

The Worst-Case Scenario: An Alternative View

**By Dr. Marvin J. Cetron and Owen Davies
Forecasting International**

Thirty years of war in the Middle East: That is what the commentators on public radio in mid-December 2006 warned could come from the current mess in Iraq. They were far from the first to mention this possibility. It is a grim vision that many pessimists hold even today.

The argument, of course, goes like this: Iran is supporting Shi'ite extremists in their attempt to dominate post-Saddam Iraq. The American military is the primary force, and perhaps the only force, that prevents them from subjugating the country's Sunni minority. If American forces leave Iraq, Syria and Saudi Arabia will enter the fray on the side of the Sunnis, as King Abdullah reportedly warned Vice President Cheney early in December 2006. Turkey, presumably, will take advantage of this chaos to settle its long-running conflict with the Kurds of northern Iraq and the adjoining regions. We now have a regional war.

However, there is more to come. This is, after all, the most volatile region in the world. Sunnis and Shi'ites have carried on an intermittent religious and ethnic power struggle there for some 1400 years. Worse, after World War I the victors deliberately broke the Middle East into artificial states that could never be stable, and thus could not easily be united under the banner of Pan Arabism. As Sesh Velamoor, of the Foundation for the Future, points out, if the West is unhappy with conditions in the Middle East, it has itself largely to blame. Yet for our current purposes the important point is that mere instability soon could break down into general chaos.

Here is one possible course of events: Hezbollah's current protests in Lebanon are likely to escalate into outright revolt. Saudi Arabia could intervene here, too, as it has been actively supporting the government of Prime Minister Fouad Siniora. At the same time, Hezbollah and Hamas, in the Occupied Territories, will be encouraged to renew their struggle against Israel. In Egypt, the banned but still powerful Muslim Brotherhood would be encouraged to resume the battle for a fundamentalist Islamic state, endangering Western access to the Suez Canal. Extremists from distant reaches of the Muslim world will flood into the Middle East. Saudi Arabia, a land of Sunni Arabs, and Iran, the home of Persian Shi'ites, already on opposite sides in Iraq, might expand their conflict to do battle across the Persian Gulf, with fallout in Kuwait, Qatar, and the United Arab Emirates.

One way or another, it all spins out of control. Everyone in the Middle East fights everyone else for decades.

There are other ways to interpret the situation in the Iraq. Sesh Velamoor suggests that Iraq may quickly become a Shi'ite theocracy on the model of Iran, slowly growing more liberal in the years ahead. Others hold that Iran is stirring the chaos in Iraq not so much to dominate its neighbor as to keep U.S. troops mired there. That way, if President Bush decides to attack Iran, Teheran will have some 200,000 American hostages at hand right next door.

Yet with all its possible variations, the idea of a generalized war in the Middle East appears at least as credible as the circumstances that now may be leading up to it would have seemed little more than five years ago. Its impact on the West merits serious examination. It is the worst-case scenario, which must be understood and either defended against or, if possible, turned to the West's advantage.

To date, most commentators have simply assumed that a generalized war in the Middle East would be a bad thing, and this assumption has limited their analyses to

policy implications for the American occupation of Iraq. Certainly, wholesale carnage is never to be welcomed, and the risk of unrestrained slaughter must be factored into any decision America makes about the land it chose to occupy. Yet the United States will not remain in Iraq forever, and its departure is likely to leave a power vacuum in that country. Under the circumstances, there are questions that need to be answered in some detail. What would a regional war in the Middle East imply for the United States and its allies? And what should the West do to influence the situation to its advantage, now and in the future? Thus far, many possibilities have been overlooked.

For example, the Iraq war has inspired, recruited, trained, and battle-hardened a new generation of future terrorists who, when freed from Iraq, are likely to turn their attention to the United States and its allies, especially in England and France. Having a Middle-Eastern war to keep them occupied may be the only thing capable of preventing a *jihad* against the West that could make terrorism to date seem relatively tame.

At least, it seems so to us. We offer the following analysis for comment and welcome whatever thoughts anyone may have to offer. Not everyone will agree with the our premises. Many issues will look very different in the Middle East than they do in the West. Yet this article is a “what if?” It is a place to begin the discussion of what may lie ahead in one specific scenario that is too important to remain unexamined.

The United States has only four basic interests in the Middle East: Israel, terrorism, nuclear nonproliferation, and oil. Let us take them in order.

Israeli Security

For the United States, the security of Israel has long been a matter of compelling interest. This is true for many reasons. Israel is the only democracy in the Middle East and the one ally there that the U.S. can count on in a crisis. Israel provides America with useful intelligence about the region, and some other areas of the world, at least as often as America supplies it to Israel. Israel occasionally takes action that is in the American interest when the United States itself would find that difficult, as in the bombing of the Osirak Nuclear Research Facility in Iraq in 1981. And Israel has long been a victim of aggression, for which the U.S. generally has sympathy. It is significant also that many Americans, and especially many politically influential Americans, feel a deep personal interest in the fate of the Jewish homeland. In all, it is inevitable that the United States would consistently side with Israel in its efforts to survive the hostility of its neighbors.

