# Impact Defense Core—HSS 12

This is a backfile core of impact defense cards to facilitate better debates. It is not recommended that students rely on these cards during the season without re-cutting them—they are culled from a variety of places, some more reliable than others.

## \*\*\* Economy

### Economy Is Resilient

#### The U.S. and global economy are resilient

Behravesh, 6 (Nariman, most accurate economist tracked by USA Today and chief global economist and executive vice president for Global Insight, Newsweek, “The Great Shock Absorber; Good macroeconomic policies and improved microeconomic flexibility have strengthened the global economy's 'immune system.'” 10-15-2006, www.newsweek.com/id/47483) // JMP

The U.S. and global economies were able to withstand three body blows in 2005--one of the worst tsunamis on record (which struck at the very end of 2004), one of the worst hurricanes on record and the highest energy prices after Hurricane Katrina--without missing a beat. This resilience was especially remarkable in the case of the United States, which since 2000 has been able to shrug off the biggest stock-market drop since the 1930s, a major terrorist attack, corporate scandals and war. Does this mean that recessions are a relic of the past? No, but recent events do suggest that the global economy's "immune system" is now strong enough to absorb shocks that 25 years ago would probably have triggered a downturn. In fact, over the past two decades, recessions have not disappeared, but have become considerably milder in many parts of the world. What explains this enhanced recession resistance? The answer: a combination of good macroeconomic policies and improved microeconomic flexibility. Since the mid-1980s, central banks worldwide have had great success in taming inflation. This has meant that long-term interest rates are at levels not seen in more than 40 years. A low-inflation and low-interest-rate environment is especially conducive to sustained, robust growth. Moreover, central bankers have avoided some of the policy mistakes of the earlier oil shocks (in the mid-1970s and early 1980s), during which they typically did too much too late, and exacerbated the ensuing recessions. Even more important, in recent years the Fed has been particularly adept at crisis management, aggressively cutting interest rates in response to stock-market crashes, terrorist attacks and weakness in the economy. The benign inflationary picture has also benefited from increasing competitive pressures, both worldwide (thanks to globalization and the rise of Asia as a manufacturing juggernaut) and domestically (thanks to technology and deregulation). Since the late 1970s, the United States, the United Kingdom and a handful of other countries have been especially aggressive in deregulating their financial and industrial sectors. This has greatly increased the flexibility of their economies and reduced their vulnerability to inflationary shocks. Looking ahead, what all this means is that a global or U.S. recession will likely be avoided in 2006, and probably in 2007 as well. Whether the current expansion will be able to break the record set in the 1990s for longevity will depend on the ability of central banks to keep the inflation dragon at bay and to avoid policy mistakes. The prospects look good. Inflation is likely to remain a low-level threat for some time, and Ben Bernanke, the incoming chairman of the Federal Reserve Board, spent much of his academic career studying the past mistakes of the Fed and has vowed not to repeat them. At the same time, no single shock will likely be big enough to derail the expansion. What if oil prices rise to $80 or $90 a barrel? Most estimates suggest that growth would be cut by about 1 percent--not good, but no recession. What if U.S. house prices fall by 5 percent in 2006 (an extreme assumption, given that house prices haven't fallen nationally in any given year during the past four decades)? Economic growth would slow by about 0.5 percent to 1 percent. What about another terrorist attack? Here the scenarios can be pretty scary, but an attack on the order of 9/11 or the Madrid or London bombings would probably have an even smaller impact on overall GDP growth. So what would it take to trigger a recession in the U.S. or world economies over the next couple of years? Two or more big shocks occurring more or less simultaneously. Global Insight recently ran a scenario showing that a world recession could happen if the following combination of events were to take place: oil prices above $100 per barrel, inflation and interest rates running 3 percentage points above current levels and a 10 percent drop in home prices across many industrial nations (e.g., the United States, the United Kingdom, Spain, Australia, Sweden). The likely timing of such a recession would be 2007. However, given the extremeness of these assumptions, the probability of such a scenario is less than 20 percent. The good news is that the chances of a recession occurring in the next couple of years are low. The not-so-good news is that assertions about recessions being relegated to history's trash heap are still premature.

#### Despite volatility, US econ is still resilient.

Joshua Zumbrun and Romy Varghese, May 9, 2012. “Fed’s Plosser Says US Economy Proving Resilient to Shocks.” Business Week. Zumbrun and Varghese are Business Week correspondents. http://www.businessweek.com/news/2012-05-09/fed-s-plosser-says-u-dot-s-dot-economy-proving-resilient-to-shocks

Philadelphia Federal Reserve Bank President Charles Plosser said the U.S. economy has proven “remarkably resilient” to shocks that can damage growth, including surging oil prices and natural disasters.¶ “The economy has now grown for 11 consecutive quarters,” Plosser said today according to remarks prepared for a speech at the Philadelphia Fed. “Growth is not robust. But growth in the past year has continued despite significant risks and external and internal headwinds.”¶ Plosser, who did not discuss his economic outlook or the future for monetary policy, cited shocks to the economy last year, including the tsunami in Japan that disrupted global supply chains, Europe’s credit crisis that has damaged the continent’s banking system and political unrest in the Middle East and North Africa.¶ “The U.S. economy has a history of being remarkably resilient,” said Plosser, who doesn’t have a vote on policy this year. “These shocks held GDP growth to less than 1 percent in the first half of 2011, and many analysts were concerned that the economy was heading toward a double dip. Yet, the economy proved resilient and growth picked up in the second half of the year.”¶ Plosser spoke at a conference at the Philadelphia Fed titled, “Reinventing Older Communities: Building Resilient Cities.”

#### Global economy resilient

Fareed Zakaria was named editor of Newsweek International in October 2000, overseeing all Newsweek editions abroad, December 12, 2009, “The Secrets of Stability,” http://www.newsweek.com/2009/12/11/the-secrets-of-stability.html

This revival did not happen because markets managed to stabilize themselves on their own. Rather, governments, having learned the lessons of the Great Depression, were determined not to repeat the same mistakes once this crisis hit. By massively expanding state support for the economy—through central banks and national treasuries—they buffered the worst of the damage. (Whether they made new mistakes in the process remains to be seen.) The extensive social safety nets that have been established across the industrialized world also cushioned the pain felt by many. Times are still tough, but things are nowhere near as bad as in the 1930s, when governments played a tiny role in national economies. It's true that the massive state interventions of the past year may be fueling some new bubbles: the cheap cash and government guarantees provided to banks, companies, and consumers have fueled some irrational exuberance in stock and bond markets. Yet these rallies also demonstrate the return of confidence, and confidence is a very powerful economic force. When John Maynard Keynes described his own prescriptions for economic growth, he believed government action could provide only a temporary fix until the real motor of the economy started cranking again—the animal spirits of investors, consumers, and companies seeking risk and profit. Beyond all this, though, I believe there's a fundamental reason why we have not faced global collapse in the last year. It is the same reason that we weathered the stock-market crash of 1987, the recession of 1992, the Asian crisis of 1997, the Russian default of 1998, and the tech-bubble collapse of 2000. The current global economic system is inherently more resilient than we think. The world today is characterized by three major forces for stability, each reinforcing the other and each historical in nature. The first is the spread of great-power peace. Since the end of the Cold War, the world's major powers have not competed with each other in geomilitary terms. There have been some political tensions, but measured by historical standards the globe today is stunningly free of friction between the mightiest nations. This lack of conflict is extremely rare in history. You would have to go back at least 175 years, if not 400, to find any prolonged period like the one we are living in. The number of people who have died as a result of wars, civil conflicts, and terrorism over the last 30 years has declined sharply (despite what you might think on the basis of overhyped fears about terrorism). And no wonder—three decades ago, the Soviet Union was still funding militias, governments, and guerrillas in dozens of countries around the world. And the United States was backing the other side in every one of those places. That clash of superpower proxies caused enormous bloodshed and instability: recall that 3 million people died in Indochina alone during the 1970s. Nothing like that is happening today.

#### Factory growth proves that US econ is resilient and will avoid double dip.

Fox News May 1, 2012 “US Factory Growth Shows Economy More Resilient.” Published May 1, 2012 by the Associated Press. No author listed, Fox News. http://www.foxnews.com/us/2012/05/01/us-manufacturing-grows-at-fastest-pace-since-june/

US Factory Growth Shows Economy More Resilient: WASHINGTON – U.S. manufacturing grew last month at the fastest pace in 10 months, suggesting that the economy is healthier than recent data had indicated.¶ New orders, production and a measure of hiring all rose. The April survey from the Institute for Supply Management was a hopeful sign ahead of Friday's monthly jobs report and helped the Dow Jones industrial average end the day at its highest level in more than four years.¶ The trade group of purchasing managers said Tuesday that its index of manufacturing activity reached 54.8 in April, the highest level since June. Readings above 50 indicate expansion.¶ The sharp increase surprised analysts, who had predicted a decline after several regional reports showed manufacturing growth weakened last month. The gain led investors to shift money out of bonds and into stocks. The Dow Jones industrial added 66 points to 13,279, its best close since Dec. 28, 2007. Broader indexes also surged.¶ The ISM manufacturing index is closely watched in part because it's the first major economic report for each month. April's big gain followed a series of weaker reports in recent weeks that showed hiring slowed, applications for unemployment benefits rose and factory output dropped.¶ "This survey will ease concerns that the softer tone of the incoming news in recent months marked the start of a renewed slowdown in growth," Paul Dales, an economist at Capital Economics, said in a note to clients. "We think the latest recovery is made of sterner stuff, although we doubt it will set the world alight."

### Economic Collapse Does Not Cause Wars

#### Economic decline does not cause war-prefer this thorough study

Miller, 2k (Morris, economist, adjunct professor in the University of Ottawa’s Faculty of Administration, consultant on international development issues, former Executive Director and Senior Economist at the World Bank, Winter, Interdisciplinary Science Reviews, Vol. 25, Iss. 4, “Poverty as a cause of wars?” p. Proquest)

The question may be reformulated. Do wars spring from a popular reaction to a sudden economic crisis that exacerbates poverty and growing disparities in wealth and incomes? Perhaps one could argue, as some scholars do, that it is some dramatic event or sequence of such events leading to the exacerbation of poverty that, in turn, leads to this deplorable denouement. This exogenous factor might act as a catalyst for a violent reaction on the part of the people or on the part of the political leadership who would then possibly be tempted to seek a diversion by finding or, if need be, fabricating an enemy and setting in train the process leading to war. According to a study undertaken by Minxin Pei and Ariel Adesnik of the Carnegie Endowment for International Peace, there would not appear to be any merit in this hypothesis. After studying ninety-three episodes of economic crisis in twenty-two countries in Latin America and Asia in the years since the Second World War they concluded that:19 Much of the conventional wisdom about the political impact of economic crises may be wrong ... The severity of economic crisis - as measured in terms of inflation and negative growth - bore no relationship to the collapse of regimes ... (or, in democratic states, rarely) to an outbreak of violence ... In the cases of dictatorships and semidemocracies, the ruling elites responded to crises by increasing repression (thereby using one form of violence to abort another).

#### No impact- econ decline doesn’t cause war

Barnett ‘9(Thomas P.M. Barnett, senior managing director of Enterra Solutions LLC, “The New Rules: Security Remains Stable Amid Financial Crisis,” 8/25/2009)

When the global financial crisis struck roughly a year ago, the blogosphere was ablaze with all sorts of scary predictions of, and commentary regarding, ensuing conflict and wars -- a rerun of the Great Depression leading to world war, as it were. Now, as global economic news brightens and recovery -- surprisingly led by China and emerging markets -- is the talk of the day, it's interesting to look back over the past year and realize how globalization's first truly worldwide recession has had virtually no impact whatsoever on the international security landscape. None of the more than three-dozen ongoing conflicts listed by GlobalSecurity.org can be clearly attributed to the global recession. Indeed, the last new entry (civil conflict between Hamas and Fatah in the Palestine) predates the economic crisis by a year, and three quarters of the chronic struggles began in the last century. Ditto for the 15 low-intensity conflicts listed by Wikipedia (where the latest entry is the Mexican "drug war" begun in 2006). Certainly, the Russia-Georgia conflict last August was specifically timed, but by most accounts the opening ceremony of the Beijing Olympics was the most important external trigger (followed by the U.S. presidential campaign) for that sudden spike in an almost two-decade long struggle between Georgia and its two breakaway regions. Looking over the various databases, then, we see a most familiar picture: the usual mix of civil conflicts, insurgencies, and liberation-themed terrorist movements. Besides the recent Russia-Georgia dust-up, the only two potential state-on-state wars (North v. South Korea, Israel v. Iran) are both tied to one side acquiring a nuclear weapon capacity -- a process wholly unrelated to global economic trends. And with the United States effectively tied down by its two ongoing major interventions (Iraq and Afghanistan-bleeding-into-Pakistan), our involvement elsewhere around the planet has been quite modest, both leading up to and following the onset of the economic crisis: e.g., the usual counter-drug efforts in Latin America, the usual military exercises with allies across Asia, mixing it up with pirates off Somalia's coast). Everywhere else we find serious instability we pretty much let it burn, occasionally pressing the Chinese -- unsuccessfully -- to do something. Our new Africa Command, for example, hasn't led us to anything beyond advising and training local forces. So, to sum up: \* No significant uptick in mass violence or unrest (remember the smattering of urban riots last year in places like Greece, Moldova and Latvia?); \* The usual frequency maintained in civil conflicts (in all the usual places); \* Not a single state-on-state war directly caused (and no great-power-on-great-power crises even triggered); \* No great improvement or disruption in great-power cooperation regarding the emergence of new nuclear powers (despite all that diplomacy); \* A modest scaling back of international policing efforts by the system's acknowledged Leviathan power (inevitable given the strain); and \* No serious efforts by any rising great power to challenge that Leviathan or supplant its role. (The worst things we can cite are Moscow's occasional deployments of strategic assets to the Western hemisphere and its weak efforts to outbid the United States on basing rights in Kyrgyzstan; but the best include China and India stepping up their aid and investments in Afghanistan and Iraq.) Sure, we've finally seen global defense spending surpass the previous world record set in the late 1980s, but even that's likely to wane given the stress on public budgets created by all this unprecedented "stimulus" spending. If anything, the friendly cooperation on such stimulus packaging was the most notable great-power dynamic caused by the crisis. Can we say that the world has suffered a distinct shift to political radicalism as a result of the economic crisis? Indeed, no. The world's major economies remain governed by center-left or center-right political factions that remain decidedly friendly to both markets and trade. In the short run, there were attempts across the board to insulate economies from immediate damage (in effect, as much protectionism as allowed under current trade rules), but there was no great slide into "trade wars." Instead, the World Trade Organization is functioning as it was designed to function, and regional efforts toward free-trade agreements have not slowed. Can we say Islamic radicalism was inflamed by the economic crisis? If it was, that shift was clearly overwhelmed by the Islamic world's growing disenchantment with the brutality displayed by violent extremist groups such as al-Qaida. And looking forward, austere economic times are just as likely to breed connecting evangelicalism as disconnecting fundamentalism. At the end of the day, the economic crisis did not prove to be sufficiently frightening to provoke major economies into establishing global regulatory schemes, even as it has sparked a spirited -- and much needed, as I argued last week -- discussion of the continuing viability of the U.S. dollar as the world's primary reserve currency. Naturally, plenty of experts and pundits have attached great significance to this debate, seeing in it the beginning of "economic warfare" and the like between "fading" America and "rising" China. And yet, in a world of globally integrated production chains and interconnected financial markets, such "diverging interests" hardly constitute signposts for wars up ahead. Frankly, I don't welcome a world in which America's fiscal profligacy goes undisciplined, so bring it on -- please! Add it all up and it's fair to say that this global financial crisis has proven the great resilience of America's post-World War II international liberal trade order.

#### Economic collapse doesn’t cause instability

Fareed Zakaria was named editor of Newsweek International in October 2000, overseeing all Newsweek editions abroad, December 12, 2009, “The Secrets of Stability,” http://www.newsweek.com/2009/12/11/the-secrets-of-stability.html

Others predicted that these economic shocks would lead to political instability and violence in the worst-hit countries. At his confirmation hearing in February, the new U.S. director of national intelligence, Adm. Dennis Blair, cautioned the Senate that "the financial crisis and global recession are likely to produce a wave of economic crises in emerging-market nations over the next year." Hillary Clinton endorsed this grim view. And she was hardly alone. Foreign Policy ran a cover story predicting serious unrest in several emerging markets. Of one thing everyone was sure: nothing would ever be the same again. Not the financial industry, not capitalism, not globalization. One year later, how much has the world really changed? Well, Wall Street is home to two fewer investment banks (three, if you count Merrill Lynch). Some regional banks have gone bust. There was some turmoil in Moldova and (entirely unrelated to the financial crisis) in Iran. Severe problems remain, like high unemployment in the West, and we face new problems caused by responses to the crisis—soaring debt and fears of inflation. But overall, things look nothing like they did in the 1930s. The predictions of economic and political collapse have not materialized at all.

### They Say: “Economic Interdependence Solves War”

#### Economic nationalism is inevitable – makes economic cooperation impossible

GOLDSTONE ‘7 - PhD candidate in the Department of Political Science and a member of the Security Studies Program at the Massachusetts Institute of Technology. He is a non-resident research fellow at the Center for Peace and Security Studies, Georgetown University (P.R.,”Does Globalization Bring War or Peace?”. September 25. http://www.alternet.org/audits/62848/?page=entire)

American policymakers should beware claims of globalization's axiomatic pacifying effects. Trade creates vested interests in peace, but these interests affect policy only to the extent they wield political clout. In many of the states whose behavior we most wish to alter, such sectors -- internationalist, export-oriented, reliant on global markets -- lack a privileged place at the political table. Until and unless these groups gain a greater voice within their own political system, attempts to rely on the presumed constraining effects of global trade carry substantially greater risk than commonly thought.

A few examples tell much. Quasi-democratic Russia is a state whose principal exposure to global markets lies in oil, a commodity whose considerable strategic coercive power the Putin regime freely invokes. The oil sector has effectively merged with the state, making Russia's deepening ties to the global economy a would-be weapon rather than an avenue of restraint. Russian economic liberalization without political liberalization is unlikely to pay the strong cooperative dividends many expect.

China will prove perhaps the ultimate test of the Pax Mercatoria. The increasing international Chinese presence in the oil and raw materials extraction sectors would seem to bode ill, given such sectors' consistent history elsewhere of urging state use of threats and force to secure these interests. Much will come down to the relative political influence of export-oriented sectors heavily reliant on foreign direct investment and easy access to the vast Western market versus the political power of their sectoral opposites: uncompetitive state-owned enterprises, energy and mineral complexes with important holdings in the global periphery, and a Chinese military that increasingly has become a de facto multi-sectoral economic-industrial conglomerate. Actions to bolster the former groups at the expense of the latter would be effort well spent.

At home, as even advanced sectors feel the competitive pressures of globalization, public support for internationalism and global engagement will face severe challenges. As more sectors undergo structural transformation, the natural coalitional constituency for committed global activist policy will erode; containing the gathering backlash will require considerable leadership.

Trade can indeed be a palliative; too often, however, we seem to think of economic interdependence as a panacea; the danger is that in particular instances it may prove no more than a placebo.

## \*\*\* Competitiveness

### No Impact

#### Competitiveness is a myth.

Paul Krugman, Professor of Economics at the Massachusetts Institute of Technology, 1994 [“Competitiveness: A Dangerous Obsession,” Foreign Affairs, Volume 73, Issue 2, March/April, Available Online to Subscribing Institutions via Academic Search Elite]

Guess what? Delors didn't confront the problems of either the welfare state or the EMS. He explained that the root cause of European unemployment was a lack of competitiveness with the United States and Japan and that the solution was a program of investment in infrastructure and high technology.

It was a disappointing evasion, but not a surprising one. After all, the rhetoric of competitiveness--the view that, in the words of President Clinton, each nation is "like a big corporation competing in the global marketplace"--has become pervasive among opinion leaders throughout the world. People who believe themselves to be sophisticated about the subject take it for granted that the economic problem facing any modern nation is essentially one of competing on world markets--that the United States and Japan are competitors in the same sense that Coca-Cola competes with Pepsi--and are unaware that anyone might seriously question that proposition. Every few months a new best-sell-er warns the American public of the dire consequences of losing the "race" for the 21st century.[1] A whole industry of councils on competitiveness, "geo-economists" and managed trade theorists has sprung up in Washington. Many of these people, having diagnosed America's economic problems in much the same terms as Delors did Europe's, are now in the highest reaches of the Clinton administration formulating economic and trade policy for the United States. So Delors was using a language that was not only convenient but comfortable for him and a wide audience on both sides of the Atlantic.

Unfortunately, his diagnosis was deeply misleading as a guide to what ails Europe, and similar diagnoses in the United States are equally misleading. The idea that a country's economic fortunes are largely determined by its success on world markets is a hypothesis, not a necessary truth; and as a practical, empirical matter, that hypothesis is flatly wrong. That is, it is simply not the case that the world's leading nations are to any important degree in economic competition with each other, or that any of their major economic problems can be attributed to failures to compete on world markets. The growing obsession in most advanced nations with international competitiveness should be seen, not as a well-founded concern, but as a view held in the face of overwhelming contrary evidence. And yet it is clearly a view that people very much want to hold--a desire to believe that is reflected in a remarkable tendency of those who preach the doctrine of competitiveness to support their case with careless, flawed arithmetic.

This article makes three points. First, it argues that concerns about competitiveness are, as an empirical matter, almost completely unfounded. Second, it tries to explain why defining the economic problem as one of international competition is nonetheless so attractive to so many people. Finally, it argues that the obsession with competitiveness is not only wrong but dangerous, skewing domestic policies and threatening the international economic system. This last issue is, of course, the most consequential from the standpoint of public policy. Thinking in terms of competitiveness leads, directly and indirectly, to bad economic policies on a wide range of issues, domestic and foreign, whether it be in health care or trade.

