### AT: T – Reduce

#### We meet – We eliminate NRC regulations to a level that makes SMR licensing cost effective

#### C/I – Reduce means to lower to an inferior condition, not eliminate

CJS, Corpus Juris Secundum - legal encyclopedia, 52

(Vol. 76, p. 178)

It has been said that in its ordinary signification “reduce” does not mean to cancel, destroy, or bring to naught, but to diminish, lower, or bring to an inferior state; and this is variously defined as meaning to bring to a former state; to bring to a certain condition; to bring to an inferior state with respect to rank, size, quality, value, or the like; to diminish; to lower; to degrade or impair; to replace; to restore.

#### Restriction means policy limitation – including regulation

PLD 12  
(People’s Law Dictionary – site last updated 2012, <http://dictionary.law.com/Default.aspx?selected=1835-http://dictionary.law.com/Default.aspx?selected=1835>)

restriction n. any limitation on activity, by statute, regulation or contract provision. In multi-unit real estate developments, condominium and cooperative housing projects managed by homeowners’ associations or similar organizations, such organizations are usually required by state law to impose restrictions on use. Thus, the restrictions are part of the "covenants, conditions and restrictions" intended to enhance the use of common facilities and property which are recorded and incorporated into the title of each owner.

#### They massively overlimit – there are no nuclear energy restrictions that exist that prohibit energy production – there are regulations in play that functionally prohibit production because some nuclear producers don’t meet it – there are no topical nuclear restrictions affirmatives under their aff

#### Aff Flexibility – Eliminating nuclear restrictions kills aff innovation – all of the best affs this year are nuclear affs, forcing us to stick to only nuclear incentives destroys aff ground

#### We are a reduction in the main barrier to SMR commercialization

Hopf, Senior Nuclear Engineer, ’11

[Jim Hopf, Senior Nuclear Engineer, Member of the American Nuclear Society’s Public Information Committee, “[Roadblock in Congress for SMR Development,”](file:///C:/Users/Abhik/AppData/Roaming/Microsoft/Word/Roadblock%20in%20Congress%20for%20SMR%20Development,) October 25th 2011, http://ansnuclearcafe.org/2011/10/25/congress-smr/]

As many have observed, the main barrier to the deployment of SMRs may not be a lack of government financial or R&D support, but instead the enormous amount of time and money required to get new reactor designs licensed by the NRC. Reactor licensing processes have been taking many years and costing more than a $100 million dollars. Even approving an exact copy of an already-licensed reactor design (for a new site) is projected to take more than two years. Even SMRs that deploy conventional light-water technology (such as NuScale or mPower) can expect a long (~ 5 year) licensing process (starting in late 2012 or 2013). For non-conventional technologies like Hyperion, who knows how long it will take? The NRC has stated that non-conventional SMRs like Hyperion are not on its priority list right now, and that it will only consider such an application when a serious customer has been found (thus setting up a chicken-egg problem). Other issues that may hold back SMRs include security and emergency planning/evacuation requirements, and per-reactor NRC fees. If the NRC is not willing to consider the SMRs’ lower potential radioactivity release, as well as the lower probability of such release, in setting these requirements, as well as scaling fees with reactor capacity, it may destroy SMRs’ economic viability. Perhaps a more effective way for the government to support SMRs is for it to do something to reduce the licensing-related barriers discussed above, as opposed to outright financial support of SMR development. Possible options include making sure the NRC has sufficient resources to handle the entire volume of incoming license applications, somehow limiting the scope of review, or requiring the NRC to complete reviews within some fixed, reasonable time period.

#### Default to Reasonability – competing interpretations causes a race to the bottom – over-incentivizes going for T to arbitrarily limit out the aff

# Prolif

### AT: Prolif Slow (Middle East)

#### Our advantage is specific to Middle East acquisition to SMR – they’re rant about Iran and NK doesn’t apply

#### ME Prolif will be rapid – Multiple countries (Saudi Arabia, UAE, Jordan, Egypt) pursuing nuclear weapons through nuclear energy acquisition now – trying to counterbalance Iran

#### [ ] Will be unstable – pursuit of weapons by multiple different powers creates strategic uncertainty that causes normal deterrence patterns to fail – Russel & Krepenivich

### AT: Makhijani/Economies Of Scale

#### SMR’s are cheap and competitive – They are much smaller and can be built faster so they have a lower precompletion risk – inevestors are more willing to put money in – rosner & Goldberg – the only thing that is preventing it

#### SMR cost saving measures outweigh economies of scale

Moniz, Former Energy Undersecretary, ’11

[Ernest Moniz, Cecil and Ida Green Distinguished Professor of Physics and Engineering Systems and Director of the Energy Initiative, MIT, Former Undersecretary of the U.S. Department of Energy, “Why We Still Need Nuclear Power,” Foreign Affairs; Nov/Dec2011, Vol. 90 Issue 6, p83-94]

THE SAFETY and capital cost challenges involved with traditional nuclear power plants may be considerable, but a new class of reactors in the development stage holds promise for addressing them. These reactors, called small modular reactors (SMRs), produce anywhere from ten to 300 megawatts, rather than the 1,000 megawatts produced by a typical reactor. An entire reactor, or at least most of it, can be built in a factory and shipped to a site for assembly, where several reactors can be installed together to compose a larger nuclear power station. SMRs have attractive safety features, too. Their design often incorporates natural cooling features that can continue to function in the absence of external power, and the underground placement of the reactors and the spent-fuel storage pools is more secure. Since SMRs are smaller than conventional nuclear plants, the construction costs for individual projects are more manageable, and thus the financing terms may be more favorable. And because they are factory-assembled, the on-site construction time is shorter. The utility company can build up its nuclear power capacity step by step, adding additional reactors as needed, which means that it can generate revenue from electricity sales sooner. This helps not only the plant owner but also customers, who are increasingly being asked to pay higher rates today to fund tomorrow's plants. The assembly-line-like production of SMRs should lower their cost, too. Rather than chasing elusive economies of scale by building larger projects, SMR vendors can take advantage of the economies of manufacturing: a skilled permanent work force, quality control, and continuous improvement in reactors' design and manufacturing. Even though the intrinsic price per megawatt for SMRs may be higher than that for a large-scale reactor, the final cost per megawatt might be lower thanks to more favorable financing terms and shorter construction times--a proposition that will have to be tested. The feasibility of SMRs needs to be demonstrated, and the government will almost certainly need to share some of the risk to get this done. No SMR design has yet been licensed by the NRC. This is a time-consuming process for any new nuclear technology, and it will be especially so for those SMR designs that represent significant departures from the NRC's experience. Only after SMRs are licensed and built will their true cost be clear. The catch, however, is that the economies of manufacturing can be realized and understood only if there is a reliable stream of orders to keep the manufacturing lines busy turning out the same design. In order for that to happen, the U.S. government will have to figure out how to incubate early movers while not locking in one technology prematurely.

