## \*\*\*1AC\*\*\*

No great power war SMR 1AC- also attached

## \*\*\*2AC\*\*\*

### 2AC DOD T – FI

**C/I- Financial incentives use public funds to motivate production**

**Webb 1993** (Kernaghan Webb, lecturer in the Faculty of Law at the University of Ottawa, “Thumbs, Fingers, and Pushing on String: Legal Accountability in the Use of Federal Financial Incentives”, 31 Alta. L. Rev. 501)

In this paper, "financial incentives" are taken to mean disbursements 18 of public funds or contingent commitments to individuals and organizations, intended to encourage, support or induce certain behaviours in accordance with express public policy objectives. They take the form of grants, contributions, repayable contributions, loans, loan guarantees and insurance, subsidies, procurement contracts and tax expenditures.19 Needless to say, the ability of government to achieve desired behaviour may vary with the type of incentive in use: up-front disbursements of funds (such as with contributions and procurement contracts) may put government in a better position to dictate the terms upon which assistance is provided than contingent disbursements such as loan guarantees and insurance. In some cases, the incentive aspects of the funding come from the conditions attached to use of the monies.20 In others, the mere existence of a program providing financial assistance for a particular activity (eg. low interest loans for a nuclear power plant, or a pulp mill) may be taken as government approval of that activity, and in that sense, an incentive to encourage that type of activity has been created.21 Given the wide variety of incentive types, it will not be possible in a paper of this length to provide anything more than a cursory discussion of some of the main incentives used.22 And, needless to say, the comments made herein concerning accountability apply to differing degrees depending upon the type of incentive under consideration.¶ By limiting the definition of financial incentives to initiatives where public funds are either disbursed or contingently committed, a large number of regulatory programs with incentive effectswhich exist, but in which no money is forthcoming,23 are excluded from direct examination in this paper. Such programs might be referred to as *indirect* incentives. Through elimination of indirect incentives from the scope of discussion, the definition of the incentive instrument becomes both more manageable and more particular. Nevertheless, it is possible that much of the approach taken here may be usefully applied to these types of indirect incentives as well.24 Also excluded from discussion here are social assistance programs such as welfare and *ad hoc* industry bailout initiatives because such programs are not designed primarily to encourage behaviours in furtherance of specific public policy objectives. In effect, these programs are assistance, but they are not incentives.

#### Precision- DOE definition

Waxman 1998 (Solicitor General of the US (Seth, Brief for the United States in Opposition for the US Supreme Court case HARBERT/LUMMUS AGRIFUELS PROJECTS, ET AL., PETITIONERS v. UNITED STATES OF AMERICA, http://www.justice.gov/osg/briefs/1998/0responses/98-0697.resp.opp.pdf)

2 On November 15, 1986, Keefe was delegated “the authority, with respect to actions valued at $50 million or less, to approve, execute, enter into, modify, administer, closeout, terminate and take any other necessary and appropriate action (collectively, ‘Actions’) with respect to Financial Incentive awards.” Pet. App. 68, 111-112. Citing DOE Order No. 5700.5 (Jan. 12, 1981), the delegation defines “Financial Incentives” as the authorized financial incentive programs of DOE, “including direct loans, loan guarantees, purchase agreements, price supports, guaranteed market agreements and any others which may evolve.” The delegation proceeds to state, “[h]owever, a separate prior written approval of any such action must be given by or concurred in by Keefe to accompany the action.” The delegation also states that its exercise “shall be governed by the rules and regulations of [DOE] and policies and procedures prescribed by the Secretary or his delegate(s).” Pet. App. 111-113.

### Environment

#### DOE already committed to fixing regulatory barriers

Colman 10/1 (Zack Colman, “Nuke industry presses for change to proliferation rules,” The Hill, http://thehill.com/blogs/e2-wire/e2-wire/259529-nuclear-group-says-doe-rule-change-would-create-jobs)

A nuclear energy industry group is lobbying the Energy Department (DOE) to eliminate a trade barrier that it says would help U.S. firms add jobs.¶ Specifically, the Nuclear Energy Institute (NEI) says DOE should change a rule, known as Part 810, to enhance exports to a list of restricted nations for products — such as consulting services and software — that it says do not pose a nuclear proliferation threat.¶ The rule change would allow U.S. commercial nuclear firms to discuss operations with foreign partners more freely, according to NEI.¶ The group said the rule change would remove a competitive disadvantage for U.S. firms in the global market.¶ Currently, the rule requires U.S. companies to obtain advance authorization to speak about nuclear plans with a list of restricted countries, out of concern for nuclear proliferation. On average in 2011, that clearance took a little less than one year, according to a NEI-commissioned report discussed Monday.¶ DOE issued a proposed update to the rule in September 2011, but that significantly increased the amount of technology subjected to agency authorization. The nuclear industry criticized the rule, and DOE decided to revise it once again — a process that is still ongoing.¶ At issue is whether DOE has the authority to make the changes the nuclear industry seeks.¶ The Atomic Energy Act created the Nuclear Regulatory Commission (NRC) and gave it the power to approve nuclear export licenses for things such as nuclear fuel. It is unclear whether that authority extends to consulting services and software, though the nuclear industry believes it does not.¶ “The administrative agencies, particularly DOE, have the latitude to be able to administer these regulations in a much more efficient way,” Richard Myers, NEI vice president for policy development, said at a Monday press conference at the National Press Club in Washington, D.C.¶ NEI said the nation’s regulatory regime handcuffs it from securing a share of a global commercial nuclear market that Commerce estimates could range from $500 billion to $750 billion over the next decade. NEI said capturing a quarter of that market would yield 185,000 U.S. jobs.¶ The report, which was conducted by Pillsbury Winthrop Shaw Pittman LLP, said U.S. commercial nuclear export regulations are more complex than those from Korea, France, Japan and Russia. Much of that is attributed to at least four federal agencies — the departments of Commerce, Energy and State, as well as the NRC — having a hand in that oversight.¶ Waiting for authorization to discuss operational details with foreign partners has proven burdensome for Exelon Generation, J. Bradley Fewell, the utility’s vice president and deputy general counsel, said Monday.¶ “These regulations are hampering our ability to expand the sale of and implementation of our nuclear management model,” he said.¶ DOE said it is reviewing public comments on Part 810.¶ "We are committed to an approach that balances the needs of industry and our goals for nuclear energy with our responsibility to prevent the spread of nuclear weapons and keep dangerous nuclear material out of the hands of terrorists. The Administration continues to review 810 rules and will proceed in a way that incorporates the feedback that we've received to date," Joshua McConaha, a spokesman with DOE's National Nuclear Safety Administration, said in a statement.

### 2AC Natural Gas

#### Supply shocks coming- Peak shale production

Berman 2012 (Arthur E. Berman, geological consultant and head of Labrynth Consulting, February 8, 2012, “After the gold rush: A perspective on future U.S. natural gas supply and price,” Energy Bulletin, http://www.energybulletin.net/stories/2012-02-08/after-gold-rush-perspective-future-us-natural-gas-supply-and-price)

Operators have indulged in over-drilling these plays for many reasons but adding reserves, holding leases and company growth are among the main factors particularly with the low cost of capital. The inevitable result has been the collapse of prices as supply exceeded demand. Most analysts forecast that the future will be much like the present, and that natural gas will be abundant and cheap for decades to come. There are, however, strong and consistent indicators that natural gas supply may be less certain than most observers believe and require a higher price to be developed economically. Natural gas demand is growing as fuel switching for electric power generation continues, and will be increased by environmental regulation in the coming years. The U.S. will shift more of its future energy needs to natural gas in many sectors of the economy. The best justification, in fact, for the land grab and over-drilling spree is expectation of higher prices. Those companies that grabbed the land and held it by production will profit greatly once the true supply and cost of shale gas is recognized. The financial survival of all companies in this position is not, however, certain. Price matters, and there is finally some response from shale gas producers with recent announcements to curtail drilling. While price was cited as the main reason for reduced drilling, it is likely that some companies now have financial constraints. The shale gas phenomenon has been funded mostly by debt and equity offerings. At this point, further debt and share dilution are less feasible for many companies. Joint ventures have provided a way for some to prolong spending but that now seems like a less likely source of funding. Capital availability in the near term will likely be tighter than is has until now. Acquisition and consolidation may become more attractive to companies with cash as producers become more extended.¶ Some of the shale gas plays may be at or near peak production at least at the current price of gas and technology. All major producing areas except Louisiana are in decline. Some doubt the accuracy of public data compared with EIA data, but it seems unlikely that the trends it shows are erroneous. In any case, the data the EIA makes available does not have sufficient resolution to evaluate individual plays or state-level trends.

#### Its barely cleaner than coal

Barton 11 (Charles Barton, Nuclear Green, “No Help with Global Warming: Wind and gas,” 1/29/11) <http://nucleargreen.blogspot.com/2011/01/no-help-with-global-warming-wind-and.html>

Advocates for natural gas routinely … 9,000 times higher than previously reported.

When all these emissions are counted, gas may be as little as 25 percent cleaner than coal, or perhaps even less.¶ If that were not bad enough,¶ roughly half of the 1,600 gas-fired power plants in the United States operate at the lowest end of the efficiency spectrum. And even before the EPA sharply revised its data, these plants were only 32 percent cleaner than coal, . . . Now that the EPA has doubled its emissions estimates, the advantages are slimmer still. Based on the new numbers, the median gas-powered plant in the United States is just 40 percent cleaner than coal, according to calculations ProPublica made . . . Those 800 inefficient plants offer only a 25 percent improvement.¶ Other scientists say the pollution gap between gas and coal could shrink even more. That’s in part because the primary pollutant from natural gas, methane, is far more potent than other greenhouse gases, and scientists are still trying to understand its effect on the climate—and because it continues to be difficult to measure exactly how much methane is being emitted.¶ It is far from clear that Natural Gas is the panasia for global warming. Indeed it may turn out to be another energy bridge to no where if we rely on it too much.