#### Economic power is not zero-sum

Paul Krugman, Professor of Economics at the Massachusetts Institute of Technology, 1994

[“Competitiveness: A Dangerous Obsession,” Foreign Affairs, Volume 73, Issue 2, March/April, Available Online to Subscribing Institutions via Academic Search Elite]

Moreover, countries do not compete with each other the way corporations do. Coke and Pepsi are almost purely rivals: only a negligible fraction of Coca-Cola's sales go to Pepsi workers, only a negligible fraction of the goods Coca-Cola workers buy are Pepsi products. So if Pepsi is successful, it tends to be at Coke's expense. But the major industrial countries, while they sell products that compete with each other, are also each other's main export markets and each other's main suppliers of useful imports. If the European economy does well, it need not be at U.S. expense; indeed, if anything a successful European economy is likely to help the U.S. economy by providing it with larger markets and selling it goods of superior quality at lower prices.

International trade, then, is not a zero-sum game. When productivity rises in Japan, the main result is a rise in Japanese real wages; American or European wages are in principle at least as likely to rise as to fall, and in practice seem to be virtually unaffected.

It would be possible to belabor the point, but the moral is clear: while competitive problems could arise in principle, as a practical, empirical matter the major nations of the world are not to any significant degree in economic competition with each other. Of course, there is always a rivalry for status and power countries that grow faster will see their political rank rise. So it is always interesting to compare countries. But asserting that Japanese growth diminishes U.S. status is very different from saying that it reduces the U.S. standard of living--and it is the latter that the rhetoric of competitiveness asserts.

One can, of course, take the position that words mean what we want them to mean, that all are free, if they wish, to use the term "competitiveness" as a poetic way of saying productivity, without actually implying that international competition has anything to do with it. But few writers on competitiveness would accept this view. They believe that the facts tell a very different story, that we live, as Lester Thurow put it in his best-selling book, Head to Head, in a world of "win-lose" competition between the leading economies. How is this belief possible?

#### Focus on competitiveness causes policymakers to oversimplify economic problems and fail to address the root cause

Paul Krugman, Professor of Economics at the Massachusetts Institute of Technology, 1994 [“Competitiveness: A Dangerous Obsession,” Foreign Affairs, Volume 73, Issue 2, March/April, Available Online to Subscribing Institutions via Academic Search Elite]

Second, the idea that U.S. economic difficulties hinge crucially on our failures in international competition somewhat paradoxically makes those difficulties seem easier to solve. The productivity of the average American worker is determined by a complex array of factors, most of them unreachable by any likely government policy. So if you accept the reality that our "competitive" problem is really a domestic productivity problem pure and simple, you are unlikely to be optimistic about any dramatic turnaround. But if you can convince yourself that the problem is really one of failures in international competition--that imports are pushing workers out of high-wage jobs, or subsidized foreign competition is driving the United States out of the high value-added sectors--then the answers to economic malaise may seem to you to involve simple things like subsidizing high technology and being tough on Japan.

#### Lack of credible competitors preserves American dominance

Qian, 2008—reporter of Yale Global [Jiang, February 29th, Is the Sun Setting on US Dominance? – Part II, http://yaleglobal.yale.edu/display.article?id=10435]

The proponents of such a "multipolar worldview" often confuse the immense potential of their favored giants with their actual influences. They often overlook the immense internal difficulties these rising giants must overcome to realize their potential. Most importantly, they do not take full account of the strategic interactions between these giants during their simultaneous rise and the strategic opportunities that such interactions present for the US. Among the rising powers, the European Union boasts by far the largest economy, with a strong currency and a comparatively large and prosperous population. However, after a long drive of expansion, Europe faces a serious cohesion problem. It still suffers from a weak security framework that's dependent on NATO and a legalistic rather than executive center in Brussels. Although the EU does chase strategic interests in its proximities such as the central Asia and North Africa, it does so, not for any overreaching vision to compete globally, but mostly for parochial economic reasons. Europe is not yet competing in any "Great Game," for the simple reason that Europe is not yet unified. Recent rejections of the EU constitution show that serious resistance remains towards further integration. After recent stabilization of its economy, a resurgent Russia is often mentioned as a future global power. However, Russia faces severe long-term internal challenges. Its population is declining and aging, its vast Siberia territories hollowing out after the end of Soviet subsidies. Extractive industries such as hydrocarbon, mining and timber account for 80 percent of Russia's exports and 30 percent of its government revenue, whereas its manufacturing industries are mostly outdated and uncompetitive. Russia therefore will have serious issues with its self-image as a major world power, finding it hard to forge an assessment of its global role commensurate with its long-term demographic and economic realities. Japan has a similar problem of updating its self-image as the most "advanced" nation in Asia for more than 100 years. Today Japan faces the harsh reality that, after its neighbors catch up, Japan will again find itself a geographically small, resource-poor island nation dependent on trade, living uneasily among large, populous continental neighbors. It has a largely pacifist, prosperous population in a neighborhood still rife with nationalism. Unlike Europe, East Asia has yet to extinguish historical grievances, border disputes and a taste for raw national powers. As Japan itself proved, economic rises, once initiated, can be rapid indeed, so its current economic strength does not guarantee its future influence. Furthermore, barring a rapid re-militarization, Japan's growth in national strengths is bound to be slower than that of its still maturing neighbors, therefore its relative strategic position in East Asia will only grow weaker. Either re-militarization or an erosion of its self-perceived leadership in the region is likely to require a profound reassessment of Japan's postwar consensus of national purposes. India sees itself as an up-and-coming power, proud to be a democracy yet simultaneously aspiring to more traditional "hard" powers. As a diverse and still poor country, it faces immense internal challenges. Its manufacturing base and infrastructure need major overhaul. Beyond these, India is limited by its geographical constraint in the South Asia and the thorn in its side that’s Pakistan. Sandwiched between Pakistan, Burma and the Himalayas, India’s ambition beyond the subcontinent could not blossom until its geographical perimeter is secured. China borders three of the ambitious giants – India, Russia and Japan. China's neighborhood is far tougher than that of either Europe or the US. Like India, China is a large, poor country rife with internal tensions. Unlike Europe or America, its current form of government does not enjoy wide ideological appeal. Compared with Russia’s or even Japan’s, its military is still modernizing. It has recently become fashionable in America and Europe to describe Chinese "expansions" in Africa and South America. But the evidence is mostly economic deals over raw materials. This is not expansionism, but mercantilism. China is indeed playing an active geopolitical game in its immediate environment: Southeast Asia, Central Asia and Korea Peninsula. But this only serves to show that China is still mired in local complexities.

### Competitiveness High

#### The US is still the leader in competitiveness—the world economy goes down with us.

Frederick E. Allen, May 30, 2012. “The US Still Leads the World in Competitiveness.” Frederick E. Allen, Forbes Staff.—Leadership of Editors at Forbes. http://www.forbes.com/sites/frederickallen/2012/05/30/the-u-s-still-leads-the-world-in-competitiveness/

Worried that we’re falling behind in the world economy, and that other nations, like maybe China, are pulling ahead of us? Relax. Here’s reassurance from IMD, the international business school in Lausanne, Switzerland: The findings of its annual World Competitiveness Yearbook are just out, and they show that the only place that can touch us is a relative pygmy, Hong Kong.¶ IMD ranked 59 economies across the world, measuring “how well countries manage their economic and human resources to increase their prosperity.” It used 329 ranking criteria, a third of them arising from a survey of more than 4,200 international executives. The 10 most competitive nations, with their scores relative to the first-place finisher, are:¶ 1. Hong Kong. Score: 100.00¶ 2. USA: 97.75¶ 3. Switzerland: 96.68¶ 4. Singapore: 95.92¶ 5. Sweden: 91.39¶ 6. Canada: 90.29¶ 7. Taiwan: 89.96¶ 8. Norway: 89.67¶ 9. Germany: 89.26¶ 10. Qatar: 88.48¶ ¶ The 10 Hardest Jobs to Fill in America¶ Jacquelyn Smith¶ Forbes Staff¶ ¶ The Red Hot Heart of Leadership¶ August Turak¶ Contributor¶ Last year the U.S. and Hong Kong were tied for first place, and Singapore, Sweden, and Canada were respectively third, fourth, and fifth. The last-place finisher is Venezuela, with a score of 31.45. It’s the only country to do worse than poor, beleaguered Greece (43.05). Mainland China, in case you were wondering, is No. 23, down from 19 last year. The rankings’ authors observe that in Europe, Ireland (20), Iceland (26), and Italy (40) look better positioned to recover economically, judging by the numbers, than Spain (39), Portugal (41), or Greece (58).¶ Prof. Stephane Garelli, director of IMD’s World Competitiveness Center, says, “U.S. competitiveness has a deep impact on the rest of the world because it is uniquely interacting with every economy, advanced or emerging. No other nation can exercise such a strong ‘pull effect’ on the world. Europe is burdened with austerity and fragmented political leadership and is hardly a credible substitute, while a South-South bloc of emerging markets is still a work in progress. In the end, if the U.S. competes, the world succeeds.”

#### US is the leader in global competitiveness in the status quo.

Graham White, June 1, 2012. “World Competitiveness Rankings: What do they tell us.” The Conservation—Latest ideas and research in Australia and around the world. Graham White is a Senior Lecture in the School of Economics at the University of Sydney. http://theconversation.edu.au/world-competitiveness-rankings-what-do-they-tell-us-7397

The IMD World Competitiveness Rankings released this week are worth reflecting on, not so much because of the relative positioning of various countries – including Australia – but rather because of the reasoning which underpins the rankings.¶ The press release accompanying the rankings gives some indication of this reasoning. The first point worth noting is the potentially misleading use of the term competitiveness. When this term is used by economists it usually refers to the price competitiveness of a country’s exports and import-competing goods. And for many economists this would over time be bound up with the relative real unit labour costs across different countries.¶ The reasoning accompanying the IMD rankings suggest however a much looser use of the term “competitiveness”. What’s suggested is rather a view about the potential of different countries for sustained economic prosperity.¶ Now, price competitiveness of one’s exports and import-substitutes may be part of this, but is certainly never the whole story.¶ Moreover, as a number of economists over the years have noted, the world economy is not an open economy, but a closed economy. This means that one country’s improved competitiveness is at the expense of another country.¶ In other words, growing your economy through exports at the expense of other countries can mean exporting not just goods and services, but exporting unemployment to other countries as well.¶ IMD World Competitiveness Yearbook 2012¶ So one needs to be cautious in drawing links between competitiveness and economic prosperity – it is not a game everyone can win.¶ Another interesting feature of the IMD release relates to the position of the US. It is suggested that the “US remains at the centre of world competitiveness because of its unique economic power”.¶ Undoubtedly the element of truth in this statement is the continued hegemony of the US in the global economy.¶ But one could reasonably contend that this is much less to do with any superiority in competitiveness of the US in the narrow economic sense and much more to do with the continued dominant status of the US dollar as a de facto reserve currency in the international monetary system.¶ And this dominance – effectively emerging as far back as the end of the First World War – has continued, interestingly, while the external accounts of the US – specifically, its current account – have been deteriorating.¶ In fact the US current account has been deteriorating since the breakdown of the Bretton Woods era in the early 1970’s.This in turn has reflected a long-run deterioration in US trade performance. Yet this has not seemingly impeded the economic dominance of the US.¶

## \*\*\* Terrorism

### Terror Hyped—General

#### Hyping threat from al Qaeda prolongs its survival

Prof. Audrey Kurth Cronin, PhD, 2010, professor of strategy at the National War College, Terrorizing Ourselves, Cato Institute, "Defeating al Qaeda” http://books.google.com/books?id=HIsLQgAACAAJ

The al Qaeda movement is most likely either to implode or to transition to another form of violence. Which path it takes depends at least in part on what the United States and U.S. allies do. The al Qaeda movement can still do serious damage, but treating it as a new, monolithic threat like the Communist menace is profoundly counterproductive and makes it seem stronger and more united than it is. The most effective way to nudge it towards implosion is to confound the classic strategies of leverage being employed by the leadership.

#### Al Qaeda's objectives unachievable—it’s all hype.

Martin C. Libicki, 2008, PhD, senior management scientist at RAND, formerly of the National Defense University) and Prof. Seth G. Jones (PhD, adjunct professor of political science at Georgetown University), RAND Corporation, "How Terrorist Groups End", http://www.rand.org/pubs/monographs/2008/RAND\_MG741-1.pdf (page XVII)

There is reason to be hopeful. Our analysis concludes that al Qa'ida's probability of success in actually overthrowing any government is close to zero. Out of all the religious groups that ended since 1968, none ended by achieving victory. Al Qa'ida has virtually unachievable objectives in trying to overthrow multiple regimes in the Middle East. To make matters worse, virtually all governments across Europe, North America, South America, Asia, the Middle East, and Africa consider al Qa'ida an enemy. As al Qa'ida expert Peter Bergen has noted, "Making a world of enemies is never a winning strategy."

### No Threat—General

#### Terrorists unskilled and divided

Prof. John Mueller, 2010 (PhD in political science, professor of political science at Ohio State University), Terrorizing Ourselves, Cato Institute, "Assessing Measures Designed to Protect the Homeland", http://books.google.com/books?id=HIsLQgAACAAJ

Political scientist Michael Kenney has interviewed dozens of officials and intelligence agents and has analyzed court documents, and he finds homegrown Islamic militants to be operationally unsophisticated, short on know how, prone to making mistakes, poor at planning, and severely hampered by a limited capacity to learn. Another study documents the difficulties of network coordination that continually threaten operational unity, trust, cohesion, and the ability to act collectively.

#### Minimal terrorist presence in the U.S.

Prof. John Mueller, 2010 (PhD in political science, professor of political science at Ohio State University), Terrorizing Ourselves, Cato Institute, "Assessing Measures Designed to Protect the Homeland", http://books.google.com/books?id=HIsLQgAACAAJ

By 2005, however, after years of well funded sleuthing, the FBI and other investigative agencies concluded in a secret report that they had been unable to uncover a single true al Qaeda sleeper cell anywhere in the United States, a finding (or nonfinding) publicly acknowledged two years later. Al Qaeda deserves special attention here because, as stated by Glenn Carle, a 23-year veteran of the Central Intelligence Agency, where he was deputy national intelligence officer for transnational threats, it is "the only Islamic terrorist organization that targets the U.S. homeland."

### No Threat—Bioterror

#### Beyond current terrorist capabilities

Milton Leitenberg, 2010 (senior research scholar at the Center for International and Security Studies), Terrorizing Ourselves, Cato Institute, "Assessing the Threat of Bioterrorism", http://books.google.com/books?id=HIsLQgAACAAJ

For two decades, we have been told that bioterrorism would be perpetrated by terrorist groups with an international presence and international political objectives. As noted, however, these groups have little or no scientific competence, little or no knowledge of microbiology, and no known access to pathogen strains or laboratory facilities. The most recent U.S. National Intelligence Council terrorist assessment makes no reference to any of these capabilities. The report of the Commission on the Prevention of Weapons of Mass Destruction Proliferation and Terrorism, released in December 2008, states, "We accept the validity of intelligence estimates about the current rudimentary nature of terrorist capabilities in the area of biological weapons."

### No Threat—Nuclear Terror

#### Nuclear terrorism is science fiction - easier to launch Bin Laden into space. It’s not ironman where you just create high tech weapons in a hideout cave.

Adam Garfinkle, 2009 (PhD in international relations, served as a staff member of the National Security Study Group of the U.S. Commission on National Security), May 2009, Foreign Policy Research Institute, "Does Nuclear Deterrence Apply in the Age of Terrorism?", http://www.fpri.org/footnotes/1410.200905.garfinkle.nucleardeterrenceterrorism.html

There have, of course, been several novels, dozens of action movies, and countless television shows featuring terrorists who had somehow gotten their hands on a nuclear device. But none of these dramas ever explains credibly how a bunch of ragtag dropouts and narcissists get their hands on or figure out how to build a useable nuclear weapon. This is because they can't. It is, to understate the matter, not an easy thing to build a nuclear weapon, given the physics, metallurgy, and engineering involved. It takes a fairly large space, a lot of people with different kinds of specialties, and a fair amount of time and money. The material involved is not easy to hide or move, and it certainly isn't easy to deliver a bomb to a target even if one could be fabricated or stolen. Some of the more imaginative depictions of potential catastrophe would have us believe that terrorists could put a nuclear bomb in a suitcase. This is nonsense. You've got to be very sophisticated technically to get a nuke into a suitcase. If you're al Qaeda working in a cave somewhere, even if you have some metallurgy experts and scientists trying to help you, getting a nuclear device into a suitcase is even less likely than being able to launch Osama bin Laden into orbit.

### No Threat—Cyber Attack

#### The threat of a cyber-attack is extremely low.

Scott Borg, January 21, 2012 “Threat of Future Cyber Attacks by Adversaries Remains Low” January 21, 2012. Scott Borg is the Director and Chief Economist of the United States Cyber Consequences Unit.

Will American adversaries respond to American improvement with serious cyber attacks? The short answer is, no. There could be some denial-of-service attacks on U.S. government Web sites, but these would probably be only a minor nuisance. And if they do happen, they might not be acknowledged or even noticed. Cyber conflicts between Hamas and Israel, beginning in 1999, and between Hezbollah and Israel, beginning in 2000, made virtually all political activists in the Middle East very aware of the potential of cyber attacks. Starting in 2001, senior al Qaeda leaders regularly said they would turn the Western superiority in information technology into a tool to bring down the West. In October 2001, an alleged al Qaeda operative, arrested in India, claimed that other members of the terrorist network had managed to get hired by Microsoft, so that they could build backdoors and bugs into the company’s new XP operating system. There is no evidence that al Qaeda operatives were actually able to do this. But after this news story was picked up by the international press, al Qaeda leaders and other ideological militants would certainly have been thinking about the possibilities. Beginning in early 2002, American intelligence officials repeatedly warned that computers belonging to al Qaeda associates had been used to access Web sites offering hacker tools and instructions. Imam Samudra, organizer of the 2002 Bali nightclub bombings, urged Muslim militants to start hacking into U.S. computers, both to steal money and to do damage.¶ Starting in 2002, however, government forces were very successful in hunting down potential al Qaeda cyber attack leaders. Imam Samudra was arrested in Indonesia in 2002 and eventually executed for his terrorist acts. Abu Anas al Liby was reported captured in Sudan in 2002, although American officials have since said that his whereabouts is still unknown. Khalid Shaikh Mohammed was captured in Pakistan in 2003 and is currently being held at Guantanamo Bay. Depriving al Qaeda of these leaders seems to have been a big setback to their cyber efforts. Cyber-attack threats are increasingly disappearing, strongly due to an increasing United States cyber-infrastructure. In March of 2005, Sir David Omand announced that British intelligence had surveillance reports indicating al Qaeda affiliates were preparing to use the internet and other electronic communication systems to cripple economic, medical, and transport networks. These attacks were either never launched or, more likely, were unsuccessful. Government forces had another round of successes in capturing al Qaeda cyber attack advocates in 2005. Younis Tsouli was arrested in the U.K. in 2005 and convicted of incitement to acts of terrorism in 2007. Mustafa Setmariam Nasar was captured in Pakistan in 2005. In 2006, many cyber attackers in the Arab world got caught up in a cyber campaign against Denmark, prompted by the Danish cartoon of Mohammed. This effort seems to have temporarily reduced other cyber attack activity originating from the Middle East. In December of 2006 and again in October of 2007, Web sites associated with al Qaeda announced the beginning of a "cyber Jihad," directed against Western banks and other important institutions. There were rumors and circumstantial signs of ambitious cyber attacks being mounted by al Qaeda during this period, but they don’t seem to have gotten very far. Since early 2008, there has been no sign of any sustained or sizeable effort on the part of al Qaeda to assemble a serious cyber-attack force. This suggests, at minimum, that they have not been recruiting cyber attackers very widely or aggressively. It is possible the al Qaeda has been developing cyber-attack teams from within its own ranks, but bringing them to a very high level of capabilities without interaction with the wider hacker world would be difficult. Altogether, given its history and the lack of outward signs, it seems unlikely that enemies has developed significant cyber attack capabilities.

### Bioterror Risk Low

#### RISK OF BIOTERROR LOW: TECH HURDLES, RISK OWN DEATHS, CULTURAL TABOOS, EASY ALTS

PARANCHI (RAND Analyst) ’01 [John, “Anthrax Attacks, Biological Terrorism and Preventive Responses,” Rand Testimony, Ct 186, http://www.rand.org/publications/CT/CT186/CT186.pdf nov.//DeLo-uwyo]

The use of disease and biological material as a weapon is not a new method of¶ warfare. What is surprising is how infrequently it is has been used. Biological agents¶ may appeal to the new terrorist groups because they affect people indiscriminately and¶ unnoticed, thereby sowing panic. A pattern is emerging that terrorists who perpetrate¶ mass and indiscriminate attacks do not claim responsibility.5 In contrast to the turgid¶ manifestos issued by terrorists in the 1960s, 1970s and 1980s, recent mass casualty¶ terrorists have not claimed responsibility until they were imprisoned. Biological agents¶ enable terrorists to preserve their anonymity because of their delayed impact and can be¶ confused with natural disease outbreaks. Instead of the immediate gratification of seeing¶ an explosion or the glory of claiming credit for disrupting society, the biological weapons¶ terrorist may derive satisfaction from seeing society’s panicked response to their actions.¶ If this is the case, this is a new motive for the mass casualty terrorist.

