

INDEPENDENT POLICY REPORT

ROUTING

Do We Need to Go to War for Oil?

David R. Henderson

Executive Summary

Many people fear that a hostile foreign oil producer will be able to damage Americans and, for that reason, think that the U.S. government should ensure U.S. access to oil. But a foreign government cannot cause Americans to line up for gasoline. Only price controls imposed by U.S. governments can do that, which is what they did in the 1970s. A hostile foreign oil producer cannot inflict more than a small amount of harm on Americans by refusing to sell oil to Americans, unless this oil producer is willing to cut its own output. If a hostile foreign oil producer maintains output but cuts exports to the United States, it initiates a game of musical chairs in which the

number of chairs equals the number of players. Different buyers will be linked with different sellers than before the hostile producer reduced its oil exports to the United States, but the cost to Americans of switching suppliers would be negligible. The only way a foreign oil producer can harm Americans is by cutting output, but that producer will then harm itself and also harm all other oil users, not just U.S. consumers. This harm is likely to be well under 0.5 percent of U.S. gross domestic product (GDP). Ironically, war for oil could well drive the price of oil higher, not lower, thus costing Americans twice—as taxpayers and as oil users.

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ISBN 10: 1-59813-016-1
ISBN 13: 978-1-59813-016-4

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Introduction

Many people at various points on the political spectrum have claimed that the U.S. thirst for oil is so great that, unless we change our habits (the left emphasizes conservation, and the right emphasizes drilling in the Arctic wildlife refuge and elsewhere), the U.S. government will find itself drawn into wars to maintain access. This thinking shows a fundamental misunderstanding of how energy markets work. There is no good case for going to war over oil.

Ominous Noises

In March 1975, *Harper's* published an article, "Seizing Arab Oil," authored by "Miles Ignotus." The author's name, explained *Harper's*, "is the pseudonym of a Washington-based professor and defense consultant with intimate links to high-level U.S. policy makers." At the time, many insiders speculated that the author's real name was Edward Luttwak, still today a prominent military analyst. The article was published less than two

years after the Organization of Petroleum Exporting Countries (OPEC) had become a cohesive cartel and had raised the world price of oil from below \$3 a barrel to about \$12. The author expressed frustration at the high price of oil and argued that no nonviolent means of breaking the cartel's back would work. Even massive conservation, he argued, was unlikely to solve the problem. Moreover, he claimed, "there is absolutely no reason to expect major new discoveries."

So what options were left, according to "Ignotus"? He wrote: "There remains only force. The only feasible countervailing power to OPEC's control of oil is power itself—military power." Where should this force be exerted? Ignotus wrote:

The goal is not just to seize some oil (say, in accessible Nigeria or Venezuela) but to break OPEC. Thus force must be used selectively to occupy large and concentrated oil reserves, which can be produced rapidly in order to end the artificial scarcity of oil and thus

cut the price. Faced with armed consumers occupying vast oil fields whose full output can eventually bring the price down to 50 cents per barrel, most of the producers would see virtue in agreeing to a price four or five times as high, but still six times lower than present prices. This being the ultimate goal, there is one feasible target: Saudia Arabia.

“Ignotus” devoted the rest of the article to laying out, in detail, the number of divisions needed, where to place them, and so on. Ignotus’s article, though one of the most articulate, was far from the only call in the United States for a U.S. invasion of a Middle East oil country. Of course, no such U.S. invasion occurred in the 1970s. Nevertheless, Ignotus’s kind of extreme thinking made respectable the idea that the U.S. government should seriously consider invading countries in the Persian Gulf to drive down the price, or assure the supply, of oil.

On January 1, 1975, just two months before Ignotus’s article appeared, Secretary of State Henry Kissinger had stated that military force should not be used “in the case of a dispute over price,” but should be considered “where there is some actual strangulation of the industrialized world.”¹ Kissinger did not say what he meant by “strangulation.” In May of that year, Secretary of Defense James R. Schlesinger made further threatening noises, stating, “we might not remain entirely passive to the imposition of [another oil] embargo.

I’m not going to indicate any prospective reaction, other than to point out that there are economic, political, and conceivably military measures in response.”²

Indeed, in 1977 President Jimmy Carter issued an order for the U.S. military to start a Rapid Deployment Force (RDF). The idea of such a force was to give the government the ability quickly to send a substantial invasion force to various parts of the world. After the fall of the shah of Iran in 1979, the Rapid Deployment Force became focused on the Persian Gulf. In 1983, during the Reagan administration’s tenure, this Rapid Deployment Force became known as the U.S. Central Command (CENTCOM). The cost of this force, even in years of relative peace, has been high. Although the U.S. government tends to hide the cost of various programs, making it hard for analysts, let alone citizens, to know these costs, one analyst, Earl Ravenal,³ estimated the fiscal year 1985 budget for CENTCOM at \$59 billion, \$47 billion of which, he claimed, was for the Persian Gulf alone. At the time, that amounted to a full 1 percent of U.S. gross domestic product (GDP). To put that \$47 billion in perspective, in today’s dollars, it would be \$89 billion.

Nor, of course, was this the end of serious U.S. planning for an invasion of the Middle East over oil. In January 1980, after the Soviet government had invaded Afghanistan the previous month, President Carter, in his State of the Union address, announced the “Carter Doctrine.” The most-relevant sentence of that doctrine was the following:

Let our position be absolutely clear: An attempt by any outside force to gain control of the Persian Gulf region will be regarded as an assault on the vital interests of the United States of America, and such an assault will be repelled by any means necessary, including military force. (January 23, 1980).

In the sentences leading up to this statement, Carter made clear that the specific threat he had in mind was from the Soviet Union.

