

Message to Debaters on the Economics of the 2010-2011 Debate Topic

By David Henderson

Resolved. The United States federal government should substantially reduce its military and/or police presence in one or more of the following: South Korea, Japan, Afghanistan, Kuwait, Iraq, Turkey.

You can get far in analyzing this issue by bringing in some key concepts from economics: the economics of supply and demand, the economics of price controls, centralized information versus local knowledge, game theory, the economics of crowding out, opportunity cost and the benefits of free trade. Using these concepts helps make a strong case for the affirmative: the U.S. government should substantially reduce its military and police presence in all six countries.

Supply and Demand for Oil in a World Market

Start with Iraq and Kuwait. One reason many Americans have wanted the U.S. government to have a presence in the Middle East is their fear that a hostile government of an oil-producing country in that part of the world would cut off supplies to the United States. They recall 1973, when the Arab members of the Organization of Petroleum Exporting Countries (OPEC) refused to sell oil to the United States and the Netherlands. But that embargo had no effect on the ability of

the United States and the Netherlands to buy imports. What hurt the United States, the Netherlands and all other countries that were net importers of oil at the time, - was the OPEC-engineered increase in the price of world oil from about \$3.29 a barrel in 1973 to \$11.58 a barrel in 1974.ⁱ

Some basic economics of supply and demand helps explain why a selective embargo has little effect on the world oil market. Imagine that the government of Country A has been selling oil to people in Country B and wishes to harm them by refusing or reducing oil sales. What happens next depends crucially on whether Country A cuts its own oil production. If Country A stops producing the oil it was trying to sell to Country B, then, in trying to hurt B, it also hurts itself by enjoying less oil revenue. After all, the only reason oil is valuable to most oil producing countries is because other people in the world want to buy it. Let's assume that Country A maintains its production of oil and sells the oil it's denying Country B to other countries. This means that Country A must search for customers in other countries to sell the suddenly freed-up oil to. Here's where it gets interesting.

In 2009, the five most important exporters of oil to the United States, in order of importance, were Canada, Mexico, Venezuela, Saudi Arabia and Angola. Total imports from these countries were 65 percent of U.S. imports. Imagine that the government of Saudi Arabia decides that it wants to hurt Americans. Say the Saudi government cuts sales by half, to 622,000 barrels a day. The United States will respond by scrambling to find other sources of oil. Where will it find them?

Let's go back to the Saudis. They need to find consumers in other countries

to sell this 622,000 barrels a day to. Let's say that they ship the oil to buyers in China. Then, those buyers in China will reduce their purchases by 622,000 barrels from their previous suppliers, say Iraq or Iran.

This means Iraq and Iran must now find new buyers for 622,000 barrels of oil. Presto! No matter how many additional countries we bring into this scenario, we still have an extra 622,000 barrels of supply somewhere on the world market. The American buyers' problems are solved because if they aren't able to buy 622,000 barrels of oil from the Saudis, they can get their 622,000 barrels elsewhere. Transportation costs may increase the price of buying oil from other countries, but the increase would be negligible (probably less than \$1 per barrel).

In short, when the government of one country tries to selectively target people in another country, but still wishes to maintain output, it can't succeed. The selective "oil weapon" is a dud. It's like a game of musical chairs in which the number of chairs equals the number of players. 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. It means that we are assured no country can harm us with a selective embargo.

One main reason for the particular pattern of oil exports and imports is transportation cost. All other things being equal, including the quality of the oil, buyers in one country will tend to buy from countries that have the lowest cost of transporting oil to their country. It follows that when a country's government disrupts this pattern by cutting off oil supplies to a nearby country, transportation

costs rise. The higher transportation cost acts as an excise tax, the burden of which is typically shared by the buyers and sellers. 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 amount, probably under \$1 per barrel. For the hypothetical 622,000 barrel production cut, therefore, the maximum hurt to U.S. consumers would be \$622,000 a day or \$227 million a year — that's less than \$1 per year per U.S. resident.

