

# The Cult of Energy Insecurity and the Crisis of Energy Security

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This paper considers issues of economics and national security, and in particular of the relationship between energy and security, with a focus on the United States. How do developments on world energy markets and US energy policy affect American power and the prospects for war involving the US? What policies should the US pursue to advance its international political goals and enhance its relative security? I address these two questions, and, given current events (the US financial crisis of autumn 2008 that is still unfolding as I write) in a brief concluding section I broaden the discussion and link some of these issues with questions regarding American financial vulnerability and the future of the international use of the dollar (and its consequences).

My principal argument is that energy insecurity is a myth – that is, concerns by states that they will not be able to assure adequate energy supplies to meet their domestic needs, in turn presenting leaders with economic crisis and domestic political outrage, are misguided. States need not be worried about this problem, with the exception of a few unlikely scenarios (about which more below), especially if short term disruptions (easily managed by relatively modest contingency planning) are excluded from consideration. *However*, and this is a big however, while the political stability of the international system is not threatened by energy insecurity, it *is* threatened by what can be called “the cult of energy insecurity”, that is, the erroneous belief that national security requires ambitious and vigilant foreign policy measures to assure adequate access to energy.

The cult of energy insecurity is akin to the “cult of the offensive” before the First World War. Before that war, defensive military postures and tactics had the advantage over the offense, but the widespread, erroneous belief that the advantage was with the offense contributed to both the proximate and underlying causes of the war.<sup>1</sup> Similarly, while there is little objective basis to be concerned for the availability of energy, the cult of energy insecurity could bring about dysfunctional policies and unnecessary conflicts and even militarized disputes between states over energy.

This paper proceeds in six parts. First, I consider what real threats to energy security might exist (I see two, both rather unlikely). Second, I locate the foundational error at the root of the cult of energy insecurity: the failure to fully understand the concept of opportunity cost (which renders the physical control over energy supplies virtually meaningless). I then identify two elements that are contributing to and exacerbating the cult: the failure to fully appreciate the level of US energy consumption, and possible “security dilemma” consequences generated by China’s foreign policies as they relate to energy. (Thus, adjustments to US domestic and/or China’s foreign policies would help mitigate the dangers that derive from the cult). Fourth, I introduce and consider the irony that the greatest threat to US national security is not energy insecurity, but energy security. It is the ready availability of (still) cheap energy abroad that has lulled the US into dangerous inaction, with the consequence that American power, influence, and security is undermined and threatened. I then pursue the observation that US problems arising from energy issues are self-inflicted wounds, and speculate whether this reflects a more serious underlying problem in the country. Finally (and again, somewhat briefly, in the expectation that this issue will be on the table more generally and in the spirit of introducing these themes for consideration) I relate some of this discussion to the present financial crisis and the future of the dollar as an international currency and how this might affect American power and security.

## WORKING PAPER: DO NOT CITE OR CIRCULATE WITHOUT PERMISSION

### What Are the Threats to Energy Security?

As a baseline, it is worthwhile to consider what real threats there might be to “energy security” – which in the contemporary context means some assurance of access to needed oil supplies. In my own view, there appear to be two, but only two, plausible risks to energy security defined in this way: the control of Persian Gulf supplies, and the disruption of the flow of oil from that region. If a single hostile power were to gain control – physical control or even political domination – over the entire resources of the Persian Gulf, this would be a real national security threat to the United States, and therefore something that the US should direct its power and influence to help avoid. Given the (essentially) un-differentiated nature of oil, and the fact that it is mostly transported by ships at sea (as opposed to natural gas that is delivered by pipeline), in general it is exceedingly difficult for one nation or even a group of nations to wield “oil power” – that is, to target a specific adversary for an “oil embargo”. Oil pretty much sloshes around the world, and if one country refuses

to sell oil to another, well, that oil will be sold elsewhere, displacing other sales and thus freeing up other supplies, which would find their way to the nominal “target” of the oil sanction. The pattern of distribution might be affected, but not the essentials of supply and demand or the availability of oil more generally. And even if one country tried to affect these essentials by cutting back its own production, it would bear the brunt of the cost of such a sanction, still fail to target the object of its wrath directly (all consuming states would share any increased costs), and create incentives for other producers to profit from increasing their own production.<sup>2</sup>

But dominating the entire Persian Gulf region would be different – because so much of the world’s reserves are concentrated there, controlling them would be a game changer. Targeted sanctions would still be of limited practicability, but the concentration of resources and thus power that such control would provide to one single political entity would be considerable, creating a dangerous and capacious force to be reckoned with. Moreover, control of that much oil would, very uncharacteristically, create a real oil weapon that could be a force in world politics. Turning off the spigot, or even just strategically wreaking havoc with it, would still be costly to the (now hegemonic) oil supplier, but the potential political pay-offs would be much greater, and it is easy to imagine scenarios under which the political objectives are seen to be worth the economic costs (which, in this context, would also probably be easier for the supplier to bear).

This is the logic behind the Carter Doctrine, which formalized the commitment of the US to use force to assure that Persian Gulf oil would not come under the control of any single hostile power, and this rhetoric was put to the test during the first Gulf War and in its aftermath.<sup>3</sup> If Iraq had been allowed to conquer Kuwait unopposed, it might have been able to achieve political domination over Saudi Arabia and the smaller Gulf states even without formal military conquest of them. Such domination would have been a real threat to the US national interest. In sum, while this does not commit the US into any particular policy or course of action (the full range of costs and benefits of a variety of policy options need to be considered), as things stand now, if one single power were to gain physical or even political control over the entire Persian Gulf region, this would represent a real threat to energy security.

