# 1NC

## 1NC-Politics

#### CIR Will Pass Now – Obama Has the PC and Hes Pushing IT

By: Reid J. Epstein October 17, 2013 Obama’s latest push features a familiar strategy http://dyn.politico.com/printstory.cfm?uuid=00B694F1-5D59-4D13-B6D1-FC437A465923

President Barack Obama made his plans for his newly won political capital official — he’s going to hammer House Republicans on immigration.¶ And it’s evident from his public and private statements that Obama’s latest immigration push is, in at least one respect, similar to his fiscal showdown strategy: yet again, the goal is to boost public pressure on House Republican leadership to call a vote on a Senate-passed measure.¶ “The majority of Americans think this is the right thing to do,” Obama said Thursday at the White House. “And it’s sitting there waiting for the House to pass it. Now, if the House has ideas on how to improve the Senate bill, let’s hear them. Let’s start the negotiations. But let’s not leave this problem to keep festering for another year, or two years, or three years. This can and should get done by the end of this year.”¶ (WATCH: Assessing the government shutdown's damage)¶ And yet Obama spent the bulk of his 20-minute address taking whack after whack at the same House Republicans he’ll need to pass that agenda, culminating in a jab at the GOP over the results of the 2012 election — and a dare to do better next time.¶ “You don’t like a particular policy or a particular president? Then argue for your position,” Obama said. “Go out there and win an election. Push to change it. But don’t break it. Don’t break what our predecessors spent over two centuries building. That’s not being faithful to what this country’s about.”¶ Before the shutdown, the White House had planned a major immigration push for the first week in October. But with the shutdown and looming debt default dominating the discussion during the last month, immigration reform received little attention on the Hill.¶ (PHOTOS: Immigration reform rally on the National Mall)¶ Immigration reform allies, including Obama’s political arm, Organizing for Action, conducted a series of events for the weekend of Oct. 5, most of which received little attention in Washington due to the the shutdown drama. But activists remained engaged, with Dream Act supporters staging a march up Constitution Avenue, past the Capitol to the Supreme Court Tuesday, to little notice of the Congress inside.¶ Obama first personally signaled his intention to re-emerge in the immigration debate during an interview Tuesday with the Los Angeles Univision affiliate, conducted four hours before his meeting that day with House Democrats.¶ Speaking of the week’s fiscal landmines, Obama said: “Once that’s done, you know, the day after, I’m going to be pushing to say, call a vote on immigration reform.”¶ (Also on POLITICO: GOP blame game: Who lost the government shutdown?)¶ When he met that afternoon in the Oval Office with the House Democratic leadership, Obama said that he planned to be personally engaged in selling the reform package he first introduced in a Las Vegas speech in January.¶ Still, during that meeting, Obama knew so little about immigration reform’s status in the House that he had to ask Rep. Xavier Becerra (D-Calif.) how many members of his own party would back a comprehensive reform bill, according to a senior Democrat who attended.¶ The White House doesn’t have plans yet for Obama to participate in any new immigration reform events or rallies — that sort of advance work has been hamstrung by the 16-day government shutdown.¶ But the president emerged on Thursday to tout a “broad coalition across America” that supports immigration reform. He also invited House Republicans to add their input specifically to the Senate bill — an approach diametrically different than the House GOP’s announced strategy of breaking the reform into several smaller bills.¶ White House press secretary Jay Carney echoed Obama’s remarks Thursday, again using for the same language on immigration the White House used to press Republicans on the budget during the shutdown standoff: the claim that there are enough votes in the House to pass the Senate’s bill now, if only it could come to a vote.¶ “When it comes to immigration reform … we’re confident that if that bill that passed the Senate were put on the floor of the House today, it would win a majority of the House,” Carney said. “And I think that it would win significant Republican votes.”

#### The plan would be controversial and Obama would have to be pushing the plan

Leogrande 13

William M. LeoGrande is professor in the Department of Government, School of Public Affairs at American University in Washington, D.C.¶ The Danger of Dependence: Cuba's Foreign Policy After Chavez 4-2-13¶ http://www.worldpoliticsreview.com/articles/12840/the-danger-of-dependence-cubas-foreign-policy-after-chavez¶ Are U.S.-Cuban Relations Poised for Change?

In his first public statement after assuming Cuba's presidency in 2006, Raúl Castro held out an olive branch to Washington, declaring his readiness to sit down and negotiate the differences between the two countries. Obama came to office in 2009 declaring that U.S. policy toward Cuba amounted to 50 years of failure and that it was "time to try something new." The stage appeared set for a tectonic shift in U.S.-Cuban relations, long locked in a state of perpetual hostility.¶ Obama took some early steps that augured well. In April 2009, he ended restrictions on Cuban-American remittances and family travel and subsequently eased regulations limiting cultural and academic exchange. At Washington's initiative, the United States and Cuba resumed bilateral talks on migration, suspended by President George W. Bush in 2004. The two governments also began discussions on other issues of mutual interest, such as Coast Guard cooperation and drug interdiction.¶ But the momentum in Washington soon dissipated in the face of more pressing foreign policy priorities, opposition from Congress, even among some Democrats, and resistance from an inertial State Department bureaucracy more comfortable with the familiar policy of the past -- its failure notwithstanding -- than the risk of trying something new. As a former senior State Department official explained, high-visibility foreign policy changes of this magnitude only happen if the president demands that they happen, and Obama's attention was focused elsewhere. In December 2009, Cuba's arrest of Alan Gross, a consultant for the U.S. Agency for International Development's "democracy promotion" programs, brought all progress to a halt. At the end of Obama's first term, relations with Cuba were not much better than at the start.¶

**Increasing green cards generates an effective base of IT experts- solves cybersecurity**

**McLarty 9** (Thomas F. III, President – McLarty Associates and Former White House Chief of Staff and Task Force Co-Chair, “U.S. Immigration Policy: Report of a CFR-Sponsored Independent Task Force”, 7-8, http://www.cfr.org/ publication/19759/us\_immigration\_policy.html)

We have seen, **when you look at the** table of the **top 20 firms that are H1-B visa requestors**, at least 15 of those **are** IT firms. And as we're seeing across industry, much of the hardware and software that's used in this country is not only manufactured now overseas, but **it's developed overseas** by scientists and engineers who were educated here in the United States. **We're seeing a lot more activity around cyber-security, certainly** noteworthy **attacks** here **very recently**. It's becoming an increasingly dominant set of requirements across not only to the Department of Defense, but the Department of Homeland Security and the critical infrastructure that's held in private hands. **Was there any discussion** or any interest from DOD or DHS as you undertook this review on the security **things about what can be done to** try to **generate a more effective group of IT experts here in the U**nited **S**tates, **many of which are coming to the U.S. institutions**, academic institutions **from overseas and** often **returning back? This** potentially **puts us at a competitive disadvantage** going forward. MCLARTY: Yes. And I think your question largely is the answer as well. I mean, **clearly we have less talented students here studying** -- or put another way, more **talented students** studying in other countries that are gifted, talented, really **have a tremendous ability to develop these kind of technology and scientific advances**, we're going to be put at an increasingly disadvantage. Where if they come here -- and **I** kind of **like** Dr. Land's approach of **the green card being handed to them** or carefully put in their billfold or purse as they graduate -- then, obviously, **that's** **going to strengthen**, I think, our system, **our security needs**.

#### Cyberterrorism will cause accidental launch that triggers the Dead Hand and nuclear war

Fritz 9 (Jason, BS – St. Cloud, “Hacking Nuclear Command and Control”, Study Commissioned on Nuclear Non-Proliferation and Disarmament, July, www.icnnd.org/Documents/Jason\_Fritz\_Hacking\_NC2.doc)  
*Direct control of launch*   
The US uses the two-man rule to achieve a higher level of security in nuclear affairs. Under this rule two authorized personnel must be present and in agreement during critical stages of nuclear command and control. The President must jointly issue a launch order with the Secretary of Defense; Minuteman missile operators must agree that the launch order is valid; and on a submarine, both the commanding officer and executive officer must agree that the order to launch is valid. In the US, in order to execute a nuclear launch, an Emergency Action Message (EAM) is needed. This is a preformatted message that directs nuclear forces to execute a specific attack. The contents of an EAM change daily and consist of a complex code read by a human voice. Regular monitoring by shortwave listeners and videos posted to YouTube provide insight into how these work. These are issued from the NMCC, or in the event of destruction, from the designated hierarchy of command and control centres. Once a command centre has confirmed the EAM, using the two-man rule, the Permissive Action Link (PAL) codes are entered to arm the weapons and the message is sent out. These messages are sent in digital format via the secure Automatic Digital Network and then relayed to aircraft via single-sideband radio transmitters of the High Frequency Global Communications System, and, at least in the past, sent to nuclear capable submarines via Very Low Frequency (Greenemeier 2008, Hardisty 1985). The technical details of VLF submarine communication methods can be found online, including PC-based VLF reception. Some reports have noted **a Pentagon review**, which **showed a potential** “electronic back door into the **US** Navy’s system for broadcasting nuclear launch orders **to Trident submarines”** (Peterson 2004). The investigation showed that cyber terrorists could **potentially** infiltrate **this network** and insert false orders for launch. The investigation led to “elaborate new instructions for validating launch orders” (Blair 2003). Adding further to the concern of cyber terrorists seizing control over submarine launched nuclear missiles; The Royal Navy announced in 2008 that it would be installing a Microsoft Windows operating system on its nuclear submarines (Page 2008). The choice of operating system, apparently based on Windows XP, is not as alarming as the advertising of such a system is. This may attract hackers and narrow the necessary reconnaissance to learning its **details and potential** exploits. It is unlikely that the operating system would play a direct role in the signal to launch, although this is far from certain. Knowledge **of the operating system** may lead to the insertion of malicious code, which could be used to gain accelerating privileges, tracking, valuable information, and deception **that** could **subsequently** be used to initiate **a** launch. Remember from Chapter 2 that the UK’s nuclear submarines have the authority to launch if they believe the central command has been destroyed. Attempts by cyber terrorists to create the illusion of a decapitating strike could also **be used to** engage fail-deadly systems. Open source knowledge is scarce as to whether Russia continues to operate such a system. However evidence suggests that they have in the past. Perimetr, also known as Dead Hand**,** was an automated system set to launch a mass scale nuclear attack in the event of a decapitation strike **against Soviet leadership** and military. In a crisis, military officials would send a coded message to the bunkers, switching on the dead hand. If nearby ground-level sensors detected a nuclear attack on Moscow, and if a break was detected in communications links with top military commanders, the system would send low-frequency signals over underground antennas to special rockets. Flying high over missile fields and other military sites, these rockets in turn would broadcast attack orders to missiles, bombers and, via radio relays, submarines at sea. Contrary to some Western beliefs, Dr. Blair says, many of Russia's nuclear-armed missiles in underground silos and on mobile launchers can be fired automatically. (Broad 1993) Assuming such a system is still active, cyber terrorists would need to create a crisis situation in order to activate Perimetr, and then fool it into believing a decapitating strike had taken place. While this is not an easy task, the information age makes it easier. Cyber reconnaissance could help locate the machine and learn its inner workings. This could be done by targeting the computers high of level official’s—anyone who has reportedly worked on such a project, or individuals involved in military operations at underground facilities, such as those reported to be located at Yamantau and Kosvinksy mountains in the central southern Urals (Rosenbaum 2007, Blair 2008) Indirect Control of Launch Cyber terrorists could cause incorrect information to be transmitted, received, or displayed at nuclear command and control centres, or shut down these centres’ computer networks completely. In 1995, a Norwegian scientific sounding rocket was mistaken by Russian early warning systems as a nuclear missile launched from a US submarine. A radar operator used Krokus to notify a general on duty who decided to alert the highest levels. Kavkaz was implemented, all three chegets activated, and the countdown for a nuclear decision began. It took eight minutes before the missile was properly identified—a considerable amount of time considering the speed with which a nuclear response must be decided upon (Aftergood 2000). Creating a false signal in these early warning systems would be relatively easy using computer network operations. The real difficulty would be gaining access to these systems as they are most likely on a closed network. However, if they are transmitting wirelessly, that may provide an entry point, and information gained through the internet may reveal the details, such as passwords and software, for gaining entrance to the closed network. If access was obtained, a false alarm could be followed by something like a DDoS attack, so the operators believe an attack may be imminent, yet they can no longer verify it. This could add **pressure** to the decision making process, and **if coordinated precisely, could** appear as a **first round** EMP burst. Terrorist groups could also **attempt to** launch a non-nuclear missile, such as the one used by Norway, **in an attempt** to fool the system. The number of states who possess such technology is far greater than the number of states who possess nuclear weapons. Obtaining them would be considerably easier, especially when enhancing operations through computer network operations. Combining traditional terrorist methods with cyber techniques opens opportunities neither could accomplish on their own. For example, radar stations might be more vulnerable to a computer attack, while satellites are more vulnerable to jamming from a laser beam, thus together they deny dual phenomenology. Mapping communications networks through cyber reconnaissance may expose weaknesses, and automated scanning devices created by more experienced hackers can be readily found on the internet. Intercepting or spoofing communications is a highly complex science. These systems are designed to protect against the world’s most powerful and well funded militaries. Yet, there are recurring gaffes, and the very nature of asymmetric warfare is to bypass complexities by finding simple loopholes. For example, commercially available software for voice-morphing could be used to capture voice commands within the command and control structure, cut these sound bytes into phonemes, and splice it back together in order to issue false voice commands (Andersen 2001, Chapter 16). Spoofing could also be used to escalate a volatile situation in the hopes of starting a nuclear war. “ \*\*[they cut off the paragraph]\*\* “In June 1998, a group of international hackers calling themselves Milw0rm hacked the web site of India’s Bhabha Atomic Research Center (BARC) and put up a spoofed web page showing a mushroom cloud and the text “If a nuclear war does start, you will be the first to scream” (Denning 1999). Hacker web-page defacements like these are often derided by critics of cyber terrorism as simply being a nuisance which causes no significant harm. However, web-page defacements are becoming more common, and they point towards alarming possibilities in subversion. During the 2007 cyber attacks against Estonia, a counterfeit letter of apology from Prime Minister Andrus Ansip was planted on his political party website (Grant 2007). This took place amid the confusion of mass DDoS attacks, real world protests, and accusations between governments.