Yet this is a sympathy for which the United States pays heavily in the enmity of Muslims around the world. Although America’s support for the Israel is not the only issue that draws Muslim ire to the U.S., it is the source of the broadest antagonism. In a time of generalized war in the Middle East, Muslims will be angry enough at the United States for having allowed its crusade in Iraq to destabilize the region. America’s close relationship with Israel can only add fuel to that fire.

In anticipation of a future Middle Eastern war, the United States has a compelling need to defuse Muslim anger to whatever degree it can. Over the years, it has squandered a number of opportunities to do so. For example, it entered the war in Bosnia only after sitting on its hands while Serbian Christians slaughtered Croatian Muslims; this eventually became one of three grievances that Osama bin Laden cited as just cause for a *jihad* against America. It continues largely to ignore the devastation of Muslims in Darfur—admittedly at the hands of other Muslims. And for some 30 years it

has consistently refused to intercede with Israel on behalf of the Palestinians even in those situations where Israeli policy has been open to question.

Washington is now in a position to make amends. If Israel ever needed America's unquestioning patronage, it no longer does, despite its embarrassing inability to defeat Hezbollah in the Lebanon conflict of July 2006. Prime Minister Ehud Olmert made that clear when—apparently inadvertently—he admitted in December 2006 that his country does indeed possess nuclear weapons. Israel's neighbors may be hostile, but if they sometimes are suicidal as individuals, as nations they are not. Even if they are capable of destroying Israel, as Iran may soon be, they will take no action against it that would provoke a nuclear response.

This allows Washington to take a step that has long been needed. It must reassert itself in the conflict between Israel and the Palestinians, but with much more balance than it has, in the Muslim view, displayed. No peace between the two neighbors is possible until Israel removes its settlements from the Occupied Territories and returns the occupied land to Palestinian control. At its earliest opportunity, the United States must press Jerusalem to do so. At the same time, it must press the Palestinians to recognize Israel's right to exist within secure borders. Most importantly, from its point of view, Washington must be seen to act as an honest broker between Israel and the Palestinians.

There are obvious obstacles to this plan. The United States may not be able to work with a Palestinian Authority that includes Hamas unless that organization accepts Israel's right to exist. Israel clearly will not make peace with its adversaries until Hezbollah returns the two Israeli soldiers kidnapped in July 2006. Washington can begin its efforts by trying to resolve these issues.

It is worth noting that this kind of peacemaking has been attempted before. In the Camp David 2000 summit, Israeli Prime Minister Ehud Barak agreed to return all of the Occupied Territories to Palestinian control in return for a peace settlement with a Palestinian state. Under strong pressure from his Arab League allies, Yasir Arafat rejected the offer. We have no reason to believe that another attempt at a two-state solution would be any more successful today or in the near future. If anything, this seems even less likely in a time when Hamas shares control of the Palestinian Authority and Mahmoud Ahmadinejad leads Iran. Ahmadinejad has clearly stated that it is his purpose to destroy Israel and the West, and he has established a reputation as the most volatile leader in the Middle East.

Yet these concerns are beside the point. The United States must be seen to seek peace in between Israel and its neighbors in a way that most Muslims will view as fair to the Palestinians. It is the only thing Washington can do to insulate its nation, even in part, from violence once it leaves Iraq.

There are implications here for Israel as well. If Fatah, Hamas, and Hezbollah are invigorated by the chaos of regional war, they will also be divided by it. Some of their partisans may remain focused on Israel but many will be drawn away by the larger conflict. There are dangers here for Israel, such as that Muslim radicals will gain still more influence in the region, but on balance the problems of a Mid-East war seem unlikely to be much greater than the ones Israel faces today.

There is, of course, another possibility to consider. Israel could easily be dragged into any regional war. The most obvious risk is an attack by its enemies. Iran, whose

army is six times as large as Saudi Arabia's, might view a generalized war as a golden opportunity to eliminate the hated Jewish state even in the face of Jerusalem's nuclear deterrent. Yet Israel also could enter the war voluntarily, on the side of Saudi Arabia, with whom it has already established informal relations. This would all but guarantee a loss for Iran and its Shi'ite allies. The payoff for Israel—aside from defanging one of its most dangerous antagonists—would be a much closer relationship with Saudi Arabia, Jordan, and Egypt. A settlement with the Palestinians could be a relatively short step from there.

We are not about to predict that having America leave Iraq would lead, via Middle Eastern war, to peace between Israel and the Palestinians. Yet it does seem likely that Israel would enter this hypothetical conflict and it would do so on its own terms. The probable outcome clearly deserves further study.

Terrorism

Terrorism is fundamentally a separate issue from America's relationship with Israel. Al Qaeda and its allies object to any American presence in the Middle East, and particularly in Saudi Arabia, the location of Mecca. For them, supporting the Palestinian cause is little more than an opportunity to curry favor among moderate Muslims. As things stand, a sustained and convincing display of even-handedness toward the Palestinians by the United States could weaken that support, and this can only be beneficial.

