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Committee on Finance
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Mr. **Chairman**, I am pleased to appear before this Subcommittee to discuss the use of oil import tariffs as a policy to reduce the long-run ~~-demand~~ for imported oil. In my remarks I will discuss the following issues:

- o The economic benefits of an oil import **tariff**;
- o The economic costs imposed by a **tariff**;
- o The factors which influence the relationship between benefits and costs;
- o The effectiveness of oil import tariffs relative to other oil import reduction policies; and
- o The appropriate tariff level.

The Economic Benefits of an Oil Import Tariff

An oil import tariff on both crude oil and refined products would lower oil consumption in the short run in two principal ways. First, industrial and individual consumers would reduce their demands for petroleum products because of the higher **prices--for** example, individuals would drive fewer miles per year. Second, to the extent that higher oil prices made other energy sources economic, some substitution of natural gas and coal and, to a lesser degree, renewable resources for oil would occur. While the demand response to higher oil prices is limited in the short run, in the longer term there would be significant opportunities to improve both the efficiency of

oil-using equipment and the ability of the economy to substitute other forms of energy for oil.

The primary benefit of both **short-run** and long-run oil import reductions is that they reduce the upward pressure on long-run oil prices by lowering the worldwide demand for oil. This in turn reduces the magnitude of the inflationary drag of high oil prices on long-run economic growth. **Additionally**, the tax would allow the United States to decrease the amount of national income that is diverted to pay for foreign oil. Alternatively stated, some of the funds that would normally go to OPEC oil producers through higher world prices would be recouped by the tax and used to maintain demand for domestic goods and services. There would also be a number of other less important benefits, including a short-term improvement in the balance of trade and a decrease in U.S. vulnerability to oil supply disruptions. Furthermore, a significant reduction in oil dependence might afford the United States more freedom in its relationships with other nations.

The Economic Costs of an Oil Import Tariff

Because it would raise the price of oil in the United States, an oil import tariff would, however, also impose some major costs on the U.S.

economy. Aggregate output would decrease, and some sectors would be severely affected, notably the steel and automobile industries. Furthermore, a tariff would create shifts in income between producers and consumers and among consumers, and ultimately might not improve the U.S. balance of trade. Some of these costs could be ameliorated through additional policies, but some might have to be accepted in order to obtain the benefits of reduced oil imports.

Output and Aggregate Income. Higher oil prices result in short-term unemployment and lower economic growth in the longer term by reducing the amount of goods and services that can be profitably produced, thus restricting their supply. In the shorter run, higher oil prices also transfer income from the users of oil to oil producers or to the government, who may not quickly **"recycle"** this income into increased purchases of goods and services or into tax reductions. Consequently, demand falls, reducing, in turn, income and employment. Furthermore, higher oil prices increase the demand for money to pay for the oil, and, unless the Federal Reserve allows the money supply to accommodate this demand, this can lead to tighter credit and higher interest rates, restraining both consumption and investment. Oil price increases also tend to reinforce the inflationary spiral. Energy price increases trigger higher claims on income as people attempt, with varying success, to shift the loss of real income to others. Fiscal and monetary policies cannot deal with this increased inflationary pressure

without exacerbating the short-run demand problems described above. Thus, higher energy prices tend to entrench stagflation in the economy.

Effects on Specific Sectors. The dampening effects of an oil import tariff on economic growth would not be distributed evenly across all sectors of the economy. Automobile sales would be severely affected by higher gasoline prices. Although the U.S. automobile industry is shifting to production of smaller, more **fuel-efficient** cars, its capacity to produce smaller engines and auto bodies will be limited in the next several years. Thus, imposing an oil import tariff in the near future would reduce domestic auto sales as consumers bought the more **fuel-efficient** foreign vehicles. An import tariff of \$20.00, equivalent to a per gallon levy of 50 cents, could reduce U.S. auto sales by 1.0 million units, or 10 percent of projected production, in the first year after its imposition, and by 6 percent during each of the following two years, and by 200,000 units per year, or 2 percent of projected production, in the fourth through seventh years. In addition, the reduced national income and higher interest rates induced by a tariff would cut into auto sales. Thus, the effects of a tariff on the automobile and related industries would be sizable.