## 1NC-T

#### Interpretation - “Engagement” requires the provision of positive incentives

Haass 00 – Richard Haass & Meghan O’Sullivan, Brookings Institution Foreign Policy Studies Program, Honey and Vinegar: Incentives, Sanctions, and Foreign Policy, p. 1-2

The term *engagement* was popularized amid the controversial policy of constructive engagement pursued by the United States toward South Africa during the first term of the Reagan administration. However, the term itself remains a source of confusion. To the Chinese, the word appears to mean simply the conduct of normal relations. In German, no comparable translation exists. Even to native English speakers, the concept behind the word is unclear. Except in the few instances in which the United States has sought to isolate a regime or country, America arguably "engages" states and actors all the time in one capacity or another simply by interacting with them. This book, however, employs the term engagement in a much more specific way, one that involves much more than a policy of nonisolation. In our usage, engagement refers to a foreign policy strategy that depends to a significant degree on positive incentives to achieve its objectives. Certainly, engagement does not preclude the simultaneous use of other foreign policy instruments such as sanctions or military force. In practice, there is often considerable overlap of strategies, particularly when the termination or lifting of sanctions is used as a positive inducement. Yet the distinguishing feature of engagement strategies is their reliance on the extension or provision of incentives to shape the behavior of countries with which the United States has important disagreements.

#### That means the plan must be a quid-pro-quo

De LaHunt 6 - Assistant Director for Environmental Health & Safety Services in Colorado College's Facilities Services department (John, “Perverse and unintended” Journal of Chemical Health and Safety, July-August, Science direct)

Incentives work on a *quid pro quo* basis – this for that. If you change your behavior, I’ll give you a reward. One could say that coercion is an incentive program – do as I say and I’ll let you live. However, I define an incentive as getting something you didn’t have before in exchange for new behavior, so that pretty much puts coercion in its own box, one separate from incentives. But fundamental problems plague the incentive approach. Like coercion, incentives are poor motivators in the long run, for at least two reasons – unintended consequences and perverse incentives.

#### Violation – the plan isn’t

#### Voting issue:

#### Limits --- it functionally narrows the topic because few cases can defend conditioning --- the alternative is hundreds of single import or export cases that explode the Neg’s research burden

#### Ground --- QPQ locks in core generics like soft power and foreign politics DAs, counterplans to add or remove a condition, and critiques of diplomacy

## 1nc- K

#### Commidification of resources forces enclosure and reliance on markets for livelihoods—that organizes society in ways that make livelihoods zero sum

**De Angelis, East London political economy professor, 2004**

(Massimo, “Opposing fetishism by reclaiming our powers: The Social Forum movement, capitalist markets and the politics of alternatives”, International Social Science Journal Volume 56, Issue 182, Wiley)

There is not the space here to discuss the processes of market creation. Suffice to say that it is possible to theorise them in terms of “enclosures” (Caffentzis 1995, De Angelis 2004b). To put it simply, enclosures refer to those strategies promoted by economic and political elites that “commodify” things. In general commodification is to turn resources that are held in common among communities, or exchanged as gifts among its members or across members of different communities, or administrated and distributed by central institutions (Polanyi 1944), into things that are bought and sold on the market, commodities. The “things” turned into commodities often represent important resources necessary for communities to reproduce their livelihoods, and their “enclosure” represents at the same time the destruction of those communities and their increasing dependence on markets, which in today's context are increasingly linked to global commodity chains. The consolidation, development and deepening of capitalism in our lives heavily depends on enclosures. Indeed, as others and I have argued, enclosures are a continuous feature of the capitalist mode of production (Caffenzis 1995, De Angelis 2004b, Parelman, 2000) Today, enclosures, the commodification of resources upon which people depend for their livelihoods, take many names. They may involve the dispossession of thousands of farming communities from land and water resources following international bank funding of dam construction, as in the case of the dam project in the Narmada valley in India or the Plan Puebla Panama in Latin America. Or they may take the form of cuts in social spending on hospitals, medicines, and schools, or, especially in countries in the south, cuts in food subsidies so as to have money to pay interest on a mounting international debt. In all these cases, cuts, dispossessions and austerity, namely “enclosures”, are imposed for the sake of “efficiency”, and rationalisation and “global competitiveness”. Enclosures are therefore any strategy that push people to depend on markets for their livelihood. Enclosures only create a context for market social interaction to occur. If enclosures push people into increasing the degree of their dependence on markets for the reproduction of their livelihoods, then markets integrate their activities in a system that pits all against all. The increasing intensification of planetary interdependence brought about by global markets implies that any “node” of social production, at whatever scale – whether an individual on the labour market, a company in a particular industry, a city and country in competition to attract capital and investments vis-à-vis other cities and countries – faces an external force that forces it to adapt to certain standards of doing things, to adopt certain forms of social cooperation, in order to beat the competitor on pain of threat to its livelihood. But “beating the competitor” is also, at the same time, threatening the livelihoods of other communities we are competing with, to the extent that they also depend on markets to reproduce their own livelihoods. The more we depend on money and markets to satisfy our needs and follow our desires, the more we are exposed to a vicious circle of dependence that pits livelihoods against each other. Some of us win, and some of us lose, but in either case we are both involved in perpetrating the system that keeps us reproducing scarcity when in fact we could celebrate abundance. It must be noted that the competition that runs through the global social body is not similar to the competitive games we play with friends. When I play table football with my friends I aim at winning. But whether I win or lose, I end up sharing food and laughter with my friends, whether they lose or win. Competition in this realm is innocuous; it is a practice that might strengthen communities' playfulness instead of destroying it. But competition in the economy – whether “perfect” or “imperfect”, whether real or merely simulated (the latter being increasingly the case in public services where, in the absence of markets, government agencies simulate their dynamics by setting new benchmarks) – ultimately finds its very energy in its threat to livelihoods. It is a mode of social relation that is based on pitting livelihoods against each other. In so doing it continuously reproduces scarcity and community destruction. From the perspective of any “node”, this mode of articulation across the social body is disciplinary because, borrowing from Foucault's (1975) analysis of Bentham's Panopticon, or model prison, the market is also a mechanism in which norms are created through a social process that distributes rewards and punishments (see De Angelis 2002). By norms of production I am here referring to the variety of principles of allocation of resources and distribution associated with social human production, as well as ways of doing things, rhythms and forms of cooperation, that in capitalist markets are synthesised in prices. Norms of production (that is, ways of relating to one another) are answers to such fundamental questions as: what we shall produce, how we shall produce it, how much of it we shall produce, how long we should spend working to produce it, and who shall produce it – all very concrete questions that define process and relational questions concerning the reproduction of our social body and the ways in which we relate to each other and to nature. These questions are not answered by people themselves taking charge of their lives and relations among themselves; thus, equally, the norms of social production and of their relations to each other are not defined collectively. Instead they are defined by an abstract mechanism that we have created (actually, that states have created at sword-and gun-point: see Polanyi, 1944, and Marx, 1867, as classical accounts) and that we take as “natural” in the daily practices of our lives. It is the abstract process of disciplinary markets that articulates the social body in such a way as to constitute social norms of production, rather than individual social actors negotiating among themselves the norms of their free cooperation. In this market mechanism, individual actors must respond to existing heteronomous norms imposed by the blind mechanism of the market by meeting or beating the market benchmark (or the simulated market benchmark imposed by neo-liberalism's state bodies), an activity which in turn affects the market norm itself. In this continuous feedback mechanism, livelihoods are pitted against each other. When rewards and punishments are repeated in a system, norms are created. This is a process that the paladin of market freedom, Friedrich von Hayek, well understood, although he ignored the question of power and enclosure processes in explaining the emergence of capitalist markets. For Hayek, the abstract mechanism of the market is a spontaneously emerging system of freedom (De Angelis 2002).

#### Root cause of global environmental degradation is neoliberal drive for profit-try or die for reorganizing social relations

**Abramsky, former Institute of Advanced Studies in Science, Technology and Society fellow, 2010**

(Kolya, Sparking a Worldwide Energy Revolution: Social Struggles in the Transition to a Post-Petrol World, pg 7-9)

The stark reality is that the only two recent periods that have seen a major reduction in global CO2emissions both occurred in periods of very sudden, rapid, socially disruptive, and painful periods of forced economic degrowth—namely the breakdown of the Soviet bloc and the current financial-economic crisis. Strikingly, in May 2009, the International Energy Agency reported that, for the first time since 1945, global demand for electricity was expected to fall. Experience has shown that a lot of time and political energy have been virtually wasted on developing a highly-ineffective regulatory framework to tackle climate change. Years of COPs and MOPs—the international basis for regulatory efforts— have simply proven to be hot air. And, not surprisingly, hot air has resulted in global warming. Only unintended degrowth has had the effect that years of intentional regulations sought to achieve. Yet, the dominant approaches to climate change continue to focus on promoting regulatory reforms, rather than on more fundamental changes in social relations. This is true for governments, multilateral institutions, and also large sectors of so-called "civil society," especially the major national and international trade unions and their federations, and NGOs. And despite the patent inadequacy of this approach, regulatory efforts will certainly continue to be pursued. Furthermore, they may well contribute to shoring up legitimacy, at least in the short term, and in certain predominantly-northern countries where the effects of climate changes are less immediately visible and impact on people's lives less directly. Nonetheless, it is becoming increasingly clear that solutions will not be found at this level. The problem has to do with production, not regulation. The current worldwide system of production is based on endless growth and expansion, which is simply incompatible with a long term reduction in emissions and energy consumption. Despite the fact that localized and punctual moments of reduction may well still occur, the overall energy consumption and emissions of the system as a whole can only increase. All the energy-efficient technologies in the world, though undoubtedly crucial to any long term solution, cannot, on their own, square the circle by reducing the total emissions of a system whose survival is based on continual expansion. This is not to say that developing appropriate regulation is not important—it is completely essential. However, the regulatory process is very unlikely to be the driving force behind the changes, but rather a necessary facilitation process that enables wider changes. Furthermore, regulation that is strong enough to be effective is only likely to come about once wider changes in production are already underway. Energy generation and distribution plays a key role in shaping human relations. Every form of energy implies a particular organization of work and division of labor (both in general, and within the energy sector, in particular). The most significant social, economic, cultural, political, and technological transformations in history were associated with shifts in energy generation: from hunting and gathering to agriculture, from human and animal power for transport and production to wind and the steam engine, from coal to oil and nuclear fission as drivers of industry and war. All these transformations have led to increased concentration of power and wealth. And a very real possibility exists that the coming transformation in the world's energy system will result in similar shifts in power relations. But we live in interesting times. The ecological and social carrying-capacity of our planet and existing social relations are overstretched, snapping in different places. This will trigger a major change in the next few decades, but nobody knows in which direction. Consequently, the most important single factor determining the outcome of this change will be the intensity, sophistication, and creativity of grassroots social mobilization.

#### The alternative is a process of critique that challenges the ideology of capital by prioritizing human development over production

Lebowitz 07 (Michael A. Lebowitz is author of Beyond Capital: Marx’s Political Economy of the Working Class (Palgrave Macmillan, 2003), Build It Now: Socialism for the Twenty-First Century (Monthly Review Press, 2006), and The Socialist Alternative: Real Human Development (Monthly Review Press, forthcoming in 2008). Portions of this essay were presented as “Going Beyond Survival: Making the Social Economy a Real Alternative” at the Fourth International Meeting of the Solidarity Economy, July 21–23, 2006, at the University of Sao Paulo, Brazil, “Venezuela: A Good Example of the Bad Left of Latin America”, <http://monthlyreview.org/2007/07/01/venezuela-a-good-example-of-the-bad-left-of-latin-america>,)

What constitutes a real alternative to capitalism? I suggest that it is a society in which the explicit goal is not the growth of capital or of the material means of production but, rather, human development itself—the growth of human capacities. We can see this perspective embodied in the Bolivarian Constitution of Venezuela—in Article 299’s emphasis upon “ensuring overall human development,” in the declaration of Article 20 that “everyone has the right to the free development of his or her own personality,” and in the focus of Article 102 upon “developing the creative potential of every human being and the full exercise of his or her personality in a democratic society.”¶ In these passages (which are by no means the whole of that constitution), there is the conception of a real alternative—an economy whose logic is not the logic of capital. “The social economy,” President Hugo Chávez said in September 2003, “bases its logic on the human being, on work, that is to say, on the worker and the worker’s family, that is to say, in the human being.” That social economy, he continued, does not focus on economic gain, on exchange values; rather, “the social economy generates mainly use-value.” Its purpose is “the construction of the new man, of the new woman, of the new society.”¶ These are beautiful ideas and beautiful words, but they are, of course, only ideas and words. The first set comes from a constitution and the second comes from the regular national educational seminar known as Aló Presidente. How can such ideas and words be made real? Let me suggest four preconditions for the realization of this alternative to capitalism.¶ (1) Any discussion of structural change must begin from an understanding of the existing structure—in short, from an understanding of capitalism. We need to grasp that the logic of capital, the logic in which profit rather than satisfaction of the needs of human beings is the goal, dominates both where it fosters the comparative advantage of repression and also where it accepts an increase in slave rations. (2) It is essential to attack the logic of capital ideologically. In the absence of the development of a mass understanding of the nature of capital—that capital is the result of the social labor of the collective worker—the need to survive the ravages of neoliberal and repressive policies produces only the desire for a fairer society, the search for a better share for the exploited and excluded: in short, barbarism with a human face.¶ (3) A critical aspect in the battle to go beyond capitalism is the recognition that human capacity develops only through human activity, only through what Marx understood as “revolutionary practice,” the simultaneous changing of circumstances and self-change. Real human development does not drop from the sky in the form of money to support survival or the expenditures of popular governments upon education and health. In contrast to populism, which produces people who look to the state for all answers and to leaders who promise everything, the conception which truly challenges the logic of capital in the battle of ideas is one which explicitly recognizes the centrality of self-management in the workplace and self-government in the community as the means of unleashing human potential—i.e., the idea of socialism for the twenty-first century.¶ (4) But, the idea of this socialism cannot displace real capitalism. Nor can dwarfish islands of cooperation change the world by competing successfully against capitalist corporations. You need the power to foster the new productive relations while truncating the reproduction of capitalist productive relations. You need to take the power of the state away from capital, and you need to use that power when capital responds to encroachments—when capital goes on strike, you must be prepared to move in rather than give in. Winning the “battle of democracy” and using “political supremacy to wrest, by degrees, all capital from the bourgeoisie” remains as critical now as when Marx and Engels wrote the Communist Manifesto. Consider these preconditions. Are they being met by the new Latin American governments on the left? On the contrary, for the most part, we can see the familiar characteristics of social democracy—which does not understand the nature of capital, does not attack the logic of capital ideologically, does not believe that there is a real alternative to capitalism, and, not surprisingly, gives in when capital threatens to go on strike.¶ “We can’t kill the goose that lays the golden eggs,” announced the social democratic premier of British Columbia in Canada (in the 1970s when I was party policy chairman). Here, crystallized, is the ultimate wisdom of social democracy—the manner in which social democracy enforces the logic of capital and ideologically disarms and demobilizes people.¶ Venezuela, however, is going in a different direction at this point. While the Bolivarian Revolution did not start out to build a socialist alternative (and its continuation along this path is contested every step of the way), it is both actively rejecting the logic of capital and also ideologically arming and mobilizing people to build that alternative.

