# 1

**Interpretation – Financial incentives must be positively linked to rewards – they cannot be negative**

Harris, 89 – professor of law at the University of Illinois (Fred, 49 La. L. Rev. 1315 (1988-1989) “Automobile Emissions Control Inspection and Maintenance Program: Making It More Palatable to Coerced Participants”, Hein Online)

53. The term "incentives," for purposes of this Article, means those devices that induce one into doing something because of the prospect of reward and, therefore, engender a positive feeling within the actor. An example of incentives in this sense would be tax incentives like credits and/or deductions. But it appears that Congress, some courts and a few commentators have taken a broader view of incentives and have categorized items such as extensions to compliance deadlines and, most notably, sanctions in the Act-denials of federal grants and bans on construction in the event of noncompliance-as incentives to compliance. To be sure, these latter items may induce compliance but surely not because of the extension of a "carrot." Instead, they epitomize the "stick" or "disincentive" approach to behavioral modification.

**Violation – the aff mechanism imposes requirements that result in a financial incentive**

**That’s a voter**

**Limits – makes the topic bidirectional – allows imposition of requirements on one energy source in order to incentivize another – explodes research because the list of negative incentives is massive**

**Ground – predictable negative offense is limited to direct incentives for each energy source – allowing negative incentives arbitrarily give the aff unpredictable spin on core generics like politics and energy trade off disads.**

# 2

#### Oil prices will stabilize now – prices will stick above OPEC break-even levels without significant changes

Irina Rogovaya August 2012; writer for Oil and Gas Eurasia, Oil Price Changes: Everyone Wants Stability <http://www.oilandgaseurasia.com/articles/p/164/article/1875/>

According to the current base forecast for the Eurozone prepared by Oxford Economics, within the next two years oil prices will continue to drift lower, but not beyond the bounds of the “green” corridor for the world economy – $80-100 per barrel. This forecast coincides with the expectations of the World Bank (see Fig. 4). Meanwhile, S&P analysts presented three scenarios for the energy market in June. In the base scenario, oil will remain at $100 per barrel. S&P calculates that the likelihood of a stressful scenario in which the price of oil drops below $60 per barrel (the bottom in 2009) is 1:3. Analysts believe that given today’s state of economic and geopolitical affairs, strong political will would be needed to force the price of oil below $70-80 (the current level of effective production). So far, that will is nowhere to be seen. Recent events have shown that nobody is interested in the Eurozone breaking apart. And nobody wants a war in the Persian Gulf. Furthermore, nobody today intends to force the production of less valuable oil. At least that is what OPEC leaders promised during the recent summit. “Stability on the market should be at the center of our attention,” General Secretary Abdalla El-Badri said. Even Saudi Arabia, which consistently violates OPEC discipline in over-producing its quotas, announced at the beginning of July that it would review its margins to determine a higher price for Saudi supplies ordered on August contracts. Analysts noted that the average price of oil supplied to Europe and Asia had jumped (by $0.85 and $0.66 per barrel respectively), a fact which could be seen as proof that the collective members of the cartel will not let prices fall under $100 per barrel.

**Wind power expansion would shift natural gas to transportation and massively reduce oil demand**

**TGCO** 20**10**; Texas Gulf Coast Online, Wind Power Plan Could Solve Oil Crisis http://www.texasgulfcoastonline.com/News/tabid/86/ctl/ArticleView/mid/466/articleId/106/Wind-Power-Plan-Could-Solve-Oil-Crisis.aspx

**If the United States takes advantage of the so-called "wind corridor**," stretching from the Canadian border to West Texas, **energy from wind turbines built there could supply 20 percent or more of the nation's power**. **Power from thousands of wind turbines that would line the corridor could be distributed throughout the country via electric power transmission lines and could fuel power plants in large population hubs. Fueling these plants with wind power would then free up the natural gas historically used to power them, and would mean that natural gas could replace foreign oil as fuel for motor vehicles**. **Using natural gas for transportation needs could replace one-third of the United States' imported oil** and would save more than $230 billion a year. As imports grow and world prices rise, the amount of money we send to foreign nations every year is soaring. At current oil prices, we will send $700 billion dollars out of the country this year alone. Projected over the next 10 years the cost will be $10 trillion. America uses a lot of oil, every day 85 million barrels of oil are produced around the world and 21 million of those are used here in the United States. That's 25% of the world's oil demand used by just 4% of the world's population. World oil production peaked in 2005. Despite growing demand and an unprecedented increase in prices, oil production has fallen over the last three years. Oil is getting more expensive to produce, harder to find and there just isn't enough of it to keep up with demand. The simple truth is that cheap and easy oil is gone. A 2005 Stanford University study found that **there is enough wind power worldwide to satisfy global demand 7 times over, even if only 20% of wind power could be captured**. Building wind facilities in the corridor that stretches from the Texas panhandle to North Dakota could produce 20% of the electricity for the United States at a cost of $1 trillion. It would take another $200 billion to build the capacity to transmit that energy to cities and towns. It's a one-time cost and compared to the $700 billion we spend on foreign oil every year, it's a bargain. **Building new wind generation facilities** and better utilizing our natural gas resources **can replace more than one-third of our foreign oil imports in 10 years**. The benefits for the Texas economy and real estate values on the coast are enormous - and the entire country will benefit from lower gas prices.

**High prices are key to the Russian economy and domestic stability**

Michael **Schuman** 7-5-20**12** ; writes about Asia and global economic issues as a correspondent for TIME in Hong Kong. B.A. in Asian history and political science from the University of Pennsylvania and a master of international affairs from Columbia; “Why Vladimir Putin Needs Higher Oil Prices” http://business.time.com/2012/07/05/why-vladimir-putin-needs-higher-oil-prices/

But Vladimir Putin is not one of them. **The economy that the Russian President has built not only runs on oil, but runs on oil priced extremely high. Falling oil prices means rising problems for Russia – both for the strength of its economic performance, and possibly, the strength of Putin himself.** Despite the fact that Russia has been labeled one of the world’s most promising emerging markets, often mentioned in the same breath as China and India, the Russian economy is actually quite different from the others. While India gains growth benefits from an expanding population, Russia, like much of Europe, is aging; while economists fret over China’s excessive dependence on investment, Russia badly needs more of it. Most of all, **Russia is little more than an oil state in disguise**. **The country is the largest producer of oil in the world** (yes, bigger even than Saudi Arabia), **and Russia’s dependence on crude has been increasing**. **About a decade ago, oil and gas accounted for less than half of Russia’s exports; in recent years, that share has risen to two-thirds**. **Most of all, oil provides more than half of the federal government’s revenues. What’s more, the economic model Putin has designed in Russia relies heavily not just on oil, but high oil prices**. **Oil lubricates the Russian economy by making possible the increases in government largesse that have fueled Russian consumption**. Budget spending reached 23.6% of GDP in the first quarter of 2012, up from 15.2% four years earlier. What that means is Putin requires a higher oil price to meet his spending requirements today than he did just a few years ago. Research firm Capital Economics figures that the government budget balanced at an oil price of $55 a barrel in 2008, but that now it balances at close to $120. Oil prices today have fallen far below that, with Brent near $100 and U.S. crude less than $90. **The farther oil prices fall, the more pressure is placed on Putin’s budget, and the harder it is for him to keep spreading oil wealth to the greater population through the government**. **With a large swath of the populace angered by his re-election to the nation’s presidency in March, and protests erupting on the streets of Moscow, Putin can ill-afford a significant blow to the economy, or his ability to use government resources to firm up his popularity.** That’s why **Putin hasn’t been scaling back even as oil prices fall**. His government is earmarking $40 billion to support the economy, if necessary, over the next two years. He does have financial wiggle room, even with oil prices falling. Moscow has wisely stashed away petrodollars into a rainy day fund it can tap to fill its budget needs. But **Putin doesn’t have the flexibility he used to have. The fund has shrunk**, from almost 8% of GDP in 2008 to a touch more than 3% today. **The package**, says Capital Economics, **simply highlights the weaknesses of Russia’s economy:** This cuts to the heart of a problem we have highlighted before – namely that Russia is now much more dependent on high and rising oil prices than in the past… The fact that the share of ‘permanent’ spending (e.g. on salaries and pensions) has increased…creates additional problems should oil prices drop back (and is also a concern from the perspective of medium-term growth)…The present growth model looks unsustainable unless oil prices remain at or above $120pb.

**Russian economic collapse causes global nuclear war**

Steven **David**, January/February 19**99**;Professor of International Relations and Associate Dean of Academic Affairs at the Johns Hopkins University, FOREIGN AFFAIRS, **,** http://www.foreignaffairs.org/19990101faessay955/steven-r-david/saving-america-from-the-coming-civilwars.html

**I**f internal war does strike Russia, economic deterioration will be a prime cause. From 1989 to the present, the GDP has fallen by 50 percent. In a society where, ten years ago, unemployment scarcely existed, it reached 9.5 percent in 1997 with many economists declaring the true figure to be much higher. Twenty-two percent of Russians live below the official poverty line (earning less than $ 70 a month). Modern Russia can neither collect taxes (it gathers only half the revenue it is due) nor significantly cut spending. Reformers tout privatization as the country's cure-all, but in a land without well-defined property rights or contract law and where subsidies remain a way of life, the prospects for transition to an American-style capitalist economy look remote at best. As the massive devaluation of the ruble and the current political crisis show, Russia's condition is even worse than most analysts feared. If conditions get worse, even the stoic Russian people will soon run out of patience.  A future conflict would quickly draw in Russia's military. In the Soviet days civilian rule kept the powerful armed forces in check. But with the Communist Party out of office, what little civilian control remains relies on an exceedingly fragile foundation -- personal friendships between government leaders and military commanders. Meanwhile, the morale of Russian soldiers has fallen to a dangerous low. Drastic cuts in spending mean inadequate pay, housing, and medical care. A new emphasis on domestic missions has created an ideological split between the old and new guard in the military leadership, increasing the risk that disgruntled generals may enter the political fray and feeding the resentment of soldiers who dislike being used as a national police force. Newly enhanced ties between military units and local authorities pose another danger. Soldiers grow ever more dependent on local governments for housing, food, and wages. Draftees serve closer to home, and new laws have increased local control over the armed forces. Were a conflict to emerge between a regional power and Moscow, it is not at all clear which side the military would support.  Divining the military's allegiance is crucial, however, since the structure of the Russian Federation makes it virtually certain that regional conflicts will continue to erupt. Russia's 89 republics, krais, and oblasts grow ever more independent in a system that does little to keep them together. As the central government finds itself unable to force its will beyond Moscow (if even that far), power devolves to the periphery. With the economy collapsing, republics feel less and less incentive to pay taxes to Moscow when they receive so little in return. Three-quarters of them already have their own constitutions, nearly all of which make some claim to sovereignty. Strong ethnic bonds promoted by shortsighted Soviet policies may motivate non-Russians to secede from the Federation. Chechnya's successful revolt against Russian control inspired similar movements for autonomy and independence throughout the country. If these rebellions spread and Moscow responds with force, **civil war is likely**.  Should Russia succumb to internal war, the consequences for the United States and Europe will be severe. **A major power** like Russia -- even though in decline -- **does not suffer civil war quietly or alone**. An embattled **Russia**n Federation might provoke **opportunistic attacks from enemies such as China.** Massive flows of refugees would pour into central and western Europe. Armed struggles in Russia could easily spill into its neighbors. Damage from the fighting, particularly attacks on nuclear plants, would poison the environment of much of Europe and Asia. Within Russia, the consequences would be even worse. Just as the sheer brutality of the last Russian civil war laid the basis for the privations of Soviet communism, a second civil war might produce another horrific regime.

**High prices are key to Russian military modernization**

John T. **Bennett**, 4-3-20**12**; covers national security and foreign policy for U.S. News & World Report“Oil Prices Fueling Russia's Disruption of U.S. Foreign Policy

Russia's burgeoning oil and natural gas exports are underwriting Russian efforts to regain status as a world superpower” http://www.usnews.com/news/articles/2012/04/03/oil-prices-fueling-russias-disruption-of-us-foreign-policy

U.S.-Russian relations returned to the front pages last week after Obama urged outgoing Russian President Dmitry Medvedev to "give me space" on several issues, including a European missile defense shield that Moscow opposes. Likely GOP presidential nominee Mitt Romney soon after called Russia America's "top geopolitical enemy."¶ "**Putin still aspires for Russia to be a superpower**," says Steven Pifer, a former U.S. ambassador to Ukraine. "**There are only two ways for Russia to achieve that: nuclear weapons, and oil and natural gas sales."¶** The price of a barrel of oil was nearly $105 at midday Tuesday, steadily climbing from a 52-week low of $76.35 per barrel in October. Oil prices began to rise in late 2010, peaking at $113 per barrel in May 2011, before dipping last summer and then rising again.¶ [Whose Russia Comment Was More Damaging: Obama's or Romney's?]¶ **Russia is the world's second-largest oil exporter** at 5 million barrels a day, and its the ninth-leading natural gas exporter at 38.2 billion cubic meters a year, according to the CIA World Factbook. Russia rakes in nearly $500 billion annually in exports, with the CIA listing petroleum and natural gas as its top two commodities.¶ Frances Burwell, vice president of the Atlantic Council, says **Russia's oil revenues "give it a comfort zone" from which its leaders feel they have** the **global cache** to make things tough for Washington.¶ Burwell says she "places more weight" for Russia's recent global muscularity on "Putin's re-emergence." **The Russian once-and-soon-again president "clearly sees playing the national card as the strong guy internationally benefits him**," she says.¶ But, make no mistake, **bloated national coffers from high oil and gas prices underwrite Putin's muscle-flexing**, experts say.¶ [Who is Joe Biden to Slam Mitt Romney on Russia Policy?]¶ **Putin made a number of big domestic promises during the presidential race, including plans to usher in sweeping pension and wage hikes. He also put forth "a rather ambitious military modernization program**," Pifer says.¶ "**If oil prices remain high, he might be able to do all of those things**," Pifer says. "If prices come down, however, Putin will have some very tough decisions to make at home ... between guns versus butter."¶ **Should oil and gas prices tumble, experts say Putin would likely pick butter.¶** "**In 2007 when oil was doing well, Putin [as president] could have modernized the Russian military**," says Pifer. **Instead, Putin made a number of economic moves, such as the creation of a rainy day fund that was used during the recent global financial crisis**," Pifer notes.¶ What's more, Putin returns to power with his sharp eyes locked on his opposition, which is composed of the country's urban, middle-class populations.¶ Experts agree that Putin would be hard-pressed to break his pension and wage promises in favor of a few more missiles. But even an economically weaker Russia would likely pick its spots to block Washington's desires.¶ "**They have a very sovereigntist, non-interventionalist view of world affairs**," Burwell says. That means **Moscow fundamentally opposes Western efforts to boss around the world's strongmen,** with which Russian leaders have much in common.¶ "The Russian also have real hard-core, national, commercial and other interests in both Iran and Syria that cannot simply be ignored," Burwell says.

