HOW HAS SADDAM HUSSEIN SURVIVED?

ECONOMIC SANCTIONS, 1990–93

PATRICK CLAWSON

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HOW HAS SADDAM HUSSEIN SURVIVED?

ECONOMIC SANCTIONS: 1990–93

PATRICK CLAWSON

Sanctions have lately become a mechanism of choice for addressing international disputes—but do they work?

In its first 45 years, the Security Council of the United Nations (U.N.) had imposed sanctions only twice—on Rhodesia in 1966 and on South Africa in 1977. Then in August 1991 the Security Council put comprehensive sanctions on Iraq (Resolution 661). These were followed in 1991–92 by arms embargoes on the republics of the former Yugoslavia (Resolution 713, September 1991) and Somalia (Resolution 733, January 1992). That spring Libya was put under an arms embargo, a ban on aircraft flights, and a requirement to reduce diplomatic staff (Resolution 748, March 1992).[1] The sanctions against Yugoslavia

1. For a history of U.N. sanction resolutions, see Paul Fifoot, "Functions and Powers and Inventions: UN Action in Respect of Human Rights and Humanitarian Intervention," in Nigel Rodley, ed., *To Loose the Bands of*

(consisting then only of Serbia and Montenegro) were widened to include many economic and financial transactions (Resolution 757, May 1992, and Resolution 787, November 1992). Even the Organization of American States, for the first time in its history, imposed sanctions—on Haiti in October 1991.

The Iraqi experience offers some rich lessons about the ambiguity over the aims of sanctions, the varied mechanisms that a government can use to adjust to sanctions, and the impact of sanctions on living standards.

1 What Have Been the Aims of Sanctions?

It is not easy to judge whether the sanctions against Iraq have been successful because what they were meant to accomplish is not clear. The viewpoint, "there is abundant proof that sanctions can work,"[2] is hard to evaluate without clear agreement about what "working" means. Success cannot be judged in the abstract.

Sanctions Prewar

Before the war, there was a vigorous debate in the United States about the sanctions. Senator Sam Nunn (D-Ga.) described the differences as "at the heart of the debate" about what policies the United States should adopt toward

Wickedness: International Intervention in Defence of Human Rights, London: Brassey's, 1992.

2. Gary Clyde Hufbauer and Kimberly Ann Elliott, "Sanctions Will Bite—and Soon," *New York Times*, 14 January 1991.

Iraq.[3] One group questioned the effects economic sanctions could have on Iraq, but another group asked what goals sanctions were meant to achieve.

Prewar, there appear to have been four major schools of thought about what the sanctions were designed to do: (1) devastate the Iraqi economy to force Iraq to withdraw quickly from Kuwait; (2) warn Iraq that the world community would—later if not sooner—force Iraq to leave Kuwait; (3) weaken Iraq's ability to defend itself if allied use of force proved necessary; (4) signal worldwide disapproval immediately while deciding on other action.

ECONOMIC DEVASTATION. Sanctions were dismally ineffective at forcing Iraqi withdrawal in the short run and there were no reasonable prospects of success. As Director of Central Intelligence William Webster wrote Congress at the time, "Economic hardship alone is unlikely to compel Saddam to retreat from Kuwait."[4]

WORLDWIDE PRESSURE. Steadily escalating worldwide economic pressure on Iraq might have given Saddam an excuse to climb down and a motivation to do so. The sanctions might also have induced Iraq to be forthcoming in negotiations.

The success of sanctions at achieving these goals is debatable, but it seems unlikely Saddam would have agreed to withdraw despite sustained sanctions. As Congressman Stephen Solarz (D-N.Y.) wrote, "If six weeks of the most intense aerial bombardment in history was not sufficient to bring about an unconditional Iraqi withdrawal from Kuwait, it is simply not plausible to suggest that six more months

3. Sam Nunn, "'War Should Be a Last Resort,'" *Washington Post*, 11 January 1991.

4. R. Jeffrey Smith, *Washington Post*, 11 January 1991.

of the relatively benign application of sanctions would have done so."[5]

MILITARY WEAKENING. Sanctions have generally been considered a substitute for the use of military force. But another aspect of those sanctions was to cause a deterioration in the Iraqi military so that when fighting took place, the allies could quickly prevail. Analysts anticipated that sanctions, when imposed, could impair the readiness of Iraq's advanced weapons systems. The thinking was: either Iraq would continue training with the systems, and spare parts would become scarce; or training would be halted, spare parts would be adequate, but crews would be unable to use the systems effectively.

In the event, the sanctions do not appear to have had much effect on the Iraqi military. The deterioration due to the sanctions was slow. CIA Director Webster testified in December 1990 that the sanctions "are affecting the Iraqi military only at the margins"[6] and that the Iraqi military would not be seriously affected for some months to come. More important, the sanctions seem to have had little impact on Iraq's use of its advanced weapon systems. Those systems proved so inadequate relative to the U.S. forces that they were rapidly put of action. Faced with the overwhelming technological superiority of the U.S. forces, the Iraqi performance would not likely have been different had they had better access to spare parts. The presence of foreign advisors, however, might have made a noticeable difference. Much of the advanced equipment appears to

5. "Don't Argue with Victory," *New York Times* , 18 March 1991.

6. Testimony Before the House Armed Services Committee, 101st Cong., 2d Sess., 5 December 1990.

have been operated or maintained by Soviet or French advisors, who were generally withdrawn after the imposition of sanctions.

Perhaps the sanctions slowed Iraq's acquisition of weapons of mass destruction, particularly its nuclear program. Postwar U.N. inspections have revealed that Iraq was much closer than had been thought to the development of nuclear weapons. Without sanctions, Iraq might have had sufficient access to foreign equipment and advisors for its disguised nuclear facilities to continue its rapid development program. However, it seems unlikely that Iraq could have produced nuclear weapons by the time Desert Storm began. Furthermore, any Iraqi threats to use nuclear weapons would not have been credible to outside observers because those observers did not know how close Iraq had come to being able to make such weapons.

IMMEDIATE SIGNAL WHILE BUYING TIME. Sanctions could be implemented quickly to send a signal of disapproval, whereas other alternatives would require time to marshall forces.

If judged by this goal, the sanctions were effective. They provided a rallying point and an immediate signal while other steps were being considered. Right after the Iraqi invasion of Kuwait, military forces in the area were not sufficient to repel the Iraqis. The sanctions may have had little effect on Iraqi decisions, but they may have been an important factor in showing the world community that many nations shared a common resolve to reverse the conquest. This show of solidarity could therefore have bolstered the willingness of states to pledge their armed forces to the common task.

In the political science literature on sanctions can be found the argument that sanctions are used to demonstrate

resolve and to send signals about intentions.[7] Lisa Martin has analyzed how a state can best use sanctions to demonstrate that it views a situation seriously. She argues that the sending state must signal its resolve by willingness to suffer economic loss from the sanctions. The sender is also most likely to get the message across if it works through multilateral institutions (for example, the United Nations). Martin notes that once a momentum has been established such that it appears that the most relevant states will apply the sanctions, a bandwagon effect develops which brings along other states. Consistent with this theory, sanctions against Iraq may have been useful to show Baghdad how seriously the international community viewed its violation of international law.

Sanctions Postwar

Postwar, the situation became even more complicated. The sanctions may have continued because of inability to agree about the circumstances for lifting them. Indeed, the sanctions turned out to be harder to lift than had been realized when adopted. Experts on the United Nations, on sanctions, and on the Middle East in the midst of the war were by no means sure that the sanctions would continue after the war. The inertia of the U.N. system appears to be symmetrical; while hard to stir into action, the United Nations is hard to stop once in motion.

The main criteria that have been offered for judging the success of sanctions postwar have been: (1) to keep Iraq from rearming; (2) to secure full compliance with U.N.

7. For example, David Baldwin, *Economic Statecraft* (Princeton, N.J.: Princeton University Press, 1985) and Lisa Martin, *Coercive Cooperation: Explaining Multilateral Economic Sanctions* (Princeton, N.J.: Princeton University Press, 1992).

resolutions; (3) to end Saddam Hussein's rule; (4) to punish Iraq.

PREVENTING REARMAMENT. The least ambitious goal for the sanctions is to keep a tight arms embargo on Iraq to prevent rearmament and progress with its unconventional weapons program. Through a tight international inspection regime on shipments to Iraq, the embargo would make suppliers unwilling to deal with Iraq, and through occasional missions by international observers gross violations would be detected. Perhaps most important, Iraq would lack the dollars for large-scale arms purchases.

The sanctions regime has achieved much in this regard. However, Kenneth Timmerman has marshalled the evidence to show that Iraq has been able to rebuild many of its military industries,[8] although admittedly many of the restored factories can probably produce only at a very low rate, if at all, given shortages of material. In addition, Michael Eisenstadt has shown that Iraq has restored to service enough military equipment and has maintained enough units to give Baghdad the most powerful military in the Gulf.[9] The Iraqi military remains formidable by regional standards, the largest in the region, with 2,100 tanks, 3,300 armored personnel carriers, and 1,100 artillery pieces.[10]

SECURING FULL COMPLIANCE WITH U.N. The ceasefire

8. *Iraq Rebuilds Its Military Industries*, Staff Report to the House Committee on Foreign Affairs Subcommittee on International Security, International Organizations, and Human Rights, 103d Cong., 1st Sess., 29 June 1993.

9. "Iraq's Current Conventional Military Capabilities," *PolicyWatch* (Washington Institute for Near East Policy) , 1 July 1993.

10. Kenneth Katzman, "Iraq: Future Policy Options," Congressional Research Service Report to Congress, 12 December 1991.

resolution (Number 687) includes the dismantling of Iraqi chemical, biological, nuclear, and long-range missile weapons programs; the payment of reparations; and the recognition of Kuwaiti independence within the U.N.-demarcated border. Other resolutions the United States has said it would want to implemented before ending the sanctions include resolutions on human rights for the Kurdish and Shiite minorities.

Iraq's record of compliance with the U.N. resolutions has been spotty at best. With regard to its arms programs, Baghdad has impeded the work of various U.N. inspection missions, leading to several confrontations. It refused until July 1993 to agree to the Resolution 715 provisions for long-term monitoring of arms production, and it continues to hide information about its foreign suppliers required under Resolution 687. With regard to issues such as the demarcation of Kuwait's borders or human rights for Kurds and Shiites, Saddam's record has been one of near total disregard for the U.N. resolutions.

Sanctions do not appear to have been a major factor in Saddam's decisions about how far to comply with the U.N. resolutions. Whenever he has backed down from an initial refusal to comply with a U.N. demand, the principal motivating factor would seem to have been the threat of force, combined with a U.N. willingness to compromise on the points to which he is most sensitive. It would be difficult to cite any case in which sanctions led Saddam to back down from resistance to U.N. resolutions.

END SADDAM HUSSEIN'S RULE. The overthrow of Saddam Hussein was not originally a goal as defined by spokesmen

for the U.S. government,[11] but had become one by summer 1991. Deputy National Security Council adviser Robert Gates signalled the new policy in a 7 May 1991 speech: "Saddam is discredited and cannot be redeemed . . . All possible sanctions will be maintained until he is gone."[12] On the first anniversary of the war's start, President Bush stated, "The American people and I remain determined to keep the pressure on Saddam until a new leadership comes to power in Iraq," although White House press secretary Marlin Fitzwater stressed that the change "is not something we can do from the outside."[13]

Bill Clinton, the week before his presidential inauguration, seemed to signal a willingness to work with Saddam Hussein when he stated, "I always tell everybody, 'I'm a Baptist; I believe in deathbed conversions.' If he wants a different relationship with the United States and with the United Nations, all he has to do is change the behavior."[14] Later the Clinton administration clarified that its stance was the same as Al Gore had set out in September 1991: "The only way we can hope for long-term relief from Saddam Hussein is if Saddam Hussein ceases to hold power and if

11. On the debate immediately postwar about whether the United States should aim for the elimination of Saddam Hussein's rule, see Dan Balz and Al Kamen, *Washington Post*, and Andrew Rosenthal, *New York Times*, both from 24 March 1991.

12. Jim Hoagland, "Sanctions to Topple Saddam," *Washington Post*, 20 May 1991.

13. Washington Post, Fitzwater also said ousting Saddam "was never an objective," 17 January 1992.

14. Bill Clinton, interview in *New York Times*, 14 January 1992.

his Baathist regime is dismantled as well."[15] Martin Indyk, senior director for Near East and South Asia at the National Security Council, gave a major address on 18 May 1993, in which he explained,

> Some have tried to portray our policy as a softening of previous policy. By now it should be clear that we seek full compliance for all Iraqi regimes. We will not be satisfied with Saddam's overthrow before we agree to lift sanctions. Rather, we will want to be satisfied that any successor government complies fully with all U.N. resolutions. Nor do we seek or expect a reconciliation with Saddam Hussein's regime. . . . Our policy is deliberate: it is to establish clearly and unequivocally that the current regime in Iraq is a criminal regime, beyond the pale of international society and, in our judgment, irredeemable. We are also providing stronger backing for the Iraqi National Congress (INC) as a democratic alternative to the Saddam Hussein regime.[16]

It is hard to see any scenario in which economic sanctions lead to Saddam's overthrow in the short term. That overthrow would have to come from a popular rebellion or a coup, or some messy combination of the two. Popular rebellion would be difficult to stir up as long as the poor receive their daily bread from the regime, in the form of ration coupons that are more valuable than their cash wages. In addition, the economic situation has stabilized and seems to be improving slowly—again, hardly the ideal conditions for provoking a popular rebellion. To be sure, the sanctions may undermine the regime's economic control mechanisms and may contribute to popular dissatisfaction.

15. Al Gore, "Defeating Hussein, Once and for All," *New York Times*, 26 September 1991.

16. Martin Indyk, "Clinton Administration Policy Toward the Middle East," *PolicyWatch* (Washington Institute for Near East Policy), 21 May 1993.