There are a number of countervailing disincentives for states and terrorists to use¶ biological weapons, which help explain why their use is so infrequent. The technical and¶ operational challenges biological weapons pose are considerable. Acquiring the material,¶ skills of production, knowledge of weaponization, and successfully delivering the¶ weapon, to the target is difficult. In cases where the populations of the terrorist¶ supporters and adversaries are mixed, biological weapons risk inadvertently hitting the¶ same people for whom terrorists claim to fight. Terrorists may also hesitate in using¶ biological weapons specifically because breaking the taboo on their use may evoke¶ considerable retaliation. The use of disease as a weapon is widely recognized in most¶ cultures as a means of killing that is beyond the bounds of a civilized society.¶ From a psychological perspective, terrorists may be drawn to explosives as¶ arsonists are drawn to fire. The immediate gratification of explosives and the thrill of the¶ blast may meet a psychological need of terrorists that the delayed effects of biological¶ weapons do not. Causing slow death of others may not offer the same psychic thrill¶ achieved by killing with firearms or explosives.¶ Perhaps the greatest alternative to using biological weapons is that terrorists can¶ inflict (and have inflicted) many more fatalities and casualties with conventional¶ explosives than with unconventional weapons. Biological weapons present technical and¶ operational challenges that determined killers may not have the patience to overcome or¶ they may simply concentrate their efforts on more readily available alternatives.¶ Pg 11-12

#### BIOTERRORISM UNLIKELY: DIFFICULT TO WEAPONIZE, UNPREDICTABLE

SIMON **(Frmr member, SIPRI Chemical and Biological Warfare Project)** ’02 [Jacqueline, “Implications of the Terror Attacks for the BWC,” INESAP INFORMATION Bulletin, March n 19 pp 4-7//delo-uwyo]

The threat posed by chemical and biological weapons has often been misrepresented. While manufacturing chemical agents or obtaining biological agents is not particularly difficult, it is not easy, and using these agents to cause mass casualty is extremely difficult. In order to cause mass casualty it is necessary to take into account the lethality of an agent, its concentration, environmental factors, and resistance of the population. Even more difficult is to combine all of these factors with an effective method of dispersal. All of the elements of this equation must be mastered in order to achieve significant results. That would require extensive resources and scientific knowledge inaccessible to most terrorists. An oft-cited example of the failure of a terrorist group to achieve success with its biological warfare projects is the Japanese cult Aum Shinrikyo, which, despite vast funds and experienced scientists, was unable to wage a successful biological attack. This example also illustrates the unpredictability of biological weapons which has made them unattractive to many militaries and terrorist organizations

#### RISK OF BIOTERROR LOW—BASED ON VULNERABILITY ASSESSMENTS, NOT ACTUAL THREATS—THEIR CLAIM HAVE LITTLE GROUNDING IN REALIY

SIMON **(Frmr member, SIPRI Chemical and Biological Warfare Project)** ’02 [Jacqueline, “Implications of the Terror Attacks for the BWC,” INESAP INFORMATION Bulletin, March n 19 pp 4-7//delo-uwyo]

The events of September 11 and the anthrax incidents that followed have led to a sea change in public perception and policy response with regard to biological weapons. The terrorist attacks against New York and Washington and the anthrax letters have become irrevocably linked in the public psyche. This linkage has led to the expansion of America's defensive goals and the marriage of two previously distinct security threats, terrorism and attack by nuclear, chemical or particularly biological weapon. The progeny of this marriage, 'bio-terrorism', has vaulted to the top of the list of threats to international security, within the United States most obviously, but in many other states as well. This focus on bio-terrorism as the scourge of the new millennium will have a serious impact on proliferation policies worldwide.¶ As the Cold War with its foundation of nuclear deterrence faded into the background of public consciousness, chemical and biological weapons had begun to move to the forefront and gained increasing prominence in policy circles and the media as the "greatest threat to international security". Nuclear weapons were not forgotten, but lumped in with chemical and biological weapons under the misnomer and catch phrase 'weapons of mass destruction'. While the likelihood of the use of chemical and biological weapons was viewed as increasing, their use on Western soil was still regarded by most analysts as a distant threat. Many of the assumptions behind this view have been shattered and reconstructed since the events of the autumn of 2001.¶ For persons living in North America (and many others worldwide) it undeniably 'feels' like the threat of attack by terrorists or weapons of mass casualty has increased. However, this is a feeling based in a newfound sense of vulnerability rather than an actual increase in the threat itself. Analysts, intelligence agencies, and policymakers have been aware of the threat posed by these weapons for many years and this threat has not increased exponentially since September 11. Attack by biological weapons causing mass casualty is largely regarded as a low-probability, high consequence event. In other words, if such an event did occur the results would be devastating, but the likelihood of occurrence is very small. Most analysis conducted on potential biological weapons attack has focussed on attack by a state actor whose motivations, if not capabilities, are generally known. In the case of a terrorist attack however, it is very difficult to gain any information about the motivations, capabilities and intent of the enemy. This has resulted in a situation where vulnerability assessments are widely substituted for threat assessments and policy is based on worst-case scenario projections with little grounding in reality.

## \*\*\* Hegemony

### Heg Unsustainable

#### Decline is inevitable – heg is economically unsustainable

Layne, 09 – Mary Julia and George R. Jordan Professor of International Affairs at Texas A&M's George Bush School of Government and Public Service, Ph.D. in Political Science from the University of California, LL.M. in International Law from Virginia Law, J.D. from USC, and Research Fellow with the Center on Peace and Liberty at The Independent Institute (Christopher, "The Waning of U.S. Hegemony—Myth or Reality? A Review Essay", International Security, Vol. 34, No. 1, Summer 2009, July 6th 2010, Galileo, p. 21-23) PDF

The publications reviewed in this essay examine whether the United States is in (or is headed for) relative decline.74 Brooks and Wohlforth purport to deny the possibility that America is in relative decline, but a growing number of analysts disagree.75 The long-term impact of the current economic crisis largely will determine who is right (and to be fair, Brooks and Wohlforth wrote their book before its effects became evident). Yet, even before the meltdown, longterm structural weaknesses that have been accumulating for more than three decades were causing U.S. economic power to wane.76 The warning signs with respect to U.S. decline are a looming fiscal crisis and doubts about the future of the dollar as the reserve currency, both of which are linked to the fear that after recovery, the United States will face a serious inflationary threat.77 Optimists contend that once the United States recovers, fears of a fiscal crisis will fade: the country faced a larger debt to GDP ratio after World War II, and yet embarked on a sustained era of growth. The postwar era, however, was a golden age of U.S. industrial and financial dominance, trade surpluses, and sustained high growth rates. The United States of 2009 is far different from the United States of 1945, however, which is why many economists believe that even in the best case, it will emerge from the current crisis with serious macroeconomic handicaps.78 Chief among these handicaps are the increase in the money supply (caused by the massive amount of dollars the Federal Reserve and Treasury have pumped into circulation to rescue the economy), and the $1 trillion plus budget deficits that the Brookings Institution and the Congressional Budget Office (CBO) project the United States will incur for at least a decade.79 When the projected deficits are bundled with the persistent U.S. current account deficit, the entitlements overhang, and the cost of two ongoing wars, there is reason to worry about the United States’ longterm fiscal stability.80 The CBO states, “Even if the recovery occurs as projected and the stimulus bill is allowed to expire, the country will face the highest debt/GDP ratio in 50 years and an increasingly urgent and unsustainable fiscal problem.”81 If the Congressional Budget Office is right, it spells trouble ahead for the dollar. As Jonathan Kirshner noted on the eve of the meltdown, the dollar’s vulnerability “presents potentially significant and underappreciated restraints upon contemporary American political and military predominance.”82 The dollar’s loss of reserve currency status would undermine U.S. dominance, and recent events have magnified concerns that predated the financial and economic crisis. 83 First, the other big players in the international economy now are either military rivals (China) or ambiguous “allies” (Europe) that have their own ambitions and no longer require U.S. protection from the Soviet threat. Second, the dollar faces an uncertain future because of concerns that its value will diminish over time. Because of these two factors, as Eric Helleiner notes, if the dollar experiences dramatic depreciation in the future, there is a “risk of defections generating a herd-like momentum” away from it.84

#### U.S hegemony is unsustainable

Snyder PhD, Professor of Public Policy at the University of Maryland 2010 – [Quddus Z. Snyder, “Systermic theory in an era of declining US hegemony,” http://www.bsos.umd.edu/gvpt/irworkshop/papers\_fall09/snyder.pdf]

At the turn of the century it appeared as if we were living through a ‘hegemonic age.’ But recent developments might justify a reevaluation of this conclusion. With its armed forces over-extended, and resources stretched, the US appears much weaker today than it did five years ago. The classic Gilpinian dilemma provides insight into the present predicament the US finds itself in: This three-way struggle over priorities (protection, consumption, and investment) produces a profound dilemma for society. If it suppresses consumption, the consequence can be severe internal social tensions and class conflict…If the society neglects to pay the costs of defense, external weakness will inevitably lead to its defeat by rising powers. If the society fails to save and reinvest a sufficient fraction of its surplus wealth in industry and agriculture, the economic basis of the society and its capacity to sustain either consumption or protection will decline. Thus far the US has maintained a massive defense budget while consumption and investment have been sustained by deficit spending. It is unclear how long this formula will work. The problem does not only stem from fact that the US is bogged down in two wars, it is also in the throes of a serious economic downturn. Of course, everyone is getting hit. Because all are suffering, the US is still a giant in terms of relative power differentials. Relative power is important, but so is the hegemon’s ability to actually do things. It is unlikely that the US will have either the political will or capability to take on major international undertakings. It is unclear when the US will fully withdraw from Iraq and Afghanistan; however, these projects will gobble up massive amounts of resources and treasure at a time when America’s own recovery is being partly bankrolled by foreign powers like China**.**43 The point is simply that America’s unilateral assertiveness on the international scene is changing. US security guarantees may prove less credible than they once were, leading allies to enhance their own military capabilities. The US may still be a giant, but one that, for now at least, seems more bound.

### Hegemony Impact Defense

#### Heg collapse doesn’t cause global nuclear war

Richard Haas (president of the Council on Foreign Relations, former director of policy planning for the Department of State, former vice president and director of foreign policy studies at the Brookings Institution, the Sol M. Linowitz visiting professor of international studies at Hamilton College, a senior associate at the Carnegie Endowment for International Peace, a lecturer in public policy at Harvard University’s John F. Kennedy School of Government, and a research associate at the International Institute for Strategic Studies) April 2008 “Ask the Expert: What Comes After Unipolarity?” http://www.cfr.org/publication/16063/ask\_the\_expert.html

Does a non polar world increase or reduce the chances of another world war? Will nuclear deterrence continue to prevent a large scale conflict? Sivananda Rajaram, UK Richard Haass: I believe the chance of a world war, i.e., one involving the major powers of the day, is remote and likely to stay that way. This reflects more than anything else the absence of disputes or goals that could lead to such a conflict. Nuclear deterrence might be a contributing factor in the sense that no conceivable dispute among the major powers would justify any use of nuclear weapons, but again, I believe the fundamental reason great power relations are relatively good is that all hold a stake in sustaining an international order that supports trade and financial flows and avoids large-scale conflict. The danger in a nonpolar world is not global conflict as we feared during the Cold War but smaller but still highly costly conflicts involving terrorist groups, militias, rogue states, etc.

#### Hegemony doesn’t prevent war

Christopher Layne (Associate Professor in the Bush School of Government and Public Service at Texas A&M University) 2006 “The Peace of Illusions” p 176-7

A second contention advanced by proponents of American hegemony is that the United States cannot withdraw from Eurasia because a great power war there could shape the post conflict international system in ways harmful to U.S. interests. Hence, the United States "could suffer few economic losses during a war, or even benefit somewhat, and still find the postwar environment quite costly to its own trade and investment."sa This really is not an economic argument but rather an argument about the consequences of Eurasia's political and ideological, as well as economic, closure. Proponents of hegemony fear that if great power wars in Eurasia occur, they could bring to power militaristic or totalitarian regimes. Mere, several points need to be made. First, proponents of American hegemony overestimate the amount of influence that the United States has on the international system. There are numerous possible geopolitical rivalries in Eurasia. Most of these will not culminate in war, but it's a good bet that some will. But regardless of whether Eurasian great powers remain at peace, the outcomes are going to be caused more by those states' calculations of their interests than by the presence of U.S. forces in Eurasia. The United States has only limited power to affect the amount of war and peace in the international system, and whatever influence it does have is being eroded by the creeping multipolarization under way in Eurasia. Second, the possible benefits of "environment shaping" have to be weighed against the possible costs of U.S. involvement in a big Eurasian war. Finally, distilled to its essence, this argument is a restatement of the fear that U.S. security and interests inevitably will be jeopardized by a Eurasian hegemon. This threat is easily exaggerated, and manipulated, to disguise ulterior motives for U.S. military intervention in Eurasia.

#### Heg unsustainable – multiple constraints ensure collapse and rise of alternatives

Christopher Layne, Chair in National Security at the School of Government and Public Service at Texas A&M University, 09 [“The Waning of U.S. Hegemony—Myth or Reality?: A Review Essay,” International Security, Vol. 34, No. 1, Summer 2009]

For an overview of trends that could affect international politics over the next two decades, a good starting point is the National Intelligence Council’s (NIC’s) Global Trends 2025: A Transformed World.15 Global Trends 2025 is not light reading, but it is significantly more insightful and intellectually courageous than typical government reports. Its key geopolitical conclusion is that the U.S.-dominated unipolar world will give way to multipolarity during the next two decades spurred by two causal mechanisms: the emergence of new great powers (and potentially important regional powers); and economic, financial, and domestic political constraints that may erode U.S. capabilities. China, India, and possibly Russia are emerging great powers.16 As Global Trends 2025 points out, the rise of China and India to great power status will restore each to “the positions they held two centuries ago when China produced approximately 30 percent and India 15 percent of the world’s wealth” (p. 7). Their ascent is being propelled by “the global shift in relative wealth and economic power” from North America and the Euro-Atlantic world to Asia—a shift “without precedent in modern history” (ibid.). By 2025, China figures to have the world’s second-largest economy (measured by gross domestic product [GDP]) and will be a first-rank military power (p. 30). India, buoyed by its strong economic growth rate, will “strive for a multipolar system with New Delhi as one of the poles” (ibid.). Although both states could encounter speed bumps that might slow—or even derail—their ascents to great power status, the NIC believes that the “chances are good that China and India will continue to rise” (p. 29).17**]** Because of uncertainties about economics, energy prices, domestic governance issues, and especially demography, Russia’s great power trajectory is more problematic than China’s or India’s (pp. 31–32).18 Between 2009 and 2025, Russia’s population is forecast to drop from 141 million to below 130 million, affecting the availability of manpower for both the military and the labor pools (pp. 23–24, 30). If Russia overcomes its demographic challenge and continues its revival as a great power, however, the NIC believes it “will be a leading force in opposition to U.S. global dominance” (p. 32). Because its great power status is closely tied to its ability to control both the energy resources and pipelines of Central Asia and the Caucasus, Russia will also seek to reestablish its sphere of influence in the “near abroad” (pp. 32, 82). According to the NIC, in addition to relative decline, the United States will confront other constraints on its international role. U.S. military supremacy will no longer be as dominant as it has been since the Cold War’s end (p. 93). The United States’ soft power may diminish as its liberal model of political and economic development is challenged by authoritarian/statist alternatives (pp. 3, 8–9, 13–14). At home, economic and political constraints may undermine U.S. hegemony. Global Trends 2025 was published just before the full scope of the global financial and economic crisis became apparent. Nevertheless, the NIC did have an inkling of the meltdown’s potential long-term implications for U.S. power. In particular, Global Trends predicts that over the next two decades, the dollar’s role as the international economy’s preeminent reserve currency will erode. Although at the time this issue went to press, the dollar remained strong and will continue to be the reserve currency for some time to come, China’s spring 2009 call to replace the dollar with a new reserve currency signals that the NIC’s long-term worries may be justified.19 **[End Page 153]** As the NIC observes, the financial privileges conferred on the United States by the dollar’s unchallenged reserve currency status have underpinned the preeminent role of the United States in international politics since the end of World War II. Thus, “the dollar’s decline may force the United States into difficult tradeoffs between achieving ambitious foreign policy goals and the high domestic costs of supporting those objectives” (pp. 12, 94, 97). Moreover, the growing dependence of the United States on foreign capital inflows “may curtail U.S. freedom of action in unanticipated ways” (p. 97). The NIC concludes that America’s “interest and willingness to play a leadership role may be more constrained as the economic, military, and opportunity costs of being the world’s leader are reassessed by American voters” (p. 93). Ultimately, although the United States will probably be primus inter pares in a multipolar international system twenty years from now, it will have less power—and foreign policy options—than it has been accustomed to having since 1945 (ibid.).

#### No challengers to competitiveness dominance

Qian 08—reporter of Yale Global [Jiang, February 29th, Is the Sun Setting on US Dominance? – Part II, http://yaleglobal.yale.edu/display.article?id=10435

The proponents of such a "multipolar worldview" often confuse the immense potential of their favored giants with their actual influences. They often overlook the immense internal difficulties these rising giants must overcome to realize their potential. Most importantly, they do not take full account of the strategic interactions between these giants during their simultaneous rise and the strategic opportunities that such interactions present for the US. Among the rising powers, the European Union boasts by far the largest economy, with a strong currency and a comparatively large and prosperous population. However, after a long drive of expansion, Europe faces a serious cohesion problem. It still suffers from a weak security framework that's dependent on NATO and a legalistic rather than executive center in Brussels. Although the EU does chase strategic interests in its proximities such as the central Asia and North Africa, it does so, not for any overreaching vision to compete globally, but mostly for parochial economic reasons. Europe is not yet competing in any "Great Game," for the simple reason that Europe is not yet unified. Recent rejections of the EU constitution show that serious resistance remains towards further integration. After recent stabilization of its economy, a resurgent Russia is often mentioned as a future global power. However, Russia faces severe long-term internal challenges. Its population is declining and aging, its vast Siberia territories hollowing out after the end of Soviet subsidies. Extractive industries such as hydrocarbon, mining and timber account for 80 percent of Russia's exports and 30 percent of its government revenue, whereas its manufacturing industries are mostly outdated and uncompetitive.Russia therefore will have serious issues with its self-image as a major world power, finding it hard to forge an assessment of its global role commensurate with its long-term demographic and economic realities. Japan has a similar problem of updating its self-image as the most "advanced" nation in Asia for more than 100 years. Today Japan faces the harsh reality that, after its neighbors catch up, Japan will again find itself a geographically small, resource-poor island nation dependent on trade, living uneasily among large, populous continental neighbors. It has a largely pacifist, prosperous population in a neighborhood still rife with nationalism.Unlike Europe, East Asia has yet to extinguish historical grievances, border disputes and a taste for raw national powers. As Japan itself proved, economic rises, once initiated, can be rapid indeed, so its current economic strength does not guarantee its future influence. Furthermore, barring a rapid re-militarization, Japan's growth in national strengths is bound to be slower than that of its still maturing neighbors, therefore its relative strategic position in East Asia will only grow weaker. Either re-militarization or an erosion of its self-perceived leadership in the region is likely to require a profound reassessment of Japan's postwar consensus of national purposes. India sees itself as an up-and-coming power, proud to be a democracy yet simultaneously aspiring to more traditional "hard" powers. As a diverse and still poor country, it faces immense internal challenges. Its manufacturing base and infrastructure need major overhaul. Beyond these, India is limited by its geographical constraint in the South Asia and the thorn in its side that’s Pakistan. Sandwiched between Pakistan, Burma and the Himalayas, India’s ambition beyond the subcontinent could not blossom until its geographical perimeter is secured. China borders three of the ambitious giants – India, Russia and Japan. China's neighborhood is far tougher than that of either Europe or the US. Like India, China is a large, poor country rife with internal tensions. Unlike Europe or America, its current form of government does not enjoy wide ideological appeal. Compared with Russia’s or even Japan’s, its military is still modernizing. It has recently become fashionable in America and Europe to describe Chinese "expansions" in Africa and South America. But the evidence is mostly economic deals over raw materials. This is not expansionism, but mercantilism. China is indeed playing an active geopolitical game in its immediate environment: Southeast Asia, Central Asia and Korea Peninsula. But this only serves to show that China is still mired in local complexities.

### No Challengers

#### America is too awesome – Other countries can’t even eat on the same plate

The Economist 08 (“What crisis? Innovation” June 14, 2008, U.S. Edition. Lexis)

Worries that America is losing its edge in science and technology are overblown "THE wolves have not encircled us yet," the Denver Post opined in an article in 2006 entitled "Signs America's Scientific Edge is Slipping", "but there's no denying the sounds of scratching at the door."This was a pithy summary of a mountain of reports from congressional committees, scientific panels and business groups. But a new report from the RAND Corporation's National Defence Research Institute, "US Competitiveness in Science and Technology", suggests that the panic is overblown. The report demonstrates that America is still the world's science and technology powerhouse. It accounts for 40% of total world spending on research and development, and produces 63% of the most frequently cited publications. It is home to 30 of the world's leading 40 universities, and employs 70% of the world's living Nobel laureates. America produces 38% of patented new technologies in the OECD and employs 37% of the OECD's researchers. There is little evidence that America is resting on its laurels, according to RAND. Developing countries such as China and India may be boosting their science and technology muscle faster than America. But they are starting from a low base. America is outperforming Europe and Japan on many performance measures: in 1993-2003 America's growth rate in patents averaged 6.6% a year compared with 5.1% for the European Union and 4.1% for Japan. One reason for America's angst was that the growth of federal spending on R&D slowed significantly with the end of the cold war. It only grew by 2.5% a year in 1994-2004 compared with a long-term average of 3.5% since 1953. The trouble with this statistic is that America has lots of sources of R&D spending: federal money accounted for only $86 billion of the $288 billion that it spent on R&D in 2004. Spending on the life sciences is increasing rapidly, a reasonable bet on the future. Others worry that non-US citizens now account for 41% of science and engineering PhDs. But this is arguably a sign of America's continuing world domination: the world's brightest people are gravitating to the world's best opportunities. A higher proportion than ever of these paragons want to make their homes in the United States.