However, a Middle Eastern war changes that equation. In any credible future, we can expect to see much the same level of terrorism we already are accustomed to. Hotels owned or patronized by Americans will be bombed all too often. The United States will lose the occasional embassy. Every ten years or so, there may even be another attack on the scale of the World Trade Center. But will a regional war bring more terrorism against the West, or less? We see two possibilities.

An all-out war between the Sunni and Shi'ite lands could reduce the amount of anti-Western terrorism. In this scenario, extremists throughout the Muslim world would rush toward the Middle East, to fight for whichever side of the conflict holds their allegiance. Most are likely to be Sunnis, as they form a large majority in most of the Muslim world. These extremists will be too busy killing their fellow Muslims to bother much with the United States and its allies. Eventually, they could turn the training and experience won in the Middle East against us. Yet it is at least possible that a long internal conflict might finally slake the extremists' appetite for slaughter. And two or three decades is long enough for the West to demonstrate good will toward Islam and reduce the appeal of *jihād*.

Alternatively, both sides could back away from a fratricidal war—but not before thousands of agitated extremists arrived in the region, where they would represent a severe threat to established governments. For local rulers, the obvious answer would be to divert their energy to more distant targets. First covertly, and later perhaps overtly, Saudi Arabia and its neighbors would sponsor terrorist attacks against Israel and the West. At the same time, they would move rapidly toward fundamentalism, preserving their own nominal rule at the cost of giving much more power to local imams. For the United States and its allies, this would dramatically raise the risk of attack for at least a generation.

Which of these scenarios is more likely also merits further study. However, in one critical aspect, it hardly matters which comes to pass. Either case would imperil the flow of Mid-East oil to the West for many years. We will consider the implications of that development in a few minutes.

Nuclear Proliferation

The Middle East will develop nuclear energy. That much seems inevitable. Steve Millett, a private consultant formerly with Battelle (smillett@columbus.rr.com) points out that the nations of the Middle East have at least four compelling reasons to go nuclear. They need large amounts of electricity to support their economic growth and living standards, and they do not want to burn oil that can be exported profitably to the rest of the world. They need even more electricity for the large-scale desalination of water. They need a nuclear deterrent against potential enemies; the U.S. invasion of Iraq only made Iran even more determined to develop nuclear weapons. And they believe that having nuclear weapons will restore their former stature as an advanced global civilization, easing their sense of cultural humiliation.

Of course, the future changes once nuclear weapons arrive in the Middle East. Thus far, the United States has focused its nonproliferation concerns on Iran, which despite its denials does appear to be working on the military applications of nuclear power. How soon Iran could build its first nuclear device is unclear. Estimates range from two to ten years; unbiased analyses are hard to find. If Iran would not seriously attack Israel in normal times, thereby inviting its own destruction, the hazards of poor judgment in a time of regional war seem considerably greater, especially once Teheran has nukes of its own.

In fact, Israel views Iran as the single greatest threat to its security according to Shabtai Shavit, a senior security advisor and former head of Mossad, Israel's foreign intelligence service. Iran, he says, already has chemical and biological warheads for surface-to-air missiles with ranges up to 3,500 kilometers, far more than long enough to attack all of Israel. Shavit also believes that Iran is developing missiles with a range of 5,000 kilometers and is working hard on missile-launching submarines, either of which could strike at the United States. While the range and accuracy of Iranian missiles have yet to be confirmed, Iran made it clear that its goals include erasing Israel from the map and destroying all infidels. Under the circumstances, the possibility that it might be able to deliver chemical, biological, and someday nuclear weapons at long range is sufficient cause for Jerusalem's concern, and for Washington's as well.

However, Teheran's declared enemies are not the only people worried about a nuclear-equipped Iran. As recently as 2005, Saudi leaders said that their country was unlikely ever to need nuclear power. Today, they are working hard to develop the infrastructure required for an atomic power system—or for the eventual production of nuclear weapons. Turkey is building its first atomic power plant. Egypt has announced plans to build its first as well. Bahrain, Jordan, Syria, Kuwait, Oman, Qatar, and the United Arab Emirates all have told the International Atomic Energy Commission that they are interested in developing nuclear power. These all are lands with large Sunni majorities and serious worries about a Shi'ite Iran possessed of nuclear weapons.