Of course, the government of an oil-producing country can do substantial harm to people in other countries by cutting the amount of oil it produces and the amount it sells. (I use the word “government” here on purpose because outside of Canada, the United States and Britain, almost all the world's oil is produced by governments.) But any government that reduces its oil supply in an attempt to hurt a *particular country* faces three huge problems.

First, an oil producer cannot single out particular countries or consumers to hurt. If one oil producer cuts supply, then, all other things being equal, the world oil supply drops and prices rise. *All* oil consumers are hurt, and their hurt is proportional to the amount of oil they use. Thus, the “oil weapon” is an incredibly blunt instrument that, when used, will hurt friend and foe alike.

Second, the price rise will help other oil-producing countries that don't reduce their supply. So, for example, if Iran's government chooses to reduce its

supply of oil to hurt the United States, it also helps its avowed enemy, Saudi Arabia. (At the higher world price, the Saudis will enjoy higher revenues.)

Third, continuing the weapon analogy, the “oil weapon” blows up in its user’s face. Specifically, any country that produces less than about 15 percent of the world supply will find that the price increase it receives will not compensate for the reduction in revenues due to lower production.

Consider the case of Saddam Hussein in 1990. After he took over Kuwait, the United States launched an attack, drove the Iraqis out and “liberated” the country. Hussein’s motive for taking over Kuwait was probably not — as former Secretary of State Henry Kissinger, Secretary of State James A. Baker III and President George H.W. Bush feared — to cut output and increase the price, but simply to have more oil to sell.

A thief does not steal a television set to watch TV; he steals a TV to fence it. Similarly, an oil thief wants to steal oil to sell it. But suppose that Saddam had wanted to harm the United States. Even under favorable assumptions about the world oil market, he could not have harmed the United States without substantially harming himself at the same time. [See Sidebar.]

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Hypothetical Case: Saddam Hussein Tries to Hurt the United States by Reducing the Output of Kuwaiti Oil

At the time of the Iraqi invasion, Kuwait was producing 4.3 million barrels per day (mbd) in a 60 mbd world market. Imagine that Saddam Hussein, wanting to hurt the United States, had cut output by one mbd. (You really have to use your imagination here because Saddam Hussein was a U.S. ally at that time!) This would have amounted to only 1.7 percent of world output.

What effect would this have on U.S. oil prices? The effect can be calculated by using the economic concept of price elasticity — the degree to which quantities demanded or supplied change in reaction to a price change. For example, an elasticity of 1 means that every 1 percent reduction in output (“supply”) results in a 1 percent increase in oil prices. Let’s bias the analysis in favor of a large hurt on the United States and a small hurt on Saddam by assuming an elasticity of 0.1, meaning every 1 percent reduction in output would cause a 10 percent increase in price.ⁱⁱ 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. The harm to the United States, which was importing about 8 mbd at the time, would have been \$27 million a day. At the time, this would have amounted to less than 0.2 percent of gross domestic product. Note, also, that even with this \$3.40 per barrel increase, Saddam Hussein would have accrued less revenue than if he had not cut output at all. He would have brought in \$77 million a day by cutting output, but had he not cut output he would have brought in \$86 million a day.

It’s true that by producing less, Saddam would have had lower costs, so let’s bias the analysis in favor of Saddam benefiting by assuming that the cost of oil

production for the last one mbd was \$5 per barrel, a number that most observers would regard as being on the high side at the time. 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 was as ruthless as he appeared to be, he would have wanted to cut output by less than one mbd, or maybe not at all.

Obviously, one mbd is less than 4.3 mbd. Therefore, the estimated damage from the hypothetical one mbd cut in oil output by Saddam Hussein is well below the actual damage done to the United States by the United Nations' 1990-1991 restrictions on output from Iraq and Kuwait, restrictions of which the U.S. government was a key instigator.

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In short, it's hard to construct any realistic chain of events in the Middle East designed to disrupt the flow of our oil that would be more expensive to us than the cost of maintaining a military presence.