## \*\*\* Warming

#### No warming and it’s not anthropogenic

Watson 9 (Steve, citing a report conducted by the Japan Society of Energy and Resources, the academic society representing scientists from the energy and resource fields, “Top Japanese Scientists: Warming Is Not Caused By Human Activity,” February 27th, http://www.infowars.com/top-japanese-scientists-warming-is-not-caused-by-human-activity/)

A major scientific report by leading Japanese academics concludes that global warming is not man-made and that the overall warming trend from the mid-part of the 20th Century onwards has now stopped. Unsurprisingly the report, which was released last month, has been completely ignored by the Western corporate media. The report was undertaken by Japan Society of Energy and Resources (JSER), the academic society representing scientists from the energy and resource fields. The JSER acts as a government advisory panel, much like the International Panel on Climate Change did for the UN. The JSER’s findings provide a stark contrast to the IPCC’s, however, with only one out of five top researchers agreeing with the claim that recent warming has been accelerated by man-made carbon emissions. The **government commissioned** report criticizes computer climate modeling and also says that the US ground temperature data set, used to back up the man-made warming claims, is too myopic. In the last month, no major Western media outlet has covered the report, which prompted British based sci-tech website The Register to commission a translation of the document. Section one highlights the fact that Global Warming has ceased, noting that since 2001, the increase in global temperatures has halted, despite a continuing increase in CO2 emissions. The report then states that the recent warming the planet has experienced is primarily a recovery from the so called "Little Ice Age" that occurred from around 1400 through to 1800, and is part of a natural cycle. The researchers also conclude that global warming and the halting of the temperature rise are related to solar activity, a notion previously dismissed by the IPCC. "The hypothesis that the majority of global warming can be ascribed to the Greenhouse Effect is mistaken." the report’s introduction states. Kanya Kusano, Program Director and Group Leader for the Earth Simulator at the Japan Agency for Marine-Earth Science & Technology (JAMSTEC) reiterates this point: "[The IPCC's] conclusion that from now on atmospheric temperatures are likely to show a continuous, monotonic increase, should be perceived as an unprovable hypothesis," Shunichi Akasofu, head of the International Arctic Research Center in Alaska, cites historical data to challenge the claim that very recent temperatures represent an anomaly: "We should be cautious, IPCC’s theory that atmospheric temperature has risen since 2000 in correspondence with CO2 is nothing but a hypothesis. " "Before anyone noticed, this hypothesis has been substituted for truth… The opinion that great disaster will really happen must be broken." Akasofu concludes. The key passages of the translated report can be found here. The conclusions within the report dovetail with those of hundreds of Western scientists, who have been derided and even compared with holocaust deniers for challenging the so called "consensus" on global warming. The total lack of exposure that this major report has received is another example of how skewed coverage of climate change is toward one set of hypotheses. This serves the agenda to deliberately whip up mass hysteria on behalf of governments who are all too eager to introduce draconian taxation and control measures that won’t do anything to combat any form of warming, whether you believe it to be natural or man-made.

#### Newest data proves the greenhouse effect is a hoax

IBT 11(International Business Times, Citing report from NASA’s Terra Satellite, “Global Warming a Hoax? NASA Reveals Earth Releasing Heat into Space,” 7/30, http://sanfrancisco.ibtimes.com/articles/189649/20110730/global-warming-hoax-nasa-earth-releasing-heat-space.htm)

With new data collected from a NASA's Terra satellite, the previous model may be proven as a hoax. Hypothesis based on the satellite's findings show that planet Earth actually releases heat into space, more than it retains it. The higher efficiency of releasing energy outside of Earth contradicts former forecasts of climate change. Dr. Roy Spencer, a team leader for NASA's Aqua satellite, studied a decade worth of satellite data regarding cloud surface temperatures. "The satellite observations suggest there is much more energy lost to space during and after warming than the climate models show...There is a huge discrepancy between the data and the forecasts that is especially big over the oceans," said Dr. Spencer. By cross examining data with other Climate Change models, he concluded that carbon dioxide is just a minor part in global warming. His studies have garnered media attention and that the data are going against the beliefs of global warming alarmists by disproving their theory.

#### Cooling now - outweighs emissions

NIPCC ’10(Nongovernmental International Panel on Climate Change, multi-national scientific coalition comprised of leading climate scientists, “Acknowledging Recent Natural Cooling,” http://www.nipccreport.org/articles/2010/jun/25jun2010a1.html)

In a paper entitled "A strong bout of natural cooling in 2008," which was published in *Geophysical Research Letters*, Perlwitz *et al*. (2009) recount some interesting facts about which many climate alarmists would rather the public remained unaware, including the fact that there was, in Perlwitz *et al*.'s words, "a precipitous drop in North American temperature in 2008, commingled with a decade-long fall in global mean temperatures." Perlwitz *et al*. begin their narrative by noting that there has been "a decade-long decline (1998-2007) in globally averaged temperatures from the record heat of 1998," citing Easterling and Wehner (2009). And in further describing this phenomenon, they say that U.S. temperatures in 2008 "not only declined from near-record warmth of prior years, but were in fact colder than the official 30-year reference climatology (-0.2°C versus the 1971-2000 mean) and further were the coldest since at least 1996." With respect to the geographical origin of this "natural cooling," as they describe it, the five researchers point to "a widespread coolness of the tropical-wide oceans and the northeastern Pacific," focusing on the Niño 4 region, where they report that "anomalies of about -1.1°C suggest a condition colder than any in the instrumental record since 1871." So, pushing the cause of the global and U.S. coolings that sparked their original interest back another link in the chain which -- in their estimation -- connects them with other more primary phenomena, they ask themselves what caused these *latter* anomalous and significant oceanic coolings? Perlwitz *et al*. first discount *volcanic eruptions*, because they say "there were no significant volcanic events in the last few years." Secondly, they write that *solar forcing* "is also unlikely," because its radiative magnitude is considered to be too weak to elicit such a response. And these two castaway causes thus leave them with "coupled ocean-atmosphere-land variability" as what they consider to be the "most likely" cause of the anomalous coolings. In regard to these three points, we agree with the first. With respect to Perlwitz *et al*.'s dismissal of solar forcing, however, we note that the jury is still out with respect to the interaction of the solar wind with the influx of cosmic rays to earth's atmosphere and their subsequent impact on cloud formation, which may yet prove to be substantial. And with respect to their final point, we note that the suite of real-world ocean-atmosphere-land interactions is highly complex and also not fully understood. Indeed, there may even be important phenomena operating within this realm of which the entire scientific community is ***ignorant***. And some of those phenomena may well be strong enough to ***totally compensate*** for anthropogenic-induced increases in greenhouse gas emissions, so that other natural phenomena end up dictating the ever-changing state of earth's climate, as could well be what has been happening over the last decade or more. In light of these considerations, therefore, as well as the substantial *strength* and *longevity* of the planet's current cooling phase, the path of wisdom would seem to us to be to wait and see what happens next, in the unfolding biogeophysical drama of earth's ever-changing climatic path to the future, before we undertake to attempt to *change* what we clearly do not fully *comprehend*.

#### **Your evidence is based on flawed studies - warming’s not a threat and not anthropogenic**

Leake 10 (Jonathan, Times Online, Citing John Christy of the UA Huntsville, a former author for the IPCC, “World may not be warming, say scientists,” 2-14, http://www.timesonline.co.uk/tol/news/environment/article7026317.ece?print=yes&randnum=1269060067737)

The United Nations climate panel faces a new challenge with scientists casting doubt on its claim that global temperatures are rising inexorably because of human pollution. In its last assessment the Intergovernmental Panel on Climate Change (IPCC) said the evidence that the world was warming was “unequivocal”. It warned that greenhouse gases had already heated the world by 0.7C and that there could be 5C-6C more warming by 2100, with devastating impacts on humanity and wildlife. However, new research, including work by British scientists, is casting doubt on such claims. Some even suggest the world may not be warming much at all. “The temperature records cannot be relied on as indicators of global change,” said John Christy, professor of atmospheric science at the University of Alabama in Huntsville, a former lead author on the IPCC. The doubts of Christy and a number of other researchers focus on the thousands of weather stations around the world, which have been used to collect temperature data over the past 150 years. These stations, they believe, have been seriously compromised by factors such as urbanisation, changes in land use and, in many cases, being moved from site to site. Christy has published research papers looking at these effects in three different regions: east Africa, and the American states of California and Alabama. “The story is the same for each one,” he said. “The popular data sets show a lot of warming but the apparent temperature rise was actually caused by local factors affecting the weather stations, such as land development.” The IPCC faces similar criticisms from Ross McKitrick, professor of economics at the University of Guelph, Canada, who was invited by the panel to review its last report. The experience turned him into a strong critic and he has since published a research paper questioning its methods. “We concluded, with overwhelming statistical significance, that the IPCC’s climate data are contaminated with surface effects from industrialisation and data quality problems. These add up to a large warming bias,” he said. Such warnings are supported by a study of US weather stations co-written by Anthony Watts, an American meteorologist and climate change sceptic. His study, which has not been peer reviewed, is illustrated with photographs of weather stations in locations where their readings are distorted by heat-generating equipment. Some are next to air- conditioning units or are on waste treatment plants. One of the most infamous shows a weather station next to a waste incinerator. Watts has also found examples overseas, such as the weather station at Rome airport, which catches the hot exhaust fumes emitted by taxiing jets. In Britain, a weather station at Manchester airport was built when the surrounding land was mainly fields but is now surrounded by heat-generating buildings. Terry Mills, professor of applied statistics and econometrics at Loughborough University, looked at the same data as the IPCC. He found that the warming trend it reported over the past 30 years or so was just as likely to be due to random fluctuations as to the impacts of greenhouse gases. Mills’s findings are to be published in Climatic Change, an environmental journal. “The earth has gone through warming spells like these at least twice before in the last 1,000 years,” he said.

#### **No extinction**

NIPCC 11. Nongovernmental International Panel on Climate Change. Surviving the unprecedented climate change of the IPCC. 8 March 2011. http://www.nipccreport.org/articles/2011/mar/8mar2011a5.html

In a paper published in *Systematics and Biodiversity*, Willis *et al*. (2010) consider the IPCC (2007) "predicted climatic changes for the next century" -- i.e., their contentions that "global temperatures will increase by 2-4°C and possibly beyond, sea levels will rise (~1 m ± 0.5 m), and atmospheric CO2will increase by up to 1000 ppm" -- noting that it is "widely suggested that the magnitude and rate of these changes will result in many plants and animals going extinct," citing studies that suggest that "within the next century, over 35% of some biota will have gone extinct (Thomas *et al*., 2004; Solomon *et al*., 2007) and there will be extensive die-back of the tropical rainforest due to climate change (e.g. Huntingford *et al*., 2008)." On the other hand, they indicate that some biologists and climatologists have pointed out that "many of the predicted increases in climate have happened before, in terms of both magnitude and rate of change (e.g. Royer, 2008; Zachos *et al*., 2008), and yet biotic communities have remained remarkably resilient (Mayle and Power, 2008) and in some cases thrived (Svenning and Condit, 2008)." But they report that those who mention these things are often "placed in the 'climate-change denier' category," although the purpose for pointing out these facts is simply to present "a sound scientific basis for understanding biotic responses to the magnitudes and rates of climate change predicted for the future through using the vast data resource that we can exploit in fossil records." Going on to do just that, Willis *et al*. focus on "intervals in time in the fossil record when atmospheric CO2 concentrations increased up to 1200 ppm, temperatures in mid- to high-latitudes increased by greater than 4°C within 60 years, and sea levels rose by up to 3 m higher than present," describing studies of past biotic responses that indicate "the scale and impact of the magnitude and rate of such climate changes on biodiversity." And what emerges from those studies, as they describe it, "is evidence for rapid community turnover, migrations, development of novel ecosystems and thresholds from one stable ecosystem state to another." And, most importantly in this regard, they report "there is very little evidence for broad-scale extinctions due to a warming world." In concluding, the Norwegian, Swedish and UK researchers say that "based on such evidence we urge some caution in assuming broad-scale extinctions of species will occur due solely to climate changes of the magnitude and rate predicted for the next century," reiterating that "the fossil record indicates remarkable biotic resilience to wide amplitude fluctuations in climate."

#### Flawed studies - warming’s not a threat and not anthropogenic

Leake 10 (Jonathan, Times Online, Citing John Christy of the UA Huntsville, a former author for the IPCC, “World may not be warming, say scientists,” 2-14, http://www.timesonline.co.uk/tol/news/environment/article7026317.ece?print=yes&randnum=1269060067737)

The United Nations climate panel faces a new challenge with scientists casting doubt on its claim that global temperatures are rising inexorably because of human pollution. In its last assessment the Intergovernmental Panel on Climate Change (IPCC) said the evidence that the world was warming was “unequivocal”. It warned that greenhouse gases had already heated the world by 0.7C and that there could be 5C-6C more warming by 2100, with devastating impacts on humanity and wildlife. However, new research, including work by British scientists, is casting doubt on such claims. Some even suggest the world may not be warming much at all. “The temperature records cannot be relied on as indicators of global change,” said John Christy, professor of atmospheric science at the University of Alabama in Huntsville, a former lead author on the IPCC. The doubts of Christy and a number of other researchers focus on the thousands of weather stations around the world, which have been used to collect temperature data over the past 150 years. These stations, they believe, have been seriously compromised by factors such as urbanisation, changes in land use and, in many cases, being moved from site to site. Christy has published research papers looking at these effects in three different regions: east Africa, and the American states of California and Alabama. “The story is the same for each one,” he said. “The popular data sets show a lot of warming but the apparent temperature rise was actually caused by local factors affecting the weather stations, such as land development.” The IPCC faces similar criticisms from Ross McKitrick, professor of economics at the University of Guelph, Canada, who was invited by the panel to review its last report. The experience turned him into a strong critic and he has since published a research paper questioning its methods. “We concluded, with overwhelming statistical significance, that the IPCC’s climate data are contaminated with surface effects from industrialisation and data quality problems. These add up to a large warming bias,” he said. Such warnings are supported by a study of US weather stations co-written by Anthony Watts, an American meteorologist and climate change sceptic. His study, which has not been peer reviewed, is illustrated with photographs of weather stations in locations where their readings are distorted by heat-generating equipment. Some are next to air- conditioning units or are on waste treatment plants. One of the most infamous shows a weather station next to a waste incinerator. Watts has also found examples overseas, such as the weather station at Rome airport, which catches the hot exhaust fumes emitted by taxiing jets. In Britain, a weather station at Manchester airport was built when the surrounding land was mainly fields but is now surrounded by heat-generating buildings. Terry Mills, professor of applied statistics and econometrics at Loughborough University, looked at the same data as the IPCC. He found that the warming trend it reported over the past 30 years or so was just as likely to be due to random fluctuations as to the impacts of greenhouse gases. Mills’s findings are to be published in Climatic Change, an environmental journal. “The earth has gone through warming spells like these at least twice before in the last 1,000 years,” he said.

#### CO2 doesn’t cause warming

Chen 10 – Xuefei Chen (People's Daily Online correspondent in Stockholm) “Swedish expert says CO2 is not the main cause of global warming”. 4-22, http://english.peopledaily.com.cn/90001/90777/90853/6959757.html

Dr. Goldberg said that there is an urban effect around heavily populated cities in our world, for example, the gap in temperature between the suburban Stockholm and the city center can often be at least 2 degrees Celsius. And the gap between Beijing city center and Great Wall area can be six degrees Celsius. The urban effect is caused by human's construction, transportation and the density of the housing and population, but this is not a global effect. "You cannot compensate for urban effects because you don't know how much it is, it changes with cloudiness, time of day, sun position over the horizon, wind intensity and direction and winter or summer," Goldberg said. He questioned the accuracy of the measurement in Al Gore's The Inconvenient Truth. He said that in the USA about 900 stations accounting to 78 percent of the total are incorrectly located such as in the parking place or airports near the airplanes or runways where he believes it is definitely hotter than other natural areas such as mountains or rivers. About 90 percent of the places where they measured the temperature are not according to regulations and have an error of 1 to 5 degrees C, which he thinks is very big. The only accurate way to measure temperature is with satellite, Goldberg said. Another thing that matters is that climate scientist must do what they say they do," Goldberg argued. Phil Jones in Hadley Centre said he wouldn't give out the data about his 25 years of work to someone who only wants to find something wrong with it thereby violating the Freedom of Information Act, Goldberg held. How much carbon-dioxide in the atmosphere? How much CO2 is there in the air? Only 0.0387 %, it has neither odor, nor color and is not poisonous. If there isn't CO2, there will not be plant life, therefore, we must have CO2, we need it, Goldberg argued. He said that the average amount of water vapor is 30.000 ppm. So the consequence of that is that 95 percent or even up to 98 percent of the total greenhouse effect is water vapor while only one percent is CO2. The other greenhouse gases are ozone, methane and CFC, etc. Goldberg said even if human beings emit 100 ppm CO2, 98 percent of it will go into the ocean because of the chemical balance between the oceans and the atmosphere. The remaining 2 ppm will be added to the atmosphere which is negligible because there isn't enough oil and gas in the world to generate enough carbon dioxide to change the climate. Over the past 100 years, with an increase of 100 ppm CO2, the earth temperature only increased 0.7 degree. Thus it is not possible for the temperature to increase 2 degrees globally which our politicians want to prevent, Goldberg said. Why? Goldberg explained that the ocean will absorb large amount of CO2. Once it is absorbed by the ocean, it will to some extent become calcium carbonate which is the same thing as limestone. Then the limestone will be building up at the bottom of the oceans. The whole island of Gotland which is the largest island in Sweden is formed of limestone. "It was built up at the bottom of the ocean because the ocean absorbed the CO2 and when saturated it formed limestone sediments at the bottom of the ocean. The CO2 content in the atmosphere has been shrinking continuously. A billion years ago, there was 80 percent CO2 in the atmosphere, now it is 0.038 %. It ‘s been shrinking all the time, it is continuing because of the formations of limestone sediments in the oceans." Goldberg explained. He said that the transport of CO2 is controlled by ocean temperature. For example, one can send CO2 bubbles into a bottle of cold water which is about 5 degrees C, but if one opens the bottle and puts it on the table, the water temperature will increase, and the CO2 will leave the water soon. The same theory, the lakes absorb a lot of CO2 in winter and it releases the CO2 in summer when the temperature reaches 23 to 25 degrees, you won't have much CO2 in the water. Thus this is a natural process and with all the minerals in sea water, the sea water can absorbs 73 times more CO2 than fresh water. "Mount Mauna Loa in Hawaii is the world's largest live volcano which emits a lot of CO2. 87 percent of the data recorded there has to be edited. The data may therefore have been manipulated," Goldberg said. He said that in 1973 there was a big eruption and there were no measurements done for 3 months, but there is no data gap in the diagrams. Why? Asked Goldberg. "Many climate scientists are bluffing in order to please the politicians who want to put a tax on CO2. These scientists live in symbiosis with the politicians. They both depend on each other," Goldberg criticized this. Solar activity decides whether the temperature is up or down Goldberg said that solar activity has increased 3 times according to records from NASA earth observatory. This is something we can't do anything about. "The activity of the sun shows the highest activity ever recorded in 2002. Earlier history of solar activity can be seen from the distribution of isotopes in rocks and biomass which are depending on the solar activity," Goldberg explained. Sun activity heats the sea surface, and the sea releases CO2. Over the past 100 years, 100 ppm CO2 were emitted due to the warming of the sea surface. In the atmosphere, there is 750 gigaton of carbon. In the ocean there is 38.100 gigatons of Carbondioxide. That is 50 times more according to the famous Henry's Law. Henry's law says that 98 percent of CO2 stays in the ocean while about 2 percent stays in the atmosphere. It is estimated that humans today generate about 8 gigaton CO2. Thus we release approx. one percent of CO2 to the atmosphere. The biomass is absorbing 121 gigaton and the oceans 92 gigaton. That means 28 percent of the CO2 in the atmosphere is absorbed each year in a cycle. All the CO2 in the air will be absorbed in less than 5 years, which means if we emit one percent a year, that percent is also included in the absorption. So one can never find more than 4 percent of CO2 in the atmosphere coming from humans," Goldberg explained. Along the equator, the sun is heating the water. When the water is warmer, the water is releasing carbon dioxide (CO2). The colder the water is, the more CO2 it absorbs. And therefore the colder waters around the Arctic and Antarctica will absorb a lot of CO2. There is a huge cycle of CO2. If you take out the CO2 for plants, then the ocean will evaporate more to air. If you emit more, the ocean will take it up. Ocean controls the amount of CO2 in the atmosphere. The sun controls the ocean temperatures which in turn has a strong effect on the climate on earth. "The people of Bangladesh breaths out 75 million tons CO2 per year, Sweden generates 60 million tons per year from all its industrial activities, transports and warming of houses etc. while the people in China breathes out 700-800 million tons per year. What does it mean? It means to reduce the amount of the CO2 will have no effect on our climate at all. You cannot do anything, I mean you cannot stop the sun from coming up tomorrow morning. If we cannot stop the sun from going up in the morning, can we change the CO2 system in the atmosphere? It is self regulated and sun-controlled," Goldberg said.

#### Can’t solve warming --- coal pollution

Mendelson 11 – 4 11/18/2011 Joe Mendelson (serves as NWF's Director of Policy, Climate & Energy Program where he leads a team of legislative and policy professionals to develop and implement solutions to global warming) “Obama Commits to Tackle Carbon Pollution in 2012 from Wildlife Promise”http://blog.nwf.org/2011/11/obama-commits-to-tackle-carbon-pollution-in-2012/

Yesterday, Environmental Protection Agency (EPA) Administrator Lisa Jackson announced plans for establishing new carbon pollution limits on the nation’s power plants. This is good news. Just last month NWF had voiced serious concerns that these efforts were going to be delayed indefinitely. Significantly, the new schedule gets the Obama Administration back on track to tackle the nation’s biggest source of air pollution that causes climate change. EPA' Administrator Jackson (image emagazine.com) These new rules will utilize section 111 of the Clean Air Act. This provision of law requires EPA to establish federal air pollution standards to control air pollutants from stationary sources (read here coal-fired power plants) which cause or contribute significantly to the air pollution that harms our health and wildlife. The standards are also intended to promote use of the most modern air pollution control technologies so our power plants stay up to date. Let’s just say the sooner we get on with this effort the better. As NWF’s Senior Scientist Amanda Staudt blogs today, a new report by the Nobel Prize winning U.N. Intergovernmental Panel on Climate Change says carbon pollution induced climate change will make the drought and flooding events that have battered the United States more frequent in years to come. Right now, our nation’s power plants can belch carbon dioxide pollution into our air without any limits. A recent piece in the New York Review of Books by Yale economist William Nordhaus aptly describes why it is urgent that we address this source of carbon pollution: [The] burning coal is very dirty, releasing both conventional pollutants and greenhouse gases. Per unit of energy, coal emits 27 percent more CO2 than oil and 78 percent more CO2 than natural gas. . . . In the aggregate, the emissions of CO2 from coal-fired electricity- generating facilities are the largest single industrial source of greenhouse gas emissions in the United States. They make up one third of all emissions in an industry that constitutes only about one half of one percent of the US economy! Moreover, studies indicate that reducing coal-fired generation is the least expensive way for the US to reduce its carbon emissions in the near term (emphasis added). The new pollution limits will be established into two parts. In January, the administration will propose limits that any new power plant must meet before it can be constructed. NWF expects that the critically important second part of the standards - new carbon pollution limits on the nation’s existing power plants – will be proposed later in the Spring of 2012.