Finally, of course, the first Gulf War was initiated by the U.S. government at least partly over the issue of oil. President Bush I stated that his military action in the Persian Gulf was partly about “access to energy resources that are key...to the entire world.” Bush claimed that if Saddam Hussein had gotten greater control of oil reserves in the Middle East, he would have been able to threaten “our jobs” and “our way of life.”⁴ James A. Baker III, secretary of state at the time, claimed that Saddam Hussein, by controlling much of the world’s oil, “could strangle the global economic order, determining by fiat whether we all enter a recession, or even the darkness of a depression.”⁵ And the ever-present Henry Kissinger wrote that an unchecked Saddam Hussein would be able to “cause a worldwide economic crisis.”⁶

There has been much speculation about whether the current President Bush waged war on Iraq over oil. It is always hard to know someone’s true motives. But we don’t need to know George Bush’s motives. The fact is that many people at various points along the

political spectrum believe that if the United States wants to have access to oil, then it needs to make occasional wars on countries in the Middle East or at least have a strong military presence there. But this view ignores some basic economics.

The Economics of Oil Price Controls

Many people believe that foreign governments whose countries produce a great deal of oil for export can cause U.S. consumers to line up for gasoline. This belief became common after 1973 when OPEC reduced the supply of oil, driving up the world price from less than \$3 per barrel to about \$12 per barrel. Millions of Americans each spent many hours over the next few months lining up for gasoline. But, as any introductory microeconomics textbook will tell you, this belief is false. No foreign government, no matter how powerful, can cause Americans to line up for gasoline. Only governments in America have the power to do that, and they do so with price controls.

A reduction in supply causes the price to rise to the point at which the amount demanded just equals the amount supplied. Sellers have a strong incentive to raise the price if they find that more is being demanded than they are supplying. And so they do. This is the everyday story of free markets. When bad weather reduces the orange crop in Florida, for example, the prices of oranges and orange juice rise, but all people willing to pay that price can get all they want. There are exceptions to this rule of price increases occurring quickly to eliminate shortages. The recent PlayStation® 3

is one such exception. But the exceptions are almost always due to deliberate decisions by producers in niche markets who want to create a buzz for their product. Oil and gasoline are not such an exception. Indeed, as noted above, when OPEC reduced the supply of oil, the world price of oil shot up quite quickly.

The reason Americans lined up for gasoline in the 1970s is that the U.S. government had imposed price controls on gasoline. On August 15, 1971, President Nixon imposed Phase I of his multiphase program of price controls. Phase I was a ninety-day price freeze on all prices, including wages, in the United States. It was followed by higher-numeral phases that relaxed the freeze but still kept price controls on the vast majority of goods and services. Among the goods whose prices were government controlled was gasoline. So when the reduction in world oil supply caused the price of oil almost to quadruple, people who used oil as an input in their production, including gasoline refiners, were not allowed to raise the price as much as they would have without the price controls. With the price of gasoline not allowed to rise as much as it would have, more gasoline was demanded than otherwise, and less was supplied than otherwise. The result: a gasoline shortage. Countries whose governments did not impose price controls on gasoline, such as Switzerland and Germany, avoided shortages. The lesson many people learned from the 1970s—that reductions in world supply lead to shortages and lineups—was the wrong lesson. The real lesson is, or should be, that price controls cause shortages.

Price controls remained in place throughout the 1970s, with occasional relaxations but never abolition. When world oil supplies tightened in 1979, the shortages returned because, again, gasoline prices were not allowed to rise to free-market levels. In 1981, after President Reagan used his discretionary power to end price controls, shortages disappeared.

The Resilience of Modern Economies to Oil Price Increases

One other important economic fact that many people remember from the 1970s is the presence of “stagflation,” that is, the simultaneous occurrence of inflation and stagnation or slow growth. Even many economists at the time believed that a major cause of this stagnation was the higher prices of oil and gasoline. Yet more recent research⁷ by economists Rajeev Dhawan of Georgia State University and Karsten Jeske of the Federal Reserve Bank of Atlanta has shown this belief to be false. It’s true that a net importer of oil will suffer a loss when the price of an import rises. So, for example, if the United States imports six million barrels per day (mbd), as it did in 1973, and the price of oil rises by \$9, the loss to the U.S. economy (assuming Americans do not own shares in any of the foreign companies that export to the U.S.) is \$54 million a day or about \$19.7 billion a year. In 1973, GDP was \$1,383 billion, which means that the price increase of oil should have made GDP \$19.7 billion, or 1.4 percent, less than otherwise. In an economy whose normal growth rate of real GDP was 2 to 3 percent, this 1.4 percentage

point drop would not have been enough to cause a recession and stagflation. Why, then, did economic growth fall by substantially more than 1.4 percentage points in the early 1970s, putting the U.S. economy into a deep recession?

The answer, according to Dhawan and Jeskie, is price controls. Price controls on any good, imported or domestic, will cause not only a shortage, but also a misallocation. Without price controls, the good goes to its highest-valued uses. When price controls are in place, the good is allocated more randomly, either by lineups, government fiat, or both. In the case of gasoline, it was both. Price controls on gasoline caused people to line up for it. That meant that it tended to go to those with the lowest value of time, such as students or retirees, rather than to those who valued the good most. In such a case, there are two economic losses: the loss in valuable time for all who line up and the loss due to misallocation of the good. When government steps in to allocate, as the federal government did in the 1970s, the good tends to go disproportionately to those with more political pull rather than to those who value it most. Also, central planners, no matter how informed, brilliant, and well-intentioned they are, can't know the highest-valued uses in a world where there are literally millions of uses and users. So, for example, the federal government decided to allocate gasoline based on historical allocation. If 90 percent of the previous year's gasoline were available, the government required gasoline refineries to sell 90 percent of last year's sales to each location. This meant that

expanding suburbs went without and that rural areas, where people had traveled a lot the previous year because they had been confident of getting supplies, got too much. Americans, in short, got to experience a little Sovietization of the U.S. economy. An analysis that omits the substantial costs of misallocation by waiting and misallocation by central planning is incomplete.

