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The Oil Excise Tax: Another Government Windfall

By David I. Meiselman

"It is not from the benevolence of the butcher, the brewer or the baker that we expect our dinner, but from their regard to their own interests . . ."

Adam Smith
The Wealth of Nations

The proposed Windfall Profits Tax, a new and major tax, will not solve the energy problem. In fact, if enacted, the Windfall Profits Tax can only worsen an already bad situation and further increase our dependence on foreign oil.

However, it would appear that the main purpose of the Windfall Profits Tax, the hidden agenda as it were, is not energy independence; it is to use higher petroleum prices as a new and major source of Federal government revenues both to finance still larger Federal government budgets and to moderate the embarrassingly large Federal deficits President Carter has pledged to eliminate.

To see how we have come to this situation, consider that for many years, essentially since the tax measures enacted during World War II, the Federal government itself has depended on a set of major fiscal windfalls to resolve the inevitable conflicts in the making of tax and expenditure policy. Although tax rates have been cut repeatedly (except for Social Security taxes), Federal revenues have continued to grow in spite of reduced tax rates, and expenditures have risen even faster than tax revenues. Less and less seems to be yielding more and more.

Starting with the Kennedy-Johnson tax cut of 1964, the Congress has passed, and the President has signed, legislation reducing the effective rates of Federal income taxes at least five times. There have been four tax cuts in the last eight years alone. In 1968, income tax rates were raised, the only time since the Korean War, and that tax hike expired in 1970. Federal income tax rates are now lower than they were during the calm Eisenhower years when there was hardly a hint of tax revolt in the country.

From time to time there have been some important changes in the tax code which have effectively increased tax rates for selected individuals and businesses, but these have generally been portrayed as plugging loopholes rather than as general tax increases.

Two mechanisms have been at work to give the appearance of something for almost everybody, with goodies for proponents of spending and tax reduction alike. First, economic growth, as in the years following the Kennedy-Johnson tax cut, generated increases in Federal revenues. With noninflationary economic growth, Federal revenues increased faster than the growth of real income because of the progressivity of the Federal income tax and the corporate profits tax. Both individuals and businesses earned more income and also moved into higher brackets. Not many years ago, this characteristic of the Federal tax system was viewed with some alarm by fiscal Keynesians. Concern over this "Fiscal Drag" of the early sixties helped to motivate the Kennedy-Johnson tax cut of 1964.

The second mechanism for creating fiscal windfalls is inflation. After economic growth faltered, especially in

This Issue in Brief

The Windfall Profits Tax, writes Professor Meiselman in this issue of *Tax Review*, will not solve the energy problem; in fact, it will make the U.S. even more dependent on foreign oil.

After examining the rationale behind the windfall tax, the author describes this "new and major tax" as a "money machine" designed to finance still larger Federal budgets and to compensate for "embarrassingly large Federal deficits."

Some of Dr. Meiselman's analysis is addressed to the specifics of the House-passed energy tax bill (HR 3919) which the Senate and Conference Committee may alter significantly. His main argument, however, focuses on the "windfall profits" tax concept and is very pertinent to the current debate.

The views expressed are those of the author and not necessarily those of the Tax Foundation.

the 1970s, inflation generated large unlegislated increases in Federal revenues, as rising tax payments exceeded the inflation rate. Under the present tax code and tax schedules, tax payments increase approximately 50 percent faster than the inflation rate when there is no real economic growth. Individuals are thrown into higher brackets even when their pre-tax incomes just keep pace with inflation. Corporations pay increased taxes on incorrectly calculated profits based on historic rather than replacement costs, and the like. Among the consequences of inflation is that the growth of Federal revenues accelerates. Spenders have a strong vested interest in inflation.

Growth has faltered, and even though inflation has accelerated there is simply not enough revenue to maintain the system. The string of high peace-time deficits, even during periods of economic expansion and low unemployment, has apparently alarmed enough voters that there are more and more calls for reduced deficits and even for constitutionally mandated balanced budgets. President Carter has a long-standing and oft-repeated promise to eliminate the deficit and bring the budget into balance. To contain or to eliminate the deficit, either spending must be cut, which Congress and the Administration are unwilling to do in any significant way, or taxes must be increased. There is no political support for general tax increases—if anything, there is substantial political pressure for tax reduction.

It is in this fiscal context that the Windfall Profits Tax can be interpreted as helping to solve the Federal government's fiscal dilemma rather than the energy problem. It is as if, running out of revenue windfalls to the U.S. Treasury, the Administration is trying to tax perceived oil company windfalls. Note that, in proposing the Windfall Profits Tax, President Carter estimated revenues of \$146 billion and expenditures of \$142 billion over ten years. However, revenues are scheduled to start pouring in immediately, and large expenditures will not start for some years hence. In the interim, the Federal government will have turned on a new money machine.