Combined with Teheran's growing influence among Iraq's Shi'a majority, the threat of an Iranian nuclear weapon has led Washington to re-think its policies in the

Middle East, according to journalist Seymour Hersh, writing in *The New Yorker* (March 5, 2007.) Despite President Bush's close personal ties with the Saudi royal family, the fact that Al Qaeda originated among Saudi extremists once led most Washington leaders to view Sunni Muslims as the more dangerous of the religion's two main sects. This was reinforced by the Sunni fighters in Iraq, who have killed more Americans than the Shi'ites have by an estimated ten-to-one. Today, according to Mr. Hersh and our own observations, the administration views the Sunnis—and especially its allies in Saudi Arabia—as less threatening than an Iran that is no longer counterbalanced by a strong Iraq. Therefore, the White House is working, both independently and in concert with the Saudis, to support both Iraqi dissidents and the Lebanese government against Shi'ite extremists. Like many of the preparations for the Iraq War, these efforts reportedly are being run out of the vice president's office. It seems unlikely that these efforts will divert the fundamentalist regime in Iran from developing a nuclear weapon there, much less provoke a change of regimes in Teheran. Neither will they do much to undermine Hezbollah in Lebanon. When they fail, the United States will be left with only one option, to eradicate Iran's bomb program, either directly or by proxy, through Israel.

Fear of Iran's growing power has changed other policies as well in ways that eventually could make it easier to deal with Iran's nuclear program. Saudi Arabia and Israel have been in direct talks, and Saudi Arabia—convinced that peace in Palestine would reduce Iranian influence—has joined in negotiations between the Arabs and Israelis and between the Palestinian factions. Israel and the United States are not fully satisfied by the terms of the power-sharing deal between Hamas and Fatah, but without Saudi intervention there likely would have been no deal at all. If it ever becomes necessary to attack the Iranian nuclear program, Saudi Arabia will allow Israeli planes to cross its airspace for the attack. As the Middle Eastern adage goes, "The enemy of my enemy is my friend."

For the United States, the idea of favoring Sunni over Shi'a has a natural lifespan. If nothing derails it beforehand, it will end when one of the Sunni lands also begins development of a nuclear weapon—about ten years from now in the case of Saudi Arabia. At that point, the United States may be left with no option but to call for the denuclearization of the entire Middle East, including Israel. How successful it will be in such an effort seems open to doubt.

One other policy may require modification as well. The most dangerous possibility in this scenario involves Pakistan, the only Muslim land that already possesses nuclear weapons. To date, the United States has treated Pakistan as an ally in its so-called "war on terror." However, Dr. Abdul Qadeer Khan, the father of Pakistan's atomic weapons program, intended his creation to be an "Islamic bomb," at service to the *jihadi* movement around the world. There is significant reason to suspect that this goal is widely held among the country's military and government, but that may not matter. Fully 70 percent of the Pakistani population wants the present government replaced by a more *jihad*-friendly regime, and there have been at least three attempts on President Musharraf's life. A successful assassination is likely to bring in a government that will be much less cooperative with the West. In a Middle-East war, the day could come when Pakistan donates nuclear weapons to the Sunni side of the conflict, or to the battle against Israel. This requires development of a strategy to

prevent the use of Islamabad's nukes, either in the Middle East or against the West. So far as we know, based on the unclassified literature, this effort has yet to begin.

The Key Concern

That leaves the matter of oil. The Middle East produces nearly 31 percent of the world's oil and consumes only one-fifth of its own output. About two-thirds of the petroleum used in the United States is imported. Perhaps one-fourth of that—around one-sixth of total consumption—comes from the Middle East. Japan imports all its oil, most of from the Middle East. Europe, India, and China all depend, to greater or lesser degrees, on Middle Eastern oil. If something disrupts the flow of almost one-third of the world's oil, as a major war in the Middle East inevitably would, the cost of energy in the throughout the world will soar. This is a recipe for prolonged recession, and perhaps even depression, in the United States and most of its trading partners.

In the short run, healing the American economy would mean accepting measures that many Americans would prefer to avoid. The United States could wind up competing with China for oil in totalitarian states that Washington currently shuns. It also might use its intelligence agencies to promote more favorable policies in Venezuela.

Tapping the oil reserves beneath the Arctic National Wildlife Reserve becomes a given in this scenario. To prevent needless environmental damage, drilling would be limited to the winter, when the ground is rock-hard. In addition, the oil would be transported through double-walled pipelines to prevent spills. The pristine Alaskan environment still would suffer, but this concern would no longer prevent drilling.

The West Coast also would be opened to drilling, though at distances beyond 20 miles from the beaches, not 10, as the law currently requires. The risk of environmental damage here too would be considered an acceptable price for economic survival.

Less controversially, the U.S. surely would buy still more oil from Canada, where a significant new field has recently been discovered, and would develop the deep-water deposits under the Gulf of Mexico much faster than anyone now plans.

Crude oil, of course, is useless without sufficient refining capacity, and the United States already needs more than it possesses. No new refineries have been built there in more than 20 years, thanks to a combination of environmental concerns and the unwillingness of potential neighbors to have a refinery in their back yards. To meet America's current need for gasoline and heating oil, at least four new refineries are required. The only obvious solution is for the federal government to build them around the country, either on government-owned land or on property obtained through eminent domain. These might be sold or leased to oil producers or operated by the government itself. At the same time, it should use the Strategic Petroleum Reserve much more actively to mitigate temporary supply shortages.