Certainly Dhawan's and Jeske's evidence is consistent with experience in the economies that have avoided price controls on oil. For example, despite huge price increases on oil since 2002, economic growth in the United States, which imports even a higher percent of its oil now than it did in the 1970s, has remained strong. Oil prices increased from an average of \$23.7⁸ (inflation-adjusted to 2006) in 2002 to an average of \$58.30 in 2006,⁸ an increase of 245 percent. Yet during that same time, annual U.S. economic growth averaged 3.2 percent, which is at the high end of the normal range of growth rates.

This makes sense. The average inflation-adjusted price increase per barrel over that four-year period was about \$8.60 a year. With imports during those years averaging about 3.6 billion barrels a year,⁹ the loss to the U.S. economy from the price increase in a typical year during that period was about \$31 billion. Compare this to the average GDP of over \$11 trillion (in 2006 dollars) during this time. This amounts to only about 0.3 percentage points of GDP. Thus oil price increases in a given year took only about 0.3 percentage points off that year's growth of GDP.

The Impotence of Selective Embargoes, or Musical Chairs with Everyone Seated

To say that a reduction in the supply of oil cannot cause a shortage is not to say that it cannot cause harm. As noted above, any country that is a net importer of a good will be harmed by the higher price if the supply of that good falls. But the key is that the supply must fall. Which brings us to the issue of selective embargoes.

Imagine that the government of country A currently sells oil to people in country B and wishes to harm people in country B by refusing to sell or by reducing sales. What happens next depends crucially on whether government A cuts its own oil production or maintains its production. Assume to begin with that government A maintains its production. This means that government A must look around for people in other countries to whom to sell the suddenly-freed-up oil. Here's where it gets interesting. But but before proceeding further, let's put some empirical meat on these hypothetical bones by considering where the United States got its imports in recent years.

Notice that the U.S.'s two closest neighbors, Canada and Mexico, are also its two largest suppliers of oil. They are unlikely to want to use oil policy to hurt the United States. Notice also that the only Middle Eastern country on the list of the top nine is Iraq. We shouldn't put too much weight on this fact, however. Even in the extreme case in which the United States imported no oil from the Middle East, a reduction in output in that part of the world would drive up prices of all oil consumed in the United States, whether imported or pro-

TABLE I: SOURCE OF U.S. OIL IMPORTS, 2005 (IN MILLIONS OF BARRELS PER DAY (MBD))

Canada	2.172
Mexico	1.646
Saudia Arabia	1.523
Venezuela	1.506
Nigeria	1.147
Iraq	0.522
United Kingdom	0.387
Norway	0.244
Colombia	0.196
Subtotal	9.343
All other	4.184
Total imports	13.527

SOURCE: DEPARTMENT OF ENERGY, ENERGY INFORMATION ADMINISTRATION, [HTTP://WWW.EIA.DOE.GOV/EMEUAER/TXT/PTBO504.HTML](http://www.eia.doe.gov/emeu/aer/txt/ptbo504.html)

duced domestically.

Of the countries on the above list of America's nine largest sources of oil imports, the one most likely to want to hurt the United States is Venezuela or, more accurately, Venezuela's government under Hugo Chávez. Interestingly, Chávez has done the exact opposite, actually subsidizing oil imports to favored groups in the northeastern United States. But imagine the worst: Imagine that Chávez wants to target the United States using the "oil weapon." So he cuts sales to the United States by, say, half, or 753,000 barrels a day. Then the United States finds that it has 753,000 barrels a day less. So people in the United States who had been buying Venezuelan oil and now find that they are cut off will scramble to find other

sources of oil. Where will they find them? Let's go back to Chávez. He needs to find people in other countries to whom to sell this freed-up 753,000 barrels a day. Let's say he ships the oil to buyers in China. Then those buyers in China will find that they want to buy 753,000 fewer barrels from their suppliers, say Iraq or Saudi Arabia. Presto! The American buyers' problems are solved, because they can get their 753,000 barrels from Iraq or Saudi Arabia. In short, when the government of one country tries selectively to target people in another country, but still wishes to maintain its output, it can't succeed. The selective "oil weapon" is a dud. It's like a game of musical chairs with nine children—and nine chairs. The game would be awfully boring, which is why it is not played that way. But in the case of international trade, boring is good.

The analysis in the above paragraph is oversimplified in two ways, neither of which harms the main conclusion. First, it is unlikely that the government of Venezuela or the government of any country would maintain output simply by selling the freed-up output to people in only one other country. It is also unlikely that people in the targeted country would get supplies from producers in only two other countries. But introducing that complication simply complicates things without changing the conclusion at all. Second, the reason for the particular pattern of oil exports and imports was probably transportation costs: If you're in New Orleans, why buy from Iran when the cost of shipping from Venezuela is much lower than the cost of shipping from Iran? It follows, therefore, that when a country's government

disrupts this pattern by cutting off oil supplies to a nearby country, transportation costs rise. It is likely, therefore, that both the disrupting government and the people in the disrupted country are hurt a little. The disrupting government would be hurt by having to accept a somewhat lower price from a more-distant buyer. The people in the disrupted country would be hurt by having to pay a somewhat higher transportation cost to get their oil. But the maximum hurt in either case would be no more than the difference in transport costs, and this would be a small number, probably under one dollar per barrel. For the hypothetical 753,000-barrel production cut, therefore, the maximum hurt to U.S. consumers would be \$753,000 a day or \$275 million a year, a very small number. To put it in perspective, it is less than one dollar per year per U.S. resident.

Jerry Taylor, an energy analyst at the Cato Institute, makes my "musical chairs" point a different way. The world oil market, he notes, is like a bathtub. Those who produce oil are filling the bathtub. Those who consume it are draining the bathtub. A government that wishes to reduce the supply of oil to a particular group of consumers cannot do so without reducing the amount of oil it puts in the bathtub.