The Economics of Price Controls

Another reason many Americans want the U.S. government to have a strong presence in the Middle East is their worry that a foreign oil-producing country can cause long lines and lengthy waits to buy gasoline. Most Americans over the age of 50 remember the gas station lines of 1973 and 1979 all too well. In 1973, there were gasoline shortages after OPEC cut output, and shortages appeared again in

1979. Many Americans assumed that the worldwide reduction in supply caused the shortage — forcing them to wait in line for an hour to buy the small amount of gasoline they were allowed to purchase.

But reductions in supply alone are never enough to cause a shortage. If governments let oil prices rise, people eliminate marginal uses while continuing to use oil where it is most valuable. They take fewer trips to the store and fewer driving vacations, but don't stop driving to work. Utilities switch from oil to natural gas. People insulate their houses and close off unused rooms. In thousands of different ways, oil users make subtle adjustments that cause the amount consumed to fall to a point where it equals the amount supplied. The market works.

What caused the gasoline lines in the United States were the price controls that President Nixon imposed in 1971. Later, Presidents Ford and Carter retained these controls, thus leading to the 1979 gasoline lines. As long as the government avoids imposing price controls, any cutback in supplies caused by a foreign government or by domestic suppliers will lead to higher prices, not shortages. That is the lesson that should have been learned from the 1970s. The countries that imposed price controls, such as the United States, caused Soviet-style queues. Countries that avoided price controls, such as Switzerland, made it through the 1970s with no lines. If our worry is that if the U.S. government leaves foreign suppliers alone they will cause shortages of gasoline in the United States, we need not worry.

Centralized Information versus Local Knowledge

The late economist Friedrich Hayek, who was co-winner of the Nobel Prize in economic science in 1974, wrote an article in 1945 called “The Use of Knowledge in Society.”ⁱⁱⁱ In this article, which has become a classic, Hayek showed why central economic planning by government could not work and why free markets work so well to allocate resources. He wrote, “[C]entral planning based on statistical information by its nature cannot take direct account of these circumstances of time and place and that the central planner will have to find some way or other in which the decisions depending on them can be left to the ‘man on the spot.’”

Modern economists who draw on Hayek’s insight use the term “local knowledge” to refer to this knowledge of circumstances of time and place that only the “man [or woman] on the spot” has. Each of us, argued Hayek, has special information not available to others and, if we are not allowed to act on this local knowledge, it won’t get used.

How does this relate to foreign policy? The U.S. government and, within it, the State Department and the Department of Defense, are to some extent central planners. As information is aggregated at local levels in various countries and passed on to higher levels, the specificity of the information is lost. Therefore, it’s difficult, indeed virtually impossible, for planners sitting in Washington to make good decisions for people in, say, Iraq. There’s a strong argument, therefore, for letting people in Iraq make their own decisions.

Among those who appear to agree with that argument are people in Iraq. In a poll taken in 2006, nearly 75 percent of Baghdad residents polled said that they

would feel safer if U.S. and other foreign forces left Iraq. And 65 percent of people polled favored an immediate pullout.^{iv}

Insights from Game Theory

If the U.S. government were to remove U.S. troops from the Middle East and Afghanistan, what would stop terrorists in those parts of the world from using those countries as a base to attack the United States? Actually, a U.S. withdrawal would probably *reduce* terrorist attacks on the United States. And one tool that helps us to see that is game theory.

In game theory, which has become widely used in economics in the last 50 years, each person who takes action is regarded as a player. The essence of game theory is that the actions of one “player” depend, in part, on the actions of the other player(s) in the game. Therefore, the most important overall conclusion of game theory is that in deciding how to act, a player needs to anticipate how other players will respond to his actions. How other players respond depends on what those players’ goals are and what they perceive the first player’s goals to be. To do game theory well, you need to put yourself in the shoes of the various players — to see the world the way they see it.

Consider how the use of game theory might have affected the U.S. and United Nations (U.N.) decision to go to war over the Iraqi government’s 1990 invasion of Kuwait. At first glance, the U.S./U.N. invasion of Iraq appears totally successful. Saddam Hussein was forced to withdraw from Kuwait and his military machine was

left in tatters. However, the invasion also sent a signal, one that the chief of staff of India's army stated explicitly: "Don't fight the Americans without nuclear weapons."^v An unintended consequence of the U.S./U.N. victory in the 1991 Gulf War, therefore, may have been to increase the incentive of various governments in the Middle East and elsewhere to acquire nuclear weapons.