### AT: Can’t Solve Prolif (Long/Carded)

#### US SMR development key to solve prolif

1. **Restores US nuclear credibility – means the US can set and enforce nuclear agreements and standards – key to nonprolif agenda**
2. **SMR nuclear material can’t be accessed – SMR’s are buried underground and closed to access – sent back to the US to be refueled**

#### Strong nuclear industry is the largest internal link to US non-prolif credibility

Domecini & Miller, Research Prof @ Texas A&M, ’12

[Pete Domecini, Former US Senator, Warren F. “Pete,” PhD, Private Consultant, Research Professor at Texas A&M University, “Maintaining U.S. Leadership in Global Nuclear Energy Markets A Report of the Bipartisan Policy Center’s Nuclear Initiative,” July 2012]

Nuclear power technologies are distinct from other potential exports in energy or in other sectors where America’s competitive advantage may also be declining. Because of the potential link between commercial technology and weapons development, nuclear power is directly linked to national security concerns, including the threat of proliferation. Although reactors themselves do not pose significant proliferation risks, both uranium-enrichment and spent fuel–processing technologies can be misused for military purposes. If U.S. nuclear energy leadership continues to diminish, our nation will be facing a situation in which decisions about the technological capabilities and location of fuel-cycle facilities throughout the world will be made without significant U.S. participation. Leadership is important in both commercial and diplomatic arenas, and it requires a vibrant domestic industry; an effective, independent regulator; access to competitive and innovative technologies and services; and the ability to offer practical solutions to safety, security, and nonproliferation challenges (an international fuel bank, for example, could help address concerns about the proliferation of uranium-enrichment capabilities). COMMERCIAL NUCLEAR OPERATIONS As the world’s largest commercial nuclear operator and dominant weapons state, the United States has traditionally been the clear leader on international nuclear issues. Today, the United States still accounts for approximately one-quarter of commercial nuclear reactors in operation around the world and one-third of global nuclear generation. 33 This position is likely to shift in coming decades, as new nuclear investments go forward in other parts of the world while slowing or halting in the United States. In past decades, the United States was also a significant exporter of nuclear materials and technologies, but this dominance too has slowly declined. At present, however, the U.S. safety and security infrastructure and regulatory framework remain without peer and U.S. expertise and guidance on operational and regulatory issues continues to be sought around the world. The domestic nuclear industry established the INPO in the wake of the Three Mile Island accident in 1979 in a collective effort to hold all industry players accountable to the highest standards for safe and reliable commercial operations. Similarly, the NRC is seen as the gold standard for commercial nuclear regulation. As long as other countries seek to learn from the experience and expertise of U.S. firms and regulators, the United States will enjoy greater access to international nuclear programs. A substantial reduction in domestic nuclear energy activities could erode U.S. international standing. COMPETITIVE COMMERCIAL NUCLEAR EXPORTS As an active participant in commercial markets, the United States has considerable leverage internationally through the 123 Agreements (in reference to Section 123 of the Atomic Energy Act) and Consent Rights on nuclear technologies exported by the U.S. nuclear industry. These mechanisms provide a direct and effective source of leverage over other countries’ fuel-cycle decisions. U.S. diplomatic influence is also important, but absent an active role in commercial markets, it may not be sufficient to project U.S. influence and interests with respect to nuclear nonproliferation around the world. At an October 2011 Nuclear Initiative workshop on “Effective Approaches for U.S. Participation in a More Secure Global Nuclear Market,” Deputy Secretary of Energy Daniel B. Poneman framed commerce and security not as competing objectives but as “inextricably intertwined.”

# Econ

### 2AC Growth Good/Yes War

#### Their evidence is wishful thinking – Green and Schrage say economic decline emboldens autocratic regimes and causes protectionism that hurts alliance structures – growth is necessary to new democracies – reversal emboldens failed states to attack

#### Leadership through a strong economy is needed to reassure allies and deter enemies – that’s Lieberthal and O’Hanlon – decline enables the conditions for war

#### We have already crossed the threshold of sustainability – Continued technological advancement is key to undo the damage and prevent extinction of all species

AtKisson 1 (President and CEO of The AtKisson Group, an international sustainability consultancy to business and government, “Sustainability is Dead— Long Live Sustainability” <http://www.rrcap.unep.org/uneptg06/course/Robert/SustainabilityManifesto2001.pdf>)

The evidence that we are beyond the limits to growth is by now overwhelming: the alarms include climatic change, disappearing biodiversity, falling human sperm counts, troubling slow-downs in food production after decades of rapid expansion, the beginning of serious international tensions over basic needs like water. Wild storms and floods and eerie changes in weather patterns are but a first visible harbinger of more serious trouble to come, trouble for which we are not adequately prepared. Indeed, change of all kinds—in the Biosphere (nature as a whole), the Technosphere (the entirety of human manipulation of nature), and the Noösphere (the collective field of human consciousness)—is happening so rapidly that it exceeds our capacity to understand it, control it, or respond to it adequately in corrective ways. Humanity is simultaneously entranced by its own power, overwhelmed by the problems created by progress, and continuing to steer itself over a cliff. Our economies and technologies are changing certain basic structures of planetary life, such as the balance of carbon in the atmosphere, genetic codes, the amount of forest cover, species variety and distribution, and the foundations of cultural identity. Unless we make technological advances of the highest order, many of the destructive changes we are causing to nature are irreversible. Extinct species cannot (yet) be brought back to life. No credible strategy for controlling or reducing carbon dioxide levels in the atmosphere has been put forward. We do not know how to fix what we’re breaking. At the same time, some of the very products of our technology— plutonium, for instance—require of us that we maintain a very high degree of cultural continuity, economic and political stability, and technological capacity and sophistication, far into the future. To ensure our safety and the safety of all forms of life, we must always be able to store, clean up, and contain poisons like plutonium and persistent organic toxins. Eventually we must be able to eliminate them safely. At all times, we must be able to contain the actions of evil or unethical elements in our societies who do not care about the consequences to life of unleashing our most dangerous creations. In the case of certain creations, like nuclear materials and some artificially constructed or genetically modified organisms, our secure custodianship must be maintained for thousands of years. We are, in effect, committed to a high-technology future. Any slip in our mastery over the forces now under our command could doom our descendants—including not just human descendants, but also those wild species still remaining in the oceans and wilderness areas—to unspeakable suffering. We must continue down an intensely scientific and technological path, and we can never stop.

### 2AC No Transition

#### No transition because of energy sources – that’s McNelis – mindset shifts are insufficient to meet demand in electricity, practical action is key

#### Alternatives to growth kill hundreds of millions and cause global conflict—we can’t “*turn off*” the economy.

Barnhizer 6 — David R. Barnhizer, Emeritus Professor at Cleveland State University’s Cleveland-Marshall College of Law, 2006 (“Waking from Sustainability's "Impossible Dream": The Decisionmaking Realities of Business and Government,” *Georgetown International Environmental Law Review* (18 Geo. Int'l Envtl. L. Rev. 595), Available Online to Subscribing Institutions via Lexis-Nexis)

The scale of social needs, including the need for expanded productive activity, has grown so large that it cannot be shut off at all, and certainly not abruptly. It cannot even be ratcheted down in any significant fashion without producing serious harms to human societies and hundreds of millions of people. Even if it were possible to shift back to systems of local self-sufficiency, the consequences of the transition process would be catastrophic for many people and even deadly to the point of continual conflict, resource wars, increased poverty, and strife. What are needed are concrete, workable, and pragmatic strategies that produce effective and intelligently designed economic activity in specific contexts and, while seeking efficiency and conservation, place economic and social justice high on a list of priorities. n60

The imperative of economic growth applies not only to the needs and expectations of people in economically developed societies but also to people living in nations that are currently economically underdeveloped. Opportunities must be created, jobs must be generated in huge numbers, and economic resources expanded to address the tragedies of poverty and inequality. Unfortunately, natural systems must be exploited to achieve this; we cannot return to Eden. The question is not how to achieve a static state but how to achieve what is needed to advance social justice while avoiding and mitigating the most destructive consequences of our behavior.