As a distinct but nevertheless related matter, a sustained blockage of the Strait of Hormuz would also represent a real threat to energy security. The Strait is a vulnerable choke point, and twenty-six

million barrels of oil flow through it each day. If there was a serious impediment to the flow of oil through this passage, it could cause a major disruption on world energy markets, and it would take some time before alternative routes could be established. While in practice it might be quite difficult to shut down the Strait, in the short term, significant interference with the flow would be truly uproarious of the global economy, and potentially threatening to the conduct of military operations. Coupled with some other political crisis or coordinated military attack, this scenario could become quite dangerous.<sup>4</sup>

Given the significance of the Strait, and the possibility of a short term disruption in world oil supplies, two policies, already in place, seem wise: there is a good case for some US naval presence in the region, both as a deterrent and, if necessary, as a force to protect tanker traffic and suppress threats to it; and the existence of the US strategic petroleum reserve. That reserve is currently at approximately 700 million barrels (or enough to replace about fifty days of imports at current rates of consumption); plans to expand the reserve have been put on hold by the huge spike in oil prices over the past few years. In any event, a robust reserve makes sense – with the reserve, oil on tankers at sea, reductions in demand that would accompany sudden, giant spikes in prices, and likely production increases elsewhere (to take advantage of those higher prices) – would probably allow the U.S to endure a significant short term disruption in oil supplies in without crippling essential services at home or military operations abroad. Given that it is (properly) a *strategic* reserve, it would be a mistake to release some of those stocks to take the edge off high prices, despite considerable political pressure to do so.<sup>5</sup>

With regard to energy security, then, I reach two conclusions. First, aside from these two problems – domination of the Gulf resources by a single power and a disruption of the flow of oil through the Strait of Hormuz – I see no threats to energy security. (Moreover, the first seems very unlikely, and the second manageable at a fairly modest cost.) Second, absent either of these two threats, price, not power, will determine where the world's oil will go and how it will be used. But the widespread failure to understand the enormous power of markets with regard to oil is contributing to a lot of bad policy out there, and to the Cult of Energy Insecurity.

## Why the Cult of Energy Insecurity is a Cult: Efficient Markets and Opportunity Costs

In some popular accounts, there has been increasing attention to evidence and arguments that global petroleum production will soon reach peak levels, after which it will gradually diminish over time.<sup>6</sup> These concerns add some stress to the Cult, but while plausible, they are largely overstated, at least with regard to their relevance as significant national security issues in the coming decades. In its World Energy Outlook for 2004, the International Energy Agency (IEA) estimated that even though global energy demand was expected to continue to grow over next quarter century, from 75 million barrels a day (mb/d) in 2000 to 120 mb/d in 2030, global production should be able to meet that demand.<sup>7</sup> It is possible to contest (and perhaps even ridicule) the expectations of the IEA. After all, in 2002, the IEA estimated that oil prices would remain at about \$21/barrel through 2010 before rising to \$29 through 2030; two years later it updated its projection with the expectation of oil at an average price of \$35/barrel between 2005 and 2030. Obviously, prices have quickly soared beyond anything their experts imagined, almost before the ink was dry on their publications. But the IEA's errors actually underscore one of the two reasons why the adherents to the Cult of Energy Insecurity have it so wrong – the “threat” of oil comes from its price, not its availability.<sup>8</sup>

This is because of the remarkable efficiency of world oil markets. One does not need to be a flag-waving free marketer to acknowledge how well markets work in this particular area. Oil is a homogeneous, fungible product that will seek out its highest dollar level. And energy markets are not only extraordinarily efficient (and rich in information and remarkably institutionally complete) – they are also distinctly equilibrating. They are efficient in that, unlike many markets, prices are extremely flexible, both up and down. (In constant 2007 dollars, the price of oil declined, in fits and starts, from nearly \$100/barrel in 1980 to under \$16 in 1998; it has recently soared well past \$100, although at the time of this writing it has slipped back under \$100. The point is that oil prices display remarkable flexibility.) They are equilibrating in that the behavior of market participants is price sensitive in the appropriate direction. Additionally, large increases in price of oil are further self-correcting in that they tend to have recessionary impact on consumer economies, further tamping down demand.<sup>9</sup>

There are three quick lessons here. First, the fact that the IEA guessed so wrong about the price of oil should actually give us *more* confidence in its optimistic assessments of the availability of supply – those guesses were based on \$35/barrel oil – all other things held constant, oil at \$100 (or more) will likely call forth more supply and tamp down demand from its original expectations. Second, demand and supply shocks will be further adjudicated by the price mechanism – if market conditions push oil to \$150, then that is where the price will go. Third, although global demand seems likely to rise, it is wise to remember that oil prices are not easy to predict and can (and have) gone down – caution should be taken in projecting linear trends into the future.

The overall supply of oil for the coming decades at least, then, will almost certainly be assured by the functioning of the price mechanism, and more likely than not, oil prices will remain near or above historical highs. (This second conclusion should inform the direction of American public policy, about which more below.) So concerns for supply are overstated: the oil will be there – at a price. But the Cult of Energy Insecurity rests on two inter-related blunders, underestimating the power and efficiency of energy markets, as just discussed, is one; the other, and even more consequential for questions of national security, is ignoring the inescapable power of opportunity costs.

It is often said that the theory of comparative advantage is the most important (and elegant) economic theory that non-economists should understand and appreciate. In my own view, however, for students of international relations and especially for specialists in strategy and security studies, the most important contribution of economics is the concept of opportunity cost – which means essentially, that the “true” cost of something is not measured by its price tag, but instead is measured by the opportunities foregone by making one choice instead of another.<sup>10</sup>

To recognize the inescapable implications of opportunity costs is to recognize that for consumers of oil (setting aside the issue of emergency supplies to deal with short term disruptions and military contingencies), the physical control or legal claim to oil is largely irrelevant. Choices about how oil will be allocated – that is, where it goes and to what uses it is put, will be decided, if not dictated, by what economists call the “shadow price” of oil; that is, its opportunity cost – what is foregone elsewhere by using it here – and this will be established by the *world* price of oil set on *international* markets. This holds true even for oil that is domestically produced or under the proprietary or physical control of a consuming state. For consuming states, the control of oil is a myth.<sup>11</sup>

## Exacerbating the Cult: America at Home, China Abroad

The behavior of the world's two biggest energy consumers, China and the United States, in very distinct ways, has unfortunately (and unnecessarily) intensified the Cult, so that its consequences are more acutely felt than they need be. In fact, one common scenario that links China's remarkable economic rise with military confrontation connects the dots from China's growing energy demands to concerns for the physical limits of global petroleum supply, to the vital interests of the US (and China) to secure adequate access to and supplies of the world's oil.<sup>12</sup> If there is a direct and dangerous Sino-American confrontation over energy, it will be the result of the Cult, not underlying realities, and a consequence of panicked reactions to the failed policies of these super-consumers. Fortunately, this particular scenario remains very unlikely, despite the Cult, but there is much politics short of war, and the exaggerated perception of energy insecurity will nevertheless unnecessarily complicate (for the worse) US-China relations in the coming years.