**Modernization is key to maintain the nuclear threshold – prevents miscalc and escalation**

Bettina **Renz and** Rod **Thornton** January 20**12**; lecturers on international security in the Faculty of Social Sciences, University of Nottingham “Russian Military Modernization Cause, Course, and Consequences” Problems of Post-Communism Volume 59, Number 1 / January / February 2012 p 44 - 54

The perceived weakness of this triad means that the Kremlin was pleased with **the START agreement** of March 2010. The **treaty limits favor Moscow in that it does not have to cut any of its own nuclear warheads** or delivery systems—the numbers of ICBMs and warheads in its own triad are actually below the negotiated caps. Only the United States has had to bring its numbers down.58 Normally, in the arranging of such international security treaties, negotiating from a position of military weakness—as Russia was—is not conducive to the ability to drive a hard bargain. Moscow has been lucky, however, in that Washington seems not to be too interested in the shape of Russia’s current and future nuclear arsenal. Rather, in terms of perceived security threats, Washington has its eye more on the terrorist ball than on the Russian one. Additionally, **under STA RT, Russia does not have to reduce the number of its tactical nuclear weapons. It has more of these than the United States. These are prized and important assets to Moscow, and they have become even more prized and important as Russia’s conventional military has become weaker. They are seen more and more as the fallback option if Russia one day faces some sort of defeat in a conventional conflict—against the likes of Georgia or China. In the largest Russian military exercise held since the end of the cold war—conducted recently in the Russian Far East—tactical nuclear weapons (i.e., mines) were notionally “exploded” as part of the exercise play.59 This fact alone seems to confirm that Russia’s conventional military weakness has led to a reduction in its nuclear-use threshold.** Conclusion The current modernization in the Russian military is long overdue. Because it is long overdue, it has to be completed in a rushed, haphazard fashion and against a backdrop of a military–industrial complex unable to fulfill its role in the process. Traditionally, military modernization is not achieved lightly, given the bureaucratic inertia and cultural norms that are always present. When, as in the current situation in Russia, such barriers to change are aided and abetted by any number of additional problems (not to mention the rampant corruption that is endemic across all levels of Russian state institutions, including the military), then it must be expected that Russia’s armed forces will be striving for some time to become truly “modern.”60 In essence, what should have been accomplished as an evolution over many years, and should have begun during the Yeltsin era, is now being attempted as a revolution in the post–Georgian war era. As with any revolutionary change, a good deal of disruption and disaffection has been created. Moreover, **the current Russian military is a weakened military. The psychology of the tsarist/Soviet/Russian military has always been that numbers counted, that mass would prevail. Numbers inspired confidence, and numbers could deter. But the current Russian military is losing numbers** while not making up for them by creating smaller, more professional forces equipped with the requisite technologies. Quality is not replacing quantity. **The military is in a state of flux. Russian politicians and military figures both now lack a genuine confidence in the armed forces’ ability to deter**. This can have two consequences. Either Russia takes large steps to avoid the possibility of military confrontation by stressing diplomatic solutions to possible threat scenarios (as the tsarist government did in 1914), or it goes the opposite way**, fearing that if any state is threatening military action against Russia then the hair trigger comes into operation** (Israeli-style). That is, **the mentality of the first, preemptive strike becomes paramount—taking advantage of surprise—and using what assets Russia now has. The alternative is to take the risk of waiting to be attacked and maybe “losing**.” What is clear is that, with its armed forces currently weakened by the process of change, the **sense of vulnerability generated has led Russia, in classic confirmation of the security dilemma concept, to magnify the threats it faces, or thinks it faces.** Conscious of its vulnerability to threats, real or imagined, **Moscow may begin to look more and more toward the inflexible tool of its tactical nuclear weapons as its principal defense mechanism**. While no one really supposes that such weapons will be used in any confrontation with the West, the same cannot be said of any possible conflict with the Chinese. Ironically, **Beijing’s military still relies on mass. The best modern military counter to mass is to employ either PGMs or tactical nuclear weapons. The Russian military has hardly any of the former but plenty of the latter. Hair triggers and tactical nuclear weapons are not comfortable bedfellows.**

# 3

**Obama is winning but its close and reversible – the average of recent polls puts Obama ahead**

**Cook, 10/4**/12 – editor and publisher of the Cook Political Report for National Journal (Charlie, “Mitt Romney Breaks His Losing Streak” <http://www.nationaljournal.com/columns/cook-report/the-cook-report-romney-breaks-his-losing-streak-20121004?mrefid=mostViewed>)

Too many political observers see politics in an entirely binary way: Everything has to be either a “0” or a “1”; a race is either tied or it’s over; every election is either won or stolen. Some people never want to admit that their side lost. And some people think that a poll either tells them what they want to hear or is methodologically flawed—or crooked. It’s like an obnoxious sports fan (often found in Philadelphia) who views a ruling by a referee or umpire as either favorable or a bad call. Denial and simplicity reign.

The presidential election is neither tied nor over. Of the 16 most recent national polls using live telephone interviewers calling both respondents with landlines and those with cell phones (between 30 and 40 percent of voters do not have landlines and cannot legally be called by robo-pollsters), one has the race even, two have Obama with a narrow 2-point edge, five have 3-point Obama margins, two have 5-point Obama advantages, another pair have 6-point Obama leads, two have 7-point leads, and one has an 8-point Obama lead. This would strongly suggest that the Obama lead is between 3 and 6 percentage points; such brand-name polls as those by CNN, Fox News, and NBC News/Wall Street Journal are among those in that 3- to 6-point range.

Conversations with Democratic and Republican pollsters and strategists suggest that Colorado, Florida, North Carolina, and Virginia are the most competitive swing states. Some high-quality private polling shows Romney with very narrow leads in both North Carolina and Virginia, but a few other equally sophisticated surveys show Obama with narrow advantages in those two states. At least one private survey shows Florida even, but most show the Sunshine State and Colorado with narrow Obama leads, in the small- to mid-single-digit range. Just a hair or two better for Obama but still quite close are Nevada and Wisconsin, followed by Iowa. Things really get ugly for Romney in Ohio and Michigan, and, finally, in Pennsylvania, which is no longer competitive. Ohio shows a 5- to 8-point lead for Obama in private polling. In Michigan, Obama’s lead is slightly wider, and in Pennsylvania, Romney faces close to a 10-point deficit. It is mathematically possible for Romney to reach 270 electoral votes without Michigan, Ohio, or Pennsylvania, but it is in reality exceedingly unlikely.

It would take a very consequential event to change the trajectory of this race. Time will tell whether Romney’s strong debate performance on Wednesday night was the event that he needed—particularly in swing states such as Ohio. But at least he energized his supporters and sent a clear message that the race is not over.

**Solar power is unpopular - not seen as cost competitive and perceived as trading off with other sources**

**Lifsher, 5 -** LA Times Staff Writer

(Marc, June 27, “Governor's Solar Plan Is Generating Opposition,” <http://articles.latimes.com/2005/jun/27/business/fi-solar27>, d/a 7-20-12

Gov. Arnold Schwarzenegger's plan to spend billions of dollars to put electricity-producing [solar panels](http://articles.latimes.com/2005/jun/27/business/fi-solar27) on a million California rooftops could be running into stormy weather. For the second year running, the governor is sponsoring legislation that would put photovoltaic solar systems at the head of the line for the bulk of state alternative energy [funding](http://articles.latimes.com/2005/jun/27/business/fi-solar27). For Schwarzenegger and his backers in the environmental community and the solar industry, a massive push to use abundant "free power" from the sun is an easy call. "Today, in California, where we are famous for the sun, we are going to put the positive benefits of that sun to good use," Schwarzenegger said in February, announcing his personal support for SB 1, the solar power bill. Schwarzenegger is thinking big: He wants to increase the state's total solar output from about 101 megawatts to 3,000 megawatts by 2018. That's enough nonpolluting power to run about 2.25 million homes and eliminate the need to build six large natural gas-fired generating plants. The governor isn't the only Hollywood star backing sun power. Actors Edward Norton and Ed Begley Jr., both well-known environmental activists, spoke at a recent media event in South Central Los Angeles in support of SB 1. But the bill, despite such high-profile backing and a bipartisan 30-5 vote in the state Senate, is facing potential difficulties in the Assembly. Opposition from business lobbies, utilities, unions and even consumer groups is setting the stage for what could be a close vote. The first hint of how the bill will fare in the Assembly is expected to come today when it faces its first hearing in the Assembly Utilities and Commerce Committee. Most of the complaints about the governor's solar program center on its estimated 10-year, $2-billion-to-$3-billion price tag. Much of that would be paid by power users in the form of surcharges imposed by the California Public Utilities Commission. Proponents estimate that the annual rate hike would be about $15 per residential customer. But business groups -- usually among Schwarzenegger's staunchest supporters -- complain that increases for large power users such as big-box retailers and industrial operations would be much higher -- a key point in a state that already has the highest electricity rates in the continental United States. The governor's solar plan is "so expensive that it's not cost-effective," said Joseph Lyons, an energy lobbyist for the California Manufacturers and Technology Assn. "Our members need rate relief, and this goes in the other direction," Lyons said. Southern California Edison Co., the state's second-largest investor-owned utility, is also skeptical, saying the governor's bill favors rooftop solar systems over what it says are more cost-effective centralized solar generating stations. Even fans of solar power -- who view photovoltaic panels as a crucial part of the state's alternative energy mix -- question the wisdom of earmarking the bulk of funding for one source, to the detriment of less-glamorous energy efficiency and conservation programs. "Solar is not even close to competitive," said Severin Borenstein, director of the University of California Energy Institute in Berkeley. He noted that solar power's long-run, average production cost of 25 cents to 30 cents per kilowatt hour, not including government subsidies or tax [credits](http://articles.latimes.com/2005/jun/27/business/fi-solar27), is much higher than the 5 cents to 9 cents for wind power and 6 cents to 7 cents for modern, natural-gas-fired generation plants. Even a leading energy consumer advocate, the Utility Reform Network, is critical of the governor's solar dream, contending it would drive up utility bills for some lower-income residential ratepayers. "It singles out one technology ... it's not giving us the biggest bang for the buck," said Michael Florio, an attorney for the group. Meanwhile, enthusiasm among home builders is lukewarm at best. They fear that a requirement that solar be offered as an option on most new homes beginning in 2010 would be unpopular with buyers.

#### Romney would support an Israeli strike on Iran

Robert W. Merry 8-1-2012; editor of The National Interest and the author of books on American history and foreign policyRomney Edges U.S. toward War with Iran http://nationalinterest.org/commentary/romney-edges-us-toward-war-iran-7275

The major newspapers all understood that GOP presidential candidate Mitt Romney’s expressions in Jerusalem last weekend were important, which is why they played the story on page one. But only the New York Times captured the subtle significance of what he said. The paper’s coverage, by Jodi Rudoren and Ashley Parker, reported that Romney sought to adhere to the code that says candidates shouldn’t criticize the president on foreign soil. “But,” they added, “there were subtle differences between what he said—and how he said it—and the positions of his opponent.” Most significantly, while Obama talks about stopping Iran from obtaining nuclear weapons, Israel insists Tehran should be prevented from having even the capacity to develop nuclear weapons. This means no nuclear development even for peaceful purposes. Romney embraced the Israeli language. In doing so, he nudged his nation closer to war with Iran. Based on Israeli prime minister Benjamin Netanyahu’s oft-repeated expressions, he clearly seems bent on attacking Iran to destroy or delay its nuclear program and, if possible, undermine the Iranian regime. And he wants America at his side when he does it. Obama has been seeking to dissuade Israel from contemplating such an assault in order to give the president’s austere sanctions regimen a chance to work. But what does he mean by “a chance to work?” If he means a complete capitulation by Iran, he’s dreaming, of course. History tells us that nations don’t respond to this kind of pressure by accepting humiliation. That’s the lesson of Pearl Harbor, as described in my commentary in these spaces. Many close observers of the Iran drama believe there may be an opportunity for a negotiated outcome that allows Iran to enrich uranium to a limited extent—say, 5 percent—for peaceful purposes. Iran insists, and most experts agree, that the Non-Proliferation Treaty allows such enrichment for energy production. In any event, numerous signatories to the NPT do in fact maintain limited enrichment programs for peaceful ends. Obama seems torn between pursuing such an outcome and embracing the Israeli position, which demands that Iran foreswear all enrichment and any peaceful nuclear development. In last spring’s Istanbul meeting between Iran and the so-called P5+1 group (the United States, Britain, France, China, Russia and Germany), there seemed to be a genuine interest on the part of those six nations to explore an outcome that would allow for some enrichment by Iran. Five weeks later in Baghdad, the P5+1 group seemed to backtrack and insist upon zero enrichment. Talks are ongoing but only among low-level technical people; any serious negotiations are on hold pending the election. Thus Obama has managed to maintain his flexibility during the delicate campaign period. But now we have Romney in Israel essentially telling the people there that they need fear no ambivalence on his part. If elected, he will embrace the Netanyahu position, which is designed to ensure the collapse of any negotiations attending anti-Iran sanctions, which Netanyahu already has labeled a failure. “We have to be honest,” he said over the weekend, during Romney’s visit, “and say that the sanctions and diplomacy so far have not set back the Iranian program by one iota.” That’s the view that Romney subtly embraced in Jerusalem.

