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**An Attack on Iraq:
The Military, Political, and Economic
Consequences**

Scenario Briefing

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I. THE MILITARY AND STRATEGIC FACTORS SHAPING AN ANALYSIS OF THE ECONOMIC CONSEQUENCES OF AN ATTACK ON IRAQ

There are major uncertainties about the military outcomes and political ramifications of an attack on Iraq.

Really three sequential sets of scenarios:

- **The prelude to war and the different ways in which war can occur.**
- **The actual process of conflict.**
- **The post-conflict occupation of Iraq and the way in which an independent Iraqi regime emerges.**

No one can now predict the nature of the events in each case, the timing of such events, or the seriousness of their impacts on the market.

- **Events unfolding by day.**

Nominal economic analysis is certainly possible and useful. Prophecy is impossible.

May be more important to prepare for the most important variables than for scenarios and the most probable events.

We will know what will happen when it happens.

II. THE UNCERTAIN PRELUDE TO WAR

Core of the US and British military build-up will be complete no later than mid-March 2003.

Bush Administration claims UN resolution 1441 meets its three key criteria for future action. It finds Iraq in “material breach,” defines Iraq’s obligations in unambiguous terms, and threatens “serious consequences.” It also demands that UN inspectors be given, “immediate, unimpeded, and unrestricted access.”

Has created following timetable:

- **November 15: Iraq accepts the terms of the new resolution and promise to comply;**
- **November 18: The Chief UN inspectors, Hans Blix (UNMOVIC) and Mohammed El Baradei (IAEA) arrive in Baghdad with some 24 inspectors and set up communications, offices, transport, and laboratories;**
- **November 25: A advance team of UN inspectors arrives to prepare for work and begin spot inspections;**
- **December 7: Iraq provides the Security Council with a “full, accurate, and complete” declaration of all of its programs to develop and deliver CBRN weapons, as well as of all civilian materials and facilities that can be use for military applications;**
- **December 21: Weapons inspectors restart their work. About 80-100 inspectors and support staff are expected to by in Iraq; and**
- **January 27, 2003: Head UNMOVIC and IAEA inspectors give first report to the Security Council. (January 27th more practical)**
- **January 28: President Bush’s State of the Union address says Iraq’s conduct is unacceptable.**
- **February 1: British sources issue “6 week deadline.”**
- **February 5: Secretary Powell outlines US case that Iraq continues to proliferate.**
- **February 14: UNMOVIC and IAEA issue new reports.**

Possible that Iraq could create a crisis that would effectively allow the US to go to war at any point before US and UK are fully prepared for war.

III. WHAT HAPPENS IF UNMOVIC AND THE IAEA “SUCCEED”

The choice is not war or peace—it is war vs. deferral, containment, or disarmament.

If UNMOVIC/IAEA should continue its operations, months or years of uncertainty could follow. The key variables would be:

- **How will the US deal with a regime change – covert or open – under these conditions?**
- **Even a successful UN disarmament effort could simply push Iraq towards biological dual use and covert delivery.**
- **The current UN resolutions leave open-ended sanctions requiring monitoring, and prohibiting conventional arms imports.**
- **All current oil for food and future investment issues unresolved; so are all issues relating to a major Iraqi debt, reparations obligations, and contingency contracts.**
- **The Kurdish issue could explode independently, and the status of the No Fly/drive Zones and Northern and Southern Watch remains uncertain.**
- **The mid and long-term Iranian and Southern Gulf response is unpredictable and so is Iran’s effort in proliferation.**
- **The US would face increasing problems in terms of keeping forces ready and prepositioned, and US and British actions will become increasingly known and politically controversial in the Gulf and Turkey. How long will allies stay on board? Can the US fall back on missiles and air?**

IV. WILD CARDS AND POSSIBLE CAUSES OF WAR THAT ARE INDEPENDENT OF THE US/BRITISH DESIRED TIMING

War now seems most likely to occur in March or April. At the same time, a war may come earlier than the US anticipates and/or be dictated by factors beyond its control:

- A “golden BB” that shot down a US or UK aircraft could trigger a major military exchange and a different kind of crisis.
- Any evidence of an Iraqi covert attack or terrorist link could trigger war for different reasons.
- If Iraq felt a war was inevitable, some experts feel it would use is CB weapons to preempt and attack US forces, a port, a US Gulf ally, or Israel.
- Detection of any Iraqi effort to deploy forces to create a capability to launch or use weapons of mass destruction would create a narrow window of opportunity that could force the US to preempt without warning.
- Any major aggressive troop or air movement towards the Kurds or neighbor.
- Any major violation of the “No Fly Zones” or “No Drive Zone.”