#### Too much co2 has already been released – can’t prevent warming

**Longley 8** [Robert, as worked closely with federal agencies including the Department of Housing and Urban Development, the Environmental Protection Agency and the U.S. Census Bureau, “Global Warming Inevitable This Century, NSF Study Finds”, http://usgovinfo.about.com/od/technologyandresearch/a/climatetochange.htm]

Despite efforts to reduce greenhouse gas emissions, global warming and a greater increase in sea level are inevitable during this century, according to a new study performed by a team of climate modelers at the National Center for Atmospheric Research (NCAR) in Boulder, Colo. Indeed, say the researchers, whose work was funded by the National Science Foundation (NSF), globally averaged surface air temperatures would still rise one degree Fahrenheit (about a half degree Celsius) by the year 2100, even if no more greenhouse gases were added to the atmosphere. And the resulting transfer of heat into the oceans would cause global sea levels to rise another 4 inches (11 centimeters) from thermal expansion alone. The team's findings are published in this week's issue of the journal "Science." “This study is another in a series that employs increasingly sophisticated simulation techniques to understand the complex interactions of the Earth,” says Cliff Jacobs of NSF’s atmospheric sciences division.

#### No tipping point

McGrath 11 – 4 August 2011. “Arctic 'tipping point' may not be reached” By Matt McGrath (Science reporter, BBC World Service)http://www.bbc.co.uk/news/science-environment-14408930

The team said they had found an indirect method to give a picture of the ice cover dating back 11,000 years Scientists say current concerns over a tipping point in the disappearance of Arctic sea ice may be misplaced. Danish researchers analysed ancient pieces of driftwood in north Greenland which they say is an accurate way to measure the extent of ancient ice loss. Writing in the journal Science, the team found evidence that ice levels were about 50% lower 5,000 years ago. They say changes to wind systems can slow down the rate of melting. They argue, therefore, that a tipping point under current scenarios is unlikely. While modern observations by ship and by satellite give us a very accurate picture of the recent state of the ice, historic information is limited. The ice comes and goes without leaving a permanent record. But a Danish team believes it has found an indirect method that gives a clear picture of the ice loss dating back 11,000 years. Dr Svend Funder from the Natural History Museum of Denmark led several expeditions to inhospitable regions of Northern Greenland. On these frozen shores the Danish team noticed several pieces of ancient driftwood. They concluded that it could be an important method of unlocking the secrets of the ancient ice. "Driftwood cannot float across the water, it has to be ferried across the ocean on ice, and this voyage takes several years, which means that driftwood is actually a signal of multi-year sea ice in the ocean and it is this ice that is at risk at the moment," said Dr Funder. Carbon dating was used to determine the age of the wood. And figuring out its origins also yielded important information. "It's so lovely that drift wood from Siberia is mainly larch and from North America is mainly spruce. So if we see there was more larch or spruce we can see that the wind system had changed and in some periods there was little spruce and in other periods there was lots," he said. Wind delay? As well as the driftwood, the scientists mapped beach ridges for 500km (310 miles) along the coast. This proved that at one time the waves had reached the shore unhindered by the ice. Dr Funder and his team say their data shows a clear connection between temperature and the amount of sea ice. The researchers concluded that for about 3,000 years, during a period called the Holocene Climate Optimum, there was more open water and far less ice than today - probably less than 50% of the minimum Arctic sea ice recorded in 2007. But the researcher says that even with a loss of this size, the sea ice will not reach a point of no return. "I think we can say that with the loss of 50% of the current ice, the tipping point wasn't reached." The idea of an Arctic tipping point has been highlighted by many scientists in recent years. They have argued that when enough ice is lost it could cause a runaway effect with disastrous consequences.

## \*\*\* Oil

#### Nuclear is replacing oil

Simit Patel; Energy Geopolitics Analyzer; January 3 2012 “Oil Prices Rose 19% In 2011 - Another Sign That A Nuclear Renaissance Is Inevitable” http://seekingalpha.com/article/317065-oil-prices-rose-19-in-2011-another-sign-that-a-nuclear-renaissance-is-inevitable

Oil prices rose 19% over the course of 2011, the third consecutive year marked by a rise in the price of oil. Below is the monthly chart of Brent Crude Oil that illustrates the clear uptrend.¶ ¶ ¶ While currency devaluation, geopolitical tensions, and speculators are all forces that may be contributing to rising oil prices and greater market volatility, a growing factor that suggests the price rise will continue is the supply/demand imbalance in the oil market. In other words: demand for oil and other fossil fuels is only growing, but the supply of them is diminishing. The chart below illustrates.¶ ¶ click to enlarge¶ ¶ ¶ ¶ While I believe the world will likely be using fossil fuels as a primary source of energy for some time, we are clearly at a point where a new source of energy is needed. I believe nuclear energy is the primary candidate destined to grow, for the following reasons:¶ ¶ 1. It can provide "baseload" - meaning always on - energy¶ 2. It is emission-free¶ 3. It has high power density, which means it does not require an inordinate amount of land and thus is conducive to powering cities¶ 4. It is inexpensive¶ ¶ No other source can really make these same claims. Wind and solar are much more expensive and cannot effectively provide baseload energy, which is precisely why they remain insignificant sources of power on a global basis. Technological breakthroughs may change this, though I don't see this on the horizon, and believe renewables will have limited roles in the global energy market until this changes.¶ ¶ And so, the rise of nuclear energy is virtually inevitable -- the world will demand it for survival. Accordingly, China already has 25 nuclear power plants under construction, and realizes that nuclear will be a key part of how its nation is powered as it increasingly urbanizes. Investors can recognize China as the "smart money" -- the force driving the market's demand and sending prices higher -- in the nuclear energy market.¶ ¶ Of course, this transition will not occur overnight - nuclear power plants take a long time to build - and so oil, coal, and natural gas will continue to play an important role in providing energy to the world. Investors will need to be patient, as this market may take up to a decade to really get going. The value network is still developing and much depends on how government participates and regulates the market, as well as what innovations entrepreneurs will develop as the market grows

#### High oil prices cause a transition to alternative energy absent the plan

**Rivlin, 1** (Paul Rivlin has a PhD from the University of London and is a Senior Research Fellow at the Moshe Dayan Center for Middle Eastern and African studies, specializing in the Middle East economy and its historical development, “High Oil Prices and the Middle East Strategic Balance,” on March 16,2011 from http://www.dayan.org/pdfim/TA\_Notes\_RIVLIN\_Oil\_MAR16\_11.pdf)

Does it make sense **for the US and other Western countries to reduce oil consumption? High oil prices will do this automatically if they are maintained**, because **they will encourage the use of alternative fuels and technologies that use less fuel. Stimulating this** by government action **would reduce exposure to oil price rises/shortages and would encourage the development of new technologies. These** could help to **stimulate economic growth** and be exported to China and other fast growing, oil importing countries. They would also have beneficial environmental effects. It is too late to avoid the effects of the current predictable and predicted crisis; any measures undertaken now would only affect the demand for oil in the medium term.

#### The price of oil is what investors look to when making investment decisions

Huang et. al 11 (Alex YiHou, Department of Finance, Yuan Ze University, Taiwan, Chiao-Ming Cheng Graduate School of Management, Yuan Ze University, Taiwan, Chih-Chun Chen Graduate School of Management, Yuan Ze University, Taiwan, Wen-Cheng Hu Graduate School of Management, Yuan Ze University, Taiwan “Oil Prices and Stock Prices of Alternative Energy Companies: Time Varying Relationship with Recent Evidence” http://www.southwesternfinance.org/conf-2011/swfa2011\_submission\_30.pdf kdej)

In sum, while price uncertainty of crude oil rises and green energy gains greater deal of attention in recent years, the interrelationships between oil prices and stock performances of alternative energy companies become more significant. For Periods I and II, time before the Lebanon War from 2001 to late 2006, no causality is shown from oil prices to ECO index or vice verse, implying that the movements of crude oil prices do not affect how the investors trade with the stocks of alternative energy industry. In the most recent period, when oil prices reach historical high and crash back with volatile dynamics, oil price behavior becomes responsible for stock performances of alternative energy companies. Also only recently, the dynamics in oil trading also depend on how stocks of oil companies perform. These results add to literature showing that investors of alternative energy companies conduct their trading decisions upon observation of crude oil price shocks. The two markets, i.e. crude oil market and stock market for green energy sector, seem to be more closely interactive with each other. The full picture of how the crude oil markets react to the development of green energy, however, requires additional examinations and is certainly an area worthy of future exploration.

## \*\*\* Russia

### No Russia War

#### Zero risk of Russian war

Graham 7 (Thomas Graham, senior advisor on Russia in the US National Security Council staff 2002-2007, 2007, "Russia in Global Affairs” The Dialectics of Strength and Weakness http://eng.globalaffairs.ru/numbers/20/1129.html)

An astute historian of Russia, Martin Malia, wrote several years ago that “Russia has at different times been demonized or divinized by Western opinion less because of her real role in Europe than because of the fears and frustrations, or hopes and aspirations, generated within European society by its own domestic problems.” Such is the case today. To be sure, mounting Western concerns about Russia are a consequence of Russian policies that appear to undermine Western interests, but they are also a reflection of declining confidence in our own abilities and the efficacy of our own policies. Ironically, this growing fear and distrust of Russia come at a time when Russia is arguably less threatening to the West, and the United States in particular, than it has been at any time since the end of the Second World War. Russia does not champion a totalitarian ideology intent on our destruction, its military poses no threat to sweep across Europe, its economic growth depends on constructive commercial relations with Europe, and its strategic arsenal – while still capable of annihilating the United States – is under more reliable control than it has been in the past fifteen years and the threat of a strategic strike approaches zero probability. Political gridlock in key Western countries, however, precludes the creativity, risk-taking, and subtlety needed to advance our interests on issues over which we are at odds with Russia while laying the basis for more constructive long-term relations with Russia.

#### America would survive unscathed

Sharavin 7 (Alexander Sharavin, Director of the Institute of Political and Military Analysis, 2007. Defense and Security, “Will America Fight Russia?” p. Lexis)

The United States may count on a mass air raid and missile strike at objects of the Russian strategic nuclear forces and, perhaps, some objects of other branches of the Russian military. Plus, of course, at the military and political planning centers. Whatever targets may escape destruction on the first try will be bombed out of existence by repeated strikes. And Russia will have nothing to answer with. Even if some elements of the strategic nuclear forces survive, they will fall prey to the American national missile defense. The American strategic missile forces in their turn will escape the war unscathed.

### Arctic Conflict

#### Cooperation will stop conflict and solve arctic war – Illegal fishing and mapping prove.

Brosnan, Leschine and Miles '11**[Ian, Thomas, Edwards.School of Marine Affairs University of Washington Seattle, Washington, USA.“Cooperation or Conﬂict in a Changing Arctic?”** http://web.ebscohost.com.ezproxy.uwc.edu/ehost/pdfviewer/pdfviewer?sid=40c969c4-6fe8-4c63-95d0-98d48b833759%40sessionmgr11&vid=2&hid=19**. Pg. 13-19. JCook.]**

**Under the theme of sovereignty,** the coastal Arctic states are interested in determining the extentof their extended continental shelves and projecting sovereign presence. There areincentives for the five coastal states to cooperate on both issues. Cooperation will allowthem to realize increasingly optimal outcomes. **In some cases,** cooperation among the states isalready occurring.***Extended Continental Shelves.*Article 76 of UNCLOS permits a coastal state whose continental margin extends beyond its 200-nautical-mile EEZ to establish the outer edge of its continental margin up to, but no further than, 350 nautical miles beyond the baselines used to delimit the territorial sea or not more than 100 nautical miles from the 2,500-meter isobath. The coastal state is accorded sovereign rights to the mineral and nonliving resources of the seabed and subsoil and sedentary living marine resources out to the extent of its continental margin and has 10 years from the national date of entry into force ofthe convention to submit to the Convention on the Limits of the Continental Shelf (CLCS) the particulars of the limits of its extended continental shelf.29 Mapping the continental shelf to determine marginal extent and preparing the necessary information is a technically challenging and expensive task. It typically requires the use of multiple techniques to map seafloor topography and sediment characteristics and can involve the employment of two ships, one to perform mapping activities and the other to provide icebreaking services.30 *Cooperation and Extended Continental Shelf Issues.*** Is there room for cooperation on the first issue, mapping the continental margins? The United States, Russia, Canada, and Denmark are clear that delimiting their continental shelves is a national priority. The U.S. State Department describes why: certainty and international recognition **[of the limits of the continental shelves]** are important in establishing the necessary stability for development, conservation and protection of these areas [that are] likely rich in resources.**31 However, this is insufficient to suggest that an avenue for cooperation exists.** The answer may lie in comparing thepotential outcomes of unilateral action against cooperation. **Consider the first case,** a state engaging in unilateral mapping of its Arctic continental margins. The state will bear the full financial costs of mapping its extended continental margin; two ice-capable ships **carrying costly mapping equipment and technically competent personnel may be required, one to break ice, the other to map the seafloor.32 The ships and their availability may be particularly important as the national icebreaker fleets of the Arctic nations are aging and are prone to mission-limiting casualties.33 As developed, relatively wealthy nations, the Arctic states seem likely to have the resources to complete mapping efforts by their 10-year timetable (Norway succeeded and Russia submitted information34)but**, while the shelves are being mapped, shelf-related decisions and activities such as resource development and bilateral boundary resolutions must bedeferred and the legal and technical personnel to prepare and evaluate claims at the national and international level must be maintained**.35 The same holds true if submission timetables are not met.** Collaborative efforts can conceivably result in better outcomes. Nations may have access to more ship-time, comparative advantages in mapping equipment and ship capabilities may be realized, duplication of effort may be avoided, and mapping, submission, and approval may proceed more quickly, leading to cost savings and political stability that companies investing in resource exploitation value.**36 Submissions to the CLCS need not be for the whole of a nation’s extended continental shelf: Norway’s 2006 submission was for three distinct and important regions, with the possibility of additional future submissions.37 Thus,**collaboration need not encompass the entire mapping efforts of the states, but could focus on priority areas such as the regions where there may be overlapping claims**. Continental shelf mapping appears to represent a dilemma of common interest.** Collaboration would likely permit the states to realize a more optimal outcome: geopolitical stability supportive of development, conservation, and protection of a potentially resourcerich shelf, in a more timely and perhaps less costly manner**. The United States and Canada appear to prefer the outcomes from cooperation; they have conducted two cooperative mapping missions in the Beaufort Sea since 2008.38 *Sovereign Presence.* Sovereign presence in this analysis refers to efforts to deter, detect, and interdict illegal activities such as smuggling, terrorism, and illegal fishing. These are activities that, generally speaking, require combinations of enforcement vessels (aircraft and ships), trained personnel, and monitoring and surveillance capabilities. The capability of the states in these areas varies. In the U.S. Arctic, these sorts of activities are generally under the purview of the Coast Guard, whose Arctic assets include three icebreakers. Two, the most powerful, are well past their service lives and neither ship, at the time of writing, is operational.39 Other U.S. Coast Guard assets, including small boats and aircraft, were not designed for Arctic operations and summer tests in Barrow suggest they are not wellsuited to Arctic use.40 Canada’s icebreaker fleet is also aging and the country has long had plans to build a powerful Arctic icebreaker and, more recently, a small fleet of Arctic patrol ships. The icebreaker project has been slow and the Arctic patrol ship plans were recently placed on hold.41 Canada’s satellite-based Arctic surveillance project, Polar Epsilon, does appear to be proceeding.42Norway operates a dozen patrol ships, including several ice-strengthened vessels that operate in the Barents Sea and a program named i-Nord has been proposed to implement and operate a comprehensive monitoring system for the Norwegian Arctic.43 Denmark operates seven ice-strengthened ships that conduct fisheries and sovereignty patrols in Greenland and teams of specially trained dogsled forces patrol northern Greenland.44 A recent defense position paper released by the Danish government proposes a new Arctic command and military group with air, land, and sea components and new surveillance capabilities.45 Russia’s capabilities are less evident, but the country previously announced creation of a new Arctic security group under the Russian Federal Security Service and has reportedly awarded a contract for a fleet of coastal patrol ships.46 The Russian Federal Security Service operates a large, but aged, fleet of coastal patrol ships, several of which are strengthened for Arctic operations.47 *Cooperation and Sovereign Presence.*** Norway devotes the most attention in its strategy statement to sovereign presence. Three pages of its strategy are devoted to **illegal, unreported, and unregulated (**IUU) fishing. Norway, Canada, and the United States describe interest in bilateral cooperation to stem illegal activities**. Similar** interest in bilateral cooperation on such issues is not explicit in the Danish and Russian strategies, but may be inferred from their stated interest in Arctic cooperation generally. There are benefits to joint action that suggest that cooperation will result in outcomes that are otherwise not attainable and may represent the outcomes sought by the states, even if they are not explicitly stated in the strategy statements. Bilateral and multilateral efforts to deter, detect, and interdict illegal activities can serve as force multipliers, maximizing the use of limited resources**. For example, when the police force of one party participates in a ride-along of another state’s maritime patrol, the authority and jurisdiction of two states can be projected at once from one vessel rather than two. Comparative advantages in equipment and capability can also be realized if nations have invested in unique platforms for enforcement or surveillance, including satellite deployments.48 Such advantages need not be identified post hoc; the Arctic states are reviewing their surveillance and operational capabilities. Bilateral and multilateral efforts to stem illegal activity can also mean that international borders no longer serve as a means of escaping authorities.**

#### Cooperation will stop conflict and solve arctic resource scenarios – Prefer our evidence siting every scenario possible.

Brosnan, Leschine and Miles '11**[Ian, Thomas, Edwards.School of Marine Affairs University of Washington Seattle, Washington, USA.“Cooperation or Conﬂict in a Changing Arctic?”** http://web.ebscohost.com.ezproxy.uwc.edu/ehost/pdfviewer/pdfviewer?sid=40c969c4-6fe8-4c63-95d0-98d48b833759%40sessionmgr11&vid=2&hid=19**. Pg. 23-25. JCook.]**