#### Transitioning back to local economies is impossible—globalization is too entrenched.

Barnhizer 6 — David R. Barnhizer, Emeritus Professor at Cleveland State University’s Cleveland-Marshall College of Law, 2006 (“Waking from Sustainability's "Impossible Dream": The Decisionmaking Realities of Business and Government,” *Georgetown International Environmental Law Review* (18 Geo. Int'l Envtl. L. Rev. 595), Available Online to Subscribing Institutions via Lexis-Nexis)

Globalization's ability to produce wealth for a particular group simultaneously produces harms to different people and interests and generates unfair resource redistribution within existing cultures. This is an unavoidable consequence of globalization. n62 The problem is that globalization has altered the rules of operation of political, economic, and social activities, and in doing so multiplied greatly our ability to create benefit and harm. n63 While some understandably want the unsettling and often chaotic effects of globalization to go away, it can only be dealt with, not reversed. The system in which we live and work is no longer closed. There are few contexts not connected to the dynamics of some aspect of the extended economic and social systems resulting from globalization. This means the wide ranging and incompatible variables of a global economic, human rights, and social fairness system are resulting in conflicts and unanticipated interpenetrations that no one fully understands, anticipates, or controls. n64 Local [\*622] self-sufficiency is the loser in this process. It can remain a nostalgic dream but rarely a reality. Except for isolated cultures and niche activities, there is very little chance that anyone will be unaffected by this transformational process. Change is the constant, and it will take several generations before we return to a period of relative stasis. Even then it will only be a respite before the pattern once again intensifies.

### 2AC Sustainability

#### The aff makes growth sustainable – SMRs provide carbon-free energy on a large scale – resolves the warrants in their evidence

#### Collapse doesn’t create a new order – empirics

Mead 9

2/4, Walter Russell, Henry A. Kissinger Senior Fellow in U.S. Foreign Policy at the Council on Foreign Relations, Only Makes You Stronger: Why the recession bolstered America, The New Republic

Even before the Panic of 2008 sent financial markets into turmoil and launched what looks like the worst global recession in decades, talk of American decline was omnipresent. In the long term, the United States faces the rise of Asia and the looming fiscal problems posed by Medicare and other entitlement programs. In the short term, there is a sense that, after eight years of George W. Bush, the world, full of disdain for our way of life, seems to be spinning out of our--and perhaps anybody's--control. The financial panic simply brought all that simmering anxiety to a boil, and the consensus now seems to be that the United States isn't just in danger of decline, but in the full throes of it--the beginning of a "post-American" world. Perhaps--but the long history of capitalism suggests another possibility. After all, capitalism has seen a steady procession of economic crises and panics, from the seventeenth-century Tulip Bubble in the Netherlands and the Stop of the Exchequer under Charles II in England through the Mississippi and South Sea bubbles of the early eighteenth century, on through the crises associated with the Napoleonic wars and the spectacular economic crashes that repeatedly wrought havoc and devastation to millions throughout the nineteenth century. The panics of 1837, 1857, 1873, 1893, and 1907 were especially severe, culminating in the Great Crash of 1929, which set off a depression that would not end until World War II. The series of crises continued after the war, and the last generation has seen the Penn Central bankruptcy in 1970, the first Arab oil crisis of 1973, the Third World debt crisis of 1982, the S&L crisis, the Asian crisis of 1997, the bursting of the dot-com bubble in 2001, and today's global financial meltdown. And yet, this relentless series of crises has not disrupted the rise of a global capitalist system, centered first on the power of the United Kingdom and then, since World War II, on the power of the United States. After more than 300 years, it seems reasonable to conclude that financial and economic crises do not, by themselves, threaten either the international capitalist system or the special role within it of leading capitalist powers like the United Kingdom and the United States. If anything, the opposite seems true--that financial crises in some way sustain Anglophone power and capitalist development.

#### Growth is sustainable -- resource scarcity can be corrected by technology.

Haynes 2008 (Beth Haynes, Professor of Economics at Brigham Young University-Hawaii, “Finite Resources vs. Infinite Resourcefulness”, 8/19/08 <http://wealthisnottheproblem.blogspot.com/2008/08/finite-resources-vs-infinite.html>)

Our consumption is excessive. If we continue to consume our natural resources, there will be nothing left for the future. Use less. Do it for the children! Limit. Limit. Limit. Do it for the poor! A significant number of environmental concerns center on this fear of using up some important resource: oil, rainforest, fresh water, open space, biodiversity. The concern is genuine. The fears are real. People then work to pass laws which intentionally slow production and hinder (even prevent) consumption. The express purpose is to make us poorer in the short run with the hope of preventing poverty in the long run. It’s common sense. Save today in order to have some available tomorrow. It’s how our bank accounts work, so it seems logical to apply the same reasoning to resource use. But there is a catch. All of economic history, up to and including today, demonstrates that the more we exploit our natural resources, the more available they become. (3-7) How can this possibly be? If we use our “limited, non-renewable resources” we have to end up with less, right? Actually, no. And here is why. We don’t simply “use up” existing resources; we constantly create them. We continually invent new processes, discover new sources, improve the efficiency of both use and extraction, while at the same time we discover cheaper, better alternatives. The fact that a particular physical substance is finite is irrelevant. What is relevant is the process of finding ways to meet human needs and desires. The solutions, and thus what we consider resources, are constantly changing. Oil was a nuisance, not a resource, until humans discovered a use for it. In order to survive and flourish, human beings must succeed at fulfilling certain needs and desires. This can be accomplished in a multitude of ways using a multitude of materials. The requirements of life set the goals. How these goals are met does not depend on the existence or the availability of any particular material. Limits are placed not by the finiteness of a physical substance, but by the extent of our knowledge, of our wealth, and of our freedom. Knowledge. Wealth. Freedom. These are the factors which are essential to solving the problems we face. “The Stone Age didn’t end because we ran out of stones.” (8) Think for a minute about how we have solved the problem of meeting basic needs throughout history: Transportation: from walking to landing on the moon Communication: from face-to-face conversations to the World Wide Web. Food: from hunting and gathering to intravenous feeding and hydroponics. Shelter: from finding a cave to building skyscrapers Health care: from shamans to MRIs and neurosurgery. How does progress happen? A synopsis of the process is provided by the main theme of Julian Simon’s book, The Ultimate Resource 2: More people, and increased income, cause resources to become more scarce in the short run. Heightened scarcity causes prices to rise. The higher prices present opportunity and prompt inventors and entrepreneurs to search for solutions. Many fail in the search, at cost to themselves. But in a free society, solutions are eventually found. And in the long run, the new developments leave us better off than if the problems had not arisen, that is, prices eventually become lower than before the scarcity occurred. (9) This idea is not just theory. Economists and statisticians have long been analyzing the massive amounts of data collected on resource availability. The conclusion: our ability to solve the problems of human existence is ever-expanding. Resources have become less scarce and the world is a better place to live for more and more people. (3-7) Overall, we create more than we destroy as evidenced by the steady progress in human well being and there is no evidence for concluding that this trend can't and won't continue. Doomsday predictions have been with us since ancient times and they have consistently been proven wrong.