V. IF WAR COMES: THE KEY IRAQI POLITICAL VARIABLES

- **The most important single wild card is the level of popular support Saddam Hussein will or will not have.**
- **The second most important wild card is the ability of Saddam's loyal forces to carry out a "redoubt strategy" and conduct effective urban warfare.**
- **The most dangerous – but not the most probable -- Iraqi "wild card" scenario would be the use of effective biological weapons like Smallpox or an advanced Anthrax agent – or a stolen nuclear device -- against allied forces and basing facilities in the Gulf, a key Gulf population center or energy facility, or against Israel to seek to expand the conflict and turn the Arab and Islamic world against the US.**
- **Other important, but less critical "wild cards" include the effectiveness of Iraq land-based air defenses, the behavior of the regular army in supporting Saddam, and Saddam's possible use of scorched earth tactics like burning his oil fields.**
- **Factionalism and warlordism are risks during the fighting and during the peace.**

VI. IRAQ WARFIGHTING AND WEAPONS OF MASS DESTRUCTION

- **Command, control, and logistical arrangements in place to deploy both biological and chemical weapons within 45 minutes of decision to do so.**
- **12-25 Scuds (possibly up to 80). Type and number of TELs unknown.**
- **One-way strike fighter missions, use of drones.**
- **Crude unitary warheads and bombs through 1991. Current advances unknown.**
- **No evidence ready with nuclear or radiological weapons.**
- **Never accounted for 400 biological bombs. Some 50 CB Scud warheads, 2,160 kilograms of growth media (equals 26,000 liters of Anthrax), 1,200 liters of botulinum toxin, and 5,500 liters of clostridium perfringens.**
- **Status of smallpox and dry-storable, easily disseminated, Anthrax micropowders unknown.**
- **Mustard, sarin, cyclosarin, and VX agents. British estimate 100-500 metric tons.**
- **Renovate chlorine and phenal production.**
- **Cannot account for 550 artillery shells, 15,000 artillery rockets. (122MM=15-20 Kilometers)**
- **Cannot account for 6,500 bombs, 1,000 tons of VX related agents.**

VII. OTHER SERIOUS “WILD CARDS” INCLUDE THE ACTIONS OF IRAQ’S NEIGHBORS

- **Iran seems likely to be deterred from any adventures.**
 - **But much depends on fate of Iraq’s Shi’ites.**
 - **Fear “Iran will be next.”**
- **Turkey seems likely to go along with the US.**
 - **But will not give the US all the access it wants.**
 - **The Kurdish issue is potentially explosive.**
- **The Arab states will probably go along to get along.**
 - **Bahrain, Kuwait, Oman, and Qatar are critical for basing.**
 - **Saudi will provide oil and some basing.**
 - **Egypt, Jordan, and Israel will allow transit.**
- **Israel will act in self-defense but show restraint.**
 - **If, however, there are significant Israeli casualties, all bets are off.**

VIII. IF WAR COMES: IRAQI TACTICAL MILITARY ISSUES

- **Unlike Afghanistan, Iraq is a real military threat. Some Iraqi Republican Guard Brigades have more operational heavy weapons than the entire Taliban and Al Qaida forces in Afghanistan.**
- **The Iraqi army still can deploy some 375,000 men, organized into seven corps, with two Republican Guards corps and five regular army corps.**
- **Iraq also has extensive internal security and paramilitary forces.**
- **The Iraqi Air force has around 30,000 men. It still has some 316 combat aircraft, although only about 50-60% are servicable.**
- **The heavy surface-to-air missile forces of the Air Defense Command are still organized into one of the most dense defensive networks in the world.**
- **The 2,000 man Iraqi Navy has never been an effective force and was devastated during the Gulf War. Only mines and land-based anti-ship missiles are a threat.**

IX. “INTANGIBLES” AND UNCERTAINTIES REGARDING IRAQI TACTICAL WARFIGHTING CAPABILITY INEVITABLY AFFECT ANY ASSESSMENT OF WAR FIGHTING SCENARIOS

