

Sanctions of Mass Destruction

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THREAT ASSESSMENT

With the demise of the Cold War, virtually all the major problems that afflicted great power relations over the last half-century have been resolved. Many argue, however, that new dangers such as those posed by "rogue states" and terrorism have emerged to replace the old ones of conventional or nuclear war. As part of this shift in how threats are constructed and perceived, old worries about nuclear weapons have been subsumed under the new concept of "weapons of mass destruction" (WMD), lumped together with arms that have killed relatively few people to date (biological weapons), arms of much lower potential lethality (chemical weapons), and dramatic but costly and often ineffective delivery vehicles (ballistic missiles).

As these have become prominent bogeymen, the maturation of another impressive method, if not exactly a weapon, of mass destruction has been largely overlooked. The irony is that in contrast to the others, this device—economic sanctions—is deployed frequently, by large states rather than small ones, and may have contributed to more deaths during the post-Cold War era than all weapons of mass destruction throughout history. Comparing the record of these various threats to human well-being is an instructive exercise—and one that casts U.S. policy toward Iraq, which levies sanctions to impede WMD programs, in a new and disturbing light.

TERRORISTS AND ROGUES

However dramatic terrorist attacks are, and however tragic for the innocent victims and their families, the total damage they have caused to date has been quite low and hardly constitutes grounds for panic and hysteria. On average, far fewer Americans are killed each year by terrorists than are killed by lightning, deer accidents, or peanut allergies. To call terrorism a serious threat to national security is scarcely plausible.

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This is not to suggest that terrorism be ignored, of course. It is clearly an outrage that should be dealt with somehow—but more as a form of crime than a form of warfare. For all the attention individual attacks generate, moreover, the situation is probably improving rather than deteriorating. Although there was a rise at the time of the Gulf War, international terrorism has declined in frequency from the late Cold War for a variety of reasons including enhanced prevention measures and better international cooperation. Many activists and states that once saw terrorism as an effective political tool have abandoned it in frustration. Since the effects of terrorism stem less from its actual consequences than from the alarm it inspires, governments, scholars, and the media should depict terrorism for what it is—the pathetic action of the weak and desperate—instead of stoking popular fears and magnifying the destructive capabilities of terrorists to cosmic proportions.

Something similar can be said for rogue states. When big problems go away, small problems tend to rise in perceived importance. The "rogue state" concept has accordingly been invented and treated as if it described a new problem in international affairs. Yet there were plenty of such states

during the Cold War. Sukarno's Indonesia, for example, frequently threatened other states, as did Nasser's Egypt and Castro's Cuba. Compared to these, not to mention the giant rogues such as Stalin's Soviet Union or Mao's China, the dangers posed today by such enfeebled, impoverished, and friendless states as Iraq and North Korea are minor indeed.

WEAPONS INSPECTION

Terrorists and rogue states would present a much greater threat, to be sure, if they were to acquire WMD. Apprehension about this possibility is understandable, though it too is not really all that new. The fear that terrorist groups or renegade states might obtain nuclear weapons has been around at least since the 1950s, when it began to be possible to create small "suitcase" bombs. Before rushing to action, however, it is worth taking time to deconstruct the threat.

Nuclear weapons clearly deserve the "weapons of mass destruction" designation because they can indeed destroy masses of people in a single blow. Even so, it is worth noting that any nuclear weapons acquired by terrorist groups or rogue states, at least initially, are likely to be small. Contrary to exaggerated Indian and Pakistani claims, for example, independent analyses of their May 1998 nuclear tests have concluded that the yields were Hiroshima-sized or smaller.

Such bombs can cause horrible though not apocalyptic damage. Some 70,000 people died in Hiroshima and 40,000 in Nagasaki. People three miles away from the blast sites received only superficial wounds even when fully exposed, and those inside bomb shelters at Nagasaki were uninjured even though they were close to ground zero. Some buildings of steel and

concrete survived, even when they were close to the blast centers, and most municipal services were restored within days.

A Hiroshima-sized bomb exploded in a more fire-resistant modern city would likely be considerably less devastating. Used against well-prepared, dug-in, and dispersed troops, a small bomb might actually cause only limited damage. If a single such bomb or even a few of them were to fall into dangerous hands, therefore, it would be terrible, though it would hardly threaten the end of civilization.

Biological weapons seem a promising candidate to join nuclear ones in the WMD club because, properly developed and deployed, they might indeed kill hundreds of thousands, perhaps even millions, of people. The discussion remains theoretical, however, because biological weapons have scarcely ever been used, even though knowledge of their destructive potential goes back centuries. (The English, for example, made some efforts to spread smallpox among American Indians during the French and Indian War.)