### 2AC Environment

**Globalization solves environment—conscience shift, regulation, development, clean tech, and private property**

Norberg, Cato Institute Senior Fellow, 2003

[Johan, In Defense of Global Capitalism, p. 225-37]

Although multinational corporations and free trade are proving good for development and human rights in the Third World, there still remainsthe objection that **globalization harms the environmen**t. Factories in the Western world, the argument runs, will relocate to poorer countries with no environmental legislation, where they can pollute with impunity. The West has to follow suit and lower its own environmental standards in order to stay in business. That is a dismal thesis, with the implication that when people obtain better opportunities, resources, and technology, they use them to abuse nature. Does there really have to be a conflict between development and the environment? The notion that there has to be a conflict runs into the same problem as the whole idea of a race to the bottom: it **doesn't tally with reality. There is no exodus of industry** **to countries with poor environmental standards, and there is no downward pressure on** the level of global **environmental protection.** **Instead, the bulk of** American and European **investments goes to countries with environmental regulations** similar to their own. There has been much talk of American factories moving to Mexico since NAFTA was signed. Less well known, however, is that since free trade was introduced Mexico has tightened up its environmental regulations, following a long history of complete nonchalance about environmental issues. This tightening up is part of a global trend. All over the world, economic progress and **growth are moving hand in hand with** intensified **environmental protection.** Four researchers who studied these connections found “a very strong, positive association between our [environmental] indicators and the level of economic development**.” A country that is very poor is too preoccupied** with lifting itself out of poverty **to bother about the environment** at all. Countries usually begin protecting their natural resources when they can afford to do so. **When they grow richer, they start to regulate** effluent **emissions, and when they have still more resources they also begin regulating air qualit**y. 19 A number of factors cause environment protection to increase with wealth and development. Environmental quality is unlikely to be a top priority for people who barely know where their next meal is coming from. Abating misery and subduing the pangs of hunger takes precedence over conservation. When our standard of living rises we start attaching importance to the environment and obtaining resources to improve it. Such was the case earlier in western Europe, and so it is in the developing countries today. Progress of this kind, however, requires that people live in democracies where they are able and allowed to mobilize opinion; otherwise, their preferences will have no impact. Environmental destruction is worst in dictatorships. But it is the fact of prosperity no less than a sense of responsibility that makes environmental protection easier in a wealthy society. **A wealthier country can afford to tackle environmental problems; it can develop** environmentally friendly **technologies**—wastewater and exhaust emission control, for example—and begin to rectify past mistakes. Global environmental development resembles not so much a race for the bottom as a race to the top, what we might call a “California effect.” The state of California's Clean Air Acts, first introduced in the 1970s and tightened since, were stringent emissions regulations that made rigorous demands on car manufacturers. Many prophets of doom predicted that firms and factories would move to other states, and California would soon be obliged to repeal its regulations. But instead the opposite happened: other states gradually tightened up their environmental stipulations. Because **car companies needed the** wealthy **California market, manufacturers** all over the United States **were forced to** **develop** new **techniques for reducing emissions**. Having done so, they could more easily comply with the exacting requirements of other states, whereupon those states again ratcheted up their requirements. **Anti-globalists** usually **claim that the profit motive and free trade** together **cause businesses to entrap politicians in a race for the bottom**. **The California effect implies the opposite: free trade enables politicians to pull profit-hungry corporations along with them** in a race to the top. This phenomenon occurs because compliance with environmental rules accounts for a very small proportion of most companies' expenditures. What firms are primarily after is a good business environment—a liberal economy and a skilled workforce— not a bad natural environment. A review of research in this field shows that there are no clear indications of national environmental rules leading to a diminution of exports or to fewer companies locating in the countries that pass the rules. 20 This finding undermines both the arguments put forward by companies against environmental regulations and those advanced by environmentalists maintaining that globalization has to be restrained for environmental reasons. Incipient signs of the California effect's race to the top are present all over the world, because globalization has caused different countries to absorb new techniques more rapidly, and the new techniques are generally far gentler on the environment.**Researchers have investigated steel manufacturing in 50 different countries and concluded that countries with more open economies took the lead in introducing cleaner technology**. Production in those countries generated almost 20 percent less emissions than the same production in closed countries. This process is being driven by multinational corporations because they have a lot to gain from uniform production with uniform technology. Because they are restructured more rapidly, they have more modern machinery. And they prefer assimilating the latest, most environmentally friendly technology immediately to retrofitting it, at great expense, when environmental regulations are tightened up. Brazil, Mexico, and China—**the three biggest recipients of foreign investment**—**have followed a very clear pattern: the more investments they get, the better control they gain over air pollution**. The worst forms of air pollution have diminished in their cities during the period of globalization. When Western companies start up in developing countries, their production is considerably more environment-friendly than the native production, and they are more willing to comply with environmental legislation, not least because they have brand images and reputations to protect. Only 30 percent of Indonesian companies comply with the country's environmental regulations, whereas no fewer than 80 percent of the multinationals do so. One out of every 10 foreign companies maintained a standard clearly superior to that of the regulations. This development would go faster if economies were more open and, in particular, if the governments of the world were to phase out the incomprehensible tariffs on environmentally friendly technology. 21 Sometimes one hears it said that, for environmental reasons, the poor countries of the South must not be allowed to grow as affluent as our countries in the North. For example, in a compilation of essays on Environmentally Significant Consumption published by the National Academy of Sciences, we find anthropologist Richard Wilk fretting that: If everyone develops a desire for the Western high-consumption lifestyle, the relentless growth in consumption, energy use, waste, and emissions may be disastrous. 22 But studies show this to be colossal misapprehension. On the contrary, **it is in the developing countries that we find the gravest, most harmful** **environmental problems**. In our affluent part of the world, more and more people are mindful of environmental problems such as endangered green areas. Every day in the developing countries, more than 6,000 people die from air pollution when using wood, dung, and agricultural waste in their homes as heating and cooking fuel. UNDP estimates that no fewer than 2.2 million people die every year from polluted indoor air. **This result is already “disastrous” and far more destructive than atmospheric pollution and industrial emissions. Tying people down to that level of development means condemning millions to premature death every year.** It is not true that pollution in the modern sense increases with growth. Instead, pollution follows an inverted U-curve. When growth in a very poor country gathers speed and the chimneys begin belching smoke, the environment suffers. But when prosperity has risen high enough, the environmental indicators show an improvement instead: emissions are reduced, and air and water show progressively lower concentrations of pollutants. The cities with the worst problems are not Stockholm, New York, and Zürich, but rather Beijing, Mexico City, and New Delhi. In addition to the factors already mentioned, this is also due to the economic structure changing from raw-material-intensive to knowledge-intensive production. In a modern economy, heavy, dirty industry is to a great extent superseded by service enterprises. Banks, consulting firms, and information technology corporations do not have the same environmental impact as old factories. According to one survey of available environmental data, the turning point generally comes before a country's per capita GDP has reached $8,000. At $10,000, the researchers found a positive connection between increased growth and better air and water quality. 23 That is roughly the level of prosperity of Argentina, South Korea, or Slovenia. In the United States, per capita GDP is about $36,300. Here as well, the environment has consistently improved since the 1970s, quite contrary to the picture one gets from the media. In the 1970s there was constant reference to smog in American cities, and rightly so: the air was judged to be unhealthy for 100–300 days a year. Today it is unhealthy for fewer than 10 days a year, with the exception of Los Angeles. There, the figure is roughly 80 days, but even that represents a 50 percent reduction in 10 years. 24 The same trend is noticeable in the rest of the affluent world—for example, in Tokyo, where, a few decades ago, doomsayers believed that oxygen masks would in the future have to be worn all around the city because of the bad air. Apart from its other positive effects on the developing countries, such as ameliorating hunger and sparing people the horror of watching their children die, **prosperity beyond a** certain **critical point can improve the environment**. What is more, this turning point is now occurring progressively earlier in the developing countries, because they can learn from more affluent countries' mistakes and use their superior technology. For example, air quality in the enormous cities of China, which are the most heavily polluted in the world, has steadied since the mid-1980s and in several cases has slowly improved. This improvement has coincided with uniquely rapid growth. Some years ago, the Danish statistician and Greenpeace member Bjørn Lomborg, with about 10 of his students, compiled statistics and facts about the world's environmental problems. To his astonishment, he found that what he himself had regarded as self-evident, **the steady deterioration of the global environment, did not agree at all with official empirical data.** He found instead that **air pollution is diminishing, refuse problems are diminishing, resources are not running out**, **more people are eating their fill,** and people are living longer. Lomborg gathered publicly available data from as many fields as he could find and published them in the book The Skeptical Environmentalist: Measuring the Real State of the World. The picture that emerges there is an important corrective to the general prophesies of doom that can so easily be imbibed from newspaper headlines. Lomborg shows that air pollution and emissions have been declining in the developed world during recent decades. Heavy metal emissions have been heavily reduced; nitrogen oxides have diminished by almost 30 percent and sulfur emissions by about 80 percent. Pollution and emission problems are still growing in the poor developing countries, but at every level of growth annual particle density has diminished by 2 percent in only 14 years. In the developed world, phosphorus emissions into the seas have declined drastically, and E. coli bacteria concentrations in coastal waters have plummeted, enabling closed swimming areas to reopen. Lomborg shows that, **instead of large-scale deforestation, the world's forest acreage** increased from 40.24 million to 43.04 million square kilometers between 1950 and 1994. He finds that there has never been any large-scale tree death caused by acid rain. The oft-quoted, but erroneous statement about 40,000 species going extinct every year is traced by Lomborg to its source—a 20-year-old estimate that has been circulating in environmentalist circles ever since. Lomborg thinks it is closer to 1,500 species a year, and possibly a bit more than that. The documented cases of extinction during the past 400 years total just over a thousand species, of which about 95 percent are insects, bacteria, and viruses. As for the problem of garbage, the next hundred years worth of Danish refuse could be accommodated in a 33-meter-deep pit with an area of three square kilometers, even without recycling. In addition, Lomborg illustrates how increased prosperity and improved technology can solve the problems that lie ahead of us. All the fresh water consumed in the world today could be produced y a single desalination plant, powered by solar cells and occupying 0.4 percent of the Sahara Desert. It is a mistake, then, to believe that growth automatically ruins the environment. And claims that we would need this or that number of planets for the whole world to attain a Western standard of consumption—those “ecological footprint” calculations—are equally untruthful. Such a claim is usually made by environmentalists, and it is concerned, not so much with emissions and pollution, as with resources running out if everyone were to live as we do in the affluent world. Clearly, certain of the raw materials we use today, in presentday quantities, would not suffice for the whole world if everyone consumed the same things. But that information is just about as interesting as if a prosperous Stone Age man were to say that, if everyone attained his level of consumption, there would not be enough stone, salt, and furs to go around. Raw material consumption is not static. With more and more people achieving a high level of prosperity, we start looking for ways of using other raw materials. Humanity is constantly improving technology so as to get at raw materials that were previously inaccessible, and we are attaining a level of prosperity that makes this possible. **New innovations make it possible for old raw materials to be put to better use and for garbage to be turned into new raw materia**ls. A century and a half ago, oil was just something black and sticky that people preferred not to step in and definitely did not want to find beneath their land. But our interest in finding better energy sources led to methods being devised for using oil, and today it is one of our prime resources. Sand has never been all that exciting or precious, but today it is a vital raw material in the most powerful technology of our age, the computer. In the form of silicon—which makes up a quarter of the earth's crust— it is a key component in computer chips. There is a simple market mechanism that averts shortages. If a certain raw material comes to be in short supply, its price goes up. This makes everyone more interested in economizing on that resource, in finding more of it, in reusing it, and in trying to find substitutes for it. The trend over the last few decades of falling raw material prices is clear. Metals have never been as cheap as they are today. Prices are falling, which suggests that demand does not exceed supply. In relation to wages, that is, in terms of how long we must work to earn the price of a raw material, natural resources today are half as expensive as they were 50 years ago and one-fifth as expensive as they were a hundred years ago. In 1900 the price of electricity was eight times higher, the price of coal seven times higher, and the price of oil five times higher than today. 25 The risk of shortage is declining all the time, because new finds and more efficient use keep augmenting the available reserves. In a world where technology never stops developing, static calculations are uninteresting, and wrong. By simple mathematics, Lomborg establishes that if we have a raw material with a hundred years' use remaining, a 1 percent annual increase in demand, and a 2 percent increase in recycling and/or efficiency, that resource will never be exhausted. If shortages do occur, then with the right technology most substances can be recycled. One-third of the world's steel production, for example, is being reused already. **Technological advance can outstrip the depletion of resources**