- Impact by combat element of more than 10 years without open access to world arms market,
- Quality of training, and leadership experience by unit and force element.
- Reliance on a rigid logistic system,
- Progress in reducing the past rigidities and over-centralization of the command system, and its failure to allow for independence of action.
- Lack of training for night warfare, lack of night vision aids.
- Ability to make effective use of water barriers and earth barriers;
- Lack of real world desert warfare training, effective mobile air defense.
- Problems in beyond visual range combat capability:
- Since 1991, improvements in artillery tactics and methods to acquire long-range targeting capabilities and manage and switch fires.
- Ability to effectively deploy and concentrate air defense assets for tactical purposes, versus exploit largely fixed SA-2/ SA-3, and SA-6 system.
- Real-world ability to execute urban warfare and military operations in built up areas;
- Real world value of hard targets in terms of deep shelters: Advantage or trap.
- Level of improvement in air operations and in ability to conduct effective air-to-air and air-to-ground combat using dispersed forces capable of independent operations.
- Ability to operate attack and transport helicopters.
- Efficiency of dispersal techniques and human shields, plus decoys and deception, in limiting the efficacy of US intelligence and strategic reconnaissance (ISR), targeting, and air strike capabilities.
- Planning and real-world capability to execute asymmetric warfare, covert warfare, and use terrorist proxies.
- Effectiveness of the security and paramilitary forces in the face of any serious popular opposition.
- Size and effectiveness of Iraqi opposition forces, if any.
- Lack of experience in using Scuds and chemical weapons for 12-14 years. Lack of any operational experience with biological weapons.
- Ties to Al Qaida and terrorists; Ability to use smallpox and carry out covert CBRN attacks.

X. IF WAR COMES: HOW THE US AND BRITAIN WILL FIGHT

If the US and Britain execute their present war plans, the most likely attack is a US and British land-air offensive that begins with an intensive “effects-based” air campaign launched from bases in Turkey, Bahrain, Kuwait, Qatar, and Oman. These will be supported from bombers flying from Diego Garcia, the UK, and US, by four carrier task forces, and by extensive cruise missile launch forces.

Key targets will include leadership centers, facilities and forces capable of using weapons of mass destruction, key hardened and underground command centers, major communication systems, military POL facilities, the major security forces headquarters and facilities, and the core strength of the Special Republican Guards, Republican Guards, and key regular Iraqi divisions believed to be loyal to the regime. The suppression of surface-based air defenses will have high priority. So will the suppression of Iraqi air and helicopter forces, but this is seen as much less challenging than suppressing Iraq’s surface to air missiles.

The US and Britain will have at least three heavy division equivalents ready to move through Kuwait plus extensive light forces and attack and assault helicopter forces. Special forces, and perhaps light divisions with attack and transport helicopters, will enter Iraq early in the air campaign to help suppress Iraqi missile launches and weapons of mass destruction, and seize air bases in Iraq. There is a significant probability that Jordan will provide some facilities for such operations and that the US will quietly overfly Israel and Jordan.

Some reports also indicate that the US and Britain intend to deploy the US 101st Airborne Division and similar British forces into Northern Iraq through Germany and Turkey. These forces would secure the region, acquire air bases, take advantage of the Kurds and any Iraqi defections, and prevent any Turkish action in the area. US Marine and British forces would also seek to rapidly seize air bases in the south in the desert areas on the periphery of Basra, both to ease the basing problem and deter Iranian adventures.

The US and Britain will rely heavily on air power to use “effects-based” attacks to paralyze Iraqi land forces, and paralyze or destroy the regime’s ability to control the country and armed forces. It will seek to isolate ground forces outside the regime’s centers of power and push them to defect. It will rely on speed and shock and will bypass Iraqi resistance in areas of secondary importance. Rather than divert ground forces to securing the flanks and rear areas of its main advancing thrusts, it will use airpower. Civil-military units, Special Forces, and rangers will provide an immediate security, occupation, and humanitarian relief effort as US forces advance.

The US will actively seek to avoid Israel involvement by promising additional aid, deploying Patriots to Israel and Jordan, improving radar and satellite links, and by suppressing Iraqi Scud-launch capabilities. It will be prepared for escalation to CB warfare. It will also be prepared for major bridging operations, and urban warfare in key areas.

A major force protection and Homeland defense effort will take place in the US. This could involve a large call up of the National Guard.

XI. US AND BRITISH WAR PLANS RAISE THE FOLLOWING ISSUES REGARDING THE US STRATEGIC POSITION AND THE LIMITS TO US AND BRITISH WARFIGHTING CAPABILITIES

- **Access to Basing.**
- **Need to Fight by a Different Standard. (Iraqi and world battle for perceptions)**
- **Quality of humanitarian and civil military effort in Iraq from D-Day on.**
- **Management of US, European, Arab, and world media. Ability to conduct political and media warfare.**
- **Real World Efficiency of Precision Strike Capability and “Effects-based” versus destructive strikes.**
- **Capabilities for Urban Warfare and Combat in Built-Up Areas.**
- **Capabilities for Bridging and Rapid Maneuver.**
- **Capabilities for Summer and High Temperature Warfare.**
- **Capabilities for Chemical and Biological Warfare.**
- **Force Protection and Homeland Defense Capabilities.**