China has not yet fought for oil, but its leaders are obviously eager to establish secure access to foreign supplies upon which the country is increasingly dependent. China's increased demand for energy as a result of its economic growth is the most significant change on global energy markets. Until 1993, China was a net exporter of oil; its energy needs were met largely by its enormous coal production (and the People's Republic remains by far the world's largest producer of coal, which still accounts for most of its energy needs). But by 2003 China was also importing oil at a brisk pace, with overall demand growing at 8% a year and imports accounting for 30% of its oil consumption. The IEA estimates that China's demand for imported oil will rise from 1.5 mb/d in 2001 to 4.2 mb/d in 2010, and to 9.8 mb/d in 2030.<sup>13</sup>

Most of China's imported oil comes from the Persian Gulf region. Increased dependence on oil imports, and on Middle Eastern oil supplies (under the shadow of the US Navy), have not gone unnoticed by China's leadership. Eager to reduce its dependence on the Gulf and sensitive to its growing energy needs (and the competing energy demands of other states, such as India and Japan) China has left no stone unturned in its efforts to diversify its supplies, and where possible to lock in proprietary control of resources. Searching for more geopolitically attractive alternatives, President Hu Jintao has traveled on missions to Latin America, South East Asia and Africa with energy security at the top of his agenda; Chinese officials have been active both in seeking supplies of

existing oil and pursuing potential opportunities for exploration, in, among other places, the Caspian region, throughout Africa (especially Angola and Sudan), Indonesia, and even in Canada and Peru.<sup>14</sup>

It is certainly not surprising to observe states seeking to assure adequate and uninterrupted access to energy. Moreover, Chinese energy firms, as late entrants into a highly competitive global market, may find it necessary to overbid to secure rights and also see unique opportunities in markets marginalized by Western competitors due to political pressures and greater economic risks.<sup>15</sup> Nevertheless, China's geopolitical energy ambitions will inevitably face some real limitations, and if these structural realities are not understood, then the potential for conflict will increase. There are stubborn facts about how much oil there is, where the oil will come from, and the mechanism by which it will be distributed. These *supply-side* essentials will not be fundamentally altered by the foreign policies of oil consuming states.

The bottom line is that China's oil will come, increasingly in the future, from the Middle East, which is where most of the world's proven reserves remain. Although China will also import oil from a number of sources, including Russia, currently Saudi Arabia and Iran are China's two largest suppliers, and every indication is that Gulf sources will be at least as important, if not more so, in the future.<sup>16</sup> This implies limits to China's "scour the globe" approach to alternate sources of crude that should take a bit of the edge off an international scramble for oil (although this does increase the prospects for emerging Sino-American political rivalry in the Gulf region). The primacy of Gulf resources also further underscores the argument about opportunity cost pricing – China may invest in oilfields abroad, but, especially given where most of the world's oil sits, efforts by consuming states to "lock up" supplies of oil is literally a pipe dream, one that could be a source of international conflict, but which will not guarantee any state's particular supply.

In sum, the elements of the supply side of the global energy equation are essentially fixed and relatively impervious to manipulation by the foreign policies of consuming states. The demand side is another story. If potential international conflict over oil derives in part from overly ambitious Chinese foreign policy, it derives as well from inadequately ambitious US domestic policy. American energy policy is profoundly misguided and costly, and exacerbates the Cult of Energy Insecurity.



China's energy consumption has attracted attention because it is a relatively new player on the world energy market and because of the rapid rate of growth of its energy demands. Often lost in such discussions is the elephant in the room (or perhaps at the watering hole): the fact that world energy markets remain driven by US consumption. There is an enormous amount of slack on the demand side of energy markets, and most that comes from potential savings in US use. Consider the apparently alarming projection that as a function of continued rapid economic growth, China's total demand for crude oil will *double*, and grow from 5.2 mb/d in 2002 to 10.7 mb/d by 2015. But the US remains the Babe Ruth of oil consumers.<sup>17</sup> In 2006 the US consumed over 20.6 mb/d, more than the rest of the top five oil consuming nations (China, Japan, Germany, Russia and India) combined; the US also imported 12.3 mb/d in 2006, more than Japan, China and Germany combined. Moreover, in absolute terms, the US demand is projected to increase by about as much as China's – each is expected to increase their consumption by about 4.5 mb/d by 2020, but the similar growth in US demand reflects a slower rate of increase due to its already very high current consumption.<sup>18</sup>

Changes to US policy could fundamentally alter the nature of world energy markets, and take the edge off the cult of energy insecurity. (It would also have a host of other potential benefits, but that is a different discussion.) The potential for energy savings are enormous. US auto drivers traveled 1.5 trillion miles in 1982 and 2.5 trillion in 1995 – in larger and less fuel efficient cars. Opportunities for increased energy efficiency exist throughout the US economy, involving home appliances, insulation, and innovations in new construction, but gasoline use remains the most prominent issue. One out of every eight barrels of oil produced in the world is currently burned on American roads.<sup>19</sup> This cavalier and profligate consumption makes the US (and other states) more alert to threats to “energy security” than need be.