. Not many years ago, everyone was convinced of the impossibility of the whole Chinese population having telephones, because that would require several hundred million telephone operators. But the supply of manpower did not run out; technology developed instead. Then it was declared that nationwide telephony for China was physically impossible because all the world's copper wouldn't suffice for installing heavy gauge telephone lines all over the country. Before that had time to become a problem, fiber optics and satellites began to supersede copper wire. The price of copper, a commodity that people believed would run out, has fallen continuously and is now only about a tenth of what it was 200 years ago. People in most ages have worried about important raw materials becoming exhausted. But on the few occasions when this has happened, it has generally affected isolated, poor places, not open, affluent ones. To claim that people in Africa, who are dying by the thousand every day from supremely real shortages, must not be allowed to become as prosperous as we in the West because we can find theoretical risks of shortages occurring is both stupid and unjust. The environmental question will not resolve itself. Proper rules are needed for the protection of water, soil, and air from destruction. Systems of emissions fees are needed to give polluters an interest in not damaging the environment for others. Many environmental issues also require international regulations and agreements, which confront us with entirely new challenges. Carbon dioxide emissions, for example, tend to increase rather than diminish when a country grows more affluent. When talking about the market and the environment, it is important to realize that efforts in this quarter will be facilitated by a freer, growing economy capable of using the best solutions, from both a natural and a human viewpoint. In order to meet those challenges, it is better to have resources and advanced science than not to have them. Very often, environmental improvements are due to the very capitalism so often blamed for the problems. The introduction of **private property creates owners with long-term interests. Landowners must see to it that there is good soil** or forest **there** **tomorrow as well**, because otherwise they will have no income later on, whether they continue using the land or intend to sell it. If the property is collective or government-owned, no one has any such long-term interest. On the contrary, everyone then has an interest in using up the resources quickly before someone else does. It was because they were common lands that the rain forests of the Amazon began to be rapidly exploited in the 1960s and 1970s and are still being rapidly exploited today. Only about a 10th of forests are recognized by the governments as privately owned, even though in practice Indians possess and inhabit large parts of them. **It is the absence of definite fishing rights that causes** **(heavily subsidized)** **fishing fleets to try to vacuum the oceans of fish** **before someone else does**. No wonder, then, that the most large-scale destruction of environment in history has occurred in the communist dictatorships, where all ownership was collective. A few years ago, a satellite image was taken of the borders of the Sahara, where the desert was spreading. Everywhere, the land was parched yellow, after nomads had overexploited the common lands and then moved on. But in the midst of this desert environment could be seen a small patch of green. This proved to be an area of privately owned land where the owners of the farm prevented overexploitation and engaged in cattle farming that was profitable in the long term. 26 Trade and freight are sometimes criticized for destroying the environment, but the problem can be rectified with more efficient transport and purification techniques, as well as emissions fees to make the cost of pollution visible through pricing. The biggest environmental problems are associated with production and consumption, and there trade can make a positive contribution, even aside from the general effect it has on growth. **Trade leads to a country's resources being used as efficiently as possible. Goods are produced in the places where production entails least expense and least wear and tear on the environment.** That is why the amount of raw materials needed to make a given product keeps diminishing as productive efficiency improves. With modern production processes, 97 percent less metal is needed for a soft drink can than 30 years ago, partly because of the use of lighter aluminum. A car today contains only half as much metal as a car of 30 years ago. Therefore, it is better for production to take place where the technology exists, instead of each country trying to have production of its own, with all the consumption of resources that would entail. It is more environmentally friendly for a cold northern country to import meat from temperate countries than to waste resources on concentrated feed and the construction and heating of cattle pens for the purpose of native meat production.