These can be powerful forces in the long run but are unlikely to lead to revolt within the next year.

Any coup would have to be organized by the elite, but imports are high enough to sustain their consumption comfortably. Furthermore, Saddam has some basis for arguing to his subordinates that his policies are working: the sanctions regime is eroding without Iraq's bending its neck. It is unclear why a general would want to stage a coup that could lead to his own castigation as an American stooge who gave up Iraq's independence just as the brave nation had come through its darkest hour into the breaking dawn.

TO PUNISH IRAQ. Punishing Iraq, to keep Iraqis poor, is not a goal offered by any government as an argument for sustaining sanctions. It is, however, a goal that has been imputed to the sanctions by the governments of Iraq and Jordan, among others. The theory that sanctions are designed to punish Iraq has great currency among the private voluntary organizations working in Iraq. A key element in this view is that Iraqis have a right to better living conditions than the sanctions permit (which some would justify on the grounds that a people should not be held responsible for the actions of an authoritarian ruler).[17]

2 Adjusting to Sanctions

Iraq has adjusted to sanctions to a degree not anticipated by people who placed high hopes in the sanctions when they were first adopted. Gary Hufbauer and Kimberly Elliott,

17. For example, Jean Dreze and Harris Gazdar, *Hunger and Poverty in Iraq, 1991*, Development Economics Research Programme Discussion Paper 32, Suntory-Toyota International Centre for Economics and Related Disciplines, London School of Economics and Political Science, September 1991, p. 58.

the authors of a respected and detailed study of 115 cases of sanctions since World War I, concluded, "The evidence suggests that sanctions will begin to bite sometime in the spring or early summer [of 1991], with a high probability of forcing Iraq from Kuwait as early as the fall."[18] This view turned out to be vastly overoptimistic. So too did the postwar optimism of Henry Kissinger, who wrote in May 1991, "Sanctions are more likely to work now than before hostilities [because] the war has ravaged Iraq's economy and military capacity."[19] In fact, the sanctions have not led Saddam to cooperate with the United Nations, much less led to his overthrow.

What led many analysts to believe that sanctions would have a strong impact on Iraq? And how did Iraq adjust to the sanctions so as to prove these analysts wrong?

Vulnerability to Sanctions

Iraq would seem remarkably vulnerable to sanctions for three reasons. First and most important, the Iraqi economy is based on oil production. Oil sales used to account for between 90 percent and 95 percent of export earnings, depending on the year. Oil output pre-crisis was about 60 barrels a person annually (3.0 million barrels a day). If the price of oil was $16.70, Iraqi oil output was worth $1,000 a person a year. Put another way, oil production was equal to roughly 40 percent of GDP.

A second reason for Iraq's high vulnerability to sanc-

18. Hufbauer and Elliott, "Sanctions Will Bite." See also Gary Clyde Hufbauer, Jeffrey J. Schott, and Kimberly Ann Elliott, *Economic Sanctions Reconsidered: History and Current Policy*, and *Economic Sanctions Reconsidered: Supplemental Case Histories*, 2d ed. (Washington, D.C.: Institute for International Economics, 1990).

19. Henry Kissinger, *Washington Post*, 5 May 1991.

tions was its economy's high dependence on trade. The ratio of trade to GDP was high: exports and imports were each between 35 percent and 50 percent of GDP, while the average for middle-income countries in 1989 was 25 percent.[20] Furthermore, Iraq relied on imports for many vital goods that could not be produced at home, instead of using trade as a low-cost supplement to a diversified domestic industrial base. Indeed, what industry there was in Iraq was largely assembly of foreign parts or manufacture of a few simple or bulky items, for example, cement.

A third factor in Iraq's vulnerability to sanctions was the ease of blocking its main export's routes. Because oil has such a low ratio of value to volume, Iraq's exports were extraordinarily bulky: 140 million tons a year. Sheer volume made Iraq's oil hard to smuggle, and therefore made Iraq vulnerable to sanctions. Other than a maximum of about 150,000 barrels a day ($1 billion a year) that could be trucked out via Jordan and Turkey, the rest of Iraq's 2.8 million barrels a day in oil exports had to pass through three easy-to-block channels: a pipeline to Turkey, a pipeline to Saudi Arabia, and a port on Iraq's narrow Persian Gulf coast. The alternative routes lay through neighbors, Syria and Iran, with which Iraq was on bad terms. However, had either of these neighbors been so minded, Iraq could have exported significant amounts of oil through them.

While it would therefore seem that Iraq was especially vulnerable to sanctions, caution should have been in order. Information about the Iraqi economy was scarce. Iraqi governments have been as secretive as any in the world.

20. For middle-income countries, World Bank, *World Development Report 1991*, Washington, D.C., p. 220. For Iraq, author's estimates, using GDP of $45 billion.

Outside analysts therefore had only the vaguest idea of what Iraq had in the way of stocks and adjustment capacity when the sanctions started. Indeed, as explained below, right up to the start of the war the U.S. government had seriously underestimated Iraq's stocks of foodstuffs. The intelligence community thought Iraq would run low on foods before the spring 1991 harvests, but Iraq in fact had ample supplies.

Caution should have been called for because the U.S. government had systematically underestimated the Iraqis in the preceding two years. The U.S. government had been surprised by at least three major developments: the more than $2 billion spirited away from the Banca Nazionale del Lavoro branch in Atlanta, the launch of an Iraqi multistage rocket, and the Iraqi progress in developing "super gun" technology rejected in the West. In each case, Iraqis turned out to be remarkably skilled at concealing their actions from what were in theory tight supervision by U. S. and other Western authorities. This should have suggested the possibility that Iraq might turn out to be less vulnerable to sanctions than available information might have implied.

Furthermore, vulnerability to sanctions is as much a matter of politics as economics. On the political front, the Iraqi government's vulnerability to sanctions was limited by at least four factors. First, the Baath government did not care particularly about welfare of the people, so suffering for the masses would cause the country's leaders few qualms. Indeed, as subsequent events showed, Western public opinion appears to be at least as concerned about famine and epidemics in Iraq as are the leaders in Baghdad. It was not clear how the sanctions would cause suffering to the elite, given their myriad ways of diverting to their own use whatever supplies were available.

Second, even if people became discontented because of

declining living standards, they had few opportunities to influence government policy. Saddam had organized an extensive security apparatus to detect and eliminate dissent, so opponents of his policies could not express their viewpoints, much less act on them. The elite had found that Saddam was not open to criticism, as evidenced by the famous 1984 episode in which Saddam had invited criticism at a cabinet meeting only to kill the one minister who voiced mild complaints. Saddam had acquired a world-class expertise at avoiding assassination and coups.

Third, Iraq is split between three major ethnic groups, and the regime always had the option of withholding supplies from the Kurdish and Shiite three-fourths of the population in order to provision better the Sunni Arab minority that provides the backbone of the regime.

Fourth, Iraq's history at stubborn confrontations demonstrates its people's deep nationalistic, if not xenophobic, streak. Iraqis seem proud that their governments—royal, liberal, and Baath—deprived Iraq of badly needed oil revenues through two decade-long confrontations with international oil companies, one in the 1930s and one over the southern fields in the 1960s.

Indeed, modern Iraqi history is a succession of one political obstacle to growth after another. A summary of Iraq's economic history by the Economist Intelligence Unit[21] lists some of the disputes other than the last two wars, which were, of course, the biggest drains on the economy:

> Growth of national income has been erratic and generally poor for an oil economy. Much of the problem arose from political events which caused prolonged pauses in the rate of economic advance. An

21. Economist Intelligence Unit, *1990/91 Country Profile*, London, p. 13.

oil dispute with the Iraq Petroleum Company began in 1960 and persisted in a variety of forms until 1973, inhibiting capital formation and value added in oil. The revolution of 1958 brought land reforms and other changes in the ownership of productive factors that adversely affected the private sector and left individual enterprise all but stultified. Perennial fighting in Kurdistan has been a further retardant on growth, while bad relations with Syria have interrupted use of pipeline facilities to the eastern Mediterranean ports and made Iraqi oil exports unreliable and depressed.

Adjustment Techniques

To illustrate the techniques Iraq has used to adjust to sanctions, food supply is the best case. From the day sanctions were imposed, foreign analysts and Iraqis concentrated on food supplies. At first glance, that seems peculiar, given that the sanctions resolution exempted imports of "supplies intended strictly for medical purposes, and, in humanitarian circumstances, foodstuffs." [22] Food mattered despite this partial exemption. For one thing, the exemption was only partial, and the sanctions committee authorized few shipments of food prewar. As important, Saddam would have suffered a major political defeat if he had had to agree to the U.N. conditions for imports, namely, that food should be distributed by charitable organizations.[23] Saddam made a point of pride that Iraq need not cooperate

22. Resolution 661 of 6 August 1990, paragraph 3(a). Paragraph 4 permitted "payments exclusively for strictly medical or humanitarian purposes and, in humanitarian circumstances, foodstuffs."

23. Resolution 666 of 13 September 1990, provided for humanitarian relief. Paragraph 6 "directs the [Sanctions] Committee that in formulating its decisions it should bear in mind that foodstuffs should be provided through the United Nations in co-operation with the International Committee of the Red Cross or other appropriate humanitarian agencies and distributed by them or under their supervision in order to ensure that they reach the intended beneficiaries."

with the United Nations and that Iraq could make do despite the sanctions; he therefore placed great importance on muddling through.

The potential for providing food during sanctions has depended upon four factors: reducing consumption, using up stocks, increasing local output, and smuggling.

BELT TIGHTENING. The Iraqi government moved quickly to implement a rationing system, which functioned rather smoothly by late September 1990. The system of food distribution in Iraq combined two elements: what the Iraqi government called rationing—that is, guaranteed access at low fixed prices to specified quantities—plus a free market essentially without price controls for all other goods. The ration system was described by one of the world's leading experts on hunger, Jean Dreze, and Harris Gazdar:

> Food is supplied to the agents ["most of whom are ordinary grocers with a small clientele"] every month according to the number of 'coupons' which they are able to produce. These coupons are collected by the agents from their customers, who detach them from the ration cards . . . [The agents] charge the official ration prices and collect a commission of 10 percent on sales (the remainder of the proceeds belong to the government). . . . In August 1991 there were (according to the Ministry of Trade) 48,023 agents.[24]

The ration system is described in more detail in the next section. Briefly, the rations generally cover flour (usually a wheat/barely mix), rice, cooking oil, sugar, tea and sometimes other goods, such as chickpeas. These rations have provided between 1,200 and 1,750 calories a day; the government changed the ration allocations monthly. There are few reports of distribution's falling short of the declared allocation in the areas under government control,

24. Dreze and Gazdar, *Hunger and Poverty in Iraq*, pp. 32–34.

although reports of delays in delivery of a month's rations are frequent. The rations are inadequate for sustenance, but they provide a safety net—a guarantee that the basic goods covered would be available in shops and that the price would be low, so that the free market could be used as a supplement rather than as the basic supply source. The ration system has been particularly useful for the poor because the rations are sold at extremely low prices.

USE UP STOCKS. In retrospect, Iraq was able to draw much more extensively on food stocks than had been realized in August 1990. U.S. intelligence based itself on evidence from the U.S. Agricultural Attaché in Baghdad, who had extensive experience and was highly regarded. The estimate of the July 1990 cereal stocks was 1.1 million tons. It now appears that Iraq had not 1.1 million tons but 2.5 million tons in July 1990, hardly a trivial difference. The extra 1.4 million tons is six months of human consumption at the crisis level. The earlier estimate suggested that Iraq would have difficulty feeding itself before the May 1991 harvests, but according to the later estimate, Iraq had ample stocks to last through fall 1991 and possibly through winter 1991/92. That difference in perception could be significant in evaluating the effect of sanctions on Iraq's need to cooperate with the international community, at least to the degree necessary to obtain humanitarian food aid.

CIA Director Webster had testified to the House Armed Services Committee on 5 December 1990, that Iraq would be able to maintain grain consumption at only two-thirds of last year's level until the next harvest and that Iraq would be short of sugar and edible oil. Editorial writers interpreted this testimony as evidence that sanctions were having a considerable effect on Iraq. In fact, Iraq did better than Director Webster expected on each count. In retrospect, in the area where the U.S. government thought it had the best

information about the Iraqi economy, the data were way off, and the difference was of potentially considerable importance to U.S. policy formation.

INCREASE LOCAL OUTPUT. The Iraqi government has taken vigorous action to increase local food output. On the whole, those steps have been successful.

In 1990/91, food supplies increased primarily due to slaughtering of animals. Meat supplies surged and prices fell as farmers trimmed their herds when grain was diverted from animal feed to human consumption. "Just prior to the January air war, meat prices were comparable to a year ago because of continuing livestock herd liquidation," despite substantial increases in prices for other foods.[25] In fall 1990, Baghdad raised the prices paid to farmers and released farm labor from army duty during the planting season. Nevertheless, the 1990\91 food crop output was mediocre (with a large wheat crop but a much smaller barley crop), because the spring harvest was disrupted by fuel shortages in the aftermath of the war.

Domestic output has been rather solid in 1991/92 and 1992/93. Indeed, the bountiful spring 1993 harvests have provided sufficient cereal stocks to last until autumn 1993 with few if any additional imports.

IMPORTS. Importing has continued both with and without U.N. permission. Prewar, the United Nations permitted essentially no shipments, and sanctions-busting appears to have been on small scale. The governments of the countries bordering Iraq all took action to prevent Iraqi imports. The Jordanian authorities acted under U.N. pressure, which took the form of boarding and searching ships bound for

25. Susan Epstein, *Iraq's Food and Agricultural Situation During the Embargo and the War* (Washington, D.C.: Congressional Research Service), 26 February 1991, p. 9.