In 1996 I applied game theory to terrorism and to the U.S. government's role in the world:

In December 1996, I took this other-person's-shoes approach with a group of Defense Department officials when I commented on a paper by my Hoover colleague Henry Rowen, a former president of the RAND Corporation. I pointed out that in his paper Rowen had taken terrorism as a given, but that one should take a step back and ask why terrorism exists. I said:

"What leads the Irish Republican Army to put bombs in Britain? Why don't they, for example, put bombs in Canada or Bangladesh? To ask the question is to answer it. They place the bomb where they think it will help influence the government that makes decisions most directly in the way of their goals, and the governments in the way of their goals are usually governments that intervene in their affairs."

Then I concluded, "If you want to avoid acts of terrorism carried out against people in your country, avoid getting involved in the affairs of other countries." In other words, don't go around stirring up hornets' nests.^{vi}

Martin Shubik, a famous game theorist who was in the audience when I spoke, accused me of advocating that "we all love one another." But Shubik missed the point. I responded, "A good game theorist puts himself in the shoes of the other person whether or not he loves him. Even if you hate your opponent, and especially if he hates you, it's good to know what motivates him and what pushes his button."

Since my 1996 speech, scholars have learned much about what motivates terrorists. Virtually all of the evidence collected leads to the conclusion that suicide terrorists carry out their actions in order to achieve a political goal, and the political goal is always the same: to get foreign governments to pull their military forces out of the territory that terrorists care about. One of the collectors of this evidence is Robert Pape, a political science professor at the University of Chicago and the director of the Chicago Project on Suicide Terrorism. Pape based his research on a data set of suicide terrorist attacks around the world from 1980 to 2003. According to Pape, "the survey counted every instance in which at least one terrorist killed himself or herself in attempting to kill others."^{vii} And what does Pape conclude after examining these data? He writes:

Over the past two decades, terrorist organizations have increasingly relied on suicide attacks to achieve political objectives. The specific goal sought in almost all suicide terrorist campaigns in modern history is the same: to compel a democratic state to withdraw combat forces from territory prized by the terrorists. This holds true for al-Qaeda, the terrorist organization of greatest concern to most Americans. Al-Qaeda's efforts to mobilize people to kill Americans are driven principally by a simple strategic goal: to drive the United States and its Western allies from the Arabian Peninsula and other Muslim countries.^{viii}

What about the idea that suicide terrorism is directed against the United States because Islamic fundamentalists simply hate us and hate our freedom? Pape writes:

Over two thirds of al-Qaeda suicide attackers have been nationals from predominantly Sunni Muslim countries, especially Saudi Arabia, other states on the Arabian Peninsula and Afghanistan. Few are from many of the world's most populous Islamic fundamentalist countries. Sudan — an Islamic fundamentalist country with a population almost the same size as Saudi Arabia — has never produced an al-Qaeda suicide terrorist. Iran — whose population of 70 million

people is steeped in Islamic fundamentalism and is three times the size of Saudi Arabia — has never produced one either. Iraqis, Shiite and Sunni alike, have similarly resisted al-Qaeda's appeals.^{ix}

Even al-Qaeda's attacks on American's allies in the Iraq war are consistent with Pape's explanation. Pape points out that an al-Qaeda planning document discovered by the Norwegian intelligence service outlined a strategy for attacking America's allies to persuade them to leave Iraq. The document even recommended strikes against Spain just before the March 2004 national elections. The strikes occurred, even though they were not suicide strikes, and the strategy worked: Shortly after the train bombings, Spain's government did pull out of Iraq.

To summarize, the essence of game theory is to think about what your opponent might do in response to your actions and to take this into account in choosing your actions. In foreign policy, one universal truth is that the vast majority of people do not like having their country invaded or occupied. When they object, there is a reasonable probability that the most extreme of them will take violent action against the government or the people of the invading or occupying country. This in itself is a strong argument for not having a "police presence" in other countries.