#### Great power war

Trabanco 2009 – Independent researcher of geopolitical and military affairs (1/13/09, José Miguel Alonso Trabanco, “The Middle Eastern Powder Keg Can Explode at Anytime,” http://www.globalresearch.ca/index.php?context=va&aid=11762)

In case of an Israeli and/or American attack against Iran, Ahmadinejad's government will certainly respond. A possible countermeasure would be to fire Persian ballistic missiles against Israel and maybe even against American military bases in the regions. Teheran will unquestionably resort to its proxies like Hamas or Hezbollah (or even some of its Shiite allies it has in Lebanon or Saudi Arabia) to carry out attacks against Israel, America and their allies, effectively setting in flames a large portion of the Middle East. The ultimate weapon at Iranian disposal is to block the Strait of Hormuz. If such chokepoint is indeed asphyxiated, that would dramatically increase the price of oil, this a very threatening retaliation because it will bring intense financial and economic havoc upon the West, which is already facing significant trouble in those respects. In short, the necessary conditions for a major war in the Middle East are given. Such conflict could rapidly spiral out of control and thus a relatively minor clash could quickly and dangerously escalate by engulfing the whole region and perhaps even beyond. There are many key players: the Israelis, the Palestinians, the Arabs, the Persians and their respective allies and some great powers could become involved in one way or another (America, Russia, Europe, China). Therefore, any miscalculation by any of the main protagonists can trigger something no one can stop. Taking into consideration that the stakes are too high, perhaps it is not wise to be playing with fire right in the middle of a powder keg.

# 4

**The 50 state governments and relevant subnational actors should establish energy financing banks to create long-term purchase contracts for new qualifying facilities that use wind power, solar power, or wind and solar power for energy production to ensure a reasonable rate of return.**

#### States should establish energy finance banks to do the plan – solves all the case and doesn’t require new spending

**Muro and Berlin, 9/12**/12 – \*senior fellow and policy director of the Metropolitan Policy Program at Brookings AND \*\* Senior Vice President for Policy and Planning, and General Counsel at the Coalition for Green Capital (Mark and Ken, “State Clean Energy Finance Banks: New Investment Facilities for Clean Energy Deployment”, <http://www.brookings.edu/~/media/research/files/papers/2012/9/12%20state%20energy%20investment%20muro/12%20state%20energy%20investment%20muro>)

Given these challenges, states that want to realize the benefits of clean energy deployment should consider a new approach to funding clean energy programs. Specifically, they should investigate the possibility of developing state clean energy finance banks that use limited public dollars and leverage private capital to provide a combination of low-interest rate funding that makes clean energy projects competitive and low-cost 100-percent up-front loans for energy efficiency projects.

Such an approach would address the deployment and diffusion challenges faced by clean energy

technologies while recognizing that federal and state appropriations, tax credits, and other incentives

and subsidies will be sharply diminished in the years ahead because of the budget crisis at all levels of

government. Likewise, the development of such finance entities would address the need for states to

develop a new paradigm for financing strong clean energy and energy efficiency projects as part of a

push to develop strong regional industries.

So-called “clean energy finance banks” or “green banks” are ideally suited to solve the present

problems because they offer a practical way for states to make available leveraged, low-cost financing

for project developers in their states. First, they can be developed out of existing state programs while

bringing into the enterprise the equivalent of substantial new resources given their ability to leverage

funds. Likewise, because the banks would provide debt financing, they would be repaid on their loans,

putting them in the position to borrow funds and to establish revolving loan funds that would provide

funds that could be reinvested without new sources of financing. Furthermore, clean energy finance

banks, if established as independent institutions, would be able to issue revenue bonds without the full

faith and credit of the state and without the restrictions facing states, which have limited borrowing

capacity. Finally, clean energy finance banks could efficiently seek large investors with patient, longterm capital who are seeking a long-term, conservative rate of return, such as pension fund investors.

#### It’s legitimate and elections is a net benefit

**Harvard Law Review, 6** – the author isn’t named but the qualifications are: John M. Olin Fellow in Law, Economics, and Business at Harvard Law School (119 Harv. L. Rev. 1855, “STATE COLLECTIVE ACTION\*”, April, lexis)

Consider now the reasons why states may act collectively. In the simplest terms, collective action may be more desirable than individual state action because it opens a panoply of otherwise unavailable policy choices and may be more desirable than federal action because it allocates power to a better-positioned actor. n12 These advantages may exist **[\*1859]** because regional organizations have better information, are better positioned to act on that information, or avoid duplicative costs or coordination problems. n13 Also, collective action may be desirable politically because it may make certain programs either more or less politically salient. n14 Similarly, political actors may want to act collectively because doing so spreads or diversifies political risk. n15 Lastly, collective action may provide opportunities for economies of scale or rent-seeking behavior that states cannot achieve independently. n16

Some brief examples of how states may act collectively illustrate the importance of the topic. n17 As in the stylized examples, states may act collectively to reduce pollution. Groups of states also could develop plans to use common reserves of natural resources, including oil fields or aquifers that cross state lines, or plans to allocate the use of rivers, lakes, forests, or other natural resources. They may also regulate wildlife that lives in multiple states, either to protect that wildlife or to use it for commercial purposes. States may take similar action to regulate or allocate energy or to develop interstate transit infrastructure, such as highways, rail lines, or regional airports. States may regulate the production or distribution of goods or create economic development organizations organized either geographically or by some other trait, such as agricultural or oil and gas production. They also may wish to regulate certain industries or set labor standards in common ways or may wish to regulate products commonly by adopting similar production standards or tort rules. As a final example - although one can imagine many other motivations for state collective action - states may collectivize to provide better social welfare or governmental insurance programs.

# 1nc competitiveness

**Heg causes war and prolif-recalcitrant power balancing takes out the benefits of heg**

**Monteiro 11** \*Nuno P. Monteiro is Assistant Professor of Political Science at Yale University [<http://www.mitpressjournals.org/doi/pdf/10.1162/ISEC_a_00064>, “Unrest Assured: Why Unipolarity is not Peaceful”]

A unipole carrying out a defensive-dominance strategy will seek to preserve all three aspects of the status quo: maintaining the territorial boundaries and international political alignments of all other states, as well as freezing the global distribution of power. 60 This strategy can lead to conflict in two ways, both of which stem from uncertainty about the unipole’s intentions. First, not knowing the extent of the unipole’s determination to pursue a strategy of defensive dominance may spur some minor powers to develop their capabilities. Second, uncertainty about the degree to which the unipole will oppose small changes to the status quo may lead some minor powers to attempt them. In both cases, the opposition of the unipole to these actions is likely to lead to war. In this section, I lay out these two pathways to conflict and then illustrate them with historical examples. To be sure, states can never be certain of other states’ intentions. 61 There are a couple of reasons, however, why this uncertainty increases in unipolarity, even when the unipole appears to be determined to maintain the status quo. First, other states cannot be certain that the unipole will always pursue nonrevisionist goals. This is particularly problematic because unipolarity minimizes the structural constraints on the unipole’s grand strategy. As Waltz writes, “Even if a dominant power behaves with moderation, restraint, and forbearance, weaker states will worry about its future behavior. . . . The absence of se rious threats to American security gives the United States wide latitude in making foreign policy choices.” 62 Second, unipolarity takes away the principal tool through which minor powers in bipolar and multipolar systems deal with uncertainty about great power intentions—alliances with other great powers. Whereas in these other systems minor powers can, in principle, attenuate the effects of uncertainty about great power intentions through external balancing, in a unipolar world no great power sponsor is present by definition. In effect, the systemic imbalance of power magnifies uncertainty about the unipole’s intentions. 63 Faced with this uncertainty, other states have two options. First, they can accommodate the unipole and minimize the chances of conºict but at the price of their external autonomy. 64 Accommodation is less risky for major powers because they can guarantee their own survival, and they stand to beneªt greatly from being part of the unipolar system. 65 Major powers are therefore unlikely to attempt to revise the status quo. Minor powers are also likely to accommodate the unipole, in an attempt to avoid entering a confrontation with a preponderant power. Thus, most states will accommodate the unipole because, as Wohlforth points out, the power differential rests in its favor. 66 Accommodation, however, entails greater risks for minor powers because their survival is not assured if the unipole should turn against them. Thus some of them are likely to implement a second strategic option—resisting the unipole. The structure of the international system does not entirely determine whether or not a minor power accommodates the unipole. Still, structure conditions the likelihood of accommodation in two ways. To begin, a necessary part of a strategy of dominance is the creation of alliances or informal security commitments with regional powers. Such regional powers, however, are likely to have experienced conºict with, or a grievance toward, at least some of its neighboring minor powers. The latter are more likely to adopt a recalcitrant posture. Additionally, by narrowing their opportunities for regional integration and security maximization, the unipole’s interference with the regional balance of power is likely to lower the value of the status quo for these minor powers. 67 As the literature on the “value of peace” shows, countries that attribute a low value to the status quo are more risk acceptant. This argument helps explain, for example, Japan’s decision to attack the United States in 1941 and Syria’s and Egypt’s decision to attack Israel in 1973. 68 In both cases, aggressor states knew that their capabilities were significantly weaker than those of their targets. They were nonetheless willing to run the risk of launching attacks because they found the prewar status quo unacceptable. 69 Thus, for these states, the costs of balancing were lower relative to those of bandwagoning. In an international system with more than one great power, recalcitrant minor powers would, in principle, be able to balance externally by finding a great power sponsor. 70 In unipolarity, however, no such sponsors exist. 71 Only major powers are available, but because their survival is already guaranteed, they are likely to accommodate the unipole. And even if some do not, they are unlikely to meet a recalcitrant minor power’s security needs given that they possess only limited power-projection capabilities. 72 As such, recalcitrant minor powers must defend themselves, which puts them in a position of extreme selfhelp. There are four characteristics common to states in this position: (1) anarchy, (2) uncertainty about other states’ intentions, (3) insufªcient capabilities to deter a great power, and (4) no potential great power sponsor with whom to form a balancing coalition. The ªrst two characteristics are common to all states in all types of polarity. The third is part of the rough-and-tumble of minor powers in any system. The fourth, however, is unique to recalcitrant minor powers in unipolarity. This dire situation places recalcitrant minor powers at risk for as long as they lack the capability to defend themselves. They depend on the goodwill of the unipole and must worry that the unipole will shift to a strategy of offensive dominance or disengagement. Recalcitrant minor powers will therefore attempt to bolster their capabilities through internal balancing. To deter an eventual attack by the unipole and bolster their chances of survival in the event deterrence fails, recalcitrant minor powers will attempt to reinforce their conventional defenses, develop the most effective asymmetric strategies possible, and, most likely in the nuclear age, try to acquire the ultimate deterrent—survivable nuclear weapons. 73 In so doing, they seek to become major powers. Defensive dominance, however, also gives the unipole reason to oppose any such revisions to the status quo. First, such revisions decrease the benefits of systemic leadership and limit the unipole’s ability to convert its relative power advantage into favorable outcomes. In the case of nuclear weapons, this limitation is all but irreversible, virtually guaranteeing the recalcitrant regime immunity against any attempt to coerce or overthrow it. Second, proliferation has the potential to produce regional instability, raising the risk of arms races. These would force the unipole to increase defense spending or accept a narrower overall relative power advantage. Third, proliferation would lead to the emergence of a recalcitrant major power that could become the harbinger of an unwanted large-scale balancing attempt. The unipole is therefore likely to demand that recalcitrant minor powers not revise the status quo. The latter, however, will want to resist such demands because of the threat they pose to those states’ security. 74 Whereas fighting over such demands would probably lead to defeat, conceding to them peacefully would bring the undesired outcome with certainty. A preventive war is therefore likely to ensue. In the second causal path to war, recalcitrant minor powers test the limits of the status quo by making small revisions—be they territorial conquests, altered international alignments, or an increase in relative power—evocative of Thomas Schelling’s famous “salami tactics.” 75 The unipole may not, however, accept these revisions, and instead demand their reversal. For a variety of reasons, including incomplete information, commitment problems, and the need for the minor power to establish a reputation for toughness, such demands may not be heeded. As a result, war between the unipole and recalcitrant minor powers emerges as a distinct possibility. 76 Regardless of the causal path, a war between the unipole and a recalcitrant minor power creates a precedent for other recalcitrant minor powers to boost their own capabilities. Depending on the unipole’s overall capabilities—that is, whether it can launch a second simultaneous conºict—it may also induce other recalcitrant minor powers to accelerate their balancing process. Thus, a war against a recalcitrant minor power presents other such states with greater incentives for, and (under certain conditions) higher prospects of, assuring their survival by acquiring the necessary capabilities, including nuclear weapons. At the same time, and depending on the magnitude of the unipole’s power preponderance, a war against a recalcitrant minor power creates an opportunity for wars among major and minor powers—including major power wars. To the extent that the unipole’s power preponderance is limited by its engagement in the ªrst war, **its ability to manage confrontations** between other states elsewhere is curtailed, increasing the chances that these will erupt into military conflicts. Therefore, even when the unipole is engaged, war remains a possibility. Between the end of the Cold War and the terrorist attacks of September 11, 2001, the United States generally implemented a strategy of defensive dominance. During this period, the dynamics described in this section can be seen at work in the cases of the 1991 Persian Gulf War and the 1999 Kosovo War, as well as in the Kargil War between India and Pakistan, and in North Korea’s and Iran’s nuclear programs. On August 2, 1990, Saddam Hussein ordered his forces to invade Kuwait, convinced the United States would not oppose this revision of the status quo. During the months that followed, the United States assembled an international coalition determined to restore Kuwaiti independence, and it obtained UN authorization to use force if Iraq did not withdraw its occupation forces by January 15, 1991. Two days after this deadline, the U.S.-led coalition began military action against Iraqi forces, expelling them from Kuwait in six weeks. 77 Two points deserve mention. First, the Gulf War was triggered by Iraq’s miscalculation regarding whether the United States would accept Iraqi annexation of Kuwait. At the outset of the unipolar era, great uncertainty surrounded the limits of what actions U.S. decisionmakers would find permissible. 78 Iraq miscalculated the degree of U.S. ºexibility, and war ensued. Second, the war was made possible by unipolarity, which placed Iraq in a situation of extreme selfhelp. Indeed, lack of a great power sponsor—at the time, the Soviet Union was in strategic retrenchment—was duly noted in Baghdad. Immediately after the war, Saddam’s foreign minister, Tariq Aziz, lamented, “We don’t have a patron anymore. . . . If we still had the Soviets as our patron, none of this would have happened.” 79 Similarly, in 1999, Serbian leaders miscalculated U.S. tolerance to ethnic violence in Kosovo, a secessionist province of the Federal Republic of Yugoslavia. In March 1999, reacting to increasing brutality in the province, the international community convened a conference, which produced the Rambouillet accords. This agreement called for the restoration of Kosovo’s autonomy and the deployment of NATO peacekeeping forces, both unacceptable to Serbian authorities, who refused to submit to it. 80 In response, NATO launched a bombing campaign in Yugoslavia. In early June, after nine weeks of bombing, NATO offered the Serbian leadership a compromise, which it accepted, ending the war. 81 Once the war had started and it became clear that Serbia had overreached, Belgrade relied on the support of its ancestral major power ally, Russia. Serbian strategy during the war thus aimed in part at buying time for Russia to increase pressure on NATO to cease hostilities. Contrary to Belgrade’s expectations, however, Russian support for Serbian aims eroded as the war continued. On May 6, Russia agreed with the Group of Seven nations on a plan that included the deployment of UN peacekeepers and a guarantee of Yugoslavia’s territorial integrity. By mid-May, faced with Serbia’s obduracy, Moscow began to press its ally to accept the offer. Thus, not only did Russian support fail to prevent a U.S.-led intervention, but it was instrumental in convincing Serbia to accede to NATO’s demands. 82 The only war between major powers to have occurred thus far in a unipolar world—the Kargil War between India and Pakistan—started, as my theory would have predicted, while the United States was involved in Kosovo. 83 In May 1999, India detected Pakistani forces intruding into the Kargil sector in Indian-controlled Kashmir. This action triggered the ªrst Indo-Pakistani war of the nuclear age, which ended on July 4—after the cessation of military operations in Kosovo—when President Bill Clinton demanded Pakistan’s withdrawal, which occurred on July 26. 84 In the absence of a great power sponsor and uncertain of U.S. intentions, Iran and North Korea—both recalcitrant minor powers—have made considerable efforts to bolster their relative power by developing a nuclear capability. Unsurprisingly, the United States has consistently opposed their efforts, but has so far been unable to persuade either to desist. The North Korean nuclear program dates to the 1960s, but most of the nuclear development was conducted in a world with a status quo unipole. 85 Throughout the 1990s and into the early 2000s, North Korea sought to elude U.S. opposition without ever crossing the nuclear threshold. The North Korean regime seemed to have understood that the United States would view an explicit move toward a nuclear breakout as an extreme provocation and raise the possibility of a preventive war. When the United States shifted to a strategy of offensive dominance in late 2001, however, Pyongyang wasted little time in acquiring its nuclear deterrent. Iran, too, pursued a nuclear program throughout the 1990s. 86 The Iranian nuclear program, started in the 1950s, gained new impetus with the end of the Cold War as the result of a conºuence of factors: the 1989 replacement of an antinuclear supreme leader, Ayatollah Ruhollah Khomeini, with a pronuclear Ayatollah Ali Khamenei; the discovery of Iraq’s covert nuclear program during the 1991 Gulf War; and, above all, an increased U.S. presence in the region following that war. 87 A decade later, the expansion of Iran’s nuclear program prompted the State Department to proclaim, “We believe Iran’s true intent is to develop the capability to produce ªssile material for nuclear weapons.” 88 Iran’s nuclear program continued throughout the period in which the United States shifted toward a strategy of offensive dominance, to which I turn next.