Jordan's only port, at Aqaba. From August 1990 through March 1991, the import restraints appear to have worked well enough that the Iraqi government did not use up all of of its available foreign exchange to import goods.

While the Iraqi government was unable to arrange much in the way of imports, the Iraqi private sector stepped up its smuggling activities. The Iraqi government removed all restraints on imports, that is, all taxes and all permits. The Iraqi traders only had to smuggle out of the country of origin. Many communities in the Middle East have a long tradition of smuggling; for instance, the smuggler-hero is a staple of Iranian modern literature set in villages. With all the dedication in the world, the Iranian government could not have stopped all smuggling across its long and open border; compare the U.S.-Mexican experience.

Postwar, the United Nations provided for expedited procedures for Iraqi requests to import foodstuffs. As discussed below, Iraqi food imports are running at or above $1 billion a year. These imports provided about a half of the calories that Iraqis consumed in 1992. Iraq has been able to finance this level of imports without full cooperation with the United Nations, thanks to methods discussed in section 3, below.

Relying on the Private Sector

In the first two years of the sanctions, Iraq followed remarkably market-oriented policies to deal with sanctions-induced shortages. Prices were allowed to rise to the level that clears the market. The result was well stocked stores, with goods readily available to anyone ready and able to pay the price. Consumers did not have to waste time searching, or lining up, for scarce goods; instead, they could concentrate on earning additional income to buy these high-priced goods. Dedicating effort to production instead of

waiting in line was much better use of Iraqis' time.

Consider the case of food during the first two years of sanctions. To be sure, food was "scarce" in Iraq in the sense that people ate less than they did pre-crisis. But food was not scarce in the sense that sanctions left the stores empty. Indeed, there is little evidence that the sanctions on imports into Iraq had much effect on food supply. Merchants were able to supply enough food to Iraq to keep prices the same as in Jordan, converting from Iraqi to Jordanian dinars at the black market exchange rate.[26]

Indeed, the food problem in Iraq was a lack of income not of ways to import. This points to the key role of restraining Iraq's income: sanctions on exports had much more effect on Iraq than did the import constraints. Lifting all sanctions on civilian imports would have had little effect on Iraq in 1991–92 because Iraq could not have afforded to import much more than it did.

In the first two years of sanctions, Saddam Hussein did not implement the classic populist employment policies so common in the Middle East, especially when a regime is worried about unrest. Public enterprises shed employees.[27] The military demobilized hundreds of thousands who returned to casual day labor or street vending, both low-prestige and poor income-earning occupations.[28] Nor did Saddam increase salaries much during this period. Wage

26. Dreze and Gazdar, *Hunger and Poverty in Iraq*, p. 19.

27. Although Dreze and Gazdar report that public enterprises have maintained their employment levels and pay everyone who shows up once a day, their description of their visit to a large public enterprise showed that it had in fact laid off a substantial portion of its workforce.

28. Dreze and Gazdar report (p. 26), "Our interviews with daily wage-earners suggest that many of them are recently released soldiers."

increases through December 1991 were under 100 percent for the military[29] and less for the civil service. Meanwhile, free market food prices rose 5- to 20-fold from August 1990 through December 1991. Because of lower demand, prices of luxury items like meat increased less than the prices of staples.

Thanks to containment of government expenditure in 1990 and 1991, the budget deficit was limited, despite the loss of oil revenue, which provided three-fourths of total revenue pre-crisis. As an example of that cost containment, consider expenditures on military wages: because the military was shrinking in size as the salaries increased, the total military wage bill may have decreased. Limiting the deficit was no small achievement and helped explain the relatively stable functioning of the Iraqi economy despite the profound shocks it has undergone.

As one important result of the relatively low budget deficit, inflation was rather low for a country in the midst of such a sharp crisis. The surest indication was the black market exchange rate, which adjusts quickly to any difference in inflation between Iraq and its trading partners (a phenomenon known to economists as purchasing power parity). The exchange rate has been depreciating for years, and that depreciation did not accelerate in the first two years of the sanctions. Indeed, the rate of depreciation continued at the same pace it had followed since 1980 (a pace broken only in 1988–89 with the strengthening of the currency in the interval between the Iran and Kuwait wars).

29. Dreze and Gazdar report (p. 20a), that in August 1991 a starting level conscript got 85 dinars a month, an experienced conscript got 165 dinars and a "professional soldier" got 220 dinars. Military pay was raised 40 percent in September, according to Baghdad Radio of 5 September, as cited in Foreign Broadcast Information Service (hereafter: FBIS), 6 September 1991, p. 7).

Referring to low levels of inflation when food prices have increased sharply may seem paradoxical, but what happened to food prices is not typical of what happened to all prices. Indeed, food price increases are a market signal that food is in short supply compared to other goods, so the price of food relative to other goods has gone up. Furthermore, price increases have been fastest for foods that are largely imported. From early 1990 to late summer 1991, free market prices for these foods increased 15- to 20-fold for foods largely imported such as wheat flour or cooking oil. Foods grown largely in Iraq rose only 4- to 5-fold, for example, potatoes (.45 dinars to 1.92 dinars) or chickpeas (.65 dinars to 2.92 dinars). Prices in late summer 1991 for domestically grown foods were not much higher than April 1989 prices, before the reintroduction of price controls and other government measures forced down free market prices.

For instance, potatoes were 2.0 dinars per kilo in April 1989 and 1.92 dinars in late summer 1991.[30]

The reliance on market policies that characterized the first two years of sanctions was reversed after July 1992. Controls over private business were progressively reintroduced. The Iraqi government made more and more use of populist state-directed economic policies, which sound good to the economic illiterate but which hurt the economy. Examples include campaigns against merchants' charging high prices at the same time the government increases wages (especially to the military) which it can pay for only by printing money.

30. 1989 prices from *Middle East Economic Digest*, 14 July 1989, and Dr. Laurie Mylorie of The Washington Institute for Near East Policy. 1991 prices from press accounts.

TABLE 1 □ IRAQ: PRICES OF SELECTED FOODS
(dinars per kilogram)

Commodity	July 1990	Aug 1991	Feb 1993	Jun 1993
Wheat flour	0.12	2.36	4.00	21.00
Rice	0.20	3.62	9.50	17.00
Vegetable oil	0.70	9.82	22.00	65.50
Sugar	0.20	4.42	11.50	29.50
Tea	1.00	25.18	58.00	192.00
Red meat	6.00	15.18	75.00	90.00
Eggs(per 30)	2.25	13.25	68.00	80.00

Sources: World Food Programme; author's estimates.

The process, though continuous, has unfolded in four important stages. The first stage—controls over the marketing of farm produce—occurred while most of the economy was kept free, in 1991. These controls were never fully lifted, although farmers were permitted to sell half their harvest to the state marketing organizations rather than on free markets. By October 1992, the government was back to its usual role of buying up the cereal crops at prices well under what farmers could have gotten on a free market. [31]

In the second stage, price controls were reimposed, having been abolished both in name and in practice in August 1990. They were reintroduced in theory in 1991 but took effect only in summer 1992. The Iraqi government

31. Revolutionary Command Council Decree No. 283, amending the 16 May 1991 Decree No. 136 (which had in turn re-established some state control over cereals trade), printed in *Al-Thawrah*, 26 October 1992, in FBIS, 30 October 1992.

signalled its change in policy with its usual subtlety—executing about 40 merchants in July 1992 on charges of overcharging and hoarding. This tough action had little effect on prices but a great effect on commerce: what had been an open and efficient process began to shift underground. Merchants have been understandably reluctant to repeat their efforts to supply Iraq's needs, for fear of incurring new government penalties instead of rewards.

The third stage in the reimposition of government controls was the regulation of foreign trade. Small steps were taken in 1991, especially the "reactivation" of the suspended Customs Law in August 1991.[32] But the main step was the December 1992 reintroduction of extensive bans on importation of luxuries and of goods readily produced in Iraq. The list included such consumer staples as fresh fruit, fresh and canned vegetables, shoes, and clothing.[33] Predictably, the banned items remained available, but only to people with good political connections or willing to pay a higher price. In addition, the controls on stocks forced merchants to import small quantities at a time, which meant higher prices than for larger quantities.

The most recent tightening of the state grip has been over the monetary system. Baghdad had taken some preliminary steps as early as May 1992, when the 100 dinar

32. Director General of the Customs Authority Bastam al-Janabi, interview in *Al-Iraq al-Iqtisadi*, 27 February 1993, in FBIS, 30 April 1993.

33. *Alif Ba*, 9 December 1992, in FBIS, 26 February 1993.

note was withdrawn from circulation[34] because of concerns about counterfeiting. (Some reports suggest counterfeiting by the U.S. government.[35]) The major step was taken in May 1993: the Iraqi government announced that the old 25 dinar notes were no longer valid and could only be exchanged for smaller notes in limited amounts and only within Iraq. The country's borders were shut to keep out notes from abroad. The excuse given for the action was that the old notes had been counterfeited—a highly implausible reason. The old notes were more highly valued precisely because they were of higher quality (having been printed in Switzerland pre-crisis) while the new notes are flimsy and poorly printed. Indeed, just before the demonetization, the free market exchange rate for the old notes was about 33 per dollar while the new notes brought closer to 100.[36] Had the concern been counterfeiting, Saddam could have repeated what he had done with the 100 dinar and 50 dinar notes, namely, gradual and orderly exchange for small notes. The sudden and limited exchange of the 25 dinar notes was designed to show Saddam's power and to rob those he did not favor.

The demonetization hurt holders of unexchangable old notes, people who were not well connected politically. Some Iraqi traders suffered because they held more than exchangable limit. Kurds in north Iraq registered old notes for 1.3 billion dinars (worth $39 million) with the autonomous Kurdish government, which could not exchange the old notes for new.[37] The best estimate of the notes held by Jordanians was $100 million—3 billion dinars at 30 dinars per dollar—although other estimates range from $30 million to $200 million.[38] Whatever the magnitude of the loss, the effect on business confidence was devastating. Merchants outside Baghdad's reach, in Kurdistan and in Jordan, for instance, will be much less willing to accept payment in dinar—which means that Iraq will need more dollars than before to carry out its trade.

The reasons for the reimposition of state control over the economy are not clear. One explanation would be that the sanctions are finally pinching, and Saddam feels backed into a corner. That theory seems inconsistent with his behavior on other fronts: his continuing refusal to bend on the conditions for access to several billion dollars available with U.N. approval (explained below) and his continuing confrontations with the U.N. arms inspectors. More plausible is the opposite explanation, that Saddam feels self-assured and confident enough to return to his preferred policies of complete control over Iraqi society. In this view, Saddam was never enthusiastic about allowing the private sector independent room for action, which he did only during the period of acute political crisis to reduce popular discontent over bad economic times. Once his security apparatus had sufficient control over the situation, he could return to a policy of complete economic control,

34. Baghdad Radio, 11 May 1992, in FBIS, 13 May 1992.

35. Christy Campbell and Adrian Porter of the *London Sunday Telegraph*, *Washington Times*, 16 March 1992. The issue of who is counterfeiting Iraqi money is discussed by Warren Strobel and Michael Hedges, "Funny money flooding Iraq; U.S. just smiles," *Washington Times*, 2 March 1992.

36. *Mideast Mirror*, 6 May 1993.

37. John Murray Brown, "Kurds seek access to Turkish lira," *Financial Times*, 28 May 1993.

38. *Mideast Mirror*, 6 May 1993. James Whittington in the *Financial Times* of 6 May 1993 cites a Jordanian finance ministry official as estimating $100 million. Chris Hedges in the *New York Times* of 16 May 1993 also cited a $100 million estimate.

irrespective of the effects on the economy.

3 Living Standards

Though well below the U.S. level, Iraq's standard of living pre-crisis was that of an upper middle income developing country. Life expectancy, literacy, and high school education were all comparable to those of the better-off Latin American nations or the poorer European countries. Per capita food consumption, at 2,960 calories per person a day, was well above the 2,331 calories in low-income countries but well below the 3,398 calories in high-income countries. Energy consumption was low because of the lack of industry. Iraq was at or above the levels of social indicators attained by its neighbors.

Comparisons between the Iraqi and U.S. economies are difficult because Iraq had such a distorted and controlled economy that concepts like GDP are of dubious relevance. It would be silly to convert Iraq's official GDP of 20.8 billion dinars in 1989 at its official exchange rate of 3.2 dollars to the dinar, because the resulting $66 billion figure grossly overstates Iraqi income.[39] Many components of GDP should be valued at closer to the free market exchange rate, which in 1989 was about .3 dinars per dollar. Iraq's 1989 GDP was no more than $45 billion, $2,500 per person. As a rule of thumb, to scale up from the Iraqi economy to an economy the size of the United States, multiply by 100: $1 to Iraq has the same weight as $100 to the United States.

39. According to the Iraqi Government's *Annual Abstract of Statistics 1990*, the 1989 GNP was 19.3 billion dinars at market prices and 20.8 billion dinars at factor cost.

TABLE 2 □ SOCIAL INDICATORS OF DEVELOPMENT, LATE 1980s

Group/ country	Life expectancy (years)	Daily caloric intake/ person	Adult illiteracy (percent)	Secondary education[a]	Annual energy use/ person[b]
Low income	62	2,331	44	37	330
Iraq	63	2,962	11	47	752
Turkey	66	3,080	26	46	837
Iran	63	3,100	49	53	1,019
Syria	66	3,168	40	57	896
Saudi Arabia	64	2,832	—	44	4,307
Upper middle[c]	67	2,990	24	58	1,890
High income	76	3,398	<5	59	4,867

Source: World Bank, World Development Report 1991.
a. Percent of school-age population.
b. Kilograms of oil equivalent .
c. Upper middle income countries are: Brazil, Czechoslovakia, Gabon, Greece, Hungary, Iran, Iraq, South Korea, Libya, Oman, Portugal, Romania, South Africa, Trinidad and Tobago, Venezuela, Uruguay, and Yugoslavia

Living Standards August 1990–January 1991

Despite the sanctions, Iraqi living standards remained little changed until the start of the war. Indeed, in some important ways, Iraqi living standards improved after 2 August 1990. For the preceding five years, imports of consumer goods into Iraq had been strictly limited because the government had directed so much of the scarce foreign exchange into the military/industrial complex. Kuwait, on the other hand, was a consumer paradise. Large quantities of Kuwaiti goods were transferred to Iraq one way or another:

seizure by the Iraqi government, looting by soldiers, voluntary sales by Kuwaiti businessmen who saw no other alternative, or flea market sales by fleeing expatriates, especially Asians desperate for the cash to pay for their trip home via Jordan during the August–September chaos.