Game theory can also give us insight into the issue of U.S. troops stationed around the world. For example, even though the fighting in the Korean War ended in 1953, the U.S. government has continuously had troops stationed in South Korea

since then. As of May 2010, 28,500 U.S. soldiers were stationed in South Korea. This number is obviously small relative to the 655,000 active-duty members of the South Korean military or the approximately 3,000,000 South Korean reserves. But if North Korea and South Korea ever went to war, a number of U.S. troops would be killed or wounded, which would almost certainly bring the U.S. government into the war in a much bigger way.

How does game theory apply? Here, it's a more complicated game because we have not two players but at least four: the U.S. government, U.S. citizens, the South Korean government, and the North Korean government. We can't just regard the U.S. government as being the same as U.S. citizens. Instead, the U.S. government is a player distinct from U.S. citizens. Indeed, even to call the U.S. government one player is a simplification because the secretary of state's interests and goals may well differ from those of the secretary of defense, and both may have goals and interests that differ from those of the president and/or Congress, et al. But let's make that simplification.

Assume that the U.S. government wants to defend South Korea against an attack by the government of North Korea. If the U.S. government had no troops in South Korea, then no U.S. troops would be killed. Many Americans would not care much about such an invasion. But the players in the U.S. government, whose goals differ from those of the average American, would care. They would understand that to get a critical mass of U.S. citizens upset about a North Korean attack on South Korea, they would need a certain number of U.S. soldiers to be killed. The shorthand

for this idea is that the U.S. troops currently in places such as South Korea are a “tripwire.”^x They are a small military force whose involvement in hostilities will trigger the use of a larger force. Still, aside from satisfying the goals of State Department planners, is there any rational reason to keep troops somewhere like South Korea? Read on.

The Economics of Crowding Out

Decades ago, economists pointed out that when the government increases spending it can “crowd out” private investment.^{xi} The concept of “crowding out” also applies to other government expenditures, including defense spending. One might have made a case for the U.S. government establishing bases and paying for the defense of Japan after World War II and South Korea after the Korean War, times when both countries’ economies were decimated and most of their citizens were very poor. However, it is much more difficult to make that case today. Both South Korea and Japan have very prosperous economies, and Japan’s economy is the world’s second largest when measured by nominal gross domestic product.

U.S. government spending to defend Japan and South Korea reduces the need for the Japanese and South Korean governments to provide for their own defense. They do provide for their own defense of course, but the amount they spend is probably less than it otherwise would be because the U.S. government spends so much on their defenses. In other words, defense spending by the U.S. government “crowds out” defense spending by Japan and South Korea.

It would be a mistake to assume that, if the United States closed its bases in South Korea and Japan, defense spending by those two governments would remain the same. Faced with the task of providing all of their own defense, they would likely increase their defense spending if they perceived threats that warranted such increases.

Opportunity Cost

One of the most basic insights from economics is the idea of “opportunity cost.” Every time we make a choice about how to use resources, we are necessarily choosing not to use them in some other way. The opportunity cost of a resource is the value of the highest-valued use that we forgo. Imagine, for example, that you choose to study and forgo two other options — playing video games and hanging out with friends. If you value playing video games more than hanging out with friends that particular day, then your opportunity cost of studying is the value you place on playing video games. If, on the other hand, you value hanging out with friends more than you value playing video games, then your opportunity cost of studying is the value you place on hanging out with friends.

Opportunity costs remind us that “there is no such thing as a free lunch.” Every time we choose one thing, we give up something else.

How does opportunity cost apply to this discussion? Operating bases and intervening in other countries’ affairs takes resources that could have been devoted to other uses. President Eisenhower, who was Supreme Allied Commander of the

U.S. armed forces in Europe during World War II, made a stirring statement about opportunity costs when he said the following: “The cost of one modern heavy bomber is this: a modern brick school in more than 30 cities. It is two electric power plants, each serving a town of 60,000 population. It is two fine, fully equipped hospitals. It is some 50 miles of concrete highway. We pay for a single fighter plane with a half million bushels of wheat. We pay for a single destroyer with new homes that could have housed more than 8,000 people.”^{xii}

Today’s total U.S. military budget is approximately \$700 billion. Estimating the cost of the bases in the six countries plus the cost of being prepared to police those six countries is difficult. The U.S. government reports the data in ways that make the number hard to estimate, but a reasonable approximation of the cost is \$100 billion annually. This money could be spent by governments or by individuals on medical care, education, trips to Hawaii, widescreen televisions, or any hundreds of thousands of goods and services Americans might like to buy. For example, one way to spend \$100 billion is to write a check for almost \$1,000 to every household in the country.