Other industries would be affected as well. Energy comprises 15 to 20 percent of the final costs of steel production, for example, and the higher energy costs caused by an oil import tariff might be more than the steel

industry could pass on to consumers, thus squeezing **profits**, and, presumably, investment in that industry. Other energy-intensive industries that could be similarly affected include paper, chemicals, refining, cement, and aluminum.

Of particular importance is the petrochemical industry, which relies heavily on oil as a feedstock for production of its final product. In recent years, U.S. petrochemicals have been exported successfully, to a large extent because of the subsidy afforded this industry by domestic oil and gas price controls. By adding to the cost of petrochemical feedstocks, an oil import tariff might place this industry in an untenable position in international competition, particularly when oil price decontrol is completed and if natural gas deregulation takes place. Whether or not some exception for the petrochemical industry might be in order if an oil import tariff is implemented would have to be considered.

The sizable effects of an oil import tariff on specific industries, particularly automobiles, suggest that such a tariff might best be "phased **in**" in accordance with these industries' abilities to accommodate its effects. By announcing its intention to raise oil prices over time in a series of steps, the government could create an expectation of higher prices that would induce these industries to begin an adjustment in their products and

processes before the higher prices were implemented. This would also mitigate many of the adjustment effects across the economy.

Income Distribution. The imposition of an oil import tariff would lead to several significant income transfers. First, tariff collections, presuming a \$20.00 tariff level, would amount to approximately \$50 billion per year accruing to the federal government. This amount could be rebated to households through payroll collections and transfer payments, although it would be difficult to devise a rebate system to reach every household. Second, the imposition of an oil import tariff would raise the price of domestically produced oil and oil substitutes, such as natural gas and coal, leading to higher revenues for domestic energy producers. Unless some form of taxation was placed on all domestic energy products or price controls for energy products were instituted, an income transfer larger than \$50 billion per year would result. It should be noted, however, that the windfall profits and corporate income taxes would collect approximately half of the windfalls realized by domestic oil producers for potential recycling to consumers. A far smaller portion of the windfall realized by natural gas and coal producers would be recycled in this fashion.

Balance of Trade. An oil import tariff would have mixed effects on the balance of trade. Certainly, the imposition of a tariff would reduce the outflow of dollars in payment for oil, and would therefore strengthen the

dollar. This advantage would be partially mitigated, however, by reduced purchases of U.S. goods and services by the oil-producing countries. An import tariff could have another negative effect on U.S. exports. By subjecting U.S. industries to higher energy costs than their foreign competitors, a tariff might reduce their competitiveness in world markets. Although a tax credit could be devised to offset increased energy costs for firms producing exports, it would be extremely difficult to administer equitably and efficiently. Given the uncertainty surrounding the effect of higher energy prices on the competitive position of U.S. exports, it is unclear whether an oil import tariff would improve the U.S. balance of trade.

Factors Affecting the Relative Costs and Benefits of Oil Import Tariffs

As my discussion has indicated, an oil import tariff would allow us to reduce oil imports, but only by imposing economic costs. Yet no long-term reduction in our import level can be achieved without paying some price. The size of the cost, however, might be affected by several factors, among them, the efficiency with which the economy responds to an oil import tariff, the reaction of producing nations, and whether or not the tariff is **multilaterally** imposed.

Economic Responsiveness. The same inefficiencies impede the responsiveness of the economy to higher energy **prices**, whether they result from an oil import tariff or other causes. These inefficiencies include natural gas price **controls**, regulatory biases that induce electric utilities to retain **oil-and** gas-fired **units**, and lack of consumer action on conservation measures induced by the rapid turnover in residences and commercial structures. Inasmuch as such imperfections are corrected, the responsiveness to any oil price increase improves, and the relative advantages of an oil import tariff are substantially increased.