## 1NC Warming ADV CP

#### The United States federal government should increase research and engineering of photocatalytic systems to a level necessary for deployment of photodegredation technology and deploy these systems at a large scale

#### The counterplan solves warming and is cheap – these techniques convert greenhouse gases to fuels through photocatalysed reactions

Renaud de RICHTER, 2011 [July 28th, Fighting global warming: the potential of photocatalysis¶ against CO2, CH4, N2O, CFCs, tropospheric O3, BC and other¶ major contributors to climate change, http://hal.archives-ouvertes.fr/docs/00/61/17/10/PDF/Fighting\_global\_warming\_by\_photocatalysis-Richter-Caillol-2011.pdfPHD at University of science and technology at Montpellier France, submission to Journal of Photochemistry and Photobiology C: Photochemistry Reviews, coauthor of book in 2010 on unusual renewable energies]

This comprehensive review on photocatalysis techniques at room temperature aims at**¶** demonstrating their potential in helping solving the environmental and global warming**¶** challenges humanity is currently facing, by demonstrating that photocatalytic¶ technologies could be useful in:¶ • transforming or converting CO2 gas, back to fuels using solar energy;¶ • destructing anthropogenic non-CO2 GHG (mainly N2O, CH4, CFCs, etc.);¶ • eliminating BC and soot (probably also PM), probably the second-largest**¶** contributor to global excess radiative forcing after CO2;¶ • reducing tropospheric O3 and its precursors (NOx, VOCs, CH4, CO).¶ Photocatalysis looks like a panacea to fight all potent greenhouse gases, as**¶** photocatalysed reactions are able to transform or destroy almost all well-mixed, longlived¶ greenhouse gases - CO2, CH4, N2O, CFC-12 and CFC-11 - which account for**¶** about 96% of the direct radiative forcing, and also short-lived climate forcers like¶ VOCs, NOx, BC and soot that have an important contribution to climate change.¶ The effects of essential parameters on process performance, including light wavelength¶ and intensity, type of reducing agent or oxidant, metal-modified surface, temperature¶ and pressure can be found in the literature cited herein.¶ However, for successful application of photocatalytic laboratory scale techniques to**¶** large scale photodegradation of atmospheric pollutants more research and engineering**¶** design need to be performed.**¶** This literature review showed that cheaper photocatalytic technologies for the¶ abatement of GHGs, BC, tropospheric O3 and low-level local pollutants (VOCs and¶ hal-00611710, version 1 - 28 Jul 2011¶ Page 41 / 68¶ R. de\_Richter, S. Caillol, J. Photochem. Photobiol. C: Photochem. Rev. (2011).¶ Fighting global warming: the potential of photocatalysis…¶ NOx) can indeed be an effective alternative to limit their increasing tropospheric**¶** concentration and thus reduce their contribution to global warming.

## Adv 1

#### Warming won’t cause extinction

Barrett 07, professor of natural resource economics – Columbia University

(Scott, Why Cooperate? The Incentive to Supply Global Public Goods, introduction)

First, climate change does not threaten the survival of the human species.5 If unchecked, it will cause other species to become extinction (though biodiversity is being depleted now due to other reasons). It will alter critical ecosystems (though this is also happening now, and for reasons unrelated to climate change). It will reduce land area as the seas rise, and in the process displace human populations. “Catastrophic” climate change is possible, but not certain. Moreover, and unlike an asteroid collision, large changes (such as sea level rise of, say, ten meters) will likely take centuries to unfold, giving societies time to adjust. “Abrupt” climate change is also possible, and will occur more rapidly, perhaps over a decade or two. However, abrupt climate change (such as a weakening in the North Atlantic circulation), though potentially very serious, is unlikely to be ruinous. Human-induced climate change is an experiment of planetary proportions, and we cannot be sur of its consequences. Even in a worse case scenario, however, global climate change is not the equivalent of the Earth being hit by mega-asteroid. Indeed, if it were as damaging as this, and if we were sure that it would be this harmful, then our incentive to address this threat would be overwhelming. The challenge would still be more difficult than asteroid defense, but we would have done much more about it by now.

#### CO2 isn’t key

Watts 12, 25-year climate reporter, works with weather technology, weather stations, and weather data processing systems in the private sector, 7/25/’12

(Anthony, <http://wattsupwiththat.com/2012/07/25/lindzen-at-sandia-national-labs-climate-models-are-flawed/>)

ALBUQUERQUE, N.M. — Massachusetts Institute of Technology professor Richard Lindzen, a global warming skeptic, told about 70 Sandia researchers in June that too much is being made of climate change by researchers seeking government funding. He said their data and their methods did not support their claims. “Despite concerns over the last decades with the greenhouse process, they oversimplify the effect,” he said. “Simply cranking up CO2 [carbon dioxide] (as the culprit) is not the answer” to what causes climate change. Lindzen, the ninth speaker in Sandia’s Climate Change and National Security Speaker Series, is Alfred P. Sloan professor of meteorology in MIT’s department of earth, atmospheric and planetary sciences. He has published more than 200 scientific papers and is the lead author of Chapter 7 (“Physical Climate Processes and Feedbacks”) of the International Panel on Climate Change’s (IPCC) Third Assessment Report. He is a member of the National Academy of Sciences and a fellow of the American Geophysical Union and the American Meteorological Society. For 30 years, climate scientists have been “locked into a simple-minded identification of climate with greenhouse-gas level. … That climate should be the function of a single parameter (like CO2) has always seemed implausible. Yet an obsessive focus on such an obvious oversimplification has likely set back progress by decades,” Lindzen said. For major climates of the past, other factors were more important than carbon dioxide. Orbital variations have been shown to quantitatively account for the cycles of glaciations of the past 700,000 years, he said, and the elimination of the arctic inversion, when the polar caps were ice-free, “is likely to have been more important than CO2 for the warm episode during the Eocene 50 million years ago.” There is little evidence that changes in climate are producing extreme weather events, he said. “Even the IPCC says there is little if any evidence of this. In fact, there are important physical reasons for doubting such anticipations.” Lindzen’s views run counter to those of almost all major professional societies. For example, the American Physical Society statement of Nov. 18, 2007, read, “The evidence is incontrovertible: Global warming is occurring.” But he doesn’t feel they are necessarily right. “Why did the American Physical Society take a position?” he asked his audience. “Why did they find it compelling? They never answered.” Speaking methodically with flashes of humor — “I always feel that when the conversation turns to weather, people are bored.” — he said a basic problem with current computer climate models that show disastrous increases in temperature is that relatively small increases in atmospheric gases lead to large changes in temperatures in the models. But, he said, “predictions based on high (climate) sensitivity ran well ahead of observations.” Real-world observations do not support IPCC models, he said: “We’ve already seen almost the equivalent of a doubling of CO2 (in radiative forcing) and that has produced very little warming.”He disparaged proving the worth of models by applying their criteria to the prediction of past climatic events, saying, “The models are no more valuable than answering a test when you have the questions in advance.” Modelers, he said, merely have used aerosols as a kind of fudge factor to make their models come out right. (Aerosols are tiny particles that reflect sunlight. They are put in the air by industrial or volcanic processes and are considered a possible cause of temperature change at Earth’s surface.) Then there is the practical question of what can be done about temperature increases even if they are occurring, he said. “China, India, Korea are not going to go along with IPCC recommendations, so … the only countries punished will be those who go along with the recommendations.” He discounted mainstream opinion that climate change could hurt national security, saying that “historically there is little evidence of natural disasters leading to war, but economic conditions have proven much more serious. Almost all proposed mitigation policies lead to reduced energy availability and higher energy costs. All studies of human benefit and national security perspectives show that increased energy is important.” He showed a graph that demonstrated that more energy consumption leads to higher literacy rate, lower infant mortality and a lower number of children per woman. Given that proposed policies are unlikely to significantly influence climate and that lower energy availability could be considered a significant threat to national security, to continue with a mitigation policy that reduces available energy “would, at the least, appear to be irresponsible,” he argued. Responding to audience questions about rising temperatures, he said a 0.8 of a degree C change in temperature in 150 years is a small change. Questioned about five-, seven-, and 17-year averages that seem to show that Earth’s surface temperature is rising, he said temperatures are always fluctuating by tenths of a degree.

#### Recent temperatures show no increase in warming

**Happer 12** (William is a professor of physics at Princeton. “Global Warming Models Are Wrong Again”, Wall Street Journal, 3/27/12, <http://online.wsj.com/article/SB10001424052702304636404577291352882984274.html>)

What is happening to global temperatures in reality? The answer is: almost nothing for more than 10 years. Monthly values of the global temperature anomaly of the lower atmosphere, compiled at the University of Alabama from NASA satellite data, can be found at the website http://www.drroyspencer.com/latest-global-temperatures/. The latest (February 2012) monthly global temperature anomaly for the lower atmosphere was minus 0.12 degrees Celsius, slightly less than the average since the satellite record of temperatures began in 1979

#### Hurricanes check deadzones

**Turner et al, 09** – PhD in zoology, distinguished professor of environmental studies at LSU (Nancy N. Rabalais, R. Eugene Turner, Robert J. Diaz, Dubravko Justic, ICES Journal of Marine Science, 66:1528-1537, “Global change and eutrophication of coastal waters”, https://blog.uwgb.edu/bachelen/wp-content/uploads/bachelen/2009/08/hypoxiapaper.pdf, WEA)

The 2005 tropical storm season for the Gulf of Mexico is notorious for the devastating effect of hurricanes Katrina (in August) and Rita (in September) on the Louisiana coast. However, two additional earlier storms—hurricanes Cindy and Dennis— generated sufficiently high wave and windfields to disrupt hypoxia on the Louisiana shelf in July, before the scheduled cruise that maps the extent of midsummer hypoxia took place. The subsequent size of the hypoxic area was smaller (11 840 km2) than predicted by the nitrate–N load in May (16 083 km2) based on the Turner et al. (2006) model (Figure 5). However, hypoxia had re-established across a larger area by August (NNR, unpublished data), when Hurricane Katrina crossed the southeastern Louisiana coast. The variability in the changes of oxygen conditions near the bottom in a 20-m water column is illustrated by the 2003 hurricane season (Figure 6). The passage of several tropical storms and hurricanes in June–August 2003 disrupted stratification and hypoxia, but to varying degrees. The path of Tropical Storm Bill was very close to station C6C, but it passed rapidly north and the wave field was insufficient to re-aerate the bottom waters. Although it passed well to the south of station C6C, Hurricane Claudette generated a field of 30-knot winds at the site of the observing system, as it moved slowly towards the west. As with Hurricanes Cindy and Dennis in 2005, which resulted in a smaller area of hypoxia than predicted for the spring nitrate–N load, the effect of Hurricane Claudette in 2003 was sufficient to reduce the size of the bottomwater hypoxia to 8560 km2, which was 2.5% less than the predicted size of 20 000 km2. Tropical Storms Erika and Grace had opposite effects. The former had no effect on hypoxia former, whereas the latter caused an increase in bottom oxygen.

