A prospective war with Iraq raises many questions—about the members of the coalition that would fight Iraq, the timing and length of the war, the cost of the war, and the cost of the peace—that are on the minds of not only policy makers but also economists, financial planners, and money managers. While policy-makers and the media focus largely on the potential military and political aspects of a war, the potential economic aspects remain equally difficult to assess.

As demonstrated by the 1990s, securing the peace can bring lasting economic and financial dividends. Likewise, failing to secure the peace can produce profound negative after-shocks.

CENTRA Technology provided two different scenarios for a war in Iraq to the Pacific Pension Institute (PPI) 2003 Winter Roundtable Meeting in Del Mar, California, in order to give PPI members the chance to work through various economic impacts that could result from the war. In each case, our method was to break the problem into its basic parts: real-world dynamics will reflect the interplay of groups with competing agendas—in this case, governments with different policy options and competing private sector actors making financial and direct investment commitments. A simulation offers the advantage of integrating both security and economic dynamics—something that is rarely done by individual analysts.

Key Findings

There were several commonalities among the groups as they discussed a potential war with Iraq, regardless of the duration of the war. Among these were:

- An expectation that the US and other governments would use further fiscal and monetary policies to stimulate national economies. The more serious the outlook in the security realm, moreover, the greater the expected fiscal and monetary stimulus in the economic realm—an effort to compensate for private investor risk aversion. And thus one key difference between a short war and a messy war is likely to be the cumulative affects of 2003-2004 economic stimulus well into the next decade. Governments in Europe and Asia would expect the United States to take the lead and set the tone.
• An expectation that, while the United States would be inclined to pursue fiscal stimulus, it would be a radically different kind of stimulus than that envisioned in the current White House tax cut package. Indeed, the current proposed package featuring an acceleration of cuts scheduled over the next decade and elimination of taxes on dividends would probably be deemed poorly suited to offset downside surprises in the Iraq War context, and thus would be a political casualty of a messy war.

• The belief that Asia would likely be a stable place for investment, barring any disruptive activities by North Korea. The more adverse the war scenario, the greater the likelihood that Asia rather than the United States would emerge as a “flight to quality” safe haven. As a byproduct, Asian governments would have an opportunity to add to already abundant central bank reserves. In terms of direct investment, China emerged as a key beneficiary from global financial uncertainty, given its distance from the theater of conflict and its established appeal.

• A belief that fund managers should tend toward more conservative investments, focusing on maintaining sufficient cash flow and on preserving capital, while bracing for increased volatility. Conservative fixed income securities would rally, while emerging market debt would slump. In the United States, liquidity preference would send stocks of money with zero maturity far beyond the current $6.2 trillion. Nevertheless, any scenario in the security realm will produce buying opportunities for investors astute enough to recognize its key features. The first ten days of the conflict would be critical in determining the expectations of investors and would mark a turning point—positive or negative—for financial markets.

• An increased appetite for diversification, as a manifestation of defensive approaches by some investors and opportunism by others—those with long-term objectives and a belief the war would ultimately come out in favor of Western security interests.

• Expectations among a subset of investors that the war would not have a “clean” outcome and would probably not be a repeat of the 1990-91 Persian Gulf War. An expectation that there would be a marked retrenchment in US consumer spending (and subsequently in other markets as well) if the war took an unexpected turn would also weigh heavily on markets until the news convinced investors that the surprises would break on the upside.

• A concern over the stability of oil supplies and concern that a lack of stability in raw materials markets could lead to global economic problems. A short and successful war would not test markets greatly, but a longer and messier war would divide oil producers between Arab producers, who would find it increasingly difficult to accommodate Western economic interests amid pressure from their domestic constituencies, and producers elsewhere, who would be focused on the need to stabilize the global economy.