Kuwaitis had 560,000 cars, with an average age of two to three years. Of these, 350,000 were stolen or destroyed.[40] If 100,000 autos with an average value of $5,000 were taken from Kuwait, that makes $500 million. Recall the rule of thumb that, relative to the size of the economy, $1 in Iraq is $100 in the United States. On that basis, the auto transfer would have been $50 billion in a U.S.-sized economy—not an insignificant sum.

When a whole host of other consumer durables is added, along with the stocks of luxury foods that so impressed journalists visiting Baghdad markets to see if food was still available, the overall conclusion is that Iraqis saw a substantial addition to their living standards. In general, Iraq had sufficient stocks of many goods to maintain moderately normal consumption prewar.

Living Standards February 1991—June 1991

Living standards declined sharply in early 1991 due to the bombing campaign, the ground war, and subsequent large-scale civil disturbances. Some of the worst living conditions came after the ceasefire with coalition forces, when Iraqi government authority in large areas disintegrated.

During the war, food distribution was seriously disrupted. A careful household survey into food supplies by Jean Dreze and Harris Gazdar, in August 1991 asked about conditions during the war and found,

40. *Financial Times*, 26 February 1992; Chris Hedges, "A V-8 for Victory: It's Kuwait's Way of Celebrating," *New York Times*, 9 February 1993.

> The [household] survey brings out that most of the "indicators" that are now recognized in the economic literature as being commonly associated with famine situations were discernable in Iraq during the war: drastic reduction of food intake; exorbitant food prices; consumption of wild plants and other "famine foods"; large-scale depletion of household assets; and even the emergence of open conflicts between family members (sometimes leading to physical fights) over the allocation of food.

In addition to the near famine, such basic services as water and sewage functioned only sporadically during February and March. The June 1991 report by a team led by the Aga Khan, prepared at the request of the U.N. Secretary-General, stated, "At the end of the war, the available [electrical generating] capacity was negligible." Not surprisingly, the water system also had largely ceased functioning. Indeed, the transportation system had also become erratic, because there were "virtually no sales of gasoline to private users" in February and early March.[41] The telephone system also stopped functioning. Without telephones and electricity, with only limited use of vehicles, the hospital system was reduced to basic techniques.

This period formed in the public mind an image of Iraqi starvation and privation. That image was fed by the dramatic report of the Secretary-General's envoy, Martti Ahtisaari, who visited Iraq in March 1991.[42] Under-Sec-

41. The first quote is from the Report to the Secretary-General dated 15 July 1991 on humanitarian needs in Iraq prepared by a mission led by Sadruddin Aga Khan, S/22799 (hereafter: the Aga Khan report), p. 35. The next quote is from the Ahtisaari report cited in the next note, paragraph 35.

42. Report to the Secretary-General on Humanitarian Needs in Iraq in the Immediate Post-Crisis Environment by a Mission to the Area Led by Mr. Martti Ahtisaari, Under-Secretary General for Administration and Management, 20 March 1991.

retary General Ahtisaari concluded: "Iraq has, for some time to come, been relegated to a pre-industrial age, but with all the disabilities of a post-industrial dependency on an intensive use of energy and technology." He warned, "The Iraqi people may soon face a further imminent catastrophe, which could include epidemic [sic] and famine, if massive life-supporting needs are not rapidly met."

Perhaps the dramatic language about the poor situation of the moment was justified, but that seems doubtful. For instance, Mr. Ahtisaari made a plea to permit emergency imports of fuel and parts for trucks to move food and medical supplies, but as U.S. authorities pointed out, he made no mention of the trucks and fuel being used in profusion by the Iraqi Army to fight a war against rebels.[43] Be that as it may, the forecast about Iraq's recovery abilities turned out to be vastly overpessimistic; the Iraqi economy has been able to restore services much more rapidly than Ahtisaari forecast. [44]

The image of an imminent public health catastrophe has persisted long after its reality has faded. Patrick Tyler of the *New York Times* wrote about a "health crisis" and "epidemic levels" of several diseases.[45] In fact, the health situation in Iraq was better than that for most of humanity by the time he was writing. A Tufts team documented malnutrition in southern Iraq, as was extensively reported, but that team noted it could not determine whether the malnutrition predated the crisis or was a new phenomenon. It would hardly be surprising if the poorer classes in Shiite

43. Paul Lewis, *New York Times*, 23 March 1991.

44. See the companion study on year two of the sanctions.

45. *New York Times*, 22 May and 24 June 1991.

south Iraq, near the fighting with Iran, had had inadequate food before August 1990.

None of these economic problems can reasonably be ascribed to the sanctions. Even if sanctions had been lifted the day after the liberation of Kuwait, the situation probably would have been little different in March and April. It takes time to restore services and trade patterns after a war. Compare the experiences of Kuwait: with all the money and goodwill in the world, organizing the services is still not easy. In short, some months of disruption were inevitable after the war.

On 22 March, the U.N. Security Council voted to permit humanitarian shipments to Iraq on a "no objections" basis. While the text of Resolution 687 referred to expediting imports of the broad range of goods classified as humanitarian in the Ahtisaari report, in practice, because of skepticism by some governments about the humanitarian character of many nonfood shipments, licenses were readily granted for food and medicine imports but fewer licenses were issued for other items. Thanks to this change in policy, the Iraqi government was able to begin regular and large-scale food imports by early summer 1991.

Living Standards July 1991–July 1993

The regular distribution of rations, which had in practice stopped from mid-January 1991 through April 1991, began again from May or June. By July, the food ration system was fully restored in the areas under government control. Once again, the government provided a minimum diet, its exact composition changing month to month. Goods sufficient to provide 1,300 calories were available in July-August 1991 at 11 dinars monthly per family of six. This price had become derisory relative to free market rates which Dreze and Gazdar calculate would have valued the

same basket at 219 dinars. Families could supplement their rations with purchases on the free market. In the unlikely event that a family of six had to rely on only one income-earner at a low-level job, his wages would have been roughly sufficient to provide a family of six with 1,800 calories per person per day, through a combination of rationed goods and free market domestically grown goods.

After a sharp improvement in mid-1991, the food supply situation stagnated or improved very slowly from early 1992 through mid-1993. Ration levels increased slowly, including in October 1992 and January 1993.[46] Special allocations were made at various times, for example, chickens during the month of Ramadan.[47]

After the June 1993 increases in allocations, the rations were sufficient to provide each Iraqi with 1,750 in calories.[48] Table 3 shows ration allocations and their caloric value. It also shows the cost of imports for the rations. Note that the cost of the imported rations as calculated is in the same ballpark as the $90 million a month ($1,080 million a year) cost cited by Iraq's Minister of Trade, Muhammad Mahdi Salih.[49]

Rationed goods remain available at highly discounted prices. At June 1993 prices, a family of six would have to

46. Radio Baghdad, 15 October 1992 and 15 January 1993, in FBIS 16 October 1992, and 19 January 1993.

47. Trade Minister Muhammad Mahdi Salih complained about the cost of such special distributions in an interview with *Al-Jumhuriyah* (Baghdad), 6 March 1993, in FBIS, 30 April 1993.

48. Techniques for estimating calories from weight differ; the Food and Agriculture Organization and World Food Programme estimate is 1,705 calories.

49. *Al-Tharwa*, 13 June 1993, in FBIS, 22 June 1993.

TABLE 3 □ IRAQ: 1993 RATIONS: CALORIC CONTENT AND IMPORT COST

	Flour	Rice	Sugar	Cook-ing oil	Baby milk	Totals[a]
Ration (kg/mo/person)	9.00	2.75	1.50	0.50	2.40	—
Imports needed/yr						
Tons	1,308	348	326	109	47	2,155
$ mn	309	139	98	51	166	804
Calories per day, avg.						
Adult	1,080	340	193	147	406	1,768
Baby	—	—	—	—	—	406

Note: High population estimates were used to produce a conservative (high cost) estimate of import need and cost.
Sources: Trade Minister Muhammad Mahdi Salih, Al-Thawra, 13 June 93 (FBIS 22 June); Aga Khan report to U.N. Sec-Gen, July 15, 1991:; author's estimate, using USDA, FAO, IMF, and Iraqi sources.
a. Totals include include 16 tons of tea a year per person at a total cost of $41 million.

spend 24 dinars a month on rations. If the family were dependent on the salary of one unskilled government employee making about 250 dinars a month, its income would suffice to purchase the ration plus free market foods (fruits, vegetables, meat, dairy, and some additional supplies of rationed goods) to bring the diet up to 2,000 calories a day. The income of most families would be higher, and therefore they could afford more food. Those in the private sector make considerably more than government employees; indeed, Saddam recently urged government employees to take a second job to make ends meet (he also claimed average wages for the unskilled are much higher than the

figure used here).[50]

The reported ration amounts are consistent with the available data on domestic production of basic goods and on the amount of food being imported into Iraq. The table presents estimates of food available for consumption and of imports, both total and per capita.

The import estimates come from partner-country data on what was shipped to Iraq. The data check well with figures from several other sources. U.N. data on imports permitted indicate Iraqi imports of 6.5 million tons of food and medicine a year, that is, the U.N. authorized imports equal in weight to about one-third the pre-crisis level.[51] Data from Turkey and Jordan on deliveries through their territory show imports at about the same level, for example, Jordanian government data show transit cargo at Aqaba port was 2.1 millions tons in 1992 compared to 5.9 million tons in 1989.[52]

Those partner-country data show that Iraq imported about $1 billion in foodstuffs in 1991 and about $800 million in 1992, which is also the level projected for 1993.[53] By comparison, Iraq would need only $600 million to distribute the late-1991 ration, or $800 million at the

50. Saddam and Udayy Hussein speaking to media leaders, Baghdad Radio, in FBIS, 18 June 1993.

51. *New York Times,* 25 November 1992.

52. James Whittington, "Jordan hit by sanctions on Iraq," *Financial Times,* 5 January 1993. Data for 1992 were estimated from 11 months data.

53. Personal communications, John Parker, U.S. Department of Agriculture.

TABLE 4 □ IRAQ: GRAIN CONSUMPTION AND IMPORTS

	Average 1968–70	1989	1990	1991	1992	1993
Consumption per capita (kilograms)						
All grains	132	208	220	218	217	165
Wheat	95	160	147	163	141	77
Barley	14	6	23	21	36	37
Rice	23	35	40	25	34	45
Corn	0	6	10	10	7	7
Total consumption (thousand metric tons)						
All grains	1,198	3,741	3,930	3,780	3,861	3,025
Wheat	860	2,882	2,635	2,882	2,506	1,412
Barley	125	115	405	368	634	672
Rice	212	636	715	425	601	822
Corn	1	108	175	165	120	119
Imports (thousand metric tons)						
All grains	240	5,387	3,010	2,122	2,420	1,230
Wheat	136	3,525	1,935	1,800	1,900	500
Barley	100	570	210	10	10	0
Rice	1	542	450	287	500	725
Corn	3	750	415	25	10	5
Memorandum item (thousands)						
Population	9,100	17,993	17,880	17,300	17,800	18,300

Note: Consumption is production plus imports minus waste, seed use, and animal feed.
Sources: Author's estimate based on U.S. Department of Agriculture data.

summer-1993 level. That leaves an ample margin to feed the military, provide the upper crust with all the imported foods they want, and give the middle class a margin of (high-priced) imported foods above the ration.

The food supply includes not only the regularly rationed goods but also fruits and vegetables grown locally as well as the small amounts of local dairy and meat. The supply of such commodities, averaged over the Iraqi population, provides 500 calories a day. That plus the rations would yield 2,250 calories a day. The average Iraqi diet was somewhat higher, because the supply of basic foodstuffs from imports and domestic production exceeds the amounts needed for the rations—which corresponds with researchers' observation that some people buy some basic foodstuffs on the free market to supplement their rations. In total, the data on available food supplies, as well as the data on food prices and average family income, suggest that the average Iraqi diet is above 2,250 calories a day and may be as high as 2,400 calories a day.

That may not be a comfortable level to someone who was used to 2,900 calories per day before the crisis. Nevertheless, Iraqis had a larger food supply per person in mid-1993 than in 1965: 2,250 calories versus 2,150.[54] Indeed, the Iraqi grain supply per capita under sanctions has been well above the level in the late 1960s (Table 4). The grain supply in 1968–70 averaged 132 kilos per person, whereas the supply in 1993 is projected at 165 kilos.

Furthermore, a 2,250 calorie diet is more than adequate nutritionally. There is no clear agreement on what constitutes the minimum number of calories needed to sustain

54. The 1965 figure is from the World Bank, *World Development Report 1991*.

life. International organizations have systematically and repeatedly exaggerated caloric requirements, which probably do not exceed 1,800 calories per person per day.[55] A U.N. Department of Humanitarian Affairs report stated in April 1993 that the rations then in effect provided only 68 percent of minimum energy requirements.[56] Given that those rations yielded 1,600 calories per person per day, this implies that Iraqis need 2,300 calories per day—a judgment that seems inconsistent with scientific knowledge of human nutrition. However, even accepting that exaggerated standard, the average Iraqi diet is still nutritionally sufficient.