#### Their advantages are contradictory- heg causes environmental degradation and is a barrier to global environmental cooperation

Beaver 4/24- Kathryn, BA in Government, The College of William and Mary (“United States Foreign Policy and Multilateral Institutional

Effectiveness”, April 24, 2013 https://digitalarchive.wm.edu/bitstream/handle/10288/18178/KathrynBeaver2013\_text.pdf?sequence=2\\CLans)

Because two case studies used to assess the impact of U.S. policy on organizational effectiveness are environmental agreements, this section offers a very brief overview of some of the theories on the challenges of global environmental governance, a unique issue area, and its relationship to hegemony. Some authors usefully characterize environmental issues as common pool resources (CPRs).34 This characterization of resources sums up challenges with appropriation and allocation of nonexcludable finite resources and therefore greatly influences the ability of treaties to be successful.35 Hegemonic stability theory traditionally claims that hegemons can provide public goods, but some theory suggests that in a CPR situation, a hegemon would not be able to effectively ensure the preservation of a resource. A hegemon can theoretically override the free-rider problem by paying for the free riders‘ share so long as they can manage the allocation of the resource. However, there is no way for the hegemon to ensure that free riders do not use up all of the remaining shares of the resource while also bearing no cost. There is little incentive, therefore, for a hegemon like the United States to agree to environmental cutbacks and pay for other states to indiscriminately consume the resource. Coercive hegemons have a higher likelihood of succeeding in a CPR situation, and must be willing to impose negative sanctions on free riders that would make the cost of overconsumption greater than the cost of forcing cooperation.36 Therefore, existing theories on common pool resources and hegemony characterize some incentive structures for the U.S. when contemplating environmental agreements and the extent to which its support could influence other states in the regime. Attempts at creating international environmental law are often plagued with various dilemmas and challenges stemming from environmental objectives having to compete with problems of international development for political priority level. While some states may be aware of the need to reduce environmental harm for the sake of protecting the environment, doing so would come at the expense of development because their economies may rely on certain industries affected by environmental regulation. Requiring a developing country to reduce their industrial output and therefore intentionally hurt their economy in order to adhere to environmental treaties is often fruitless. The debate over environmental policy and its effects on development is a continual theme throughout the several decades of attempted multilateral engagement over environmental problems. One notable exception to many common environmental governance dilemmas is the Montreal Protocol, which is a case study in this thesis for analyzing the impacts of U.S. policy on multilateral effectiveness. Other challenges to achieving agreement on environmental issues come from the reality that there are seldom reliable enforcement mechanisms to ensure that states meet their treaty obligations. While specific treaties attempt to enforce provisions, there are relatively few consequences for a state to walk away. Canada‘s recent withdrawal from the Kyoto Protocol exemplifies this weakness. Canadian industry was unable to meet the required emissions reduction under compliance with the Kyoto Protocol, and the Canadian government withdrew its ratification in 2011.37 Many scholars have speculated on the ability of hard law treaties to create any positive effect on the environment, and indeed, the United Nations reports that many environmental problems from 2002 were exacerbated despite the growing number of signatories to environmental treaties.38 Recent evidence and scholarship on environmental agreements‘ success indicates that the number of signatures on a treaty does not necessitate a guarantee that all states parties will comply with the agreements because, despite flexibility mechanisms, many treaties do not have a substantial enforcement mechanism that forces states to honor commitments. All of the above theoretical conditions explore the challenges facing international agreements on environmental issues as well as how a hegemon or powerful state could affect the negotiations, compliance, and success of a treaty. These considerations will be vital in exploring the United States‘ role in the two environmental case studies.

#### Aff cant solve – Castro won’t allow sugar-ethanol

Specht ‘12

(Jonathan – Legal Advisor, Pearlmaker Holsteins, Inc. B.A., Louisiana State University, 2009; J.D.,¶ Washington University in St. Louis 2012. “Raising Cane: Cuban Sugarcane Ethanol’s Economic and Environmental Effects on the United States” – ExpressO – http://environs.law.ucdavis.edu/issues/36/2/specht.pdf)

To speak of a Cuban sugarcane-based ethanol industry is, at this point, largely¶ a matter of speculation.¶ 46¶ Because of the anti-ethanol views of Fidel Castro (who¶ has said that ethanol should be discoura¶ ged because it diverts crops from food to¶ fuel),¶ 47¶ Cuba currently has almost no ethanol industry. In the words of Ronald¶ Soligo and Amy Myers Jaffe of the Brookings Institution, “Despite the fact that¶ Cuba is dependent on oil imports and is aware of the demonstrated success of¶ Brazil in using ethanol to achieve energy self-sufficiency, it has not embarked¶ on a policy to develop a larger ethanol industry from sugarcane.”¶ 48¶ There is,¶ however, no reason why such an industry cannot be developed. As Soligo and¶ Jaffe wrote, “In addition, Cuba has large land areas that once produced sugar but¶ now lie idle. These could be revived to provide a basis for a world-class ethanol¶ industry. We estimate that if Cuba achieves the yield levels attained in¶ Nicaragua and Brazil and the area planted with sugarcane approaches levels¶ seen in the 1970s and 1980s, Cuba coul¶ d produce up to 2 billion gallons of¶ sugar-based ethanol per year.”¶ 4

#### Cuba is transitioning to sustainable agriculture because the embargo- the plan reverses that

Gonzalez 03(Carmen Gonzalez, Professor of International Law at Seattle University. 2003. "Seasons of Resistance: Sustainable Agriculture and Food Security in Cuba". Tulane Environmental Law Journal. papers.ssrn.com/sol3/papers.cfm?abstract\_id=987944)

Cuba was able to transform its agricultural development model as a consequence of the political and economic autonomy occasioned by its relative economic isolation, including its exclusion from major international financial and trade institutions.411 Paradoxically, while the U.S. embargo subjected Cuba to immense economic hardship, it also gave the Cuban government free rein to adopt agricultural policies that ran counter to the prevailing neoliberal model and that protected Cuban farmers against ruinous competition from highly subsidized agricultural producers in the United States and the European Union.412 Due to U.S.¶ pressure, Cuba was excluded from regional and international financial institutions, including the International Monetary Fund, the World Bank, and the Inter-American Development Bank.413 Cuba also failed to reach full membership in any regional trade association and was barred from the negotiations for the Free Trade Area of the Americas (FTAA).414 However, as U.S. agribusiness clamors to ease trade restrictions with Cuba, the lifting of the embargo and the end of Cuba’s economic isolation may only be a matter of time.415 It is unclear how the Cuban government will respond to the immense political and economic pressure from the United States to enter into bilateral or multilateral trade agreements that would curtail Cubansovereignty and erode protection for Cuban agriculture.416 If Cuba accedes to the dictates of agricultural trade liberalization, it appears likely that Cuba’s gains in agricultural diversification and food self-sufficiency will be undercut by cheap, subsidized food imports from the United States and other industrialized countries.417 Furthermore, Cuba’s experiment with organic and semi-organic agriculture may be jeopardized if the Cuban government is either unwilling or unable to restrict the sale of agrochemicals to Cuban farmers—as the Cuban government failed to restrict U.S. rice imports in the first half of the twentieth century.418 Cuba is once again at a crossroads—as it was in 1963, when the government abandoned economic diversification, renewed its emphasis on sugar production, and replaced its trade dependence on the United States with trade dependence on the socialist bloc. In the end, the future of Cuban agriculture will likely turn on a combination of external factors (such as world market prices for Cuban exports and Cuba’s future economic integration with the United States) and internal factors (such as the level of grassroots and governmental support for the alternative development model developed during the Special Period). While this Article has examined the major pieces of legislation that transformed agricultural production in Cuba, and the government’s implementation of these laws, it is important to remember that these reforms had their genesis in the economic crisis of the early 1990s and in the creative legal, and extra-legal, survival strategies developed by ordinary Cubans.419 The¶ distribution of land to thousands of small producers and the promotion of urban agriculture were in response to the self-help measures undertaken by Cuban citizens during the Special Period. As the economic crisis intensified, Cuban citizens spontaneously seized and cultivated parcels of land in state farms, along the highways, and in vacant lots, and started growing food in patios, balconies, front yards, and community gardens. Similarly, the opening of the agricultural markets was in direct response to the booming black market and its deleterious effect on the state’s food distribution system. Finally, it was the small private farmer, the neglected stepchild of the Revolution, who kept alive the traditional agroecological techniques that formed the basis of Cuba’s experiment with organic agriculture. The survival of Cuba’s alternative agricultural model will therefore depend, at least in part, on whether this model is viewed by Cuban citizens and by the Cuban leadership as a necessary adaptation to severe economic crisis or as a path-breaking achievement worthy of pride and emulation. The history of Cuban agriculture has been one of resistance and accommodation to larger economic and political forces that shaped the destiny of the island nation. Likewise, the transformation of Cuban agriculture has occurred through resistance and accommodation by Cuban workers and farmers to the hardships of the Special Period. The lifting of the U.S. economic embargo and the subjection of Cuba to the full force of economic globalization will present an enormous challenge to the retention of an agricultural development model borne of crisis and isolation. Whether Cuba will be able to resist the re-imposition of a capital-intensive, export-oriented, import-reliant agricultural model will depend on the ability of the Cuban leadership to appreciate the benefits of sustainable agriculture and to protect Cuba’s alternative agricultural model in the face of overwhelming political and economic pressure from the United States and from the global trading system.

#### Cuban agriculture is key to all their impacts

Peters 10 (Kathryn A. Peters, J.D. from the University of Oregon . "Creating a Sustainable Urban Agriculture Revolution". University of Oregon Law School. law.uoregon.edu/org/jell/docs/251/peters.pdf)

While urban agriculture was a response to a dramatic crisis in ¶ Cuba’s history, through the development of a community-based ¶ system of cultivation on previously vacant lots employing organic ¶ farming techniques, Cuba has created a sustainable food production ¶ system.189 As of 2005, Havana was producing over ninety percent of ¶ the perishable produce consumed in its city as well as a significant ¶ portion of its milk and meat.190 With government support, the urban ¶ gardens have become a profitable economic enterprise for many ¶ Cubans.191 Local access to fresh foods has added diversity to the ¶ Cuban diet and reduced the carbon footprint associated with its food ¶ supply by reducing the transportation and chemical input required to ¶ grow and transport the food.192 The development of urban farming ¶ has also ensured food security for Cuba.193 The success of Cuba’s ¶ system has established the country as a model for the urban ¶ production of sustainable agriculture around the world.194¶ In transitioning to a sustainable urban agricultural system, Cuba ¶ has drastically reduced its harmful impacts on the environment. ¶ Cubans have been able to significantly reduce their carbon footprints ¶ as their food supply is no longer shipped across oceans and Cuban ¶ residents can walk to local markets for fresh produce rather than drive¶ to grocery stores.195 Reduced mechanization in food production ¶ further reduces carbon emissions. Increased urban vegetation also ¶ mitigates the impact of climate change because vegetation has a ¶ cooling effect when air temperatures are high.196 Because much of ¶ Cuba’s urban land is now vegetative, surface temperatures in Cuba ¶ may remain cooler due to the thermoregulation created by the ¶ vegetation cover.197¶ According to Dr. Nelso Camponioni Concepción, the Cuban ¶ government, through its urban agricultural program, aims “to gain the ¶ most food from every square meter of available space.”198 By ¶ utilizing available urban space for sustainable food production, Cuba ¶ is reducing its impact on the planet’s carrying capacity. The organic ¶ urban gardening techniques do not consume greenspace or harm the ¶ environment; therefore, measuring the true cost of externalities is not ¶ an issue. The growth of the urban gardens has created an increasing ¶ food supply and a new economy for many Cubans without negatively ¶ impacting the environment or society.

#### Alt cause – Cerrado destroyed by *soy* and *industrial ag*

Pearce ‘11

(Fred Pearce is a freelance author and journalist based in the UK. He serves as environmental consultant for New Scientist magazine and is the author of numerous books, including When The Rivers Run Dry and With Speed and Violence. In recent articles for Yale Environment 360, Pearce has written about how an agribusiness boom threatens Africa’s second-largest mammal migration and about a dispute in Africa over rights to the waters of the Nile. “Report: The Cerrado: Brazil’s Other Biodiverse Region Loses Ground” – 14 Apr 2011 – Yale Environment 360 – http://e360.yale.edu/feature/the\_cerrado\_brazils\_other\_biodiversity\_hotspot\_loses\_ground/2393/)

But how has this been accomplished? The answer, at least in part, is by invading a new ecological frontier of equal importance — but with much less public visibility. Today, Brazil’s bush clearers from agribusiness are moving across the cerrado, the most biologically rich savanna in the world, which occupies a huge expanse of the high plains of central Brazil on the Atlantic side of the Amazon basin.¶ In recent years, the rate of ecological destruction in the cerrado has been twice that in the Amazon. And while the majority of the Amazon rainforest survives, more than 60 percent of the cerrado’s former 200 million hectares has disappeared under the plow, mostly within the last two decades.¶ The cerrado has its own rich array of unusual mammals, including armadillos, anteaters, tapirs, and maned wolves, as well as thousands of endemic vascular plants adapted to drought and fire. But while the cerrado shares a place with the Amazon on Conservation International’s list of the world’s top 25 biodiversity hotspots, so far the outrage over its devastation has remained minimal.¶ This month the Brazilian environment ministry claimed that the rate of ecological loss in the cerrado declined between 2008 and 2009. But when I visited the region last month, nobody agreed with that assessment, and even local environment regulators saw no end to the land-clearing in sight.¶ The soils of the cerrado — a complex mosaic of grass and woodland — were once regarded as too acidic to grow crops. But since Brazil’s agronomists began applying industrial quantities of lime in the 1980s, these soils have been transformed. The cerrado now produces 70 percent of Brazil’s farm output.¶ As more roads and railways penetrate the once empty interior north of the country’s shiny modernist 1960s capital, Brasilia, the land rush is intensifying and land prices are soaring. While most of the corn grown in the cerrado is consumed in Brazil, and much of the sugar cane goes to fill the tanks of the country’s ethanol-fueled vehicles, the soya, cotton, coffee, and other crops largely go for export.¶ The world’s largest soya grower, Blairo Maggi, was also until recently the governor of the cerrado state of Mato Grosso. Thanks to industrial-scale farmers like him, Brazil is today the world’s largest exporter of soya, beef, chicken, sugar, ethanol, tobacco, and orange juice. The success has been so complete that the World Bank and others now see the industrializing of the cerrado as a model for transforming Africa’s savanna grasslands.