• Beyond this, a recognition that the global economy of 2002-2003 is a more US-centric global economy than that which prevailed in the decade leading up to the 1990-91 Gulf War—a time of booming prosperity in Japan and Asia—and that the ability of the United States to weather the storm is now far more critical to the fortunes of other nations. Investors in other parts of the globe will have little choice but to focus on what happens on Wall Street.
Games, Simulation, and Strategy

The simulation took the form of an exercise in applied game theory. Roundtable participants broke out into the following ten teams, which they played in each scenario:

- US National Security Establishment
- US Economic Policy Establishment
- European Union
- Asian and Latin American Governments
- Global Oil Producers & Inventory Managers
- Global Consumers & Households
- Global Multinationals & Direct Investors
- North American Savers, Investors & Asset Managers
- Asian Savers, Investors & Asset Managers
- European Savers, Investors & Asset Managers

For each scenario, we asked participants to think about how the real-world groups they were playing would approach the following questions:

- What does the situation mean for the economic and financial environment?
- How will the United States likely adjust its approach to the war and to terrorism generally?
- How will the United States and governments in Asia, Latin America, and Europe adjust economic policy?
- What do you want to achieve over the next year?
- What do you expect that other players will do over the next year?
- How will you protect your interests?

For European national security and economic policy makers, a desire to position Europe to capitalize on postwar opportunities without burning remaining bridges to the United States. For governments in Asia, a desire for a low profile and a hope that Asia would emerge as an appealing target for investors fleeing risk and uncertainty elsewhere.

For US national security and economic policy makers, an increasing appreciation of the need to define and quickly play through the war “end game” in the military sphere while “keeping the powder dry” for fiscal and monetary stimulus in the event the end game proved more complex than anticipated.

The intense focus of actors in the economic and financial arena on “gaming out” the policy initiatives of governments around the world, and the focus of policymakers on gaming out the reactions of actors in the economic and financial realms as they weighed their options. These efforts to anticipate events would unfold unevenly and record mixed success, but they would move markets and asset prices before, during, and after the conflict itself.
Scenario One: Gulf War Redux?

During the 1990-91 Persian Gulf War, risk aversion and uncertainty prevailed in the run up to the Allied attack on Saddam Hussein’s forces in Kuwait but abated quickly once the actual fighting was underway and it became clear that the war would not last long.

- Equity markets slumped sharply in the six months leading up to the start of the air war in mid-January 1991, and the US economy contracted nearly four percent during the last two quarters of 1990. The US dollar, already slumping on economic developments, had accelerated its decline when Iraq invaded Kuwait and continued to weaken through January 1991.

- But a year after the onset of the air war, the Standard and Poors 500 stood nearly one-third higher than at the beginning of the conflict. The “war premium” on oil prices also quickly evaporated. The US dollar rallied six percent during 1991 on post-war optimism, before giving way to the realization that the recovery of the US economy, while clearly underway, would be less vigorous than hoped for.

The simulation invited participants to consider these possibilities as candidate outcomes in the approaching war with Iraq. Will we be surprised on the upside, as flight-to-safety trades made since November 2002 unwind? Or should we brace for a sharp departure from the Gulf War scenario?

In the first scenario, the particulars are posited as follows. The war begins on Thursday, March 13, 2003. The United States has 200,000 troops in the theater, and the British are the only allied nation in the coalition. Kuwait, Qatar, Saudi Arabia, and Turkey have given permission to the United States to use bases as staging points. The United States does not have a UN Security Council (UNSC) mandate, and while the UNSC has found Iraq to be in “material breach” of its obligation to disarm its weapons of mass destruction (WMD) programs, weapons inspectors have found only minor violations. US quiet diplomacy has prevented any UNSC resolutions to disapprove the war.

The scenario posits that the US economy remains sluggish; the President’s stimulus package is predicted to add $80 billion to a federal deficit that is already predicted to reach $275 billion. A short war is predicted to cost roughly $45 billion, and the United States will have to assume the entire burden, unlike the 1990-91 war. The stimulus package and war will combine to push the deficit to $400 billion. While the United States wants Gulf area governments to fund an Iraqi Reconstruction Fund, to be administered by the United Nations, international financial support so far is weak. The economic situation outside of the United States remains sluggish, and stock indices have moved sideways for the last eight weeks. Gold prices have risen to $372 per ounce, and oil is trading at $37 per barrel.

Reactions

Teams in the simulation illustrated the varying concerns and objectives of their real-world counterparts.