In sum, China could pursue its energy policy abroad in ways less likely to intensify the security dilemma, and the US could easily take measures that would reduce its domestic demand, which would also help take the edge off international energy rivalry. But if history is any guide, these are unlikely to happen. More likely, the bigger energy picture in the coming years is one with bumpy price shocks, occasional short run disruptions in supply, and an intensification of the Cult. The continued perception of energy insecurity will likely be a source of friction in Sino-American relations, deriving from geopolitical wariness, divergent interests, and shifts in the balance of political influence that will accompany China's continued economic rise. Early signs of these

problems can already be discerned. On some issues, the US government has sent mixed signals regarding China's efforts to secure oil abroad. The Department of Energy rightly notes that the effect of any energy China "removes" from world markets "should be economically neutral". But the political position of the White House is that by "acting as if they can somehow 'lock up' energy supplies around the world", China jeopardizes its good standing in the international community.<sup>20</sup> In other areas, political conflict seems more likely. Energy security issues will heighten and highlight divergent interests between the two powers in the international arena – for example, China's cultivation of close ties with resource rich nations in conflict with the US, including Sudan and Iran, will likely create new and non-trivial conflicts of interest – on this both the Department of Energy and the White House agree.<sup>21</sup> Finally, because in any event most of China's oil will come from the Middle East (and also Russia), the growing importance of China as an outlet for oil exporters will enhance its political influence in many parts of the world, which the US will likely find frustrating.

## The Irony of Energy Security

The Cult of Energy Insecurity may be a source of trouble in world politics – but its existence can be interpreted as suggesting a reassuring message: "relax, there is no real national security crisis rooted in energy insecurity". This is true, but in fact, there is, for the United States at least, a national security crisis that pertains to energy, and that is the irony of energy security. Oil remains plentiful and, even now, comparatively inexpensive. Comparatively, because alternative sources of large scale energy supplies are fairly expensive, often with front loaded start up costs, and, most problematic, vulnerable to unexpected or predatory drops in the price of oil. (Oil sells at well above the marginal cost of its production, and that cost remains considerably well below that of alternate forms of energy often discussed.<sup>22</sup> In sum, oil remains a cheap and easy source of energy, compared the alternatives, and given problems of scale and risk, private actors are likely to be wary of getting into the business of competing with oil.

It may be reassuring, then, to reach the conclusion that there are few real threats to the supply of oil and there is as a result no need for a counter-productive political rivalry over it. But the US does face an energy security crisis – a crisis of energy security, which derives from the fact that oil remains relative cheap and plentiful. Energy security has and will continue to have a negative effect on

American power, for three reasons. First, the US bears enormous costs from the fact that the world's oil reserves are concentrated in the Persian Gulf region, complicating its foreign policy and generating what can technically (if somewhat euphemistically) be called “negative security externalities”, among which are included (but not limited to) the military enforcement of the Carter Doctrine.<sup>23</sup> These externalities are by definition (and in practice) not factored into the price of its consumption. Thus the oil we consume is costing us much more as a society than we are paying at the pump, and that means, from a socially efficient economic perspective, we are using too much of it.

Second, high oil prices have empowered states and regimes that are political opponents of the United States. Three of the big winners from high oil prices, for example, are Russia, Iran and Venezuela. US (non) energy policy is particularly puzzling for a student of international security, because it is a choice that is actively and obviously empowering its enemies and subsidizing its geopolitical rivals. The biggest political challenge to the US is not the axis of evil – it is the axis of oil – a troublemaking monster created by an America in the role of Dr. Frankenstein.<sup>24</sup> This observation has surfaced in contemporary political debates, and has been the subject of some contestation (and distortion). It is correct to observe, for example, that Russia and Iran are not major suppliers of oil to the US – rather, its four biggest suppliers are Canada, Mexico, Saudi Arabia, and Venezuela. But this ignores the fungibility of oil – US consumption contributes (indeed it is by far the single biggest contributor on the demand side of the equation), to the world price of oil. If its policies (or lack of policy) cause the world price to rise, that affords benefits to net oil exporters everywhere.<sup>25</sup> If the price of oil increases from \$30/barrel to \$100/barrel, at current rates of export, Russia enjoys a windfall of about \$175 billion annually; Iran \$64 billion, Venezuela \$54 billion. Saudi Arabia, a country whose geopolitical interests are not obviously in accord with those of the US (the mutual bond and level of respect is closer to that of junkie and drug dealer), picks up about \$217 billion. Were oil to sell at \$150/barrel, at current rates of export the total annual receipts from oil sales for those four countries would be approximately \$372 billion, \$136 billion, \$115 billion, and \$465 billion, respectively.<sup>26</sup> That is the sort of cash that can bankroll a considerable amount of troublemaking in world politics.

Third, a much more subtle and complex issue, but one which I will return to in the conclusion, US national security is jeopardized by its massive current account deficits, which threaten the economic

underpinnings of American power. Energy policy is an important part of this. The cost of oil imports are a major and growing contributor to the deficits in US external accounts. Importing 12 million barrels of oil daily costs just over \$130 billion a year if oil costs \$30/barrel – at \$100/barrel, the annual cost rises to \$438 billion (and at \$150/barrel, it would be \$657 billion). As a frame of reference, in 2007, the total US trade deficit was \$708.5 billion.

## US Energy Policy: More than Just a Self-Inflicted Wound?

The persistence of relatively high real oil prices is likely to be an attribute of the global economy in the coming years. Crude oil prices were flat (or slightly falling) in real terms from 1948 to 1973; they then spiked dramatically for about ten years before receding back towards the historical norm. A second surge in oil prices emerged in late 1990s and prices eventually approached all-time highs before more recently falling back in anticipation of demand falling due to the world financial crisis. But even if prices recede somewhat, the most likely scenario is that they will remain at relatively high levels. This is because (even though price is determined jointly by supply and demand, and thus it is somewhat arbitrary to separate them), as many have noted, the spikes in oil prices 1970s were associated with supply shocks (the Yom Kippur War, the Iranian Revolution, the Iran-Iraq War), whereas the current surge in prices appears to be more demand driven. Supply shocks tend to imply atypical spikes in prices; but the current conditions that have increased worldwide demand seem unlikely to be reversed.<sup>27</sup>