#### No bio-d impact – it’s resilient

Kareiva et al 12 – Chief Scientist and Vice President, The Nature Conservancy (Peter, Michelle Marvier **--**professor and department chair of Environment Studies and Sciences at Santa Clara University, Robert Lalasz **--** director of science communications for The Nature Conservancy, Winter, “Conservation in the Anthropocene,” http://thebreakthrough.org/index.php/journal/past-issues/issue-2/conservation-in-the-anthropocene/)

2. As conservation became a global enterprise in the 1970s and 1980s, the movement's justification for saving nature shifted from spiritual and aesthetic values to focus on biodiversity. Nature was described as primeval, fragile, and at risk of collapse from too much human use and abuse. And indeed, there are consequences when humans convert landscapes for mining, logging, intensive agriculture, and urban development and when key species or ecosystems are lost.¶ But ecologists and conservationists have grossly overstated the fragility of nature, frequently arguing that once an ecosystem is altered, it is gone forever. Some ecologists suggest that if a single species is lost, a whole ecosystem will be in danger of collapse, and that if too much biodiversity is lost, spaceship Earth will start to come apart. Everything, from the expansion of agriculture to rainforest destruction to changing waterways, has been painted as a threat to the delicate inner-workings of our planetary ecosystem.¶ The fragility trope dates back, at least, to Rachel Carson, who wrote plaintively in Silent Spring of the delicate web of life and warned that perturbing the intricate balance of nature could have disastrous consequences.22 Al Gore made a similar argument in his 1992 book, Earth in the Balance.23 And the 2005 Millennium Ecosystem Assessment warned darkly that, while the expansion of agriculture and other forms of development have been overwhelmingly positive for the world's poor, ecosystem degradation was simultaneously putting systems in jeopardy of collapse.24¶ The trouble for conservation is that the data simply do not support the idea of a fragile nature at risk of collapse. Ecologists now know that the disappearance of one species does not necessarily lead to the extinction of any others, much less all others in the same ecosystem. In many circumstances, the demise of formerly abundant species can be inconsequential to ecosystem function. The American chestnut, once a dominant tree in eastern North America, has been extinguished by a foreign disease, yet the forest ecosystem is surprisingly unaffected. The passenger pigeon, once so abundant that its flocks darkened the sky, went extinct, along with countless other species from the Steller's sea cow to the dodo, with no catastrophic or even measurable effects.¶ These stories of resilience are not isolated examples -- a thorough review of the scientific literature identified 240 studies of ecosystems following major disturbances such as deforestation, mining, oil spills, and other types of pollution. The abundance of plant and animal species as well as other measures of ecosystem function recovered, at least partially, in 173 (72 percent) of these studies.25¶ While global forest cover is continuing to decline, it is rising in the Northern Hemisphere, where "nature" is returning to former agricultural lands.26 Something similar is likely to occur in the Southern Hemisphere, after poor countries achieve a similar level of economic development. A 2010 report concluded that rainforests that have grown back over abandoned agricultural land had 40 to 70 percent of the species of the original forests.27 Even Indonesian orangutans, which were widely thought to be able to survive only in pristine forests, have been found in surprising numbers in oil palm plantations and degraded lands.28¶ Nature is so resilient that it can recover rapidly from even the most powerful human disturbances. Around the Chernobyl nuclear facility, which melted down in 1986, wildlife is thriving, despite the high levels of radiation.29 In the Bikini Atoll, the site of multiple nuclear bomb tests, including the 1954 hydrogen bomb test that boiled the water in the area, the number of coral species has actually increased relative to before the explosions.30 More recently, the massive 2010 oil spill in the Gulf of Mexico was degraded and consumed by bacteria at a remarkably fast rate.31¶ Today, coyotes roam downtown Chicago, and peregrine falcons astonish San Franciscans as they sweep down skyscraper canyons to pick off pigeons for their next meal. As we destroy habitats, we create new ones: in the southwestern United States a rare and federally listed salamander species seems specialized to live in cattle tanks -- to date, it has been found in no other habitat.32 Books have been written about the collapse of cod in the Georges Bank, yet recent trawl data show the biomass of cod has recovered to precollapse levels.33 It's doubtful that books will be written about this cod recovery since it does not play well to an audience somehow addicted to stories of collapse and environmental apocalypse.¶ Even that classic symbol of fragility -- the polar bear, seemingly stranded on a melting ice block -- may have a good chance of surviving global warming if the changing environment continues to increase the populations and northern ranges of harbor seals and harp seals. Polar bears evolved from brown bears 200,000 years ago during a cooling period in Earth's history, developing a highly specialized carnivorous diet focused on seals. Thus, the fate of polar bears depends on two opposing trends -- the decline of sea ice and the potential increase of energy-rich prey. The history of life on Earth is of species evolving to take advantage of new environments only to be at risk when the environment changes again.¶ The wilderness ideal presupposes that there are parts of the world untouched by humankind, but today it is impossible to find a place on Earth that is unmarked by human activity. The truth is humans have been impacting their natural environment for centuries. The wilderness so beloved by conservationists -- places "untrammeled by man"34 -- never existed, at least not in the last thousand years, and arguably even longer.

#### No disease impact

Keller 13 -- Analyst at Stratfor, Post-Doctoral Fellow at University of Colorado at Boulder (Rebecca, 2013, "Bioterrorism and the Pandemic Potential," http://www.stratfor.com/weekly/bioterrorism-and-pandemic-potential)

Periodic media reports of bird flu, a new SARS-like virus and a case of drug-resistant tuberculosis have kept the world informed, but they have also contributed to a distorted perception of the true threat such contagions pose. Perhaps the greatest value of the media coverage is the opportunity it provides to discuss the uncertainties and the best ways to prepare for biological threats, both natural and man-made. It is important to remember that the risk of biological attack is very low and that, partly because viruses can mutate easily, the potential for natural outbreaks is unpredictable. The key is having the right tools in case of an outbreak, epidemic or pandemic, and these include a plan for containment, open channels of communication, scientific research and knowledge sharing. In most cases involving a potential pathogen, the news can appear far worse than the actual threat. Infectious Disease Propagation Since the beginning of February there have been occurrences of H5N1 (bird flu) in Cambodia, H1N1 (swine flu) in India and a new, or novel, coronavirus (a member of the same virus family as SARS) in the United Kingdom. In the past week, a man from Nepal traveled through several countries and eventually ended up in the United States, where it was discovered he had a drug-resistant form of tuberculosis, and the Centers for Disease Control and Prevention released a report stating that antibiotic-resistant infections in hospitals are on the rise. In addition, the United States is experiencing a worse-than-normal flu season, bringing more attention to the influenza virus and other infectious diseases. The potential for a disease to spread is measured by its effective reproduction number, or R-value, a numerical score that indicates whether a disease will propagate or die out. When the disease first occurs and no preventive measures are in place, the reproductive potential of the disease is referred to as R0, the basic reproduction rate. The numerical value is the number of cases a single case can cause on average during its infectious period. An R0 above 1 means the disease will likely spread (many influenza viruses have an R0 between 2 and 3, while measles had an R0 value of between 12 and 18), while an R-value of less than 1 indicates a disease will likely die out. Factors contributing to the spread of the disease include the length of time people are contagious, how mobile they are when they are contagious, how the disease spreads (through the air or bodily fluids) and how susceptible the population is. The initial R0, which assumes no inherent immunity, can be decreased through control measures that bring the value either near or below 1, stopping the further spread of the disease. Both the coronavirus family and the influenza virus are RNA viruses, meaning they replicate using only RNA (which can be thought of as a single-stranded version of DNA, the more commonly known double helix containing genetic makeup). The rapid RNA replication used by many viruses is very susceptible to mutations, which are simply errors in the replication process. Some mutations can alter the behavior of a virus, including the severity of infection and how the virus is transmitted. The combination of two different strains of a virus, through a process known as antigenic shift, can result in what is essentially a new virus. Influenza, because it infects multiple species, is the hallmark example of this kind of evolution. Mutations can make the virus unfamiliar to the body's immune system. The lack of established immunity within a population enables a disease to spread more rapidly because the population is less equipped to battle the disease. The trajectory of a mutated virus (or any other infectious disease) can reach three basic levels of magnitude. An outbreak is a small, localized occurrence of a pathogen. An epidemic indicates a more widespread infection that is still regional, while a pandemic indicates that the disease has spread to a global level. Virologists are able to track mutations by deciphering the genetic sequence of new infections. It is this technology that helped scientists to determine last year that a smattering of respiratory infections discovered in the Middle East was actually a novel coronavirus. And it is possible that through a series of mutations a virus like H5N1 could change in such a way to become easily transmitted between humans. Lessons Learned There have been several influenza pandemics throughout history. The 1918 Spanish Flu pandemic is often cited as a worst-case scenario, since it infected between 20 and 40 percent of the world's population, killing roughly 2 percent of those infected. In more recent history, smaller incidents, including an epidemic of the SARS virus in 2003 and what was technically defined as a pandemic of the swine flu (H1N1) in 2009, caused fear of another pandemic like the 1918 occurrence. The spread of these two diseases was contained before reaching catastrophic levels, although the economic impact from fear of the diseases reached beyond the infected areas. Previous pandemics have underscored the importance of preparation, which is essential to effective disease management. The World Health Organization lays out a set of guidelines for pandemic prevention and containment. The general principles of preparedness include stockpiling vaccines, which is done by both the United States and the European Union (although the possibility exists that the vaccines may not be effective against a new virus). In the event of an outbreak, the guidelines call for developed nations to share vaccines with developing nations. Containment strategies beyond vaccines include quarantine of exposed individuals, limited travel and additional screenings at places where the virus could easily spread, such as airports. Further measures include the closing of businesses, schools and borders. Individual measures can also be taken to guard against infection. These involve general hygienic measures -- avoiding mass gatherings, thoroughly washing hands and even wearing masks in specific, high-risk situations. However, airborne viruses such as influenza are still the most difficult to contain because of the method of transmission. Diseases like noroviruses, HIV or cholera are more serious but have to be transmitted by blood, other bodily fluids or fecal matter. The threat of a rapid pandemic is thereby slowed because it is easier to identify potential contaminates and either avoid or sterilize them. Research is another important aspect of overall preparedness. Knowledge gained from studying the viruses and the ready availability of information can be instrumental in tracking diseases. For example, the genomic sequence of the novel coronavirus was made available, helping scientists and doctors in different countries to readily identify the infection in limited cases and implement quarantine procedures as necessary. There have been only 13 documented cases of the novel coronavirus, so much is unknown regarding the disease. Recent cases in the United Kingdom indicate possible human-to-human transmission. Further sharing of information relating to the novel coronavirus can aid in both treatment and containment. Ongoing research into viruses can also help make future vaccines more efficient against possible mutations, though this type of research is not without controversy. A case in point is research on the H5N1 virus. H5N1 first appeared in humans in 1997. Of the more than 600 cases that have appeared since then, more than half have resulted in death. However, the virus is not easily transmitted because it must cross from bird to human. Human-to-human transmission of H5N1 is very rare, with only a few suspected incidents in the known history of the disease. While there is an H5N1 vaccine, it is possible that a new variation of the vaccine would be needed were the virus to mutate into a form that was transmittable between humans. Vaccines can take months or even years to develop, but preliminary research on the virus, before an outbreak, can help speed up development. In December 2011, two separate research labs, one in the United States and one in the Netherlands, sought to publish their research on the H5N1 virus. Over the course of their research, these labs had created mutations in the virus that allowed for airborne transmission between ferrets. These mutations also caused other changes, including a decrease in the virus's lethality and robustness (the ability to survive outside the carrier). Publication of the research was delayed due to concerns that the results could increase the risk of accidental release of the virus by encouraging further research, or that the information could be used by terrorist organizations to conduct a biological attack. Eventually, publication of papers by both labs was allowed. However, the scientific community imposed a voluntary moratorium in order to allow the community and regulatory bodies to determine the best practices moving forward. This voluntary ban was lifted for much of the world on Jan. 24, 2013. On Feb. 21, the National Institutes of Health in the United States issued proposed guidelines for federally funded labs working with H5N1. Once standards are set, decisions will likely be made on a case-by-case basis to allow research to continue. Fear of a pandemic resulting from research on H5N1 continues even after the moratorium was lifted. Opponents of the research cite the possibility that the virus will be accidentally released or intentionally used as a bioweapon, since information in scientific publications would be considered readily available. The Risk-Reward Equation The risk of an accidental release of H5N1 is similar to that of other infectious pathogens currently being studied. Proper safety standards are key, of course, and experts in the field have had a year to determine the best way to proceed, balancing safety and research benefits. Previous work with the virus was conducted at biosafety level three out of four, which requires researchers wearing respirators and disposable gowns to work in pairs in a negative pressure environment. While many of these labs are part of universities, access is controlled either through keyed entry or even palm scanners. There are roughly 40 labs that submitted to the voluntary ban. Those wishing to resume work after the ban was lifted must comply with guidelines requiring strict national oversight and close communication and collaboration with national authorities. The risk of release either through accident or theft cannot be completely eliminated, but given the established parameters the risk is minimal. The use of the pathogen as a biological weapon requires an assessment of whether a non-state actor would have the capabilities to isolate the virulent strain, then weaponize and distribute it. Stratfor has long held the position that while terrorist organizations may have rudimentary capabilities regarding biological weapons, the likelihood of a successful attack is very low. Given that the laboratory version of H5N1 -- or any influenza virus, for that matter -- is a contagious pathogen, there would be two possible modes that a non-state actor would have to instigate an attack. The virus could be refined and then aerosolized and released into a populated area, or an individual could be infected with the virus and sent to freely circulate within a population. There are severe constraints that make success using either of these methods unlikely. The technology needed to refine and aerosolize a pathogen for a biological attack is beyond the capability of most non-state actors. Even if they were able to develop a weapon, other factors such as wind patterns and humidity can render an attack ineffective. Using a human carrier is a less expensive method, but it requires that the biological agent be a contagion. Additionally, in order to infect the large number of people necessary to start an outbreak, the infected carrier must be mobile while contagious, something that is doubtful with a serious disease like small pox. The carrier also cannot be visibly ill because that would limit the necessary human contact.

#### Soy is king in Brazil – it’ll drive Cerrado destruction.

Newell ‘11

Philip Newell is internally citing the WWF Report– Soya and the Cerrado: Brazil’s forgotten jewel. He is a research intern with the Nourishing the Planet project. August 2nd – http://blogs.worldwatch.org/nourishingtheplanet/wwf-report-soya-and-the-cerrado-brazil%E2%80%99s-forgotten-jewel/

According to a recent report released by WWF UK, the increased use of soy beans has had painful consequences for the Cerrado region of Brazil. The Cerrado is the unique savannah south of the Amazon Rainforest. This landscape, once covering a quarter of Brazil, holds an amazing 5 percent of all life on Earth. Since the prehistoric days when there was only one continent, this grassy expanse has harbored not only 11,000 flowering plants (nearly half are found only in the Cerrado) but also countless animal species, including the giant anteater and maned wolf. This rich history also imbues the land with cultural significance, as it has played a key role for over 10,000 years in the culture and religion of a variety of indigenous Brazilian societies.¶ Currently, however, the Cerrado is being converted into farmland for the express purpose of growing soybeans (soya). In only 15 years, production of soy has doubled, now covering an area almost the size of Egypt worldwide. In Brazil, there are 24.1 million hectares planted with soy, equivalent to the size of the United Kingdom. Such a prolific conversion has devastated the natural biodiversity of the region. A recent survey suggests that by 2008, almost half of the original vegetation cover had been lost, disappearing at a rate significantly greater than the Amazon rainforest. This also has significant consequences for climate change. According to WWF, in the six year period between 2002 and 2008, land-use change in the Cerrado released 275 million tons of CO2 per year-more than half the total emissions for the United Kingdom.¶ A whopping 80 percent of the soy grown worldwide is used for feeding cows, pigs, chickens and other livestock, according to the report. Current trends suggest that developing countries will continue to increase their meat consumption, until they match levels of developed countries. If soy remains one of the main components of livestock feed, then soy production will increase. Since most land planted with soy has already achieved maximum production levels (only the Indian region has room for improving yields), demand for land for soy planting will grow.

