Empirical Project 6: Trade and Energy Policy

The huge run-up in oil prices over the last couple years is always big news. The switch to alternative fuels has a myriad of issues which can be confounded by trade policy as seen in this Feb. 1, 2007, Wall Street Journal article (p. B1).

Even as the U.S. looks to ethanol as a way to wean itself off foreign petroleum supplies, imports of the biofuel are soaring. Despite a sharp tariff levied on most ethanol shipped from abroad, importers are finding they can compete with domestic ethanol on price. Some foreign suppliers, especially Brazil, also can provide ethanol more easily in some cases because of shipping bottlenecks in some areas of the U.S.

The surge in imports has yet to cause political backlash because U.S. ethanol supplies haven't caught up with demand. But tensions could arise this year as production at a slew of new domestic ethanol plants threatens to outstrip demand. Already, Corn Belt farmers who supply ethanol plants have taken to calling Brazil, the top foreign supplier of ethanol to the U.S., the "Saudi Arabia" of ethanol. "Why should we be trading dependency on one energy source for dependency on another?" asks Matt Hartwig, a spokesman for the Renewable Fuels Association, a trade group for the U.S. ethanol industry.

The U.S. ethanol industry benefits from a 51-cent-a-gallon tax credit as well as a 54-cent-a-gallon tariff levied on most imports. The tariff drives up the price of imported ethanol. Neither subsidy is likely to change despite Bush administration hints that it wouldn't mind seeing the tariff disappear.

The import surge suggests that users are happy to base their purchases less on where it comes from than cost and convenience. "It all comes down to economics," says Gene Edwards, executive vice president at Texas-based Valero Energy Corp., a major North America oil refiner that blends ethanol into gasoline. "If it's Brazilian sugar cane that makes the ethanol, why should we care?" About 30% of the ethanol that Valero blended last year was imported, according to the company.

New players are piling into the U.S. ethanol market, including China, the Netherlands and even Pakistan. Through November, total U.S. imports of ethanol used for fuel last year were 616 million gallons, more than four times as much as the 135 million gallons in 2005, according to the U.S. International Trade Commission.

Brazil, which makes its ethanol from sugar cane instead of corn, is one of the world's most efficient producers of the biofuel. U.S. imports of Brazilian ethanol rose to 418 million gallons in the first 11 months of 2006, from 31 million gallons in all of 2005, according to figures from the trade commission. Jamaica was the second-largest exporter to the U.S. last year, followed by China.

U.S. producers can't yet make enough ethanol to supply domestic needs. Last year about 4.9 billion gallons of ethanol were produced in the U.S., while about 5.5 billion gallons were consumed, according to the Renewable Fuels Association. Imports made up the difference.

Brazilian imports have been attractive because imported ethanol can be about the same price as the U.S. product, and sometimes cheaper. For instance, with corn at about $3.70 a bushel, the wholesale price of a gallon of ethanol -- including transportation and production -- is about $1.90. At current sugar-cane prices, a gallon of ethanol costs about $1.75 a gallon, including transportation from Brazil and the tariff.

Shipping convenience is also a factor. Many of the biggest users of ethanol are on the coasts, while many of the ethanol plants are clustered in the Midwest. For coastal users, it is often simpler and more reliable to have ethanol hauled on a ship from Brazil than on already-strained railroad lines from rural Nebraska or Iowa. Moving the budding ethanol industry "beyond its Midwest roots out to some of the coast routes is a challenge," says Rick Tolman, chief executive of the National Corn Growers Association.

Last month, at the World Economic Forum in Switzerland, Secretary of Energy Samuel Bodman said he believed more imports were going to be needed to meet ethanol demand. "The idea is that at some point in the future all these technologies need to stand the test of the free market," he said.

But farm and ethanol interests are likely to block any move to remove the tariff or let it expire in 2009. Some American companies clearly see benefits in foreign ethanol, especially that made from sugar cane. Last year, agriculture giant Cargill Inc. of Minneapolis invested in a Brazilian sugar-cane-ethanol plant. "We think the best way to ensure a strong, growing market domestically is assurance of supply," says Bill Brady, spokesman for Cargill. "That's why we favor a global marketplace when it comes to ethanol."

ASSIGNMENT: Address the following questions with data analysis, media quotes, and /or other evidence to back up your answers. As with all of these assignments, make sure to appropriately document your sources of information.

A) What is the value of U.S. imports of oil (for a recent year) in value and as a percent of total imports. How does this compare to ethanol?

B) What is the tariff rate on oil? How does this compare to the tariff policies on ethanol?

C) Which country, Brazil or the U.S., seems to have the comparative advantage in ethanol production and why?

D) Which groups in the U.S. gain from the current policies and which ones lose?

E) What arguments are there for protecting our markets from imported ethanol? (Look at chapter 15 in our textbook) What are the arguments for eliminating any import barriers to ethanol? What would you recommend to the President of the United States? Which groups in the U.S. would favor your plan and which ones would oppose it?

RESTRICTIONS: Can have a maximum of three students handing in a joint project. Report cannot be longer than 4 pages of text (double-spaced) with an extra page allowed for charts and graphs.