Studies show that US households are responsive to energy price changes. As the price of oil goes up, the behavior of US consumers and producers will adapt, as they did after the oil shocks of the 1970s, and generate substantial energy savings.<sup>28</sup> Given that oil prices are likely to remain at high levels and more likely than not trend upwards in the longer run, it would be immeasurably wiser public policy for the US government, rather than doing nothing, to anticipate these increases with a large gasoline tax, phased in over time (say, for example, an additional twenty-five cents a gallon a year for ten years).<sup>29</sup> A gasoline tax would provide an anchor for energy price expectations, so that households and firms (and producers of alternate sources of energy and energy saving products) would be able to anticipate market efficient behavior, something less likely to happen with energy prices left solely to the market that will dip up and down dramatically around the general upward trend. From the perspective of the US as a whole, such a tax would be literally costless, because it would retain the

revenue accrued from such a tax. (Given the state of the economy and the challenges faced by the middle class, a commensurate reduction in payroll taxes makes good sense and would leave most citizens at least as well off as before, but that is just one among many options.) In fact, America would turn a profit on a big gas tax – since the US is a net importer of oil and since it is so big its behaviors affect the market, such a tax would act like an “optimal tariff”, shifting wealth from foreign oil exporters to America. Since some of this tax would be “paid” by oil producers, as the reduced demand would cause a reduction in the global price of crude; adding a twenty five cent tax to a four dollar gallon of gas will not result in a price of \$4.25, but some figure in-between \$4 and \$4.25.<sup>30</sup> Without such a tax increase, revenue from price increases (likely to occur in any event) accrues totally to producers.<sup>31</sup>

A gas tax would reduce US consumption – and credibly signal that its future oil use would be likely to decline even further – and as a result take some of the edge off the Cult of Energy Insecurity. Beyond that, it would kill three geopolitical birds with one stone: it would reduce the negative security externalities that are the result of the concentration of oil reserves in the Persian Gulf region, and help make that area seem less strategically important; it would reduce the pathological pattern whereby the US is bankrolling the international troublemaking of its political adversaries and geopolitical rivals; and it would improve the large, dangerous (and likely unsustainable) deficits in US external accounts.

However – and this is worthy of some contemplation – this almost certainly will not happen. The American political system seems simply incapable of generating this public policy, a blunder so profound that at some point it raises questions as to whether the US is able to pursue policies that advance the aggregate, long term national interest. Is American policy subject to capture by interest groups within society, and/or, perhaps especially in this case, unable to pursue the long run national interest because its citizens are unable to adequately calculate the short and long term costs of “doing nothing”? This touches upon a larger issue about the robustness of American power, for which warning signs are notable.

The US seems to at the political limits of its fiscal will, for example, which is consistent with theories that anticipate great powers will become addled by consumerism and the corroding consequences of affluence.<sup>32</sup> This perhaps manifested in America’s low savings rate, its massive

external deficits, and is particularly notable with regard to America's recent wars. The 9/11 attacks revealed a real threat to the nation's security, yet the subsequent war in Afghanistan was undertaken with caution regarding risks taken and resources (both military and economic) expended; investments in homeland security have been relatively modest given the needs at hand, and appropriations for securing "loose nukes" have been inadequate.<sup>33</sup> The yawning divergence between the government's rhetoric associated with the stakes of the Iraq war and the unwillingness of the administration to call for any national sacrifices on its behalf strongly suggest that America's leaders are deeply skeptical of the nation's ability to mobilize its vast wealth in support of foreign policy abroad. Indeed the Iraq War is the only large war in US history that has been accompanied by tax cuts. Major tax increases were associated with the War of 1812, the Civil War, World War I, World War II, The Korean War, and even, if with great reluctance on the part of President Johnson, the Vietnam War.<sup>34</sup> Pathologies in US energy policy, then, may not only have negative consequences for US national security, they might suggest an underlying problem with the foundations of US power.

## Financial Crisis, Oil, the Dollar, and American Power

Given the current global financial crisis, now clearly one of the great international financial crises in modern history, it is worthwhile to draw together some of these themes (energy, consumption, American power), and link them up with the crisis and related issues such as the future of the dollar as an international currency. One possible consequence of the current crisis will be that, in the coming years, the dollar's role as an international currency will contract. This is a debatable point, but a diminution of the dollar's international use is plausible and consequential, and its likelihood related to US choices made about things like consumption and energy policy.<sup>35</sup>

The US has benefited from the fact that the dollar serves as the "world's currency", and would face real consequences from the contraction of the international role of the greenback.<sup>36</sup> The two main benefits it has enjoyed are a reduced balance of payments constraint, (due to the relative ease with which the issuer of the key currency is able to finance its deficits), and enhanced political influence – because to the extent that the world runs on the dollar, participants in that system have a stake in the dollar's value. A contraction of the dollar's international role would diminish these perks. Even more dramatic than the loss of privileges, however, would be the consequences of overseeing and

managing a currency in (relative) decline. To the extent that the dollar's role is expected to recede, the US will be faced with an increasingly visible overhang problem (as more actors diversify away from the dollar). In this context, the US would face a whiplash effect: American policies would no longer be given the benefit of the doubt – just the opposite – its macroeconomic management would be subject to intense scrutiny in international financial markets and its deviations from financial rectitude would start to come at a price. Federal government spending would take place under the watchful eye of international bankers and investors, whose preferences will always be for cuts. Borrowing from abroad would become less automatic and more costly. It would also become more difficult to reduce the value of US debts via devaluation and inflation, devices which have served the US well in the past, but which in the future would both work less well and further undermine the dollar's credibility.

This would have national security consequences. Increased (and more skeptical) market scrutiny of American macroeconomic policy choices would be particularly intense during moments of international crisis and during periods of wartime, presenting constraints that, again, will appear magnified due to the fact that the US is so uniquely unaccustomed to feeling this sort of pressure. Markets tend to react negatively to the prospects for a country's currency as it enters crisis and war, anticipating increased prospects for government spending, borrowing, inflation, and hedging against general uncertainty.<sup>37</sup> Under dollar hegemony, the US tended to benefit from the “flight to quality” during moments of international distress; but in the context of dollar diminution, with markets much more nervous about the dollar, the US would find itself uncharacteristically under financial stress during crucial moments of international political confrontation. Although comparisons between the dollar today and post-war sterling are usually unhelpful (given basic differences between the two settings), here the analogy to Britain is illustrative. During World War II the international role of the pound was an important source of support; but after the war, with sterling in decline, the vulnerability of the pound left Britain exposed and forced it to abandon its military adventure over Suez in 1956.