#### Natural gas is too dirty and causes rollback to coal

Barton 9 (Charles Barton, Nuclear Green, “Greenpeace's [r]evolutionary energy failure: Part I,” 3/13/9) <http://nucleargreen.blogspot.com/2009/03/we-live-in-era-of-confusion.html>

Finally we ought to consider the use of natural gas in the [r]evolution energy system. [R]evolution supports the use of combined heat and power cogeneration systems. I personally think that natural gas combined cycle generators represent a far more efficient use of natural gas. Combined cycle generators uses the heat of gases exiting the turbine's exhaust to heat a boiler. Steam from the boiler powers a steam turbine which is connected to a generator. The combined cycle systems have impressive efficiency. We hear claims about how efficient Combined Heat and Power systems are, but I live in Texas where it would be nice if someone could build a similar system for air conditioning. Combined heat and power systems only are efficient if you need heating, and you certainly don't need heating year round. When you don't need heating you simply get your gas turbine generator efficiency from your CHiPs plant.¶ The whole problem with natural gas can be summed up with two words: carbon dioxide. Even though we might use natural gas more efficiently, it is still a carbon based fossil fuel, and when we burn it, we increase the CO2 concentration in the atmosphere. There are other issues. Natural gas is becoming more expensive to extract. Thus even when used efficiently, natural gas is regarded as a high cost fuel, and natural gas generators are usually treated as peak reserve power sources because utilities can charge more for peak power. Natural gas generating systems have low capital cost, but high fuel costs. Natural gas generators are also useful as load followers. This undoubtedly has a lot to do with why [r]evolution sees as many natural gas generators producing electricity in 2040 as were producing electricity. Grid instability caused by the intermittency of solar and wind generating sources has to be controlled, in order to keep the grid from constantly crashing. Gas turbines have enough flexibility to handle the load stabilizing task on a renewables dominated grid. Unfortunately we cannot speak of such a grid as a post carbon grid, since the [r]evolution grid will be still dependent on the burning of carbon based fuel in 2040. presumably after 2040 electricity from non-intermittent renewable sources - hydro, biomass, and geothermal - will replace replace natural gas, but this assumes that biomass and geothermal will be ready provide large amounts of reliable electricity in a generation. This is a risk of the [r]evolution plan, and quite frankly the odds at present run heavily against biomass, and geothermal, while hydro is not envisioned to expand enough to pick up the slack if biomass and geothermal fail to live up to the expectations which the [r]evolution plan places upon them.¶ Given the likely failure of biomass and geothermal technologies, carbon emitting natural gas will be required to maintain grid stability after 2040. What happens when natural gas begins to run out? The answer is simple, the [r]evolution grid would revert to coal fired generating facilities to provide the grid with the stability! That is right folks, the [r]evolution plan might not get rid of coal long term.

### GPW

#### Econ collapse doesn’t cause war – prefer our studies

Samuel Bazzi (Department of Economics at University of California San Diego) and Christopher Blattman (assistant professor of political science and economics at Yale University) November 2011 “Economic Shocks and Conflict: The (Absence of?) Evidence from Commodity Prices” <http://www.chrisblattman.com/documents/research/2011.EconomicShocksAndConflict.pdf?9d7bd4>

VI. Discussion and conclusions A. Implications for our theories of political instability and conflict The state is not a prize?—Warlord politics and the state prize logic lie at the center of the most influential models of conflict, state development, and political transitions in economics and political science. Yet we see no evidence for this idea in economic shocks, even when looking at the friendliest cases: fragile and unconstrained states dominated by extractive commodity revenues. Indeed, we see the opposite correlation: if anything, higher rents from commodity prices weakly 22 lower the risk and length of conflict. Perhaps shocks are the wrong test. Stocks of resources could matter more than price shocks (especially if shocks are transitory). But combined with emerging evidence that war onset is no more likely even with rapid increases in known oil reserves (Humphreys 2005; Cotet and Tsui 2010) we regard the state prize logic of war with skepticism.17 Our main political economy models may need a new engine. Naturally, an absence of evidence cannot be taken for evidence of absence. Many of our conflict onset and ending results include sizeable positive and negative effects.18 Even so, commodity price shocks are highly influential in income and should provide a rich source of identifiable variation in instability. It is difficult to find a better-measured, more abundant, and plausibly exogenous independent variable than price volatility. Moreover, other time-varying variables, like rainfall and foreign aid, exhibit robust correlations with conflict in spite of suffering similar empirical drawbacks and generally smaller sample sizes (Miguel et al. 2004; Nielsen et al. 2011). Thus we take the absence of evidence seriously. Do resource revenues drive state capacity?—State prize models assume that rising revenues raise the value of the capturing the state, but have ignored or downplayed the effect of revenues on self-defense. We saw that a growing empirical political science literature takes just such a revenue-centered approach, illustrating that resource boom times permit both payoffs and repression, and that stocks of lootable or extractive resources can bring political order and stability. This countervailing effect is most likely with transitory shocks, as current revenues are affected while long term value is not. Our findings are partly consistent with this state capacity effect. For example, conflict intensity is most sensitive to changes in the extractive commodities rather than the annual agricultural crops that affect household incomes more directly. The relationship only holds for conflict intensity, however, and is somewhat fragile. We do not see a large, consistent or robust decline in conflict or coup risk when prices fall. A reasonable interpretation is that the state prize and state capacity effects are either small or tend to cancel one another out. Opportunity cost: Victory by default?—Finally, the inverse relationship between prices and war intensity is consistent with opportunity cost accounts, but not exclusively so. As we noted above, the relationship between intensity and extractive commodity prices is more consistent with the state capacity view. Moreover, we shouldn’t mistake an inverse relation between individual aggression and incomes as evidence for the opportunity cost mechanism. The same correlation is consistent with psychological theories of stress and aggression (Berkowitz 1993) and sociological and political theories of relative deprivation and anomie (Merton 1938; Gurr 1971). Microempirical work will be needed to distinguish between these mechanisms. Other reasons for a null result.—Ultimately, however, the fact that commodity price shocks have no discernible effect on new conflict onsets, but some effect on ongoing conflict, suggests that political stability might be less sensitive to income or temporary shocks than generally believed. One possibility is that successfully mounting an insurgency is no easy task. It comes with considerable risk, costs, and coordination challenges. Another possibility is that the counterfactual is still conflict onset. In poor and fragile nations, income shocks of one type or another are ubiquitous. If a nation is so fragile that a change in prices could lead to war, then other shocks may trigger war even in the absence of a price shock. The same argument has been made in debunking the myth that price shocks led to fiscal collapse and low growth in developing nations in the 1980s.19 B. A general problem of publication bias? More generally, these findings should heighten our concern with publication bias in the conflict literature. Our results run against a number of published results on commodity shocks and conflict, mainly because of select samples, misspecification, and sensitivity to model assumptions, and, most importantly, alternative measures of instability. Across the social and hard sciences, there is a concern that the majority of published research findings are false (e.g. Gerber et al. 2001). Ioannidis (2005) demonstrates that a published finding is less likely to be true when there is a greater number and lesser pre-selection of tested relationships; there is greater flexibility in designs, definitions, outcomes, and models; and when more teams are involved in the chase of statistical significance. The cross-national study of conflict is an extreme case of all these. Most worryingly, almost no paper looks at alternative dependent variables or publishes systematic robustness checks. Hegre and Sambanis (2006) have shown that the majority of published conflict results are fragile, though they focus on timeinvariant regressors and not the time-varying shocks that have grown in popularity. We are also concerned there is a “file drawer problem” (Rosenthal 1979). Consider this decision rule: scholars that discover robust results that fit a theoretical intuition pursue the results; but if results are not robust the scholar (or referees) worry about problems with the data or empirical strategy, and identify additional work to be done. If further analysis produces a robust result, it is published. If not, back to the file drawer. In the aggregate, the consequences are dire: a lower threshold of evidence for initially significant results than ambiguous ones.20

#### Economic collapse doesn’t cause war – no causal connection

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

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.

### Solvency

#### Utilities own them

GAO 2012, “Renewable Energy Project Financing: Improved Guidance and Information Sharing Needed for DOD Project-Level Officials”, April, <http://gao.gov/assets/590/589883.pdf>

Power purchase agreements for renewable energy may take several forms, but all are essentially agreements to purchase renewable energy from a private-sector energy producer. For example, in some of these agreements, the developer installs a renewable energy-system on agency property, and the agency pays for the system through its purchase of power over the life of the contract. After installation, the developer owns, operates, and maintains the system for the life of the contract. DOD refers to power purchase agreements undertaken using certain authorities as Energy Services Contracts. Depending on the authority used, DOD can enter into power purchase agreements for up to 32 years, excluding the period for construction.

**No industry overstretch**

O’shea 9/4 (Patrick O’shea September 4, 2012, “Navy and nuclear industry sign deal to fight workers shortage,” http://www.timesonline.com/news/business/navy-and-nuclear-industry-sign-deal-to-fight-workers-shortage/article\_64f8c887-6796-55e1-80e7-45369da494c3.html)

The nuclear industry long has drawn employees from the U.S. Navy, so it makes sense that companies would look to the Navy again as the industry faces an impending shortage of skilled workers. The Naval Nuclear Propulsion Program, which operates a large fleet of nuclear-powered submarines and ships, and more than 30 civilian nuclear energy companies recently signed an agreement that will assist in the recruitment of Navy veterans qualified to work in the field. The Nuclear Energy Institute trade group has estimated that the industry will have to hire 25,000 more workers over the next four years to replace retirees and find new workers to staff plants now under construction in the southeast. Under the agreement, nuclear-trained Navy personnel ending their active-duty commitment have the option of having their contact information forwarded to industry recruiters for companies participating in the program. And Navy recruiters will have access to the names of those enrolled in industry-training programs at about 40 community colleges across the nation. "The beauty of this agreement is that it provides multi-avenue flow for training the next generation of nuclear workers, who can gain the skills and experience needed through formal education in or out of the military, on-the-job training or both that ensures a bright future in a growing industry," said Tony Pietrangelo, NEI senior vice president and chief nuclear officer. Akron, Ohio-based FirstEnergy Corp., which owns and operates the Beaver Valley Nuclear Power Station in Shippingport, is one of the companies participating in the program. FirstEnergy's Jennifer Young said the average age of the approximately 1,000 workers at the Shippingport plant is 49. Nuclear industry employees can retire as young as 55. Young said there is no way to predict how many openings the facility will have over the next few years, but she noted that the company has seen more retirements over the last few years and 2012 already has a higher retirement rate than 2011. Young said recruiting from the Navy is just one recruitment tool used by FirstEnergy, which also draws from related four-year and two-year college programs, but she said the former Navy workers come in already familiar with the technology and rigors involved in the industry. Young said FirstEnergy is being proactive about bringing in workers in all its areas, not just nuclear engineering. She said they also will need replacements in construction personnel, industrial safety workers and accountants, among other jobs. And its all about "replacing sooner than later," Young said, because that gives the company time to properly train them and allow them to interact with the veterans they eventually will replace. "There is no better experience than training with veterans who can mentor them at the plant," she said.