The Economics of a Reduction in Supply

Of course, a government of an oil-producing country can do substantial harm to the people of another country by cutting the amount of oil it produces and sells. To change the example and make it more in line with past world events, imagine what would have happened

if the United States and other governments had not invaded Iraq, and Saddam Hussein had held on to Kuwait in 1991. Then Saddam Hussein would have had all Iraqi production and all Kuwaiti production under his control.

Before we consider the consequences of a reduction in supply, however, we should, as Occam's razor reminds us, consider the explanation of Saddam Hussein's motives that requires the fewest assumptions. That explanation is that he wanted control over Kuwait so that he could sell Kuwait's oil, not so that he could withhold it from the market. A thief typically steals a television so that he can sell it; so also with the thief of Baghdad. At the time, Saddam Hussein owed a huge debt to foreigners that he had run up during the Iran-Iraq War of 1980—and wanted money to pay it down. The money from the Kuwaiti oil would have helped him do this. If that is the explanation of Saddam Hussein's action, then there would have been no substantial cut in the world oil supply and, therefore, his takeover of Kuwait would have had no effect on the price of oil. Many people find this implausible, because they note that within days of his invasion, the price of oil had shot up. But this price increase was due to the U.N. sanctions, passed on August 6, 1990, which forbade any country from importing oil from Kuwait or Iraq. By doing this, the United Nations reduced world supply by more than 4 mbd, at the time a 7 percent reduction in world output. Even some normally sophisticated economic analysts got it wrong. Here, for example, is what the prestigious President's Council of Economic Advisers wrote in its 1991 Economic Report

of the President. I reproduce a large part of the whole section titled "Recent Oil Price Movements."

After Iraq invaded Kuwait on August 2, the spot price rose quickly, reaching about \$28 a barrel on August 6. The spot price went as high as \$40 a barrel in mid-October and then generally declined through the end of 1990. Soon after the start of Operation Desert Storm in mid-January 1991, the spot price fell to about \$20 a barrel, not far from its level just before Iraq invaded Kuwait.

Soon after Iraq's invasion, uncertainty concerning the timing of the resolution of the Gulf crisis increased uncertainty about future oil supplies, which in turn increased the precautionary demand for oil inventories. *Several countries began to increase their oil production in August, and by November these additional supplies had completely offset the loss of 4.3 million barrels in daily exports from Iraq and Kuwait ...*

It is clear that the proximate cause of the rapid oil price increase late in the summer of 1990 was Iraq's invasion of Kuwait and its threat to Saudi Arabia. Had Iraq dominated both Kuwait and Saudi Arabia, it would have controlled almost one-half of the world's proven oil reserves. The international community responded to

this aggression vigorously, deploying multinational forces and initiating an embargo against Iraq. *These responses to the Iraqi threats to both peace and economic security have averted even sharper and longer lasting increases in the price of oil and a greater deterioration of economic conditions.*¹⁰ (italics in original)

This passage is striking in a few ways. First, note the timing of the price increases. The major jump, notes the report, happened between the end of July and August 6. And August 6 was the day that the United Nations took 4.3 mbd of oil off the world market, a fact that the report admits. But one searches in vain for a straightforward statement that the U.N. embargo caused the price increase. Second, note that the Bush economists implicitly admit that the U.N. embargo was to blame. Although they state that the Iraqi invasion of Kuwait was “the proximate cause,” they emphasize in the middle paragraph above the reduction in supply from Iraq and Kuwait. Who caused this reduction in supply? Not Saddam Hussein, who would have committed economic suicide by refusing to sell oil, but the United Nations. Of course, it goes without saying that none of this analysis is meant to justify Saddam Hussein’s actions. Rather, it’s to say that whoever cuts the world supply, no matter his intentions, is responsible for the consequent price increase.

But, in the face of all the evidence, let’s assume that Saddam Hussein would have used his new power over the Kuwaiti oil supply to

withhold oil from the market and drive up the world price. Certainly, such an action would have hurt the United States, a net importer of oil. But there are two important points to be noted. First, the hurt could not have been targeted on the United States. Instead, all consumers of oil all around the world would have been hurt in proportion to the amount of oil they consumed.

Second, the worst hurt Saddam Hussein could have inflicted would have been by restricting exports to zero, which ironically, as noted above, is what the United Nations did. But by restricting exports to zero, Saddam would have earned zero revenues. He would have done a favor for his OPEC friends (and his OPEC enemies, such as Iran), but zero times a very high price is still zero. What this means is that he would have had to trade off between a high price and a high output. With just 4.3 mbd to deal with in a world market where daily output was 60 mbd, imagine that Saddam Hussein had cut output by 1 mbd. This would have been 23 percent of his previous output, but only 1.7 percent of world output. Let’s bias the analysis in favor of a large hurt on the United States by assuming the extremely inelastic end of the range of economists’ estimates of the short-run elasticity of demand for oil: an elasticity of 0.1. This would mean that every 1 percent reduction in output would cause a 10 percent increase in price. Therefore, a 1.7 percent reduction in output would have caused a 17 percent increase in price, raising the world price from about \$20 a barrel to about \$23.40 a barrel. The harm to the United States, which had been import-

ing about 8 mbd at the time, would have been \$27 million a day (8 mbd x \$3.40), or \$9.9 billion a year. At the time, this would have been less than 0.2 percent of U.S. gross domestic product. Note also that even with this \$3.40 per barrel increase, Saddam Hussein's revenues would have been lower than had he not cut output at all. He would have brought in \$77 million a day (3.3 mbd x \$23.40) or \$28.2 billion a year, but had he not cut output, he would have brought in \$86 million a day, or \$9 million a day more, which, on an annual basis, is 4.3 mbd x \$20, or \$32.4 billion. Of course, what he would care about is not revenues but revenues net of costs.¹¹ By producing less, Saddam would also have had lower costs. So let's bias the analysis in favor of his getting a gain from cutting output by assuming that the cost of oil production for the last 1mbd was \$5 per barrel, a number that virtually all observers would regard as being on the high side. Then his cut in output would have saved him \$5 million a day. So he would have given up \$9 million a day in revenue to save \$5 million a day, which would not have been a good deal for him. In short, there is good reason to think that if Saddam were as ruthless as he appeared to be, he would have wanted to cut output by less than 1 mbd, or maybe even not at all.