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What is the Windfall Profits Tax?

The Windfall Profits Tax is not a profits tax. It is an excise tax on domestically produced crude oil based on gross revenues at the wellhead. The excise tax applies both to oil that has already been discovered and to oil from reserves yet to be found. The tax rate increases as oil becomes more scarce, as it is likely to do in future years. Indeed, by discouraging exploration and production of U.S. crude, the so-called Windfall Profits Tax is still another implicit subsidy to imported OPEC oil which increases even more our dependence on foreign oil. By reducing production, it thereby also tends to drive up the price of petroleum, part of the process by which at least some of the tax is shifted to consumers.

Revenues from the tax would be placed in a special trust fund, called the Energy Trust Fund, in the U.S. Treasury. The President and Administration spokesmen have proposed that receipts from the tax be devoted to a wide range of expenditures, especially focusing on synthetic fuels, mass transit, special assistance to the poor to help pay for higher fuel bills, and the like. Attempts have been made to garner support for the tax from those who would benefit from these expenditures. However, the House-passed bill makes no such necessary link between tax receipts and expenditures. Use of the Energy Trust Fund is left up to future authorization and appropriation acts. In other words, Congress can spend the funds any way it wishes—including direct and indirect expenditures for programs unrelated to energy.

The so-called Windfall Profits Tax is an unusually complicated tax. Briefly, it sets out to impose an excise tax whose rate depends on increases in prices of domestic crude. Under the House bill (HR 3919), Tier 1 oil, "old" oil discovered before the Nixon price controls of 1971, is taxed at the rate of 60 percent of the difference between its selling price and \$5.86 per barrel, escalated by post-1978 inflation. The Tier 1 tax will phase out on July 1, 1984, when Tier 1 oil will be taxed in Tier 2.

Tier 2 oil, essentially oil discovered between 1972 and 1979, is taxed at 60 percent of the difference between its selling price and \$13.06 per barrel, indexed by post-1978 inflation. The Tier 2 tax will be phased out by January 1, 1991.

Tier 3, the remaining domestically produced oil, has three components, each of which has somewhat different tax treatment. First, oil discovered since 1978 plus incremental tertiary oil is taxed at 50 percent of the first \$9.00 of sales price above a \$17.00 per barrel base price, and 60 percent of the sales price above \$26.00 per barrel, all indexed for inflation plus 2 percent annually. Newly discovered oil will not be taxed after 1990. Second, Alaskan oil from the Sadlerochit Reservoir, the only currently producing North Slope reservoir, is taxed at 50 percent of the wellhead price above \$7.50 per barrel, adjusted for inflation. This tax will not be phased out. Third, all other oil is taxed at 60 percent of the difference between its sale price and \$16.00 per barrel, escalated for inflation. Tier 1 and Tier 2 oil will pay this tax after these tiers are phased out.

The assurance that future prices will be higher gives producers incentives to cut back current supplies by deferring production. One of the main virtues of decontrol is to eliminate this production and exploration constraint by permitting current prices to increase. In addition, the impact of inflation and the absence of effective inflation indexing of Federal taxes means that producers and owners of oil reserves have strong additional incentives to hold wealth in the ground rather than pay high taxes on production and withdrawals from reserves.

At the present time, the price for Middle East oil delivered in the United States is at least \$23.00 a barrel. If, for purposes of illustration, we take the \$23.00 price as a current "free" market price for petroleum in the United States, we can see that the so-called Windfall Profits Tax would impose a large additional excise tax on essentially all petroleum produced in the United States, independent of the profitability of companies and individuals producing or owning the oil. The tax rate will rise as the price of petroleum increases faster than the inflation rate, as virtually all experts predict unless the OPEC oil cartel is broken.

Reduced Incentives

The Windfall Profits Tax is sure to reduce the supply of crude in other ways as well. The tax will severely reduce incentives to exploration and to production. One way of looking at the tax is that it is an added cost of production, like other lifting and recovery costs. By increasing costs—producers must pay the tax on every barrel of crude produced—the tax directly reduces oil production.

Even after oil reserves are found, they must be recovered, and there are expenses involved in recovery efforts. It is estimated that primary recovery methods depending on natural pressure and pumps typically tap only 30 to 40 percent of an oil reservoir. Perhaps more than half of all discovered crude is simply left in the ground, because the recovery costs exceed revenues under existing technology, costs, and prices. Still other more costly and complex methods also can be, and are, utilized to drain more oil from existing finds. These range from secondary recovery methods that drive more crude out of the ground by water flooding of oil reservoirs to more elaborate tertiary methods that depend on chemical and gas injection, heating, and so forth.