The United States also needs at least seven new atomic power plants to meet its current and future demand for electricity. An energy crisis finally would break the country's de facto ban on new reactors, allowing the construction of at least those seven. These first generating stations would use safe hot-water reactors. Even safer technologies lie further in the future, and they are likely to be adopted once they become available.

Expanding the use of atomic energy of course means finding somewhere to put still more nuclear waste. This is not a technological problem, so much as a political one.

The ideal hiding place for atomic waste was recognized almost as soon as anyone considered the problem. The salt domes of Louisiana have been geologically stable and free of water for hundreds of millions of years; if they had not been, water would long since have washed the salt away. Nuclear waste could safely be stored in one of them until it decayed to the level of background radiation. However, thanks to Louisiana's political power decades ago, the law forbids consideration of any depository other than the Yucca Mountain site now being developed by the Atomic Energy Agency. In an energy emergency, that law is likely to be rescinded and the country will finally do the obvious. Nuclear waste will be buried in salt domes and forgotten.

We can expect a much stronger push for alternative energy as well. Given the proper incentives—and a world oil shortage seems likely to qualify—solar, wind, and other renewable power technologies already have proved useful. Germany, where cloudy days are common, is home to 15 of the world's largest photovoltaic power plants. The American Southwest would be a much more cost-efficient place to collect solar power. Add in expanded use of wind power where it is most available, perhaps some wave energy on the coasts, and a much stronger effort to develop biofuels such as cellulosic ethanol, and alternative energy stands a good chance of helping out if Middle Eastern oil suddenly becomes unavailable. Yet it will not be available immediately, and it will replace all the energy now coming from the Middle East.

In the very long run, even energy sources that now seem only fantasy could help to supply the West's energy needs. An old joke among physicists holds that fusion power is only 40 years away—and always will be. Yet of late there have been several reports of potential breakthroughs in this field. Our best guess, and it is no more than that, is that all the years of research into fusion eventually will pay off. A discredited power source also may hold unexpected promise. For more than 20 years, the U.S. Navy has carried on research into cold fusion, despite the skepticism of many prominent physicists. Scientists with the program now say that they can reliably demonstrate the fusion of hydrogen under conditions that are easy to reproduce. If these results can be confirmed and scaled up, an era of cheap power still may lie ahead. It will not arrive in time to soften the impact of a long war in the Muslim world.

Another change is likely to be more important by far. With a prolonged disruption in its supply of foreign oil, the United States finally would be forced to develop oil shale. In deposits widely spaced around the continent, the U.S. has enough petroleum trapped in shale to supply American energy needs for some 300 years. Although some skeptics put the cost of shale oil several times higher, most agree that it has long been economical when crude oil prices reach somewhere between \$30 and \$40 per barrel. (See the chart below.) This resource would be under development today if oil companies were not overoptimistically concerned that crude might retreat to its traditional level of around \$25 per barrel. Recently, an Israeli company called A.F.S.K. Hom Tov has credibly announced that it can produce shale oil at a cost of \$17 per barrel. That technology can be licensed and used in the United States. We believe it will be.

Once this neglected supply of energy is developed to its full potential, the U.S. will be independent of foreign oil, even without energy conservation—and in this scenario, we surely will see a serious effort at conservation. That will make the economy much more efficient. This in turn will stretch the supply of shale and make

America more able to compete in international markets. On the way by, the U.S. will develop an energy-conservation industry it has previously left to Japan.

The downside to shale oil, of course, is severe environmental degradation. Shale oil is as dirty a resource as coal, and perhaps worse. Yet there is a choice to be made. The United States can have a relatively clean environment and an economy weighed down by triple-digit oil. Or it can have cheap oil and a dirty environment—most of it in the Far West, where relatively few Americans will have to look at it. Call us cynical, but it is hard to see the environment winning this debate.

In all, a regional war in the Middle East will give the United States five or ten ugly years of economic chaos. Yet out beyond a decade, the results look very different. Economically, this is a net positive, and probably a big one. The first few years of hardship, and the environmental impact of developing oil shale, can be seen as reasonable prices to be paid for the economic and strategic security of energy independence. In a time of Middle Eastern war, they will be.

What of other countries?

