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US Oil Imports: Volumes, Sources and Politics

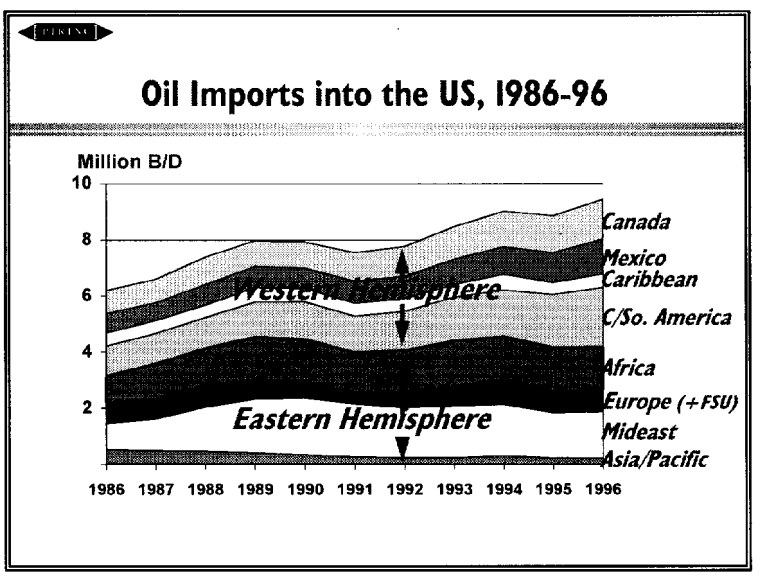
by
John H. Lichtblau
Chairman
Petroleum Industry Research Foundation, Inc.[1]

The attention of oil exporters is now increasingly focused on the Asian economies whose explosive growth rate in oil imports may eventually make them the world's largest oil import market. But for now the US retains that position. Last year's US gross imports of 9.4 million B/D of crude and products were about equal to all of Western Europe's oil imports and some 2 million B/D higher than total imports into the emerging markets of Asia (including China). Preliminary figures indicate that the US's share of world inter-regional oil trade rose from 24% in 1995 to 25% in 1996. Given the size of the US market and its potential, the economics, logistics and politics of US oil imports will continue to be of major importance to all oil exporters.

The Current Import Scene

Where do US oil imports come from? Last year nearly 56%, or 5.3 million B/D, came from Western Hemisphere sources (Chart 1). Western Hemisphere imports have increased throughout the 1990's, both in volume and share. Imports from the Eastern Hemisphere also rose during this period but at a much slower rate and smaller volume. Over the 10 year period 1986-96, Western Hemisphere imports increased by 2.2 million B/D and Eastern Hemisphere imports by one million B/D.

Chart 1

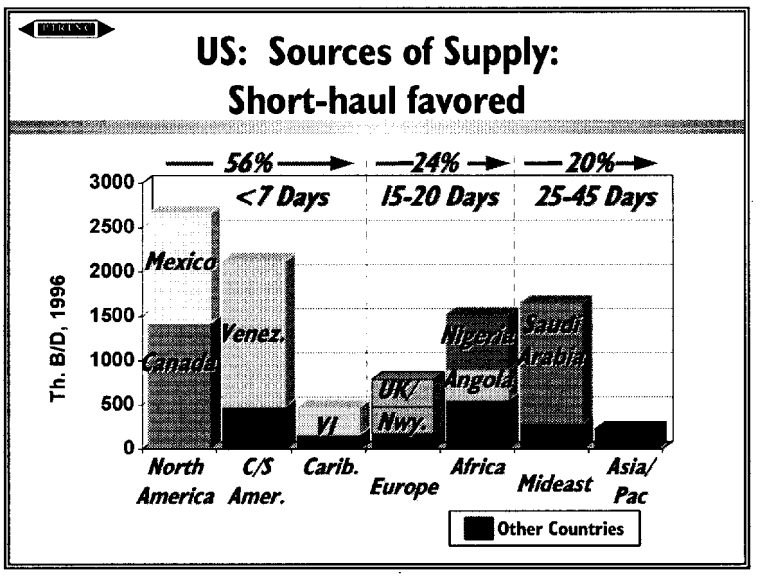


The reason for the differences in the growth rate and volume is *logistics* and availability of supplies. As Chart 2 shows, it takes 7 days or less for a tanker to travel to the US from Latin

[1] Petroleum Industry Research Foundation, Inc. (PIRINC) is an industry-supported think tank based in New York City.