Petroleum prices must be high enough to cover the added tax expenses. When crude is taxed, resources are directly driven out of these kinds of production and recovery efforts. Production is lower than it would otherwise be. Prices are higher, and we import more from abroad. This is part of the mechanism by which a crude oil excise tax, whatever its official title, is shifted to consumers. The Treasury may end up richer, but the country is surely poorer.

There is no question that an excise tax on crude, mislabeled a Windfall Profits Tax, reduces U.S. oil production. Regrettably, there is little agreement about how much oil production will suffer. Industry estimates are

that decontrol, alone, will increase U.S. production by two million barrels per day, but that the Windfall Profits Tax would cause a loss of one million barrels per day, half the gains of decontrol, and close to 15 percent of current oil imports of about eight million barrels per day. Other estimates of supply responses to decontrol and to the Windfall Profits Tax differ, with the government estimates generally somewhat smaller on both accounts.

Reduced Production

Even if OPEC initially supplies more crude to meet higher U.S. demands for imports, with no increase in the price of crude, as some congressional analyses seem to assume, there is tax shifting because other prices will increase. This mechanism works through the balance of payments, a decline in the terms of trade and in the foreign exchange value of the dollar, and higher prices for non-oil goods and services. With increased U.S. purchases from OPEC, the trade deficit will increase and the foreign exchange value of the dollar will fall. All imports will cost more. Prices of American-produced goods that sell in world markets, such as wheat and soybeans, will also increase in the U.S. These effects are as certain as they are diffuse, and they will appear as an acceleration of inflation.

Disagreement about quantitative estimates of supply responses is understandable in view of the fact that price and tax changes of the large magnitude involved have never been observed. In the past, changes in prices and taxes have been relatively small, and the regulatory climate has also usually been different. It is therefore difficult to extrapolate from that experience to the present set of circumstances.

But even if there is no agreement about the magnitude and speed of supply responses, the direction of the effect of adding to costs by imposing taxes on production is unambiguous. Taxing anything causes less of it to be produced. On the other side of the coin, it is also clear that higher returns increase supply: here, by inducing more resources into desired exploration and production. It is interesting to note that, similar to economists' lack of consensus about supply responses, there is also lack of agreement among geologists about the world's remaining oil reserves. This is partly a consequence of the fact that only a small fraction of the earth's surface has ever been explored for oil. Much of this exploration has been carried on by government enterprises with predictable inefficiency. American oil companies may not be universally loved, but they are universally respected for their ability to discover and produce oil efficiently.

Reduced R & D Spending

Much of the typical supply discussion assumes no important change in existing technology and may thereby severely underestimate supply responses to permanently higher prices. Technology responds to economic incentives, so higher returns also increase incentives to develop new exploration and production tech-

nology. There is obviously no way to make precise quantitative predictions about technological improvements and their impact, but technology, especially in modern times, is largely produced by deliberate investment in research and development. Prospects of high returns to R & D typically result in more R & D effort that yield more R & D results. This is a major factor in the relative efficiency of private sector R & D compared to government efforts.

The Windfall Profits Tax will directly reduce the supply of domestic crude both by reducing the profitability of the oil industry and also by setting a precedent for taxing perceived large gains of individual investors which can be politically and administratively labeled windfalls. It is estimated that decontrol of oil prices would increase gross revenues of the oil industry by an average of \$12 billion per year before taxes. After payment of existing taxes and royalties, estimated net revenues to producers will increase less than \$6 billion with no windfall tax.

Under the House-passed Windfall Profits Tax, the net revenue would come to about \$2.5 billion, or about twenty cents of every dollar change in the price of crude. The Federal government would eventually receive eighty cents of every dollar increase in the price of crude and would thereby be the major beneficiary of decontrol.

Much has been made of these and similar estimates, and rightly so. However, in relating these estimates to their effects on supply, the discussion often seems to turn on retained earnings as yielding the sums needed to finance oil company exploration and production efforts. There is much analytical merit to this exercise, but the more important aspect to this discussion revolves about how the tax would influence the rates of return at the margin.

Less Investor Appeal

What investors perceive as the rate of return on the use of capital in oil exploration and production relative to other uses controls the flow of capital into or out of the oil industries. If returns are low, or if there is a non-trivial chance that any large gains will mostly be taxed away, investors will shun oil for other uses of their capital, including foreign investment, as has happened in the past. It is not necessary that oil companies raise investment funds by retained earnings alone, because funds can be channeled to the oil industry through the capital market. However, it is necessary that anticipated returns be high enough both to attract capital from outside the industry and to justify using capital within the oil industry.