**No SMR meltdowns**

**Rosner and Goldberg 2011** (Robert Rosner, astrophysicist and founding director of the Energy Policy Institute at Chicago, and Stephen Goldberg, Special Assistant to the Director at the Argonne National Laboratory, Energy Policy Institute at Chicago, “Small Modular Reactors – Key to Future Nuclear Power Generation in the U.S.”, Technical Paper, Revision 1, November 2011)

While the focus in this paper is on the business case for SMRs, the safety case also is an important element of the case for SMRs. Although SMRs (the designs addressed in this paper) use the same fuel type and the same light water cooling as gigawatt (GW)-scale light water reactors (LWRs), there are significant enhancements in the reactor design that contribute to the upgraded safety case. Appendix A provides a brief overview of the various technology options for SMRs, including the light water SMR designs that are the focus of the present analysis.¶ Light water SMR designs proposed to date incorporate passive safety features that utilize gravity-driven or natural convection systems – rather than engineered, pump-driven systems – to supply backup cooling in unusual circumstances. These passive systems should also minimize the need for prompt operator actions in any upset condition. The designs rely on natural circulation for both normal operations and accident conditions, requiring no primary system pumps. In addition, these SMR designs utilize integral designs, meaning all major primary components are located in a single, high-strength pressure vessel. That feature is expected to result in a much lower susceptibility to certain potential events, such as a loss of coolant accident, because there is no large external primary piping. In addition, light water SMRs would have a much lower level of decay heat than large plants and, therefore, would require less cooling after reactor shutdown. Specifically, in a post-Fukushima lessons-learned environment, the study team believes that the current SMR designs have three inherent advantages over the current class of large operating reactors, namely:¶ 1. These designs mitigate and, potentially, eliminate the need for back-up or emergency electrical generators, relying exclusively on robust battery power to maintain minimal safety operations.¶ 2. They improve seismic capability with the containment and reactor vessels in a pool of water underground; this dampens the effects of any earth movement and greatly enhances the ability of the system to withstand earthquakes.¶ 3. They provide large and robust underground pool storage for the spent fuel, drastically reducing the potential of uncovering of these pools.

### States CP

#### Investor confidence

Domenici and Miller 2012 (Senator Pete Domenici, Bipartisan Policy Center Senior Fellow, and Dr. Warren F. “Pete” Miller, Co-chair, Bipartisan Policy Center Nuclear Initiative¶ And Former Assistant Secretary for Nuclear Energy, July 2012, “Maintaining U.S.¶ Leadership in Global Nuclear Energy Markets,” http://bipartisanpolicy.org/sites/default/files/Leadership%20in%20Nuclear%20Energy%20Markets.pdf)

Electric utilities in the United States face a changing market environment, one that features low natural gas prices, flattening electric demand, and the prospect of further environmental regulations. In this context of substantial uncertainty about the future, fuel diversity is especially important as a way to help ensure that the electric power sector can deliver reliable, affordable, and secure energy services over long timeframes. Market signals alone are unlikely to result in a diverse fuel mix, so helping to maintain and improve a range of electricity supply options remains a role for federal policy. In particular, U.S. policy should be aimed at helping to preserve nuclear energy as an important technology option for near- or longer-term deployment.

#### Licensing

Waterman 2009 (Richard W. Waterman, Professor of Political Science at University of Kentucky, 2009, “Bush and Nuclear Regulatory Commission,” President George W. Bush’s Influence Over Bureacracy and Policy, google books)

The historic 1994 congressional elections, however, are consistent with expectations. When the Republicans took control of Congress for the first time in 40 years (in January 1995), there was a decline of almost 3.5 civil penalties assessed per month. Since the 1994 electoral earthquake meant that the chairs of both the House and Senate oversight committees were in the hands of Republicans for the first time since the NRC was established, this likely sent shockwaves throughout the agency. Because Congress possesses both the power of the purse and oversight authority, NRC personnel altered their enforcement behavior in a manner that was consistent with the political philosophy of the new dominant coalition in Congress.

#### No commercialization without the DOD

**Cohen 2012** (Armond Cohen, Executive Director of the Clean Air Task Force, “DoD: A Model for Energy Innovation?,” http://energy.nationaljournal.com/2012/05/powering-our-military-whats-th.php#2211477)

Recently, the Clean Air Task Force and our colleagues at The Consortium for Science, Policy and Outcomes at Arizona State University, assessed the opportunities and challenges at the U.S. Department of Defense for accelerating a national and even global transition to advanced and clean energy technologies. Building on background papers, a workshop, new research, and a previous project that articulated foundational principles for federal energy innovation policies, this report identified the sources of DoD’s success in fostering new technology that can be applied to both civilian energy innovation efforts and future defense-related energy efforts. Unlike most other agencies, including the Energy Department, the Pentagon is the ultimate customer for the new technology it helps create, spending some $200 billion each year on R&D and procurement. The implications of DoD’s role as customer have not been widely appreciated, as: · DoD, uniquely in government, supports multi-year, billion-dollar “end to end” innovation efforts that produce technology that is continuously tested, deployed and refined on bases and in the field, providing **real world feedback** that leads to **increases in performance** and **reductions in cost**. By contrast, most of the federal government’s civilian energy innovation efforts involve research loosely connected at best with the few commercialization efforts that it supports. · DoD and its contractors know how to **bring together multiple innovations** to achieve **system-level advances** leading to **big performance gains** (examples range from nuclear submarines to unmanned aircraft to large-scale information systems). This systems approach is precisely what is needed to advance clean energy technologies. · Relatively stable, multi-year funding allows the Pentagon to pursue “long cycle” innovation that is necessary for large, capital- intensive technologies and supports a highly capable contractor base that can respond to changing national security demands. · The Pentagon’s scope and budget has allowed it to **experiment** with new and **creative innovation tools** such as the well-known Defense Advanced Projects Research Agency, which has produced extraordinary technological breakthroughs; and the Environmental Security Technology Certification Program, which develops and demonstrates cost-effective improvements in environmental and energy technologies for military installations and equipment. · Because of DoD’s size and demands for performance and reliability, it is unique among government and private sector organizations as a **demonstration test-bed**. Smart-grid technologies and advanced energy management systems for buildings are already poised to benefit from this aspect of the Pentagon’s innovation system. · DoD has collaborated effectively with other federal agencies, including the Department of Energy and its predecessors (for example, to advance nuclear energy technologies). Continuing competition and cooperation between DoD and DOE will spur energy innovation. DoD’s innovation capabilities can enhance U.S. national security, improve U.S. international competitiveness, and spur global energy restructuring and greenhouse gas emissions reductions. At the same time, while providing enormous opportunities to develop and test energy efficiency technologies and small scale distributed energy appropriate to forward bases, the Pentagon is unlikely to become an all-purpose hub for advancing all categories of clean-energy technologies, because its energy innovation activities will be sustainable only where they can support the nation’s defense capabilities. Therefore, many other large-scale technologies that are of great importance to improving the environment, such as carbon-free central station generation or zero carbon transportation, may not as easily fit with DoD’s mission. Possible exceptions might include small modular nuclear reactors that can be used for producing independent, non-grid power at military bases, or, conceivably, zero-carbon liquid fuels other than anything resembling current generation biofuels. In any case, the challenge for military-led energy innovation is to further define and delineate avenues for improved clean-energy performance that are linked to the national strategic mission. History shows that when such linkages are strong, DoD’s innovation capabilities are **second to none**. But perhaps the more important lesson from this work is that a serious American program of civilian energy innovation could profitably look to Pentagon history for clues about how to succeed. Stable and significant funding; “end to end” thinking on long innovation cycles; procurement of advanced energy technology at commercial scale as well as research and testing; and institutional experimentation and diversity using multiple institutional channels – these have been important reasons that the United States has the most lethal and effective military arsenal in world history. If we’re serious about maintaining American superiority in the energy technology domain, some of this “defense innovation DNA” needs to be replicated or adapted to meet the challenge.

**Licensing- Only DOD solves it**

CSPO 2010 (Consortium for Science, Policy and Outcomes at Arizona State, June 2010, “Four Policy Principles for Energy Innovation and Climate Change: A Synthesis,” http://www.catf.us/resources/publications/files/Synthesis.pdf)