XII. WAR FIGHTING SCENARIOS

- **No one can predict the exact nature, time, and intensity of the fighting. In fact, it is impossible to predict whether there will be fighting, particularly in the context of present political, military, and economic conditions, (What is the energy market and global economy like if the war begins in August 2004?)**
- **Scenarios must be based on somewhat arbitrary sets of independent variables that are logically grouped to illustrate the possible outcomes of the war.**
- **Put differently, there is a nearly 100% probability that actual combat will not neatly conform to any scenario developed before the war, and that some variables postulated in one scenario will actually prove to be most important in another.**
- **The convenient corollary of these uncertainties, however, is that many expert arguments over how to structure given scenarios are largely irrelevant.**
- **One should not have to be an expert in complexity theory to understand that arguing over the probability of any given mix of low probability events actually occurring in the postulated way is largely a waste of time.**
- **In broad terms, it is still possible to talk about three major sets of outcomes and scenarios that help bound the analysis of economic effects provided that the US and Britain are able to choose the moment and way in which they go to war.**

XIII. BEST CASE: IRAQ ONLY/QUICK VICTORY

The best and most probable case (40-60%) is the one in which the US and Britain win a quick and decisive victory in no more than 4-6 weeks.

- **Shock, awe and effects are key, not killing mechanisms or destruction.**
- **Regime largely collapses.**
- **Minor urban fighting localized to a few areas and regime loyalists like Saddam's feddayeen and Special Republican Guards**
- **Limited civilian deaths and little, if any, critical collateral damage or loss of key infrastructure,**
- **No meaningful Iraqi use of WMD against U.S. troops, Israel, or region.**
- **No escalation of 2nd Intifada.**
- **No major problems with any ally, or complications from Israel, or Iran.**
- **UN passive, or supports US and British operations.**
- **No reduction in oil production/exports by OPEC, and Saudi Arabia both increases production and gives some forms of covert military support.**
- **No major popular challenges in allied countries to the US presence or friendly regional governments.**
- **No major force protection attacks or major sabotage or covert attacks in friendly countries.**
- **No major acts of terrorism or covert attacks in the US, UK, or allied countries.**
- **Ends with US in control; no major factional divisions or warlords. No defections or rival power centers challenging US/UK ability to have Iraqi's work out some kind of effective republic or federal arrangements.**
- **No long-lead or significant damage to oil producing capacity in Iraq, or elsewhere.**

XIV. BEST CASE: IMPLICATIONS FOR ECONOMIC FORECASTING

- **IT DOES NOT TAKE GREAT VISION TO SAY THAT THIS LIST IS TOO GOOD TO BE TRUE.**
- **THERE WILL BE SOME INCIDENTS, MOMENTS WHEN THE WAR APPEARS TO GO WRONG, FRICTION WITH OUR ALLIES, ETC.**
- **AT THE SAME TIME, THE FACT THAT REAL-WORLD PROBLEMS ARE CERTAIN TO EMERGE IN SOME AREAS DOES NOT MEANING THAT THIS CASE WILL NOT OCCUR IN GENERAL TERMS OR THAT THE WAR SHOULD BE APPROACHED AS IF MAJOR PROBLEMS WOULD OCCUR FOR THE OIL INDUSTRY OR GLOBAL ECONOMY.**
- **PERHAPS THE KEY CAUTION IS THAT TO THE EXTENT THE MARKET OPERATES ON THE BASIS OF “FOOLS RUSH IN” OR “PANIC WHENEVER YOU DON’T UNDERSTAND WHAT IS HAPPENING.”**
- **SINCE SOME INVESTORS AND ENERGY EXECUTIVES ALWAYS PANIC IN A PERCEIVED CRISIS, AND THERE WILL BE INCIDENTS, THE QUESTION IS HOW MUCH DO STUPIDITY AND OVER-REACTION MATTER?**

XV. INTERMEDIATE CASE: LIGHT DAMAGE TO OIL FACILITIES/OIL MARKET BECOMES POLITICALLY UNSTABLE

Moderate probability (30-40%), and could extend fighting to 6-12 weeks, although time may not be the key variable.