Belligerents have eschewed such weapons with good reason, because biological weapons are extremely difficult to deploy and control. Although terrorist groups or rogue states may overcome such problems in the future through advances in knowledge and technology, the record thus far is not likely to encourage them. Japan reportedly infected wells in Manchuria and bombed several Chinese cities with plague-infested fleas before and during World War II. These ventures may have killed thousands of Chinese but apparently also caused thousands of unintended casualties among Japanese troops and had little military impact. In the 1990s the large and extremely well funded Japanese cult Aum Shinrikyo apparently tried at least nine times to set off biological weapons by spraying pathogens from trucks

and wafting them from rooftops. These efforts failed to cause a single fatality—in fact, nobody even noticed that the attacks had taken place.

For best results biological weapons need to be dispersed in very low-altitude aerosol clouds, which is very difficult to do. Explosive methods of dispersion, moreover, may destroy the organisms. And except for anthrax spores, long-term storage of lethal organisms in bombs or warheads is difficult; even if refrigerated, most have a limited lifetime. The effects of such weapons are gradual, very hard to predict, and could spread back onto the attacker, and they can be countered with civil defense measures.

Chemical weapons, meanwhile, are virtually incapable of killing masses of people in open areas except when used in vast quantities, and so their inclusion in the WMD category is highly dubious unless the concept is so diluted that bullets or machetes could be included as well. As with terrorism, the problem here is primarily fear rather than actual consequences.

Matthew Meselson, a biologist at Harvard University, calculates that it would take a ton of nerve gas or five tons of mustard gas to produce heavy casualties among unprotected people in an open area one kilometer square. Even for nerve gas this would require the concentrated delivery into a rather small area of about 300 heavy artillery shells or seven 500-pound bombs. A 1993 analysis by Congress' Office of Technology Assessment concluded that a ton of sarin perfectly delivered under absolutely ideal conditions over a heavily populated area against unprotected people might cause between 3,000 and 8,000 deaths. Under slightly less ideal circumstances—if there were a moderate wind or if the sun were out, for example—the death rate would be a tenth as great.

Discussions of chemical weapons often stress their ability to cause many casualties—both dead and wounded—glossing over the fact that historically

most of those incapacitated by such weapons have not actually died. When, following its unsuccessful efforts with biological weapons, Aum Shinrikyo released "deadly" sarin into a Japanese subway, the attack caused 5,000 casualties but only 12 deaths (although a more competent attack would have taken a higher toll). Iraq used chemical weapons against substantially unprotected Iranians during the Iran-Iraq War, but Iran reported that of the 27,000 gassed through March 1987, only 262 died.

In World War I only two to three percent of those gassed on the western front died, whereas wounds caused by conventional weapons were 10 to 12 times more fatal. On average it took over a ton of gas to produce a single fatality, and gas accounted for less than one percent of total battle deaths in the war. In the official British history of the war chemical weapons are accordingly relegated to a footnote which asserts that gas "made war uncomfortable . . . to no purpose." Defense analyst Thomas McNaugher considers this conclusion "overly glib" but concedes that "it is closer to the truth than the contention that chemical weapons are nearly magical devices that invariably cause large casualties and inspire panic."

In recent years ballistic missiles have often been listed alongside nuclear, chemical, and biological weapons in the litany of dire post-Cold War threats. Once again, however, this concern is substantially misplaced. Missiles are expensive, and the kinds rogue states and terrorists are likely to obtain will be unreliable and generally inferior to aircraft for delivering almost any kind of weaponry.

Iraq's experience during the Gulf War is a case in point. Out of several dozen Scud missiles fired at U.S. and other coalition forces, only one fluke shot caused significant casualties, killing 28 Americans at a barracks in Dhahran, Saudi Arabia. The 27 to 30 Iraqi Scud missiles that showered

down on Israel during the Gulf War caused at most one death directly, along with three by heart attack. A few other Israelis were suffocated by the gas masks they were wearing to protect themselves—though the missiles, as it turned out, were not carrying gas warheads. Missiles like the Iraqi Scuds are so inaccurate that, armed with conventional explosives, it would take 3,700 of them fired at an unprotected target to achieve a 50 percent chance of destroying it. As General Norman Schwarzkopf puts it, the Scud is the military equivalent of a mosquito.

When considered as delivery systems for chemical and especially for biological weapons, missiles have further limitations. To deliver such weapons effectively, the warhead cannot simply slam into the ground but needs to disperse its contents in a spray at very low altitudes, something that requires enormously sophisticated technology. In some ways, therefore, it may be wise to encourage rogue states and well-heeled terrorists to waste their money on ballistic missiles, rather than having them invest in cheaper and more effective delivery systems such as airplanes, cruise missiles, or unmanned aerial vehicles.