#### Econ decline leads to environmental collapse

Richard 8

Michael Graham, staff writer, Tree Hugger, http://www.treehugger.com/files/2008/02/4\_reasons\_recession\_bad\_environment.php

As a counter-point to Lloyd's tongue-in-cheek post about [10 Ways the Recession Can Help the Environment](http://www.treehugger.com/files/2008/02/always_look_on.php), here are some eco-reasons why we should wish a speedy recovery (we won't get into non-green reasons here): Firstly, when squeezed, companies will reduce their investments into research & development and green programs. These are usually not short-term profit centers, so that is what's axed first. Some progress has been made in the past few years, it would be sad to lose ground now. Secondly, average people, when money is tight, will look for less expensive products (duh). Right now, that usually means that greener products won't make it. Maybe someday if we start taxing "bads" instead of "goods" (pollution, carbon, toxins instead of labor, income, capital gains) the least expensive products will also be the greenest, but right now that's not the case. Thirdly, there's less money going into the stock markets and bank loans are harder to get, which means that many small firms and startups working on the breakthrough green technologies of tomorrow can have trouble getting funds or can even go bankrupt, especially if their clients or backers decide to make cuts. Fourthly, during economic crises, voters want the government to appear to be doing something about the economy (even if it's government that screwed things up in the first place). They'll accept all kinds of measures and laws, including those that aren't good for the environment. Massive corn subsidies anyone? Don't even think about progress on global warming...

### AT: Mindset Shift

#### Mindset shifts fail—people won’t want to change their consumption patterns voluntarily.

Van den Bergh 10—Jeroen C.J.M. van den Bergh works at the Spain Institute for Environmental Science and Technology and at the Department of Economics and Economic History at the Universitat Autònoma in Barcelona and a member of the Faculty of Economics and Business Administration, and Institute for Environmental Studies, VU University Amsterdam (“Environment versus growth — A criticism of ‘degrowth’ and a plea for ‘a-growth’,” Published in *Ecological Economics,* Volume 70, Issue 5 (15 March 2011), Pages 881–890, Available Online to Subscribing Institutions at http://www.sciencedirect.com/science/article/pii/S0921800910004209)

Supporters of this strategy have the hope that frugality (voluntary restraint or simplicity) will drive consumption down. As identified in the literature on environmental psychology, some people are indeed able to apply voluntary restrictions to their consumption behavior which are environmentally motivated (Gsottbauer and van den Bergh, forthcoming). The question is of course how environmentally effective this is, and in particular whether one can safely assume this to work for a significant proportion of all consumers. Only looking at shopping malls, television, roads and airports should make one very skeptical about this. One can anyway wonder whether it is realistic or even fair to ask from the median consumer that s/he gives up the luxuries of modern life, to in some way go back in time. It is unlikely that hunter-gatherers or Henri David Thoreau (“Walden”) can serve as a role model for them.

# Offcase

### 2AC K

#### Case outweighs –

#### Proliferation – Economic rationality doesn’t frame instability of new proliferants, use it or lose it mindset and strategic asymmetry among close proliferants causes global nuclear conflagration

#### Demand for energy inevitable and sustainability movements triggers our impact – only creating hedges to natural gas volatility can solve for price spikes – collapse the global economy and triggers war – that’s a massive impact turn to the alternative

#### Perm – do both

#### Our framework is that the alternative should be judged on the efficacy of its response to existing institutional practices

#### This means that the neg should have to answer the following questions – what is the alternative institution/social order that should be put into place? Is that feasible? What would have to be done to create that change and what would be the consequences of those actions?

#### Absent these questions shifts in knowledge production are useless – governments’ obey institutional logics that exist independently of individuals and constrain decisionmaking

Wight – Professor of IR @ University of Sydney – 6

(Colin, Agents, Structures and International Relations: Politics as Ontology, pgs. 48-50

One important aspect of this relational ontology is that these relations constitute our identity as social actors. According to this relational model of societies, one is what one is, by virtue of the relations within which one is embedded. A worker is only a worker by virtue of his/her relationship to his/her employer and vice versa. ‘Our social being is constituted by relations and our social acts presuppose them.’ At any particular moment in time an individual may be implicated in all manner of relations, each exerting its own peculiar causal effects. This ‘lattice-work’ of relations constitutes the structure of particular societies and endures despite changes in the individuals occupying them. Thus, the relations, the structures, are ontologically distinct from the individuals who enter into them. At a minimum, the social sciences are concerned with two distinct, although mutually interdependent, strata. There is an ontological difference between people and structures: ‘people are not relations, societies are not conscious agents’. Any attempt to explain one in terms of the other should be rejected. If there is an ontological difference between society and people, however, we need to elaborate on the relationship between them. Bhaskar argues that we need a system of mediating concepts, encompassing both aspects of the duality of praxis into which active subjects must fit in order to reproduce it: that is, a system of concepts designating the ‘point of contact’ between human agency and social structures. This is known as a ‘positioned practice’ system. In many respects, the idea of ‘positioned practice’ is very similar to Pierre Bourdieu’s notion of *habitus*. Bourdieu is primarily concerned with what individuals do in their daily lives. He is keen to refute the idea that social activity can be understood solely in terms of individual decision-making, or as determined by surpa-individual objective structures. Bourdieu’s notion of the *habitus* can be viewed as a bridge-building exercise across the explanatory gap between two extremes. Importantly, the notion of a habitus can only be understood in relation to the concept of a ‘social field’. According to Bourdieu, a social field is ‘a network, or a configuration, of objective relations between positions objectively defined’. A social field, then, refers to a structured system of social positions occupied by individuals and/or institutions – the nature of which defines the situation for their occupants. This is a social field whose form is constituted in terms of the relations which define it as a field of a certain type. A *habitus* (positioned practices) is a mediating link between individuals’ subjective worlds and the socio-cultural world into which they are born and which they share with others. The power of the habitus derives from the thoughtlessness of habit and habituation, rather than consciously learned rules. The habitus is imprinted and encoded in a socializing process that commences during early childhood. It is inculcated more by experience than by explicit teaching. Socially competent performances are produced as a matter of routine, without explicit reference to a body of codified knowledge, and without the actors necessarily knowing what they are doing (in the sense of being able adequately to explain what they are doing). As such, the *habitus* can be seen as the site of ‘internalization of reality and the externalization of internality.’ Thus social practices are produced in, and by, the encounter between: (1) the *habitus* and its dispositions; (2) the constraints and demands of the socio-cultural field to which the habitus is appropriate or within; and (3) the dispositions of the individual agents located within both the socio-cultural field and the *habitus*. When placed within Bhaskar’s stratified complex social ontology the model we have is as depicted in Figure 1. The explanation of practices will require all three levels. Society, as field of relations, exists prior to, and is independent of, individual and collective understandings at any particular moment in time; that is, social action requires the conditions for action. Likewise, given that behavior is seemingly recurrent, patterned, ordered, institutionalised, and displays a degree of stability over time, there must be sets of relations and rules that govern it. Contrary to individualist theory, these relations, rules and roles are not dependent upon either knowledge of them by particular individuals, or the existence of actions by particular individuals; that is, their explanation cannot be reduced to consciousness or to the attributes of individuals. These emergent social forms must possess emergent powers. This leads on to arguments for the reality of society based on a causal criterion. Society, as opposed to the individuals that constitute it, is, as Foucault has put it, ‘a complex and independent reality that has its own laws and mechanisms of reaction, its regulations as well as its possibility of disturbance. This new reality is society…It becomes necessary to reflect upon it, upon its specific characteristics, its constants and its variables’.