Although the average food supply may be sufficient, not every Iraqi necessarily has enough food. For instance, the government is not importing enough baby food and milk to feed infants who are not breast-fed. If any humanitarian need in Iraq today can be compared to those in South Asia or Africa, it is the problem of Iraqi infants.

On a larger scale is the issue of where the food goes, whether it is being distributed to the poor, to the Kurds, and to the Shiites. The U.S. government has stated that Saddam has a "callous policy of diverting supplies away from those who oppose him."[57] If so, the average could conceal starvation for some people and abundance for others.

55. Dennis Avery, *Global Food Progress 1991* (Indianapolis, Ind.: Hudson Institute, Center for Global Food Issues 1991). Avery also shows that when caloric supply is sufficient, so too is protein and vitamin content, under usual conditions.

56. James Whittington, "Sanctions bite hard on hungry Iraqis," *Financial Times*, 6 May 1993.

57. Edward P. Djerejian, Assistant Secretary of State for Near East and South Asia, Statement Before the House Foreign Affairs Subcommittee on Europe and the Middle East, 102d Cong., 1st Sess., 20 November 1991.

However, the private voluntary organizations report that the Iraqi food distribution system works to provide all Iraqis with rations. Dreze and Gazdar concluded in August 1991:

> Contrary to the popular belief, Iraq's public distribution system is an exemplary one in terms of coverage, equity, efficiency, and the amount distributed. . . . The rations are identical for everyone throughout the country, irrespective of age, sex, region, nationality, or any other criterion . . . It may seem surprising that a regime as repressive and intolerant as that of Saddam Hussein should turn out to be so considerate and impartial in food distribution. There is, however, nothing new in this observation. Authoritarian rulers over the world . . . have not hesitated to utilize food hand-outs as a way of defusing tensions and containing dissent.[58]

The Kurdish and Shiite populations did not receive Iraqi government rations during the period of civil rebellion in spring 1991, nor indeed for some time afterwards, and rations were never regularly supplied thereafter to the area under the Kurdish administration. However, the international community stepped in with food relief that certainly exceeded the level of Iraqi rations.

The food situation was quite typical of other vital sectors, such as electricity, water, and health. The infrastructure was slowly restored, with each successive team of experts reporting a somewhat higher level of production.

WATER. Regular water service was restored in spring 1991to Baghdad and in summer to areas hit by the civil disturbances, although the lack of sewage processing in Basra continued to pose a serious public health threat well past the first anniversary of the sanctions. The Aga Khan report stated that of the 16.8 million people who had piped water pre-crisis, 14.3 million had service restored at an

58. Dreze and Gazdar, pp. 36 and 40.

average of 100 liters per person per day, compared to 300 liters pre-crisis.[59] The International Study Team report on water and waste water provides a detailed review of conditions in late August 1991. Overall, water production was 30 percent to 70 percent of the prewar level. The best situation was in Basra where water production was 90 percent of the prewar level; however, Basra's water supply pre-crisis was nowhere near as good as Baghdad's.[60] Paradoxically, the high level of water output was a major factor in the sewage flooding in Basra, commented on by many observers (for example, the Aga Khan report). In addition, Basra's flat topography and low water table meant that sewage disposal required continuous operation of pumps, three out of four of which had suffered from the frequent power surges. Outside Basra, sewage disposal was not a particular problem, in part because geography simplified such disposal. By early 1992, water service was essentially fully restored.

ELECTRICITY. Electricity was available six to eight hours a day in urban areas by June 1991, when the Aga Khan team was in Iraq. While only 25 percent of prewar capacity was back in operation, Iraq had had substantial excess capacity prewar; the average load was about 30 percent of capacity, but the peak load in summer was much higher. The July 1991 capacity was sufficient to generate 20.4 billion megawatt hours a year compared to 1989 use of 25.6 billion, on the implausible assumption it could be operated

59. Calculated from the Iraqi *Annual Abstract of Statistics 1990*; assuming only 15.0 million people, 1.635 billion cubic meters per year is 300 liters per person per day.

60. Basra received only 15 percent as much piped water as Baghdad in 1989 (76 million cubic meters compared to 542 million), while Basra has fully one-fourth the population.

without shutdown. If run at full level (say, 90 percent of the time), the July 1991 capacity was sufficient to meet the 17.9 billion megawatt-hour 1989 demand for all but industrial purposes.

The Aga Khan report warned that the electrical situation would deteriorate because of heavy demand and lack of spare parts. In fact, exactly the opposite occurred. The International Study Team group, which was in Iraq in late August and early September 1991, found that electrical generating capacity was up from 25 percent earlier to 37 percent. That was sufficient to meet 68 percent of peak demand, which would appear to mean all nonindustrial demand.

Since fall 1991, electricity has been available most hours each day. Nevertheless, frequent power outages continued, meaning that electric refrigeration could not be counted on for perishable foods, which impeded distribution, storage in stores, and stockpiling in homes. These problems probably hit the elite almost as severely as the middle class and the poor, as there is no sign that the elite had taken such precautions as installing private generators or large water tanks, which are common in countries with frequent power or water outages.

HEALTH. Health is harder to measure than water, food, or electricity. The International Study Team included five physicians (three of them Arabic-speaking) who visited 46 health facilities. The hospitals were fully staffed, and their laboratories functioning at 30 percent of the prewar level, but could not perform adequately most surgery and other sophisticated medical interventions. The Iraqi Health Ministry reports that only 78,089 major operations were

performed in 1991 compared to 181,506 in 1989.[61]

Major operations are not the most effective way to save lives in middle-income countries, however; basic care is, and that evidently was still available from the Iraqi medical system. That would make medical care in Iraq by August 1991 better than in most low-income countries. This suggests Iraq's problems do not necessarily qualify as a crisis from the perspective of the world community. Consider, for instance, the question of medicines. The United Nations Development Programme reports, "Between 1.5 and 2.5 billion people still have little or no regular access to essential drugs . . . Basic and essential drugs cost around $1.00 per person" annually.[62] By contrast, the Aga Khan report cites Iraq's insistence that it needs $460 million—$23 per person in drugs and medical supplies.[63]

While this may be what Iraq needs to restore care to pre-crisis levels (and therefore to reduce popular anger at the deterioration in health care), it is not necessarily what the international community needs to consider as the minimum necessary for Iraq.

A detailed study of infant and child mortality in Iraq by public health specialists, several from the Harvard Public Health School, concluded,[64]

> These results provide strong evidence that the Gulf war and trade

61. Iraq News Agency, 9 March 1992, in FBIS, 10 March 1992, p. 17.

62. UNDP, *Human Development Report 1991*, p. 63.

63. Aga Khan report, p. 25.

64. Alberto Ascherio, et al., "Effect of the Gulf War on Infant and Child Mortality in Iraq," *New England Journal of Medicine*, vol. 327, no. 13 (24 September 1992), p. 931.

> sanctions caused a threefold increase in mortality among Iraqi children under five years of age. We estimate that an excess of more than 46,900 children died between January and August 1991.

The analysis compares death rates in each four-month period from January 1985 through August 1991. Death rates during the last four months of 1990, when sanctions were in effect, did not increase, but there had been no fighting. That suggests the increased deaths were due to the war-time damage. Indeed, the authors hypothesize that the excess mortality was caused by disruption of the water and sewage systems, by the degradation of health services with loss of electricity, and by malnutrition—all factors that followed the war but which were only peripherally related to the sanctions. In short, strong evidence supports the authors' claim that the Gulf war caused extensive civilian deaths:[65]

> During the Gulf war, it was suggested that by using high-precision weapons with strategic targets, the Allied forces were producing only limited damage to the civilian population. The results of our study contradict this claim and confirm that the casualties of war extend far beyond those caused directly by warfare.

On the other hand, the Iraqi government argues that "as a result of the blockade" through April 1993, 93,850 children five years of age and under and 170,888 people over age five died.[66] Even assuming that the calculations of additional deaths during that period is correct, it would

65. Ibid., p. 935.

66. Health Minister Midhat Mubakar, *Al-Jumhuriyah* (Baghdad), 24 June 1993, in FBIS, 1 July 1993. He refers to "children over five" instead of "people over five," but similar such announcements on a regular basis suggest he meant all those over five.

still be unclear what proportion was due to the sanctions and what to ongoing civil strife, such as the poor living conditions for millions of Kurds and Shiites.

The picture painted here differs sharply from the conventional wisdom portrayed in the media. Journalists and many analysts have systematically overstated the problems in Iraq. Consider the conventional wisdom of mid-1991:

> Overall, the American analysts say, the Iraqis are struggling precariously under a patchwork of short-term fixes and remedies that will probably deteriorate in the months ahead if the Bush Administration maintains trade sanctions.[67]

Or the conventional view of early 1992:

> Iraqi government expenditures indicate that its reserves are no longer adequate to supply more than essentials, like food and medicine, to military forces and key leadership groups.[68]

Whether the conventional wisdom of mid-1993—that Iraq has its back to the wall economically—is any more accurate remains to be seen. A *New York Times* headline says "In Iraq, Hunger Wins," and the accompanying story cites FAO/WFP calculations that Iraq needs 5.4 million tons of imported food in 1993.[69] That claim is a good example of the kind of analysis that underlies such portrayals of Iraqi

67. Patrick Tyler, *New York Times*, 3 June 1991.

68. Patrick Tyler, *New York Times*, 19 January 1992.

69. Paul Lewis, *New York Times*, 21 July 1993. Lewis refers to the estimate as being from the World Health Organization; it was produced by a FAO/WFP Crop and Food Supply Assessment Mission which visited Iraq 14 through 28 June 1993.

desperation. Iraqis in 1989 were able to have a more than ample diet while consuming only 3.5 million tons of imported food. These imports provided 70 percent of their total calories. A 5.4-million-ton need is ridiculous.

In fact, by the end of first year of sanctions, the Iraqi economy had stabilized at a low standard of living. The standard was not only sufficient to sustain human life; it was probably as good as the average for human life on our planet today. The evidence is consistent with the view that the main source of economic damage was the war, not the sanctions. Furthermore, it would appear that the effect of the postwar sanctions has been to slow recovery, not to cause additional deterioration.

Political Effects of the Reduced Living Standards

Direct evidence is scant on how Iraqis are reacting to the privation caused by the sanctions. The standard of living in Iraq is now at levels that Americans would find so intolerable as to lead to open revolt. But Iraqis would not necessarily react the same way. Iraq's living standard is about where it was in 1958 at the overthrow of the monarchy. Furthermore, the 1992–93 Iraqi living standard is around the level in Egypt, which was historically a reference point for Iraqis. Iraqis may therefore view their present privation as an unfortunate return to the past, rather than as an unparalleled disaster. The extent of the Iraqi population's willingness to undergo such privation is quite unknown. Of course, the Iraqi population probably also compares its 1992–93 standard of living to what they had pre-crisis or, even more tellingly, to their hopes and dreams during that brief moment of peace between August 1988 and August 1990.

Tough times have undoubtedly aroused rage in Iraq, but at whom is it directed? The Iraqi government has tried

hard to direct the anger against the West. Iraqi propaganda constantly repeats that the sanctions were designed to get Iraq out of Kuwait and Iraq is now out of Kuwait, so the sanctions accomplished their announced purpose and are now being maintained only to make Iraqis suffer. The state of Iraqi public opinion is impossible to know, as should be clear after the civil war of March and April 1991 which erupted against the expectations of every U.S. observer. Nevertheless, to the extent that visitors can judge, the Iraqi regime's propaganda campaign to blame the West for the recent suffering inside Iraq seems to have had some success. To be sure, Iraqis appear to recognize Saddam's decision to invade Kuwait as a monumental error. Nevertheless, outside observers have not seen evidence—street graffiti, popular jokes, spontaneous demonstrations—blaming Saddam's postwar policies for the shortages.

Another factor militating against a change of government is that the hardest hit group has been the middle class—the 10 percent below the elite 1 percent and above the lower 89 percent. Unlike the elite, they have little access to imported niceties; unlike the lower 89 percent, the rations do not begin to provide them with a diet as varied and tasty as they expect. The middle class is in the depressing situation of seeing the shops full but lacking the income to buy. It is hard to mobilize the middle class for change: it cannot lead a coup and has neither the numbers nor the inclination to engage in street fighting in a popular rebellion. In addition, the middle class is disproportionately Sunni Arab and therefore inclined to support Saddam for ethnic reasons. Emigration is the one safety valve of the middle class, an option that quite a number have taken or are trying to take.

Another imponderable is the political effect of the dependence on rations from the government. The rations

cost a family of six 24 dinars a month, while buying the same food on the free market would cost about 3,500 dinars a month. The implicit value of the rations is therefore 3,475 dinars a month (the gap between the free market price and the ration cost). The implicit value of the rations exceeds by a large margin the salary of an unskilled laborer (250 dinars a month) or even of a general (2,900 dinars a month).

4 Financing Imports

Iraq's potential sources of foreign exchange earnings depend upon how strictly the sanctions are implemented and whether Saddam cooperates with the U.N.-mandated oil sales. If enforcement is lax—if current trends continue—Iraq will be able to finance about $2 billion a year in imports. The many sources of this financing come from exploiting loopholes in the sanctions as actually applied and from smuggling across hard-to-police borders. Of course, any such estimate is tremendously uncertain.

Oil Sales

U.S. government sources claim Jordan is importing only 55,000 barrels a day (b/d), the official Jordanian figure for its crude oil imports from Iraq.[70] Petroleum industry and Middle East sources agree that Jordan is importing 50,000 b/d of crude from Iraq and 20,000 to 25,000 b/d of fuel oil. One oil industry source stated in 1992, however, that crude

70. Jordanian Minister of Energy and Mineral Resources Ali Abu al-Raghib, *Al-Dustur* (Amman), 8 January 1993,in FBIS 11 January 1993.

plus refined product total was 150,000 b/d.[71] A conservative valuation of the oil would be 60,000 barrels a day at $15 each, or $330 million. A more generous estimate would be 80,000 barrels a day at $16 each, or $465 million.