Government purchase of new technologies is a powerful way to accelerate innovation through increased demand (Principle 3a). We explore how this principle can be applied by considering how the DoD could purchase new nuclear reactor designs to meet electric power needs for DoD bases and operations. Small modular nuclear power reactors (SMRs), which generate less than 300 MW of power (as compared to more typical reactors built in the 1000 MW range) are often listed as a potentially transformative energy technology. While typical traditional large-scale nuclear power plants can cost five to eight billion dollars, smaller nuclear reactors could be developed at smaller scale, thus not presenting a “bet the company” financial risk. SMRs could potentially be mass manufactured as standardized modules and then delivered to sites, which could significantly reduce costs per unit of installed capacity as compared to today’s large scale conventional reactor designs. It is likely that some advanced reactors designs – including molten salt reactors and reactors utilizing thorium fuels – could be developed as SMRs. Each of these designs offers some combination of inherently safe operation, very little nuclear proliferation risk, relatively small nuclear waste management needs, very abundant domestic fuel resources, and high power densities – all of which are desirable attributes for significant expansion of nuclear energy. Currently, several corporations have been developing small nuclear reactors. Table 2 lists several of these companies and their reactor power capacities, as well as an indication of the other types of reactor innovations that are being incorporated into the designs. Some of these technologies depend on the well-established light water reactor, while others use higher energy neutrons, coolants capable of higher temperature operation, and other innovative approaches. Some of these companies, such as NuScale, intend to be able to connect as many as 24 different nuclear modules together to form one larger nuclear power plant. In addition to the different power ranges described in Table 2, these reactors vary greatly in size, some being only 3 to 6 feet on each side, while the NuScale reactor is 60 feet long and 14 feet in diameter. Further, many of these reactors produce significant amounts of high-temperature heat, which can be harnessed for process heating, gas turbine generators, and other operations. One major obstacle is to rapid commercialization and development are prolonged multi-year licensing times with the Nuclear Regulatory Commission. Currently, the NRC will not consider a reactor for licensing unless there is a power utility already prepared to purchase the device. Recent Senate legislation introduced by Senator Jeff Bingaman (D-NM) has pushed for DOE support in bringing down reactor costs and in helping to license and certify two reactor designs with the NRC. Some additional opportunities to facilitate the NRC licensing process for innovative small modular reactors would be to fund NRC to conduct participatory research to get ahead of potential license applications (this might require ~$100million/year) and potentially revise the current requirement that licensing fees cover nearly all NRC licensing review costs. One option for accelerating SMR development and commercialization, would be for DOD to establish SMR procurement specifications (to include cost) and agree to purchase a sufficient amount of SMR’s to underwrite private sector SMR development. Of note here may be that DARPA recently (3/30/10) issued a “Request for Information (RFI) on Deployable Reactor Technologies for Generating Power and Logistic Fuels”2 that specifies may features that would be highly desirable in an advanced commercial SMR. While other specifications including coproduction of mobility fuel are different than those of a commercial SMR power reactor, it is likely that a core reactor design meeting the DARPA inquiry specifications would be adaptable to commercial applications. While nuclear reactors purchased and used by DOD are potentially exempt from many NRC licensing requirements3, any reactor design resulting from a DOD procurement contract would need to proceed through NRC licensing before it could be commercially offered. Successful use of procured SMR’s for DOD purposes could provide the knowledge and operational experience needed to aid NRC licensing and it might be possible for the SMR contractor to begin licensing at some point in the SMR development process4. Potential purchase of small modular nuclear reactors would be a powerful but proven way in which government procurement of new energy technologies could encourage innovation. Public procurement of other renewable energy technologies could be similarly important.

#### Market pull- DOD key

Marqusee 2012 (Jeffrey Marqusee, Executive director at the Strategic Environmental Research and Development Program at the DOD, March 2012, “Military Installations and Energy Technology Innovations,” in Energy Innovation at the Department of Defense: Assessing the Opportunities, scribd)

The key reason that DoD cannot passively rely on the private sector to provide a suite of new, cost-effective energy technologies is the difficulty of the transition from research and development to full deployment. Many have noted this challenge; it is often described as the “Valley of Death,” a term widely used in the early and mid-1990s to describe the obstacles to commercialization and deployment of environmental technologies. DoD’s environmental technology demonstration program, the Environmental Security Technology Certification Program (ESTCP), was created to overcome that hurdle. Why can’t DoD rely on the Department of Energy (DOE) to solve the commercialization and deployment problem? DOE has a mixed record in this area. Reasons for past failures at DOE are: 1) the lack of a market within DOE for the technologies; 2) overly optimistic engineering estimates; 3) lack of attention to potential economic or market failures; 4) a disconnect between business practices at DOE and commercial practices, which leads to demonstration results that are not credible in the private sector; and 5) programs completely driven by a technology “push,” rather than a mix of technology push and market-driven pull.81 Many of these issues can be viewed as arising from the first: the lack of a market within DOE. Since DOE is neither the ultimate supplier nor buyer of these technologies at the deployment scale, it is not surprising that there are challenges in creating a system that can bring technologies across the Valley of Death. DoD’s market size allows it to play a critical role in overcoming this challenge for the energy technologies the department’s installations require, as it has for environmental technologies. In addressing the barriers energy technologies face, and understanding the role DoD installations can play, it is important to understand the type and character of technologies that DoD installations need. Energy technologies span a wide spectrum in costs, complexities, size, and market forces. Installation energy technologies are just a subset of the field, but one that is critical in meeting the nation’s and DoD’s energy challenges. DOE, in its recent strategic plans and quadrennial technology review, has laid out the following taxonomy (figure 3.5): It is useful to divide these energy technologies into two rough classes based on the nature of the market and the characteristics of deployment decisions. There are technologies whose capital costs at full scale are very high, for which a modest number of players will play a key role in implementation decisions. Examples include utility-scale energy generation, large-scale carbon sequestration, commercial production of alternative fuels, nextgeneration utility-grid-level technologies, and manufacturing of new transportation platforms. Some of these technologies produce products (e.g., fuel and power from the local utility) that DoD installations buy as commodities, but DoD does not expect to buy the underlying technology. A second but no less important class of energy technologies are those that will be widely distributed upon implementation, and the decisions to deploy them at scale will be made by thousands, if not millions, of decision makers. These include: 1) Technologies to support improved energy efficiency and conservation in buildings; 2) Local renewable or distributed energy generation; and 3) Local energy control and management technologies. Decisions on implementing these technologies will be made in a distributed sense and involve tens of thousands of individual decision makers if they are ever to reach large-scale deployment. These are the energy technologies that DoD installations will be buying, either directly through appropriated funds or in partnership with third-party financing through mechanisms such as Energy Saving Performance Contracts (ESPCs) or Power Purchase Agreements (PPAs). In the DOE taxonomy shown above, these distributed installation energy technologies cover the demand space on building and industrial efficiency, portions of the supply space for clean electricity when restricted to distributed generation scale, and a critical portion in the middle where microgrids and their relationship to energy storage and electric vehicles reside.

### 2AC Agenda- Debt Ceiling

#### No war

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

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.

#### No impact – even if there is a fight – investors won’t be rattled – outcome is always fine for the economy.

SF Gate 1-3-13, Read more: http://www.sfgate.com/business/bloomberg/article/Obama-Catastrophe-With-Congress-Looms-as-4165923.php#ixzz2GyLZnZNn

When partisan gridlock last brought the government to the brink of default in August 2011, the stock market fell and Standard & Poor’s cut the nation’s credit rating. After House Speaker John Boehner, an Ohio Republican, withdrew from negotiations on July 22, 2011, the S&P 500 Stock Index fell more than 16 percent in the next 11 trading days.¶ Bond investors were unrattled. Yields on 10-year U.S. Treasury notes declined from 2.96 percent on July 22 to 2.56 percent on Aug. 5, 2011, the day of the S&P downgrade. Yields continued to drop, reaching 1.72 percent on Sept. 22 of that year. Yields were at 1.91 percent at 5 p.m. New York time yesterday, according to Bloomberg Bond Trader data.¶ “The market is not worried about default,” said Zach Pandl, an interest-rate strategist in Minneapolis at Columbia Management Investment Advisers LLC, which oversees $340 billion.¶ “In the U.S., the debt level is lower than comparable countries, growth is higher and we have a unblemished track record in the U.S. of debt repayment, all of which has helped calm investor concerns,” he said. “The process is messy, but the outcome is always acceptable.”

#### Independently plan solves inev collapse

Freeman 2009 (Marsha Freeman, Technology Editor, Executive Intelligence Review Magazine and Associate Editor, 21st Century Science and Technology Magazine, Spring 2009, “Stimulate The Economy: Build New Nuclear Plants!,” http://www.21stcenturysciencetech.com/Articles\_2009/Stimulate\_Nucl\_sp09.pdf)

But economic growth will depend upon trillions of dollars of Federal investment that ameliorate the immediate situation by laying the basis for the long-term increased productivity of the economy, as a whole. It is not a question of simply creating jobs, but increasing the capital- intensity of the economy, and raising the productive level of the nation’s work- force. This is the function of investments in basic economic infrastructure.¶ There will be no economic recovery, or growth, without a massive expansion and upgrading of the nation’s energy supply and distribution system. Contrary to “popular opinion,” which has been shaped by scam artists like T. Boone “Windbag” Pickens, and “green” ideologues like Al Gore, only a massive expansion of nuclear energy can provide the quality and quantity of energy that a 21st Century economy requires. Although the first tentative steps have been taken by electric utilities to restart the construction of new nuclear power plants, with more than two dozen reactor license applications filed with the Nuclear Regulatory Commission, this “renaissance” in nuclear power will not materialize without a Federally directed “stimulus.” Similarly, the disappearance of the U.S. nuclear manufacturing industry has begun to be reversed, but the re- constitution of a nuclear industry, based on the most modern power plant designs and advanced manufacturing techniques, will not happen without a nationally directed effort. For decades, the mass-production auto industry, and its component manufacturers, created one out of every thirteen industrial jobs in the United States. This was the reservoir of the nation’s machine tool design and industrial engineering talent. The industry, which now lies in ruin, must be retooled and mobilized to recreate a nuclear manufacturing industry.

#### No debt deal

Weisenthal 1/2 (Joe Weisenthal, “The Analyst Who Nailed The Fiscal Cliff Is Not So Optimistic About What's Coming Up Next,” Business Insider, http://www.businessinsider.com/eurasias-sean-west-on-the-debt-ceiling-fight-2013-1)

Sean West is the Eurasia Group analyst who nailed the Fiscal Cliff fight, putting 2-1 odds of there being a deal as late as December 31, when many people were concerned that it was all over.¶ So we asked him for his take on the Debt Ceiling fight, which will be coming up in the next couple of months.¶ As a refresher, a whole bunch of stuff is coming up over the next two months, as the debt ceiling, the sequester, and the end of the current budget are all happening around the same time.¶ Suffice it to say, he is not as optimistic that things will go as smoothly, and that's saying something! The main difference: In the Fiscal Cliff fight, there was an alignment of incentives to get a deal. In the debt ceiling? Sharply different incentives.¶ Here's what he told us via email:¶ While Congress and the President averted the fiscal cliff, it provided little reason to believe the debt ceiling battle will be anything but another round of brinksmanship — and potentially an even nastier fight. On the fiscal cliff, everyone in Washington had a shared incentive to avoid an across the board tax increase and sequestration --and the pathway to a deal was still so ugly that most folks thought they would never get there. On the debt ceiling, incentives are not at all aligned. The President has an incentive to take the debt ceiling off the table for good as a Republican leverage point by refusing to negotiate on it; Republicans have an incentive to get the most out of Obama on spending cuts as possible while they have the leverage. It's too early to know exactly how it will shape up, but it's safe to say the cliff negotiation did not establish a new method of politics conducive to bipartisan deal making.¶ Should be interesting!