It goes without saying that 1 mbd is less than 4.3 mbd. Therefore, the estimated damage from the hypothetical 1-mbd cut in oil output by Saddam Hussein is well below the actual damage done to the United States by the U.N.'s 1990-91 restrictions on output, for which the U.S. government was a key instigator.

Indeed, to get a substantially higher esti-

mate of the damage Saddam Hussein could have done to the United States, one would need to make an extreme assumption: namely that Saddam Hussein would not only have kept Kuwait but would also have taken over Saudi Arabia and the United Arab Emirates. In a 1990 article in the *Wall Street Journal*,¹² I made that assumption and estimated that the maximum hurt to the United States U.S. was still less than 0.5 percent of GDP.

Moreover, even these estimates of hurt are overstated. Why? Because producers in other countries do not sit passively by when the price of oil rises. Producers have what economists call an "upward-sloping supply curve." In normal language, that means that when the price increases, producers produce more, in part because sources of supply that weren't worth exploiting at the previous lower price are worth exploiting at a higher price. This increased production from other producers moderates the price increase from a given producer's cut in output, further limiting the damage that can be done to countries, such as the United States, that are net importers of oil. Interestingly, one of the italicized sections of the above quote from the 1991 Economic Report of the President recognizes this fact.

What can we conclude? First, no oil-producing country's government can hurt only the United States by withholding oil from the market; it can hurt the United States but only by hurting all other oil consumers also. Second, any oil-producing country's ability to hurt the United States using oil as a weapon is limited, because it is just one country and one producer in the midst of many. This is

true even if other oil producers do not increase output in response to the higher price. Of course, the larger the production of the oil-producing country, the larger the hurt it can inflict, but this hurt is still limited by the fact that many other countries produce oil. Third, other oil producers will increase their output in response to a price increase caused by an oil-withholding government, moderating the price increase and further limiting the damage done to oil-importing countries. Fourth, in hurting the United States by withholding oil from the market, any oil-producing country will face a tradeoff. On the one hand, it will get a higher price for the oil it sells; on the other hand, it will not sell as much oil. So there is a good chance that the government of the oil-producing country will also hurt itself and its own citizens. Fifth and finally, as noted earlier, modern economies have been quite resilient in the face of oil-price increases.

For these reasons, there is little reason to fear that a government that wants to use oil as a weapon will be able to inflict much harm with this weapon. The vaunted “oil weapon” is almost a dud.

Moreover, if the fear of the oil weapon leads a government to consider military action to prevent its use, we need to consider the costs of military action. Just as economists use cost-benefit analysis to decide whether an airport is worth expanding, the same analytic techniques can be used to estimate the costs and benefits of a war. The benefits of a war to preserve the oil supply have been noted above, although not referred to that way. The upper limit on the benefits of such a war is the harm that can be inflicted by the reduction in oil

supply, because the war will presumably prevent or reverse this reduction. I say “upper limit” because wars can, and usually do, go badly wrong and fail to achieve their stated objective. So, for example, the country might be successfully taken over, but local guerrillas may keep blowing up pipelines, preventing the oil from being exported.

The costs of a war to preserve the supply of oil will typically exceed the upper limit of the benefits. The cost of the first Gulf War to the United States, for example, was well above the estimated \$9.9 billion of annual benefits. It is true that U.S. allies, especially Saudi Arabia, Kuwait, and Japan, bore most of the incremental costs of the Gulf War. But the incremental costs, though usually the only relevant costs to consider, are not the only relevant costs in the case. The reason is that the main purpose, as noted above, of the RDF, which later became CENTCOM, was to have a military force ready to go to the Persian Gulf if the supply of oil was threatened. The annual cost of this force was a multiple of the annual benefit from ensuring the supply of oil. And if the U.S. government had forsworn the use of military force to preserve access, as it could have done without threatening its access, then these large annual costs were unnecessary.

An Aside on “Dependence” on Foreign Oil

Many people worry about the fact that the United States is dependent on foreign oil. While the worry is real, the basis for the worry is lacking. First, notice the use of the word “dependent.” The image that creates is of a poor, helpless waif, U.S. consumers in this

case, seeking the goodwill of the powerful, oil-producing nations. But a little economics is needed here. Remember that international trade in oil is just that: trade. Both sides gain from trade. Both sides, therefore, are “dependent” on each other. As the above calculations show, if one side decides not to export to the other, that side loses too. Producers of oil are dependent on the dollars, euros, and yen that buy that oil. This fact is commonly recognized when the topic is U.S. exports; many Americans worry that we don’t export enough because they want our exporters to earn money from people in other countries. But somehow this simple fact gets lost when the topic is exporters of oil in the Middle East or Venezuela. “Dependence on foreign oil,” because it is so one-sidedly misleading, is a term that belongs in the dustbin of history.

Other Cases for War for Oil

I have dealt with the main argument most people make for going to war over oil, namely to ensure the continued supply of oil rather than a reduction. But are there other grounds for war for oil? There appear to be four other cases although, as we shall see, two of the cases collapse into one. I deal with each in turn.