#### Environmental collapse doesn’t cause extinction – tech solves

**Science Daily 10**

Science Daily, reprinted from materials provided by American Institute of Biological Sciences, September 1, 2010, "Human Well-Being Is Improving Even as Ecosystem Services Decline: Why?", http://www.sciencedaily.com/releases/2010/09/100901072908.htm

Global degradation of ecosystems is widely believed to threaten human welfare, yet accepted measures of well-being show that it is on average improving globally, both in poor countries and rich ones. A team of authors writing in the September issue of BioScience dissects explanations for this "environmentalist's paradox." Noting that understanding the paradox is "critical to guiding future management of ecosystem services," Ciara Raudsepp-Hearne and her colleagues confirm that improvements in aggregate well-being are real, despite convincing evidence of ecosystem decline. Three likely reasons they identify -- past increases in food production, technological innovations that decouple people from ecosystems, and time lags before well-being is affected -- provide few grounds for complacency, however. Raudsepp-Hearne and her coauthors accept the findings of the influential Millennium Ecosystem Assessment that the capacity of ecosystems to produce many services for humans is now low. Yet they uncover no fault with the composite Human Development Index, a widely used metric that incorporates measures of literacy, life expectancy, and income, and has improved markedly since the mid-1970s. Although some measures of personal security buck the upward trend, the overall improvement in well-being seems robust. The researchers resolve the paradox partly by pointing to evidence that food production (which has increased globally over past decades) is more important for human well-being than are other ecosystem services. They also establish support for two other explanations: that technology and innovation have decoupled human well-being from ecosystem degradation, and that there is a time lag after ecosystem service degradation before human well-being will be affected.

## ADV 2

**No impact to heg – data**

**Fettweis, 11** Christopher J. Fettweis, Department of Political Science, Tulane University, 9/26/11, Free Riding or Restraint? Examining European Grand Strategy, Comparative Strategy, 30:316–332, EBSCO

It is perhaps worth noting that there is no evidence to support a direct relationship between the relative level of U.S. activism and international stability. In fact, the limited data we do have suggest the opposite may be true. During the 1990s, the United States cut back on its defense spending fairly substantially. By 1998, the United States was spending $100 billion less on defense in real terms than it had in 1990.51 To internationalists, defense hawks and believers in hegemonic stability, this irresponsible “peace dividend” endangered both national and global security. “No serious analyst of American military capabilities,” argued Kristol and Kagan, “doubts that the defense budget has been cut much too far to meet America’s responsibilities to itself and to world peace.”52 On the other hand, if the pacific trends were not based upon U.S. hegemony but a strengthening norm against interstate war, one would not have expected an increase in global instability and violence. The verdict from the past two decades is fairly plain: The world grew more peaceful while the United States cut its forces. No state seemed to believe that its security was endangered by a less-capable United States military, or at least none took any action that would suggest such a belief. No militaries were enhanced to address power vacuums, no security dilemmas drove insecurity or arms races, and no regional balancing occurred once the stabilizing presence of the U.S. military was diminished. The rest of the world acted as if the threat of international war was not a pressing concern, despite the reduction in U.S. capabilities. Most of all, the United States and its allies were no less safe. The incidence and magnitude of global conflict declined while the United States cut its military spending under President Clinton, and kept declining as the Bush Administration ramped the spending back up. No complex statistical analysis should be necessary to reach the conclusion that the two are unrelated. Military spending figures by themselves are insufficient to disprove a connection between overall U.S. actions and international stability. Once again, one could presumably argue that spending is not the only or even the best indication of hegemony, and that it is instead U.S. foreign political and security commitments that maintain stability. Since neither was significantly altered during this period, instability should not have been expected. Alternately, advocates of hegemonic stability could believe that relative rather than absolute spending is decisive in bringing peace. Although the United States cut back on its spending during the 1990s, its relative advantage never wavered. However, even if it is true that either U.S. commitments or relative spending account for global pacific trends, then at the very least stability can evidently be maintained at drastically lower levels of both. In other words, even if one can be allowed to argue in the alternative for a moment and suppose that there is in fact a level of engagement below which the United States cannot drop without increasing international disorder, a rational grand strategist would still recommend cutting back on engagement and spending until that level is determined. Grand strategic decisions are never final; continual adjustments can and must be made as time goes on. Basic logic suggests that the United States ought to spend the minimum amount of its blood and treasure while seeking the maximum return on its investment. And if the current era of stability is as stable as many believe it to be, no increase in conflict would ever occur irrespective of U.S. spending, which would save untold trillions for an increasingly debt-ridden nation. It is also perhaps worth noting that if opposite trends had unfolded, if other states had reacted to news of cuts in U.S. defense spending with more aggressive or insecure behavior, then internationalists would surely argue that their expectations had been fulfilled. If increases in conflict would have been interpreted as proof of the wisdom of internationalist strategies, then logical consistency demands that the lack thereof should at least pose a problem. As it stands, the only evidence we have regarding the likely systemic reaction to a more restrained United States suggests that the current peaceful trends are unrelated to U.S. military spending. Evidently the rest of the world can operate quite effectively without the presence of a global policeman. Those who think otherwise base their view on faith alone.

#### The pursuit of hegemony and the use of its rhetoric to justify action leads to endless cycles of violence

Bonds et al 13- University of Mary Washington, Contributor to the Journal of Political Economy of the World-System Section of the American Sociological Association (Journal of World-Systems Research”, 2013 Winter Issue, http://www.jwsr.org/wp-content/uploads/2013/03/Vol19\_no1\_combined.pdf#page=89\\CLans)

#### Certainly, the United States could not shrug off or ignore the emergence of humanitarian norms in its pursuit of hegemony during the twentieth century. Hegemony requires, after all, that a dominant nation exercise the global “moral leadership” necessary to garner the consent of a critical mass of domestic and international political factions (Arrighi 2010). Likely for this reason, the United States became the “world spokesman for liberalism” during its era of hegemony, promoting the idea of the “rights of the people,” including the notion that they should not be deprived of their most basic rights to life during times of war (Wallerstein 1995: 156). Furthermore, several scholars have argued that powerful nations work to establish global humanitarian norms as a means of controlling or diminishing the military capacities of weaker nations or insurgent non-state groups, as in the case of chemical weapons (Price 1997), landmines (Beier 2011), or the small arms trade (Stavrianakis 2011). Hegemony, however, requires more than an economically dominant nation’s ability to exert global cultural leadership; it also requires the use of violent coercion (Arrighi 2010; see also Gramsci 1971). There are several reasons why military force is particularly important to the U.S. during its era of hegemony. First and foremost, the United States was called upon to secure “international order,” including the maintenance of inequitable relationships between nations first forged through colonialism (Wallerstein 2004). Securing “international order” has often meant that the United States has used its military power to open and preserve access to foreign markets and to protect its own military and economic supremacy. It has also used its substantial military power as a threat or through actual belligerence in order to maintain access to valuable natural resources that are necessary for the continuous accumulation of capitalism (Klare 2004; Downey, Bonds, and Clark 2010). In sum, the period of U.S. hegemony has been one in which the U.S. military was continuously poised to use coercive violence to defend the established world order, and one in which it was often embroiled in one conflict or another somewhere around the globe. There is, therefore, a real contradiction that U.S. officials had to manage during the period of U.S. hegemony; in order to secure international and domestic consent, officials had to proclaim the values of liberalism and act to protect the “rights of the people,” even in times of war. This presented some pressure to comply with international humanitarian norms that prohibit and stigmatize certain acts of violence that have been identified as especially cruel or harmful. On the other hand, ensuring U.S. hegemony required the consistent use of military force that, at times, resulted in widespread killings that deprived unarmed persons of their most basic right to exist. Such contradictions have typically been managed, which is to say actively suppressed, through appeals to “military necessity” and through the dehumanization of real or potential “enemies.” Through these appeals, officials attempt to justify acts of egregious violence by claiming that they are necessary for victory or even survival. Through processes of dehumanization, aided and abetted by longstanding notions of white supremacy, state officials and other elites may portray enemy populations as subhuman, inhuman, or as being barbarous and therefore outside the bounds of civilization (Dower 1987; Steuter and Wills 2008). Such symbolic treatment of others may suppress the contradiction between the humanitarian norms that emerged during the period of liberal reformism and the brutal and altogether inhumane realities of actual state violence that characterize it. Though appeals to military necessity and the dehumanization of enemies have been important means by which the United States has historically legitimated wars and mass violence, they may not by themselves be sufficient in the contemporary era. This is particularly due to anti-colonial and anti-racist struggles that have countered dehumanization and sought to affirm the humanity of all persons, along with the development of global human rights networks that seek to publicize and shame state practices that violate international normative frameworks (Risse, Ropp, and Sikkink 1999; Wallerstein 2004; Blau and Moncado 2005). Historical research presented in this article indicates that the U.S. government has utilized three additional techniques to do legitimating work as a means of attempting to hide, distance itself from, or explain away perceived violations of international humanitarian norms. These techniques include defensive categorization, the use of humanitizing discourse, and surrogacy. Defensive Categorization Governments that are criticized for committing atrocities or violations of humanitarian norms often categorically deny all accusations (Cohen 2001). There are some situations, however, when certain facts about contested acts of state violence are undeniable and beyond dispute. In such instances, state officials often seek to place these acts and outcomes within an interpretative framework through which they would not be considered major violations of humanitarian norms (Cohen 2001). Defensive categorization is one such technique, by which U.S. governmental officials attempt to make the case that a certain act of state violence is quite different and altogether separate from another stigmatized category of violence. Instead, officials attempt to normalize such acts by stressing how similar they are to routine and commonplace behavior. Humanitizing Discourse U.S. officials may further attempt to legitimate contested forms of violence through the use of a humanitizing discourse, by which they may stress the extreme care that their military takes to avoid humanitarian harms when using contested weaponry. Of course, such claims are often misleading and may, in some situations, simply not be true. U.S. governmental officials may also use a humanitizing discourse in defense of contested forms of violence by stressing their alleged humanitarian benefits. For instance, wars are increasingly justified in recent times as being fought in the interest of human rights and democracy (Bricmont 2006). Surrogacy Through this legitimating technique, U.S. officials can direct client states to utilize weapons or violent practices that breach international humanitarian norms, often supplying these governments with the means to do so. Surrogacy provides the United States distance and/or the ability to argue that it is not ultimately responsible for any resulting violations of international standards committed by its adjuncts (Bonds 2012). Through the remainder of this article, I will examine three historical instances where the United States has used chemically toxic weapons from the 1960s to the present, documenting the consistency through which these three legitimating techniques were used. No transition wars

Macdonald and Parent 11 (Paul, Assistant Professor of Political Science at Williams College, and Joseph, Assistant Professor of Political Science at the University of Miami. “Graceful Decline? The Surprising Success of Great Power Retrenchment”. International Security Spring 2011, Vol. 35, No. 4, Pages 7-44.)

¶ Our findings are directly relevant to what appears to be an impending great power transition between China and the United States. Estimates of economic performance vary, but most observers expect Chinese GDP to surpass U.S. GDP sometime in the next decade or two.91 This prospect has generated considerable concern. Many scholars foresee major conºict during a Sino-U.S. ordinal transition. Echoing Gilpin and Copeland, John Mearsheimer sees the crux of the issue as irreconcilable goals: China wants to be America’s superior and the United States wants no peer competitors. In his words, “[N]o amount of goodwill can ameliorate the intense security competition that sets in when an aspiring hegemon appears in Eurasia.”92¶ Contrary to these predictions, our analysis suggests some grounds for optimism. Based on the historical track record of great powers facing acute relative decline, the United States should be able to retrench in the coming decades. In the next few years, the United States is ripe to overhaul its military, shift burdens to its allies, and work to decrease costly international commitments. It is likely to initiate and become embroiled in fewer militarized disputes than the average great power and to settle these disputes more amicably. Some might view this prospect with apprehension, fearing the steady erosion of U.S. credibility. Yet our analysis suggests that retrenchment need not signal weakness. Holding on to exposed and expensive commitments simply for the sake of one’s reputation is a greater geopolitical gamble than withdrawing to cheaper, more defensible frontiers.¶ Some observers might dispute our conclusions, arguing that hegemonic transitions are more conflict prone than other moments of acute relative decline. We counter that there are deductive and empirical reasons to doubt this argument. Theoretically, hegemonic powers should actually find it easier to manage acute relative decline. Fallen hegemons still have formidable capability, which threatens grave harm to any state that tries to cross them. Further, they are no longer the top target for balancing coalitions, and recovering hegemons may be influential because they can play a pivotal role in alliance formation. In addition, hegemonic powers, almost by definition, possess more extensive overseas commitments; they should be able to more readily identify and eliminate extraneous burdens without exposing vulnerabilities or exciting domestic populations.¶ We believe the empirical record supports these conclusions. In particular, periods of hegemonic transition do not appear more conflict prone than those of acute decline. The last reversal at the pinnacle of power was the Anglo- American transition, which took place around 1872 and was resolved without armed confrontation. The tenor of that transition may have been inºuenced by a number of factors: both states were democratic maritime empires, the United States was slowly emerging from the Civil War, and Great Britain could likely coast on a large lead in domestic capital stock. Although China and the United States differ in regime type, similar factors may work to cushion the impending Sino-American transition. Both are large, relatively secure continental great powers, a fact that mitigates potential geopolitical competition.93 China faces a variety of domestic political challenges, including strains among rival regions, which may complicate its ability to sustain its economic performance or engage in foreign policy adventurism.94