**Extinction**

**Asal and Beardsley 09** (Victor, Department of Political Science, State University of New York, Albany, and Kyle, Department of Political Science, Emory University, Winning with the Bomb, <http://belfercenter.ksg.harvard.edu/files/uploads/Beardsley-Asal_Winning_with_the_Bomb.pdf>)

Conclusion Why do states proliferate? Nuclear weapons and the programs necessary to create them are expensive. They are dangerous. Other countries may attack a state while it is trying to create a nuclear arsenal and there is always the risk of a catastrophic accident. They may help generate existential threats by encouraging first strike incentives amongst a state's opponents. This paper has explored the incentives that make nuclear weapons attractive to a wide range of states despite their costly and dangerous nature. We have found that nuclear weapons provide more than prestige, they provide leverage. They are useful in coercive diplomacy, and this must be central to any explanation of why states acquire them. Since 9 August 1945 no state has used a nuclear weapon against another state, but we find evidence that the possession of nuclear weapons helps states to succeed in their confrontations with other states even when they do not “use” them. Conflict with nuclear actors carries with it a potential danger that conflict with other states simply does not have. Even though the probability of full escalation is presumably low, the evidence confirms that the immense damage from the possibility of such escalation is enough to make an opponent eager to offer concessions. Asymmetric crises allow nuclear states to use their leverage to good effect. When crises involve a severe threat – and nuclear use is not completely ruled out – the advantage that nuclear actors have is substantial. Nuclear weapons help states win concessions quickly in 25 salient conflicts. Consistent with the other papers in this issue and the editors’ introduction (Gartzke and Kroenig this issue), we report that nuclear weapons confer tangible benefits to the possessors. These benefits imply that there should be a general level of demand for nuclear weapons, which means that explanations for why so few states have actually proliferated should focus more on the supply side, as applied by Matthew Kroenig (this issue) and Matthew Fuhrmann (this issue). The findings here importantly suggest an additional reason why “proliferation begets proliferation,” in the words of George Shultz (Shultz 1984, 18). If both parties to a crisis have nuclear weapons, the advantage is effectively cancelled out. When states develop nuclear weapons, doing so may encourage their rivals to also proliferate for fear of being exploited by the shifting bargaining positions. And once the rivals proliferate, the initial proliferator no longer has much bargaining advantage. On the one hand, this dynamic adds some restraint to initial proliferation within a rivalry relationship: states fear that their arsenal will encourage their rivals to pursue nuclear weapons, which will leave them no better off (Davis 1993; Cirincione 2007). On the other hand, once proliferation has occurred, all other states that are likely to experience coercive bargaining with the new nuclear state will also want nuclear weapons. The rate of proliferation has the potential to accelerate because the desire to posses the “equalizer” will increase as the number of nuclear powers slowly rises. Our theoretical framework and empirical findings are complementary to Gartzke and Jo (this issue), who posit and find that nuclear states enjoy greater influence in the international realm. An interesting dynamic emerges when comparing the results to Rauchhaus (this issue), who finds that nuclear weapons in asymmetric dyads tend to increase the propensity for escalation. We have argued that nuclear weapons improve the bargaining leverage of the 26 possessors and tested that proposition directly. It is important to note that the factors that shape conflict initiation and escalation are not necessarily the same factors that most shape the outcome of the conflict. Even so, one explanation for why a stronger bargaining position does not necessarily produce less escalation is that escalation is a function of decisions by both sides, and even though the opponent of a nuclear state is more willing to back down, the nuclear state should be more willing to raise its demands and push for a harder bargain in order to maximize the benefits from the nuclear weapons. Nuclear weapons appear to need ever-greater shares of their bargains in order to be satisfied, which helps to explain both their proclivity to win and their proclivity toward aggressive coercive diplomacy. An important implication in light of these findings is thus that even though nuclear weapon states tend to fare better at the end of their crises, this does not necessarily mean that the weapons are a net benefit for peace and stability.

**Unipolarity destroys coordination necessary to stop the next epidemic-abandoning heg solves**

**Weber et al. 7 \***Steven Weber is a Professor of Political Science at UC-Berkeley and Director of the Institute of International Studies, Naazneen Barma, Matthew Kroenig, Ely Ratner, [“How Globalization Went Bad”, January-February 2007, Foreign Policy]

The same is true for global public health. Globalization is turning the world into an enormous petri dish for the incubation of infectious disease. Humans cannot outsmart disease, because it just evolves too quickly. Bacteria can reproduce a new generation in less than 30 minutes, while it takes us decades to come up with a new generation of antibiotics. **Solutions are only possible when and where we get the upper hand**. Poor countries where humans live in close proximity to farm animals are the best place to breed extremely dangerous zoonotic disease. **These are often the same countries, perhaps not entirely coincidentally, that feel threatened by American powe**r. Establishing an early warning system for these diseases—exactly what we lacked in the case of SARS a few years ago and exactly what we lack for avian flu today—will require a significant level of intervention into the very places that don’t want it. That will be true as long as international intervention means American interference. The most likely sources of the next ebola or HIV-like pandemic are the countries that simply won’t let U.S. or other Western agencies in, including the World Health Organization. Yet the threat is too arcane and not immediate enough for the West to force the issue. What’s needed is another great power to take over a piece of the work, a power that has more immediate interests in the countries where diseases incubate and one that is seen as less of a threat. **As long as the United States remains the world’s lone superpower, we’re not likely to get any help.** Even after HIV, SARS, and several years of mounting hysteria about avian flu, the world is still not ready for a viral pandemic in Southeast Asia or sub-Saharan Africa. America can’t change that alone.

**Extinction**

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Senate Majority Leader Frist describes the recent slew of emerging diseases in almost biblical terms: “All of these [new diseases] were advance patrols of a great army that is preparing way out of sight.”3146 Scientists like Joshua Lederberg don’t think this is mere rhetoric. He should know. Lederberg won the Nobel Prize in medicine at age 33 for his discoveries in bacterial evolution. Lederberg went on to become president of Rockefeller University. “Some people think I am being hysterical,” he said, referring to pandemic influenza, “but there are catastrophes ahead. We live in evolutionary competition with microbes—bacteria and viruses. There is no guarantee that we will be the survivors.”3147 There is a concept in host-parasite evolutionary dynamics called the Red Queen hypothesis, which attempts to describe the unremitting struggle between immune systems and the pathogens against which they fight, each constantly evolving to try to outsmart the other.3148 The name is taken from Lewis Carroll’s Through the Looking Glass in which the Red Queen instructs Alice, “Now, here, you see, it takes all the running you can do to keep in the same place.”3149 Because the pathogens keep evolving, our immune systems have to keep adapting as well just to keep up. According to the theory, animals who “stop running” go extinct. So far our immune systems have largely retained the upper hand, but the fear is that given the current rate of disease emergence, the **human race is losing the race**.3150 In a Scientific American article titled, “Will We Survive?,” one of the world’s leading immunologists writes: Has the immune system, then, reached its apogee after the few hundred million years it had taken to develop? Can it respond in time to the new evolutionary challenges? These perfectly proper questions lack sure answers because we are in an utterly unprecedented situation [given the number of newly emerging infections].3151 The research team who wrote Beasts of the Earth conclude, “Considering that bacteria, viruses, and protozoa had a more than two-billion-year head start in this war, a victory by recently arrived Homo sapiens would be remarkable.”3152 Lederberg ardently believes that emerging viruses may imperil human society itself. Says NIH medical epidemiologist David Morens, When you look at the relationship between bugs and humans, the more important thing to look at is the bug. When an enterovirus like polio goes through the human gastrointestinal tract in three days, its genome mutates about two percent. That level of mutation—two percent of the genome—has taken the human species eight million years to accomplish. So who’s going to adapt to whom? Pitted against that kind of competition, Lederberg concludes that the human evolutionary capacity to keep up “may be dismissed as almost totally inconsequential.”3153 To help prevent the evolution of viruses as threatening as H5N1, the least we can do is take away a few billion feathered test tubes in which viruses can experiment, a few billion fewer spins at pandemic roulette. The human species has existed in something like our present form for approximately 200,000 years. “Such a long run should itself give us confidence that our species will continue to survive, at least insofar as the microbial world is concerned. Yet such optimism,” wrote the Ehrlich prize-winning former chair of zoology at the University College of London, “might easily transmute into a tune whistled whilst passing a graveyard.”3154

**Kagan’s wrong – the factors they say stop war will remain post-decline, holding on to power guarantees threat inflation that turns their offense – he even agrees their impact is overstated**

**Preble 12** – vice president for defense and foreign policy studies at the Cato Institute (seriously, even Cato doesn’t like Kagan)

(Christopher, “The Critique of Pure Kagan”, <http://nationalinterest.org/print/bookreview/the-critique-pure-kagan-7061>, dml)