When Jordan notified the sanctions committee in June 1991 of its intention to import the oil, Jordan stated that the funds would be used only to repay Iraq's debt to Jordan. On this basis, the sanctions committee "took note" of Jordan's declaration, without expressing approval or disapproval. However, Jordan evidently made no commitments about refraining from new loans to Iraq. While some in the U.S. government interpret the U.N. sanctions to forbid new loans, that would not seem to be the interpretation common in other countries, including Jordan. Therefore, Jordan can comply with the letter of the sanctions while violating the spirit: it can import Iraqi oil to repay old Iraqi debts while extending new loans to Iraq, in a transaction that amounts to the same thing as paying Iraq directly for the oil.

The respected oil industry newsletter *Petroleum Intelligence Weekly* reported in 1992, "Syria has unexplained volumes of up to 40,000 b/d of crude. A 2-month search by PIW has established that some amount of crude has been transported from Iraq to Jordan to Syria by Amman (Trucking) Resources."[72] However, there are doubts about this report. Exports to Syria would have to be by truck—a long and expensive route—as there is no evidence that the long-shut pipeline from Iraq has been reopened.

71. *New York Times*, 8 December 1991; *Middle East Economic Digest*, 20 December 1991; and *Mideast Mirror*, 10 May 1993. The high estimate is from *Petroleum Intelligence Weekly*, 6 April 1992.

72. *Petroleum Intelligence Weekly*, 6 April 1992.

"Senior U.S. officials" complained to the *Washington Post* in March 1993 that Iran had imported oil from Iraq.[73] The amounts involved appear to have been small, as the reports spoke of dozens of tanker trucks per day. However, there were said to have been periodic discussions between Baghdad and Tehran about a larger deal. It would be easy to transport oil between Iraq and Iran, as the two have pipelines that come within ten miles of each other at two points, at the Shatt-al-Arab river or in the central zone between Naft-e Shah and Naft Khaneh.

Press reports confirm travellers' tales that substantial amounts of Iraqi oil are imported into Turkey,[74] to take advantage of a $2.20 per gallon price differential that results from heavy Turkish taxation and large Iraqi subsidies (especially as the oil is paid for with currency exchanged at the black market rate). The volume of the trade fluctuates. In 1991, Agence France-Presse cited U.N. officials in Baghdad who estimated the trade at 600 tankers a day, each carrying 50 barrels, plus what regular cargo trucks carry in extra tanks.[75] By comparison, the pre-crisis trade was 20,000 barrels a day. A conservative estimate of the oil revenue would be 3,500 barrels a day at $16 each, or $20 million. A more generous estimate would be 6,000 barrels at $16 each, or $35 million.

73. R. Jeffrey Smith, "U.S. Accuses Iran of Breaking Oil Embargo," *Washington Post*, 29 March 1993.

74. *New York Times*, 13 December 1991 and *Washington Post*, 10 December 1991.

75. Jacques Charlemot, Agence France-Presse, 13 December 1991,in FBIS, 16 December 1991. He reports the oil price per liter as being .07 dinars in Iraq, equal to one U.S. cent at the free market rate, and sixty cents in Turkey. The price paid by the Turkish dealers for the oil is assumed here at slightly below the world market price, that is, ten to twelve cents per liter.

Gold Sales

The stock of gold jewelry in Iraq pre-crisis was at least $1 billion and possibly $3 billion, that is, 100 to 300 tons of gold. This estimate is based on data from the industry standard source, Gold Field Mineral Services of London.[76] Its reference work reports that 42 tons of gold were imported into Iraq, Syria, and Jordan for jewelry fabrication between 1981 and 1984, evidently almost all for Iraq. In addition, Iraqis held large amounts of jewelry manufactured elsewhere or bought before 1981. (After 1984, with the economic downturn in Iraq, little gold seems to have entered the country.) From the scrap gold purchased by jewelers in Iraq, Syria, and Jordan—which averages 10 tons a year—it would seem that the gold stock is at least 200 tons, at least half of it in Iraq. By way of comparison, the usual figure for world holdings of jewelry is 30,000 tons, of which 3,000 tons are said to be in Turkey.

The Iraqi Central Bank reported for many years, until it classified its holdings secret, that Iraq had 130 tons of gold, worth about $1.3 billion.[77] During the war with Iran, Baghdad launched drives to collect gold jewelry, which suggests possible gold sales. On the other hand, it was credibly reported that the gold so collected was used to gild the Presidential Palace. It is not known how much of the government's gold was held in Iraq and how much was stored abroad and therefore possibly frozen by the U.N. sanctions.

The stock of gold jewelry in Kuwait pre-crisis was at

76. Gold Field Mineral Services of London, *Gold 1990*, *Gold 1989*, *Gold 1982*, and interviews.

77. International Monetary Fund, *International Financial Statistics*, various issues.

least $2 billion and possibly as much as the $4 billion estimated by the Economist Intelligence Unit,[78] that is, 400 tons to 200 tons. Some substantial portion ended up in Iraq, either through seizure by individual soldiers or through sale by Kuwaitis who needed money for living expenses during the crisis. This excludes the Kuwaiti official gold reserves, which were returned to Kuwait after the war.

In short, excluding the official Kuwaiti gold later returned to Kuwait, the gold stock (government plus private) in Iraq in fall 1991 was somewhere between 100 and 700 tons, worth between $1 billion and $7 billion.

Anecdotal evidence suggests that Iraqis may be selling gold from jewelry and small private stocks, as they have long done when times are tough. The scrap gold sales for Iraq, Syria, and Jordan which had averaged 10 tons in the 1980s reached 27.5 tons in 1990 and 34.3 tons (worth about $350 million) in 1991.[79] Iraqis would have little difficulty selling such amounts of gold, given the large scrap markets in neighboring countries: the 1991 purchases were 104.5 tons in Turkey, 137.6 tons in Arabian Peninsula states, and 43.0 tons in Iran.

Iraq has also sold some of its official gold to pay for humanitarian imports. The Australian central bank (the Reserve Bank) reported that 10 tons, worth $108 million, were handed over to it to pay for 900,000 tons of wheat.[80] Jordanian Finance Minister Basil Jardaneh confirms he

78. Economist Intelligence Unit, *Iraq*, no. 4, 1990, estimated Kuwaiti private gold holdings at 400 tons excluding jewelers' stocks.

79. *Middle East Economic Digest*, 5 June 1992.

80. *Washington Post*, 22 August 1992. The Jordanian transaction description and the Finance Minister quote is from David Ignatius, *Washington Post*, 25 April 1992.

approved the purchase of "something like $10 million" in gold by that country's Housing Bank in 1992.

Gold sales could provide Iraq as much as $250 million a year. At this rate, the gold would last 4 to 28 years.

Reexports from Kuwait

The automobiles taken from Kuwait could well have a value of $100 million, as discussed earlier. If the cars were reexported from Iraq, registration formalities would not seem to be a problem in such nearby countries as Lebanon or Iran.

Many items other than cars were taken from Kuwait. Some of the more readily saleable items would be consumer durables such as VCRs or televisions and construction materials and equipment. While any such figure is speculative, the value of goods taken from Kuwait—discounted for the damage done while removing them—may well have been a billion dollars.

To cite a November 1991 Reuters report about rings of thieves in Baghdad, "luxury saloons [cars] were fetching up to $30,000 when sold in Iran, and the cars were often driven to the border filled with stolen electronic cable, steel wire, and goods looted from Kuwait."[81]

The reexports from Kuwait may have provided $100 million on average in each of the three first years of sanctions, but they would now be tapering off.

Other Exports

Iraq is known to have exported dates. USDA sources estimate that the value may have been as high as $80 million, thanks to improved packaging and grading. Iraq

81. 13 December 1991.

has also exported via Jordan urea and sulphur, as well as refined petroleum products for Lebanon.[82]

Iraq is reliably reported to have exported used construction equipment and the like to Iran. To quote Peter Galbraith,

> In Haj Omran, within a mile of the border itself sits one of the largest collections of construction and earthmoving equipment in the world. In a short period of time I saw more than 30 large bulldozers, at least 7 giant cranes, steam shovels, and hundreds of big dump trucks. The equipment, manufactured by Volvo, Komatsu, Caterpillar, and Kawasaki looks to be in good condition. Parked along the road leading to the border were trucks loaded down with machinery. The Kurds explained that whole factories were among the contraband waiting to cross into Iran. From the evidence at Haj Omran, it is clear that Iraq is exporting its infrastructure to Iran at fire sale prices.[83]

Iraq had a large stock of such equipment from the many projects underway in the aftermath of the Iran-Iraq war. The demand for such equipment is strong in Iran since that country is in the midst of a construction boom. Monthly sales in the millions of dollars are eminently plausible.

Continuing Iraqi exports to Gulf countries of sheep, personal weapons from the ample Iraqi stock, and consumer durables have been reported. In July 1991, Paul Lewis wrote, "When Prince Sadruddin Aga Khan's team was investigating the plight of Iraqis under sanctions this month [July], some of its members found that many goods sold in distress were being shipped to Iran and Saudi Arabia, to be

82. Peter Galbraith, *Kurdistan in the Time of Saddm Hussein,* Staff Report to the Senate Committee on Foreign Relations, 102d Cong., 1st Sess., November 1991, p 10.

83. Ibid, p. 10.

resold for dollars."[84] No estimate is possible of the amounts involved.

Iraq may be able to export nonoil products worth $100-$250 million a year, excluding reexports from Kuwait. The exports are likely to rise through time.

Use of Bank Accounts

The U.N. sanctions committee in 1991 authorized governments to release bank funds to finance humanitarian imports. A list of $3,755 million in bank funds at end-March 1991 was provided by Iraq to the United Nations.[72] Most governments freezing funds did not agreed to a blanket release of such funds, but Iraq seems to have gained access to the $72 million in Yemen and Jordan. The British government agreed to release $125 million (70 million pounds sterling) of the $538 million frozen there in association with the release of a Briton held on corruption charges dating from well before the crisis.[73] Reports suggest that Canada and some north European governments also released tens of millions of dollars of the $1,228 million held in Europe outside the United Kingdom.[74] There are no indications that the United States released any of the $1,415 million it froze.

On 2 October 1992, the Security Council approved

84. *New York Times,* 25 July 1991.

72. Letter dated 7 June 1991 from the Permanent Representative of Iraq to the United Nations, Security Council Committee Established by Resolution 661 (1990), Concerning the Situation Between Iraq and Kuwait, S/AC.25/1991/Comm.190.

73. *New York Times,* 24 November 1991.

74. For example, Canada released $1.7 million in June 1992. *Middle East Economic Digest,* 12 June 1992.

Resolution 778 authorizing states to release the sales proceeds on Iraqi petroleum shipped before 2 August 1990 but not yet paid for at that time. Including amounts in bank accounts in Western nations and also unsold crude oil in storage in Turkey and Saudi Arabia, the total available was estimated at $500 million to $1 billion.[75] Each state was asked to authorize release of up to $200 million if it had that much. The United States has authorized the release of the full $200 million.

The funds released under Resolution 778 were to go only to a U.N. escrow account for humanitarian relief. This account was authorized by Security Resolution 712, passed on 19 September 1991, which "confirms that funds contributed from other sources may if desired, in accordance with [the oil sales resolution], be deposited into the escrow account as a sub-account and be immediately available to meet Iraq's humanitarian needs . . . without any of the obligatory deductions and administrative costs . . ." The account has never been activated because of Iraqi disinterest and U.N. bureaucracy.

Resolution 778 also provided in paragraph 11 that "no further Iraqi assets shall be released" except to the escrow account for humanitarian relief. That means that governments were no longer authorized to release frozen bank assets. It also applied to the Bank for International Settlements (BIS), a clearing bank owned by the world's largest central banks, which holds $300 million in Iraqi assets.[76]

75. Paul Lewis, "U.N. Council Votes to Use Iraqi Assets Frozen Abroad," *New York Times*, 3 October 1992.

76. Thomas Pickering, U.S. Ambassador to the United Nations, Testimony Before the House Foreign Affairs Subcommittees on Human Rights and International Organizations, 102d Cong., 1st Sess., 21 October 1991. The Iraqi position on the Bank for International Settlements funds was described in an

Iraq has consistently objected to the release of the BIS funds into any escrow account. In short, Iraq was able to secure several hundred million dollars from its frozen bank accounts with U.N. approval in 1991–92, but further use of such accounts is more problematic.

Rumors abound about large, undeclared Iraqi bank accounts abroad. Richard Newcomb, director of the Treasury Department's Office of Foreign Assets Control, states a common view that such accounts exist (and implicitly are of considerable size):[77]

> It is my belief, and an operating assumption of the U.S. Treasury, that through secret accounts and investments, covert Iraqi front companies and clandestine agents of his regime, Saddam Hussein is attempting to sustain and proliferate his tools for disregarding the U.N. embargo.

The search for hidden bank accounts has been conducted primarily by the U.S. government and the New York investigative firm of Jules Kroll, under contract to the Kuwaiti government.[78] There is remarkably little evidence that these searches have been productive: the amounts positively identified (as distinct from claimed) have been vastly less than the rumored hoards. A *Washington Post* headline thus summarized the search, "No Pot of Gold [has been] Found in Ongoing Hunt for Secret Iraqi Assets. "[79]

Iraq News Agency account, 20 October 1992, in FBIS, 22 October 1992.

77. Ed Blanche, Associated Press, "Hussein may be using up wealth," *Philadelphia Inquirer*, 20 July 1992.

78.. Kroll has also investigated reported secret holdings of others, such as the Shah of Iran, Ferdinand Marcos, and the Duvaliers.