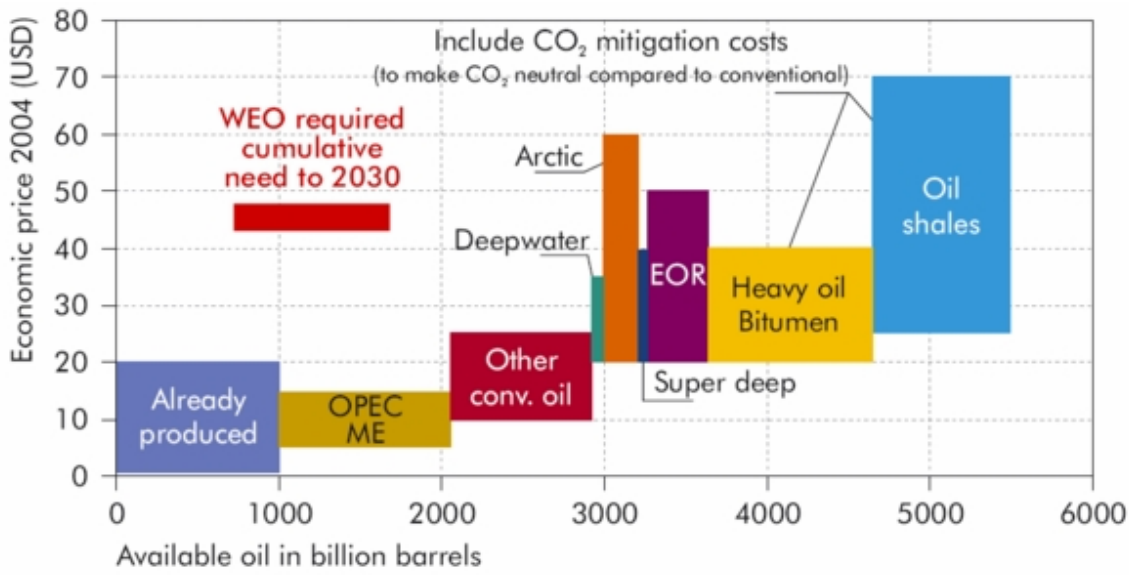
Prospects for Africa and South America do not change much. Those regions will feel some impact from the tightened world oil supply, but their economies are accustomed to chaos, their people all too used to poverty. The world resulting from a Middle Eastern war will feel like home to them.

China is well supplied with oil from Africa, which it has on long-term contracts. However, it is even more dependent on Iranian oil, which it would be unlikely to receive. This deficit would lead Beijing to develop its own oil shale, but its reserves are modest. Its hope of supplying its energy needs will continue to depend on the massive development of biomass, a process that is planned but has hardly begun. China is likely to find its economic growth, and its global power, reduced for many years.

India too would be pinched for energy, but only temporarily. India owns two-thirds of the world's thorium, a resource that New Delhi already plans to develop for nuclear power. Thorium-based reactors demand unusually heavy shielding, because they require auxiliary fuels to trigger their fission cycle, and the decay products of those fuels emit large quantities of powerful gamma rays. Yet the thorium fuel cycle is remarkably efficient, leaving almost no radioactive waste. With most OPEC oil off the market, India will become an important provider of fuel for the world's latest generation of safe nuclear reactors. Its own energy posture will be secure.

Russia clearly benefits from a Middle Eastern war. In any such scenario, Europe must become even more dependent on Russian oil than it is today, and Russia grows rich. This does not represent a significant change, of course; the trends are going in that direction already. In addition, by drawing Muslim extremists to the Middle East, a war between the Sunni and Shi'ite lands is likely to bring relative stability to Chechnya and the "stans" for so long as it draws terrorist attention away from local goals. Russia can only welcome this development.

However, there are alternatives. Much of Europe already depends on atomic power. In time, it can build more reactors and fuel them with Indian thorium.



Ancillary Benefits

There is another possibility as well, and from the viewpoint of the United States it is extremely interesting. American shale deposits contain upwards of 1 trillion barrels of oil, with around 560 million barrels recoverable. This is equal to roughly half the world's proved reserves of conventional petroleum. If the U.S. were to market even half of this shale oil, its 300-year supply would shrink to only 150 years-worth, but the United States suddenly would become the world's most important supplier of oil. Europe would gain a source of energy that carried fewer political liabilities than reliance on Russia. China would lose still more of its influence in global affairs. The Middle East could never again dominate the world's energy markets. And the United States would grow rich and powerful to a degree that it cannot even dream about today.

This wealth could be used for a number of critical purposes. The portion that flows to Washington as license fees and income tax, both corporate and individual, might well pay off the nation's budget deficit. It could eliminate any concern about the viability of Social Security, Medicare, and Medicaid. It might be used to strengthen the country's educational system, to provide a college degree or career training to anyone capable of benefiting from it. Or it might fund a foreign-aid program that could eliminate much of the disease and poverty that afflicts the developing world. Whatever use then seemed the highest priority, oil wealth would give the United States an economic and fiscal flexibility it cannot hope to gain from any other source.

There might even be another benefit. Islam has never undergone a reformation of the kind triggered in Christianity by Martin Luther or that appeared in Judaism in the 19th century. It has never accepted the validity of secular authority, nor—despite many claims that Islam is fundamentally a peaceful religion—has it learned to coexist with other religions. As non-Muslims, we are in no position to tell Islam that it must reform itself as neighboring faiths have done. Yet it seems clear that such a reformation would bring much greater stability to the Muslim world, and to the world at large. It would

clearly be in America's interest. Muslims must decide for themselves whether it would be in theirs.