***Cooperation and Resources.*Under the UNCLOS framework,** resource development outcomes **that may** require cooperation in order to be realized include transboundary fish stocks and resources in areas of overlappingclaims. These appear to be bilateral issues in the Arctic, **so it is useful to consider the potential dilemmas of the Arctic states in the context of four regions: a Norwegian/Russian region (the Barents Sea area); a Canadian/Danish region that includes the Lincoln Sea and two small areas of overlapping claims; a Canadian/U.S. region in the Beaufort Sea that also includes an overlapping territorial claim; and a U.S./Russian region north of the Bering Strait. *Norway/Russia (Barents Sea).* The case of Russia and Norway serves as a demonstration of two states forgoing unilateral action in order to attain a more optimal outcome. According to their strategy statements, the preferred resource development outcomes of Russia and Norway are similar; both seek to develop Arctic resources to sustain existing exports and domestic industries and support social and economic development. The fisheries and oil and gas resources they seek to develop are found in the Barents Sea, where fish stocks cross between the waters of both states (transboundary) and through a formerly disputed area known as the Grey Zone. The same** formerly disputed area is also believed to contain valuable energy resources.**70** Russia and Norway recognized early on that only cooperation in Barents Seafisheries would yield an optimal outcome, one of sustainable fisheries and exclusion of undesirable third parties**.71 A 1975 treaty established a joint Norwegian/Russian fisheries commission, an 1976 treaty established a framework for cooperation on joint stocks, and a 1978 Grey Zone Agreement that governs the harvest limits, catch allocations, fishing gear in use, and division of enforcement authority in the Grey Zone.72 Although outside the disputed Grey Zone, Norwegian state-owned StatoilHydro and Russia’s Gazprom have recently signed a 3-year memorandum of understanding to work jointly to develop Shtokman field.73 In late April 2010,** Russia and Norway jointly announced that they had resolved their dispute over the delimitation oftheir maritime boundary in the Barents Sea and, subsequently, signed a treaty on maritime delimitation and cooperation **in the Barents Sea and the Arctic Ocean, effectively** eliminating political uncertainty that has been one barrier to development of Barents Sea resources.**74 *Canada/Denmark (Lincoln Sea).*** TheCanada/Denmark case is similar to that of Russia and Norway. There exist overlapping claims in the Lincoln Sea.**75 However, the area of the claims is far smaller than the Grey Zone, perhaps to the point of being insignificant as far as resources are concerned.76** Denmark and Canada’s Arctic strategies reveal a preference for resource development to support economic development and, ultimately, economic independence of their Arctic territories. If the area of overlapping claims in the Lincoln Sea proves to contain energy **and fisheries resources (or fisheries resources develop as a result of changing oceanographic conditions) and climate and market conditions support exploitation,** industry investors will likely seek geopolitical stability beforeinvesting in energy development in the disputed areas. Canada and Denmark face a dilemma of common interest. The preferred optimum result for the states appears to be development of the resources in the disputed area. To realize this optimal outcome, Canada and Denmarkmust collaborate to realize the geopoliticalstability that may be a prerequisite to energy development **and to manage transboundaryfish stocks to prevent overfishing and ensure long-term stock conservation and utilization. The Russian/Norwegian management scheme in the Barents Sea, establishment of a joint fisheries commission to set catch limits and agreements on harvest allocation, enforcement, and cooperative development of energy resources, provides an model for a possible Canadian/Danish regime in the Lincoln Sea if the location of maritime borders cannot be agreed on. *Canada/United States (Beaufort Sea).***In contrast to Russia, Norway, Denmark, and Canada, the U**nited** S**tates** does not express a strong preference for resource development. **In keeping with the overall tone of its policy,** the U**nited** S**tates simply** notes that it has interests in Arctic resources. **At first glance, the Canadian development-oriented strategy and the more neutral U.S. policy seem at odds.** Canadian strategy and recent federal actions have given attentionto the area through commercial fisheries-related investments in Nunavut and the focus on the energy resources of Mackenzie Delta**.77 It seems that** the U**nited** S**tates** and Canada have thesame preferred outcome. **Specifically,** they wish to preserve their potential fisheries interests in the Beaufort Sea and energy interests where they have an overlapping territorial claim. This seems to be a case where the states may obtain their desired outcome withoutcooperation. However, consider the hypothetical case where one country finds a compelling reason to begin fishing Beaufort Sea stocks or drilling for oil where the states have overlapping claims. This hypothetical scenario would place the interests of the other stateat risk and suggests that the states actually have a dilemma of common interest. The optimal result, and incentive to collaborate, is a case where each state’s interests in energy resources in the disputed area and potential transboundary Arctic fish stocks are not placed at risk by the activities of the other state. An informal moratorium on oil and gas development in the disputed region of the Beaufort Sea already exists to preserve the interests of both states.**78 A joint moratorium on fishing throughout the Beaufort Sea would ensure the states their preferred outcome: preservation of their interests in the Beaufort Sea. At some future date, should there prove to be commercially viable fisheries in the Beaufort Sea or accessible energy resources in the area of overlapping claims that both states desire to exploit, a dilemma of common interest would still exist. Only the desired outcome would have changed, and Canada and the United States would have the same incentives to cooperate as Canada and Denmark. Again, the Norwegian/Russian agreements provide an example of a regime to address such issues. Both Canada and the United States appear amenable to the idea of new governance arrangements. The U.S. Arctic Policy explicitly states that new governance arrangements should be considered as human activities in the Arctic change. Canada’s strategy is not as explicit, but it does indicate that Canada intends to continue to deepen cooperation with the United States on emerging Arctic issues. *United States/Russia.***The case of the U**nited** S**tates** and Russia is similar to that of the U**nited** S**tates** and Canada. Their preferred outcomes, as stated in their strategy statements, seem at odds. But a regional view suggests that Russia’s maritime focus is largely on development in northwest Russia rather than the Far East.**79 This suggests that both countries may at present be interested in preserving their interests in their border region.** The U**nited** S**tates a**nd Russia do not have overlapping territorial claims in the Arctic, although Russia has not ratified the 1991 treaty delimiting the U.S./Russian maritime boundary**.80 Russia does, however, abide by its terms so, unlike the Canada/Denmark and Canada/U.S. cases, there does not appear to be any immediate concern over overlapping claims to energy resources.81** This leaves potential transboundary Arctic fish stocks as anavenue forcooperation between Russia and the United States as existing agreements do not extend north of the Bering Strait. As with Canada, a joint moratorium on new fishing could ensure the states their preferred outcome: preservation of their fisheries interests in the Arctic.

#### Cooperation will occur because of shipping

Brosnan, Leschine and Miles '11**[Ian, Thomas, Edwards.School of Marine Affairs University of Washington Seattle, Washington, USA.“Cooperation or Conﬂict in a Changing Arctic?”** http://web.ebscohost.com.ezproxy.uwc.edu/ehost/pdfviewer/pdfviewer?sid=40c969c4-6fe8-4c63-95d0-98d48b833759%40sessionmgr11&vid=2&hid=19**. Pg. 26-27. JCook.]**

In order to determine how opposition to unmanaged shipping may represent an avenue for Arctic cooperation, a number of component issues need to be considered. **Among the five states, 10 topics related to shipping are mentioned in their Arctic strategy statements. These include: aids to navigation; Vessel Traffic Services (VTS); ports; weather and navigation services; iceberg and sea-ice reports; shipping monitoring; standards for Arctic ships; environmental response; and search and rescue response. There are not clear incentives for cooperation on port development, aids to navigation, and weather or navigation services. These are traditionally national activities and, while there are international standards for the marking of aids to navigation, the states do not seem interested in new standards but rather development of infrastructure. These issues seem likely to remain targets of unilateral action.** There are**, however,** incentives for cooperation to address state concerns regarding unsupported shipping through the remaining infrastructures and services **mentioned above; vessel traffic and monitoring services, sea-ice and iceberg services, and environmental and search and rescue response.** These represent dilemmas of common interest as cooperation may result in increasing optimal outcomes that the states cannot necessarily attain acting alone**. VTS can assist vessel movements in restricted, crowded, or otherwise sensitive areas. Coordinated VTS may permit smooth transitions for mariners moving between national jurisdictions and permit states to monitor traffic bound for their waters. Coordination ofCanadian and U.S. VTS services in Puget Sound through the Co-operative Vessel Traffic System Agreement is a prime example.95** There are **also** potential incentives for cooperation on icebergand sea-ice reporting. Aircraft observations funneled through a secretariat for analysis and distribution could accomplish iceberg and sea-ice reporting services. By poolingresources and establishing one or several international centers to operate the service, states could avoid duplicate capital investments and operational costs. The currentInternational Ice Patrol that serves the North Atlantic is an example. Seventeen statescontribute financially to the service and their payments are based on each participating nation’s percentage of the total cargo tonnage transiting the patrol area during the ice season**.96**Environmental response and search and rescue cooperation can delineate clearresponsibilities of states for responding to mishaps**, improve response by establishing lines of communication and standardized procedures before events occur, eliminate gaps in geographic coverage, and pool resources to prevent unnecessary redundancies in service.** A search and rescue agreement is presentlybeing negotiated by the Arctic states.**97 As events such as the *Exxon Valdez* grounding and the Deepwater Horizon explosion suggest, a similar environmental response agreement could be equally valuable. Finally, there are incentives to cooperate on standards for Arctic ships.** States have historically cooperated on such issues because they gain the assurance that the standards they apply to their ships leaves them free to transit the waters of other states **and engage in trade as well as the knowledge that ships entering their waters meet the states’ desired standards for construction and operation. States are averse to their ships and crews needing to meet numerous similar or unique requirements as they ply the seas.98 The Arctic states concern regarding underregulated Arctic shipping therefore represents a dilemma of common aversion. The International Maritime Organization (IMO) has already issued guidelines for construction, equipping, and operation of ships intended for Arctic service.99 Guidelines often precede binding standards to determine that there is a need for such standards and, if the Arctic states are averse to substandard ships proceeding through their Arctic waters, codifying and making mandatory the current guidelines represents an opportunity for cooperation among the states.100**

## \*\*\* Environment

### Look in the Environment Core for More Cards

### Air Pollution

#### Air quality is improving

Hayward 4 (Steven F., Senior Fellow – Pacific Research Institute, Index of Leading Indicators, http://www.pacificresearch.org/pub/sab/enviro/04\_enviroindex/Enviro\_2004.pdf)

Average vehicle emissions are dropping about 10 percent per year as the fleet turns over to inherently cleaner vehicles, including modern SUVs. · Since 1985, nitrogen oxides (NOX) emissions from cars have dropped 56 percent and volatile organic compounds (VOCs) are down 67 percent, according to the most recent EPA data. · Stories touting an uptick in ozone pollution are based largely on the .weekend effect,. a paradoxical situation in which the weekend drop in NOX emissions, from 10 to 40 percent, causes an increase in ozone levels. · Asthma rates in children under the age of five rose more than 160 percent between 1980 and 1994, while air pollution rates fell from 25 to 80 percent. Was 2003 the year we started losing the battle against ozone smog? That is what you would think if you read the media headlines. .Smog Woes Back on Horizon,. trumpeted an abovethe- fold Los Angeles Times headline in mid-July.1 .It.s One Smoggy Summer,. declared the Associated Press. And USA Today joined the chorus in October with .Smoggy Skies Persist Despite Decade of Work..2 Unfortunately, a reader of these articles will learn very little about what is behind the recent uptick in ozone levels. To the contrary, most media stories convey loads of misinformation. The USA Today story, for example, offers this explanation of stubborn ozone levels: .One likely reason why the smog isn.t lifting: Americans are driving more miles than they did in the 1980s. And they.re driving vehicles that give off more pollution than the cars they drove in the .80s. (emphasis added). USA Today needs a better fact-checking department.

#### -- Global air pollution inevitable

Watson 5 (Traci, Staff Writer – USA Today, “Air Pollution From Other Countries Drifts into USA”, USA Today, 3-13, http://www.usatoday.com/weather/resources/climate/2005-03-13-pollution-\_x.htm)

Americans drive imported cars, wear imported clothes and chug imported beers. Now scientists are discovering another, less welcome import into the USA: air pollution. Mercury from China, dust from Africa, smog from Mexico — all of it drifts freely across U.S. borders and contaminates the air millions of Americans breathe, according to recent research from Harvard University, the University of Washington and many other institutions where scientists are studying air pollution. There are no boundaries in the sky to stop such pollution, no Border Patrol agents to capture it. Pollution wafting into the USA accounts for 30% of the nation's ozone, an important component of smog, says researcher David Parrish of the National Oceanic and Atmospheric Administration. By the year 2020, Harvard University's Daniel Jacob says, imported pollution will be the primary factor degrading visibility in our national parks. While the United States is cutting its own emissions, some nations, especially China, are belching out more and more dirty air. As a result, overseas pollution could partly **cancel out** improvements in U.S. air quality that have cost billions of dollars.

**-- No impact**

Schwartz 3 (Joel, Adjunct Scholar – Competitive Enterprise Institute, “Particulate Air Pollution: Weighing the Risks”, April, http://cei.org/pdf/3452.pdf)

Nonetheless, both the Bush Administration and congressional Democrats have proposed sweeping new measures to further crack down on power plant emissions. The Administration’s Clear Skies Initiative and a more stringent Democratic alternative are largely justified by claims that current levels of particulate matter (PM) pose a serious public health threat. Supporters of these bills promise substantial benefits from additional PM reductions.

Nevertheless, the benefit claims for PM reductions rest on a **weak foundation**. EPA based its new annual fine PM (PM2.5) standard on a study known as the American Cancer Society (ACS) study of PM and mortality, which assessed the association between the risk of death between 1982 and 1998 with PM2.5 levels in dozens of American cities. Although the ACS study reported an association between PM and mortality, some odd features of the ACS results suggest that PM is not the culprit. For example, according to the ACS results, PM increased mortality in men, but not women; in those with no more than a high school degree, but not those with at least some college education; in former- smokers, but not current- or never-smokers; and in those who said they were moderately active, but not those who said they were very active or sedentary. These odd variations in the relationship between PM2.5 and mortality seem **biologically implausible**. Even more surprising, the ACS study reported that higher PM2.5 levels were not associated with an increased risk of mortality due to respiratory disease; a surprising finding, given that PM would be expected to exert its effects through the respiratory system. EPA also ignored the results of another epidemiologic study that found no effect of PM2.5 on mortality in a cohort of veterans with high blood pressure, even though this relatively unhealthy cohort should have been more susceptible to the effects of pollution than the general population. The evidence therefore suggests that the existing annual standard for PM2.5 is unnecessarily stringent. Attaining the standard will be expensive, but is unlikely to improve public health.

#### -- Tons of alt causes

Brook 4 (Robert D. M.D., et al, “Air Pollution and the Cardiovascular Disease”, Circulation: Journal of the American Heart Association, 6-1, http://circ.ahajournals.org/cgi/content/full/109/21/2655#SEC1/)

A brief description of several individual air pollutants is provided first for background. A complete discussion is beyond the scope of this statement, and interested readers may find a more comprehensive review on this subject elsewhere.26 Particulate Matter Airborne Particulate Matter consists of a heterogeneous mixture of solid and liquid particles suspended in air, continually varying in size and chemical composition in space and time (Figure 1). Primary particles are emitted directly into the atmosphere, such as diesel soot, whereas secondary particles are created through physicochemical transformation of gases, such as nitrate and sulfate formation from gaseous nitric acid and sulfur dioxide (SO2), respectively. The **numerous** natural and anthropogenic sources of PM include motor vehicle emissions, tire fragmentation and resuspension of road dust, power generation and other industrial combustion, smelting and other metal processing, agriculture, construction and demolition activities, residential wood burning, windblown soil, pollens and molds, forest fires and combustion of agricultural debris, volcanic emissions, and sea spray. Although there are thousands of chemicals that have been detected in PM in different locations, some of the more common constituents include nitrates, sulfates, elemental and organic carbon, organic compounds (eg, polycyclic aromatic hydrocarbons), biological compounds (eg, endotoxin, cell fragments), and a variety of metals (eg, iron, copper, nickel, zinc, and vanadium).

#### Too many alt causes to air pollution for the plan to save a significant number of people

BROOK et al 04 M.D. and several other doctors writing for Circulation magazine from the American Heart Association [Circulation magazine Robert D. Brook, MD; Barry Franklin, PhD, Chair; Wayne Cascio, MD; Yuling Hong, MD, PhD; George Howard, PhD; Michael Lipsett, MD; Russell Luepker, MD; Murray Mittleman, MD, ScD; Jonathan Samet, MD; Sidney C. Smith, Jr, MD; Ira Tager, MD, “Air Pollution and the Cardiovascular Disease” June 1, 2004, http://circ.ahajournals.org/cgi/content/full/109/21/2655#SEC1/] k ward

A brief description of several individual air pollutants is provided first for background. A complete discussion is beyond the scope of this statement, and interested readers may find a more comprehensive review on this subject elsewhere.26 Particulate Matter Airborne Particulate Matter consists of a heterogeneous mixture of solid and liquid particles suspended in air, continually varying in size and chemical composition in space and time (Figure 1). Primary particles are emitted directly into the atmosphere, such as diesel soot, whereas secondary particles are created through physicochemical transformation of gases, such as nitrate and sulfate formation from gaseous nitric acid and sulfur dioxide (SO2), respectively. The numerous natural and anthropogenic sources of PM include motor vehicle emissions, tire fragmentation and resuspension of road dust, power generation and other industrial combustion, smelting and other metal processing, agriculture, construction and demolition activities, residential wood burning, windblown soil, pollens and molds, forest fires and combustion of agricultural debris, volcanic emissions, and sea spray. Although there are thousands of chemicals that have been detected in PM in different locations, some of the more common constituents include nitrates, sulfates, elemental and organic carbon, organic compounds (eg, polycyclic aromatic hydrocarbons), biological compounds (eg, endotoxin, cell fragments), and a variety of metals (eg, iron, copper, nickel, zinc, and vanadium).

### Ozone

#### Ozone stable – and no impact

Lieberman 7 (Ben, Senior Policy Analyst – Heritage Foundation, “Ozone: The Hole Truth”, The Washington Times, 9-19, Lexis)

Environmentalists have made many apocalyptic predictions over the last several decades. Virtually none has come to pass. Yet each time, the greens and their political allies proclaim victory, arguing their preventive prescriptions averted disaster. Such is the case with the 1987 Montreal Protocol On Substances That Deplete The Ozone Layer (Montreal Protocol). The lurid predictions of ozone depletion-induced skin cancer epidemics, ecosystem destruction and others haven't come true, for which Montreal Protocol proponents congratulate themselves. But in retrospect, the evidence shows ozone depletion was an exaggerated threat in the first place. As the treaty parties return to Montreal for their 20th anniversary meeting it should be cause for reflection, not celebration, especially for those who hope to repeat this "success story" in the context of global warming. The treaty came about over legitimate but overstated concerns that chlorofluorocarbons (CFCs, a then-widely used class of refrigerants) and other compounds were rising to the stratosphere and destroying ozone molecules. These molecules, collectively known as the ozone layer, shield the Earth from excessive ultraviolet-B radiation (UVB) from the sun. The Montreal Protocol's provisions were tightened in 1990 and again in 1992, culminating with a CFC ban in most developed nations by 1996. So what do we know now? As far as ozone depletion is concerned, the thinning of the ozone layer that occurred throughout the 1980s apparently stopped in the early 1990s, too soon to credit the Montreal Protocol. A 1998 World Meteorological Organization (WMO) report said: "Since 1991, the linear [downward] trend observed during the 1980s has not continued, but rather total column ozone has been almost **constant**." However, the same report noted that the stratospheric concentrations of the offending compounds were still increasing through 1998. This lends credence to the skeptical view, widely derided at the time of the Montreal Protocol, that natural variations better explain the fluctuations in the global ozone layer. More importantly, the feared increase in ground level UVB radiation has also failed to materialize. Keep in mind that ozone depletion, in and of itself, doesn't really harm human health or the environment. It was the concern that an eroded ozone layer will allow more of the sun's damaging UVB rays to reach the Earth that led to the Montreal Protocol. But WMO concedes no statistically significant long-term trends have been detected, noting earlier this year that "outside the polar regions, ozone depletion has been relatively small, hence, in many places, increases in UV due to this depletion are difficult to separate from the increases caused by other factors, such as changes in cloud and aerosol." In short, the impact of ozone depletion on UVB over populated regions is so small it's hard to detect. Needless to say, if UVB hasn't gone up, then the fears of increased UVB-induced harm are unfounded. Indeed, the much-hyped acceleration in skin cancer rates hasn't been documented. U.S. National Cancer Institute statistics show malignant melanoma incidence and mortality, which had been undergoing a long-term increase that predates ozone depletion, has actually been leveling off during the putative ozone crisis. Further, no ecosystem or species was ever shown to be seriously harmed by ozone depletion. This is true even in Antarctica, where the largest seasonal ozone losses, the so-called Antarctic ozone hole, occur annually. Also forgotten is a long list of truly ridiculous claims, such as the one from Al Gore's 1992 book "Earth in the Balance" that, thanks to the Antarctic ozone hole, "hunters now report finding blind rabbits; fisherman catch blind salmon."

#### Natural variation determines ozone

Carnacchio 97 (CJ, Staff – The Review, “The Sky Falls on Environmental Myths”, Michigan Review, 10-8, http://www.umich.edu/~mrev/archives/1997/10-8-97/environment.htm)

Myth #2: The Hole in the Ozone Layer: Contrary to the environmentalists' claims, there is no permanent hole in the ozone layer and no ozone shortage. Ozone is constantly created and destroyed. The interaction of ultraviolet radiation with oxygen molecules is what produces ozone. In the stratosphere, 10 to 40 kilometers above the earth's surface, several tons of ozone are produced every second. The amount of ozone present at any one time is influenced by many factors. For example, the amount of ultraviolet radiation reaching the stratosphere (and ultimately producing ozone) depends upon latitude, solar cycle, and season. Concentrations of ozone may differ drastically from one day to the next, sometimes by as much as 50 percent, depending on the weather. Ozone holes are **natural reactions** to these ultraviolet light variations. Ozone levels can also be affected by the amount of volcanic matter in the stratosphere. Each volcanic eruption emits roughly a thousand times the amount of ozone-depleting chemicals than all the CFCs man has ever produced. The ozone hole that appeared over Antarctica and caused all the panic is a natural and annual phenomena. The annual ozone hole was first measured in 1956-57, long before the ozone-destroying CFCs were in common use. The hole appears at the end of the dark, cold Antarctic winter, lasts about three to five weeks, and then disappears. There is no overall or permanent depletion of the ozone layer.

### Environment

#### Environment is resilient

Easterbrook 95 (Gregg, Distinguished Fellow – Fullbright Foundation, A Moment on Earth, p. 25)

In the aftermath of events such as Love Canal or the Exxon Valdez oil spill, every reference to the environment is prefaced with the adjective "fragile." "Fragile environment" has become a welded phrase of the modern lexicon, like "aging hippie" or "fugitive financier." But the notion of a fragile environment is profoundly wrong. Individual animals, plants, and people are distressingly fragile. **The environment** that contains them **is** close to **indestructible**. The living environment of Earth has survived ice ages; bombardments of cosmic radiation more deadly than atomic fallout; solar radiation more powerful than the worst-case projection for ozone depletion; thousand-year periods of intense volcanism releasing global air pollution far worse than that made by any factory; reversals of the planet's magnetic poles; the rearrangement of continents; transformation of plains into mountain ranges and of seas into plains; fluctuations of ocean currents and the jet stream; 300-foot vacillations in sea levels; shortening and lengthening of the seasons caused by shifts in the planetary axis; collisions of asteroids and comets bearing far more force than man's nuclear arsenals; and the years without summer that followed these impacts. Yet hearts beat on, and petals unfold still. Were the environment fragile it would have expired many eons before the advent of the industrial affronts of the dreaming ape. **Human assaults** on the environment, though mischievous, **are** **pinpricks** compared to forces of the magnitude nature is **accustomed to resisting**.

#### -- Long time-frame

Kay 1 (Jane, “Study Takes Historical Peek at Plight of Ocean Ecosystems”, San Francisco Chronicle, 7-26, Lexis)

The collapse of ecosystems often occur over a **long period**. In one example, when Aleut hunters killed the Alaskan sea otter about **2,500 years ago**, the population of their natural prey, the sea urchin, grew larger than its normal size. In turn, the urchins grazed down the kelp forests, important habitat for a whole host of ocean life. Then, when fur traders in the 1800s hunted the otters and sea cows almost to extinction, the kelp forests disappeared and didn't start to regenerate until the federal government protected the sea otters in the 20th century. In California, the diversity of spiny lobsters, sheephead fish and abalone kept down the urchin numbers. At present in Alaska, the kelp beds are declining again in areas where killer whales are preying on sea otters. Biologists think the killer whales switched to otters for food because there are fewer seals and sea lions to eat.

