0	0
Angola	0	0	0	0	0
United Kingdom	0	0	0	0	0
Colombia	0	0	0	0	0
Gabon	0	0	0	0	0
Indonesia	0	0	0	0	0
All other	20	16	13	12	2
Total	126	77	62	183	35
EC-12	0	0	1	7	0
OPEC	0	0	0	0	0
ASEAN	0	0	0	0	0
CBERA	0	0	0	0	0
Eastern Europe	0	0	0	0	0
U.S. imports for consumption:					
Saudi Arabia	3,632	4,847	6,392	8,916	10,157
Nigeria	3,513	3,157	5,057	5,759	5,197
Canada	3,399	2,997	3,133	4,414	4,643
Mexico	3,501	2,854	3,999	4,821	4,341
Venezuela	2,654	2,115	2,971	4,870	4,026
Angola	1,227	1,155	1,770	1,925	1,774
United Kingdom	1,987	1,337	1,151	1,539	1,096
Colombia	780	594	847	1,287	941
Gabon	328	155	385	696	675
Indonesia	1,412	926	819	579	583
All other	6,697	5,516	8,517	9,026	3,941
Total	29,130	25,654	35,041	43,833	37,374
EC-12	2,055	1,388	1,227	1,580	1,173
OPEC	14,950	13,771	20,054	25,433	21,732
ASEAN	1,474	1,037	1,041	950	727
CBERA	526	432	481	672	531
Eastern Europe	0	2	0	0	0
U.S. merchandise trade balance:					
Saudi Arabia	-3,632	-4,847	-6,392	-8,916	-10,157
Nigeria	-3,513	-3,157	-5,057	-5,759	-5,197
Canada	-3,293	-2,936	-3,084	-4,243	-4,609
Mexico	-3,501	-2,854	-3,999	-4,821	-4,341
Venezuela	-2,654	-2,115	-2,971	-4,870	-4,026
Angola	-1,227	-1,155	-1,770	-1,925	-1,774
United Kingdom	-1,987	-1,337	-1,151	-1,539	-1,096
Colombia	-780	-594	-847	-1,287	-941
Gabon	-328	-155	-385	-696	-675
Indonesia	-1,412	-926	-819	-579	-583
All other	-6,677	-5,500	-8,504	-9,014	-3,939
Total	-29,004	-25,577	-34,979	-43,650	-37,339
EC-12	-2,055	1,388	-1,226	-1,573	-1,173
OPEC	-14,950	-13,771	-20,054	-25,433	-21,732
ASEAN	-1,474	-1,037	-1,041	-950	-727
CBERA	-526	-432	-481	-672	-531
Eastern Europe	0	-2	0	0	0

¹ Import values are based on customs value; export values are based on f.a.s. value, U.S. port of export. U.S. trade with East Germany is included in "Germany" and not "Eastern Europe."

Source: Compiled from official statistics of the U.S. Department of Commerce.

APPENDIX A
EXPLANATION OF TARIFF AND TRADE AGREEMENT TERMS

TARIFF AND TRADE AGREEMENT TERMS

The *Harmonized Tariff Schedule of the United States* (HTS) replaced the *Tariff Schedules of the United States* (TSUS) effective January 1, 1989. Chapters 1 through 97 are based on the internationally adopted Harmonized Commodity Description and Coding System through the 6-digit level of product description, with additional U.S. product subdivisions at the 8-digit level. Chapters 98 and 99 contain special U.S. classification provisions and temporary rate provisions, respectively.

Rates of duty in the *general* subcolumn of HTS column 1 are most-favored-nation (MFN) rates; for the most part, they represent the final concession rate from the Tokyo Round of Multilateral Trade Negotiations. Column 1-general duty rates are applicable to imported goods from all countries except those enumerated in general note 3(b) to the HTS, whose products are dutied at the rates set forth in *column 2*. Goods from the People's Republic of China, Czechoslovakia, Hungary, Poland, and Yugoslavia are among those eligible for MFN treatment. Among articles dutiable at column 1-general rates, particular products of enumerated countries may be eligible for reduced rates of duty or for duty-free entry under one or more preferential tariff programs. Such tariff treatment is set forth in the *special* subcolumn of HTS column 1.