How might war in the Middle East affect this issue? Aside from a minority of extremists, who would rush as individuals to fight on whatever side held their allegiance, Indonesia and the other remote Muslim countries outside the "stans" might reasonably distance themselves from the whole mess. This would create an effective split in the Muslim world, between those who saw a war between Sunni and Shi'a as being worth fighting and those who did not. This possibility could only be improved, however slightly, by memories of an American-led attempt to make peace between Israel and the Palestinians that had failed primarily because of Palestinian intransigence.

In the long run, such a division conceivably could be the beginning of broader change. In the end, we might finally see the birth of an Islam comparable to modern Christianity and Judaism, one that is able to coexist with other religions and with secular authority and one with which the West would find it much easier to coexist in turn.

We are not forecasting that a Muslim reformation would emerge from a Middle Eastern war. Such a change of heart in Islam is a long shot at best, and it is at least equally likely that war would spread fundamentalist extremism throughout the Muslim world. Yet a general war in the Middle East is the only possible trigger for a Muslim reformation we have ever recognized.

The grimness of this potential war cannot be overestimated. Millions of people in that region would die needlessly. Many hundreds of millions elsewhere would face a period of economic chaos that could, if mismanaged, dwarf the Great Depression of the 1930s.

And yet, for the United States there could be a redeeming feature even to this worst variant of the worst case. In a paper delivered to the 15th Annual Defense Worldwide Combatting Terrorism Conference in 2005, *Forecasting International* examined the possible outcome of Islamist terrorism if it continues on its present course. That scenario too involved millions of deaths in the Muslim world, but in that case they would occur at the hands of the United States, and perhaps its allies. From the American viewpoint, it would be far better for such a catastrophe to originate within the Muslim lands.

A To-Do List

If the United States is to make the best of this potentially grim future, it will need to be prepared. This will require much more extensive analysis of many issues and the development or revision of policies in fields ranging from foreign relations to environmental management. What follows is only a brief first cut at a list of necessary policy changes and issues that must be examined:

Disengagement from Iraq

This is both necessary and inevitable. What is the least painful way to withdraw American forces from Iraq? In stages? By regions? Can it be delayed long enough to allow preparation for a war in the Middle East?

Our own analysis is that the turning point came the day Muqtada al-Sadr withdrew support from the government in response to the arrest of some of his fighters. About three-fourths of Iraqis believe that the American occupation is a mistake and that

they would be better off if the U.S. withdrew its forces. Let the Iraqi government ask Washington to take its troops home. America then can honorably bow to the popular will, declare victory, and leave, much as it did in Vietnam. Continued war is not delivering benefits in proportion to its cost in lives, national prestige, and simple cash. It will do nothing to help avert or prepare for a regional war.

Intervention with Israel on behalf of Palestine

Could a more balanced policy reduce support for the extremists among moderate Muslims? How can it be made palatable to American political interests? Can it be delayed until after the U.S. leaves Iraq, or is it a necessary precondition to moderate the predictable resurgence of anti-American terrorism? Can it be accomplished at all while Hamas shares in the ruling the Palestinian state? How much chance is there that the Palestinians will elect more reasonable leaders, and under what circumstances? The questions run on almost without end, and they all need careful examination.

There is no guarantee that anything the United States can do to ease the conflict between Israel and the Palestinians would have wider benefits in the Muslim world. Yet American policies with regard to Israel and Palestine are one of the rare factors in the Middle East that are completely under Washington's control. They should be reconsidered, for whatever small benefit change might bring.

Supporting Change in Islam

One theme among those concerned with the relationship between the West and the Muslim world is that the U.S. and its allies need to support the liberal, modernist element among Muslim thinkers. For example, Irene Sanders, a very capable forecaster and head of the Washington Center for Complexity & Public Policy, suggests that younger, Internet-connected Muslims might be able to shift the balance against both jihad and a regional war.

She may be right. Prof. Akbar Ahmed, a renowned Islamic scholar and anthropologist, recently toured the Muslim world with several of his students, including one American Muslim. He found that Muslims abroad felt that they were not understood in the West, and perhaps were being deliberately misrepresented by Western—particularly American—media. Despite being well informed about American culture and politics, they knew little about Islam in the U.S. and were amazed that Prof. Ahmed's Muslim student was able to cover her hair and go to mosque. One radical ideologue at India's Deoband University, author of a book that seeks to justify killing civilians in democracies seen to oppress Islam, was so impressed by the evident good will of the American group that he eventually sought permission to translate one of Prof. Akbar's books into Urdu. It argues for dialogue between Islam and the West and is dedicated to a prominent Jewish scholar.

Attempts to support political dissidents and liberal thinkers in the Muslim world seem clearly destined to undermine the people the West most wishes to see prosper by undermining their credibility among other Muslims. However, the sort of dialogue carried out by Prof. Akbar and his students appears much more promising, particularly as it applies to the young, Net-savvy Muslims who are likely to become future leaders. These efforts clearly should be encouraged.