#### -- Environment strong and improving – their authors lie

Dutton 1 (Dr. Dennis, Professor of Philosophy – University of Canterbury (New Zealand), “Greener Than You Think”, The Washington Post, 10-21, http://www.washingtonpost.com/ac2/wp-dyn?pagename=article&node=& contentId=A12789-2001Oct18)

That the human race faces environmental problems is unquestionable. That environmental experts have regularly tried to scare us out of our wits with doomsday chants is also beyond dispute. In the 1960s overpopulation was going to cause massive worldwide famine around 1980. A decade later we were being told the world would be out of oil by the 1990s. This was an especially chilly prospect, since, as Newsweek reported in 1975, we were in a climatic cooling trend that was going to reduce agricultural outputs for the rest of the century, leading possibly to a new Ice Age. Bjorn Lomborg, a young statistics professor and political scientist at the University of Aarhus in Denmark, knows all about the enduring appeal -- for journalists, politicians and the public -- of environmental doomsday tales, having swallowed more than a few himself. In 1997, Lomborg -- a self-described left-winger and former Greenpeace member -- came across an article in Wired magazine about Julian Simon, a University of Maryland economist. Simon claimed that the "litany" of the Green movement -- its fears about overpopulation, animal species dying by the hour, deforestation -- was **hysterical nonsense**, and that the quality of life on the planet was **radically** **improving**. Lomborg was shocked by this, and he returned to Denmark to set about doing the research that would refute Simon. He and his team of academicians discovered something sobering and cheering: In every one of his claims, Simon was correct. Moreover, Lomborg found on close analysis that the factual foundation on which the environmental doomsayers stood was **deeply flawed**: exaggeration, prevarications, white **lies** and even convenient typographical errors had been absorbed unchallenged into the folklore of environmental disaster scenarios.

#### War causes environmental collapse and means the plan won’t be enforced

Adley and Grant 4 (Jessica and Andrea, Sierra Club of Canada, “The Environmental Consequences of War”, 8-24, http://www.sierraclub.ca/national/postings/war-and-environment.html)

Throughout history, war has **invariably resulted** **in environmental destruction**. However, advancements in military technology used by combatants have resulted in increasingly severe environmental impacts. This is well illustrated by the devastation to forests and biodiversity caused by modern warfare. Military machinery and explosives have caused **unprecedented levels of deforestation** and habitat destruction. This has resulted in a serious disruption of ecosystem services, including erosion control, water quality, and food production. A telling example is the destruction of 35% of Cambodia’s intact forests due to two decades of civil conflict. In Vietnam, bombs alone destroyed over 2 million acres of land.[13] These environmental catastrophes are aggravated by the fact that ecological protection and restoration become a **low priority** during and after war. The threat to biodiversity from combat can also be illustrated by the Rwanda genocide of 1994. The risk to the already endangered population of mountain gorillas from the violence was of minimal concern to combatants and victims during the 90-day massacre.[14] The threat to the gorillas increased after the war as thousands of refugees, some displaced for decades, returned to the already overpopulated country. Faced with no space to live, they had little option but to inhabit the forest reserves, home to the gorilla population. As a result of this human crisis, conservation attempts were impeded. Currently, the International Gorilla Programme Group is working with authorities to protect the gorillas and their habitats. This has proven to be a challenging task, given the complexities Rwandan leaders face, including security, education, disease, epidemics, and famine.[15]

## \*\*\* Disease

#### No extinction

Gladwell 99 (Malcolm, The New Republic, July 17 and 24, 1995, excerpted in Epidemics: Opposing Viewpoints, p. 31-32)

Every infectious agent that has ever plagued humanity has had to adapt a specific strategy but every strategy carries a corresponding cost and this makes human counterattack possible. Malaria is vicious and deadly but it relies on mosquitoes to spread from one human to the next, which means that draining swamps and putting up mosquito netting can all hut halt endemic malaria. Smallpox is extraordinarily durable remaining infectious in the environment for years, but its very durability its essential rigidity is what makes it one of the easiest microbes to create a vaccine against. AIDS is almost invariably lethal because it attacks the body at its point of great vulnerability, that is, the immune system, but the fact that it targets blood cells is what makes it so relatively uninfectious. Viruses are not superhuman. I could go on, but the point is obvious. Any microbe capable of wiping us all out would have to be everything at once: as contagious as flue, as durable as the cold, as lethal as Ebola, as stealthy as HIV and so doggedly resistant to mutation that it would stay deadly over the course of a long epidemic. But viruses are not, well, superhuman. They cannot do everything at once. It is one of the ironies of the analysis of alarmists such as Preston that they are all too willing to point out the limitations of human beings, but they neglect to point out the **limitations** of microscopic life forms.

#### -- Disease inevitable

Sky News 8 (“Warning Over Deadly New Diseases”, 7-21, http://news.sky.com/skynews/Home/Health/New-Disease-Emerges-Every-Year-Pandemic-Outbreak-May-Not-Be-Stopped/Article/200807315047567)

In a highly critical new report, the committee said there was an "urgent need" for a better global surveillance system to identify diseases before they infect large numbers of people. It noted that three-quarters of newly-emerging human infections come from animals - but found many are only detected once they have made humans ill. Experts estimate a devastating pandemic outbreak of a new disease such as SARS or the H5N1 strain of flu could claim anything between two and 50 million lives. In evidence to the House of Lords Intergovernmental Organisations Committee inquiry, the Government said there had been no pandemic disease outbreaks since 1968. However, it warned another pandemic outbreak was "inevitable". Committee chairman Lord Soley said: "The last 100 years have seen great advances in public health and disease control through the world, but globalisation and changes in lifestyles are giving rise to new infections and providing opportunities for them to spread rapidly throughout the world.

#### -- Burn out stops disease

Lederberg 99 (Joshua, Professor of Genetics – Stanford University School of Medicine, Epidemic The World of Infectious Disease, p. 13)

The toll of the fourteenth-century plague, the "Black Death," was closer to one third. If the bugs' potential to develop adaptations that could kill us off were the whole story, we would not be here. However, with very rare exceptions, our microbial adversaries have a **shared interest** in our survival. Almost any pathogen comes to a **dead end** when we die; it first has to communicate itself to another host in order to survive. So historically, the really severe host- pathogen interactions have resulted in a **wipeout** of **both** host and pathogen. We humans are still here because, so far, the pathogens that have attacked us have willy-nilly had an interest in our survival. This is a very delicate balance, and it is easily disturbed, often in the wake of large-scale ecological upsets.

#### -- Humans will adapt

Gladwell 95 (Malcolm, The New Republic, July 17, Excerpted in Epidemics: Opposing Viewpoints, p. 29)

In Plagues and Peoples, which appeared in 1977. William MeNeill pointed out that…while man’s efforts to “remodel” his environment are sometimes a source of new disease. They are seldom a source of serious epidemic disease. Quite the opposite. As humans and new microorganisms interact, they begin to accommodate each other. Human populations slowly build up resistance to circulating infections. What were once virulent infections, such as syphilis become attenuated. Over time, diseases of adults, such as measles and chicken pox, become limited to children, whose immune systems are still naïve.

#### -- Self-interest means no extinction

MacPhee and Marx 98 (Ross, American Museum of Natural History and Aaron Diamond, AIDS Research Facility and Tulane University, “How Did Hyperdisease Cause Extinctions?”, http://www.amnh.org/science/biodiversity/extinction/Day1/disease/Bit2.html)

It is well known that lethal diseases can have a profound effect on species' population size and structure. However, it is generally accepted that the principal populational effects of disease are acute--that is, **short-term**. In other words, although a species many suffer substantial loss from the effects of a given highly infectious disease at a given time, the facts indicate that natural populations tend to **bounce back** after the period of high losses. Thus, disease as a primary cause of extinction seems **implausible**. However, this is the normal case, where the disease-provoking pathogen and its host have had a long relationship. Ordinarily, it is not in the pathogens interest to rapidly kill off large numbers of individuals in its host species, because that might imperil its own survival. Disease theorists long ago expressed the idea that pathogens tend to evolve toward a "benign" state of affairs with their hosts, which means in practice that they continue to infect, but tend **not** to **kill** (or at least not rapidly). A very good reason for suspecting this to be an accurate view of pathogen-host relationships is that individuals with few or no genetic defenses against a particular pathogen will be maintained within the host population, thus ensuring the pathogen's ultimate survival.

## \*\*\* Iran Strikes

### A2 Escalation/Iran Retaliation

#### Iran retaliation will stay limited – multiple factors prevent escalation

**Kroenig, 12** (Matthew, professor of Government at Georgetown University and a Stanton Nuclear Security Fellow at the Council on Foreign Relations, Foreign Affairs, Feb, http://www.foreignaffairs.com/articles/136917/matthew-kroenig/time-to-attack-iran)

SETTING THE RIGHT REDLINES The fact that the United States can likely set back or destroy Iran's nuclear program does not necessarily mean that it should. Such an attack could have potentially devastating consequences -- for international security, the global economy, and Iranian domestic politics -- all of which need to be accounted for. To begin with, critics note, U.S. military action could easily spark a full-blown war. Iran might retaliate against U.S. troops or allies, launching missiles at military installations or civilian populations in the Gulf or perhaps even Europe. It could activate its proxies abroad, stirring sectarian tensions in Iraq, disrupting the Arab Spring, and ordering terrorist attacks against Israel and the United States. This could draw Israel or other states into the fighting and compel the United States to escalate the conflict in response. Powerful allies of Iran, including China and Russia, may attempt to economically and diplomatically isolate the United States. In the midst of such spiraling violence, neither side may see a clear path out of the battle, resulting in a long-lasting, devastating war, whose impact may critically damage the United States' standing in the Muslim world. Those wary of a U.S. strike also point out that Iran could retaliate by attempting to close the Strait of Hormuz, the narrow access point to the Persian Gulf through which roughly 20 percent of the world's oil supply travels. And even if Iran did not threaten the strait, speculators, fearing possible supply disruptions, would bid up the price of oil, possibly triggering a wider economic crisis at an already fragile moment. None of these outcomes is predetermined, however; indeed, the United States could do much to mitigate them. Tehran would certainly feel like it needed to respond to a U.S. attack, in order to reestablish deterrence and save face domestically. But it would also likely seek to calibrate its actions to avoid starting a conflict that could lead to the destruction of its military or the regime itself. In all likelihood, the Iranian leadership would resort to its worst forms of retaliation, such as closing the Strait of Hormuz or launching missiles at southern Europe, only if it felt that its very existence was threatened. A targeted U.S. operation need not threaten Tehran in such a fundamental way. To make sure it doesn't and to reassure the Iranian regime, the United States could first make clear that it is interested only in destroying Iran's nuclear program, not in overthrowing the government. It could then identify certain forms of retaliation to which it would respond with devastating military action, such as attempting to close the Strait of Hormuz, conducting massive and sustained attacks on Gulf states and U.S. troops or ships, or launching terrorist attacks in the United States itself. Washington would then need to clearly articulate these "redlines" to Tehran during and after the attack to ensure that the message was not lost in battle. And it would need to accept the fact that it would have to absorb Iranian responses that fell short of these redlines without escalating the conflict. This might include accepting token missile strikes against U.S. bases and ships in the region -- several salvos over the course of a few days that soon taper off -- or the harassment of commercial and U.S. naval vessels. To avoid the kind of casualties that could compel the White House to escalate the struggle, the United States would need to evacuate nonessential personnel from U.S. bases within range of Iranian missiles and ensure that its troops were safely in bunkers before Iran launched its response. Washington might also need to allow for stepped-up support to Iran's proxies in Afghanistan and Iraq and missile and terrorist attacks against Israel. In doing so, it could induce Iran to follow the path of Iraq and Syria, both of which refrained from starting a war after Israel struck their nuclear reactors in 1981 and 2007, respectively.

#### Even if that fails – US can deescalate quickly and no regional war

**Kroenig, 12** (Matthew, professor of Government at Georgetown University and a Stanton Nuclear Security Fellow at the Council on Foreign Relations, Foreign Affairs, Feb, http://www.foreignaffairs.com/articles/136917/matthew-kroenig/time-to-attack-iran)

Even if Tehran did cross Washington's redlines, the United States could still manage the confrontation. At the outset of any such violation, it could target the Iranian weapons that it finds most threatening to prevent Tehran from deploying them. To de-escalate the situation quickly and prevent a wider regional war, the United States could also secure the agreement of its allies to avoid responding to an Iranian attack. This would keep other armies, particularly the Israel Defense Forces, out of the fray. Israel should prove willing to accept such an arrangement in exchange for a U.S. promise to eliminate the Iranian nuclear threat. Indeed, it struck a similar agreement with the United States during the Gulf War, when it refrained from responding to the launching of Scud missiles by Saddam Hussein.

#### Conflict is inevitable, Strikes NOW prevent war – Iran can’t retaliate

**Babbin, 2006 *(***Jed, served as a deputy undersecretary of defense in the George H.W. Bush administration “Iran Showdown”, The American Spectator, http://www.spectator.org/dsp\_article.asp?art\_id=9310)

THE WAR WITH IRAN WILL have to be foughtand we will, of course, defend Israel as best we can. But much bloodshed can be avoided, and Iran's nuclear objective put out of reach if we seize the advantage we gave up to Saddam in the UN. Surprise is a strategic advantage we must retain.The alternative to a large war, which no one speaks about, is a surprise attack against Iran mounted before Israel acts, and before the predicted Iranian nuclear test happens. Such an attack wouldemploy several unconventional weapons at once and could -- if managed properly -- be over before Iran knows it has begun. The world must know that we have done it. But after, not before. It may be that Iran's Chinese allies are doing more than helping develop its missiles. It may be that Iran's Russian trading partner is doing more than providing defenses against air attack. But neither is likely to be providing Iran with the means of effectively defending against our other capabilities. It could, and should, be made one dark night. B-2 stealth bombers, each carrying twenty ground-penetrating guided munitions, can destroy much of Iran's nuclear facilities and government centers. Some might carry reported electro-magnetic pulse weapons that can destroy all the electronic circuits that comprise Iranian missiles, key military communications and computer facilities. And it may be that we have the ability to attack Iran's military and financial computer networks with computer viruses and "Trojan horses" that will make it impossible for Iran to function militarily and economically.Our strategy must be implemented before Ahmadinejad can test his nukes. Whether that test can happen next month or next year is immaterial.The time for us to act is now.

#### No counter attack - air strikes and missiles solve

**Rogers, 2006**(Paul Professor of Peace Studies at the University of Bradford and Global Security Consultant to Oxford Research Group “IRAN: CONSEQUENCES OF A WAR”, February)

In addition to the substantial programme of air strikes and missile attacks on nuclear, missile and defence facilities, US military operations would also be aimed at pre-empting any immediate Iranian responses. Most significant of these would be any possible retaliatory Iranian action to affect the transport of oil and liquefied natural gas through the Straits of Hormuz. On the assumption that this would be an obvious form of retaliation, it would be necessary to destroy coastal anti-ship missile batteries and Iran’s small force of warships. The main base and dockyard is at Bushehr; the operational headquarters is at Bandar Abbas which is also the base for Iran’s small flotilla of Russian-built Kilo-class submarines, although Chah Bahar is due to become the new base for these three boats. Other bases for light naval forces include Kharg Island at the head of the Gulf and islands in the Abu Musa group south-west of the Straits of Hormuz, these being heavily defended and well supplied.1 The small Iranian Navy suffered severe losses in its exchanges with the US Navy at the end of the “tanker war” in April 1988, and it is probable that the main emphasis will be on fast light forces, including speedboats crewed by those prepared to die. These would be Iranian Revolutionary Guard (IRG) forces and they would most likely place the greatest emphasis on attacking tanker traffic rather than US naval units**.** Operating bases for these forces would be priorities for attack. It would also be assumed that IRG elements would move into some parts of Iraq to link up with sympathetic militia. To demonstrate that any such moves would incite retaliation, it is probable that military action would target forward-based ground force units both of the IRG and of the regular army.Of the numerous Iranian Army bases, those close to the border with Iraq at Abadan, Khorramshahr, Ahvaz, Dezfuland and possibly Mahabad would be the most likely targets, as would major IRG centres. A range of logistical support facilities would be targeted, with this possibly extending to destruction of bridges. Given the porous nature of the border, this latter action would be primarily symbolic.

#### The initial strike would decapitate their military

**Global Security.org, 2005** (January 1 http://www.globalsecurity.org/military/ops/iran-strikes.htm)

One potential military option that would be available to the United States includes the use of air strikes on Iranian weapons of mass destruction and missile facilities. In all, there are perhaps two dozen suspected nuclear facilities in Iran. The 1000-megawatt nuclear plant Bushehr would likely be the target of such strikes. According to the Nonproliferation Policy Education Center, the spent fuel from this facility would be capable of producing 50 to 75 bombs. Also, the suspected nuclear facilities at Natanz and Arak will likely be targets of an air attack. American air strikes on Iran would vastly exceed the scope of the 1981 Israeli attack on the Osiraq nuclear center in Iraq, and would more resemble the opening days of the 2003 air campaign against Iraq. Using the full force of operational B-2 stealth bombers, staging from Diego Garcia or flying direct from the United States, possibly supplemented by F-117 stealth fighters staging from al Udeid in Qatar or some other location in theater, the two-dozen suspect nuclear sites would be targeted. Military planners could tailor their target list to reflect the preferences of the Administration by having limited air strikes that would target only the most crucial facilities in an effort to delay or obstruct the Iranian program or the United States could opt for a far more comprehensive set of strikes against a comprehensive range of WMD related targets, as well as conventional and unconventional forces that might be used to counterattack against US forces in Iraq.

#### Iran will play the role of the victim to appease other countries

**Roberts, 1-17** (Paul Craig, wrote the Kemp-Roth bill and was Assistant Secretary of the Treasury in the Reagan administration. He was Associate Editor of the Wall Street Journal editorial page and Contributing Editor of National Review. He is author or coauthor of eight books. He has held numerous academic appointments, including the William E. Simon Chair in Political Economy, Center for Strategic and International Studies, Georgetown University and Senior Research Fellow, Hoover Institution, Stanford University. He has contributed to numerous scholar journals and testified before Congress on 30 occasions. He has been awarded the U.S. Treasury's Meritorious Service Award and the French Legion of Honor. http://baltimorechronicle.com/2007/011707Roberts.shtml)

The former national security official believes that Bush will be able to claim victory over Iran, because Iran will avoid responding militarily. Iran will not use its Russian missiles to sink our aircraft carriers, to shut down oil facilities throughout the Middle East, or to destroy US headquarters in the “green zone” in Baghdad. Instead, Iran will adopt the posture of another Muslim victim of US/Israeli aggression and let the anger seep throughout the Muslim world until no pro-US government is safe in the Middle East.

#### No backlash – naval and airpower check

**Rogers, 2006** (Paul, Professor of Peace Studies at the University of Bradford and Global Security Consultant to Oxford Research Group “IRAN: CONSEQUENCES OF A WAR”, February)

Although the United States has a major problem of overstretch affecting its Army and Marine Corps, an attack on Iranian nuclear facilities would be undertaken almost entirely by the Air Force and the Navy. To have the maximum impact, it would be done by surprise, utilising land-based aircraft already in the region, long-range strike aircraft operating from the United States, the UK and Diego Garcia, and naval strike forces involving carrier-borne aircraft and sea-launched cruise missiles. At any one time, the US Navy keeps one aircraft carrier battle group on station in or near the Persian Gulf. Such groups rotate, and there are periods when two are on station, providing over 150 aircraft, together with several hundred cruise missiles.4 Similar numbers of land-based aircraft could be assembled with little notice, given the range of US bases in the region, and B 1B and B-2 bombers could operate from outside the region. In particular, the specialised facilities required to operate the stealth B-2 aircraft are now available at Fairford air base in Gloucestershire.5 Air strikes on nuclear facilities would involve the destruction of facilities at the Tehran Research Reactor, together with the radioisotope production facility, a range of nuclear-related laboratories and the Kalaye Electric Company, all in Tehran. The Esfahan Nuclear Technology Centre would be a major target, including a series of experimental reactors, uranium conversion facilities and a fuel fabrication laboratory. Pilot and full-scale enrichment plants at Natanz would be targeted, as would facilities at Arak (see Appendix 1).6 The new 1,000 MW reactor nearing completion at Bushehr would be targeted, although this could be problematic once the reactor is fully fuelled and goes critical some time in 2006. Once that has happened, any destruction of the containment structure could lead to serious problems of radioactive dispersal affecting not just the Iranian Gulf coast, but west Gulf seaboards in Kuwait, Saudi Arabia, Bahrain, Qatar and the United Arab Emirates. As well as the direct human effects, since these comprise the world’s most substantial concentration of oil production facilities, the consequences could be severe.7 All of the initial attacks would be undertaken more or less simultaneously, in order to kill as many of the technically competent staff as possible, therefore doing the greatest damage to longer-term prospects. This would be a necessary part of any military action and would probably extend to the destruction of university laboratories and technology centres that indirectly support the Iranian nuclear scientific and technical infrastructure. Such an aspect of the attack is not widely recognised outside of military planning circles but would be an essential component of the operation. Given that the aim is to set back Iranian nuclear potential for as long as possible, it would be essential to go well beyond the destruction of physical facilities that could be replaced quite rapidly. The killing of those with technical expertise would have a much more substantial impact on any efforts to redevelop nuclear capabilities. Furthermore, since such expertise is known to include foreign nationals, the killing of such people already working in the country would serve as a deterrent to the involvement of others in the future. Iran currently has limited air defences and a largely obsolete and small air force. Even so, defence suppression would be a major aspect of military action, primarily to reduce the risk of the killing or capture of US aircrew. It would involve the targeting of radar facilities and command and control centres, as well as Western Command air bases at Tehran, Tabriz, Hamadan, Dezful, Umidiyeh, Shiraz and Isfahan, and Southern Command air bases at Bushehr, Bandar Abbas and Chah Bahar.8A particular concern for US forces is the continued deployment by Iran of 45 or more of the American F-14A Tomcat interceptors and their long-range AWG-9 radar equipment. 79 planes were originally procured before the fall of the Shah and around 30 are available operationally at any one time out of those still deployed.9 Research, development and production facilities for Iran’s medium-range ballistic missile programme would be priority targets, as would bases at which these mobile missiles are deployed. Because of their mobility, surprise would once again be essential. US forces have already used reconnaissance drones to map Iranian facilities and these, combined with satellite reconnaissance and a range of forms of electronic surveillance, have provided considerable information on the nuclear infrastructure and more general defence forces.