79. David Ignatius, "No Pot of Gold."

Loans and Grants

Libya exported to Iraq food aid with a value of perhaps $5 million a month beginning in April 1991. Yemen has also sent small amounts of aid. Quasi-governmental Iranian organizations appear to have sent some aid to the south.

The U.N. system agencies reported in January 1992 that they have spent a total of $97 million in Iraq in calendar year 1991 for emergency relief, exclusive of the U.N. guards, arms monitoring programs, and refugee assistance.[80] (The largest source of financing for this relief was $32 million from the U.S. government to the World Food Programme). U.N. financing was less in 1992 and is likely to fall steadily, given the number of humanitarian crises in the world and the U.N. system's continuing financial problems.

The United States reports it spent about $460 million on Operation Provide Comfort to aid Kurds in 1991. The amount of U.S. aid was sharply lower in 1992 and is likely to continue to decline. Furthermore, a GAO source suggests that the value of goods received in 1991 was closer to $100 million than the $460 million spent, for several reasons, including:

- Excess goods, like the Meals Ready to Eat (MRE), were valued at purchase cost, rather than at their much lower market value.
- Much of the cost went for U.S. personnel.
- The transport charges were heavy, especially since they

80. UNDRO Financial Report F13, 3 January 1992.

included substantial capital charges for the depreciation of the planes used in transport.

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A number of other industrial nation governments have sent aid to Iraq. For instance, the European Community granted $16 million for aid to Iraq in July 1993.[81] On the basis of fragmentary evidence, "other" aid is at least $50 million a year.

Private voluntary organizations may have spent some tens of millions of their own funds in 1991, in addition to the government-financed aid they administered. Such aid is unlikely to be appreciable, given Saddam's restrictions on such organizations' activities and given the competing needs elsewhere.

Some traders are rumored to have extended loans to Iraq. The motivations may have been partly political but largely commercial, since Iraq may well be inclined to be generous in the future to donors of aid in its hour of need. For instance, the *Wall Street Journal* quoted U.N. officials, Western businessmen, and knowledgeable Iraqis to the effect that Western firms, including oil companies, had been shipping goods to Iraq, sometimes as a gift, with the expectation (encouraged by Iraqi officials) that they would profit after the embargo was lifted.[82] Furthermore, traders may have unloaded on Iraq goods they could not sell elsewhere at a similar price and so might otherwise have

81. Agence France Presse, in FBIS, 30 July 1993.

82. Peter Waldman, "European Firms Are Lining Up for Iraqi Oil," *Wall Street Journal*, 29 January 1993.

warehoused, for example, Vietnamese rice shipped to repay old debts.[83]

5 Alternative Scenarios for the Mid-1990s

The principal alternative scenarios to the continuation of present trends would be either fuller implementation of sanctions or Saddam's agreeing to the U.N.-mandated oil sales.

Full Sanctions

An alternative scenario would be for tighter implementation of the sanctions. Six steps to reduce Iraq's access to foreign exchange would be:

□ *Iraq is blocked from gaining access to the income from any oil exported to Jordan.* That is, either Jordan is induced to stop importing oil from Iraq (for example, by an offer of low-cost oil from another source) or Jordan is persuaded to deny Iraq access to the oil income. Either step would require an end to the current Jordanian practice of using the oil income to repay Iraq's debt to Jordan while simultaneously extending new loans to Iraq.

□ *Iraq's oil exports to Turkey and Iran are slowed or stopped.* However, the Turkish government may not be able to do much more in this regard. It already has a substantial incentive to prevent such trade, because it loses the considerable tax revenue consumers would otherwise pay on oil products bought through Turkish channels. Nor is it clear how vigorously Western governments would protest

83. James Whittington, "Sanctions and missiles fail to shift Saddam," *Financial Times*, 1 July 1993.

Iranian oil purchases from Iraq.

□ *Iraqi nonoil exports to Turkey, Jordan, and Iran are prohibited*—principally dates, used construction equipment and vehicles, and some mineral products. These countries now permit the entry of merchandise worth millions of dollars a week.

□ *Iraqis receive little if any additional access to their frozen foreign bank accounts.* No more large releases are made like the British unfreezing of $125 million in November 1991.

□ *Iraq is impeded from arranging more loans and aid from governments such as Libya.* The impediment could come from pressure on governments and/or from complications in receiving U.N. permission to import goods financed by such loans and aid.

□ *Iraq receives less assistance from charitable organizations.* The Iraqi government may itself reduce cooperation with these organization, as has been hinted by the Minister of Health, to limit foreigners' access to Iraqi citizens and to reinforce governmental control over its citizens' food supplies.

With the political will to do so, Iraq's hard currency earnings could technically be reduced to about $1 billion dollars a year. Iraq would then have enough to import basic necessities but nothing else. Either Baghdad would have to devote essentially all foreign exchange earnings to importing basic necessities or, if Saddam insisted on retaining significant sums for his military and for elite consumption, Baghdad would have to reduce the ordinary Iraqi's diet so

much that popular dissatisfaction could be intense.

The barriers to tightening sanctions are both political and technical. Even with the toughest political will in the world, Iraq could still earn at least $500 million a year from gold sales and smuggling (much of it used equipment and consumer durables like automobiles). The trade in old gold jewelry and the smuggling routes are centuries old; it is unrealistic to anticipate that the governments of Turkey and Iran could stop it entirely no matter what they did.

Furthermore, few circumstances are conceivable under which Iraq would be denied assistance from humanitarian agencies, both private and U.N.-related. If Iraq were in dire circumstances, this assistance would increase to at least $300 million a year. Indeed, it is hard to envisage Iraq's foreign exchange resources dropping below $1 billion a year.

Under this scenario, the Iraqi diet would be tight unless domestic food output increased noticeably. Such an increase is not anticipated. Medical care would be more like that in the poor countries where most of humanity lives. In other words, most people would receive only basic public health and the most cost-effective of life-saving drugs; sophisticated medical interventions would be reserved for a small elite. If medicines were rationed well, the increase in mortality could be quite limited. If the government attempted to maintain the old system of advanced medical care, resources would be insufficient to provide most Iraqis even the most basic health care, and the death rate could soar.

The change from the base case would depend upon which policies the Iraqi government adopted. If Baghdad maintained its system of relatively egalitarian food distribution, the principal difference from the base case would be that the middle class and all but a handful of the very top

elite would have their diet reduced to the same poor level that the lower classes already experience. On the other hand, if the government cut back on rations to preserve the privileges of the elite, the mass of Iraqis would find their diet cut below sustenance. Under such circumstances, the political reaction could be fierce.

Under this scenario, a key problem for the government would be how to finance the rations. Little of the foreign exchange under this scenario would be under government control; the imports would be largely financed by either aid organizations or the private sector. As a result, the Iraqi government would earn little revenue from the sale of imports. The government would have little alternative but to create money to pay its bills. Baghdad could well be forced to increase the money supply at more than 100 percent a year, at a serious risk of hyperinflation. Already, the regime has announced stiff penalties for merchants who refuse to accept dinars. At the same time, the shortage of foreign exchange will cause the black market exchange rate to soar—another factor that will lead Iraqis to shun dinars. The dinar might well cease to function as money.

The decay of central government control is inevitable under this scenario. Baghdad will not have goods to hand out or even to sell. The government would face serious decay in public morale. However, it is by no means clear that the dire economic situation would turn into anti-Saddam popular rebellions. The initial impulse is more likely to be individual antisocial actions, such as an intensification of the crime wave already under way. Furthermore, Saddam may be able to channel much of the popular anger into fury at the U.N. coalition, not his regime. After the bitter experiences of the March–April 1991 rebellions, it is by no means clear that the Shiites would take up arms so soon again in a popular rebellion against Saddam. And

the Kurdish response might be to widen the gap between the areas they control and the rest of Iraq, without challenging Saddam's power in Baghdad. In other words, it would be imprudent to assume that the toughest sanctions would lead to Saddam's overthrow in the short term.

Oil Sales

If Saddam feels a need for additional foreign exchange, he always has a ready route to an extra $1 billion. Under Resolution 706 of August 1991, the Security Council has authorized the sale of up to $1.6 billion of Iraqi oil over a six-month period, subject to deductions for reparations, the cost of U.N. operations in Iraq, and an amount withheld to provide aid for those living in areas outside Baghdad's control.[84] As mandated by the Council, the Secretary-General calculated those deductions as $480 million for reparations, $121.3 million for U.N. expenses in Iraq, and $65 million for aid to those outside Baghdad's control. That leaves $933.7 million for Saddam. In other words, Saddam can ease the choke-hold of the sanctions anytime he wants.

The oil sales program involves a complicated set of procedures to reduce the amounts Iraq can divert from humanitarian needs. In August 1991 Baghdad complained bitterly that the procedures would delay the oil sales. That argument had some force then, but by December the procedures had been worked out, the experts hired, and the program could proceed smoothly soon after Iraqi agreement. However, the Iraqi government still insists on three major further changes: permission for long-term contracts rather than spot sales, use of Persian Gulf ports in addition to the

84. While Resolution 706 and its companion Resolution 712 expired in March 1992, the United States and other Security Council members have repeated their willingness to renew the offer if Iraq agrees to U.N. conditions.

pipeline through Turkey, and more control over the imports.[85] Talks have been held periodically on the oil sales. One round broke down in summer 1992, ostensibly over these issues, but the real barrier was Saddam's unwillingness to accept limits on his ability to use oil funds as he sees fit.

Talks about the oil sales revived in mid-1993, and agreement was nearly reached in late July. However, Saddam held out for better terms, evidently persuaded that he could force the lifting of all limits on Iraqi oil imports. Saddam appears to have been emboldened by comments of U.N. envoy Rolf Ekeus, who pointed out that paragraph 22 of the U.N. ceasefire Resolution 687 states, "the prohibition against the import of commodities and products originating in Iraq . . . shall have no further effect" if Iraq agrees to dismantle and cease production of nuclear, chemical, and biological weapons and long-range missiles and to permit U.N. inspections to this end. Iraq does not have to comply with other U.N. demands—for example, about respecting Kuwait's borders—to be allowed to resume oil sales, according to a strict interpretation of Resolution 687. Despite the limited nature of the steps necessary to fulfill these conditions, Saddam continued to stall as of August 1993.

Were Iraq to cooperate with the United Nations on the limited oil sales, Iraq would probably get access to more than the $933 million. The additional resources would come from two sources. The first would be additional contributions or unfrozen Iraqi funds, which various governments have talked about adding to the U.N. account as a reward for Iraqi cooperation. These funds are almost

85. *Middle East Economic Digest*, 17 January 1992.

certain to be at least $300 million. The second source of additional resources would be oil sales beyond the $1.6 billion level. The Secretary-General, relief organizations, and various governments have lobbied vigorously to permit additional oil sales, and the Security Council looks set to continue and expand the oil sales program after the initial six-month period.

The extra $1 billion a year from the limited oil sales would have a substantial impact on Iraq. By the rule of thumb explained earlier, $1 billion is to the Iraqi economy about what $100 billion is for the U.S. economy. The $1 billion could provide Iraqis with a more varied and ample diet, which could get close to the pre-crisis 3,000 calories a day. However, the diet would almost certainly have less meat than pre-crisis. Furthermore, it is quite possible that the Iraqi government would use much of the additional money to rebuild its stocks enough to withstand a year of near-complete sanctions similar to those from August 1990 through February 1991. Spent mostly on basic food stuffs, $1 billion would refill Iraq's storage facilities and be just about the right amount to withstand another siege. The FAO estimate of $3 billion for "basic needs" includes resources for siege-withstanding stocks and for restoring Iraqi consumption of meats and other nonvital foods to the pre-crisis level.

With the extra $1 billion, water and electricity supplies could become steadier. Perhaps they would not reach the pre-crisis standard, which was as good or better than in the United States, but water and electricity would improve from the present level, which is about average for Tehran and Amman (that is, periodic cuts). On the other hand, the extra $1 billion would not make much difference for industry, because it would not provide enough to import the inputs and spare parts needed to run industry at prewar

levels (a restored industry would require quite an increase in electricity output, which would strain the electric system). As for medical care, Iraq would have ample medicines for public health and basic care on a standard above that for most of humanity, but it would not have the resources to return to the prewar practice of medicine approximating the scale in advanced industrial nations.

The additional resources under this scenario would probably not do much for groups more vulnerable than the base case. The Iraqi government has already provided for their basic sustenance, and the further improvements might not be so great. The difference would be appreciable for the Sunni heartland and for the middle class, because the regime would have the resources to extend to a broader group some of the privileges now reserved for a small elite, such as the right to shop in the April 28 Supermarkets. In July 1991, prices in those markets were .025 dinars for 30 eggs compared to 12 dinars on the free market, and .400 dinars for a can of corned beef that cost 3.5 dinars on the free market.[86]

The oil sales would ease the Iraqi government's budget deficit. They would provide the resources for importing basic goods that would be sold to the public, generating revenue for the government. The government would gain little, however, because a fair amount of the additional imports will be added to stocks (which the government corporations own) or sold at the derisory prices for rationed goods.

The sale of additional imports at low prices would limit inflation; consumers' costs would go down because they could buy more at controlled prices and would therefore

86. Françoise Chipaux, *Le Monde*, 30 July 1991.

need to rely less on the higher price free market. Government's additional imports would also reduce demand for hard currency for importing goods privately. With less demand for hard currency, the pressure on the exchange rate would ease.

The additional consumer goods would give the regime a carrot to combine with the stick it now uses to maintain control. Baghdad could offer more goods to Kurdish villages that cooperate, and it could provide selective access for mid-level cadres to the stores now reserved for the elite.

The U.N. plan incorporates provisions for monitoring the imports financed by the oil sales, but that will have little effect on the regime's gain from these sales. For one thing, the supervision of U.N. restrictions will be looser in practice than in theory. The nongovernmental organizations and international bureaucracies that will be tasked to implement the restrictions are bitterly opposed to them. The humanitarian organizations are in the business of distributing as much aid as they can, so it is in their interest to work with governments rather than to engage in the much harder task of building a parallel distribution system.