THE COSTS OF ECONOMIC WARFARE

The dangers posed by chemical and biological weapons, like those from rogue states and international terrorism, are often exaggerated and for the most part still merely theoretical. They have been blown out of proportion in the quest for things to be alarmed about in a relatively safe post-Cold War world. By contrast, the dangers posed to human well-being by comprehensive economic sanctions are clear, present, and sometimes devastating, yet they have often been overlooked by scholars, policymakers, and the media.

It might help if severe economic sanctions were designated by the older label of "economic warfare." In past wars economic embargoes caused huge numbers of deaths. Some 750,000 German civilians may have died because of the Allied naval blockade during World War I, for example, a figure that does not include embargo-related deaths in Austria, Turkey, and Bulgaria or German deaths between the end of the war and the lifting of the blockade upon the signing of the Treaty of Versailles. Fewer than two million people, by comparison, have been killed by aerial bombing in all the wars of the twentieth century combined.

During the Cold War the effect of economic sanctions was generally limited because when one side imposed them the other side often undermined them. Thus the U.S. economic embargo on Cuba was substantially mitigated for decades by compensatory Soviet aid. But in the wake of the Cold War, sanctions are more likely to be comprehensive and thus effective, in causing harm if not necessarily in achieving political objectives. So long as they can coordinate their efforts, the big countries have at their disposal a credible, inexpensive, and potent weapon for use against small and medium-sized foes. The dominant powers have shown that they can inflict enormous pain at remarkably little cost to themselves or the global economy. Indeed, in a matter of months or years whole economies can be devastated, as happened in Haiti in 1991 and Serbia in 1992.

The destructive potential of economic sanctions can be seen most clearly, albeit in an extreme form, in Iraq. That country seems to have been peculiarly vulnerable because so much of its economy was dependent on the export of oil, because the effects of sanctions have been enhanced by the destruction of much Iraqi infrastructure during the Gulf War, and because the country's political leadership sometimes seems more

interested in maximizing the nation's suffering for propaganda purposes than in relieving it.

No one knows with any precision how many Iraqi civilians have died as a result, but various agencies of the United Nations, which oversees the sanctions, have estimated that they have contributed to hundreds of thousands of deaths. By 1998 Iraqi infant mortality had reportedly risen from the pre-Gulf War rate of 3.7 percent to 12 percent. Inadequate food and medical supplies, as well as breakdowns in sewage and sanitation systems and in the electrical power systems needed to run them, reportedly cause an increase of 40,000 deaths annually of children under the age of 5 and of 50,000 deaths annually of older Iraqis.

The importation of some desperately needed materials has been delayed or denied because of concerns that they might contribute to Iraq's WMD programs. Supplies of syringes were held up for half a year because of fears they might be used in creating anthrax spores. Chlorine, an important water disinfectant, has not been allowed into the country because it might be diverted into making chlorine gas, a chemical weapon developed for use in World War I but then abandoned when more effective ones became available. Medical diagnostic techniques that use radioactive particles, once common in Iraq, are banned under the sanctions, and plastic bags needed for blood transfusions are restricted. The sanctioners have been wary throughout about allowing the importation of fertilizers and insecticides, fearing their use for WMD production, and as a result disease-carrying pests that might have been controlled have proliferated. Although humanitarian exceptions to some of the restrictions have been available all along, Iraq has been slow to take advantage of them and they have been plagued by administrative chaos and organizational delays; as a result they have been inadequate to the scope of the problem.

Some casualty estimates have been questioned because they rely on Iraqi reports, and the government of Iraq clearly exaggerates its losses in hopes that sanctions will be removed. On the other hand, it is likely that estimates are low in some areas. In particular, many infant deaths may go unreported because ailing babies are not taken to hospitals now clearly incapable of saving them. The United Nations also suspects that many deaths go unreported so that survivors can collect an additional food ration. And some studies have been based on data gathered by foreign researchers in Baghdad and then extrapolated to the rest of the country, a process that may understate the national toll, since Baghdad is generally in better shape than other areas.

These statistics are often lamented by the sanctioning governments but not usually denied. Instead it is pointed out that the sanctions have been designed not to cause pain for its own sake but rather to accomplish several desirable objectives. One is to keep Saddam Hussein from developing terrible weapons with which he can once again threaten his neighbors. Another is to remove him from office.