It is a familiar refrain. But, as with Kagan’s earlier works, The World America Made combines questionable international-relations theory, questionable economics and questionable politics. To the extent that Kagan has had a hand in building today’s world, he has constructed it around too much military capacity in the hands of a single power and too little capacity in the hands of nearly everyone else. The result is a wide and growing gap between the promises Washington has made to protect others from harm and America’s political will to honor those promises if they ever come due. The world is both more complicated and more durable than Kagan imagines. The United States does not need to police the globe in order to maintain a level of security that prior generations would envy. Neither does the survival of liberal democracy, market capitalism and basic human rights hinge on U.S. power, contrary to Kagan’s assertions. Americans need not shelter wealthy, stable allies against threats they are capable of handling on their own. Americans should not fear power in the hands of others, particularly those countries and peoples that share common interests and values. Finally, precisely because the United States is so secure, it is difficult to sustain public support for global engagement without resorting to fearmongering and threat inflation. Indeed, when Americans are presented with an accurate assessment of the nation’s power relative to others and shown how U.S. foreign policy has contributed to a vast and growing disparity between what we spend and what others spend on national security—the very state of affairs that Kagan celebrates—they grow even less supportive. KAGAN’S FLAWED analysis begins with a fundamental misconception about the international system and the relations of states within it. His worldview perceives two types of countries: those that are congenitally incapable of dealing with urgent security challenges on their borders or in their respective regions; and a crafty, rapacious few who are forever scheming to intimidate, disrupt or simply devour the hapless and the helpless. Within this dichotomy, however, is a third sort of country, the only one of its kind. The United States enjoys a privileged place in the world order, explains Kagan. Its power is unthreatening because it is relatively distant from others. And, according to Kagan, the costs of this power are easily borne by the wealthiest country in the world. Kagan’s world order “is as fragile as it is unique,” and “preserving [it] requires constant American leadership and constant American commitment.” The message today is consistent with that from sixteen years ago when he and William Kristol first made the case for what they called “benevolent global hegemony.” In other respects, however, the story that emerges from The World America Made is subtly different. Anticipating a rising tide of pessimism and gloominess within the American electorate, Kagan at times resorts to the tone of a pep talk. Whereas he once highlighted the “present dangers” confronting the United States (in a volume coedited with Kristol, published in 2000), he now says the world today isn’t as dangerous as it once was—during the Cold War, for example, or at other periods in American history. Looking ahead, he says, China has its own set of problems, is unlikely to make a bid for regional hegemony and is unlikely to succeed if it tries. Likewise, we shouldn’t be overly frightened by China’s growing economic power, Kagan explains, which will lag well behind that of the United States for years. Other global challenges are more modest still. The object of these relatively optimistic assessments is to convince Americans that they can manage to hold on to their position of global dominance for many years without bankrupting themselves financially or exhausting themselves emotionally. This line of argument cuts against Kagan’s other claims, however, both in this volume and elsewhere, that the United States should spend even more on its military and that Washington should use this military more often, and in more places, than it has in the recent past. In other critical ways, Kagan’s assessment of global politics has remained remarkably consistent, even if the tone of this current volume is slightly less alarmist. In the past, he has argued that the world would collapse into a brutal, Hobbesian hell if the U.S. military were smaller and fought in fewer wars or if the U.S. government were less inclined to extend security guarantees to other countries. Today, he merely suggests such a scenario is possible and warns it would be foolish to gamble on the outcome. Kagan’s too-casual rejection of any reasonable alternative to American hegemony reveals the crucial flaw in his reasoning, however, given that he predicts we might not be afforded a choice in the future. If the United States can’t sustain its current posture indefinitely, a wiser long-term grand strategy would set about—preferably now—easing the difficult and sometimes dangerous transitions that often characterize major power shifts. Rather than continuing to discourage other countries from tending to their security affairs, the United States should welcome such behavior. Kagan’s reassuring tone—about China’s unique vulnerabilities, for example—actually buttresses that competing point of view. After all, if a distant, distracted hegemon like the United States can manage the challenge posed by China, and if it can do so while preventing wars and unrest in several other regions simultaneously, then Asian nations would be at least equally capable of accomplishing the same task given that they will be focused solely on their own security primarily in just that one region. KAGAN REFUSES to consider this possibility. He writes that the “most important features of today’s world—the great spread of democracy, the prosperity, the prolonged great-power peace—have depended directly and indirectly on power and influence exercised by the United States.” It follows, therefore, that the world would become considerably less democratic, less prosperous and less peaceful if the United States were to withdraw militarily from Europe, Asia and the Middle East. Of course, he can’t actually prove either claim to be true, and he concedes as much. Instead, he bases his case on a particular set of beliefs about how the world works and about the United States’ unique characteristics within that system. Kagan asserts that the world requires a single, order-inducing hegemon to enforce the rules of the game and that America must perform this role because its global economic interests demand it. He also believes that the United States has a special obligation, deriving from its heritage as a “dangerous nation,” to spread democracy and human rights. What’s more, America’s military might is the essential ingredient that leads to its international influence. The spread of democracy and market capitalism, Kagan claims, is made possible by U.S. power but would retreat before autocracy and mercantilism if that power were seen to be waning. The attractiveness of America’s culture, economics and political system—the vaunted “soft power” in Joseph Nye’s telling—is fleeting and would dissipate if Americans were to commit what Kagan calls “preemptive superpower suicide.” How other nations respond to U.S. power also follows a familiar pattern. In Kagan’s telling, allies will bandwagon with us if we are committed to defending them but bolt like frightened racehorses at the first sign of trouble. Would-be challengers will back down in the face of U.S. power but rush to exploit opportunities for conquest if Uncle Sam exhibits any hesitation or self-doubt. And Kagan simply dismisses any suggestion that other countries might chafe at American dominance or fear American power. His ideas represent something close to the reigning orthodoxy in Washington today and for the past two decades. Inside the Beltway, there is broad, bipartisan agreement on the basic parameters of U.S. foreign policy that Kagan spells out. This consensus contends that the burden of proof is on those who argue against the status quo. The United States and the world have enjoyed an unprecedented stretch of security and prosperity; it would be the height of folly, the foreign-policy establishment asserts, to upend the current structure on the assumption that an alternative approach would represent any improvement. But such arguments combine the most elementary of post hoc fallacies with unwarranted assumptions and idle speculation. Correlation does not prove causation. There are many factors that could explain the relative peace of the past half century. Kagan surveys them all—including economic interdependence, evolving norms governing the use of force and the existence of nuclear weapons—and concludes that U.S. power is the only decisive one. But, once again, he concedes that he cannot prove it**.**

**Multipolarity solves war- lack of great power aggressiveness makes war unthinkable, empirical examples fail this system will be different**

**Schweller 10 \*Randall Schweller is a** Professor of Political Science at Ohio State University [“Entropy and the trajectory of world politics: why polarity has become less meaningful,” Cambridge Review of International Affairs, Volume 23, Number 1, March 2010]

Though rarely mentioned, system equilibrium can emerge without balancing or power-seeking behaviour. This should not come as a surprise; for we know that a Concert system existed during a multipolar phase, roughly between 1815 and 1853. That system, however, arose from the ashes of war, the purpose of which was to defeat an aspiring hegemon before it rolled up the system. The current system, however, has already been ‘rolled up’ for all intents and purposes. So how could a balance of power be restored without deliberate balancing against the US? The answer is that uneven rates of growth among states seeking merely to get rich (wealth, not military power, security, or political influence over others) can produce a rough equivalence in capabilities among several states, none of which feel particularly threatened by each other or seek relative gains at the expense of one another. In other words, the major actors in the system are strictly egoistic, and they interact cooperatively, not competitively or strategically in a military sense, with each other. It is essentially an orthodox liberal world, in which international politics becomes a positive-sum game and the concept of equilibrium is, by definition, a Pareto optimal condition that no actor has an interest in changing (see Callinicos 2007, 546). Here, global equilibrium means maximum entropy. What has changed? Simply put, there is no longer an expectation of violent expansion among the great powers. Balance of power is built on the assumption not only that war is a legitimate instrument of statecraft (Jervis 1986, 60) but that states will settle their differences by fighting. This expectation exercises a profound influence on the types of behaviours exhibited by states and the system as awhole (Lasswell 1965 [1935], chapter 3). It was not just the prospect of war that triggered the basic dynamics of past multipolar and bipolar systems. It was the anticipation that powerful states sought to and would, if given the right odds, carry out territorial conquests at each others’ expense that shaped and shoved actors in ways consistent with the predictions of Waltzian balance of power theory.Without the very real fear of Soviet expansion, why would bipolarity have compelled the US to adopt a grand strategy of containment and deterrence? Without the traditional expectations of great power war and conquest, why would the added complexity and uncertainty of multipolar systems make them unstable? Why would states form alliances in the first place, much less worry about who aligns with whom? When war is unthinkable among the great powers, it is hard to see how polarity exerts the constraints predicted by structural balance of power theory. To the extent that this driving force of history is no longer in play, the system will experience increasing entropy. The current system’s ideational or social structures also seem to be pushing in the direction of greater entropy, suggesting that the world may be reaching an endpoint of sorts. This view of history is consistent with Kant’s (2005 [1795]) ‘perpetual peace’, Richard Rosecrance’s (1987) ‘rise of the trading state’, Francis Fukuyama’s (1992) ‘end of history’ and, for slightly different reasons, John Ikenberry’s (2001) vision of a ‘constitutional order’ rooted in liberalism. Regarding the latter, a ‘multipolar’ constitutional order would not be all that different from the current world because: (1) constitutional orders place limits on the returns to power, so presumably a switch from unipolarity to multipolarity would not be terribly significant; (2) the system, though multipolar, would retain the basic foundations of the American liberal order, its underlying social values would remain intact, and (3) there would be, just as today, no balancing behaviour among the major powers against each other, and major power war would be virtually unthinkable. That noted, Ikenberry’s view of order is more centralized, structured and deliberate than the one I have in mind. An entropy version of Ikenberry’s order would be a watered-down, more decentralized and spontaneously generated liberal order—but one that still devalues power. Liberals are not the only ones making such claims. Several prominent realists have also acknowledged that the world has fundamentally changed to the point that, if and when unipolarity ends, we will not likely see a return to traditional great power politics among the core states. Robert Jervis (2005), for instance, stresses the unprecedented development of a Security Community among all the leading powers as the defining feature of today’s world politics. The existence of this security community means not only that major power war has become unthinkable but also that bandwagoning and balancing ‘will not map on the classical form of the balance of power’ (Jervis 2005, 31). Similarly, Jonathan Kirshner (2008, 335) sees fewer prospects for great power war as a consequence of globalization. Along these lines, Fareed Zakaria (2008, 243) predicts a postAmerican world governed by a messy ad hoc order composed of a` la carte multilateralism and networked interactions among state and nonstate actors. The provision of international order in this future world will no longer be a matter decided solely by the political and military power held by a single hegemon or even a group of leading states. The bottomline is that, if war no longer lurks in the background of great power relations and if strong states must share power with institutions and nonstate actors, then to say that the world is becoming multipolar is, if not meaningless, grossly misleading. The dynamics of this new multipolar world will be significantly different from those of past multipolar systems. When great powers built arms in traditional multipolar settings, they did so under the belief that it was not only possible but probable that their weapons would be targeted and used against each other. Likewise, when they formed alliances, they targeted them at one another. A Community composed of the most developed states in the international system was not on the menu of traditional alliance politics under multipolarity. Of course, international politics can change rapidly and the mere prediction that the Community will survive into the foreseeable future, no matter how compelling it appears to us today, does not mean that the Community will not dissolve sooner than later. Even so, it is difficult to see how major power war becomes thinkable again given the intolerably high costs of war and the obvious destructiveness of nuclear weapons, the benefits of peace grounded in the perceived decoupling of territorial conquest from national prosperity, and the shared values and beliefs about how the world works among the leading states (Jervis 2005).

# 1nc warming

**Oceans resilient**

**Kennedy 2** (Victor, Coastal and Marine Ecosystems and Global Climate Change, http://www.pewclimate.org/projects/marine.cfm)

There is evidence that marine organisms and ecosystems are resilient to environmental change. Steele (1991) hypothesized that the biological components of marine systems are tightly coupled to physical factors, allowing them to respond quickly to rapid environmental change and thus rendering them ecologically adaptable. Some species also have wide genetic variability throughout their range, which may allow for adaptation to climate change.

**No Resource Wars – Three Reasons**

**Deudney 99** – (Dan, Associate Professor of Political Science, Johns Hopkins, Contested Grounds: Security and Conflict in the New Environmental Politics, Eds. Deudney & Matthews p 205-6)

The hypothesis that states will begin fighting each other as natural resources are depleted and degraded seems intuitively accurate. The popular metaphor of a lifeboat adrift at sea with declining supplies of clean water and rations suggests there will be fewer opportunities for positive-sum gains between actors as resource scarcity grows. Many fears of resource war are derived from the cataclysmic world wars of the first half of the twentieth century Influenced by geopolitical theories that emphasized the importance of land and resources for great power status, Adolf Hitler fashioned Nazi German war aims to achieve resource autonomy. The aggression of Japan was directly related to resource goals: lacking indigenous fuel and minerals, and faced with a slowly tightening embargo by the Western colonial pow ers in Asia, the Japanese invaded Southeast Asia for oil, tin, and rub ber. Although the United States had a richer resource endowment than the Axis powers, fears of shortages and industrial strangulation played a central role in the strategic thinking of American elites about world strategy. During the Cold War, the presence of natural resources in the Third World helped turn this vast area into an arena for East-West conflict. Given this record, the scenario of conflicts over resources playing a powerful role in shaping international order should be taken seriously. However, there are three strong reasons for concluding that the familiar scenarios of resource war are of diminishing plausibility for the foreseeable future. First, the robust character of the world trade system means that states no longer experience resource dependency as a major threat to their military security and political autonomy. During the 1930s, the collapse of the world trading system drove states to pursue economic autarky, but the resource needs of contemporary states are routinely met without territorial control of the resource source. As Ronnie Lipschutz has argued, this means that re source constraints are much less likely to generate interstate violence than in the past. Second, the prospects for resource wars are diminished by the growing difficulty that states face in obtaining resources through territorial conquest. Although the invention of nuclear explosives has made it easy and cheap to annihilate humans and infrastructure in extensive areas, the spread of conventional weaponry and national consciousness has made it very costly for an invader, even one equipped with advanced technology, to subdue a resisting population, as France discovered in Indochina and Algeria, the United States in Vietnam, and the Soviet Union in Afghanistan. At the lower levels of violence capability that matter most for conquering and subduing territory; the great powers have lost effective military superiority and are unlikely soon to regain it. Third, nonrenewable resources are, contrary to intuitive logic, becoming less economically scarce. There is strong evidence that the world is entering what H. E. Goeller and Alvin M. Weinberg have labeled the “age of substitutability,” in which industrial technology is increasingly capable of fashioning ubiquitous and plentiful earth materials such as iron, aluminum, silicon, and hydrocarbons into virtually everything needed by modem societies. The most striking manifestation of this trend is that prices for virtually every raw material have been stagnant or falling for the last two decades despite the continued growth in world economic output. In contrast to the expectations widely held during the 1970s that resource scarcity would drive up commodity prices to the benefit of Third World raw material suppliers, prices have fallen.

**Innovation solves**

**Chang 11 –** Graduated Cornell Law School (Gordon G., Feb 21**, “**Global Food Wars” http://blogs.forbes.com/gordonchang/2011/02/21/global-food-wars/)

In any event, food-price increases have apparently been factors in the unrest now sweeping North Africa and the Middle East. The poor spend up to half their disposable income on edibles, making rapid food inflation a cause of concern for dictators, strongmen, and assorted autocrats everywhere. So even if humankind does not go to war over bad harvests, Paskal may be right when she contends that climate change may end up altering the global map. This is not the first time in human history that food shortages looked like they would be the motor of violent geopolitical change. Yet amazing agronomic advances, especially Norman Borlaug’s Green Revolution in the middle of the 20th century, have consistently proved the pessimists wrong. In these days when capitalism is being blamed for most everything, it’s important to remember the power of human innovation in free societies—and the efficiency of free markets.