#### The alt doesn’t solve the links – technocratic management isn’t resolved through discussing our consumption practices – even if people decide to consume less, the elite are still in charge of the energy establishment

#### Submitting nuclear policy to public deliberation collapses military effectiveness and ensures extinction

Doxtader ’97

(Erik, Prof. of Rhetoric @ U of South Carolina, Total War and Public Life: A Critical Theory of American Nuclear Deterrence Policy, pgs. 3-4)

Second, public disinterest in the nuclear age may stem from a sense that the development of military policy ought not proceed as a populist exercise. Public debate is cumbersome, consensus elusive. As such, public participation in matters of national security may reduce institutional efficiency and hamper the military's ability to keep the peace. In the nuclear age, this risk has high stakes. Facing the possibility of total war, the public makes military policy at its own peril.

#### Technocracy and scientific expertise are good and turn the K – they direct consumers towards most efficient outcomes and eliminate unnecessary production

Chai 5

(Andreas, Evolutionary Economics Unit, Max Planck Institute for Research into Economic Systems, “Menger’s theory of ‘imaginary goods’ and the

historical emergence of British medical experts”, http://www.tagung05.uni-bonn.de/Papers/Chai.pdf)

For Menger, all things are subject to the laws of cause and effect (Menger 1950:51). But which cause and which effect? A fundamental prerequisite to understanding why people consume certain things is to first comprehend how they learn to associate these things to certain consequences, and how the strength of such associations change over time. Rather than define a good as anything that is exchanged on a market, he defined a good as anything that can be causally associated with the servicing of human wants (Menger 1950:2). In this way, what is and what is not a good is not constant or set over time, rather things can loose their ‘goods characteristics’ according to what consumers know, learn and do (Menger, 1950:56). Acts of consumption can become complex since a thing does not need to serve a human want directly in order to be considered a good, rather it can become a ‘indirect good’ by serving as a input into a transformation process which results in the production of final goods (Menger, 1950). This is problematic because whether or not such a indirect good is used successfully depends on not only its objective characteristics but on the consumers ability to use and transform it as well as the other higher order goods that are simultaneously used in the transformation. For example, a consumer may know how to operate a mobile telephone which may be in perfect working order, but if she is outside the network’s range, the phone is useless to the consumer. Similarly, if the consumer does not have the adequate knowledge to engage in a mobile phone contract, the phone will remain a ‘thing’ rather than a ‘good’. Menger also recognized that the duration it takes to consume is not just a costly input, but also complicates the act of discerning what the causal associations are between goods and observed effects (Menger, 1950:68). Hence, complexity increases the possibility of consumers making errors and mistakes in their decisions. In this way, the degree of complexity which the consumer faces exponentially increases the more goods she uses and the more knowledge and command these require, as well as the time taken between engaging in a transformation and observing its results. Juxtaposing his approach to both the neoclassical and institutional methods of studying consumption change, there are simultaneously some interesting similarities and notable differences to observe. Both Lancaster (Lancaster, 1966) as well as Stigler and Becker (Stigler and Becker, 1977) make an important start in capturing the transformative nature of consumption by specifying that utility is not a direct function of market goods consumed, but rather a function of final goods which are produced from market goods. This enables scholars to study how consumption patterns change with the introduction of new goods (Bianchi, 2002). However some problems still exist. While a transformation does occur, it is not one that addresses how a thing becomes a good, since the model starts with specifying given goods that can be changed with full certainty into final goods (Ruprecht, 2002). Furthermore, these models do not fully take into account the impact of increasing complexity that results from an increase in the number of inputs used. Other than perhaps affecting how much time it takes to consume, the actual number of inputs used, their complexity and how they relate to each other are not explicitly accounted for. Indeed the way such models treat time as just another input is itself questionable (Steedman, 2001). In this sense Menger seriously challenges economists to study consumption as a phenomena that is not just related to price and income effects, but also related to how consumer actually learn to consume and make associations between goods and their effects. In comparison to institutionalist approaches, Menger’s systematic examination of consumption via the law of cause and effect bring into question their tendency to simply rely on social influences to explain the nature of consumer behavior (Trigg, 2001). Yet at the same time, Menger does recognize that certain institutions do play an important role in guiding consumer behavior. Specifically, he suggests that the scientific knowledge that comes with economic development improves consumer’s welfare by promoting those consumption technologies which are in some sense relatively more ‘objectively accurate’(Menger, 1950:53). Such progress will essentially wipe out those goods that are consumed on pretenses that are essentially false, such as aphrodisiacs, love potions and amulets. These he labeled ‘imaginary goods’ and argued that they occur when 1) attributes are erroneously ascribed to things that do not really posses them, or 2) when non-existent human needs are mistakenly thought to exist. Notably, in the first category he mentions ‘the majority of medicines administered to the sick by peoples of early civilization’ and in the second category he mentions ‘medicines for diseases that do not actually exist’ (Menger 1950:53). Without doubt, experts play an important role in influencing contemporary consumption patterns. Studying how consumers react to information from other consumers and experts has been widely explored both in the optimizing framework (Akerlof, 1980;Banerjee, 1993;Bikhchandani et al., 1992;Conlisk, 1980;Nelson, 1970;Rosen, 1981) as well as from a more heterodox perspective (Cowan et al., 1997;Mokyr, 2002;Morlacchi, 2004;Rogers, 1962). Beyond economics, many scholars point out that how agents coordinate learning is not only vital to understanding economic behavior, but also to accounting for how civilizations evolve and function in general (Bandura, 1986;Richerson and Boyd, 2004). Continuing Menger’s concern for how consumers cope in increasingly complex environments, it has been postulated that the growing predominance of service industries reflects a greater role for experts in forming ‘low level consumption preferences’ (Earl and Potts, 2004). Consequently such conditions have been argued to both stimulate and require greater coordination between supply and demand (Langlois and Cosgel, 1998;Scitovsky, 1976).

#### Their description of expertism is wrong – we do not promote a top-down social order – any institutional side effects of the aff are part of a *spontaneous-order* that emerges to maximize the efficiency of financial incentives

### AT: NFU CP

#### Perm – do both

#### No solvency for prolif – global nuclear power is spreading, that’s Barber and Williams – NFU can’t stop prolif once countries have nuclear materials – DOD action is key:

#### First, exports – spreading SMR tech means states can’t access fuel to use in weapons

#### Second, diplomacy – only improving our nuclear industrial base allows negotiations which spillover to broader non-proliferation agreements

#### Declaratory policy doesn’t matter

Martin et al – Policy Analysis Program Officer, Stanley Foundation – ‘9

Matt, A New Look at No First Use, <http://www.stanleyfoundation.org/resources.cfm?id=334>

Some participants were not sure that NFU would measurably reduce the salience of nuclear weapons. For example, nuclear weapons certainly affect the relationship between India and Pakistan, and their nuclear weapons are not even deployed. Moreover, when Russia and India declared that they would no longer adhere to a NFU posture, the effect—negative or positive—on the international community was negligible. One participant recalled a meeting in Norway on reducing the salience of nuclear weapons, in which the representatives of Asian countries were unenthusiastic about NFU. Instead, they said the key to delegitimizing nuclear weapons was to get them out of the hands of the military and remove them from war plans. To that end, rather than changing declared doctrine, the United States should focus on programmatic steps toward a less aggressive nuclear posture—cutting the Reliable Replacement Warhead, de-alerting nuclear weapons, developing conventional means to cover every possible contingency except for nuclear attack, and so forth. The United States should strive to emphasize, with words and actions, that “the purpose of nuclear weapons is to ensure that they are never used.” Participants said that such a policy would have the virtue of reducing the salience of nuclear weapons while remaining more realistic and honest about possible nuclear use in extenuating circumstances.