**US heg resilient – multiple economic and political factors – plus no challengers**

Ning,13 - Deputy Director and Director of CCP Central Disciplinary Inspection Commission, 13 [Yu, President of All China Lawyers Association, 1/10/13, ‘Hegemony bonus’ helps US remain dominant’, Global Times, <http://www.globaltimes.cn/content/754889.shtml>, accessed: 7/1/13]

US hegemony brought the superpower $7,396.09 billion worth of benefits from the global system in 2011, according to a report by Chinese Academy of Sciences (CAS) released on Tuesday.¶ The report pointed out that the US enjoys the biggest "hegemony bonus" in the world.¶ The "hegemony bonus" in the report refers to monopoly profits directly or indirectly gained by the hegemonic country through the global system it dominates.¶ The report also summarized 10 ways used by the US to gain the "hegemony bonus," including through the dollar hegemony, unfair trade and benefiting from intellectual property rights, to name just a few.¶ The figure was a result based on the model constructed by the CAS. The scientific nature and its accuracy need further proof, however the research cast some light on a globally acknowledged fact that the US has long dominated the international system, and the US hegemony, especially the dollar hegemony, brings the US considerable economic benefits.¶ Since the Bretton Woods Agreement, the world has been under the dollar hegemony for over 68 years. Former French President Charles de Gaulle famously referred to the US dollar's favored status as an "exorbitant privilege."¶ Analysts wonder whether the current stagnant economy of the US will weaken its economic influence worldwide, but as long as the dollar remains the world currency, the US can still pay its bills by printing more money.¶ Meanwhile, the US decline is a topic in discussion. A report by the US National Intelligence Council in December 2012 said there would be no hegemonic power in 2030 with China surging to become the biggest economy and the influence of Asian culture surpassing US and European culture.¶ Through the two frustrated wars in the Middle East and the financial crisis, the US's global leadership has been affected and its hegemony is also increasingly being challenged. But the US won't easily resign itself to a declining status. It will strive to maintain hegemony in its economy, military, technology and culture.¶ China's rise poses threats to the US, but China has no intention of assuming the US's hegemonic power.¶ It's unlikely that some country will replace the US within a short time. China and other countries should remain sober, but the US may create more disturbances in the region to maintain its old hegemony.

**No impact to Latin America**

**Naim 06 (Moises, Foreign Policy no157 40-3, 45-7 N/D 2006, editor of foreign policy magazine)**

For decades, Latin America's weight in the world has been shrinking. It is not an economic powerhouse, a security threat, or a population bomb. Even its tragedies pale in comparison to Africa's. The region will not rise until it ends its search for magic formulas. It may not make for a good sound bite, but patience is Latin America's biggest deficit of all. Latin America has grown used to living in the backyard of the United States. For decades, it has been a region where the U.S. government meddled in local politics, fought communists, and promoted its business interests. Even if the rest of the world wasn't paying attention to Latin America, the United States occasionally was. Then came September 11, and even the United States seemed to tune out. Naturally, the world's attention centered almost exclusively on terrorism, the wars in Afghanistan, Iraq, and Lebanon, and on the nuclear ambitions of North Korea and Iran. Latin America became Atlantis--the lost continent. Almost overnight, it disappeared from the maps of investors, generals, diplomats, and journalists. Indeed, as one commentator recently quipped, Latin America can't compete on the world stage in any aspect, even as a threat. Unlike anti-Americans elsewhere, Latin Americans are not willing to die for the sake of their geopolitical hatreds. Latin America is a nuclear-weapons free zone. Its only weapon of mass destruction is cocaine. In contrast to emerging markets like India and China, Latin America is a minor economic player whose global significance is declining. Sure, a few countries export oil and gas, but only Venezuela is in the top league of the world's energy market. Not even Latin America's disasters seem to elicit global concern anymore. Argentina experienced a massive financial stroke in 2001, and no one abroad seemed to care. Unlike prior crashes, no government or international financial institution rushed to bail it out. Latin America doesn't have Africa's famines, genocides, an HIV/AIDS pandemic, wholesale state failures, or rock stars who routinely adopt its tragedies. Bono, Bill Gates, and Angelina Jolie worry about Botswana, not Brazil. But just as the five-year-old war on terror pronounced the necessity of confronting threats where they linger, it also underscored the dangers of neglect. Like Afghanistan, Latin America shows how quickly and easy it is for the United States to lose its influence when Washington is distracted by other priorities. In both places, Washington's disinterest produced a vacuum that was filled by political groups and leaders hostile to the United States. No, Latin America is not churning out Islamic terrorists as Afghanistan was during the days of the Taliban. In Latin America, the power gap is being filled by a group of disparate leaders often lumped together under the banner of populism. On the rare occasions that Latin American countries do make international news, it's the election of a so-called populist, an apparently anti-American, anti-market leader, that raises hackles. However, Latin America's populists aren't a monolith. Some are worse for international stability than is usually reported. But some have the potential to chart a new, positive course for the region. Underlying the ascent of these new leaders are several real, stubborn threads running through Latin Americans' frustration with the status quo in their countries. Unfortunately, the United States'---and the rest of the world's--lack of interest in that region means that the forces that are shaping disparate political movements in Latin America are often glossed over, misinterpreted, or ignored. Ultimately, though, what matters most is not what the northern giant thinks or does as much as what half a billion Latin Americans think and do. And in the last couple of decades, the wild swings in their political behavior have created a highly unstable terrain where building the institutions indispensable for progress or for fighting poverty has become increasingly difficult. There is a way out. But it's not the quick fix that too many of Latin America's leaders have promised and that an impatient population demands.

#### Can’t re-build sugar sector – unworkable land and long-time frame.

Soligo ‘10

et al; Ronald Soligo is a professor emeritus of economics at Rice University and a Rice scholar at the James A. Baker III Institute for Public Policy. The author writes a chapter within the book “Cuba’s Energy Future: Strategic Approaches to Cooperation,” a Brookings Publication, edited by Jonathan Benjamin-Alvarado, PhD of Political Science, University of Nebraska –obtainetHd as an ebook through MSU Electronic Resources – page 102

Three and a half billion gallons seems unrealistic for the foreseeable future. There is some question as to whether Cuba could ever again attain the 1.5 million hectares of sugarcane harvested in 1970, let alone 2 million. According to Brian Pollitt, the 1970 harvest was achieved only by cutting cane that would normally be left to mature for another season in order to produce a higher sugar yield in the following year. 48 Obviously this is not a sustainable practice if optimal yields are to be achieved. Two billion gallons can be produced with a harvested area of 1.33 million hectares and a yield of seventy-five tons per hectare. That area of cultivation is not too far from the average harvest of 1.28 million hectares that Cuba was able to maintain during the 1970s and 1980s. Yet reaching 1.33 million hectares will require time and substantial investment in farm machinery and restoration of the land, which has been neglected and compacted by the use of heavy Soviet-built harvesting machinery. The land will also have to be tilled and newly planted with sugarcane. Achieving higher sugarcane yields will also require time and investments to acquire or develop higher-yielding sugarcane varieties. Cuban yields averaged only fifty-eight tons per hectare during the 1970s and 1980s, substantially below the seventy-five tons per hectare needed to produce 2 billion gallons of ethanol. Yet other countries, as noted, have achieved or exceeded that yield, and some private Cuban farmers are reported to have achieved even higher yields of 100 tons per acre. 49 Yields, of course, are a function of other factors besides cane variety. The condition of the land, access to water and fertilizer, and other inputs would all need to be considered.

#### Cuba won’t accept FDI for its ethanol sector.

Frank ‘8

Havana-based Reuters correspondent Marc Frank is a former writer for the People's Daily World – Reuters – Feb 22, 2008 – http://www.reuters.com/article/2008/02/22/cuba-castro-ethanol-idUSN2261316320080222

Some experts believe Cuba could become the world's third ethanol producer after the United States and Brazil, but that would require huge investments, not just to improve its cane harvests, but also to finance the research and construction of distilleries.¶ The government, however, has been reluctant to allow foreign companies to administer farms, a precondition for any business wanting to invest in agriculture in Cuba.

#### No Cuban ethanol – not enough sugar and Castro says no

Sanchez ‘11

Adriana E. Sanchez, NotiEn, News Agency, 2011, “Biofuels Fighting for Space in Central America and Cuba,” http://repository.unm.edu/bitstream/handle/1928/12797/Biofuels%20Fighting%20for%20Space%20in%20Central%20America%20and%20Cuba.pdf?sequence=1

Similar to Central America, Cuba’s potential to become a leader in biofuel production is subject to speculation, and it will be strongly tied to the energy policy that the island adopts within the next few years. The Association for the Study of Cuban Economy (ASCE) says sugarcane could seemingly provide the raw material for biofuel production. But tight supplies might be a problem. The island nation is expected to produce only 1.2 million tons of raw sugar. This is a very small amount when compared to sugar production in the 1990s, which was estimated to reach 7 million to 8 million tons per year. With its current sugarcane output, Cuba could produce an estimated 3.2 billion gallons of ethanol per year, energy industry sources say. ¶ In an interview with NotiEn, Jorge Piñón, a well-known expert on Cuban energy policy, suggested that Cuba would have to stop its dependence on fossil fuels from foreign countries if it is to develop energy independence. "Cuba passed from papa Russia to papa Venezuela to solve its population’s energy demand," said Piñón. "Cuba must strive to start working on an energy policy that can help the country independent of who is in power." ¶ Piñón said ethanol production has not been more actively promoted because of the complicated relation that Cuba has had with sugarcane. "Fidel Castro puts his foot down every time there are talks about an increase in ethanol production; for him it is a political issue," said Piñón, a visiting research fellow at the Cuban Research Institute at Florida International University’s Latin American and Caribbean Center and an analyst for the Center for Hemispheric Policy at the University of Miami.

# 2nc

## Cp

### 2NC Solvency

#### Co2 - Photocatalysis solves CO2 and produces alternative energies.

Renaud de RICHTER, 2011 [July 28th, Fighting global warming: the potential of photocatalysis¶ against CO2, CH4, N2O, CFCs, tropospheric O3, BC and other¶ major contributors to climate change, http://hal.archives-ouvertes.fr/docs/00/61/17/10/PDF/Fighting\_global\_warming\_by\_photocatalysis-Richter-Caillol-2011.pdfPHD at University of science and technology at Montpellier France, submission to Journal of Photochemistry and Photobiology C: Photochemistry Reviews, coauthor of book in 2010 on unusual renewable energies]

Carbon dioxide has increased in the atmosphere from fossil fuel use in industry and transportation, manufacture of cement, building air conditioning and deforestation.¶ With a global radiative forcing of 1.74 W m−2, CO2 is the largest contributor among well-mixed long-lived greenhouse gases, accounting for more than 63% of the total.¶ This chapter addresses the potential application of photocatalysis to recycle CO2 in valued chemicals by photocatalytic reduction, also called ‘artificial photosynthesis’. The reaction scheme is the following:¶ CO2 + H2O (hυ/photocatalyst) → Carbonaceous products + O2¶ During the 1970s and the 1980s the electrocatalytic reduction of CO2 has been investigated, for instance by Fisher [6]. Then the photo-electrocatalytic reduction of CO2 on semiconductors started to be studied [7].¶ In 1987, Thampi, Kiwi and Graetzel [8] reported the photo-methanation of CO2 at room temperature and atmospheric pressure using dispersed ruthenium and ruthenium oxides loaded onto TiO2. Quickly after, many other research teams described photocatalytic reduction of CO2 with H2O on various TiO2 catalysts at room temperature, producing methanol (CH3OH) and carbon monoxide (CO) (Anpo [9] and [10]) or over a cerium oxide CeO2–TiO2 photocatalyst irradiated by visible light, in which reaction products were hydrogen and methane (Ogura [11]).¶ Several articles (Usubharatana [12], Roy [13]) have reviewed all types of photocatalysts used for photo-reduction of CO2, meanwhile Kočí [14] has provided an overview of the literature data from 1994 till 2007 regarding CO2 photocatalysis in the presence of TiO2. The most widely employed catalyst is TiO2 and the reaction products are generally methane, or methanol. However, the photocatalytic conversion of CO2 has been studied with many types of catalysts, and the main CO2 reduction photocatalysts are listed in Table 2. Recently, Wang [15] studied visible light photo-reduction of CO2 using CdSe/Pt/TiO2 catalysts; Varghese [16] described high rate solar photocatalytic conversion of CO2 and water vapour to hydrocarbon fuels; Nasution [17] performed the synthesis of methanol from CO2 by photocatalytic reduction over copper-doped TiO2 and Zhang [18] selectively produced CH4 from CO2 on Pt-loaded TiO2 photo-catalyst.¶ Kočí [19] studied the effect of temperature, pressure and volume of reactant solution on the photocatalytic reduction of CO2 over suspended TiO2 in an annular batch photoreactor. These same parameters were also examined in the reviews previously cited. In most cases, CO2 reduction is conducted over TiO2 with water or water vapour as the reducing agent.¶ Several other review articles on the photocatalytic reduction of CO2 have been published (Indrakanti [20], Anpo [21]), as well as by other methods (Centi [22], Mikkelsen [23]). Although the irradiation wavelength and many other parameters are not yet optimized, the different photocatalytic processes cited herein can help remove CO2 from the atmosphere, but they can also convert CO2 into some useful chemicals including CH4, H2, CO, CH3OH, formaldehyde, ethanol, higher hydrocarbons, etc. providing a carbon-neutral energy alternative to fossil fuels. Improvements in the photo-efficiency of photocatalysts used in these reactions are still needed to prove its feasibility.