The *Generalized System of Preferences* (GSP) affords nonreciprocal tariff preferences to developing countries to aid their economic development and to diversify and expand their production and exports. The U.S. GSP, enacted in title V of the Trade Act of 1974 and renewed in the Trade and Tariff Act of 1984, applies to merchandise imported on or after January 1, 1976, and before July 4, 1993. Indicated by the symbol "A" or "A*" in the special subcolumn of column 1, the GSP provides duty-free entry to eligible articles the product of and imported directly from designated beneficiary developing countries, as set forth in general note 3(c)(ii) to the HTS.

The *Caribbean Basin Economic Recovery Act* (CBERA) affords nonreciprocal tariff preferences

to developing countries in the Caribbean Basin area to aid their economic development and to diversify and expand their production and exports. The CBERA, enacted in title II of Public Law 98-67, implemented by Presidential Proclamation 5133 of November 30, 1983, and amended by the Customs and Trade Act of 1990, applies to merchandise entered, or withdrawn from warehouse for consumption, on or after January 1, 1984; this tariff preference program has no expiration date. Indicated by the symbol "E" or "E*" in the special subcolumn of column 1, the CBERA provides duty-free entry to eligible articles the product of and imported directly from designated countries, as set forth in general note 3(c)(v) to the HTS.

Preferential rates of duty in the special subcolumn of column 1 followed by the symbol "IL" are applicable to products of Israel under the *United States-Israel Free-Trade Area Implementation Act* of 1985, as provided in general note 3(c)(vi) of the HTS. When no rate of duty is provided for products of Israel in the special subcolumn for a particular provision, the rate of duty in the general subcolumn of column 1 applies.

Preferential rates of duty in the special duty rates subcolumn of column 1 followed by the symbol "CA" are applicable to eligible goods originating in the territory of Canada under the *United States-Canada Free-Trade Agreement*, as provided in general note 3(c)(vii) to the HTS.

Other special tariff treatment applies to particular *products of insular possessions* (general note 3(a)(iv)), goods covered by the *Automotive Products Trade Act* (general note 3(c)(iii)) and the *Agreement on Trade in Civil Aircraft* (general note 3(c)(iv)), and *articles imported from freely associated states* (general note 3(c)(viii)).

The *General Agreement on Tariffs and Trade* (GATT) (61 Stat. (pt. 5) A58; 8 UST (pt. 2) 1786) is the multilateral agreement setting forth basic principles governing international trade among its more than 90 signatories. The GATT's main obligations relate to most-favored-nation treatment, the maintenance of scheduled concession rates of duty, and national (nondiscriminatory) treatment for imported products. The GATT also provides the legal framework for customs valuation standards, "escape clause" (emergency) actions, anti-dumping and countervailing duties, and other measures. Results of GATT-sponsored multilateral tariff negotiations are set forth by way of sepa-

rate schedules of concessions for each participating contracting party, with the U.S. schedule designated as schedule XX.

Officially known as "The Arrangement Regarding International Trade in Textiles," the *Multifiber Arrangement* (MFA) provides a framework for the negotiation of bilateral agreements between importing and producing countries, or for unilateral action by importing countries in the absence of an agreement. These bilateral agreements establish

quantitative limits on imports of textiles and apparel, of cotton and other vegetable fibers, wool, manmade fibers, and silk blends, in order to prevent market disruption in the importing countries—restrictions that would otherwise be a departure from GATT provisions. The United States has bilateral agreements with more than 30 supplying countries, including the four largest suppliers: China, Hong Kong, the Republic of Korea, and Taiwan.