As with energy security, the policies needed to defend the dollar start (and end) at home. The willingness of actors to hold and rely on dollars (or any international money), depends on three calculations: some confidence that the dollar will retain its value and stability indefinitely into the future; an assessment of the attractiveness of the dollar compared to plausible alternatives; and an

additional calculation on the part of public authorities assessing the political implications about the use of international currencies. For the first time, in each of these three foundations, cracks are visible and widening. This is obvious with regard to expectations about the trajectory of the value of dollar, given the deficits in US accounts, and its domestic fiscal indicators as well.

US net national savings, which averaged about ten percent in the 1960s, eight percent in the 1970s, and four percent in the 1980s, has in recent years continued to fall, scraping close to one percent of GDP, its lowest rate in American history. Public sector trends are just as bad: although other advanced industrial countries face similar problems, the federal budget of the United States went from a surplus of 1.3 percent of GDP in 2000 to a 4.9% deficit in 2004. High US consumption levels have contributed to, and find expression in, its enormous external account imbalances. The American trade deficit reached an all time high of \$166 billion in 1998, increased by 60% in the following year, and then set a new record in each of the first six years of the twenty-first century, reaching \$758 billion in 2006. As a percentage of GDP, the US current account deficits have reached annual levels at or above 6.5% – more than 1% of global GDP – *and they absorb almost two-thirds of the current account surpluses of all the world's surplus countries.*<sup>38</sup>

While exchange rate adjustment may be part of the solution to America's external imbalances, *domestic* consumption is the primary driver of these trends, and some combination of tax increases and spending cuts in the United States will be required to address them, if the dollar is to be put back on a sustainable track (and to address unrelated but nevertheless profound concerns for the stability of the international economy). Of course these are measures that have not obviously been forthcoming, and indeed now appear even less likely given the (admittedly necessary) \$700 billion financial bailout about to be added to the tab America is running.

Which brings me back, yet again, to a large gas tax. Such a tax would not only account for the negative security externalities of oil and limit the extent to which the US is subsidizing its enemies; it would also be a big step in the right direction of putting America's external accounts in order, a problem which will, if left untended, will undermine US power. There is one final, if modest irony here: some conspiracy theorists have suggested that the US war against Iraq was a war to defend the dollar. But in fact, the opposite is true – the dollar can only be bolstered by reputation, not force,



and the cost of the war has actually undermined confidence in the future value of the greenback. Controlling oil will not save the dollar – but getting out of oil just might.

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- <sup>1</sup> Stephen Van Evera, “The Cult of the Offensive and the Origins of the First World War”, *International Security* 9:1 (summer 1984), pp. 58-107; Jack Snyder, *The Ideology of the Offensive: Military Decision Making and the Disasters of 1914* (Ithaca: Cornell University Press, 1984).
- <sup>2</sup> For a more general discussion of these types of issues, see Jonathan Kirshner, “The Microfoundations of Economic Sanctions”, *Security Studies* 6:3 (Spring 1997), pp. 32-64.
- <sup>3</sup> President Carter, State of the Union Address, January 23, 1980; Herman F. Eilts, “Security Considerations in the Persian Gulf”, *International Security* 5:2 (Fall 1980), pp. 79-113; Robert J. Lieber, “Oil and Power After the Gulf War”, *International Security* 17:1 (Summer 1992), pp. 155-176.
- <sup>4</sup> Caitlin Talmadge, “Closing Time: Assessing the Iranian Threat to the Strait of Hormuz”, *International Security* 33:1 (summer 2008), pp. 82-117; see also Eugene Gholz and Daryl Press, “All the Oil we Need”, *New York Times*, August 20, 2008.
- <sup>5</sup> Steven Mufson, “Bush Halts Oil Reserve Purchases”, *Washington Post*, May 17, 2008; Larry Rohter, “Obama, New Stand, Proposes use of Oil Reserve”, *New York Times*, August 5, 2008.
- <sup>6</sup> See for example David Goodstein, *Out of Gas: The End of the Age of Oil* (New York: W. W. Norton and Co., 2005); Paul Roberts, *The End of Oil: On the Edge of a Perilous New World* (Boston: Houghton Mifflin, 2004); Kenneth S. Deffeyes, *Hubbert’s Peak: The Impending World Oil Shortage* (Princeton: Princeton University Press, 2001).
- <sup>7</sup> International Energy Agency, *Findings of Recent IEA Work, 2003* (Paris: OECD/IEA, 2003), pp. 8, 12; International Energy Agency, *World Energy Outlook, 2002* (Paris: OECD/IEA, 2002), p. 92. For a very (and probably overly) optimistic vision of global energy supply, see Steve A. Yetiv, *Crude Awakenings: Global Oil Security and American Foreign Policy* (Ithaca: Cornell University Press, 2004).
- <sup>8</sup> The International Energy Agency remains certain that “resources are more than adequate to meet demand until 2030 and beyond. Less certain is how much it will cost”. International Energy Agency, *World Energy Outlook, 2004* (Paris: OECD/IEA, 2004), pp. 29 (quote), 33; IEA, *World Energy Outlook, 2002*, p. 37. See also Philip K. Verleger Jr., “Energy: A Gathering Storm?” in C. Fred Bergsten (ed.), *The United States and the World Economy: Foreign Economic Policy for the Next Decade* (Washington: Institute for International Economics, 2005), pp. 209-10, 212.
- <sup>9</sup> Hui Guo and Kevin L. Kliesen, “Oil Price Volatility and US Macroeconomic Activity”, *Federal Reserve Bank of St. Louis Review* 87:6 (November/December 2005), 669-83; Francois Lescaroux and Valerie Mignon, “On the Influence of Oil Prices on Economic Activity and other Macroeconomic Variables”, *CEPII Working Paper* No 2008-05 (April 2008).
- <sup>10</sup> For nice introduction to this concept, see Robert H. Frank, *Microeconomics and Behavior* (Boston: McGraw Hill, 4<sup>th</sup> ed., 2000), pp. 8-13. Frank identifies the failure to consider opportunity costs as the number one “pitfall in decision making” people make. (Number two is failure to ignore sunk costs.) See also Joseph Schumpeter, *History of Economic Analysis* (New York: Oxford University Press, 1954), p. 917.