The European Union assured that the major European countries remained out of the actual fighting of the war. Their goal was to avoid any perceived “complicity” in the war, especially in the eyes of the Middle East governments and citizenry, and avoid the anticipated terrorist
attacks that could be targeted at the countries invading Iraq. While opposed to the war, at the same time they did not want to permanently damage relations with the United States, so they were willing to provide some logistical help to the war effort, such as over-flight rights or use of bases within their borders. This team saw the war as an opportunity to improve and expand relations with Arab countries, with a clear goal of positioning EU companies for the postwar reconstruction. They saw the war as a great opportunity to increase their influence at the expense of the United States, and they were determined to seize it.

**European Savers, Investors & Asset Managers** held similar views. They were generally conservative and sought to diversify their holdings overseas. They saw the Iraq war primarily as offering new opportunities in the Middle East. Their plan was to move in gradually. In this scenario, they did not think that the direct economic impact would be large, with the exception of the expected oil spike once the war started. Their main focus was the potential impact of the war on US consumers and the US economy. With a short, successful war, there might be a chance to capitalize on uncertainty, and this group felt they should be slightly overweight in US securities and cash. They predicted there would be anxiety in Asia because of fears over oil prices, and they would be looking out for overreactions in markets.

**Asian and Latin American Governments** saw their objectives as first, economic stability, and second, national security. China was seen as an important player; Japan as a US ally would be expected to be involved in the war, but Latin American countries would be relatively immune, especially in a short war scenario. This group assumed that a lot would be known about the course of the conflict in the first ten days of the war. They expressed great faith in the superiority of US airpower and believed that a land invasion might not be necessary. The wild card, however, was North Korea; might Kim Jong-Il be tempted to cause mischief while the United States was otherwise occupied by Iraq? This group predicted that financial markets would go down initially, but they believed many private investors would see this as a buying opportunity.

**Asian Savers, Investors & Asset Managers** described themselves as very conservative and pessimistic, even under the first scenario. They would act as conservatively as possible and focus on capital preservation. They saw North Korea as the primary potential risk, because the government might try to take advantage of the United States being focused on Iraq.

The group said it had a large position in Asia to begin with, with half of its assets in Asia. Of the remaining half, two-thirds were in the United States and one-third was in Europe. After the war began, they shifted money from the United States to Europe and into Asia. They would hedge dollars and buy Euros, going long on oil, implementing a tiered approach. This group said it was planning ahead, outlining secondary and tertiary plans that would be ready to be implemented at a moment’s notice, depending on how the international security situation developed.

**Global Oil Producers & Inventory Managers** said their outlook was relatively straightforward; global oil producers and inventory managers would act largely as a homogeneous group, with the key objectives being to accommodate the United States, secure stability in the markets, and maximize leverage. The oil companies would use hedges while they foresaw a possible modest impact on prices. They predicted a global “sullen acquiescence” with the United States in the war.

**Global Multinationals & Direct Investors** listed as their major concerns oil supplies and the safety of their plants; they were particularly worried that terrorism might hurt production, and they were planning how they would handle disruptions to their supply chains. They simply did not believe that the war would be as quick as it had been in 1990-91, because the goal of
regime change in Iraq is more difficult to achieve than the liberation of Kuwait. They anticipated that consumer buying in the United States would slump, and as this buying had been driving the world economy during the last year, there would be a negative ripple effect in other economies. But if the war were short, they anticipated a fairly quick recovery of demand and were planning their production schedules accordingly.

**Global Consumers and Households**, mostly in the United States, felt that the situation in most developed countries would be the same: under a short war scenario, they felt that consumer confidence would still be down, spending would be down, and consumers would choose to stay home rather than going out on the town. They predicted a run on essentials—defined as things like “bottled water and spirits”—and said they would focus on protecting their wealth rather than taking risks with investments. Tourism and business travel would be depressed. This group felt that these behavioral changes were already taking place even though the war had not yet begun. They saw more liquidation in the markets, more cautious spending, less consumption of durable goods, and more holding of cash. They felt the impact on the labor market would be neutral in this scenario.

**North American Savers, Investors & Asset Managers** argued that Scenario One was “too rosy,” so they factored in more pessimism. Their main objectives, as pension or mutual fund managers, were preservation of capital and the ability to maintain adequate cash flow so that they could pay out clients who might sell. At the same time, they saw the need for an educational campaign to explain to their constituents what they were doing and why; this was seen as very important. They expected that there would be much more volatility and instability in the next six months, and they were worried about the “speed-up” effect of that volatility.