**There is no threat and at worst it will only mean cooperation**

**Burger et al. 10** – Kees Burger Development Economics, Corresponding author, Wageningen University, Hollandseweg, Jeroen Warner AND Eefje Derix Disaster Studies, Wageningen Universit “Governance of the world food system and crisis prevention” http://www.stuurgroepta.nl/rapporten/Foodshock-web.pdf

Both European water and agricultural policies are based on the belief that there will always be cheap food aplenty on the world market. A recent British report 23 reflects this optimism. Although production is now more prone to world market price shocks, their effects on farm incomes are softened by extensive income supports (van Eickhout et al. 2007). Earlier, in a 2003 report, a European group of agricultural economists wrote: Food security is no longer a prime objective of European food and agricultural policy. There is no credible threat to the availability of the basic ingredients of human nutrition from domestic and foreign sources. If there is a food security threat it is the possible disruption of supplies by natural disasters or catastrophic terrorist action. The main response necessary for such possibilities is the appropriate contingency planning and co-ordination between the Commission and Member States (Anania et al. 2003). Europe, it appears, feels rather sure of itself, and does not worry about a potential food crisis. We are also not aware of any special measures on standby. Nevertheless a fledgling European internal security has been called into being that can be deployed should (food) crises strike. The Maastricht Treaty (1992) created a quasi-decision-making platform to respond to transboundary threats. Since 9/11 the definition of what constitutes a threat has been broadened and the protection capacity reinforced. In the Solidarity Declaration of 2003 member states promised to stand by each other in the event of a terrorist attack, natural disaster or human-made calamity (the European Security Strategy of 2003). Experimental forms of cooperation are tried that leave member-state sovereignty intact, such as pooling of resources. The EU co-operates in the area of health and food safety but its mechanisms remain decentrslised by dint of the principle of subsidiarity. The silo mentality between the European directorates is also unhelpful, leading to Babylonian confusion. Thus, in the context of forest fires and floods the Environment DG refers to ‘civil protection’. The European Security and Defence Policy( ESDP) of 2006, which is hoped to build a bridge between internal and external security policy, on the other hand refers to ‘crisis management’, while the ‘security’ concept mainly pertains to pandemics (Rhinard et al. 2008: 512, Boin et al. 2008: 406).

**No impact—last recession proves econ doesn’t determine conflict or instability**

**Barnett 2009** – senior managing director of Enterra Solutions LLC and a contributing editor/online columnist for Esquire magazine, columnist for World Politics Review (8/25, Thomas P.M. “The New Rules: Security Remains Stable Amid Financial Crisis,” World Politics Review, <http://www.aprodex.com/the-new-rules--security-remains-stable-amid-financial-crisis-398-bl.aspx>, WEA)

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.

Do I expect to read any analyses along those lines in the blogosphere any time soon?

Absolutely not. I expect the fantastic fear-mongering to proceed apace. That's what the Internet is for.

#### Warming’s irreversible

**Solomon et al ‘10** Susan Solomon et. Al, Chemical Sciences Division, Earth System Research Laboratory, National Oceanic and Atmospheric Administration, Ph.D. in Climotology University of California, Berkeley, Nobel Peace Prize Winner, Chairman of the IPCC, Gian-Kasper Plattner, Deputy Head, Director of Science, Technical Support Unit Working Group I, Intergovernmental Panel on Climate Change Affiliated Scientist, Climate and Environmental Physics, Physics Institute, University of Bern, Switzerland, John S. Daniel, research scientist at the National Oceanic and Atmospheric Administration (NOAA), Ph.D. in physics from the University of Michigan, Ann Arbor, Todd J. Sanford, Cooperative Institute for Research in Environmental Science, University of Colorado Daniel M. Murphy, Chemical Sciences Division, Earth System Research Laboratory, National Oceanic and Atmospheric Administration, Boulder Gian-Kasper Plattner, Deputy Head, Director of Science, Technical Support Unit Working Group I, Intergovernmental Panel on Climate Change, Affiliated Scientist, Climate and Environmental Physics, Physics Institute, University of Bern, Switzerland Reto Knutti, Institute for Atmospheric and Climate Science, Eidgenössiche Technische Hochschule Zurich and Pierre Friedlingstein, Chair, Mathematical Modelling of Climate Systems, member of the Science Steering Committee of the Analysis Integration and Modeling of the Earth System (AIMES) programme of IGBP and of the Global Carbon Project (GCP) of the Earth System Science Partnership (ESSP) (Proceedings of the National Academy of the Sciences of the United States of America, "Persistence of climate changes due to a range of greenhouse gases", October 26, 2010 Vol 107.43: 18354-18359)

Carbon dioxide, methane, nitrous oxide, and other greenhouse gases increased over the course of the 20th century due to human activities. The human-caused increases in these gases are the primary forcing that accounts for much of the global warming of the past fifty years, with carbon dioxide being the most important single radiative forcing agent (1). Recent studies have shown that the human-caused warming linked to carbon dioxide is nearly irreversible for more than 1,000 y, even if emissions of the gas were to cease entirely (2–5). The importance of the ocean in taking up heat and slowing the response of the climate system to radiative forcing changes has been noted in many studies (e.g., refs. 6 and 7). The key role of the ocean’s thermal lag has also been highlighted by recent approaches to proposed metrics for comparing the warming of different greenhouse gases (8, 9). Among the observations attesting to the importance of these effects are those showing that climate changes caused by transient volcanic aerosol loading persist for more than 5 y (7, 10), and a portion can be expected to last more than a century in the ocean (11–13); clearly these signals persist far longer than the radiative forcing decay timescale of about 12–18 mo for the volcanic aerosol (14, 15). Thus the observed climate response to volcanic events suggests that some persistence of climate change should be expected even for quite short-lived radiative forcing perturbations. It follows that the climate changes induced by short-lived anthropogenic greenhouse gases such as methane or hydrofluorocarbons (HFCs) may not decrease in concert with decreases in concentration if the anthropogenic emissions of those gases were to be eliminated. In this paper, our primary goal is to show how different processes and timescales contribute to determining how long the climate changes due to various greenhouse gases could be expected to remain if anthropogenic emissions were to cease. Advances in modeling have led to improved AtmosphereOcean General Circulation Models (AOGCMs) as well as to Earth Models of Intermediate Complexity (EMICs). Although a detailed representation of the climate system changes on regional scales can only be provided by AOGCMs, the simpler EMICs have been shown to be useful, particularly to examine phenomena on a global average basis. In this work, we use the Bern 2.5CC EMIC (see Materials and Methods and SI Text), which has been extensively intercompared to other EMICs and to complex AOGCMs (3, 4). It should be noted that, although the Bern 2.5CC EMIC includes a representation of the surface and deep ocean, it does not include processes such as ice sheet losses or changes in the Earth’s albedo linked to evolution of vegetation. However, it is noteworthy that this EMIC, although parameterized and simplified, includes 14 levels in the ocean; further, its global ocean heat uptake and climate sensitivity are near the mean of available complex models, and its computed timescales for uptake of tracers into the ocean have been shown to compare well to observations (16). A recent study (17) explored the response of one AOGCM to a sudden stop of all forcing, and the Bern 2.5CC EMIC shows broad similarities in computed warming to that study (see Fig. S1), although there are also differences in detail. The climate sensitivity (which characterizes the long-term absolute warming response to a doubling of atmospheric carbon dioxide concentrations) is 3 °C for the model used here. Our results should be considered illustrative and exploratory rather than fully quantitative given the limitations of the EMIC and the uncertainties in climate sensitivity. Results One Illustrative Scenario to 2050. In the absence of mitigation policy, concentrations of the three major greenhouse gases, carbon dioxide, methane, and nitrous oxide can be expected to increase in this century. If emissions were to cease, anthropogenic CO2 would be removed from the atmosphere by a series of processes operating at different timescales (18). Over timescales of decades, both the land and upper ocean are important sinks. Over centuries to millennia, deep oceanic processes become dominant and are controlled by relatively well-understood physics and chemistry that provide broad consistency across models (see, for example, Fig. S2 showing how the removal of a pulse of carbon compares across a range of models). About 20% of the emitted anthropogenic carbon **remains in the atmosphere for** many **thousands of years** (with a range across models including the Bern 2.5CC model being about 19 4% at year 1000 after a pulse emission; see ref. 19), until much slower weathering processes affect the carbonate balance in the ocean (e.g., ref. 18). Models with stronger carbon/climate feedbacks than the one considered here could display larger and more persistent warmings due to both CO2 and non-CO2 greenhouse gases, through reduced land and ocean uptake of carbon in a warmer world. Here our focus is not on the strength of carbon/climate feedbacks that can lead to differences in the carbon concentration decay, but rather on the factors that control the climate response to a given decay. The removal processes of other anthropogenic gases including methane and nitrous oxide are much more simply described by exponential decay constants of about 10 and 114 y, respectively (1), due mainly to known chemical reactions in the atmosphere. In this illustrative study, we do not include the feedback of changes in methane upon its own lifetime (20). We also do not account for potential interactions between CO2 and other gases, such as the production of carbon dioxide from methane oxidation (21), or changes to the carbon cycle through, e.g., methane/ozone chemistry (22). Fig. 1 shows the computed future global warming contributions for carbon dioxide, methane, and nitrous oxide for a midrange scenario (23) of projected future anthropogenic emissions of these gases to 2050. Radiative forcings for all three of these gases, and their spectral overlaps, are represented in this work using the expressions assessed in ref. 24. In 2050, the anthropogenic emissions are stopped entirely for illustration purposes. The figure shows nearly irreversible warming for at least 1,000 y due to the imposed carbon dioxide increases, as in previous work. **All published studies to date**, which use multiple EMICs and one AOGCM, show largely irreversible warming due to future carbon dioxide increases (to within about 0.5 °C) on a timescale of at least 1,000 y (3–5, 25, 26). Fig. 1 shows that the calculated future warmings due to anthropogenic CH4 and N2O also persist notably longer than the lifetimes of these gases. The figure illustrates that emissions of key non-CO2 greenhouse gases such as CH4 or N2O could lead to warming that both temporarily exceeds a given stabilization target (e.g., 2 °C as proposed by the G8 group of nations and in the Copenhagen goals) and remains present longer than the gas lifetimes even if emissions were to cease. A number of recent studies have underscored the important point that reductions of non-CO2 greenhouse gas emissions are an approach that can indeed reverse some past climate changes (e.g., ref. 27). Understanding how quickly such reversal could happen and why is an important policy and science question. Fig. 1 implies that the use of policy measures to reduce emissions of short-lived gases will be less effective as a rapid climate mitigation strategy than would be thought if based only upon the gas lifetime. Fig. 2 illustrates the factors influencing the warming contributions of each gas for the test case in Fig. 1 in more detail, by showing normalized values (relative to one at their peaks) of the warming along with the radiative forcings and concentrations of CO2 , N2O, and CH4 . For example, about two-thirds of the calculated warming due to N2O is still present 114 y (one atmospheric lifetime) after emissions are halted, despite the fact that its excess concentration and associated radiative forcing at that time has dropped to about one-third of the peak value.

#### No extinction – empirically denied

**Carter 11–** Robert, PhD, Adjuct Research Fellow, James Cook University, Craig Idso, PhD, Chairman at the Center for the Study of Carbon Dioxide and Global Change, Fred Singer, PhD, President of the Science and Environmental Policy Project, Susan Crockford, evolutionary biologist with a specialty in skeletal taxonomy , paleozoology and vertebrate evolution, Joseph D’Aleo, 30 years of experience in professional meteorology, former college professor of Meteorology at Lyndon State College, Indur Goklany, independent scholar, author, and co-editor of the Electronic Journal of Sustainable Development, Sherwood Idso, President of the Center for the Study of Carbon Dioxide and Global Change, Research Physicist with the US Department of Agriculture, Adjunct Professor in the Departments of Geology, Botany, and Microbiology at Arizona State University, Bachelor of Physics, Master of Science, and Doctor of Philosophy, all from the University of Minnesota, Madhav Khandekar, former research scientist from Environment Canada and is an expert reviewer for the IPCC 2007 Climate Change Panel, Anthony Lupo, Department Chair and Professor of Atmospheric Science at the University of Missouri, Willie Soon, astrophysicist at the Solar and Stellar Physics Division of the Harvard-Smithsonian Center for Astrophysics, Mitch Taylor (Canada) (March 8th, “[Surviving](file:///C:\Users\Marc\Desktop\Surviving) the Unpreceented Climate Change of the IPCC” <http://www.nipccreport.org/articles/2011/mar/8mar2011a5.html>) Jacome

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.

#### There are multiple Feedbacks:

#### First is N Screw – nitrogen from emissions checks warming – their models don’t assume this

**Carter 10–** Robert, PhD, Adjuct Research Fellow, James Cook University, Craig Idso, PhD, Chairman at the Center for the Study of Carbon Dioxide and Global Change, Fred Singer, PhD, President of the Science and Environmental Policy Project, Susan Crockford, evolutionary biologist with a specialty in skeletal taxonomy , paleozoology and vertebrate evolution, Joseph D’Aleo, 30 years of experience in professional meteorology, former college professor of Meteorology at Lyndon State College, Indur Goklany, independent scholar, author, and co-editor of the Electronic Journal of Sustainable Development, Sherwood Idso, President of the Center for the Study of Carbon Dioxide and Global Change, Research Physicist with the US Department of Agriculture, Adjunct Professor in the Departments of Geology, Botany, and Microbiology at Arizona State University, Bachelor of Physics, Master of Science, and Doctor of Philosophy, all from the University of Minnesota, Madhav Khandekar, former research scientist from Environment Canada and is an expert reviewer for the IPCC 2007 Climate Change Panel, Anthony Lupo, Department Chair and Professor of Atmospheric Science at the University of Missouri, Willie Soon, astrophysicist at the Solar and Stellar Physics Division of the Harvard-Smithsonian Center for Astrophysics, Mitch Taylor (Canada) (October 6th 2010, “[The Effect of Nitrogen Deposition on Forest Soil Respiration](http://www.nipccreport.org/articles/2010/oct/06oct2010a4.html)” <http://www.nipccreport.org/articles/2010/oct/06oct2010a4.html>) Jacome

Janssens et al. (2010) write that "atmospheric deposition of reactive nitrogen, originating mainly from fossil-fuel burning and artificial fertilizer applications, has increased three- to five-fold over the past century," and they say that "in many areas of the globe, nitrogen deposition is expected to increase further." This phenomenon stimulates plant growth and the uptake of carbon from the atmosphere, contributing to climate change mitigation; and they state that Magnani et al. (2007) demonstrated nitrogen deposition to be "the dominant driver of carbon sequestration in forest ecosystems," although there has been what they describe as "intense debate" about the magnitude and sustainability of the phenomenon and its underlying mechanisms.

In an effort designed to further explore the subject, Janssens et al. conducted "a meta-analysis of measurements in nitrogen-addition experiments, and a comparison of study sites exposed to elevated or background atmospheric nitrogen deposition."