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- <sup>11</sup> For an illustration of how international prices set on world markets affect even closed economies completely cut off from world trade, see Jeffrey Frieden and Ronald Rogowski, “The Impact of the International Economy on National Policies: An Analytical Overview”, in Robert Keohane and Helen Milner (eds.) *Internationalization and Domestic Politics* (Cambridge: Cambridge University Press, 1996).
- <sup>12</sup> See for example Michael T. Klare, *Blood and Oil: The Dangers and Consequences of America’s Growing Petroleum Dependency* (New York: Metropolitan Books, 2004), esp. pp. 175-79; Lutz Kleveman, *The New Great Game: Blood and Oil in Central Asia* (New York: Grove Press, 2003), 9, 98, 101, 192, 263.
- <sup>13</sup> International Energy Agency, *Key World Energy Statistics, 2004* (Paris: OECD/IEA, 2004), p. 15; International Energy Agency, *Findings of Recent IEA Work, 2003* (Paris: OECD/IEA, 2003), pp. 9, 68; Paul Crompton and Yanrui Wu, “Energy Consumption in China: Pasty Trends and Future Directions”, *Energy Economics* 27:1 (January 2005), pp. 196, 206; Philip Andrews-Speed, “China’s Energy Woes: Running on Empty”, *Far Eastern Economic Review* (June 2005), pp. 14.
- <sup>14</sup> John Ghazvinian, *Untapped: the Scramble for Africa’s Oil* (Orlando: Harcourt inc, 2007); David Zweig and Bi Jianhai, “China’s Global Hunt for Energy”, *Foreign Affairs* 84:5 (September/October 2005), pp. 27-8, 31; Emma Chanlett-Avery, “Rising Energy Competition and Energy Security in Northeast Asia: Issues for US Policy”, *Congressional Research Service Report RL32466* (February 9, 2005), pp. 9-12, 14, 17; Peter Cornelius and Jonathan Story, “China Revolutionizes Energy Markets”, *Far Eastern Economic Review* (October 2004), pp. 22-3; International Energy Agency, *World Energy Outlook, 2002* (Paris, OECD/IEA, 2002), pp. 237, 249, 254; Xiaojie Xu, “The Oil and Gas Links Between Central Asia and China: A Geopolitical Perspective”, *OPEC Review* 23:1 (March 1999), pp. 35, 46, 52.
- <sup>15</sup> Zha Daojiong, “China’s Energy Security: Domestic and International Issues”, *Survival* 48:1 (Spring 2006), pp. 179-80; US Department of Energy, “National Security Review of International Energy Requirements” (February 2006), pp. 14-15, 24-8, 32; Amy Myers Jaffe and Kenneth B. Medlock III, “China and Northeast Asia”, in Jan H. Kalicki and David L. Goldwyn (eds.) *Energy and Security: Toward a New Foreign Policy Strategy* (Baltimore: Johns Hopkins University Press, 2005), pp. 277-8; Amy Myers Jaffe and Steven W. Lewis, “Beijing’s Oil Diplomacy”, *Survival* 44:1 (Spring 2002), p. 126.
- <sup>16</sup> Gawdat Bahat, “Energy Partnership: China and the Gulf States”, *OPEC Review* 29:2 (June 2005), pp. 118, 123, 125, 127; Yetiv, *Crude Awakenings*, pp. 7, 121-2; IEA, *World Energy Outlook 2004*, p. 32; IEA, *World Energy Outlook, 2002*, p. 96.
- <sup>17</sup> Barry Bonds is not the appropriate referent – in 1921, when Babe Ruth set the home run record at 59, he hit more home runs than the next two players combined (who each hit 24), and only 5 other players his as many as 20 home runs that year. Eighty years later, when Bonds hit 73, the next two players hit 64 and 57, and 38 other players hit more than 30 home runs each. US consumption remains Ruthian.
- <sup>18</sup> 2006 consumption and import data are from the US Department of Energy, Energy Information Administration, Official Energy Statistics; also see their “Top World Oil Tables”. Projections are International Energy Agency, *World Energy Outlook, 2004*; see also US Energy Information Administration, *International Energy Outlook 2005*.