Increased Supply

In all of my analysis above, I took as given that the amount of oil produced in a given country does not depend on who produces it. But that assumption flies in the face of so much of what we know about socialism versus free markets. Socialism is high cost, un-innovative, and inefficient, whereas production by private

firms tends to be innovative and efficient. And the simple fact is that about 90 percent of the world’s oil is produced under socialism, that is, government ownership. As *The Economist* noted recently,¹³ Exxon Mobil, which, in early August 2006, was the world’s most valuable listed company, with a market capitalization of \$412 billion, was only fourteenth in the world when measured by the amount of oil left in reserves. The thirteen “companies” above it were all government owned. Number one was Saudi Aramco, number two was the National Iranian Oil Company, and so on through the list that included Russia’s Gazprom, Venezuela’s PDVSA, and Nigeria’s National Petroleum Corporation. The article noted just how inefficient government oil producers are and highlighted Venezuela’s PDVSA as an example, partly due to actions taken by President Hugo Chávez since he came to power in 1999. So if the U.S. government took over a socialist oil bureaucracy and sold it to a private, for-profit firm, the supply of oil could increase due to increased efficiency.

Of course, one could agree with the above facts about the inefficiency of government production, without believing that this is a case for war. The only legitimate case for war, in my view, is to repel a foreign invasion of the homeland or to prevent an imminent such invasion. But I state the case because it is certainly one that some people could make. Again, though, one would have to consider the costs of war to weigh against these benefits. The obvious costs of an invasion to establish privatization—the slogan isn’t exactly ringing—are the substantial costs of arming, feeding, and supporting a substantial military. Moreover, there could be

unintended consequences. People in the country invaded could well be upset about the invasion and could sabotage production so that the hoped-for output never emerges. Whether or not the U.S. government's motive in invading Iraq had any connection to oil, that intervention seems to have led to sabotage of production and shipping of oil. The amount of oil produced in Iraq is well below what it was when there were no U.N. sanctions restricting Iraqi supply. Indeed, the amount of oil produced in Iraq today is below even the amount produced during the last five years of sanctions, from 1998 to 2002. During those years, production averaged 2,328 million barrels per day; in 2004 and 2005, by contrast, production was 2,011 and 1,878 mbd, respectively.¹⁴

The other case for war to increase supply is that war is an international antitrust action to break up an international monopoly, namely OPEC, and reduce market power, thus increasing output. This, in fact, was the case made by "Miles Ignotus" and others in the 1970s that was referenced earlier. But, as noted, no individual producing country with annual output the size of Iraq's would produce enough that it would have an incentive to withhold output. Taking over a country that produces as much as Iraq produces, therefore, would not lead to much of an increase in world output. War as an international antitrust action, therefore, would work only if directed against a number of producers. That makes the war even more expensive. Moreover, we don't need to estimate the costs and benefits from scratch. My 1990 analysis, referenced earlier, took as given that war against Saddam Hussein would increase world output by 4 mbd, a 7 percent increase,

and found that that would have benefited the United States by only about \$20.5 billion a year, at the time less than a one-half of 1 percent increase in U.S. GDP. Any seriously conducted war against even one oil-producing state would cost over more than one half of 1 percent of U.S. GDP per year, which is about \$65 billion in today's dollars.

Cheap Oil

Another argument for war is for consumers to get cheaper oil. But as we shall see, this argument collapses to the previous argument, the argument for increased supply.

There are two ways to get oil cheap. One is to steal it. Think of the image of "armed consumers" that the earlier-mentioned "Miles Ignotus" wrote about. Somehow, I can't ever read this phrase without thinking of thugs with stockings over their heads holding up a 7-Eleven. The first obvious point to make against such a case for war is that it is wrong. We teach our children not to steal. We do so, presumably, not just because we think it's wrong for children to steal, but also because we think it's wrong for adults to steal. How does it suddenly become right to steal when a bunch of adults get in control of a government?

The second, more subtle, point against stealing oil is that it would not benefit the majority of consumers in the country whose government stole it. Why? Because if the government stole it, the government would likely hand it over to an oil company. The government could do so in two ways. Either it could sell the oil to the company at market rates, in which case neither the company nor the con-

sumers the company sells to would benefit. Instead, the government would benefit. The other way is that the government could give the oil to the company or sell it at a below-market rate. In that case, the company would benefit, but consumers would not. Instead, the company would turn around and resell the oil at the world market price: The consumers in the company's country of headquarters would get no special deal. So not only is stealing wrong, but also it wouldn't even benefit consumers.

This brings us to the second way of getting oil cheap. For consumers to get cheaper oil as a result of their government's war for oil, the war would have to result in a lower world oil price. For that to happen, the war would have to result in a higher world supply. Thus does the case for cheap oil for consumers collapse into the case for war to increase supply.

Expensive Oil

The third case for war for oil is that the purpose of making war on various countries is to make oil more expensive. This sounds absurd. Why would a government, especially that of an oil-importing nation, want to make oil more expensive for its consumers? Yet, while it is certainly evil, it is less absurd than it sounds. Governments whose citizens buy imports regularly engage in actions that make products more expensive for their citizens. State governments, such as California's, prop up the price of milk, causing milk producers in summer, when their cows are particularly productive, to dump thousands of gallons of milk down the sewer. This is so even though the producers would love to cut price and sell

to milk drinkers, including poor milk drinkers; but they are not allowed to. The federal government prevents U.S. consumers from buying foreign sugar in excess of a tight quota, thus driving up the domestic price of sugar. To enforce these programs, as the very word "enforce" implies, governments stand ready to use force against their own producers and consumers. Why, then, would governments, in their pursuit of high prices, hesitate to use force against foreigners?