#### Sandy aid thumps the DA

O’Keefe 1/2 (Ed O’Keefe, “Obama calls for immediate Sandy aid vote,” Washington Post, http://www.washingtonpost.com/blogs/post-politics/wp/2013/01/02/obama-calls-for-immediate-sandy-aid-vote/)

President Obama today called on the House to immediately pass a plan to provide federal aid to deal with damage caused by Hurricane Sandy, while House Speaker John A. Boehner (R-Ohio) announced a meeting on the issue this afternoon with lawmakers from New Jersey and New York.¶ The Senate passed a $60 billion package last week that provides funding for the two states to begin rebuilding and mitigation projects. The House’s failure to pass a measure by Thursday at noon would mean that the process would need to begin again from scratch.¶ ““The Speaker is committed to getting this bill passed this month,” Boehner spokesman Michael Steel said, in confirming the 3 p.m. meeting with concerned lawmakers.¶ Obama weighed in on the controversy in a White House statement issued shortly after the president returned to his Hawaii vacation.¶ “When tragedy strikes, Americans come together to support those in need,” Obama said. “I urge Republicans in the House of Representatives to do the same, bring this important request to a vote today, and pass it without delay for our fellow Americans.”¶ Boehner has told his colleagues that providing storm aid is his first priority for the next Congress, which begins Thursday afternoon. Aides noted that FEMA Administrator Craig Fugate recently told a House panel that his agency should be able to continue providing financial aid to affected regions until the spring, when it would then need to request more money from lawmakers.¶ Lawmakers from both parties reacted angrily to Tuesday night’s surprise decision to not hold a vote on storm aid. New Jersey Gov. Chris Christie and New York Gov. Andrew Cuomo came together to blast the delay, calling it “inexcusable.”

#### Political capital theory is bankrupt

Dickinson2009 (Matthew Dickinson, professor of political science at Middlebury College and taught at Harvard University, where he also received his Ph.D., “Sotomayor, Obama and Presidential Power” May, google)

What is of more interest to me, however, is what her selection reveals about the basis of presidential power. Political scientists, like baseball writers evaluating hitters, have devised numerous means of measuring a president’s influence in Congress. I will devote a separate post to discussing these, but in brief, they often center on the creation of legislative “box scores” designed to measure how many times a president’s preferred piece of legislation, or nominee to the executive branch or the courts, is approved by Congress. That is, how many pieces of legislation that the president supports actually pass Congress? How often do members of Congress vote with the president’s preferences? How often is a president’s policy position supported by roll call outcomes? These measures, however, are a misleading gauge of presidential power – they are a better indicator of congressional power. This is because how members of Congress vote on a nominee or legislative item is rarely influenced by anything a president does. Although journalists (and political scientists) often focus on the legislative “endgame” to gauge presidential influence – will the President swing enough votes to get his preferred legislation enacted? – this mistakes an outcome with actual evidence of presidential influence. Once we control for other factors – a member of Congress’ ideological and partisan leanings, the political leanings of her constituency, whether she’s up for reelection or not – we can usually predict how she will vote without needing to know much of anything about what the president wants. (I am ignoring the importance of a president’s veto power for the moment.) Despite the much publicized and celebrated instances of presidential arm-twisting during the legislative endgame, then, most legislative outcomes don’t depend on presidential lobbying. But this is not to say that presidents lack influence. Instead, the primary means by which presidents influence what Congress does is through their ability to determine the alternatives from which Congress must choose. That is, presidential power is largely an exercise in agenda-setting – not arm-twisting. And we see this in the Sotomayer nomination. Barring a major scandal, she will almost certainly be confirmed to the Supreme Court whether Obama spends the confirmation hearings calling every Senator or instead spends the next few weeks ignoring the Senate debate in order to play Halo III on his Xbox. That is, how senators decide to vote on Sotomayor will have almost nothing to do with Obama’s lobbying from here on in (or lack thereof). His real influence has already occurred, in the decision to present Sotomayor as his nominee.

#### Winners win- Second term depends on bold legislative moves

Ignatius 11/7 (David Ignatius, longtime writer and reporter, studied political theory at Harvard College and economics at Kings College, Cambridge, November 7, 2012, “A time for Obama to be bold,” Washington Post, http://www.washingtonpost.com/opinions/president-obama-go-big/2012/11/07/dbf545f8-28fc-11e2-bab2-eda299503684\_story.html?hpid=z4)

Barack Obama will be getting advice by the boatload over the next few weeks, but the best guidance may be what emerges from Caro’s biography “The Passage of Power”: Think big. Find strategies and pressure points that can break the gridlock in Congress, which was as rigid in 1963 as it is today. Surprise your adversaries with bold moves and concessions that create new space on which to govern.¶ As I watched Tuesday’s triumph, it seemed obvious that Obama needs the policy equivalent of David Plouffe, his senior campaign adviser. Plouffe’s genius was to decide early on that the race depended on nine battleground states; if he could deliver those states by a relentless and sometimes ruthless assault, he would win the larger victory. He was like a general who concentrates his forces at the points of greatest vulnerability and then prevails through sheer force of will.¶ Obama’s performance as president has often lacked this decisive, strategic quality. The notes are there but not the policy “music.” In both foreign and domestic policy, the impression of Obama, after his blunderbuss, first-year battles on health care and the Israeli-Palestinian issue, has been of a careful president who reacts to events, waits for others to make the first moves and plays to avoid losing rather than to win.¶ Well, Mr. President, what the hell’s the presidency for?¶ A strategic second term would begin by identifying a list of necessary and achievable goals, and then pursuing them with the unyielding manipulative skill of a Lyndon Johnson. On the top of everybody’s list would be a budget deal. Everybody knows, more or less, what it will require: changes in Social Security and Medicare that slow the growth of entitlement spending; reform of the tax code that produces a fairer and simpler system that raises revenue without limiting growth.¶ A road map is there in the Simpson-Bowles deficit-reduction plan, and Obama administration officials have been thinking privately for months about how to tweak the plan so it’s better and fairer. Mitt Romney’s generous concession speech Tuesday night opened a possible door, and the president should follow up his statement that he will “look forward to sitting down with Governor Romney to talk about where we can work together to move this country forward.” The president and his new Treasury secretary (Jack Lew?) should take the next step and ask Romney to help close the budget deal the country needs.¶ In foreign policy, Obama will need to be equally strategic. What does he want to accomplish? My list: a deal with Iran that verifiably limits its nuclear program and avoids war; a deal in Afghanistan that averts civil war when U.S. forces leave in 2014; a deal for a political transition in Syria (a shorthand Syria summary would be to organize the opposition so that it’s strong enough to bargain, then help win a Nobel Peace Prize for Vladimir Putin). And, finally, a deal to create a Palestinian state so that Israel has secure borders and the Arab world can get on with the process of becoming modern and democratic.¶ All these primary foreign policy goals are “deals,” and it follows that the president needs a dealmaker as secretary of state. Who could do that, after Hillary Clinton leaves, probably at the end of January? John Kerry is an experienced man who thinks outside the box and is willing to take risks. Even if the president is said to have found him somewhat windy as the stand-in for Romney during debate preparation, Kerry has shown over the past four years a willingness to negotiate with adversaries, in secret, to achieve results.¶ A longtime Democratic adviser argues that Obama needs the “Bolten Plan,” as in Josh Bolten, the White House chief of staff who mobilized the machinery of government to get it moving in the same direction in George W. Bush’s second term. This will never be a happy model for Democrats, but it captures an important point: A successful second term is less about ideology than about results.¶ Think big. Take risks. Get it done. Maybe someone should slip a note in Obama’s desk drawer that asks: What would Lyndon Johnson have done to make it happen?

#### Plan popular-

**Congress requested the plan**

Matthews 2010 (William Matthews, February 15, 2010, “The Nuclear Option,” Defense News, http://www.defensenews.com/article/20100215/DEFFEAT01/2150310/The-Nuclear-Option)

The electric grids that the United States depends on for computers, communications gear and command centers are increasingly unreliable. They're strained by growing civilian demand, enfeebled by aging equipment and vulnerable to cyber and other attacks.¶ So the military is considering generating its own electricity, possibly with nuclear energy.¶ The push comes partially from the U.S. Congress, which last fall ordered the Defense Department to study the feasibility of building nuclear power plants on military installations. A report is due to lawmakers June 1.

### Guar DA

#### Moving toward substitutes now

Reddall 2012 (Braden Reddall, August 13, 2012, “Frackers in frantic search for guar bean substitutes,” Reuters, http://www.reuters.com/article/2012/08/13/us-oilservices-guarsubstitutes-idUSBRE87C0DP20120813)

Oil and gas companies are racing to find a new substitute for India's guar bean, a key ingredient used in hydraulic fracturing, the drilling technology that has revolutionized the energy industry by opening up vast new fields for production.¶ Hydraulic fracturing, or "fracking," first created a boom in natural gas drilling over the past decade that brought huge new supplies of the fuel to market, and that technology is now being used to unlock giant oil fields that were long considered too difficult to tap.¶ The extract from guar, a bean predominantly grown in India, produces a gel in fracking fluid that delivers "proppant" to hold open cracks in shale rock when it is fracked.¶ Within a day of each other in June, two Texas lawyers filed trademark applications for "AquaPerm" and "PermStim." What may at first sound like hair care products are actually substitutes for guar, a crucial ingredient in the fluid that is injected into fracked wells to extract oil and gas.

#### Multiple alt causes to low guar demand

WSM 2012 (Well Servicing Magazine, Sept/Oct 2012, http://wellservicingmagazine.com/node/897)

With high prices and short supplies, oil and gas companies are scrambling to find suitable alternatives to guar gum. Other industries that use guar, including paper, food processing and textiles, have already found suitable replacements for guar in response to the shortage. For oil companies, any cheaper alternatives to guar gum must have enough viscosity to produce a gel-like substance that, when mixed with sand and water, forces oil and gas out of its pockets when the drilling fluids are pumped underground under high pressure to fracture the host rocks.