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- <sup>19</sup> Verleger, “Energy: A Gathering Storm”, p. 237; Anna Bernasek, “Real Energy Savers Don’t Wear Cardigans. Or Do They?”, *New York Times*, November 13, 2005. Opportunities for energy savings in the US abound – five percent of all electricity used in US Households is lost to “standby power waste” – appliances not in use but still plugged in. International Energy Agency, *Things That Go Blip in the Night: Standby Power and How to Limit It* (Paris: OECD/IEA, 2001), p. 87
- <sup>20</sup> Department of Energy, “National Security Review”, pp. 3, 28; “National Security Strategy of the United States of America”, (White House, March 2006), p. 41.
- <sup>21</sup> Department of Energy “National Security Review” pp. 2-3, 22, 29, 33; “National Security Strategy”, p. 42; see also Zha Daojiong, “China’s Energy Security”, pp. 182-3; Jaffe and Lewis, “Beijing’s Oil Diplomacy”, pp. 116, 124-5.
- <sup>22</sup> For an overview of some of these issues, see Kurt Campbell and Jonathon Price, *The Global Politics of Energy* (Washington D.C.: The Aspen Institute, 2008); Christopher Simon, *Alternative Energy: Political, Economic and Social Feasibility* (Lanham MD: Roman and Littlefield, 2006); Klaus Lackner and Jeffrey Sachs, “A Robust Strategy for Sustainable Energy”, *Brookings Papers on Economic Activity* 2:2005.
- <sup>23</sup> Regardless of one’s opinion regarding the first and second Gulf wars, and their motivations, it is extremely unlikely that they would have occurred if the oil wasn’t there. To be clear, this is not to say that the Gulf wars were “wars for oil”. But rather, it is to observe that Saddam Hussein behavior mattered more (and was more dangerous) because it occurred in the Gulf – had Iraq been situated in west Africa or Latin America, there is a good chance he would still be in power. A short primer on externalities can be found in Frank, *Microeconomics and Behavior*, pp. 585-614.
- <sup>24</sup> For a recent example of Frankenstein on the move, see Michael Schwartz, “Russia Loans Venezuela \$1 Billion for Military”, *New York Times*, September 27, 2008. Simon Romero and Clifford J. Levy, “Russia and Venezuela Confirm Joint Military Exercises”, *New York Times*, September 8, 2008. Lionel Beehner, “Russian-Iran Arms Trade”, Council on Foreign Relations, *Backgrounder*, November 1, 2006.
- <sup>25</sup> This is also why the idea of energy independence “from the middle east” is a meaningless concept.
- <sup>26</sup> US imports and calculations of windfalls are based on import and export data of the US Department of Energy, Energy Information Administration.
- <sup>27</sup> For an discussion of differences between supply and demand driven oil shocks, see International Monetary Fund, *World Economic Outlook: Spillovers and Cycles in the World Economy* (Washington D.C.: International Monetary Fund, April 2007), pp. 17-19.
- <sup>28</sup> Peter C. Reiss and Matthew W. White, “Demand and Pricing in Electricity Markets: Evidence from San Diego During California’s Energy Crisis”, *NBER Working Paper* 9986 (September 2003); William T. Gavin, “Gasoline Affordability”, *Federal Reserve Bank of St. Louis, National Economic Trends*, November 2004; Carol Dahl and Thomas Sterner, “Analyzing Gasoline Demand Elasticities: A Survey”, *Energy Economics* 27:1 (July 1991), p. 210.
- <sup>29</sup> US federal gas taxes gas taxes have been unchanged at eighteen cents a gallon since 1993 (with additional state taxes adding an additional eight to forty cents). As a rule of thumb, each penny of gas tax would raise about a billion dollars in revenue; studies project that each twenty-five cent per gallon increase in gas taxes would cut consumption by 200,000 barrels per day within six months and 700,000 b/d within a few years. Verleger, “Energy: A Gathering Storm”, pp. 231, 233; American Petroleum Institute, “Nationwide and State-by-State Motor Fuel Taxes, November

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2004”; “Gas Taxes: Lesser Evil, Greater Good, *New York Times*, October 24, 2005; Christopher J. Neely, “Will Oil Prices Choke Growth?”, *Federal Reserve Bank of St. Louis, International Economic Trends*, July 2004.

<sup>30</sup> I made this argument when gas was \$1/gallon, and when it was \$2/gallon. Presidential candidate John Anderson urged a similar course of action in 1980. Gas prices are much higher now, but this speaks in favor of, not against, taking action now, as these higher prices vindicate the underlying logic of the gas tax argument.

<sup>31</sup> When world oil prices go up, the US as a whole (and other net consuming nations) lose wealth to foreigners; changes in tax policy, on the other hand, are acts of internal redistribution.

<sup>32</sup> See in particular Robert Gilpin, *War and Change in World Politics* (Cambridge: Cambridge University Press, 1981), pp. 153, 163-8; also Charles P. Kindleberger, *World Economic Primacy 1500-1990* (New York: Oxford University Press, 1996), pp. 32, 214-5; and Carlo Cipolla, “Editor’s Introduction”, in Cipolla (ed.) *The Economic Decline of Empires* (London: Methuen, 1970), pp. 4-5, 13-14.

<sup>33</sup> On this last point see Graham Allison, *Nuclear Terrorism: The Ultimate Preventable Catastrophe* (New York: Times Books, 2004).

<sup>34</sup> Davis Rich Dewey, *Financial History of the United States* (New York: Longmans, 1922); Herbert A. Stein, *The Fiscal Revolution in America* (Washington DC: American Enterprise Institute, 1996).

<sup>35</sup> On these issues, see Jonathan Kirshner, “Dollar Primacy and American Power: What’s at Stake?” *Review of International Political Economy* 15:3 (summer 2008); Eric Helleiner and Jonathan Kirshner (eds.) *The Future of the Dollar: Whither the Key Currency?* (Ithaca: Cornell University Press, forthcoming); and David Andrews (ed.) *International Monetary Power* (Ithaca: Cornell University Press, 1996).

<sup>36</sup> Note here that I am talking about reduction in the relative use of the dollar abroad – in this scenario, the dollar still functions as an international currency, just to a lesser extent than before.

<sup>37</sup> Jonathan Kirshner, *Appeasing Bankers: Financial Caution on the Road to War* (Princeton: Princeton University Press, 2007); on the British experience, see Susan Strange, *Sterling and British Policy: A Political Study of an International Currency in Decline* (Oxford: Oxford University Press, 1971).

<sup>38</sup> Maurice Obstfeld and Kenneth Rogoff, “The Unstable US Current Account Position Revisited”, *NBER Working Paper*, 10869, October 2004; pp. 1, 5, 7, 18; Michael Mussa, “Sustaining Growth While Reducing External Imbalances”, in Bergsten (ed.) *The United States and the World Economy*, (Washington: Institute for International Economics, 2005) pp. 175-6, 186, 194-5, 201-3; William R. Cline, *The United States as a Debtor Nation* (Washington: Institute for International Economics, 2005), pp. 3, 66, 85, 99, 154, 168-71, 275-7; Sebastian Edwards “Is the US Current Account Deficit Sustainable” *NBER Working Paper*, 11541, October 2005, pp. 2-3, 11-12, 26, 40-2; Lawrence H. Summers, “The Current Account Deficit and the Global Economy”, *Per Jacobson Lecture*, October 3, 2004, pp. 3-4. Trade deficit figures are from the US Census Bureau, Foreign Trade Division, June 8, 2007.