In addition, the Iraqi regime will probably indeed use the imports financed by oil for humanitarian goods distributed on a strictly egalitarian basis, but it will simply divert to other purposes the resources that it would have otherwise dedicated to such a distribution of humanitarian goods. Economists like to say that money is fungible: if more resources are made available, then Iraq can do more of what it wants to do, no matter what restrictions are placed on the additional funds.

Given the obvious advantages of the oil sales, why has Saddam not agreed to proceed? He appears to be motivated by two factors: (1) a conviction that he would gain less from the extra income than he does from his ability to

portray himself as standing firm in the face of the world, and (2) a calculation that sympathy for Iraq's situation is greater if he refuses the oil sales, such that he will eventually be permitted to sell oil on terms more favorable to his regime. He appears to be gambling that the United Nations will compromise on looser controls over the terms and the proceeds, so that he can divert some of the money through a myriad of mechanisms, such as underinvoicing the oil to understate his income, overinvoicing the humanitarian aid to overstate his expenses, or charging excessive amounts for transport and insurance, again to overstate his expenses. Indeed, some reports suggest that Saddam is so determined to make a strong case for relaxing the sanctions that "government agents have been threatening people with arrest if they accept foreign food assistance."[87] As Patrick Tyler, a *New York Times* reporter who spent 10 weeks in Iraq during 1991, summarized the views of many analysts,

> If [Saddam's] last weapon is the sacrifice of millions of Iraqis to the horrors of starvation and disease until the Western alliance is shocked into saying "Enough!" and relaxing sanctions, then Mr. Hussein will not hesitate to reach for this weapon.[88]

With the resources freed by using U.N.-approved oil sales for basic needs, Saddam could spend more on Iraq's military. The sums involved would be at most a few hundred million dollars, too little to purchase enough modern weaponry to change the region's strategic balance.

On the other hand, a few hundred million dollars would permit better maintenance and some repairs to the existing weapons and to military-industrial facilities. At the limit,

87. Christopher Walker, *Times* (London), 16 January 1992.

88. *New York Times*, 1 December 1991.

Saddam might even restart work on some nonconventional weapons that would be permitted under the U.N. restrictions. The Iraqis have shown themselves masters at developing technologies by-passed in the West. Iraq has surprised the world time and again with its programs in high tech and unexpected weaponry, such as its multistage rocket, big guns, and the calutrons (an older technology Iraq was discovered in 1991 to be producing domestically, allowing it to enrich uranium to the weapon-grade level). It would be inappropriate to assume that Saddam would be unable to develop nonconventional weapons because of the U.N. restrictions and because of financial restraints.

For instance, Iraq's best success (or rather, smallest failure) in the war was with its missiles: a big political impact for a small investment. The U.N. ceasefire resolution allows Iraq to keep its cruise missiles; only ballistic missiles with a range over 150 km are banned. Iraq continues to work on cruise missiles such as the Fao, a surface-skimming antiship cruise missile with a range of 200 km based on the Silkworm design. Or Iraq could develop high-tech conventional explosives that could do a lot of damage, for example, fuel-air explosives.

Were Iraqi oil sales to be resolved, world oil markets would be affected. The prospect in July 1993 that agreement would be reached between the U.N. and Iraq on limited oil sales was enough to drive down the spot price of oil by $2.00 a barrel.[89] Such a price drop could be avoided if other producers agreed to reduce output. Either way—lower price or lower output—the other oil producers would suffer. With Saudi Arabia probably taking much of the loss, Iraq might be able to use the threat of its oil sales as an

89. *Financial Times,* 21 July 1993.

instrument to affect the foreign policies of other oil producers, although it is unclear if such threats would have much effect.

6 Conclusion

The success of the sanctions cannot be judged for lack of clear criteria for judging them. The goals put forward for the sanctions have differed greatly—among the members of the U.S.-led coalition and across time. By some criteria, the sanctions were a great success. In 1990, they sent an immediate signal of world disapproval while forces were gathered for further action. Postwar, they kept Iraq from rearming and reactivating its nonconventional weapons programs. By other criteria, the sanctions were a dismal failure. They did not force Saddam to leave Kuwait forthwith, nor did they lead to his overthrow in 1991.

On a preliminary note, some observers in August 1990 thought the sanctions would backfire on the West because Iraqi and Kuwaiti oil was vital to the world economy. That view proved to be entirely wrong. The other oil producers increased output within a few months to make up for all the lost Iraqi and Kuwaiti exports. The reserve stocks coordinated through the International Energy Agency were not used. The price of oil roughly doubled for six months, until it became apparent that the fighting would not further disrupt oil markets. In the period from August 1991 through July 1993, oil prices were little higher than in August 1990, despite the continued absence of Iraqi oil exports.

Impact on Iraq of Sanctions

PREWAR. Sanctions had relatively little economic impact in the prewar period because of stocks, goods taken from

Kuwait, and offsetting Iraqi government policies. The prewar sanctions were as comprehensive as could have been expected: both income and imports were hit, and there was relatively little cheating by governments as distinct from the inevitable rampant smuggling by traders.

Partly because of their limited effect during the initial months, partly because of Iraqi stubbornness, and partly because the West was unclear and divided about the reasons for the sanctions, the sanctions did not impress Iraq's leadership or its population with Western resolve. There is absolutely no evidence that Saddam would have withdrawn from Kuwait had the sanctions been kept on for decades without use of force. Quite the contrary, it is now clear that Iraq had adequate stocks to survive in the short-run and that, over time, sanctions deteriorate quickly enough to allow Iraq to sustain a standard of living its people will tolerate without rebelling.

The sanctions may have played a role in mobilizing U.N. coalition support. They showed that the United Nations was searching for a nonviolent means to resolve the crisis. But some people saw the sanctions as a lasting alternative to the use of force, rather than as a signal of the world community's determination and an opportunity to negotiate a settlement if the Iraqi government were so inclined. The sanctions may have therefore strengthened the hand of opponents of the use of force by giving them a false alternative.

EFFECTS ON CIVILIANS. Iraqi living standards fell dramatically during the war, including the civil war following the ceasefire with the United Nations. What was in effect a famine during the war had little to do with the sanctions. It was the product of the disruption of transportation and electricity, not of import limits. The world public formed an image of Iraqi malnutrition during March

and April 1991, an image that has persisted long after the reality has changed.

As the civil war died down, living standards improved slowly. The easing of the sanctions, with adoption of Resolution 687, was a significant contributing factor. Detailed inspection reports by organizations unsympathetic to the continuation of the sanctions documented that electricity, water, waste water disposal, and medical care all improved steadily, if slowly. No evidence supports the catastrophic future painted by early postwar evaluations, especially that of the Secretary-General's representative, Mr. Ahtisaari.

The group that has borne the greatest burden from the sanctions has been the middle class. The poor, including many Shiites, have been relatively well protected by a food distribution system that works rather well. That middle class is unlikely to be able to effect a change in government, lacking the will and numbers to carry out a popular revolt nor are they in a position to organize a coup.

PROSPECTS FOR THE NEAR FUTURE. The sanctions against Iraq are eroding. Without a change in current trends, Iraq will continue to be able to import about $2 billion a year. There is also a distinct possibility that Saddam will reach agreement with the United Nations on sale of some Iraqi oil, which would increase Iraqi imports to at least $3 billion a year.

Two billion dollars in annual imports would be roughly one-fourth of Iraq's prewar civilian imports. It provides ample room to import food for a nutritionally adequate, though hardly ample, diet. It provides Iraqis with a standard of living above the average for the human race today, but below what citizens of advanced industrial nations would find acceptable.

Saddam can reasonably argue to his people that his

postwar policies have stabilized the economic situation while preserving Iraqi pride in resisting foreign pressure. Furthermore, he can point to the erosion of the sanctions as evidence that persistence in his obdurate stance has paid off and that there is no reason to change Iraqi policy. Under present trends, Iraq's economic situation will steadily improve without Saddam's having to bend his neck.

In short, it would be inappropriate to assume that sanctions will lead to Saddam Hussein's replacement in the near term. A coup could occur at any moment; changes of government in Iraq have long come by coup, and there are undoubtedly ambitious generals and dissatisfied politicians (some from Saddam's family and clan). Nevertheless, there is little reason to believe that sanctions would be a major factor contributing to such a coup.

Options to Sanctions in Policy Toward Iraq

One reason sanctions persist is that none of the alternatives are clearly superior on every count: each has distinct disadvantages compared to existing policy. Some of the principal steps that could be taken to supplant or supplement the current sanctions are:

□ *Target the sanctions on military-related items.* An embargo targeted on weapons would gain much support in the advanced industrial world, while a general embargo is already controversial and will become more so. Middle East nations upset with the current sanctions (for example, Egypt) would strongly support a policy that deprived Iraq of weapons and dual-use technology. Because targeted sanctions would have broader support than the current general sanctions, they would be easier to implement; more governments would be strict in enforcing them. Such targeted sanctions are thus likely to be more sustainable.

The targeted sanctions would be seen as a retreat by the United Nations from its tough stance: a reward to Iraq for its harassment of U.N. inspectors. On the other hand, the gradual erosion of the sanctions while Saddam remains in power is also a defeat for the United Nations

Targeted sanctions are unlikely, if for no other reason than the bureaucratic inertia of the U.N. system. Although enthusiasm for sanctions may be difficult to sustain, any move to modify or eliminate the sanctions regime would put strains on U.S. allies. Because sanctions were imposed by the U.N. Security Council, that would have to be the body to act on any changes. The Council may have difficulty approving changes in the sanctions regime, because any change would be subject to a veto by any of the five permanent members. The cumbersome nature of the Security Council often makes no action the path of least resistance; in this case, that means sustaining the sanctions as is, even if the sanctions are eroding in practice.

□ *Use military force.* It is hard to paint a scenario in which the limited use of military force results in Saddam's overthrow. It is also hard to see how allied forces could accomplish much from a renewed bombing campaign; only a few targets have been found that were not destroyed during the war. The basic problem for planning bombing raids is that the allies do not have good information on where the Iraqis have secreted their special weapons programs. Suggesting that the allies will recommence the full scale war against Saddam is not a credible threat. It is not realistic to expect that special operations forces could kill Saddam, no matter how broad their operating authority.

□ *Support opposition to Saddam.* Limited military protection for opposition groups would mean telling Saddam he

cannot attack the Kurdish-controlled zone. That would have the effect of practically partitioning Iraq, which could raise problems for regional stability.

Propaganda on the airwaves, financial support for opposition groups, public embrace of opposition groups, and statements of support for democracy in Iraq are all means to support the opposition. It is difficult to believe that these will be sufficient to bring about Saddam's downfall in the near term.

☐ *Increase financial pressure on Saddam.* Proposals have been heard for confiscating Iraq's frozen bank deposits as a way of financing reparations and the on-going U.N. ceasefire operations. However, these frozen deposits are the only hope of Iraq's creditors for recovering any part of what they are owed.

The allies could also put pressure on Saddam by exporting Iraqi oil. The Iraqi oil fields just across the border from Kuwait are capable of producing 1.5-2.0 million barrels a day; indeed, the largest field overlaps the border. What poetic justice if Iraq, which complained that Kuwait was stealing oil from the common field, was forced to cede all production from that field to pay for reparations and U.N. ceasefire operations. Restarting production from these fields and redirecting the oil to Kuwaiti ports would pose no technical problem and could be done in a few months at most. Saddam could be counted on to object, but it seems unlikely that he would militarily attack allied personnel working in such oil fields. To be prudent, it might be necessary to increase U.S. presence in the area—and charge the expenses against the income from the oil sales.

Sanctions as a Policy Instrument

Each case in which sanctions are used is unique, and so it would be inappropriate to assume that the experience with Iraq would necessarily be duplicated elsewhere. Nevertheless, the Iraqi case does offer some "rules of thumb" about the use of sanctions:

☐ Sanctions are unlikely to have quick effects on a determined foe, because stockpiles can be drawn down and consumption cut.

☐ Sanctions can be a rallying point for forming a coalition while military forces are moved into place.

☐ The longer comprehensive sanctions are in place, the more fragile becomes the international consensus needed to block access to frozen funds and export markets.

☐ International opinion will not tolerate sanctions that block imports vital to sustaining life. Pressure will build to relax the sanctions enough to let people in the target country retain something close to their pre-crisis standard of living.

☐ After some time, an economy subject to sanctions may hit bottom and then stabilize if not improve slowly. When the improvement begins, the target government has some plausibility in arguing to its people that since the worst is past, staying the course is worthwhile and sanctions will eventually erode away.

☐ It is not easy to identify how sanctions will lead to the overthrow of dictatorial governments.

The Iraqi experience has been humbling for believers in the use of sanctions to accomplish U.S. foreign policy aims, if those sanctions covered enough of a target country's trade, if they were enforced with sufficient vigor, and if they were applied long enough. In fact, sanctions have made only a limited contribution toward U.S. goals vis-à-vis Saddam. And the sanctions have come at the price of heavy suffering inflicted on the Iraqi people, those least responsible for Iraq's aggressive policies bearing the greatest burden.[90] Sanctions would therefore appear to be a policy of dubious morality and limited efficacy. In the face of aggression, sanctions may look like a wonderful compromise response that avoids the two extremes of doing nothing and responding with military force. Unfortunately, in practice sanctions can combine the worst of both alternatives. Like doing nothing, sanctions do not reverse the aggression, and like military force, sanctions cause heavy suffering to civilians.

90. On the morality of the Iraqi sanctions, see Patrick Clawson, "Sanctions as Punishment, Enforcement, and Prelude to Further Action," *Ethics and International Affairs*, vol. 7, 1993.