If their asset allocations were aggressive, managers would need to consider whether or not that was still a good strategy. If they were comfortable with their allocations, perhaps they would “move up in the cash side.” They would look more to Asian currencies and the Euro, and would favor consumer basics. They were much less comfortable with small cap or growth stocks. They predicted that the US federal budget would grow and that the United States would move to actively try on easing Israeli-Palestinian tensions as a way to dampen increasing polarization in the Middle East. They assessed that the Federal Reserve will ease monetary policy—lower interest rates and increase the money supply. The big tax cut proposed by the Bush Administration would be out of the question, but they anticipated more modest tax cuts.

The **US National Security Establishment** saw its main objectives as a quick and clean military success; regime change in Iraq; security of Iraq’s oil fields; disarming Iraq and eliminating the threat of Iraqi weapons of mass destruction; preservation of US homeland security; minimizing casualties, both US and Iraqi civilian; and maintaining US popular support for the war, which would likely grow harder if the war dragged on. They were also concerned about shoring up support in other Arab and Muslim governments, as well as courting international public opinion, especially in the Middle East. They felt that finding and publicizing any Iraqi “smoking guns” where weapons violations were concerned would be particularly helpful in getting that support.

The group said it would seek an international coalition for the postwar occupation. They argued they would have to offer financial support to countries outside of Iraq, namely Turkey, Jordan, and Egypt. This money would not just be for the governments but would also go to contractors in those countries that could help rebuild Iraq. They expected it would be necessary to seek financial assistance from other countries, especially for Iraqi reconstruction. They assumed there would be more al Qaeda strikes, and they were particularly concerned about the safety of US Embassies around the world. They also assumed that other nations would build
up oil reserves.

The US Economic Policy Establishment found nothing surprising in this scenario and did not feel that they needed to take any specific actions, since they have already begun preparing for the impact of a war, for example by easing monetary policy in the late fall of 2002. They felt it was more important to prepare for the need to take actions later. Their goals were to maintain market stability and attract capital to finance the war effort. They would prepare to mobilize the US strategic oil supply should it be necessary. They saw as their key constituents domestic investors and consumers, along with public opinion.

Scenario Two: A War Consumed By Unintended Consequences

In the simulation, the second scenario sought to make concrete the fears of participants, who retained concerns about adverse military and political developments, and the prospect of a longer and messier war, as well as about possible attacks on the US homeland stemming from the war effort.

In the second scenario the details were posited as follows. As of August 1, 2003, the war continues, with the United States having achieved its military objectives in all but several Iraqi cities, including the capital. Desiring to avoid the political fallout that would accompany US military moves to finish the war by decimating Baghdad and Tikrit, however, Washington has moved very deliberately during the last several months.

The war has spurred terrorist planning against the US homeland. Triggering the scenario, terrorists have again struck America with a high profile operation, targeting US commercial aircraft, hitting six with surface-to-air missiles in a coordinated attack at seven different airports. Two crash, killing a total of 561 people; four planes are able to land without fatalities, but commercial and general aviation have been suspended by the US Government. Osama bin Laden is seen on Arab television claiming responsibility; al Qaeda links to the Iraqi regime remain hard to document and ambiguous, but bin Laden’s hand in the strikes seems unmistakable.

The scenario posits that Iraq has a provisional government, which includes returned exiles, tribes, former regular Army officers, northern Kurds, and token Shia, but it is weak and divided. Saddam Hussein has vanished from the scene and no longer controls Iraqi politics, but his exact whereabouts are unknown. Former Republican Guard forces of uncertain political loyalties are still in control of most eastern cities, and while they promise support to the provisional government, they clearly have their own agenda. Kurdish political parties are discontented with the provisional government, and their more radical elements continue to call for at least an independent Kurdish military. Because Saddam flooded key areas in the south and used chemical weapons along allied invasion routes during March and April, there are massive environmental, health, and refugee problems. The United States controls most oil fields, but regime attempts to sabotage fields in the North produced an enormous environmental disaster. Pictures of the destruction and refugees are being shown across the region, hurting the US image.