The work of the fifteen scientists revealed, in their words, that "nitrogen deposition impedes organic matter decomposition, and thus stimulates carbon sequestration, in temperate forest soils where nitrogen is not limiting microbial growth." What is more, they find that "the concomitant reduction in soil carbon emissions is substantial," being "equivalent in magnitude to the amount of carbon taken up by trees owing to nitrogen fertilization."

For those worried about the (highly unlikely) prospect of CO2-induced global warming, these findings should be good news; for in the concluding sentence of their paper, Janssens et al. state that "the size of the nitrogen-induced inhibition of below-ground respiration is of the same order of magnitude as the forest carbon sink." And they state in the concluding sentence of their paper's introduction that "**this effect has not been included in current carbon-cycle models**," suggesting that when it is included, it will contribute much to "climate change mitigation."

#### Second is M screw – co2 solves methane emissions which cause warming

**Carter 1-10 –** Robert, PhD, Adjuct Research Fellow, James Cook University, Craig Idso, PhD, Chairman at the Center for the Study of Carbon Dioxide and Global Change, Fred Singer, PhD, President of the Science and Environmental Policy Project, Susan Crockford, evolutionary biologist with a specialty in skeletal taxonomy , paleozoology and vertebrate evolution, Joseph D’Aleo, 30 years of experience in professional meteorology, former college professor of Meteorology at Lyndon State College, Indur Goklany, independent scholar, author, and co-editor of the Electronic Journal of Sustainable Development, Sherwood Idso, President of the Center for the Study of Carbon Dioxide and Global Change, Research Physicist with the US Department of Agriculture, Adjunct Professor in the Departments of Geology, Botany, and Microbiology at Arizona State University, Bachelor of Physics, Master of Science, and Doctor of Philosophy, all from the University of Minnesota, Madhav Khandekar, former research scientist from Environment Canada and is an expert reviewer for the IPCC 2007 Climate Change Panel, Anthony Lupo, Department Chair and Professor of Atmospheric Science at the University of Missouri, Willie Soon, astrophysicist at the Solar and Stellar Physics Division of the Harvard-Smithsonian Center for Astrophysics, Mitch Taylor (Canada) (January 2012, “Environmental Stresses and Plant Methane Emissions”http://www.nipccreport.org/articles/2012/jan/10jan2012a4.html) Jacome

Concluding from a review of the scientific literature that "aerobic CH4 [methane] emissions from plants may be affected by O2 stress or any other stress leading to ROS [reactive oxygen species] production," authors Wang *et al*. (2009) sought to determine whether physical injury would also affect CH4 emissions from plants. Their work revealed that "physical injury (cutting) stimulated CH4 emissions from fresh twigs of *Artemisia* species under aerobic conditions," and that "more cutting resulted in more CH4 emissions," as did hypoxia in both cut and uncut *Artemisia frigida* twigs.

In discussing their findings, and those of previous studies that suggest, in their words, "that a variety of environmental stresses stimulate CH4 emission from a wide variety of plant species," Wang *et al*. concluded that "global change processes, including climate change, depletion of stratospheric ozone, increasing ground-level ozone, spread of plant pests, and land-use changes, could cause more stress in plants on a global scale, potentially stimulating more CH4 emission globally," while further concluding that "the role of stress in plant CH4 production in the global CH4 cycle could be important in a changing world."

Several things "could" be important in this regard, but the ongoing rise in the air's CO2 content is hard at work *countering* stress-induced CH4 emissions. Environmental stresses of all types do indeed generate highly-reactive oxygenated compounds that damage plants, but atmospheric CO2 enrichment typically boosts the production of antioxidant enzymes that *scavenge* and *detoxify* those highly-reactive oxygenated compounds. Thus, it can be appreciated that the historical rise in the air's CO2 content should have gradually been *alleviating* the level of stress experienced by Earth's plants; and this phenomenon should have been gradually *reducing* the rate at which the planet's vegetation releases CH4 to the atmosphere. In addition, it should have been doing it at *an accelerating rate* commensurate with the accelerating rate of the upward trend in the air's CO2 content.

Wang *et al*.'s way of thinking therefore suggests that the air's CH4 concentration should be *rising ever faster*, as "global change processes" lead to more plant stress, more ROS production in plants, and more CH4 emissions from Earth's vegetation, whereas a conflicting hypothesis suggests that the air's CH4 concentration should be *rising ever slower*, as higher concentrations of atmospheric CO2 lead to less plant stress, more antioxidants that scavenge and detoxify ROS in plants, and less CH4 emissions from Earth's vegetation.

So which view is winning? A quick glance at the atmosphere's recent methane history - shown below - provides the answer.

*Figure 1. Trace gas mole fractions of methane (CH4) as measured at Mauna Loa, Hawaii. Adapted from Schnell and Dlugokencky (2008).*

As can be seen from this figure, the rate of increase in atmospheric methane abundance has steadily declined since the late 1980s, with near-zero increase from 1999 through the end of the record. Is the ongoing rise in the air's CO2 content responsible for knocking its biggest greenhouse-gas competitor (other than water vapor) entirely out of the picture with respect to *future* global warming? Or, will further increases in CO2 emissions actually cause the atmosphere's methane concentration to *decline* and thereby begin to counteract its (CO2's) *own* warming effect. Only time will tell.

#### Third are Natural Aerosols

**Carter 11**, Robert, PhD, Adjuct Research Fellow, James Cook University, Craig Idso, PhD, Chairman at the Center for the Study of Carbon Dioxide and Global Change, Fred Singer, PhD, President of the Science and Environmental Policy Project, Susan Crockford, evolutionary biologist with a specialty in skeletal taxonomy , paleozoology and vertebrate evolution, Joseph D’Aleo, 30 years of experience in professional meteorology, former college professor of Meteorology at Lyndon State College, Indur Goklany, independent scholar, author, and co-editor of the Electronic Journal of Sustainable Development, Sherwood Idso, President of the Center for the Study of Carbon Dioxide and Global Change, Research Physicist with the US Department of Agriculture, Adjunct Professor in the Departments of Geology, Botany, and Microbiology at Arizona State University, Bachelor of Physics, Master of Science, and Doctor of Philosophy, all from the University of Minnesota, Madhav Khandekar, former research scientist from Environment Canada and is an expert reviewer for the IPCC 2007 Climate Change Panel, Anthony Lupo, Department Chair and Professor of Atmospheric Science at the University of Missouri, Willie Soon, astrophysicist at the Solar and Stellar Physics Division of the Harvard-Smithsonian Center for Astrophysics, Mitch Taylor (Canada) [“Climate Change Reconsidered 2011 Interim Report,” September, Science and Environmental Policy Project, Center for the Study of Carbon Dioxide and Global Change, Published by The Heartland Institute]

In a contemporaneous study of aerosols, Carslaw et al. (2010) write, ―the natural environment is a major source of atmospheric aerosols, including dust, secondary organic material from terrestrial biogenic emissions, carbonaceous particles from wildfires, and sulphate from marine phytoplankton dimethyl sulphide emissions.‖ These aerosols ―have a significant effect on many components of the Earth system, such as the atmospheric radiative balance and photosynthetically available radiation entering the biosphere, the supply of nutrients to the ocean, and the albedo of snow and ice. With this background in mind, the authors reviewed ―the impact of these natural systems on atmospheric aerosols based on observations and models, including the potential for long term changes in emissions and feedbacks on climate.‖ Based on their review, the seven scientists report, ―the number of drivers of change is very large and the various systems are strongly coupled,‖ noting ―there have therefore been very few studies that integrate the various effects to estimate climate feedback factors.‖ However, they add, ―available observations and model studies suggest that the regional radiative perturbations are potentially several watts per square meter due to changes in these natural aerosol emissions in a future climate,‖ which is **equivalent to the magnitude of climate forcing projected** to result from increases in greenhouse gases but typically of the opposite sign.

#### Turn – plan causes emissions and air pollution

Zycher 11 – visiting scholar at AEI (Benjamin, April 20, 2011, “The Folly of Renewable Electricity,” AEI, <http://www.aei.org/article/energy-and-the-environment/alternative-energy/the-folly-of-renewable-electricity/>)

These are among the reasons that the EIA estimates that wind and solar power cost 100-300 percent more than conventional power. This is consistent with a recent finding by Professor Constant Tra that each percentage-point increase in a renewable requirement raises commercial and residential rates by 4-10 percent. The proponents' claim that the 33 percent requirement will increase costs by only 7 percent is a pipe dream.¶ A cleaner environment is worth it, you say? Not so fast. As counterintuitive as it may seem, increased reliance on wind and solar power will hurt the environment, not because of such phony issues as endangered cockroaches, used by the environmental left as a tool with which to obstruct the renewable energy projects that they claim to support. Instead, this damage will be real, in the form of greater air pollution. The conventional generators needed to back up the unreliable wind and solar production will have to be cycled up and down because the system operators will be required to take wind and solar generation when it is available. This means greater operating inefficiency and more emissions. That is precisely what a recent engineering study of the effects of renewables requirements found for Colorado and Texas.

#### Solar power development destroys the environment – causes warming and kills biodiversity

**Pizzo 11** – JD from the University of Colorado, attorney for the National Wildlife Federation (“When Saving the Environment Hurts the Environment: Balancing Solar Energy Development with Land and Wildlife Conservation in Warming Climate,” HeinOnline legal search engine)

Land Use and Ecosystem/Habitat Disturbance¶ Development of large-scale solar projects transforms the lands on which they are constructed and precludes most other uses.69 When used to generate electricity on a commercial scale, solar energy facilities require large tracts of land.70 The land requirements for CSP systems are approximately ﬁve to ten acres of land per megawatt of capacity." Thus, a single utility-scale solar plant may occupy up to forty-ﬁve square miles, or nearly 29,000 acres." To prepare land for construction of asolar facility, the ground is scraped and, when necessary, re-contoured to produce a level building site void of all vegetation. In addition, many existing utility-scale facilities have a regular program of herbicide application to keep the area under the collection devices tree of any growth that may block sunlight from reaching the mirrors.”¶ Furthermore, due to the size of utility-scale solar project areas and the extent of landscape disturbance, restoration and reclamation of the project site may not be feasible with current technology."¶ Construction, maintenance, and operation of utility-scale solar plants can have severe impacts on wildlife through direct habitat destruction and habitat fragmentation. Habitat destruction begins when the land within the solar collection ﬁeld is scraped in preparation for construction. The site remains unsuitable for wildlife for the life of the project because the large ﬁelds of solar collectors interfere with natural sunlight, rainfall, and drainage at the facility, causing microclimate alteration." For example, mirrors shield the ground from sunlight and wind, which reduces temperature and decreases wind speed and evapotranspiration beneath the reﬂecting mirrors." As one botanist has noted, “nothing will live under the mirrors?” Construction and maintenance activities also alter the composition, structure, and microclirnate of the land adjacent to the facility." In addition, the reﬂected light in solar-collecting ﬁelds may be increased from thirty percent to ﬁfty-six percent, super-heating the air above and around solar facilities.” These effects are compounded at large facilities due to the number of mirrors that cover and cool the ground while simultaneously reﬂecting light and heating the air. These habitat alterations have direct and indirect effects on wildlife, which may cause shifts in various plant and animal populations.”¶ Ecosystem disturbance and destruction are especially signiﬁcant to local organisms that rely on a limited area for sustenance." “Such species often have access to a particular resource in only one area and unless they abandon historical breeding or wintering grounds, [they are] unlikely to ﬁnd a replacement for the resource?” In addition, construction of solar facilities, roads, and transmission corridors causes habitat fragmentation, which forces wildlife to live on ever-shrinking islands of habitat where it is more difficult for them to ﬁnd food, water, shelter, mates, and protection from predators." Solar development may also affect migratory populations by cutting off migration corridors and eliminating staging grounds.“ Habitat fragmentation and migration disruption combine to limit genetic diversity by decreasing available mates and encouraging inbreeding. As a result, wildlife populations become more susceptible to extinction in the event of catastrophic events such as wildﬁre and disease. Thus, habitat fragmentation inevitably leads to smaller populations of wildlife, and threatens biodiversity by increasing the possibility of extinction for entire populations or species.”

#### Natural gas’s net GHG emissions are negative – this assumes methane release

Abby W. Schachter (Writer for the Weekly Standard and the New York Post) June 2012 “We've got to become energy independent to slow terrorism-fracking is the key” <http://www.zimbio.com/Fracking+Lawsuits/articles/2ymubk5GzT3/ve+got+become+energy+independent+slow+terrorism>

As for Howarth’s research on fracking’s carbon footprint, his conclusions were quickly debunked by fellow researchers at Cornell as well as by other scientists. As Lawrence M. Cathles of Cornell’s Department of Earth and Atmospheric Sciences concluded in his rebuttal, “The data clearly shows that substituting natural gas for coal will have a substantial greenhouse benefit under almost any set of reasonable assumptions. Methane emissions must be five times larger than they currently appear to be before gas substitution for coal becomes detrimental from a global warming perspective on any time scale.” The debate over fracking has gotten so extreme, in fact, that reasonable environmentalists are beginning to complain. As Andrew Revkin, one of the deans of environmental reporting in the United States, recently noted, fracking opponents sound so intransigent that he questions whether there is any resource to which the anti-gas advocates would say yes. The great irony is that only a few short years ago, many environmentalists were promoting natural gas as the cleaner alternative to oil and coal. The theory was that natural gas would provide a temporary bridge from pollutants such as oil and coal to so-called clean tech (wind and solar electricity generation, some nuclear power, and electric cars). Now that natural gas is cheap and plentiful, however, many openly worry that there may never be a full-scale transition to wind and solar because there won’t be a need. Gas is cleaner than coal and oil, it is equally or more efficient, it has the same applications as coal and oil, and it can be exported. Wind and solar haven’t proven to be cost-effective, nor are they easy to transport or possible to export. This realization has led to near hysterical opposition to fracking. As Howarth himself argued recently, “It is pure folly to view shale gas [as] a bridge fuel to a green future.” These are the arguments, moreover, that help explain the otherwise inexplicable rejection of natural gas extraction in New York, a state that could desperately use new industry and new revenues. There is gas from the Marcellus Shale under the state’s southern tier, and there are gas companies that came into the state nearly five years ago to lease land for potential drilling. But in 2007, the state decided that, absent new regulations for hydraulic fracturing, no new permits for natural gas wells would be issued. The moratorium continues to this day, even as Andrew Cuomo, the state’s governor, keeps promising that his Department of Environmental Conservation will produce new drilling rules—once its experts have had sufficient time to study the issue.