Producer Response. To the extent that world oil prices fall in response to the imposition of an oil import tariff and resulting U.S. import reductions, the benefits of a tariff would increase. Should producers curtail output sufficiently to maintain the world market price of oil, then the entire tariff would be borne by U.S. consumers, and prices would increase by an amount equal to the tariff. If, however, producing nations were unwilling to cut back output that far, a glutted market could result, and prices would fall somewhat. Reducing the world price through the tariff would redistribute income significantly from foreign producers to domestic consumers, since the dollar outflow for oil would be reduced, and government tariff receipts could be recycled into the economy. Thus, the relative benefits of an import tariff would increase to the extent that producers moderate any production cutbacks.

A Multilateral Tariff. The benefits of a tariff to the United States would also be increased if it were imposed multilaterally. Joint imposition **by** the major consuming nations would increase the tariff's downward pressure on world oil prices, by creating a larger oil market surplus. In addition, a multilateral tariff could eliminate the competitive disadvantage for U.S. exports created by a unilateral tax. Thus, the benefits of an oil import tariff would be magnified if all the major consuming nations imposed one.

The Effectiveness of Oil Import Tariffs Relative to Other Oil Import Policies

Whether or not oil import fees are an appropriate policy depends, therefore, in part on how OPEC responds, whether the tariff is multilaterally imposed, and the extent to which some of the current market inefficiencies are corrected. If OPEC does not take retaliatory action and there is international cooperation among consuming nations, then oil import fees clearly rank high as a long-run policy option. We would, however, point out that, by completely or partially deregulating natural gas and eliminating the current regulatory bias against new coal-fired capacity in electric utilities, oil imports could be reduced by up to 3 million barrels per day without major costs to the economy. Consequently, these policies, taken together, would rank higher than oil import tariffs in overall effectiveness,

although joint implementation would result in greater import relief than would be obtained from either option alone.

Although there are other tax options, such as taxing gasoline or all transportation fuel, they appear to rank lower than oil import fees on both efficiency and administrative grounds. Directing the entire burden to gasoline would preempt any other responses in the use of oil. By decreasing the efficiency with which higher oil prices force conservation and substitution of other fuels, a gasoline tax would result in a more difficult adjustment to higher oil prices than is necessary.

It should also be noted that the imposition of an oil import tariff might act to accelerate the production of unconventional sources of energy. Synthetic liquid fuels and renewable resources are particularly promising. By raising the price that the consumer pays for energy, an oil import tariff would make both of these types of energy more economic. By allowing the higher price created by the tariff to accrue to producers of synthetic fuels, an oil import tariff could act like a price guarantee for such energy production. If a tariff raised the price of energy to the point at which synthetic liquid energy became competitive, the tariff should be viewed as an effective substitute for many of the financial subsidies now being considered for the synthetic fuels industry.

The Appropriate Tariff Level

The choice of an appropriate tariff level depends, in part, on how we view such a tariff and what we expect it to accomplish. In a previous CBO report, dependency on imported oil was viewed as conveying several risks to the United States: the risk of future **macroeconomic** losses as oil prices rise, the risk of future disruptions of foreign oil, the risk of deterioration in the balance of payments, and the risk of imposing constraints in our relations with other nations. **Each** of these risks represents some cost that the United States may have to pay as a product of its import dependence. Calculation of these costs, however, requires knowledge of future events and of the complex relationship between oil prices, macroeconomic outcomes, and the dollar. Cost estimates by various researchers using a similar framework have suggested a range of \$5 to \$70 per barrel of imported oil, most likely centering around \$10 to \$30 per barrel.

In conclusion, Mr. Chairman, an oil import tariff would provide a number of economic benefits by reducing the long-run price of oil which would, in turn, reduce the inflationary drag on economic growth. It might also provide some other benefits, including decreased vulnerability to oil supply interruptions and a strengthened U.S. dollar. Such a tax would, however, also impose costs in terms of reduced domestic output and hardship on the automobile, steel, and petrochemical industries. If **OPEC**

did not respond with retaliatory production cutbacks, some other consuming countries also imposed a similar tax, and it was both phased in to minimize the costs of adjustment and rebated, then such a tax would rank high in overall effectiveness. Although CBO believes that the elimination of the regulatory bias in electric utilities and deregulation of natural gas would be more effective in reducing oil imports when contrasted to the tax alone, maximum benefits could be attained if these policies were implemented simultaneously.