### A2: Backlash Turns – All

#### US can minimize political fallout and avoid international crisis

**Kroenig, 12** (Matthew, professor of Government at Georgetown University and a Stanton Nuclear Security Fellow at the Council on Foreign Relations, Foreign Affairs, Feb, http://www.foreignaffairs.com/articles/136917/matthew-kroenig/time-to-attack-iran)

Washington could also reduce the political fallout of military action by building global support for it in advance. Many countries may still criticize the United States for using force, but some -- the Arab states in particular -- would privately thank Washington for eliminating the Iranian threat. By building such a consensus in the lead-up to an attack and taking the outlined steps to mitigate it once it began, the United States could avoid an international crisis and limit the scope of the conflict.

### A2 Overstretch

#### Won’t Cause Overstretch – Your Evidence Only Assumes Ground Forces

**INW, ’06** (Iran Nuclear Watch, 10/18, http://irannuclearwatch.blogspot.com/2006/10/cacnp-briefing-on-us-policy-options.html)

This is the second favorite approach of American Neoconservatives. Many mistakenly believe that the U.S. is too tied down in Iraq to carry out a successful military strike against Iran. While our ground forces may be overextended, our Navy and Air Force would have no problem carrying out this operation.

### A2 Civilian Casualties

#### Civilian casualities will be limited

**Kroenig, 12** (Matthew, professor of Government at Georgetown University and a Stanton Nuclear Security Fellow at the Council on Foreign Relations, Foreign Affairs, Feb, http://www.foreignaffairs.com/articles/136917/matthew-kroenig/time-to-attack-iran)

Washington would also be able to limit civilian casualties in any campaign. Iran built its most critical nuclear plants, such as the one in Natanz, away from heavily populated areas. For those less important facilities that exist near civilian centers, such as the centrifuge-manufacturing sites, U.S. precision-guided missiles could pinpoint specific buildings while leaving their surroundings unscathed. The United States could reduce the collateral damage even further by striking at night or simply leaving those less important plants off its target list at little cost to the overall success of the mission. Although Iran would undoubtedly publicize any human suffering in the wake of a military action, the majority of the victims would be the military personnel, engineers, scientists, and technicians working at the facilities

#### The alternative to strikes is prolif or strikes later, comparatively worse options

**Beres ‘07** (Louis Rene, professor @ the University of Purdue, May 8, pg. http://news.yahoo.com/s/csm/20070508/cm\_csm/yberes)

A more important reservation about preemption involves tactical difficulties. Due to delays, the success of strikes against certain key Iranian targets may already be in doubt. Worse, such strikes would probably entail high civilian casualties because Iran has deliberately placed sensitive military assets amid civilian populations – an international crime called "perfidy." But further delay will only multiply the number of casualties from any future operation, or – in the worst-case scenario – allow Iran to become fully nuclear.

### A2: Oil Shocks

#### No economic crisis or oil shock

**Kroenig, 12** (Matthew, professor of Government at Georgetown University and a Stanton Nuclear Security Fellow at the Council on Foreign Relations, Foreign Affairs, Feb, http://www.foreignaffairs.com/articles/136917/matthew-kroenig/time-to-attack-iran)

SETTING THE RIGHT REDLINES The fact that the United States can likely set back or destroy Iran's nuclear program does not necessarily mean that it should. Such an attack could have potentially devastating consequences -- for international security, the global economy, and Iranian domestic politics -- all of which need to be accounted for. To begin with, critics note, U.S. military action could easily spark a full-blown war. Iran might retaliate against U.S. troops or allies, launching missiles at military installations or civilian populations in the Gulf or perhaps even Europe. It could activate its proxies abroad, stirring sectarian tensions in Iraq, disrupting the Arab Spring, and ordering terrorist attacks against Israel and the United States. This could draw Israel or other states into the fighting and compel the United States to escalate the conflict in response. Powerful allies of Iran, including China and Russia, may attempt to economically and diplomatically isolate the United States. In the midst of such spiraling violence, neither side may see a clear path out of the battle, resulting in a long-lasting, devastating war, whose impact may critically damage the United States' standing in the Muslim world. Those wary of a U.S. strike also point out that Iran could retaliate by attempting to close the Strait of Hormuz, the narrow access point to the Persian Gulf through which roughly 20 percent of the world's oil supply travels. And even if Iran did not threaten the strait, speculators, fearing possible supply disruptions, would bid up the price of oil, possibly triggering a wider economic crisis at an already fragile moment. Cont… Finally, the U.S. government could blunt the economic consequences of a strike. For example, it could offset any disruption of oil supplies by opening its Strategic Petroleum Reserve and quietly encouraging some Gulf states to increase their production in the run-up to the attack. Given that many oil-producing nations in the region, especially Saudi Arabia, have urged the United States to attack Iran, they would likely cooperate.

#### No impact - US and Europe strategic reserves check

**Akleh, 2006** (Dr. Elias, Arab writer from a Palestinian descent) “Iran is The Next Battle Field”, March 5,

http://www.amin.org/eng/uncat/2006/mar/mar5-0.html)

The US expects this invasion to take less than 100 days. To avoid the expected oil crisis due to the shut-off of Iranian oil the American administration is planning to use its strategic petroleum reserve that has a supply of oil equals to about 175 days worth of Iranian production. Europe will also use its own strategic oil reserve. These reserves would be replenished with fresh oil after controlling Khuzestan. This war would give US total control of the largest three oil resources of the world; Saudi Arabia, Iraq, and Iran. The Dollar’s global hegemony would be restored, and participating European countries would have some share of the cake.

#### Iran wont shut down oil facilities

**Roberts, 1-17** (Paul Craig, wrote the Kemp-Roth bill and was Assistant Secretary of the Treasury in the Reagan administration. He was Associate Editor of the Wall Street Journal editorial page and Contributing Editor of National Review. He is author or coauthor of eight books. He has held numerous academic appointments, including the William E. Simon Chair in Political Economy, Center for Strategic and International Studies, Georgetown University and Senior Research Fellow, Hoover Institution, Stanford University. He has contributed to numerous scholar journals and testified before Congress on 30 occasions. He has been awarded the U.S. Treasury's Meritorious Service Award and the French Legion of Honor. http://baltimorechronicle.com/2007/011707Roberts.shtml)

The former national security official believes that Bush will be able to claim victory over Iran, because Iran will avoid responding militarily. Iran will not use its Russian missiles to sink our aircraft carriers, to shut down oil facilities throughout the Middle East, or to destroy US headquarters in the “green zone” in Baghdad. Instead, Iran will adopt the posture of another Muslim victim of US/Israeli aggression and let the anger seep throughout the Muslim world until no pro-US government is safe in the Middle East.

### A2: Straits of Hormuz

#### Iran won’t close the straits – economic suicide

**Schake ’07** (Kori,- research fellow at the Hoover Institution “Dealing with A Nuclear Iran” http://www.hoover.org/publications/policyreview/6848072.html)

Iran could also disrupt the flow of oil by closing the Straits of Hormuz or attacking Gulf platforms or shipping. As Edward Luttwak points out, “all of the offshore oil- and gas-production platforms in the gulf, all the traffic of oil and gas tankers originating from the jetties of the Arabian peninsula and Iraq, are within easy reach of the Iranian coast.” However, this, too, seems improbable beyond a short duration, since oil accounts for 80 percent of the Iranian economy. Attacks on gcc oil facilities are a greater likelihood, since they would increase the value of Iranian oil, but if gcc states were not involved in or supporting the strikes against Iran, such attacks would have long-term detrimental consequences for Iran’s relations with the gcc states.

#### Iran Won't Shut Off Strait Of Hormuz -That'd Guarantee The Demise Of The Regime

**Bergman 5/19/2006** (Ilan, author, "Tehran Rising: Iran's Challenge to the United States," and vice president of the America Foreign Policy Council, Defense Forum Foundation Luncheon Presentation: "Taking on Tehran: America's Options," Federal News Service, l/n)

I'll give you an example. Iran has the ability to shut off the flow of oil from the Strait of Hormuz through the Strait of Hormuz from the Persian Gulf. That's two-fifths of world energy traffic on any given day. That would obviously cause prices to spike through the roof, but it's also the quickest, easiest, and most efficient way to make India, Japan, the European Union, Russia, and China regime changers, because if that happens the first logical assumption that businessmen in all those places will make is this regime in its current form cannot be trusted to control oil, even if this crisis subsides. And unlike us, the Russians and the Chinese have no problem with dealing forcefully with economic meddlers. So I don't necessarily think that that's a threat. What I do think that the Iranians are gaming very well is our degree of aversion to rising prices. I think they know that if they rattle that energy saber pretty heftily, and often, and do war games, and test Russian equipment off of freighters and things like that, we get very nervous and we begin to deter ourselves from having these discussions. So like you said, there's not a lot of discussion about that, and that's precisely what they want.

#### More ev

**Hassett ’06** (Kevin A,- scholar @ American Enterprise Institute “World Economy Would Be Casualty of Mideast War” http://www.aei.org/publications/pubID.24663,filter.all/pub\_detail.asp)

While this scenario is sobering, it remains unlikely, at least based on the economics. Oil accounts for about 10 percent of Iran's gross domestic product and comprises 80 percent of that country's exports. Take away the oil revenue in war time, and the economy would almost grind to a halt and certainly be unable to sustain a prolonged conflict. Only suicidal leaders would allow themselves to fight with Israel under such circumstances.

## \*\*\* Resources

### LNG

#### -- No accidents –

#### A) Double hulls

**Quoddy 8** (Bay LLC, “Safety & Security”, http://www.quoddylng.com/safety.html)

The ships will employ both double containment of their contents and double hulls, ensuring a **very low risk of any** **spills or accidents**. This full containment ensures that if leaks or spills do occur, the LNG will be contained and isolated. The double hulls ensure a very low risk that any breach would even reach the hull containment tanks. The vessels are designed with a double hull to ensure minimization of leakage in the event of a collision or grounding, as well as separate ballast.

#### B) Safety systems

**Quoddy 8** (Bay LLC, “Safety & Security”, http://www.quoddylng.com/safety.html)

LNG facilities have extensive, state-of-the-art warning systems, including gas detectors, ultraviolet or infrared fire detectors, smoke or combustion product detectors, low temperature detectors, and detectors to monitor LNG levels and vapor pressures. Codes and standards from state, national, and international agencies and institutions insure the chances of any releases are **very small**, and if there are releases, the volume of the release is minimal. In addition to warning systems, LNG facilities have **automated firefighting systems**, including foam, dry chemical, or water dispersal and **automatic shutdown** **systems**.

#### -- Multiple checks prevent LNG terrorism

**Quoddy 8** (Bay LLC, “Safety & Security”, http://www.quoddylng.com/safety.html)

Are LNG tankers and storage facilities likely terrorist targets?

All parts of our critical energy infrastructure have been reassessed since the terrorist attacks of September 11, 2001. Security consciousness throughout the United States is heightened. Shippers have redoubled their already-stringent efforts to ensure security of transportation and the safety of terminals. There is **no indication** that LNG facilities or ships are more likely terrorist targets than other cargo ships or higher visibility political targets such as federal or state landmarks, public gatherings or bridges and tunnels. Nonetheless, LNG suppliers work closely with U.S. agencies charged with national security, and many developers contract with international experts who test their plans, procedures, people, and training to ensure they are sound. First, stringent access controls exist at both the point of origin and the point of destination. Both the liquefaction and re-gasification terminals have gated security access and continuous surveillance monitoring. Next, highly specialized, well-trained personnel serve as crewmembers. Before an LNG ship enters U.S. waters, the immigration service validates the crew. There is a buffer zone required between tankers and other traffic, and tugboats control the direction of tankers as they approach a terminal. Oversight is handled by the U.S. Coast Guard and host port authority pilots. Finally, the Coast Guard boards ships before they enter U.S. waters if it deems the ship a security risk.

#### -- No impact to LNG explosion

**Styles 4** (Geoffrey SW, Managing Director – GSW Strategy Group, LLC, “Energy Outlook”, 5-14, http://energyoutlook.blogspot.com/2004/05/lng-disaster-movie-front-page-of-last.html)

The other remarkable feature of this situation is the degree of fear being instilled by those opposed to the LNG terminals. Although I don't fault communities for wanting a say in the kind of industrial facilities that will be in close proximity to them, those discussions should still be based on fact and not wild ravings. The Wall Street Journal cited one LNG opponent who claimed that the destructive potential of an LNG tanker was equivalent to 55 Hiroshima bombs (see analysis below). This reflects an **irrational fear**, bolstered by **junk science**. It's hard to argue with, but we cannot base the nation's energy policies on **paranoia**. Many have picked up on the explosion at the LNG plant in Skikda, Algeria (see my blog of January 21) as evidence of the risks of handling LNG, but even if that were a fair comparison--and there are good reasons why it is not--it is actually a pretty good illustration that the risks are similar to those associated with many kinds of industrial facilities and not orders of magnitude greater, as activists assert. Having recently seen prosaic and trusted objects turned into deadly weapons, it is natural to worry a bit more about LNG than we might have a few years ago. Every LNG tanker--along with every crude oil or gasoline tanker, tank truck, or rail car--has the potential for destructive misuse. Yet we have not grounded all airplanes for fear they will be turned into cruise missiles, nor can we shun every link in the energy chain on which we all rely. While we can minimize risk, we cannot eliminate it. And if you don't want the LNG terminal in your neighborhood, for reasons that seem perfectly valid to you, just exactly whose neighborhood are you proposing as an alternative? Or are you and your neighbors prepared to take your houses off the gas grid and heat them with something else?  
Finally, for anyone interested in the atomic bomb comparison, a few facts: 1. A fully loaded LNG tanker of 120,000 cubic meters capacity holds about 50,000 tons of methane. 2. The yield of the Hiroshima bomb was equivalent to 21,000 tons of TNT. 3. Conservatively assuming that TNT and methane have the same energy content gives you a ratio of 2.5, not 55, but we are not done yet. 4. An atomic bomb releases its energy (from the conversion of matter into energy, via our old friend e=mc^2) in 1/1000th of a second. This makes for a stupendous flash and explosion, with a surface temperature comparable to that of the sun. This is why every H-bomb has an A-bomb trigger.5. A chemical explosion of methane requires a narrow range of air/fuel mix (5-15%) that could not be achieved all at once for the entire volume of an LNG tanker. In the real world, it would take many seconds and probably minutes to consume all the available fuel. 6. **The difference** between points 4 and 5 above **is analogous to the difference between going from 60-0 mph by hitting a brick wall, compared to a panic stop using the brakes.** The same energy is released, but in very different ways. 7. If it were easy to liberate nuclear weapon yields from large quantities of fuel, people would be doing this routinely. The closest we get is something like this. And note that there is an **enormous distinction** between achieving A-bomb-like overpressures in a very limited radius with a fuel/air device vs. the kind of wide-scale effects of an actual nuclear explosion.

#### Accidents won’t cause LNG explosions

**Quoddy 8** (Bay LLC, “Safety & Security”, http://www.quoddylng.com/safety.html)

What is the likelihood of explosion at the storage tanks?

An explosion is **highly unlikely** because LNG is stored under atmospheric pressure. LNG is never flammable and natural gas cannot explode if it is not confined under pressure. Immediately after being released into the surrounding air, LNG starts to warm up and convert into a gas. Since initially the gas is colder and heavier than the surrounding air, it creates an icy fog - freezing the moisture in the air, as when a freezer door is opened. However, as the gas warms up, it blends with the air and begins to disperse and rise upward. The cloud could ignite close to the ground only if there is something to ignite it during a narrow window when the right mixture of gas and air exists for combustion. If released on water, LNG floats and vaporizes, leaving no residue.

### Food

#### Current yields solve

Poole 6 (Holly Kavana, Institute for Food and Development Policy,“12 Myths About Hunger”, Backgrounder, 12(2), Summer, 4-9, http://www.foodfirst.org/12myths)

Myth 1: Not Enough Food to Go Around Reality: Abundance, not scarcity, best describes the world's food supply. Enough wheat, rice and other grains are produced to provide every human being with 3,200 calories a day. That doesn't even count many other commonly eaten foods - ­vegetables, beans, nuts, root crops, fruits, grass-fed meats, and fish. Enough food is available to provide at least 4.3 pounds of food per person a day worldwide: two and half pounds of grain, beans and nuts, about a pound of fruits and vegetables, and nearly another pound of meat, milk and eggs - ­enough to make most people fat! The problem is that many people are too poor to buy readily available food. Even most "hungry countries" have enough food for all their people right now. Many are net exporters of food and other agricultural products.

#### No famine

Gardiner 8 – Duane T. Gardiner, Texas A&M University, and Raymond W. Miller, Late, Utah University, Soils in Our Environment, 2008, p. 21

In short the world is demanding more food, more fiber, and more industrial crops grown on less land using less water. If the population continues to increase at the current rate (7000 more people per hour), one can predict that the world will experience critical resource shortages during the lifetime of young people alive today. **Despite all this doom and gloom**, most people are not hungry. In fact, the food supply has become more stable, especially for the more developed countries. During the twentieth century, growth in world economies and standards of living exceeded growth in population.

#### No food wars

Salehyan 7 (Idean, Professor of Political Science – University of North Texas, “The New Myth About Climate Change”, Foreign Policy, Summer, http://www.foreignpolicy.com/story/cms.php?story\_id=3922)

First, aside from a few anecdotes, there is **little systematic empirical evidence** that resource scarcity and changing environmental conditions lead to conflict. In fact, several studies have shown that an abundance of natural resources is more likely to contribute to conflict. Moreover, even as the planet has warmed, the number of civil wars and insurgencies has decreased dramatically. Data collected by researchers at Uppsala University and the International Peace Research Institute, Oslo shows a steep decline in the number of armed conflicts around the world. Between 1989 and 2002, some 100 armed conflicts came to an end, including the wars in Mozambique, Nicaragua, and Cambodia. If global warming causes conflict, we should not be witnessing this downward trend.

Furthermore, if famine and drought led to the crisis in Darfur, why have scores of environmental catastrophes failed to set off armed conflict elsewhere? For instance, the U.N. World Food Programme warns that 5 million people in Malawi have been experiencing chronic food shortages for several years. But famine-wracked Malawi has yet to experience a major civil war. Similarly, the Asian tsunami in 2004 killed hundreds of thousands of people, generated millions of environmental refugees, and led to severe shortages of shelter, food, clean water, and electricity. Yet the tsunami, one of the most extreme catastrophes in recent history, did not lead to an outbreak of resource wars. Clearly then, there is much more to armed conflict than resource scarcity and natural disasters.

#### Long term trends prove global food security is increasing

Pingali 3 – Prabhu Pingali, Director of Agriculture and Economic Analysis Division – FAO, and Randy Stringer, Chief of the Comparative Agriculture Development Service – FAO, “Food Security and Agriculture in the Low Income Food Deficit Countries: 10 Years After the Uruguay Round”, 6-23-2003, http://www.ecostat.unical.it/2003agtradeconf/Invited%20papers/Pingali%20and%20Stringer.PDF

From a longer term perspective, food security progress has been **nothing short of remarkable**. The proportion of people in developing countries living with average daily food intakes of less than 2200 kcal fell from 57 percent in the early 1960s to just 10 percent by the end of the century. During this period, per capita food supplies increased by more than 70 percent in China and Indonesia; by more than 50 percent in Pakistan and the Republic of Korea; and by more than 30 percent in Brazil, Burkina Fasso, the Dominican Republic, Ecuador, El Salvador, Jamaica, Mauritania and the Philippines.

#### Food security is increasing worldwide

Pingali 3 – Prabhu Pingali, Director of Agriculture and Economic Analysis Division – FAO, and Randy Stringer, Chief of the Comparative Agriculture Development Service – FAO, “Food Security and Agriculture in the Low Income Food Deficit Countries: 10 Years After the Uruguay Round”, 6-23-2003, http://www.ecostat.unical.it/2003agtradeconf/Invited%20papers/Pingali%20and%20Stringer.PDF

How serious is the food insecurity problem? At the global level, the long term trends of many food security indicators have been **positive**. For example, the prevalence of undernourishment in developing countries fell from 28 percent of the total population in 1979-81 to 17 percent in 1998-2000. In addition, The average global kcal/person/day grew by 19 percent since the mid-1960 to reach 2800 kcal, with the developing country average expanding by more than 30 percent. As consumption increased, diets shifted towards more meat, milk, eggs, vegetables oils and away from roots and tubers. Livestock products, vegetables and sugars now provide 28 percent of total food consumption in the developing countries, up from 20 percent in the mid 1960s (FAO 2003a).

#### All major populations have sufficient food

Pingali 3 – Prabhu Pingali, Director of Agriculture and Economic Analysis Division – FAO, and Randy Stringer, Chief of the Comparative Agriculture Development Service – FAO, “Food Security and Agriculture in the Low Income Food Deficit Countries: 10 Years After the Uruguay Round”, 6-23-2003, http://www.ecostat.unical.it/2003agtradeconf/Invited%20papers/Pingali%20and%20Stringer.PDF

Much of this past progress in the developing country aggregate food consumption numbers and undernutrition indicators are influenced decisively by the **significant gains** made by the most populated countries -- those with populations of more than 100 million, including Brazil, China, India, Indonesia, Nigeria and Pakistan (FAO 2003a). Bangladesh is the only developing country with more than 100 million people where per capita food consumption remains very low. Brazil, China and Indonesia now have daily food consumption levels in the 2900 to 3000 kcal range. China reduced the number of undernourished by 74 million since 1990-92. Ghana, Nigeria, Peru, Thailand and Viet Nam have all achieved reductions of more than 3 million.