- **There is unexpectedly protracted military resistance in Iraq. Regime control better than think, key elements of people more loyal.**
- **Low-level civil tensions and clashes occur in Iraq after the main fighting ends in given areas. Some terrorist attacks on U.S. forces, allies, or interests.**
- **A major covert effort to attack targets in the US and UK is discovered but either prevented or damage and loss of life is limited.**
- **Shock, awe, and “effects-based” strikes are still important in this case, but the active US and British use of killing mechanisms and actual destruction are far more important than in the previous case.**
- **Serious urban warfare in some areas, particularly Sunni core. Localized to hostile Iraqi military and security forces—not popular defense.**
- **Moderate civilian deaths, but serious collateral damage to Iraq infrastructure, and some aspects of Iraq’s oil and petroleum facilities. Iraq is much more successful in exploiting the images of Iraq suffering. The Arab and much of the European media are filled with negative images: Collateral damage, civilian deaths, Iraqi “Jenins.”**
- **Iraq attacks oil facilities in region, with limited damage but serious political and economic effects.**
- **Iraq makes limited tactical or largely ineffective strategic use of WMD – effects more in delaying troops, panic, tensions with Israel than war fighting.**
- **Escalation of the Second Intifada, or serious parallel images of Palestinian suffering**
- **Iraq attacks Israel, U.S. troops but not with WMD effective enough to trigger a major response or have highly lethal effects.**
- **There is limited Israeli intervention in war; rising political unrest in region. However, Israeli activity is limited to retaliation at the conventional level and focused on attacking the Iraqi regime and military.**
- **Minor Turkish and/or Iranian adventures in northern Iraq or the Shi’ite areas in the south.**
- **Passive Saudi cooperation, and oil production is increased, but slowly and there are political complications.**

XVI. INTERMEDIATE CASE: IMPLICATIONS FOR ECONOMIC FORECASTING

- **AT LEAST SOME OF THESE CASES ARE LIKELY TO EMERGE IN SOME FORM, WITH A TIMING AND INTENSITY THAT NO ONE CAN PREDICT. IT IS VERY UNLIKELY, HOWEVER, THAT ALL WILL EVER EMERGE IN ANY FORM.**
- **NO SCENARIO CAN INCLUDE ALL OF THE VARIABLES THAT MIGHT HAVE A MAJOR IMPACT. THERE ARE MORE “WILD CARDS” THAN CAN EVER BE BUNDLED INTO ONE SCENARIO.**
- **THE PROBLEM LIES IN GIVING SOME MIX OF SUCH EVENTS A MEANINGFUL PROBABILITY AND BUNDLING THEM INTO GIVEN SETS OF VARIABLES. THERE IS NO WAY TO DO THIS IN PREDICTIVE TERMS, BUT IT IS POSSIBLE TO DO SO IN WAYS THAT ILLUSTRATE A POSSIBLE CASE.**
- **FROM THE VIEWPOINT OF RISK ANALYSIS, THE FOCUS SHOULD BE ON THE VARIABLES, AND NOT ON THE BUNDLE OR PACKAGE. THE QUESTION IS WHICH “GO WRONG” WOULD REALLY MATTER AND HOW WRONG REALLY MATTERS. IN THIS SENSE, EFFECTS-BASED ANALYSIS IS MORE IMPORTANT THAN THE SCENARIO.**
 - **CASE ALSO ILLUSTRATES THE FACT THAT THERE WILL BE SERIOUS MOMENTS DURING THE FIGHTING WHEN MARKETS CANNOT ANTICIPATE THE OUTCOME. UNLIKE THE FALSE PANICS IN THE BEST CASE SCENARIO, THE VARIABLES IN THIS CASE MAY ACTUALLY HAVE A SUBSTANTIVE IMPACT ON ENERGY AVAILABILITY. THEY WOULD SHARPLY RAISE THE COST OF A WAR, AND THEY COULD INVOLVE VERY SERIOUS INTERNAL PROBLEMS IN THE US AND UK.**
- **THE US IS MORE LIKELY TO ESCALATE ITS WAY OUT OF ITS MILITARY PROBLEMS THAN TO ACCEPT A LONGER WAR. EVEN IN THE CASE OF URBAN WARFARE, BRIEF PERIODS OF INTENSE ESCALATION TEND TO BE MORE DECISIVE WITH LESS CUMULATIVE CASUALTIES AND COLLATERAL DAMAGE THAN SLOWER AND LESS INTENSE COMBAT THAT MAY DO LESS DAMAGE ON ANY GIVEN DAY.**

XVII. THE “WORST CASE”: ENOUGH GOES WRONG TO HAVE A MAJOR GLOBAL IMPACT – PART ONE

Probability of 5-10%; length in months – 90-180 days

Wide range of possible variables:

- **Protracted military resistance takes place in Iraq. There is intense urban warfare in more than one part of the country. There are significant casualties, collateral damage, major US reinforcements required. Costs escalate sharply.**
- **Iraq uses chemical and/or biological weapons extensively in urban warfare.**
- **There are major US and/or British casualties, and serious political problems develop with anti-war movements.**
- **The Iraqi people become actively hostile to the US and Britain at a broad popular level. Arab and global media clearly communicate this. The US loses support in the UN.**
- **Britain, Turkey, or one Gulf ally drops out/turns off.**
- **The Second Intifada blows up as the US and Britain are fighting. There is a coup attempt or successful coup attempt in Jordan.**
- **Saudi Arabia ceases to cooperate in oil production, and firmly closes its air space.**
- **Iraq attacks oil facilities in region with effective WMD weapons. There is significant damage and/or contamination of key export and/or production facilities. This leads to a broad political and economic crisis, as well as with the target country.**
- **Iraq “burns” or salinizes its oil fields (1500 wellheads: 500 in North, 1,000 in South).**
- **A similar Iraqi attack is successfully directed at Arab/Turkish bases, cities, or desalination facilities.**
- **Iraq attacks U.S. troops with WMD in attacks effective enough to trigger a major response or have highly lethal effects.**
- **Iraq proves able and willing to conduct sustained CB attacks on US forces operating in an urban environment.**
- **Iraq attacks Israel with WMD in attacks effective enough to trigger a major response or have highly lethal effects.**
- **The Iraqi attacks on Israel provoke serious Israel intervention in war, and at least the tacit Israel threat to use weapons of mass destruction, creating massive political unrest in region.**

XVIII. THE “WORST CASE”: ENOUGH GOES WRONG TO HAVE A MAJOR GLOBAL IMPACT – PART TWO

- **Iraq destroys key dams: Lak al-Milh (southwest of Baghdad) with 21 cubic meters would flood southern Iraq; on Tigris near Mosul (3,500 meters long, 126 meters deep) and al Hadilthah on Euphrates to flood Baghdad and south.**
- **Serious terrorist attacks take place on U.S. and British interests in the region. Possible use of smallpox or Anthrax.**
- **Iraq—or its proxies or sympathizers—is successful in carrying out a World Trade Center level covert attack(s) in the US and/or Britain.**
- **Significant civil conflicts develop in Iraq during the military conflict. The US is unable to control these conflicts, or intervene without appearing to attack Iraqis claiming their own independence.**
- **The US civil-military and humanitarian effort proves to be inefficient or inadequate. The US is seen as the cause of massive Iraqi suffering.**
- **Israel escalates Second Intifada. Enforces Palestinian separatism.**
- **Israel massively retaliates against Iraq. Uses nuclear weapons.**
- **Iran intervenes in Iraq to defend Shi’ite interests.**
- **Kurds seize Kirkuk, northern oil fields. Declare de facto autonomy or state.**
- **Turkey intervenes to prevent Kurdish separatism and does not retreat and/or Iran actively intervenes in the south.**
- **The war has serious lingering effects in terms of the need to repair oil facilities, collateral damage and infrastructure.**
- **There is an enduring human tragedy in terms of medical complications.**
- **The US and UK not only face a hostile Iraqi population, but years of broader Arab hostility. The result actively discredits the US in many other countries, its ability to attract allies, and its international freedom of action.**

XIX. THE “WORST CASE”: ENOUGH GOES WRONG TO HAVE A MAJOR GLOBAL IMPACT – IMPLICATIONS FOR ECONOMIC FORECASTING

- **THERE IS VIRTUALLY NO CHANCE THAT MOST OF THESE EVENTS WILL HAPPEN. THIS LIST DEALS LARGELY WITH INDIVIDUAL VARIABLES, AND THE CHANCES OF EVERYTHING GOING THIS WRONG ARE MINISCULE.**
- **THE PROBLEM AGAIN IS IN IDENTIFYING WHICH VARIABLES SHOULD REALLY BE CONSIDERED IN A CASE THAT IS DESIGNED TO ILLUSTRATE THE MORE SERIOUS PROBLEMS THAT CAN OCCUR.**
- **THERE ARE NO MAGIC ANSWERS. THINGS CAN GO TERRIBLY WRONG AND EVEN A FEW CASES PROBABLY HAVE A PROBABILITY OF AROUND 10%.**
- **IN GENERAL, HOWEVER, THINGS GO TERRIBLY WRONG BECAUSE PEOPLE ACTING AT THE TIME IGNORED WHAT TURNED OUT TO BE A KEY VARIABLE OR FUNDAMENTALLY MISUNDERSTOOD IT.**
 - **HISTORY IS FILLED WITH UNPREDICTED WORST CASES THAT DID HAPPEN. THE REAL ISSUE FOR RISK ANALYSIS IS WHICH POSSIBILITIES ARE MOST IMPORTANT AND HOW THE WORLD WOULD REACT TO AN EXTENDED, FAR MORE INTENSE WAR, WITH AT LEAST SOME OF THE CHARACTERISTICS OF A POLITICAL DEFEAT.**
- **IT SHOULD BE NOTED IN THIS REGARD THAT TERMS LIKE “CRISIS AVOIDANCE” AND “CRISIS MANAGEMENT” TEND TO BE MATHEMATICAL OXYMORONS FROM THE STANDPOINT OF PROBABILITY THEORY.**