Moreover, it was a fan, not an enemy, of the current President Bush, who revealed Bush's thinking about the problem with cheap energy. In his encomium to Bush, *The Right Man*, the economically literate David Frum wrote:

I once made the mistake of suggesting to Bush that he use the phrase cheap energy to describe the aims of his energy policy. He gave me a sharp, squinting look, as if he were trying to decide whether I was the very stupidest person he had heard from all day or only one of the top five. Cheap energy, he answered, was how we had got into this mess. Every year from the early 1970s until the mid-1990s, American cars burned less and less oil per mile traveled. Then in about 1995 that progress stopped. Why? He answered his own question: Because of the gas-guzzling SUV. And what had made the SUV craze possible? This time I answered. "Um, cheap energy?" He nodded at me. Dismissed.¹⁵

In other words, early in his presidency, George W. Bush argued that cheap energy was

the problem. Why would this oilman, from an oil family, hesitate to use military force to “solve” the problem? And it seems clear, if this was his motive (I hasten to add that I don’t know that this was his motive), his “solution” is working. As noted, the amount of oil produced in Iraq now is actually less, due to insurgents blowing up pipelines, than it was when the U.N. embargo was being weakly enforced against Saddam Hussein’s regime.

The case against this argument for war for oil is easy. The reason is that this war, if “successful,” carries two costs to the United States and no benefits. First, of course, are the substantial costs of a military invasion and occupation. Second are the net costs to the U.S. economy of the higher price of oil. While such a war, if it increased the price, would help producers in Alaska, Texas, Oklahoma, New Mexico, and other oil-producing states, the costs to consumers would be higher, in dollar terms, than the gains to producers. This conclusion is a well-established result in the economic literature on trade. But to establish it here, consider the following calculation. In 2002, the last full year before the March 2003 invasion of Iraq, domestic production of oil was 9 mbd, domestic consumption of oil was 20 mbd, and imports were 11 mbd. World prices in 2002 averaged about \$23 a barrel. Imagine that the invasion reduces world supply and raises prices by \$4 a barrel. Then domestic producers gain \$4 per barrel on 9 mbd, or \$36 million per day, while domestic consumers lose \$4 per barrel on 20 mbd, or \$80 million per day. Thus the loss to consumers exceeds, by a large margin, the gain to domestic producers. This leaves out two small effects of the price increase. First,

producers will produce a little more because of the higher price and make some profit on this additional production. Second, consumers will cut back somewhat on consumption, making consumers’ losses slightly lower. But these two effects are small, which means that the earlier conclusion that consumers’ losses outweigh producers’ gains holds up.

It is possible that in pointing to cheap energy as a problem, President Bush was concerned about the environmental costs of cheap energy. But then a solution that has a much lower cost than war is to impose a tax on energy so that the revenues from the tax can be used for something valuable. Going to war to drive up the price of oil is distinctly low on the list of solutions if cost matters.

The bottom line is that to make the case that the U.S. government should declare war on oil-producing countries in order to drive up the price is to argue that the U.S. government should spend taxpayers’ money on war in order to cause U.S. consumers to spend more money on oil. Think of the war for oil in this case as a particularly violent restriction on imports.

Adam Smith, one of the founders of modern economics, had an answer to such an argument. He made his answer in response to the British imperialists of his day who wished to maintain colonies in what was to become the United States. One of their goals was to have a captive audience of consumers who would face restrictions if they tried to buy goods from people in other countries. Smith wrote, in a justly famous passage:

To found a great empire for the sole purpose of raising up a people of cus-

tomers may at first sight appear a project fit only for a nation of shopkeepers. It is, however, a project altogether unfit for a nation of shopkeepers; but extremely fit for a nation whose government is influenced by shopkeepers. Such statesmen, and such statesmen only, are capable of fancying that they will find some advantage in employing the blood and treasure of their fellow-citizens to found and maintain such an empire. Say to a shopkeeper, Buy me a good estate, and I shall always buy my clothes at your shop, even though I should pay somewhat dearer than what I can have them for at other shops; and you will not find him very forward to embrace your proposal. But should any other person buy you such an estate, the shopkeeper would be much obliged to your benefactor if he would enjoin you to buy all your clothes at his shop.¹⁶

In other words, Smith was saying, the cost to Britain of maintaining colonies in order to maintain a preferential trade arrangement was below the benefits to Britain; thus his statement that the project is unfit for a nation of shopkeepers. But the cost to the shopkeepers was a fraction of the cost to Britain, whereas the shopkeepers got the lion's share of the benefits. The analogy to the shopkeepers in this case is U.S. oil producers.

Benefiting Particular Oil Firms

The fourth and final case that could be made for war for oil is that the war might be fought

to benefit specific firms that produce oil, firms, let's say, that get to take over oil production in the invaded country. It's easy to see the attraction of such a war. A particular firm would bear the costs of the war only in proportion to its net income (through the corporate income tax) but could get benefits from the war out of all proportion to its net income. In other words, certain firms might lobby for the war because they can "privatize" the benefits but "socialize" the costs.

Certainly, this has happened historically. Various companies since World War I have lobbied the British and U.S. governments to give them privileged access to oil in the Middle East. Also some have argued that the push to privatize oil in Iraq will give a substantial gain to oil-producing companies.

The argument against such a war is easy. The costs of a war are large and the gains to the particular firms benefited, while much greater than their pro rata share of the costs, are still tiny compared to the massive overall costs.

The Public Choice of War for Oil

If there is no good case for going to war to benefit oil consumers, why, then, do so many people believe there is such a case? My own view is that the belief is based on simple misunderstandings of how oil markets work, misunderstandings that this essay is written to counter.

But there is one other factor that could explain the desire for war for oil, a factor that economists in the discipline of "public choice" will recognize. (Public choice is the use of economics to understand the incentives and behavior of actors in the political sphere.)