Defanging Pakistan

A nuclear-armed Pakistan is nearly as dangerous to the world as a nuclear-armed Iran. Its atomic weapons must be either removed or brought under effective control by a regime that will never allow them to be used for the *jihadi* cause. This will require an extensive program of intelligence gathering, simply to begin the process. It may also require some re-education of American leaders.

Preparation for a war in the Middle East

The United States should significantly enlarge its Strategic Petroleum Reserve and use this reserve more actively to mitigate future spikes in oil prices.

Beyond this recommendation, there are questions to be answered: Which alternative sources of oil can be cultivated most effectively? How can dealing with pariah states that possess oil be made palatable to the American people and political interests? How quickly can deep-water oil in the Gulf of Mexico be developed on an emergency basis? In the Arctic National Wildlife Reserve?

Development of oil shale

Independent of any prospects for a Middle-East war, the federal government should build at least four oil refineries around the country. These would ensure that a shortage of capacity—say, after a refinery accident or another major hurricane in the Gulf of Mexico—will never endanger the country's energy posture.

The federal government needs to survey shale reserves to gain a more precise measure of how much oil is available and where it can be developed most rapidly.

Under the circumstances, shale-oil technology becomes a national-security asset, not a matter solely for private business. The federal government therefore should license the cheap-oil process from A.F.S.K. Hom Tov for sub-license to all American producers with access to shale, rather than allow it to be monopolized by a single licensee.

It also should begin immediately to survey America's shale-oil resources in detail. Oil shale is widely spread through the middle of the continent, as well as in the Far West, and some of it may be inaccessible, either because it lies under heavily populated areas or for other reasons. The United States needs to know how much oil can be recovered and how quickly, assuming the task is undertaken on an emergency basis.

Alternative energy sources

Significant questions remain to be answered with regard to alternative energy. At present, it appears that biomass energy and thorium reactors are the most viable alternatives to shale oil. In this scenario, the United States will urgently need to know how quickly they can be brought online on a significant scale. Significantly more ambitious development programs would be useful for both these technologies. At the same time, it needs a much more detailed understanding of what solar, wind, wave, and other renewable energies could contribute in a time of severe dislocation in the oil supply. Energy conservation also falls into this category, and it may be one of the greatest "resources" available.

Muslim Reformation

Is there anything the West can do to encourage or support a cultural shift in Islam? Might the urbane, relatively materialistic, Net-connected young people of the Middle East be relatively open to secularism? We suspect that the best thing American can do is stay as far away from Muslim reformers as possible, for fear of discrediting them among their people. Yet these are questions that deserve serious examination.

Study all factors influencing this scenario

The risk of regional war in the Middle East after the United States leaves Iraq has become almost a matter of common wisdom, but our picture of what would happen in such a war remains unacceptably vague. We need to understand the likely dimensions of such a war; its impact on oil prices, the American economy, and the economies of America's major trading partners; and what the United States and its allies can do to mitigate that impact. Given that war is not likely to break out the instant American troops depart, but will develop over time, it also would help to consider what could be done to slow the process—or, conceivably, to accelerate it if keeping would-be terrorists busy turns out to be the greater priority. We need to project also what would happen in post-war terrorism. Would the United States experience less danger because would-be terrorists had died or exhausted themselves fighting each other in the Middle East? Or would they feel still more aggrieved as the “Great Satan” grew into the Arab world's major competitor in the global market for oil, their only significant resource? In short, every aspect of the post-occupation period must be weighed for its impact on the American strategic and economic position.

Summary

Absent a Middle Eastern war, Forecasting International does not anticipate any significant, generalized recession or depression in the years ahead. However, neither can we foresee any circumstances in which the United States will substantially improve, or even maintain, its current position.

On the world's present course, the U.S. will remain a leader for many years to come. Yet it will never again enjoy the economic, scientific, diplomatic, and military dominance it once possessed. Many factors will erode its security. These include the growing economic might of India, China, and perhaps even Russia and Brazil; the diplomatic and military power of China; the nationalism and xenophobia of a resurgent Russia; and the progressive radicalization of the Muslim world, on which it depends for oil. At best, America will become first among equals. It could find itself beset on all sides by economic and diplomatic challenges that it may find difficult to meet successfully.

At Forecasting International, we have an unjustified reputation for optimism. In fact, we are neither optimistic nor pessimistic. We simply follow where the data lead, without preconceptions, and the result usually is not as dire as the habitual pessimists believe. Unfortunately, this is not one of those cases. We can find little cause for hope that Iraq will become the stable, democratic country once envisioned by so many Washington politicians and pundits. We do see considerable evidence that Iraq will rapidly decline into chaos once American forces leave, and that this chaos could easily spread throughout the region. Yet, even this grim prospect seems to hold out at least a little bit of room for hope.

Bizarrely, if the chaos in Iraq continues to spin out of control, the result ultimately could be a world in which the United States is richer and more influential than ever before. We believe this possibility may be worth examining in much greater detail. We are eager to know whether others find this “best-of-the-worst” scenario as tantalizing as we do, and whether anyone sees implications or opportunities that we may have overlooked.