America, compared to as much as 45 days from the Middle East. In the 1950's and 1960's most US imports came from Latin America. Eventually the US had to turn to the Middle East for incremental supplies. However, in the 10-year period 1985-95 Central and South American production grew by almost 2 million B/D while the region's consumption grew by just one million B/D. Logistically, the US was the most attractive outlet for their surplus.

Chart 2



For Mexican exports there had once been a political decision by Mexico to limit oil exports to the US to half of total exports. In recent years this restriction was dropped, in part because of the unfavorable logistics to sell the oil elsewhere. Last year about 85% of Mexico's oil exports went to the US

In Canada crude oil imports to the US are determined entirely by pipeline capacity and crude availability. There is no other export market for Canadian crude. Some products exports are shipped by tanker but all go to the US. Altogether, Canada exports nearly 60% of its oil output to the US. Again, logistically, it has no other economically viable oil export outlet.

US oil imports from Nigeria and other West African producers have also increased sharply in the last 10 years, as production there grew rapidly. Here, too, logistics make these imports preferable to those from the more distant Middle East. Another reason is the quality of Nigerian crude, with its highly desirable low sulfur content and high middle distillate yield.

US Oil Imports from the Middle East

	Middle East	Share of Total Imports
	000 B/D	%
1990	2018	25
1991	1877	25
1992	1796	23
1993	1851	22
1994	1829	20
1995	1614	18
1996	1649	17

Source: American Petroleum Institute compilation of US Department of Commerce data.

The increase in Western Hemisphere and West African imports has steadily reduced the share of Middle East imports, from a high of 25.5% in 1990 to 17.5% last year. The only important supplier of Middle East oil to the US is now Saudi Arabia, which at 1.4 million B/D was the US's third largest foreign supplier (after Venezuela and Canada) in 1996.

The decline in the Middle East's share of US oil imports has been offset by a rising share and volume of Middle East exports to the Asia/Pacific region, thus maintaining the Middle East's share of total world oil exports in the 45-48% range.

The Outlook for Imports

Looking ahead to 2005, all forecasts currently project a continuing increase in the volume of US oil imports. However, there are significant differences in the rate of this increase and the consequent share of imports in our petroleum supply. The US Energy Information Administration's (EIA) latest Reference Case forecast shows net oil imports rising to 12 million B/D by 2005, an increase of 3.6 million B/D, or 42%, over 1996. The largest single reason for this increase is a projected decline in US domestic production by one million B/D between 1996 and 2005. Yet, there are strong indications that this decline may not occur or may be much smaller than the EIA's forecast suggests. There is now evidence, based on announced and operative projects, that OCS Gulf Coast production will rise from one million B/D in 1996 to two million B/D by 2000 and then creep up some more for another few years, hence offsetting the underlying decline in onshore output.

US Petroleum Balance, 2005
(MB/D)

	1996	2005
Products Demand	18.27	20.67
Refinery Crude Runs	14.18	14.98
Domestic Crude Production	6.50	5.49
Net Crude Imports	7.47	9.49
Net Products Imports	0.96	2.51
Net Import Dependency	46%	58%

Source: 1996: EIA, Monthly Energy Report, January 1997
2005: EIA, Annual Energy Outlook 1997 Reference Case

On the demand side, the EIA's Reference Case projects a growth from 1996 to 2005 at a somewhat faster rate (1.4% annually) than in the 1990-96 period. While this is a plausible assumption, a case can be made that the growth in oil demand will slow down somewhat during this period, due to increased energy efficiency and market saturation. Under these assumptions, net oil imports would rise by 1.2-1.5 million B/D between now and 2005 rather than EIA's 3.6 million B/D.