XX. KEY WARTIME UNCERTAINTIES AND EFFECTS

- **LOYALTY OF IRAQI ARMED FORCES/PEOPLE AND WILLINGNESS TO FIGHT.**
- **LEVEL OF URBAN WARFARE.**
- **EFFECTIVENESS OF SHOCK, AWE, “EFFECTS-BASED” STRIKES.**
- **IRAQI USE OF WMD**
- **ISRAELI RESPONSE**
- **RESPONSE OF KEY EXPORTERS AND OPEC**
- **REACTION IN FINANCIAL MARKETS AND BY ENERGY CONSUMERS**
- **POLITICAL REACTION OF ARAB COUNTRIES**
- **REACTION OF OTHER KEY NEIGHBORS**
- **TERRORISM RESPONSE**

XXI. KEY ISSUES AFFECTING CONFLICT TERMINATION AND POST WAR ECONOMIC EFFECTS

- **WARS DO NOT END ALL WARS OR MAKE THE WORLD SAFE FOR DEMOCRACY. IN GENERAL, THEY AT BEST DEFEAT INTERNAL FORCES IN WAYS THAT ALLOW NATIONS TO FOLLOW A BETTER PATH IN SHAPING THEIR OWN DESTINY.**
- **HISTORY SHOWS THAT EVEN THE MOST DRAMATIC MILITARY VICTORY MERELY DEFEATS THE ENEMY, IT DOES NOT SHAPE OR WIN THE PEACE. WITH FEW EXCEPTIONS, THE UNCERTAINTIES AND PROBLEMS OF PEACE ALSO LAST LONGER THAN THOSE OF WAR. MOREOVER, NATIONS AND SOCIETIES HAVE TREMENDOUS RESILIENCE, AND REASSERT THEIR CHARACTER OVER TIME.**
- **IN THE CASE OF IRAQ, THE US AND BRITAIN ARE DEALING WITH A HIGHLY NATIONALISTIC SOCIETY WITH LITTLE TOLERANCE OF ANY VESTIGES OF COLONIALISM, BUT WITH DEEP DIVISIONS, MANY REASONS FOR INTERNAL FEUDS AND REVENGES, AND TENSIONS WITH ITS NEIGHBORS THAT WILL NOT DISAPPEAR WITH SADDAM HUSSEIN.**
- **IT IS A REALITY THAT UNLESS THE US AND BRITAIN APPROACH ANY VICTORY AS PARTNERS IN ALLOWING THE IRAQIS TO SHAPE THEIR DESTINY, THEY ARE LIKELY TO QUICKLY BE SEEN AS ENEMIES. EVEN THE BEST INTENDED EFFORT CAN MAKE ENEMIES OUT OF SOME FACTIONS, AND THE ARAB WORLD AND THE REST OF THE WORLD WILL SET VERY DEMANDING STANDARDS.**
- **IN SHORT, THE WAR ISN'T OVER WHEN SADDAM IS GONE AND THE MAJOR FIGHTING STOPS. THERE IS A VERY HIGH PROBABILITY THAT THE WORLD FACES YEARS OF TENSION AND UNCERTAINTY AS THE INTERNAL FUTURE OF IRAQ IS DECIDED, AND AS IT ESTABLISHES NEW RELATIONS WITH THE WEST AND THE NATIONS AROUND IT.**
- **PUT DIFFERENTLY, THE HOPE FOR QUICK POST-WAR STABILITY IS PROBABLY FUTILE. SO IS THE IDEA WINNING IN IRAQ WILL BRING BROADER STABILITY OR "DEMOCRACY" TO THE GULF OR MIDDLE EAST.**

XXII. THE FOLLOWING KEY VARIABLES WILL HELP DETERMINE THE OUTCOME OF THE PEACE

- **Quality of US/British-international planning for peace making and nation building**
 - **Effectiveness of peacekeeping and intervention to bring Iraqi factions together.**
 - **Humanitarian and economic aid.**
 - **Ability to limit interference by neighbors, minimize regional competition for influence in Iraq.**
- **Ability to restructure Iraqi economy away from command to modern economy.**
- **De-Saddamization of the state system, including national oil company.**
- **Legal status of Iraq as new or inheritor state and impact on debt, reparations, and existing contingency and ongoing contracts.**
- **How the Iraqi oil industry is reshaped, repaired, renovated, and expanded.**
- **Role of Iraq in OPEC**
- **Status of damage to non-Iraqi facilities in the region.**
- **Arab and Islamic perceptions of war, conflict termination, and nation building effort – pro or con.**
- **Broader Political ramifications in the region.**
- **Post conflict terrorism response if any.**