Unsurprisingly, Saddam has not cooperated in allowing the sanctions to have these effects, regardless of the human cost. Unlike many dictators, Saddam cannot flee to a haven elsewhere: the only place he is reasonably safe is in control in Iraq. He has clung tenaciously to power, crushing all opposition, and has sought to rebuild his military capabilities, including, it appears, his chemical and biological arsenals. And he has been wary of infringements on Iraqi sovereignty, including the presence of arms inspectors and other outsiders whose activities might undermine his weapons programs or even his survival. In an important sense, therefore, the costs of the sanctions are being caused by Saddam's policies rather than the sanctioners, an argument the latter often make in their own

defense. If the Iraqi dictator would only do as they demand, they argue, the sanctions would be removed. Yet the sanctioners are effectively asking Saddam to commit suicide or at least put his life in greater danger, an outcome they know is unlikely. In the end, therefore, the effects of the sanctions on the Iraqi people—Saddam's hostages—are both his fault and a predictable consequence of the sanctions policy.

LET THEIR PEOPLE GO

How do the human costs of the Iraqi sanctions compare with those of weapons of mass destruction? The atomic bombings of Hiroshima and Nagasaki together killed more than 100,000 people, and a high estimate suggests that some 80,000 died from chemical weapons in World War I. If one adds the deaths from later uses of chemical weapons in war or warlike situations (excluding the deaths of noncombatants in the Nazi gas chambers), as well as deaths caused by the intentional or accidental use of biological weapons and ballistic missiles, the resulting total comes to well under 400,000. If the U.N. estimates of the human damage in Iraq are even roughly correct, therefore, it would appear that—in a so far futile effort to remove Saddam from power and a somewhat more successful effort to constrain him militarily—economic sanctions may well have been a necessary cause of the deaths of more people in Iraq than have been slain by all so-called weapons of mass destruction throughout history.

It is interesting that this loss of human life has failed to make a great impression in the United States. Americans clearly do not blame the people of Iraq for that country's actions: even at the height of the Gulf War, 60 percent said they held the Iraqi people innocent of responsibility for Saddam's policies. Yet the massive death toll among Iraqi civilians has stirred little public protest, and hardly any notice.

Some of the inattention may derive from a lack of concern about foreign lives. Although Americans are extremely sensitive to American casualties, they—like others—often seem quite insensitive to casualties suffered by those on the opposing side, whether military or civilian. Some of the inattention may also be due to the fact that, in contrast to deaths caused by terrorist bombs, those inflicted by sanctions are dispersed rather than concentrated, and statistical rather than dramatic. Principally, however, it is likely that the sanctions are supported because they are seen as an acceptable means of pursuing desirable goals: forcing a tyrant from office and keeping him from menacing his neighbors.

If sanctions are causing great human damage in Iraq, and yet the prospects for the external or internal removal of Saddam are unpromising, another policy might be in order. Such a policy might proceed from a relaxation of the current confrontational approach that has come at a high cost not only in Iraqi lives, but also in American military readiness and dollars—over \$1 billion a year. The sanctions could be restructured to concentrate on strictly military issues, relaxing some of the economic restrictions that have brought so much hardship to Iraqi civilians.

In place of sweeping trade sanctions, an export-control process could be established to minimize Iraq's ability to import goods that will contribute to its rearmament and especially its development of nuclear weapons. Precedent for such a scheme exists: the West sustained a strategic embargo of high-technology exports against the Soviet Union with reasonable success for more than 40 years during the Cold War, and more limited arms embargoes have often been employed against other states. Such an arrangement would not entirely prevent Iraq from regaining military power and increasing its ability to threaten others, but it would constrain this

rearmament, and would do so at a financial and human cost that could be easily borne, for decades if necessary.

Saddam would undoubtedly crow over this as a triumph, but then he proclaimed the Gulf War a great victory for Iraq as well. Few are likely to be convinced, especially since the international restrictions on Iraq would be restructured rather than simply abandoned.

It will be impossible to stop Iraq from developing some biological and chemical weapons no matter what policy is pursued (particularly since weapons inspections were aborted after last December's bombings), and so the West must recognize that preventing their use ultimately depends on deterrence, just as it did during the Gulf War. If the specter of retaliation successfully deterred Iraq from launching chemical attacks during that conflict, as many argue, it can do so again. Instead of exaggerating the threat posed by Iraq's biological and chemical arsenal, the United States and Britain should simply explain that if Iraq uses these weapons it will face cataclysmic punishment—including, potentially, an invasion—that would strike at Saddam directly and not just at his long-suffering subjects. U.S. and allied forces can be kept at the ready in the neighborhood. If some Iraqi opposition groups show real and credible promise of being able to overthrow the dictator, they might be given support. But for the most part, the policy would involve letting nature and history take their course while working to alleviate the suffering of the Iraqi people.

With or without the help of sanctions, containment and deterrence have rather good track records as policies for dealing with menaces far more significant than that posed by contemporary Iraq, with its demoralized and potentially mutinous army. There is little reason to believe they would not work in this case as well. Any Iraqi attack or major provocation—certainly

any involving chemical, biological, or nuclear weapons—would be suicidal. And survival, not suicide, seems to be Saddam's chief goal.