Within this total, refined and unfinished products imports are likely to grow faster than crude imports during the next 9 years. A major reason is the rising capacity utilization of US refineries which went from 83% in 1986 to 91% in 1996 and is rising further this year. The increase in utilization reflects the fact that refining capacity increased by about 700 MB/D in those 10 years (all through expansion of existing capacity) while demand rose by 2 million B/D. There will be much less capacity expansion in the next 10 years because there will be no new refineries built while the current practice of closing and downsizing existing refineries will continue. In part this reflects the industry's poor refining margins of the 1990's. The EIA's Reference Case projects the share of products in total net imports to rise from 11.4% in 1996 to 21% in 2005. If one assumes a somewhat slower growth in demand, as discussed earlier, the

share of products in total net imports would still rise to 17-18% by 2005. The principal source of the growing products imports will be the export refineries in the Caribbean and Venezuela.

The Politics of Imports

US oil imports have risen by 51% in the 10-year period 1986-96 with 7 of the 10 years showing year-on-year increases. The rising level of imports has been accompanied by the now traditional debate over the national security risk and other presumably negative aspects of this trend. A periodic expression of these concerns has become a ritual in the public debate of US oil policy. The latest example is the new Secretary of Energy's comment at his Congressional confirmation hearing that it was "unacceptable" that oil imports should account for 60% of US oil consumption by 2010 (as projected by the EIA). Concern about the rising level of imports was also expressed by the outgoing Secretary of Energy at a press conference shortly after her resignation. Similar statements have been made in the past about a 50% net import dependency. Yet, according to the EIA's latest short-term forecast, we will reach that ratio next year, probably without much notice.

The US General Accounting Office (GAO), the government's independent watchdog agency, published an interesting report in favor of continuing an unrestricted oil import policy last December. In a report requested by a Congressional Committee entitled *Energy Security: Evaluating US Vulnerability to Oil Supply Disruptions and Options for Mitigating their Effects,* GAO concluded that

> "The US economy realizes hundreds of billions of dollars in benefits annually by using relatively low cost imported oil rather than relying on more expensive domestic sources of energy. By comparison, oil shocks impose large but infrequent economic costs that, when annualized, are estimated to cost the US economy tens of billions of dollars per year."

The GAO report was immediately sharply criticized by the Department of Energy, which wrote to the GAO

> "The analysis that motivates your conclusions regarding the benefits of imported oil is seriously flawed.... The attempted comparison between the economic benefits of imported oil and the potential economic costs of vulnerability to oil shocks yields no insight into the overall consequences of oil imports."

Going back further, in 1995 the Clinton Administration reiterated the Bush Administration's findings of 1992 that the prevailing level of oil imports "threaten to impair the national security" under the terms of the US Trade Expansion Act. However, the Clinton findings also pointed out the positive impact on the economy of oil imports and recommended no direct action to stem their growth.

Thus, the oil import debate goes on but no action has been taken, or is currently under active consideration. In fact, US import duties on crude oil and products have remained unchanged since the 1950's while US taxes on road fuels are the lowest of any industrial nation.

A current, and perhaps temporary, factor in lowering the domestic producer's pitch for some form of government support has been the substantial crude oil price increases in 1996 and early 1997. (The average price for WTI was $22.15 in 1996 compared to $18.40 in 1995 and $17.20 in 1994).[2]

Another, perhaps more durable development affecting US imports is the technological progress in reducing the cost and increasing the finding rate in offshore drilling. In the Outer Continental Shelf (OCS) of the Texas/Louisiana Gulf Coast this progress was already established before the 1996 price increase. As mentioned before, the growth in OCS production could arrest, for a number of years, the almost continuous decline in total US production since 1986.

The "Dependency" Issue

The decline in the US "dependency" ratio on Middle East oil imports is still welcomed by some analysts and policy makers here who view the Middle East as the world's least stable supply source. They cite the Gulf War of 1990 as the latest in a series of events which made the Persian Gulf an inherently insecure supplier. Yet, the Gulf War demonstrated exactly the opposite, namely that there is a single world oil market and any disruption large enough to affect world supplies causes the oil price to rise everywhere, regardless of any importer's share of oil from the disrupted supply source. Thus, the cut-off of all oil exports from Iraq and Kuwait in August 1990 caused as much of a price spike for importers who had been substantial purchasers of this oil as for those who had not imported any of it. Furthermore, the correction for the volumes lost during the Gulf War oil disruption also came primarily from the Middle East which had, and still has, most of the world's spare producing capacity and, led by Saudi Arabia, quickly made it available to offset the loss of Iraq/Kuwait exports.