#### India econ resilient

Tharoor 2009 (Shashi Tharoor, was Indian Minister of State for External Affairs and UN Under-Secretary-General, and is currently a member of India's parliament, March 13, 2009, “Resilient India,” Project Syndicate, http://www.project-syndicate.org/commentary/resilient-india)

With the world’s most developed economies reeling under the incubus of what is already being called the Great Recession, India at the beginning of the year took stock and issued a revised estimate for GDP growth in the 2008-2009 fiscal year. Its projection came out at a healthy 7.1%.¶ It is striking that even amid all the doom and gloom assailing world markets, there is no fear of a recession in India. Even the pessimists are speaking only of lower positive growth.¶ This is quite a turnabout for an economy that for years had crept along at what was derisively called the “Hindu rate of growth” – around 3% – while much of the rest of Asia shot ahead. For more than four decades after Independence in 1947, India suffered from the economics of nationalism, which equated political independence with economic self-sufficiency and so relegated the country to bureaucratic protectionism and stagnation.¶ But, since 1991, India has liberalized its economy and profited from globalization. Its tech-savvy information-technology pioneers, software engineers, and call-center operators have made the country an economic success story.¶ India has multiplied its per capita income levels many times over since 1950, and has done so far faster in recent years than Britain or the United States did during and after the industrial revolution.¶ In the last 15 years, India has pulled more people out of poverty than in the previous 45 – 10 million people a year on average in the last decade. The country has visibly prospered, and, despite population growth, per capita income has grown faster than ever before. The current financial crisis is unlikely to change the basic success story.¶ India’s financial system suffers from few of the creative and risky derivative instruments that caused such problems in the West. A tradition of conservative banking regulation and a tough-minded Governor of the Reserve Bank (India’s central bank) ensured that Indian banks did not acquire the toxic debts flowing from sub-prime loans, credit-default swaps, and over-inflated housing prices that assailed Western banks.¶ The negative effect of the US financial setbacks on Indian stock markets, therefore, made little sense, since they bore no relation to the real value of Indian companies. Instead, the decline in Indian stocks reflected foreign investors’ liquidity problems: they withdrew from holdings in India because they needed their money back home, not because it wasn’t growing for them.¶ Of course, economies that depend on foreign investment are bound to be hurt nowadays, because those investors have less capital to invest. But there are two reasons to be confident that India will weather the storm.¶ First, India has considerable resources of its own to put towards growth, and has proven itself skilled at the art of channelling domestic savings into productive investments. Second, once things have begun to stabilize in the West, investors looking for a place to put their money will look anew at India, owing to the opportunities for growth and the sheer size of the market.¶ That said, India has relied much less on foreign direct investment than China, and has even exported FDI to OECD countries. Despite being seen as a poster child for the benefits of globalization, India is not unduly dependent on global flows of trade and capital. India relies on external trade for less than 20% of its GDP; its large and robust internal market accounts for the rest.¶ India’s private sector is efficient and entrepreneurial, and its capital and management skills have proven able to control and manage assets in the sophisticated financial markets of the developed West. India clearly has the basic systems it needs to operate a twenty-first-century economy in an open and globalizing world.

#### Deterrence prevents India/Pakistan conflict

Tepperman 2009 (Jonathan Tepperman, Deputy Editor at Newsweek Magazine and former Deputy Managing Editor of Foreign Affairs, September 14, 2009, Newsweek, September 14, 2009, Lexis Academic)

The record since then shows the same pattern repeating: nuclear-armed enemies slide toward war, then pull back, always for the same reasons. The best recent example is India and Pakistan, which fought three bloody wars after independence before acquiring their own nukes in 1998. Getting their hands on weapons of mass destruction didn't do anything to lessen their animosity. But it did dramatically mellow their behavior. Since acquiring atomic weapons, the two sides have never fought another war, despite severe provocations (like Pakistani-based terrorist attacks on India in 2001 and 2008). They have skirmished once. But during that flare-up, in Kashmir in 1999, both countries were careful to keep the fighting limited and to avoid threatening the other's vital interests. Sumit Ganguly, an Indiana University professor and coauthor of the forthcoming India, Pakistan, and the Bomb, has found that on both sides, officials' thinking was strikingly similar to that of the Russians and Americans in 1962. The prospect of war brought Delhi and Islamabad face to face with a nuclear holocaust, and leaders in each country did what they had to do to avoid it.

## \*\*\*1AR\*\*\*

### A2 No Exports

#### Still spills over

Roberts 2004 (Paul Roberts, energy expert and writer for Harpers, “The End of Oil,”)

Politically, a new U.S. energy policy would send a powerful message to the rest of the players in the global energy economy. Just as a carbon tax would signal the markets that a new competition had begun, so a progressive, aggressive American energy policy would give a warning to international businesses, many of which now regard the United States as a lucrative dumping ground for older high-carbon technology. It would signal energy producers — companies and states — that they would need to start making investments for a new energy business, with differing demands and product requirements. Above all, a progressive energy policy would not only show trade partners in Japan and Europe that the United States is serious about climate but would give the United States the leverage it needs to force much-needed changes in the Kyoto treaty. With a carbon program and a serious commitment to improve efficiency and develop clean-energy technologies, says one U.S. climate expert, “the United States could really shape a global climate policy. We could basically say to Europe, ‘Here is an American answer to climate that is far better than Kyoto. Here are the practical steps we’re going to take to reduce emissions, far more effectively than your cockamamie Kyoto protocol.”’ Similarly, the United States would finally have the moral credibility to win promises of cooperation from India and China. As James MacKenzie, the former White House energy analyst who now works on climate issues for the Washington-based World Resources Institute, told me, Chinese climate researchers and policymakers know precisely what China must do to begin to deal with emissions but have thus far been able to use U.S. intransigence as an excuse for their own inaction. “Whenever you bring up the question of what the Chinese should be doing about climate, they just smile. They ask, ‘Why should we in China listen to the United States and take all these steps to protect the climate, when the United States won’t take the same steps itself? With a nudge from the United States, argues Chris Flavin, the renewables optimist at World Watch Institute, China could move away from its “destiny” as a dirty coal energy economy. Indeed, given China’s urgent air quality problems, a growing middle class that will demand environmental quality, and a strategic desire to become a high- tech economy, Flavin says, Beijing is essentially already under great domestic pressure to look beyond coal and is already turning toward alternatives — gas, which is in short supply, but also renewables, especially wind, a resource China has in abundance. Once China’s growing expertise in technology and manufacturing and its cheap labor costs are factored in, Flavin says, it has the basis for a large-scale wind industry — something the right push from the West could set in motion. “As China moves forward,” asks Flavin, “is it really likely to do something that no other country has ever done: run a modern, hightech, postindustrial economy on a hundred-year-old energy source?” Flavin, for one, thinks not. During a visit two years ago to lobby reluctant Chinese government officials to invest in renewable energy, Flavin was pleasantly surprised to find in his hotel parking lot a truck owned by NEG Micon, a Danish company that is one of the world’s largest wind turbine manufacturers. Flavin was elated: “At least one leading renewable-energy company, located halfway around the world, is confident enough of its business prospects in China that it now has its own vehicles in Beijing.”

### Accidents DA

**SMR accidents are contained- If they win they’re inevitable then it’s try or die**

**Wheeler 2010** (Jonathan Wheeler, engineer and nuclear consultant, November 21, 2010, “Small Modular Reactors May Offer Significant Safety & Security Enhancements,” This Week in Nuclear, http://thisweekinnuclear.com/?p=1193)

Small Modular Reactors (SMRs) are getting a lot of attention in the nuclear industry because they offer great potential for lower initial capital investment, scalability, and they come in sizes more appropriate for locations unable to accommodate larger 1000+ MW units. However, there are some big potential advantages that have not been widely discussed that could make SMRs a **game-changer**. These advantages are the potential for enhanced safety and security.¶ Let me explain.¶ The goal of nuclear plant emergency planning is to protect people from exposure to radiation they might receive during a reactor accident. That radiation exposure would come (mostly) from radioactive gas released into the air from a damaged nuclear plant. There are three physical barriers in all modern nuclear plants that keep radioactive gas inside the reactor: the metal cladding that encases the ceramic uranium fuel pellets, the thick steel reactor vessel and piping and that contains the reactor and coolant, and the concrete and steel containment building that encloses the reactor. For people to be in danger from a reactor accident first the fuel must overheat to create the radioactive gas. Then all three barriers (clad, system piping, and containment building) must be breached to provide a pathway for the radioactive gas to reach the atmosphere. Finally, there has to be a pressure difference to push the gas out of the plant and into the atmosphere. In water cooled reactors like most in use today, the hot water turns to steam and steam pressure builds up inside the containment. If the containment is breached this pressure pushes the radioactive gas through the hole to the air outside.¶ With this in mind, **s**mall **m**odular **r**eactor**s** offer several big advantages that make them safer:¶ They are smaller, so the amount of radioactivity contained in each reactor is less. So much less in fact, that even if the worse case reactor accident occurs, the amount of radioactive material released would not pose a risk to the public. In nuclear lingo we say SMRs have a smaller “source term.” This source term is so small we can design the plant and emergency systems to virtually eliminate the need for emergency actions beyond the physical site boundaries. Then, by controlling access to the site boundary, we can eliminate the need for off-site protective actions (like sheltering or evacuations).¶ These **sm**aller **r**eactor**s** contain less nuclear fuel. This smaller amount of fuel (with passive cooling I’ll mention in a minute) slows down the progression of reactor accidents. This slower progression gives operators more time to take action to keep the reactor cool. Where operators in large reactors have minutes or hours to react to events, operators of SMRs may have hours or even days. This means the chance of a reactor damaging accident is very, very remote.¶ Even better, most SMRs are small enough that they cannot over heat and melt down. They get all the cooling they need from air circulating around the reactor. This is a big deal because **if SMRs can’t melt down, then they can’t release radioactive gas that would pose a risk to the public.** Again, this means the need for external emergency actions is virtually eliminated.¶ Also, some SMRs are not water cooled; they use gas, liquid salt, or liquid metal coolants that operate at low pressures. This lower operating pressure means that if radioactive gases build up inside the containment building there is less pressure to push the gas out and into the air. If there is no pressure to push radioactive gas into the environment and all of it stays inside the plant, then it poses no risk to the public.