That factor is that various people and firms might gain from war for oil even though the general public loses. I addressed this issue in the above sections titled “Expensive Oil” and “Benefiting Particular Oil Firms.” But in those sections, I showed that the gains from war for oil are well below the cost. That fact alone does not necessarily keep people from advocating war, because their gains from war could well exceed the cost to them. This is the standard “concentrated gains and dispersed costs” reasoning that has helped economists understand so many of the wealth-destroying policies of government, ranging from tariffs on imports to agricultural subsidies to restrictions on the numbers of taxicabs in almost all U.S. cities. So, for example, there is little doubt that various U.S. defense contractors gain huge profits when the U.S. government makes war, profits that exceed these contractors’ additional taxes to finance the war. Therefore, they could be strong advocates of war despite the fact that their nation, on net, loses from the war. It is hard to conclude from this, however, that these contractors’ gains explain the push for war. To take the most recent example, the current U.S. war on Iraq, defense contractors were not particularly active in pushing for that war. One such contractor, it is true, is Halliburton, and Halliburton’s former CEO, Vice President Dick Cheney, has been one of the main people pushing for war in Iraq. But Cheney got his gain from Halliburton before the war; the war probably did little to enhance Cheney’s wealth.¹⁷

A more promising use of public choice may be to cast the net wider and consider the other political actors who gain from war. One such actor is the U.S. president. Presidents care in

the short run about being reelected. They can enhance their reelection chances by engaging in a war and, according to Gregory Hess and Athanasios Orphanides, are much more likely to do so when the economy is in recession.¹⁸ That certainly does not apply to the Iraq War, because the United States was in an expansion when President Bush began the invasion of Iraq. But presidents also typically care about their legacy and their standing with historians. Historians seem to judge U.S. presidents to be great if they got the United States into a war. A president, looking at that fact, knows that his own personal cost of war, assuming he doesn’t get defeated in the next election, is simply his share of taxes to pay for the war, which, in the current president’s case, is probably under \$100,000. But his gain if the war goes well is his place in history. Just like Adam Smith’s shopkeepers, therefore, the U.S. president has a strong incentive to favor military force even when it is unjustified.

Conclusion

The idea that a government needs to use military force to maintain access to oil is false. Because oil is sold in a world market, it is impossible for one country’s government to hurt another country with the “oil weapon” unless this government actually reduces its own supply. And if it reduces its own supply, it will hurt all consumers, not just consumers in the country it wishes to target. Moreover, by restricting supply, this government will forgo oil revenues and hurt itself. No government restriction of supply can cause people in another country to line up for gasoline; only price controls can do that.

Endnotes

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- 2 “Now a Tougher U.S.: Interview with James R. Schlesinger, Secretary of Defense,” *U.S. News & World Report*, May 26, 1975, pp. 26–27.
- 3 Earl C. Ravenal, *Defining Defense: The 1985 Military Budget* (Washington D.C.: Cato Institute, 1984), p. 17, quoted in David Isenberg, “The Rapid Deployment Force: The Few, the Futile, the Expendable,” *Cato Policy Analysis*, no. 44 (November 8, 1984).
- 4 Quoted in Richard Harwood, “War—or Folly—in the Gulf?” *Washington Post*, Sept. 2, 1990, p. B6.
- 5 Quoted in Gerald F. Seib and Robert S. Greenberger, “Bush Wants U.S. to Forgive Egypt Debt; Prolonged Presence in Gulf Is Indicated,” *Wall Street Journal*, September 5, 1990, p. A3.
- 6 Henry Kissinger, “America Has Crossed Its Rubicon in the Middle East,” *Los Angeles Times Syndicate*, August 19, 1990.
- 7 Rajeev Dhawan and Karsten Jeske, “How Resilient Is the Modern Economy to Energy Price Shocks?” *Federal Reserve Bank of Atlanta, Economic Review* (third quarter, 2006), pp. 21–32.
- 8 These data were accessed from http://inflationdata.com/inflation/Inflation_Rate/Historical_Oil_Prices_Table.asp on February 26, 2007.
- 9 See <http://tonto.eia.doe.gov/dnav/pet/hist/mcrimus1a.htm>
- 10 Economic Report of the President, February 1991, p. 81.
- 11 I’m indebted to economist Ben Powell of the Independent Institute and the San Jose State University economics department for pointing this out.
- 12 David R. Henderson, “Sorry, Saddam, Embargoes Won’t Hurt U.S.,” *Wall Street Journal*, August 29, 1990. This article was misleadingly titled. I had never claimed embargoes would not hurt the United States. Indeed, this claim would have been hard to make, because the U.N. embargo had been hurting the United States for more than three weeks and continued to do so long after. Rather, my claim was that Saddam Hussein’s ability to hurt the United States by withholding oil from the world market was limited. But, as everyone who writes articles for major daily publications knows, the author rarely gets to choose the article’s title.
- 13 “Really Big Oil,” *The Economist*, August 12, 2006, p. 11, and “Oil’s Dark Secret,” *The Economist*, August 12, 2006, p. 55.
- 14 These data are from <http://www.eia.doe.gov/ipm/supply.html>, Table 4.1a.
- 15 David Frum, *The Right Man* (New York: Random House, 2003), p. 65.
- 16 Smith, Adam. *Wealth of Nations*, ed. Edwin Cannan, Volume Two, Book IV, Chapter VII, Part III (Chicago: Chicago University Press, 1976)
- 17 One might argue that Cheney’s stock options on Halliburton, which he did not sell upon becoming vice president, would have given him a motive to favor the current war. But he and Lynne Cheney also signed a document giving all the gains from those options to charity. Therefore, he will not gain, in the narrow sense of gain, from an increase in the price of Halliburton’s stock. See “Kerry Ad Falsely Accuses Cheney on Halliburton,” at <http://www.factcheck.org/article261.html>.
- 18 I thank Alexander Tabarrok, Research Director at the Independent Institute, for this reference. See Gregory Hess and Athanasios Orphanides, “War Politics: An Economic, Rational-Voter Framework,” *American Economic Review*, vol. 85, no. (September 1995), pp. 828–846.

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