Thus, the term "import dependency" is really a misnomer; it implies a rigidity forced on the importer which normally does not exist. The relationship between the US and its foreign oil suppliers is one of buyer and seller operating under freely agreed commercial conditions. In addition, several producing countries (Venezuela, Mexico, Saudi Arabia for instance) have guaranteed outlets for their crude oil by "integrating" with refining marketing operations in the US. Thus, last year 34% of oil imports from Saudi Arabia went to Star Enterprise, a 50/50 partnership between Saudi Aramco and Texaco, and 30% of imports from Venezuela went to Petroleos de Venezuela's Citgo and Uno-Ven.

[2] It is interesting that the ensuing substantial price increases for oil products was this time not blamed by consumer groups on world oil producers--even though about 75% of the consumer price increase in 1996 was clearly due to the rise in crude prices--but on US refiners and their supposed minimal -inventory policies.

The essentially commercial nature of oil imports is actually increasingly recognized by US policy planners who are now advocating diversification of world supply sources to reduce the impact of a future disruption from any one source. Thus, US policy supports US oil and gas investments in Kazakhstan and Azerbaijan which have the resource potential to become major export sources in the next decade. For logistical reasons most of their exports will go to Eastern Hemisphere markets but they will of course add to total world supplies.

On the other hand, the US's controversial sanctions policy could have just the opposite effect: it would reduce the growth in oil supplies, both directly through investment restrictions in countries on which sanctions have been imposed and indirectly by increasing the investment risk in countries on which sanctions are under discussion.

While diversification of supply sources is a sound strategy for the US and other major oil importers, and also for oil companies, it has its limitations. The Middle East will remain a key factor in world oil supplies, for the following reasons: two-thirds of the world's proven oil reserves are located in the Middle East and its potential is still higher, it has a reserve/production ratio of about 95 years (compared to 21 years for the rest of the world), and we will have to add some 2 million B/D to world production each year to meet the likely growth in demand during the next 10 years.

The region takes on even more importance if we consider that nearly all of the world's readily available spare producing capacity of about 3 million B/D is located in three Middle East OPEC countries: Saudi Arabia which holds over 2 million B/D and Kuwait and the United Arab Emirates which hold the rest. Saudi Arabia's Minister of Petroleum and Mineral Resources publicly declared last November that Saudi Arabia will continue its policy of maintaining this spare capacity.

In the mid-1970's, when there was no spare capacity anywhere, the consuming countries agreed by treaty to share oil during a supply crisis by forming the International Energy Agency. The system is still in place. Many signatories have stand-by programs to curtail demand during an emergency. In contrast, the U.S. and a few other countries depend on enhanced supply in the form of emergency stocks to meet their obligations under the treaty.

The US decided in 1975 to build its own Strategic Petroleum Reserve (SPR) to be used in an emergency. The SPR was used once, sparingly, during the Gulf War but its existence had a definite effect both on military options and on lowering prices at the time. In 1996 Congress mandated the sale of some SPR oil, lowering its level from 592 to 571 million barrels. The sale had a domestic political rationale and while it was endorsed at the time by Energy Secretary O'Leary, in an interview just before her resignation in January 1997 she called the sale a mistake. It is unlikely that funds will be made available to fill the SPR to its existing capacity of about 750 million barrels but further reductions in the SPR* may be averted as the importance of a government-controlled surge supply source to the world's largest oil importer becomes better understood.

* A $1.5 billion sale of SPR oil is currently in the Administration budget for 2002.

To conclude, under any realistic assumption the US will increase its oil imports for the foreseeable future. Under normal conditions these imports are commercial transactions. However, as we have seen, if and when there is a major external disruption these transactions temporarily lose their commercial aspects. The right import policy for the US is to be prepared for such temporary disruptions but otherwise let the market determine the level and source of our imports.