**Even big accidents have a low death count- Systemic health effects overblown- Nuke war outweighs**

**Muller 2012** (Richard Muller, Professor in the Department of Physics at the University of California at Berkeley, Faculty Senior Scientist at the Lawrence Berkeley Laboratory, Institute for Nuclear and Particle Astrophysics, August 18, 2012, “The Panic Over Fukushima,” Wall Street Journal, http://online.wsj.com/article/SB10000872396390444772404577589270444059332.html)

Denver has particularly high natural radioactivity. It comes primarily from radioactive radon gas, emitted from tiny concentrations of uranium found in local granite. If you live there, you get, on average, an extra dose of **.3 rem** of radiation per year (on top of the .62 rem that the average American absorbs annually from various sources). A rem is the unit of measure used to gauge radiation damage to human tissue.¶ The **I**nternational **C**ommission on **R**adiological Protection recommends evacuation of a locality whenever the excess radiation dose exceeds .1 rem per year. But that's one-third of what I call the "Denver dose." Applied strictly, the ICRP standard would seem to require the immediate evacuation of Denver.¶ It is worth noting that, despite its high radiation levels, Denver generally has a lower cancer rate than the rest of the United States. Some scientists interpret this as evidence that low levels of radiation induce cancer resistance; I think it is more likely that lifestyle differences account for the disparity.¶ Now consider the most famous victim of the March 2011 tsunami in Japan: the Fukushima Daiichi nuclear power plant. Two workers at the reactor were killed by the tsunami, which is believed to have been 50 feet high at the site.¶ But over the following weeks and months, the fear grew that the ultimate victims of this damaged nuke would number in the thousands or tens of thousands. The "hot spots" in Japan that frightened many people showed radiation at the level of **.1 rem**, a number quite small compared with the average excess dose that people happily live with in Denver.¶ What explains the disparity? Why this enormous difference in what is considered an acceptable level of exposure to radiation?¶ In hindsight, it is hard to resist the conclusion that the policies enacted in the wake of the disaster in Japan—particularly the long-term evacuation of large areas and the virtual termination of the Japanese nuclear power industry—were expressions of panic. I would go further and suggest that these well-intended measures did far more harm than good, not least in limiting the prospects of a source of energy that is safe, abundant and (as compared with its rivals) relatively benign for the environmental health of our planet.¶ If you are exposed to a dose of 100 rem or more, you will get sick right away from radiation illness. You know what that's like from people who have had radiation therapy: nausea, loss of hair, a general feeling of weakness. In the Fukushima accident, nobody got a dose this big; workers were restricted in their hours of exposure to try to make sure that none received a dose greater than 25 rem (although some exceeded this level). At a larger dose—250 to 350 rem—the symptoms become life-threatening. Essential enzymes are damaged, and your chance of dying (if untreated) is 50%.¶ Nevertheless, even a small number of rem can trigger an eventual cancer. A dose of 25 rem causes no radiation illness, but it gives you a 1% chance of getting cancer—in addition to the 20% chance you already have from "natural" causes. For larger doses, the danger is proportional to the dose, so a 50-rem dose gives you a 2% chance of getting cancer; 75 rem ups that to 3%. The cancer effects of these doses, from 25 to 75 rem, are well established by studies of the excess cancers caused by the atomic bombs at Hiroshima and Nagasaki in 1945. (A recent study of butterflies near Fukushima confirms the well-known fact that radiation leads to mutations in insects and other simple life-forms. Research on those exposed to the atomic bombs shows, however, no similar mutations in higher species such as humans.)¶ Here's another way to calculate the danger of radiation: If 25 rem gives you a 1% chance of getting cancer, then a dose of 2,500 rem (25 rem times 100) implies that you will get cancer (a 100% chance). We can call this a cancer dose. A dose that high would kill you from radiation illness, but if spread out over 1,000 people, so that everyone received 2.5 rem on average, the 2,500 rem would still induce just one extra cancer. That is, even if shared, the total number of damaged cells would be the same. Rem measures radiation damage, and if there is one cancer's worth of damage, it doesn't matter how many people share that risk.¶ In short, if you want to know how many excess cancers there will be, multiply the population by the average dose per person and then divide by 2,500 (the cancer dose described above).¶ In Fukushima, the area exposed to the **greatest radiation**—a swath of land some 10 miles wide and 35 miles long—had an estimated first-year dose of more than 2 rem. Some locations recorded doses as high as 22 rem (total exposure before evacuation). Afterward, the levels of radiation dropped quickly; the largest component came from iodine, and its level dropped by **50% every eight days**.¶ How many cancers will such a dose trigger? To calculate an answer, assume that the entire population of that 2-rem-plus region, about 22,000 people, received the highest dose: 22 rem. (This obviously overestimates the danger.) The number of excess cancers expected is the dose (22 rem) multiplied by the population (22,000), divided by 2,500. This equals 194 excess cancers.¶ Let's compare that to the number of normal cancers in the same group. Even without the accident, the cancer rate is about 20% of the population, or 4,400 cancers. Can the additional 194 be detected? Yes, because many of them will be thyroid cancer, which is normally rare (but treatable). Other kinds of cancer will probably not be observable, because of the natural statistical variation of cancers.¶ Sadly, many of those 4,400 who die from "normal" cancer will die believing that their illness was caused by the nuclear reactor. That is human nature; we search for reasons behind our tragedies. Of the roughly 100,000 survivors of the Hiroshima and Nagasaki blasts, we can estimate that about 20,000 have died or will die from cancer. But in only about 800 of these cases was the cancer caused by the bombs. We know that by looking at similar cities. Hiroshima and Nagasaki have experienced an increase in cancer among those exposed, but it is only a small increment of the natural rate. Yet far more than the estimated 800 victims attribute their cancers to the bomb.¶ What about the outlying regions of Fukushima? The next radiation zone around the reactor had a population of about 40,000 and an average dose of 1.5 rem. This yields a total dose of 60,000 total rem (40,000 times 1.5), making the number of expected extra cancers 24 (60,000 divided by 2,500).¶ These numbers are tragic, but they are smaller than the impression that people got from much of the news coverage in the wake of the disaster. Thanks to the early evacuation, the total number of deaths from the radioactive release in the Fukushima region will almost certainly be less than my figures above. A more reasonable estimate, using average exposures rather than the maximum ones, is 100 extra cancer deaths. That is bad, to be sure, but that number is minuscule compared with the 15,000 deaths caused by the tsunami.¶ What about more distant regions? Even a tiny bit of radiation averaged over a huge population could conceivably cause cancer. But we are immersed in "natural" radioactivity from cosmic rays (radiation coming from space) and from the earth (uranium, thorium and naturally radioactive potassium in the ground). These natural levels are typically 0.3 rem per year. We also are exposed to an additional 0.3 rem if we include average medical exposures from X-rays and other medical treatments. Some areas, like Denver, have even higher natural levels.¶ The most thoughtful high-number estimate of deaths that will be caused by the Fukushima disaster comes from Richard Garwin, a renowned nuclear expert. He has written that the best estimate for the number of deaths is about 1,500—well above my estimate but still only 10% of the immediate tsunami deaths.¶ Dr. Garwin uses the same numbers that I use, but he extrapolates forward in time 70 years to the continuing damage that residual radiation could cause, assuming that the radiation cannot be covered, cleaned or washed away, and that the population of Fukushima doesn't change. Moreover, he ignores the sort of argument that I have made about the Denver dose and includes in the calculation the numbers of deaths expected from tiny doses, assuming that even small exposures are proportionately dangerous. (This is an assumption that has also been adopted by the U.S. National Academy of Sciences.)¶ I don't dispute Dr. Garwin's number, but I believe it has to be understood in context. If you apply the same approach to Denver, you have to take into account the fact that the Denver dose is delivered every year. Over 70 years, it sums to 0.3 rem times 70, or 21 rem per person. If you multiply that by 600,000 people (the current population of Denver) and divide by the cancer dose of 2,500 rem, you get the expected cancer excess in Denver. That figure is 5,000, over three times higher than Dr. Garwin's number for Fukushima.¶ I am uncomfortable with these large numbers of predicted deaths. They are based on a theory that assumes proportionality in the way that radiation increases the likelihood of cancer—a theory that has never been tested, will not be tested in the foreseeable future, and which is known to fail for leukemia.¶ I can't be sure that the theory is wrong, but I consider these relatively large numbers for Denver and Fukushima to be misleading. Remember that Denver has a lower cancer rate than the rest of the U.S., not a higher one. There is a strong argument for ignoring radiation dangers below the level of the Denver dose. In doing so, we would be ignoring risks that are unobservable and which we routinely ignore (and properly so) in other circumstances.¶ Even though Dr. Garwin predicts 1,500 eventual deaths from the nuclear accident in Japan, he says the figure is small enough that the long-term evacuation of Fukushima itself would probably cause more harm than good. Evacuation causes disruption to lives that is hard to quantify but very real.¶ Some people believe that the proportionality assumption about radiation should be made because it gives a "conservative" estimate of possible risks. But beware of that adjective. What is conservative depends on your agenda. Is a conservative estimate one that likely overestimates deaths? If so, then it is likely to lead to more disruption through evacuation and panic. Is that truly conservative?¶ Another way to overestimate the deaths is to use a much higher value for the induced cancer risk than has been determined by the best scientific studies. I think the most useful estimate is the one I've given: From the radiation so far, perhaps 100 induced cancers. Residents of Fukushima who are concerned that residual radiation will cause additional risk can avoid that by leaving, but they need to recognize that any additional cancers will be statistically unobservable, hidden well below those of natural cancer and the other dangers of modern life.¶ The tsunami that hit Japan in March 2011 was horrendous. Over 15,000 people were killed by the giant wave itself. The economic consequences of the reactor destruction were massive. The human consequences, in terms of death and evacuation, were also large. But the radiation deaths will likely be a number so small, compared with the tsunami deaths, that they should not be a central consideration in policy decisions.¶ The reactor at Fukushima wasn't designed to withstand a 9.0 earthquake or a 50-foot tsunami. Surrounding land was contaminated, and it will take years to recover. But it is remarkable how small the nuclear damage is compared with that of the earthquake and tsunami. The backup systems of the nuclear reactors in Japan (and in the U.S.) should be bolstered to make sure this never happens again. We should always learn from tragedy. But should the Fukushima accident be used as a reason for putting an end to nuclear power?¶ Nothing can be made absolutely safe. Must we design nuclear reactors to withstand everything imaginable? What about an asteroid or comet impact? Or a nuclear war? No, of course not; the damage from the asteroid or the war would **far exceed** the tiny added damage from the radioactivity released by a damaged nuclear power plant.