Free Trade: An Alternative to Military Bases and Police Presence

One alternative to the U.S. government having bases in foreign countries is to open up trade with those countries. One of the findings that economists across the political spectrum are most sure of is that free trade creates gains for all parties

involved: If it didn't create gains, they wouldn't trade. Of course, when trade is opened up, domestic producers lose when their former customers can buy more cheaply from producers in other countries. But it is a fairly straightforward exercise to demonstrate that, in dollar terms, the gains to domestic consumers from opening up trade exceed the losses to domestic producers.

There is another, nonmonetary gain from trade that is especially relevant in a discussion of foreign policy: More trade leads to more peace between the countries that trade. The reason is that war reduces trade and, therefore, those in both countries that would otherwise gain from trade lose because of the trade that doesn't take place. Many scholars who study war and trade have been aware of this connection. In 1750, Baron de Montesquieu stated that "peace is the natural effect of trade." This was confirmed in a 2006 study, "An Analysis of Dyadic Dispute," by Solomon W. Polachek of the State University of New York at Binghamton and Carlos Seiglie of Rutgers University.^{xiii} Polachek and Seiglie show that the higher the gains from trade between two trading partners, the lower the level of conflict between them. A doubling of trade leads to a 20 percent decrease in belligerence. In short, trading nations cooperate more and fight less.

ⁱ See Benjamin Zycher, "OPEC," in David R. Henderson, ed., *The Concise Encyclopedia of Economics* (Indianapolis: Liberty Fund, 2008). Available at <http://www.econlib.org/library/Enc/OPEC.html>.

ⁱⁱ The inelastic end of the range of economists' estimates of the short-run elasticity of demand for oil is 0.1.

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- iii *American Economic Review*. XXXV, No. 4. pp. 519-30. Available at <http://www.econlib.org/library/Essays/hykKnw1.html>.
- iv Amit R. Paley, "Most Iraqis Favor Immediate U.S. Pullout, Polls Show," *Washington Post*, September 27, 2006. Available at <http://www.washingtonpost.com/wp-dyn/content/article/2006/09/26/AR2006092601721.html>.
- v Quoted in Barclay Ward, "Moving Nonproliferation Forward," *Arms Control Today*, March 2007. Available at <http://www.armscontrol.org/print/2295>.
- vi David R. Henderson, "What Game Theory Can Tell Us About Terrorism," *Antiwar.com*, October 17, 2005. Available at <http://www.antiwar.com/henderson/?articleid=7647>.
- vii Robert A. Pape, "Suicide Terrorism and Democracy: What We've Learned Since 9/11," *Cato Institute*, Policy Analysis No. 582, November 1, 2006. Available at http://www.cato.org/pub_display.php?pub_id=6755.
- viii Pape, "Suicide Terrorism," page 1.
- ix Pape, "Suicide Terrorism," pages 10-11.
- x See Doug Bandow, *Tripwire: Korea and U.S. Foreign Policy in a Changed World* (Washington, D.C.: Cato Institute, 1996), pages 35-36.
- xi See Roger W. Spencer and William P. Yohe, "The 'Crowding Out' of Private Expenditures by Fiscal Policy Actions," *Federal Reserve Bank of St. Louis Review*, October 1970, pages 12-24. Available at http://research.stlouisfed.org/publications/review/70/10/Expenditures_Oct1970.pdf.
- xii Dwight D. Eisenhower, "The Chance for Peace," April 16, 1953. Available at http://www.edchange.org/multicultural/speeches/ike_chance_for_peace.html.
- xiii Discussion Paper No. 2170, June 2006, IZA, Bonn, Germany.