XXIII. ECONOMICS MAY BE MORE URGENT THAN POLITICS:

- History shows cannot trust any aspect of international aid pledges and operations.
- Dependent on oil for food and “black” sector to operate. Heavily dependent on food imports since late 1970s. Some estimate a 70% dependence on food imports once the economy recovers.
- Medical and educational crisis.
- Many artifacts of a command economy that has been centered around a dictatorship for three decades. Some solid economic institutions but no real market system in terms of distribution, banking, uniform commercial code, insurance, interest.
- Industrial development is weak and has a poor history.
- Steady decline in relative wealth since 1982, not 1991; 70% of cut in GDP per capita before Gulf War.
- Driven by massive population growth: 9.1 million in 1970, 22.7 million in 2000 and 36.9 million in 2020. 40% under 15. Unemployment in excess of 25%.
- Critical issue of successor state: \$140B in debt. \$100B plus in reparations. Oil contingency deals for 12 years with Russia, AGIP/TOTAL/Fina.

XXIV. OIL FACTOR

- No longer has oil wealth in relative terms. A little over \$700 per capita today versus over \$6,000 in 1980. See much worse in constant dollars. Around \$23,820 for Saudi in 1980 versus \$2,563 in 2001.
- Oil revenue and development issue is critical, as is sharing revenue, but NIOC has its thugs and killers. Saybolt indicates waterflooding and overpumping; 24 of 73 fields working, and 20`12-40% of wells at risk.
- Severe limits to near-term “oil wealth”: Production capacity is 2.8 MMBD, possibly 2.5 MMBD.
- About 3% of world markets. Equal to Nigeria.
- Oil revenues peaked at \$57.8 billion in 2000 dollars in 1980. Were \$15 billion in 2001, and \$12.3 billion in 2002. Would still only be \$15.7 billion in 2003 with no war.
- Limited knowledge of problems, investment priorities, costs, opportunities. Iraqi study in 1996 claimed cost of \$35 billion to get to 3.5 MMBD. Saybolt has issued warnings, but only two short visits.
- Other sources estimate:
 - \$7 billion and minimum of 3 years to 3.5 MMBD
 - \$20 billion plus for 6 MMBD by 2010
- Key issues in development:
 - True size of reserves: 100 billion barrels in unproved fields.
 - Future of Northern fields; Control of Kirkuk.
 - Future of Southern fields; Sharing with Kuwait.
 - Development of East Control fields; Majnoon in Shi’ite areas.
 - Development of West: “Sunni fields.”
- Downstream development plans?
- Service contracts? Buyback contracts? Joint ownership?

XXV. IRAQ'S FINANCIAL BURDEN

- **Debt: \$127 billion**
 - **Interest: \$47 billion**
 - **Gulf states: \$30 billion**
 - **Kuwait: \$17 billion**
 - **Russia: \$12 billion**
 - **Bulgaria: \$1 billion**
 - **Turkey: \$800 million**
 - **Poland: \$500 million**
 - **Jordan: \$295 million**
 - **Morocco: \$32 million**
 - **Hungary: \$17 million**
 - **France, Egypt, Others: ?**
- **Pending Contracts: \$57.2 billion**
 - **Russia: \$52 billion (90%)**
 - **Netherlands: \$3.6 billion (6%)**
 - **Egypt: \$740 million**
 - **China: \$80 million**
- **Reparations (Less Iran-Iraq War): \$320 billion claimed**
 - **\$148 billion settled**
 - **\$172 billion unsettled**
 - **Status of interest on payments unsettled.**

XXVI. DISARMAMENT CHALLENGE

- **How can conventional capabilities be retained? What force levels, arms modernization, military cost?**
- **How does one disarm a nation with practical experience in CBRN weapons? Intellectual capital? Dual-use facilities?**
- **Mid and long-term impact of Israeli, Syrian, Iranian, Pakistani, and Indian proliferation.**
- **How can the US provide security and prevent factional forces or warlords?**
 - Kurdish disarmament?**
 - Creation of multi-ethnic policy?**
 - De-Ba'athification**
- **Role of non-US/UK forces in security and peacekeeping role?**
- **Transition to Iraqi rule of law, enforcement of human rights, and police and security activity.**