#### Doesn’t strengthen norms or the taboo

Glaser, Professor and Deputy Dean, Graduate School of Public Policy Studies at the University of Chicago, and Steve Fetter, Professor and Dean of the School of Public Policy University of Maryland – ‘5

Counterforce Revisited, International Security, Vol. 30, No. 2 (Fall 2005), pp. 84–126

This leaves open the possibility that the nuclear taboo would be strengthened by doctrinal changes that reject the use of nuclear weapons. Some proponents of a no-fjrst-use policy have identified strengthening the norm against using nuclear weapons as a key rationale for changing U.S. nuclear doctrine.65 Again, however, the strength of this potential effect must be analyzed relative to the sources of the nuclear taboo. The nuclear taboo reflects the widespread recognition of the destructive potential of nuclear weapons, which has contributed to their being categorized as different from other weapons; the difficulty of establishing sharp lines between the use of nuclear weapons of different sizes, as well as between different types of nuclear use; and the weight of decades of nonuse. These factors may be so powerful that doctrinal shifts alone are unlikely to strengthen or weaken the taboo significantly.66

#### Solvency deficit and turn—NFU fails because of suspicion from other countries, vulnerability at home, and restriction of capabilities to defend ourselves.

Tertrais, ’09

Bruno Tertrais, Senior Research Fellow at the Fondation pour la recherche stratégique in Paris, expert in conflicts, US strategy, transatlantic relations, and nuclear proliferation. “The Trouble with No First Use” Forum: The Case for No First Use: An Exchange” October 5, 2009 http://www.informaworld.com/smpp/content~content=a915329759~db=all

At first glance, it sounds like a great and simple idea. Any nuclear-weapon use would be a catastrophe: it would break the ‘nuclear taboo’ and have, in many scenarios, terrible material, human and even environmental con- sequences. But if all nuclear-capable countries committed themselves to a ‘no-first-use’ posture, then the risk of such an event would be drastically reduced. Scott Sagan’s plea in favour of no first use is very well argued, and his article reopens an important and timely debate. However, I believe that the potential costs of no first use exceed its potential benefits. My conclu- sions are thus exactly the opposite of those reached by Sagan. My first argument is that the benefits of no-first-use postures are over- rated. Can one believe that Tehran or Pyongyang would feel reassured by Western no-first-use statements? During the Cold War, we did not take Soviet no-first-use statements seriously. I doubt that governments that see the United States and its allies as adversaries would believe our own. And does the nuclear-proliferation risk today stem mostly from Western nuclear policies? There are good reasons to think that conventional superior- ity matters more. More importantly for the purpose of non-proliferation, why would Non- Aligned Movement countries consider that nuclear-weapon states would feel bound by no-first-use commitments if and when push came to shove? Some would, but others would not, and given the amount of mispercep- tion and sometimes paranoia regarding Western military policies in general, they would be many. The non-proliferation value of a no-first-use commit- ment would be limited. Sagan argues that first-use options encourage other countries to follow suit, citing the example of India. But nuclear doctrines are hardly a matter of fashion. They are driven by security interests and technical capabilities, political imperative and moral choices. More often than not, the same causes produce the same effects. Other countries’ doctrines are used essentially as legitimising factors. New Delhi abandoned its no-first-use policy in 2003 for fear that Pakistan or China could use chemical or biological weapons in the course of a conflict against India despite their ratification of the relevant conventions. Sagan claims that the first-use option opens a ‘commitment trap’: the United States might have to use nuclear weapons to maintain its reputa- tion as a guarantor. But why would there be such a trap as long as there is no promise of a guaranteed nuclear response? That is precisely the point of ‘calculated ambiguity’ (a declaratory policy choice also made by the United Kingdom and France, albeit in different forms). I cannot believe, moreover, that an American president would see ‘rep- utation’ as a reason to take the most dramatic military decision a Western leader has had to take since 1945. My second argument is that the costs of no first use are significant. Given Western conventional superiority, it is tempting to say that the United States and perhaps even its nuclear allies, the United Kingdom and France, could afford to reserve nuclear deterrence for the prevention of nuclear attacks, thereby making no first use a theoretical possibility. But this would signal those adversaries who would take such a commitment seriously that they could do anything to the United States or its allies without ever facing the risk of a nuclear response, using chemical weapons against our forces on a battlefield, raining down conventional ballistic missiles on our homelands, or launching biological munitions against our populations. The counterargument is that the United States does not need nuclear weapons to deter non-nuclear mass destruction. But nuclear weapons are special: they can obliterate a country’s vital installations in a few minutes. Because of this ability and of some of their effects (radiation), they scare leaders and populations in a way that classical weapons do not. As Margaret Thatcher once said, there is a monument to the failure of conventional deter- rence in every French village. It is sometimes said that an adversary would not believe that a Western leader could use nuclear weapons for less than absolutely vital contingen- cies. But the US reaction to 11 September should give pause to anyone thinking that democracies are weak and do not get angry. More impor- tantly, the argument can be reversed: an adversary could believe that public opinion would not have the stomach for a sustained, costly conventional bombing campaign aimed at eradicating a state’s ability to function. The first-use option induces a fundamental uncertainty in the adversary’s mind: you cannot calculate in advance the maximum cost of an armed aggression against the core interests of a nuclear-capable country. There is, in particular, evidence of the value of nuclear weapons to deter the use of chemical or biological weapons. No country has ever used such means against a nuclear-armed adversary. Egypt used chemical weapons against Yemeni opponents in the early 1960s, but refrained from using them against Israel in 1967 and 1973. Iraq used chemical weapons against Iran (and against its own Kurdish population) in the 1980s, but did not do so against coalition forces or Israeli territory in 1991. Perhaps the United States does not need nuclear weapons to effectively ‘punish’ a chemical- or biological-weapons aggressor, although a nuclear response may be the best way to restore deterrence if such use has caused massive casualties. But my argument here is mostly about deterring the next use of weapons of mass destruction, not about deterring those that may come after that. A no-first-use policy might also have security costs beyond deterrence. As an action policy (as opposed to merely a declaratory one1), it would prevent a government which has adopted such a principle from striking pre-emptively at an adversary who has unmistakably demonstrated its intention to imminently launch a nuclear attack. Granted, such an extreme ‘damage limitation’ strike could only be executed in absolutely extraordi- nary circumstances. But it is only a slight exaggeration to say that a leader ready to forfeit it through a no-first-use policy is giving up the possibility of saving hundreds of thousands of his citizens. Sagan understates the non-proliferation costs of a no-first-use posture. If allies covered by the US nuclear umbrella saw such a policy shift as a reduc- tion in the value of American protection, they could conclude that they should embark in their own nuclear programmes. Sagan is right to mention the fact that there is, for instance, a German constituency in favour of no first use. But ask the Japanese how they would interpret an American move to such a posture. It remains to be demonstrated that ‘appropriate consultation with allies’ would be enough to reassure them. Finally, a no-first-use commitment would be a severe impingement on what leaders cherish most in time of war: freedom of action to defend their country. I personally have little doubt, for instance, that the Chinese leader- ship would not feel constrained by its no-first-use doctrine if it believed that the first use of nuclear weapons could save them from defeat or destruction. Sagan claims that when a US president says ‘all options are on the table’, countries like Iran are encouraged to develop nuclear weapons to protect themselves. There is no evidence that George W. Bush ever envisioned the possibility of a preventive nuclear strike on Iran or, for that matter, on any other country.2 (In fact, nothing in official US nuclear-policy statements of the past 20 years suggests that this could ever have been the case.3) Again, if Bush had added something along the lines of ‘however, we have no plan, no intention and no reason to use nuclear weapons preventively’, would Iranian hardliners have believed him? I am not convinced. But Sagan nev- ertheless raises a valuable point here. He is absolutely right to say that nuclear-weapons states need to be careful of how such statements can be interpreted, not only by potential adversaries, but also by the international community at large. So there would be some benefits in altering US declara- tory policy to make it clearer that nuclear weapons are for deterrence and could not be used except in extreme circumstances of self-defence, when vital interests are at stake. Such an alteration would have few costs, if any, because it would not change the doctrine itself.