### India Econ Resilient

#### Indian economy resilient

India Times 2012 (May 27, 2012, “Indian economy resilient; global efforts needed for growth: Pranab Mukherjee,” http://articles.economictimes.indiatimes.com/2012-05-27/news/31878009\_1\_economies-global-recovery-global-crisis)

Amid persisting global uncertainties, Finance Minister Pranab Mukerjee today said India's domestic demand, high savings rate and regulatory mechanisms make it a resilient economy.¶ He, however, emphasised upon the need for increased coordination among countries to realise collective gains in the face of global economic woes.¶ Mukherjee further said that performance of Asian economies in short to medium-term is crucial not only to keep the engine of global growth running, but also to hasten global recovery.¶ In the long term, a key advantage that Asian economies, prominently India and China, possess is high rates of savings and investment, he said Inaugurating a seminar on '21st century as the Asian Century - Role of India and China', organised by Manipal University.¶ He added that India's resilience results from the fact that the bulk of country's GDP is driven by domestic demand.¶ Asian economies in general have evolved to be attractive destinations for foreign direct investment, which is aiding innovation in their economies, Mukherjee said.

### Indo-Pak

#### Neither will strike first

Vas 2007 Eric Vas (retired Lieutenant general) 2007 “Can India Avoid a Military conflict with Pakistan?” http://inpad.org/res45.html

Many urge India to stand down in order to decrease the tension between the two countries. As long as freedom remains a distant dream in Pakistan and its official media continues to preach hatred against India, our security forces must continue to remain alert. India's responses to Pakistan's current moves on the five fronts are on the right lines. India has declared that it will not be the first to use nuclear weapons, but that it is prepared to give a befitting response to any Pakistani nuclear threat. India has stressed that it is prepared to discuss any issue, including J&K with Pakistan, but only when it stops its support of cross border terrorism. Meanwhile our security forces continue to intercept intruders and deal with armed terrorists within the State, while the government attempts to improve the administration and encourage dissidents to join the political system. J&K State elections are due in September. These will be fair and open elections, which may be witnessed by foreign observers in their individual capacities. Dissidents have been invited to take part in the elections to prove that they have public support. However, official Pakistani media continues its barrage of virulent anti-India propaganda. There are no visible signs that steps are being taken to stop and undo the damage being done by these tactics. Thus, to answer the question posed at the head of this article, while the Indo-Pak cold war continues, the military front is unlikely to escalate into a nuclear exchange or a full-fledged military conflict. It would be imprudent for Pakistan to do this, and it would not be cost effective for India to initiate an all out war. If cross border infiltration and terrorist attacks against innocent citizens continue the Government may order the armed forces to take appropriate action against terrorist bases within POK. The danger of an Indian raid across the LOC against a terrorist camp escalating into a major battle cannot be overruled.

#### Interdependence

Mamoon and Murshed 2010 (Dawood Mamoon, and Mansoob Murshed, Economics of Governance, 2010, Vol. 11 Issue 2, p145-167, 23p, Political Science Complete)

Conflict between India and Pakistan, which spans over most of last 60 years since their independence from British rule, has significantly hampered bilateral trade between the two nations. However, we also find that the converse is also true; more trade between India and Pakistan decreases conflict and any measures to improve the bilateral trade share is a considerable confidence building measure. A regional trade agreement along the lines of a South Asian Free Trade Agreement (SAFTA) has a high potential for the improvement of relations between India and Pakistan on a long-term basis. Pakistan and India’s general degree of openness to world (and not bilateral) trade is, however, the dominant economic factor in conflict resolution. It would be interesting to see whether India and Pakistan will be able sustain their recent impressive growth, and consequently continue with peace talks confirming the liberal peace arguments. In an ideal world increased dyadic democracy between pairs of nation should reduce inter-state hostility according to the democratic peace hypothesis; this relationship in our case is present but weak. Peace initiatives, it should be remembered, are not the sole prerogative of democracies; they can also be made by countries which are less than perfectly democratic out of economic self- interest. Pakistan, at present, is making unilateral concessions on many disputed issues with India. Our findings, however, veer towards the liberal peace hypothesis. Economic progress and poverty reduction combined with greater openness to international trade in general are more significant drivers of peace between nations like India and Pakistan, rather than the independent contribution of a common democratic polity. So it is more economic interdependence rather than politics which is likely to contribute towards peaceful relations between India and Pakistan in the near future. In many ways, our results for an individual dyad echo Polcahek’s (1997) work across several dyads, where it is argued that democracies cooperate not because they have common political systems, but because their economies are intricately and intensively interdependent. As pointed by Hegre (2000), it is at these higher stages of economic development that the contribution of common democratic values to peace becomes more salient. Meaningful democracy cannot truly function where poverty is acute and endemic, even in ostensible democracies such as India. In the final analysis, it may be that democracy itself is an endogenous by-product of increased general prosperity, as suggested nearly half a century ago by Lipset (1960). Then and only then, will nations be able to fully appreciate Angell-Lanes’ (1910) arguments regarding the futility of inter-state conflict.

#### Too expensive

Chicago Tribune December 2008 “Pakistan-India war is one neither can afford” http://articles.chicagotribune.com/2008-12-06/news/0812050415\_1\_india-and-pakistan-ved-marwah-new-delhi

Hostility between India and Pakistan is at its worst in years, but tensions stemming from last week's terror attacks in Mumbai are unlikely to bloom into full-blown war between the nuclear-armed rivals -- at least for now, according to analysts on both sides of the border. Indian authorities say that the gunmen whose rampage killed 171 people in Mumbai were trained and guided by the Pakistan-based militant group Lashkar-e-Taiba. New Delhi has demanded that Islamabad turn over leaders of Lashkar and has refused to rule out military action, warning that it had the right to protect its territory "with all the means at our disposal." But a combination of new political and economic realities, U.S. pressure and perhaps some lessons learned in the past have inhibited a rush to open conflict. Any war would be financially devastating, especially at a time of worldwide recession. India's economic juggernaut has lost some steam. And even more dire, Pakistan has had to appeal to the International Monetary Fund to keep its economy afloat. Foreign investment in both countries, which fled during the 2001-02 standoff, would vanish once again in the event of an armed clash. "No one can afford it," said Abhay Matkar, a former Indian army major in Mumbai. "Both countries are not ready for war, and it will not happen." Tammy Haq, a popular talk show host in Pakistan. "We've had decades of propaganda about how strong we are, but we can't win a war," Haq said. "We have an army that's fat, not a well-oiled fighting machine." Another factor leading to the relatively restrained response may be the lessons learned from a somewhat similar attack in 2001, an incident that some say almost led both countries to do the unthinkable and press the nuclear button.

#### Neither will be overly aggressive—Conflict will be terminated quickly—Both will be able to claim victory

Ahmed 2009—Ali Ahmed, Research Fellow at the Institute for Defence Studies and Analyses, October 27, 2009, “India-Pakistan Conflict Outcome Probability,” http://www.idsa.in/idsastrategiccomments/IndiaPakistanConflictOutcomeProbability\_AAhmed\_271009

In a situation involving limited Indian war aims, Pakistan would respond with its defensive formations and use its strategic reserves in an offensive mode wherever possible.7 A Pakistani offensive, though in keeping with Pakistan’s doctrine of ‘offensive defence’8, may not eventuate in the event of an early war. Following the imposition of costs through air action, India expects to see hostilities terminated through international pressure. Air operations and pivot corps operations by India would reduce the windows available for launching Pakistani offensives inside Indian territory, which may prove very costly for Pakistan. Besides, there would be little scope for launching forces into Indian territory in the face of India’s broad front attacks. As demonstrated at Kargil, India would wrap up any gains it may make eventually. Pakistan may employ only a small proportion of its forces in defensive operations, seeking instead to preserve most of its forces for post-conflict internal political purposes, allowing its Army to stay at the apex of Pakistan’s political pyramid.9 In any post-conflict scenario military losses would compromise the Pakistan Army’s grip on power. Termination of India’s limited offensives would enable Pakistan to declare victory of sorts by claiming that it held up India’s conventional might with only a partial use of its forces. In such a circumstance, both states would be satisfied in having met respective conflict aims. India would have inflicted punishment on Pakistan and Pakistan would claim to have withstood it. Such a juncture of positive perceptions would be useful to begin strategic engagement for peace making and long term conflict resolution.10 The foregoing indicates that Pakistan’s conflict strategy is likely to comprise the following elements: war avoidance; conventional defence; counter offensive with strategic reserves;11 a resort to asymmetric war; and preservation of military assets. For Pakistan the nuclear dimension of the conflict would include a high nuclear threshold;12 nuclear signaling for deterrence; catalyzing external pressures; and, preservation of nuclear assets from attrition. Pakistan has mooted the ‘Samson Option’ only as a last resort.13 That deterrence would hold is the understandable refrain.14 Pakistan has always tried to maintain adequate conventional capability to fight India.15 It is aware it risks national suicide if it uses nuclear weapons first.16 The Pakistan Army is aware that Pakistan would be held accountable by the international community for breaching the ‘nuclear taboo’.17 Since the least provocative nuclear use option is use on its own territory, an accounting post-conflict would restrain the finger on the proverbial nuclear button.18 In military terms there are no realistic operational and tactical gains for Pakistan in resorting to nuclear first use that India cannot counter through retaliation.