**No price spike – any rise would be gradual**

Myra Saefong (writer for Market Stream) August 31, 2012 “Hurricanes don’t scare natural gas anymore Abundance of shale gas dulls the industry’s blow from Isaac” http://stream.marketwatch.com/story/markets/SS-4-4/SS-4-10173/

Gas South’s Greiner pointed out that natural-gas storage is nearly at full capacity, and, with the summer almost over, “there is no reason to believe a sustained heat wave will drain storage and lower supply.” Gas in storage stands at 3.4 trillion cubic feet as of the week ended August 24 — 361 billion cubic feet above the five-year average, the EIA reported Thursday. “Even if we lost an average 3 billion cubic feet of supply a day for 15 days, it would be a welcome loss of supply for the natural-gas markets,” said MLV & Co.’s Pacanovsky. Even that “would not come anywhere close to erasing the overage.” Price prospects All told, there isn’t much of a chance for natural-gas prices to see a significant gain in the near future, but there is the potential for a gradual longer-term climb. “We’ll see sub-$2 [prices] again within a month or two as we move through the fall shoulder period where cooling loads tail off and heat loads haven’t ramped up yet,” said Beth Sewell, managing partner at Houston-based Quantum Power & Gas Services. “We have plenty of production that will be looking for a home.” Some early forecasts are calling for a very cold winter, and “if winter turns out to be really cold, then prices will start to rise again,” she said. However, given that shale production has added a “tremendous amount of supply to the market and we lack the ability to export much of it to higher-priced markets overseas, demand for gas will need to continue to grow … for a long-lasting rally to occur,” Sewell said. Regulatory restrictions on other energy markets, such as coal, may contribute to consistent gains in natural-gas prices, said Andrew Schrage, co-owner of Money Crashers Personal Finance, explaining that restrictions could continue to constrain those other industries, and companies, in turn, “will look to natural gas for their energy needs.” Regulations linked to hydraulic fracturing, or fracking — a process of extracting natural gas from shale — can also potentially ease natural-gas supplies. Fracking is a practice that has met with a lot of controversy because of environmental concerns. “If there were draconian legislation passed to limit the use of fracking … this would cut supply and goose prices,” said James Hug, senior portfolio manager at Yorkville Capital. Hug, though, added that he doesn’t think such a scenario is likely. Still, he said, “on the demand side, natural-gas use will pick up over time, so the price will probably creep higher in response to export potential and increasing adoption by the petrochemical industry.”

**No impact to job loss – it actually helps the economy**

**AIER, 08** – American Institute for Economic Research (http://www.aier.org/research/commentaries/898-unemployment-trends-and-economic-recovery, “Unemployment Trends and Economic Recovery”)

Recent unemployment numbers have conjured up the fear of a coming new Great Depression. A careful look, however, suggests no economy-wide collapse in employment. In addition, some unemployment during an economic downturn is actually essential for a stable economic recovery. The Department of Labor said December 11 that around 573,000 people applied for unemployment insurance payments, up from 515,000 the week earlier. While these initial claims seem large, the job loss occurred in a non-farm U.S. workforce of more than 135 million people, with 4.4 million currently collecting unemployment insurance claims. The vast majority of the working population remains employed and earning a living. In November 2008, non-farm employment was only 1.4 percent below the level of a year earlier, based on Labor Department data. Even subtracting government jobs from this total, private sector non-farm employment was only down 1.8 percent from the previous year. While there has been a decline in employment across much of the economy, it has been far from even. As the table below shows, the highest rates of job loss are clustered in a handful of sectors. At the same time, there have been industries where employment has grown, despite the economic downturn. Not surprisingly, the largest job loss has been in residential housing construction, automobile production, and textile manufacturing. The burst of the housing bubble has sent the home construction industry into a nose dive, with 11.4 percent fewer jobs compared to last year. Employment in the motor vehicle and parts industry has fallen 14.9 percent over the last year. In the auto dealer retail trade, 9.3 percent fewer people are now employed. Most of this decline has been experienced among the Big Three American automakers. The textile mills are employing 13.9 percent fewer workers compared to November of last year. Apparel industry employment has decreased by 8.9 percent. This primarily is the result of the continuing growth of global competition and the cost-efficiencies foreign suppliers provide. With consumers adjusting their budgets to a post-boom environment, other retail businesses such as electronic and appliance stores, and clothing and department stores have reduced the number of workers they employ. These cuts have been far more modest, in the range of 4 and 5.5 percent compared to last November. Other sectors as the data in the table indicate, have reduced the level of employment from a year earlier only in the range of 1 to 3 percent for the most part. Even in the commercial banking sector employment has declined by only 1 percent, according to the Labor Department’s data over the last year. On the other hand, since November of 2007, employment has continued to increase in the oil, gas and coal industries, with employment growing in these sectors in the range of 9.4 to 9.7 percent. This positive employment trend has continued even as energy prices rapidly declined over the last four months. Employment also has continued to grow, perhaps not surprisingly, in government and in those industries that rely heavily on various forms of social welfare spending such as health care and education. Direct government jobs at the local, state and federal levels have grown between 1 and 1.6 percent over the last year. Employment in educational services went up by 3.6 percent and in health care and related services by 2.9 percent. As difficult as it is to experience, unemployment is a necessary and healthy part of an economic recovery process that follows the bursting of the bubbles of an economic boom. The Federal Reserve followed an extremely aggressive monetary policy over the last five to seven years, creating a huge increase in the money supply that artificially lowered interest rates to practically zero and filled the banks with plenty of cash to lend to both the credit and uncredit worthy, as I detailed in an earlier commentary on “The Financial Bubble was Created by Central Bank Policy." The housing and consumer spending booms were bound to end when the inflationary bubbles popped. Investment resources, capital, and portions of the labor force were drawn into employments that could only last for as long as the inflationary boom. When the downturn began, it was inevitable that many of the employments created during the boom would begin to disappear. Where the bubbles were biggest is where, inescapably, the greatest amount of employment would be lost. The task ahead is to ensure a healthy economic recovery by allowing the market to find correct prices, wages, and asset values. This will enable people to discover what things are worth in the post-boom era, and where sustainable employments may be found.

# 1nc grid

**Grid resilience means no impact and no attempt**

**Kaplan 07** (Eben–Associated Editor at the Council of Foreign Relations, “America’s Vulnerable Energy Grid,” 4-27-2007, http://www.cfr.org/publication/13153/americas\_vulnerable\_energy\_grid.html)

Attacks on infrastructure are an almost daily fact of life in Iraq. Experts caution the war in that country will produce a whole generation of terrorists who have honed their skills sabotaging infrastructure. In his recent book, The Edge of Disaster, CFR security expert Stephen E. Flynn cautions, “The terrorist skills acquired are being catalogued and shared in Internet chat rooms.” But when it comes to Iraq’s electrical grid, RAND economist Keith W. Crane says terrorists are not the main cause of disruptions: “Most of the destruction of the control equipment was looting,” he says.

Either way, Clark W. Gellings, vice president of the Electric Power Research Institute, an industry research organization, thinks the U.S. grid is an unlikely target. “It’s not terribly sensational,” he explains, “The system could overcome an attack in hours, or at worst, days.” That said, attacks on electricity infrastructure could become common in future warfare: The U.S. military has designed and entire class of weapons designed to disable power grids.

**Cyber attacks are impossible – air gapped systems and PALs solve**

**Green 2** – editor of The Washington Monthly (Joshua, 11/11, The Myth of Cyberterrorism, http://www.washingtonmonthly.com/features/2001/0211.green.html)

There's just one problem: There is no such thing as cyberterrorism--no instance of anyone ever having been killed by a terrorist (or anyone else) using a computer. Nor is there compelling evidence that al Qaeda or any other terrorist organization has resorted to computers for any sort of serious destructive activity. What's more, outside of a Tom Clancy novel, computer security specialists believe it is virtually impossible to use the Internet to inflict death on a large scale, and many scoff at the notion that terrorists would bother trying. "I don't lie awake at night worrying about cyberattacks ruining my life," says Dorothy Denning, a computer science professor at Georgetown University and one of the country's foremost cybersecurity experts. "Not only does [cyberterrorism] not rank alongside chemical, biological, or nuclear weapons, but it is not anywhere near as serious as other potential physical threats like car bombs or suicide bombers."

Which is not to say that cybersecurity isn't a serious problem--it's just not one that involves terrorists. Interviews with terrorism and computer security experts, and current and former government and military officials, yielded near unanimous agreement that the real danger is from the criminals and other hackers who did $15 billion in damage to the global economy last year using viruses, worms, and other readily available tools. That figure is sure to balloon if more isn't done to protect vulnerable computer systems, the vast majority of which are in the private sector. Yet when it comes to imposing the tough measures on business necessary to protect against the real cyberthreats, the Bush administration has balked.

Crushing BlackBerrys

When ordinary people imagine cyberterrorism, they tend to think along Hollywood plot lines, doomsday scenarios in which terrorists hijack nuclear weapons, airliners, or military computers from halfway around the world. Given the colorful history of federal boondoggles--billion-dollar weapons systems that misfire, $600 toilet seats--that's an understandable concern. But, with few exceptions, it's not one that applies to preparedness for a cyberattack. "The government is miles ahead of the private sector when it comes to cybersecurity," says Michael Cheek, director of intelligence for iDefense, a Virginia-based computer security company with government and private-sector clients. "Particularly the most sensitive military systems."

Serious effort and plain good fortune have combined to bring this about. Take nuclear weapons. The biggest fallacy about their vulnerability, promoted in action thrillers like WarGames, is that they're designed for remote operation. "[The movie] is premised on the assumption that there's a modem bank hanging on the side of the computer that controls the missiles," says Martin Libicki, a defense analyst at the RAND Corporation. "I assure you, there isn't." Rather, nuclear weapons and other sensitive military systems enjoy the most basic form of Internet security: they're "air-gapped," meaning that they're not physically connected to the Internet and are therefore inaccessible to outside hackers. (Nuclear weapons also contain "permissive action links," mechanisms to prevent weapons from being armed without inputting codes carried by the president.) A retired military official was somewhat indignant at the mere suggestion: "As a general principle, we've been looking at this thing for 20 years. What cave have you been living in if you haven't considered this [threat]?"

When it comes to cyberthreats, the Defense Department has been particularly vigilant to protect key systems by isolating them from the Net and even from the Pentagon's internal network. All new software must be submitted to the National Security Agency for security testing. "Terrorists could not gain control of our spacecraft, nuclear weapons, or any other type of high-consequence asset," says Air Force Chief Information Officer John Gilligan. For more than a year, Pentagon CIO John Stenbit has enforced a moratorium on new wireless networks, which are often easy to hack into, as well as common wireless devices such as PDAs, BlackBerrys, and even wireless or infrared copiers and faxes.

The September 11 hijackings led to an outcry that airliners are particularly susceptible to cyberterrorism. Earlier this year, for instance, Sen. Charles Schumer (D-N.Y.) described "the absolute havoc and devastation that would result if cyberterrorists suddenly shut down our air traffic control system, with thousands of planes in mid-flight." In fact, cybersecurity experts give some of their highest marks to the FAA, which reasonably separates its administrative and air traffic control systems and strictly air-gaps the latter. And there's a reason the 9/11 hijackers used box-cutters instead of keyboards: It's impossible to hijack a plane remotely, which eliminates the possibility of a high-tech 9/11 scenario in which planes are used as weapons.

**No solvency–massive bureaucracy overhaul’s a prerequisite.**

**Kohlmann 6** (Evan F. Kohlmann, Foreign Affairs, “The Real Online Terrorist Threat” http://www.foreignaffairs.org/20060901faessay85510/evan-f-kohlmann/the-real-online-terrorist-threat.html)

To counter terrorists, the U.S. government must learn how to monitor their activity online, in the same way that it keeps tabs on terrorists in the real world. Doing so will require a realignment of U.S. intelligence and law enforcement agencies, which lag behind terrorist organizations in adopting information technologies. At present, unfortunately, senior counterterrorism officials refuse even to pay lip service to the need for such reforms. That must change -- and fast.

**No lashout**

**Jenkins-Smith 04** – professor of government at Texas A&M (Hank, “U.S. Public Response to Terrorism: Fault Lines or Bedrock,” http://www.spp.gatech.edu/current-students/exams/Fall-2004\_reviewmanuscript.pdf)

Our final contrasting set of expectations relate to the degree to which the public will support or demand retribution against terrorists and supporting states. Here our data show that support for using conventional U.S. military force to retaliate against terrorists initially averaged above midscale, but did not reach a high level of emotional demand for military action. Initial support declined significantly across all demographic and belief categories by the time of our survey in 2002. Furthermore, panelists both in 2001 and 2002 preferred that high levels of certainty about culpability (above 8.5 on a scale from zero to ten) be established before taking military action. Again, we find the weight of evidence supporting revisionist expectations of public opinion.

Overall, these results are inconsistent with the contention that highly charged events will result in volatile and unstructured responses among mass publics that prove problematic for policy processes. The initial response to the terrorist strikes, in the immediate aftermath of the event, demonstrated a broad and consistent shift in public assessments toward a greater perceived threat from terrorism, and greater willingness to support policies to reduce that threat. But even in the highly charged context of such a serious attack on the American homeland, the overall public response was quite measured. On average, the public showed very little propensity to undermine speech protections, and initial willing-ness to engage in military retaliation moderated significantly over the following year.

**The high difficulty means they won’t try**

**Harper, 09** – Director of Information Policy Studies, Cato Institute (Jim, Testimony before the Subcommittee on Technology & Innovation Committee on Science and Technology United States House of Representatives “Assessing Cybersecurity Activities at NIST and DHS,” 6/25, http://www.cato.org/testimony/ct-jh-20090625.html)

Take cyberterrorism. With communications networks, computing infrastructure, and data stores under regular attack from a variety of quarters—and regularly strengthening to meet them—it is highly unlikely that terrorists can pull off a cybersecurity event disruptive enough to instill widespread fear of further disruption. Fear is a necessary element for terrorism to work its will, of course. The impotence of computer problems to instill fear renders "cyberterrorism" an unlikely threat. This is not to deny the importance of preventing the failure of infrastructure, of course.