Prior to the terrorist attacks, oil had been trading at $41 per barrel; financial markets had been volatile, rising on encouraging war news and falling when new developments suggested the war would be long-lived. Wall Street is closed following the terrorist attacks and will remain closed almost a week. The new projected costs of the war are several times the original $45 billion, with still more combat and peacekeeping to come in Iraq. There is concern that US tax
revenues will fall if the economy declines, raising further Treasury financing requirements. In sum, the military victory seems hollow in the absence of a lasting political solution, and the conflict is growing in cost and complexity. How the Bush Administration will craft its response to the recent terrorist attacks remains unclear.

The critical question in the simulation is now how an adverse war outcome afflicted with unintended consequences differs from the rosier “Gulf War replay” of Scenario One. Financial markets had priced adverse outcomes into asset prices before the hostilities, but had done so unevenly, and now the downside surprise is concrete.

Reactions

Discouraged but realistic, the European Union hoped the war would be just long enough for them to gain political advantage but not long enough for too much damage to be done in the region. They wanted the war to remain contained to Iraq and not expand in the region. They would certainly be willing to sell supplies to the US war effort and again they would be willing to help to the United States with logistics, but there would be few European troops on the ground even if the war continued for another six months. The European Union would concentrate on providing aid and relief efforts that would come after the war; again, the EU hoped that these efforts would help build their relationships with the Arab states, while still hoping not to permanently alienate the United States. They were positioning Europe for the end game, hoping to help the United States get out of the mess it had made in Iraq and preparing its own role in the post-Saddam Persian Gulf.

European Savers, Investors & Asset Managers were not surprised by market volatility but were surprised markets had still rallied on encouraging war news. Looking ahead, they predicted that Asia would be relatively less volatile; Latin America would likely not deteriorate further. The real question was whether or not there would be a large sell-off in the US market once the market reopened. While they were worried about overreactions in the markets, they were also on the lookout for opportunities and would use their extra cash for those new long-term opportunities. Basically, they saw themselves as “bottom-feeders.”

In a longer war, the priorities of Asian & Latin American Governments would be reversed from the short-war scenario: national security now comes first, and economic stability is second. This group assumed that there would be additional terrorist attacks on the United States and other countries. Under Scenario Two, they predicted a prolonged recession in the United States and thought that this would curtail Asian exports to the United States, cause oil prices to rise, and force tourism down globally, in part due to people feeling unsafe and in part due to the increased security measures that would result.

There would not be much that these governments could do, except that Asians would again turn to fiscal policy to ensure economic stability. There would be general support for the United States, especially in the fight against terrorism. The group felt that security concerns would trump civil liberties in the United States, and there would be martial law in most of the Middle East. The UN would be needed to sharply step up its role in the Middle East; the group assessed that French and Russians in particular would garner increased influence.

Asian Savers, Investors, & Asset Managers took some satisfaction from the fact that they made money in some areas. Despite that, they worried that a longer war would have a strongly negative impact on the US market, and they were generally pessimistic. They did see continued opportunities in Asia, especially in China, assuming that North Korea did not cause any disruptions. They saw the following as likely areas of opportunity: materials, pharmaceuticals, and electronics.
The second scenario brought significant changes to Global Oil Producers & Inventory Managers, which had felt homogeneous in Scenario One. Now the group fragmented between the Arab and non-Arab producers, the former of whom would have to deal with local unrest and protests over the war in Iraq. The participants worried that continued fighting in Baghdad and other cities could produce a large number of civilian casualties that would be shown on Arab television and would certainly increase the difficulties for the Arab producers to continue cooperation with the United States. This group was watching US policy establishment closely, trying to assess how the war would be concluded. They anticipated a moderately negative impact on oil demand in consumer countries as a longer war hurt those economies. They were confident they could replace Iraqi oil production initially, assuming there was no further field disruption. At the war continued, they would be watching to see what Iran would do.

Global Multinationals & Direct Investors focused first on the potential of increased terrorism as a result of a longer war and how that might harm their overseas production. They also discussed the impact of an increasingly negative view of the United States in world public opinion; large protests against the war could make operations difficult in certain markets. They were increasingly concerned about oil supplies and prices, as well as rising deficits in the United States as a result of the cost of the war, and they worried that this might lead to higher interest rates; they were concerned that this would combine to produce a recession. Therefore, they were not adding to their production capabilities, and they were making sure they had enough liquidity to move globally as needed. They wondered if the US market would be the beneficiary of the “flight to safety” or if it would be Asia.