"Old" vs. "New" Oil

On one level, the prospect of taxing the appreciation of oil properties by distinguishing between "old" and "new" oil is very enticing, especially for those looking for new revenue sources. The market cannot be clearly divided between the past and present, especially when governments that make the rules also change the rules.

It is not only difficult, at best, to separate "old" from "new" oil at the present time, but the problem becomes even more difficult over time. Today's "old" oil was once "new." Today's "new" oil may be reclassified as tomorrow's "old" oil, and similarly for tomorrow's "new" oil.

Because predicted rather than current prices, costs, and taxes determine investment decisions, establishing a precedent for special treatment of appreciated assets and product prices in the oil industry will reduce investment in the oil industry and blunt other production and energy-saving investment, as well.

What is a Windfall?

Windfall is usually defined as an unanticipated gain or loss. I know of no way to separate anticipated from unanticipated gains, especially since anticipations differ. There are always wide differences of opinion that are discounted at any one point in time. Moreover, there is no way to distinguish between dumb luck and clever foresight, nor is there any way to separate permanent from transitory gains or losses.

Certainly, not all appreciations can be legitimately termed "windfalls." For example, similar to a fire insurance company which does not know which specific house will catch fire but has a fairly good idea which proportion of all houses will burn down, many prudent investors diversify by devoting some part of their portfolios to risky ventures, not knowing which one of them will succeed or fail. The probability of any one investment paying off may be very small, but the group of investments may be worthwhile because the expected payoff from a single successful venture may be very high. If most ventures fail but one ship comes in, can that one ship be legitimately called a windfall, and heavily taxed accordingly, without reference to the sunk ventures?

Risks vs. Profits

Exploration is very risky. Most efforts fail dismally and some are only moderately profitable. A very small proportion of exploration investments are very lucky and have very large payoffs. It is the prospect of high returns that lures investors and activity into high risk ventures. If the possibility of large profits are attenuated, there will be few risk takers and less exploration. Not everybody wishes to be involved in such risky enterprises or has the means for doing so. However, risk takers who prefer long odds and related big payments will look for other activities if they cannot strike it rich in oil.

It is noteworthy that there is no serious attempt to permit symmetrical tax credits for windfall losses to mirror extra taxes on windfall gains. It is also noteworthy that petroleum exploration and production alone has been selected for special windfall tax treatment. Similar appreciations take place in other parts of the economy and are part of the essential process for market adjustments to change. A poor wheat harvest in Russia

enriches the Kansas wheat farmer. Indeed, the higher wheat price is needed to encourage more U.S. production, and the probability of poor Russian harvests is factored into wheat futures prices, inventories, and so forth.

Asymmetrical Taxation

Similarly, when the OPEC cartel drives up world oil prices, other energy prices also increase. Coal lands become more valuable and coal miners' wages increase. There are more profits to be had producing small cars, wood stoves, heat pumps, and insulating materials and these increased profits are the lure that attracts resources into these and related activities as part of a wide range of healthy market adjustments. Yet, none of these is subject to tax. If anything, many of these activities receive subsidies of dubious merit and cost effectiveness.

In a statement to the Joint Economic Committee, June 27, 1979, Professor Thomas Schelling of Harvard made some sage comments about taxing windfalls in general and about the asymmetrical and counter-productive character of the Windfall Profits Tax in particular: "Any windfall profits tax, or excess profits tax, that applies to future discoveries and developments of fuel is very much like the IRS treatment of casino gains and losses.

The government proposes to capture only the 'excessive profits' of the lucky strikes that lead to profits in excess of cost. If you gamble in the casino, or on the horses, and win handsomely, the IRS will share your winnings with you, and indeed the bigger you win, the higher the share the IRS takes. If you lose, you lose alone; the IRS neither commiserates nor shares in your loss. The scheme is asymmetrical; it exists largely because people believe that this is a way to discourage gambling.

"This is a sure way to discourage risky enterprises. It is built into our income tax policy because it does.

"To apply it to natural resource development is therefore misguided. We want people to invest risk capital in the search for new petroleum, and in the development of new technologies for liquid fuel. If we promise them that we'll share their happy investments, taking a cut for the Treasury as windfall profits, but if they lose, they lose alone, we are simply applying to liquid fuels development the philosophy that has historically been found attractive and effective in discouraging risky enterprise.

"I wish it were possible to tax away today's and yesterday's windfall profits without causing any anticipation that we may do the same thing next year, and the year after, and ten years from now. But you cannot forever treat bygones as bygones without people anticipating that you'll do it again."