Under a longer war scenario, Global Consumers & Households saw a stronger continuation of the trends they outlined for Scenario One, leading to a more pronounced negative impact on labor as depressed consumption demand worked its way through the production chain to jobs. The participants predicted a psychological and emotional impact on consumers, which would worsen as the public watched increasing numbers of US soldiers and reservists go off to war, for longer periods than expected, and saw television images of casualties. They were increasingly concerned about terrorism, arguing that terrorists might attack water supplies or other high-profile targets. Frustrated, this group said it would “whine a lot and hope others would listen.”

The group’s main goal would be security, and not just in airports. They would be looking for further economic stimulus to justify spending. They would certainly want the Federal Reserve to ease credit even further, perhaps in concert with European and Asian countries, and they wanted accelerated tax relief. They would focus on having more cash and would not be taking advantage of buying opportunities in financial markets. They predicted a “flight to quality” of uncertain destination. They did not see their actions in this second case as been materially different from their actions in the first, but rather felt that Scenario Two was “Scenario One on steroids.”

If the war were to last six months or longer, North American Savers, Investors & Asset Managers would not make significantly different decisions from Scenario One decisions; they would make “refinements around the edges.” They would focus even more on cash flow. They were troubled that Baghdad and other cities were still not under US control, but did not find this too startling. They were relieved that most of the oil fields were under control, that Iraq’s neighbors were largely neutral, and that local protests were largely controlled. They felt that asset allocations that were too aggressive would again need to be reassessed and would need to move more aggressively to fixed income assets. They would take a more aggressive view of asset markets in Asian countries. They definitely would not want small cap stocks, but

The giant falters

Dollar against:

Source: Thomson Financial Datastream

What will be the currency of safe-haven assets in the event the war bogs down and goes badly? Participants were inclined to move against the dollar, but some saw opportunities in US equities.
would focus on suppliers of basic goods.

National security was a key concern, along with how the war would be prosecuted and when and how it would conclude. They questioned whether or not there would be house-to-house fighting in Iraqi cities, if the United States would have to completely occupy Iraq, and how television images of the fighting might affect public opinion in other countries. Any prospective tax cut would have to be larger, as there would be a much increased need for fiscal expenditures, not just for the military efforts but for the post-war reconstruction in Iraq and dealing with other postwar problems such as refugees. While relieved the situation was not even worse than it was, they were worried about the security of the oil supplies in a longer war scenario.

The **US National Security Establishment** said its main goal now would be to end the war as quickly as possible, paving the way for establishing a federal type government in Iraq, one that would specifically include Kurds. Acknowledging political pressures, they would focus even more on homeland security and reinvigorate civil defense efforts. They would send more troops into Baghdad and other cities, where needed, recognizing that this could be difficult and that there could be public opinion repercussions, but they argued it would be more important to secure these remaining cities and bring the actual fighting to a close. They realized that refugees would be an important problem to deal with, and they would seek international efforts to help with the problem. They recognized that there would be important environmental, public health, and public relations problems they would need to focus on and stressed that they would need international assistance. They would seek not only financial assistance but also public statements of support for nation building and refugee assistance from governments around the globe and especially from those in the Middle East.

As the war continued, and especially after the terrorist attack in the second scenario, the **US Economic Policy Establishment** saw a need for strong presidential leadership to build confidence in the US economy and stimulate weakening capital investment. There would be higher US deficits, but participants argued that deficits under war are to be expected and are “financeable.” There would be a need for stronger international coordination of economic policy. In sum, the team saw serious challenges but judged it had the policy tools to handle them, in part because it had preserved its more drastic options under Scenario One. The participants would initiate a special tax holiday on new foreign investment in the United States and a one-year depreciation tax credit on domestic investment. They would lower the Federal funds rate to 75 basis points. They would move to freeze the assets of “suspicious persons”.

Internationally, these participants said the US should place the burden of massive reconstruction funding for Iraq on the World Bank, the International Monetary Fund, and the United Nations. Any earnings from Iraqi oil fields should go back to Iraq; the United States would push Kuwait to cancel its reparation demands on Iraq, as well. The participants would unilaterally draw from the considerable aid the United States gives to Israel and Egypt and use that money to capitalize small businesses and entrepreneurs in Iraq.


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