# Ag

## Warming

### 2nc – no impact

#### Not rapid

McGrath ’13 (Matt McGrath, Environment correspondent, BBC News, “Climate slowdown means extreme rates of warming 'not as likely'”, http://www.bbc.co.uk/news/science-environment-22567023, May 19, 2013)

Scientists say the recent downturn in the rate of global warming will lead to lower temperature rises in the short-term. Since 1998, there has been an unexplained "standstill" in the heating of the Earth's atmosphere. Writing in Nature Geoscience, the researchers say this will reduce predicted warming in the coming decades. But long-term, the expected temperature rises will not alter significantly. “Start Quote The most extreme projections are looking less likely than before” Dr Alexander Otto University of Oxford The slowdown in the expected rate of global warming has been studied for several years now. Earlier this year, the UK Met Office lowered their five-year temperature forecast. But this new paper gives the clearest picture yet of how any slowdown is likely to affect temperatures in both the short-term and long-term. An international team of researchers looked at how the last decade would impact long-term, equilibrium climate sensitivity and the shorter term climate response. Transient nature Climate sensitivity looks to see what would happen if we doubled concentrations of CO2 in the atmosphere and let the Earth's oceans and ice sheets respond to it over several thousand years. Transient climate response is much shorter term calculation again based on a doubling of CO2. The Intergovernmental Panel on Climate Change reported in 2007 that the short-term temperature rise would most likely be 1-3C (1.8-5.4F). But in this new analysis, by only including the temperatures from the last decade, the projected range would be 0.9-2.0C. Ice The report suggests that warming in the near term will be less than forecast "The hottest of the models in the medium-term, they are actually looking less likely or inconsistent with the data from the last decade alone," said Dr Alexander Otto from the University of Oxford. "The most extreme projections are looking less likely than before."

#### United States not key to solve warming and inevitable

Grose ‘13 (Thomas K., National Geographic News Writer, “As U.S. Cleans Its Energy Mix, It Ships Coal Problems Abroad”, March 15, 2013)

Ready for some good news about the environment? Emissions of carbon dioxide in the United States are declining. But don't celebrate just yet. A major side effect of that cleaner air in the U.S. has been the further darkening of skies over Europe and Asia. The United States essentially is exporting a share of its greenhouse gas emissions in the form of coal, data show. If the trend continues, the dramatic changes in energy use in the United States—in particular, the switch from coal to newly abundant natural gas for generating electricity—will have only a modest impact on global warming, observers warn. The Earth's atmosphere will continue to absorb heat-trapping CO2, with a similar contribution from U.S. coal. It will simply be burned overseas instead of at home. "Switching from coal to gas only saves carbon if the coal stays in the ground," said John Broderick, lead author of a study on the issue by the Tyndall Center for Climate Change Research at England's Manchester University. The U.S. Energy Information Administration (EIA) released data this week showing that United States coal exports hit a record 126 million short tons in 2012, a 17 percent increase over the previous year. Overseas shipments surpassed the previous high mark set in 1981 by 12 percent. The United States clearly is using less coal: Domestic consumption fell by about 114 million tons, or 11 percent, largely due to a decline in the use of coal for electricity. But U.S. coal production fell just 7 percent. The United States, with the world's largest coal reserves, continued to churn out the most carbon-intensive fuel, producing 1 billion tons of coal from its mines in 2012. Emissions Sink The EIA estimates that due largely to the drop in coal-fired electricity, U.S. carbon emissions from burning fossil fuel declined 3.4 percent in 2012. If the numbers hold up, it will extend the downward trend that the U.S. Environmental Protection Agency (EPA) outlined last month in its annual greenhouse gas inventory, which found greenhouse gas emissions in 2011 had fallen 8 percent from their 2007 peak to 6,703 million metric tons of CO2 equivalent (a number that includes sources other than energy, like methane emissions from agriculture). In fact, if you don't count the recession year of 2009, U.S. emissions in 2011 dropped to their lowest level since 1995. President Barack Obama counted the trend among his environmental accomplishments in his State of the Union address last month: "Over the last four years, our emissions of the dangerous carbon pollution that threatens our planet have actually fallen." The reason is clear: Coal, which in 2005 generated 50 percent of U.S. electricity, saw its share erode to 37.4 percent in 2012, according to EIA's new short-term energy outlook. An increase in U.S. renewable energy certainly played a role; renewables climbed in those seven years from 8.7 percent to 13 percent of the energy mix, about half of it hydropower. But the big gain came from natural gas, which climbed from 19 percent to 30.4 percent of U.S. electricity during that time frame, primarily because of abundant supply and low prices made possible by hydraulic fracturing, or fracking. The trend appears on track to continue, with U.S. coal-fired plants being retired at a record pace. But U.S. coal producers haven't been standing still as their domestic market has evaporated. They've been shipping their fuel to energy-hungry markets overseas, from the ports of Norfolk, Baltimore, and New Orleans. Although demand is growing rapidly in Asia—U.S. coal exports to China were on track to double last year—Europe was the biggest customer, importing more U.S. coal last year than all other countries combined. The Netherlands, with Europe's largest port, Rotterdam, accepted the most shipments, on pace for a 24 jump in U.S. coal imports in 2012. The United Kingdom, the second largest customer, saw its U.S. coal imports jump more than 70 percent. The hike in European coal consumption would appear to run counter to big government initiatives across the Continent to cut CO2 emissions. But in the European Union, where fracking has made only its initial forays and natural gas is still expensive, American coal is, well, dirt cheap. European utilities are now finding that generating power from coal is a profitable gambit. In the power industry, the profit margin for generating electricity from coal is called the "clean dark spread"; at the end of December in Great Britain, it was going for about $39 per megawatt-hour, according to Argus. By contrast, the profit margin for gas-fired plants—the "clean spark spread"—was about $3. Tomas Wyns, director of the Center for Clean Air Policy-Europe, a nonprofit organization in Brussels, Belgium, said those kinds of spreads are typical across Europe right now. The EU has a cap-and-trade carbon market, the $148 billion, eight-year-old Emissions Trading System (ETS). But it's in the doldrums because of a huge oversupply of permits. That's caused the price of carbon to fall to about 4 euros ($5.23). A plan called "backloading" that would temporarily extract allowances from the market to shore up the price has faltered so far in the European Parliament. "A better carbon price could make a difference" and even out the coal and gas spreads, Wyns said. He estimates a price of between 20 and 40 euros would do the trick. "But a structural change to the Emissions Trading System is not something that will happen very quickly. A solution is years off." The Tyndall Center study estimates that the burning of all that exported coal could erase fully half the gains the United States has made in reducing carbon emissions. For huge reserves of shale gas to help cut CO2 emissions, "displaced fuels must be reduced globally and remain suppressed indefinitely," the report said. Future Emissions It is not clear that the surge in U.S. coal exports will continue. One reason for the uptick in coal-fired generation in Europe has been the looming deadline for the EU's Large Combustion Plant Directive, which will require older coal plants to meet lower emission levels by the end of 2015 or be mothballed. Before that phaseout begins, Wyns says, "there is a bit of a binge going on." Also, economic factors are at work. Tyndall's Broderick said American coal companies have been essentially selling surplus fuel overseas at low profit margins, so there is a likelihood that U.S. coal production will decrease further. The U.S. government forecasters at EIA expect that U.S. coal exports will fall back to about 110 million tons per year over the next two years, due to economic weakness in Europe, falling international prices, and competition from other coal-exporting countries. The Paris-based International Energy Agency (IEA) calls Europe's "coal renaissance" a temporary phenomenon; it forecasts an increasing use of renewables, shuttering of coal plants, and a better balance between gas and coal prices in the coming years. But IEA does not expect that the global appetite for coal will slacken appreciably. The agency projects that, by 2017, coal will rival oil as the world's primary energy source, mainly because of skyrocketing demand in Asia. U.S. coal producers have made clear that they aim to tap into that growing market.

#### We’ll adapt to warming

**Kenny 12** [April 9, 2012, Charles, senior fellow at the Center for Global Development, a Schwartz fellow at the New America Foundation, and author, most recently, of Getting Better: Why Global Development Is Succeeding and How We Can Improve the World Even More., “Not Too Hot to Handle,” http://www.foreignpolicy.com/articles/2012/04/09/not\_too\_hot\_to\_handle?print=yes&hidecomments=yes&page=full]

But for all international diplomats appear desperate to affirm the self-worth of pessimists and doomsayers worldwide, it is important to put climate change in a broader context. It is a vital global issue -- one that threatens to slow the worldwide march toward improved quality of life. Climate change is already responsible for more extreme weather and an accelerating rate of species extinction -- and may ultimately kill off as many as 40 percent of all living species. But it is also a problem that we know how to tackle, and one to which we have some time to respond before it is likely to completely derail progress. And that's good news, because the fact that it's manageable is the best reason to try to tackle it rather than abandon all hope like a steerage class passenger in the bowels of the Titanic.¶ Start with the economy. The Stern Review, led by the distinguished British economist Nicholas Stern, is the most comprehensive look to date at the economics of climate change. It suggests that, in terms of income, greenhouse gasses are a threat to global growth, but hardly an immediate or catastrophic one. Take the impact of climate change on the developing world. The most depressing forecast in terms of developing country growth in Stern's paper is the "A2 scenario" -- one of a series of economic and greenhouse gas emissions forecasts created for the U.N.'s Intergovernmental Panel on Climate Change (IPCC). It's a model that predicts slow global growth and income convergence (poor countries catching up to rich countries). But even under this model, Afghanistan's GDP per capita climbs sixfold over the next 90 years, India and China ninefold, and Ethiopia's income increases by a factor of 10. Knock off a third for the most pessimistic simulation of the economic impact of climate change suggested by the Stern report, and people in those countries are still markedly better off -- four times as rich for Afghanistan, a little more than six times as rich for Ethiopia.¶ It's worth emphasizing that the Stern report suggests that the costs of dramatically reducing greenhouse-gas emissions is closer to 1 (or maybe 2) percent of world GDP -- in the region of $600 billion to $1.2 trillion today. The economic case for responding to climate change by pricing carbon and investing in alternate energy sources is a slam dunk. But for all the likelihood that the world will be a poorer, denuded place than it would be if we responded rapidly to reduce greenhouse gases, the global economy is probably not going to collapse over the next century even if we are idiotic enough to delay our response to climate change by a few years. For all the flooding, the drought, and the skyrocketing bills for air conditioning, the economy would keep on expanding, according to the data that Stern uses.¶ And what about the impact on global health? Suggestions that malaria has already spread as a result of climate change and that malaria deaths will expand dramatically as a result of warming in the future don't fit the evidence of declining deaths and reduced malarial spread over the last century. The authors of a recent study published in the journal Nature conclude that the forecasted future effects of rising temperatures on malaria "are at least one order of magnitude smaller than the changes observed since about 1900 and about two orders of magnitude smaller than those that can be achieved by the effective scale-up of key control measures." In other words, climate change is and will likely remain a small factor in the toll of malaria deaths into the foreseeable future.¶ What about other diseases? Christian Zimmermann at the University of Connecticut and Douglas Gollin at Williams evaluate the likely impact of a 3-degree rise in temperatures on tropical diseases like dengue fever, which causes half a million cases of hemorrhagic fever and 22,000 deaths each year. Most of the vectors for such diseases -- mosquitoes, biting flies, and so on -- do poorly in frost. So if the weather stays warmer, these diseases are likely to spread. At the same time, there are existing tools to prevent or treat most tropical diseases, and Zimmerman and Gollin suggest "rather modest improvements in protection efficacy could compensate for the consequences of climate change." We can deal with this one.¶ It's the same with agriculture. Global warming will have many negative (and a few positive) impacts on food supply, but it is likely that other impacts -- both positive, including technological change, and negative, like the exhaustion of aquifers-- will have far bigger effects. The 2001 IPCC report suggested that climate change over the long term could reduce agricultural yields by as much as 30 percent. Compare that with the 90 percent increase in rice yields in Indonesia between 1970 and 2006, for example.¶ Again, while climate change will make extreme weather events and natural disasters like flooding and hurricanes more common, the negative effect on global quality of life will be reduced if economies continue to grow. That's because, as Matthew Kahn from Tufts University has shown, the safest place to suffer a natural disaster is in a rich country. The more money that people and governments have, the more they can both afford and enforce building codes, land use regulations, and public infrastructure like flood defenses that lower death tolls.¶ Let's also not forget how human psychology works. Too many environmentalists suggest that dealing with climate change will take immediate and radical retooling of the global economy. It won't. It is affordable, practical, and wouldn't take a revolution. Giving out the message that the only path to sustainability will require medieval standards of living only puts everyone else off. And once you've convinced yourself the world is on an inevitable course to disaster if some corner of the U.S. Midwest is fracked once more or India builds another three coal-fueled power plants, the only logical thing to do when the fracking or the building occurs is to sit back, put your Toms shoes on the couch, and drink micro-brewed herbal tea until civilization collapses. Climate change isn't like that -- or at the very least, isn't like that yet.¶ So, if you're really just looking for a reason to strap on the "end of the world is nigh" placards and go for a walk, you can find better excuses -- like, say, the threat of global thermonuclear war or a rogue asteroid. The fight to curb greenhouse gas emissions is one for the hard-nosed optimist.

## Bio-D

### 2nc – no impact

#### Most species are useless, key ones are protected.

Maier 09 – Env Scholar @ U of St Francis, Don, “What’s So Good About Biodiversity?”, Paper presented to the 6th Annual Joint International Society for Environmental Philosophy/ISEE Conferencehttp://www.environmentalphilosophy.org/ISEEIAEPpapers/2009/Maier.pdf

Once again, there is suspicion of confusion. Some particular species are good for people to eat. Because people need to eat in order to survive, those species might qualify as critically important. Other species have been found to have value for their production of chemicals of pharmacological value. Particular species have yielded these benefits, not biodiversity, not species diversity. Let us overlook this confusion and presume that the position involves something more like the claim that a great diversity of organisms increases the odds that at least some few of them are or will be around that are good to eat, that some few others of them do or will provide good medicines, and that some few others do or will provide good building materials. There remains an apparent assumption that the resource-providing creatures are a random sample of all creatures. This is almost certainly untrue and we return to this matter of fact just below. But putting this objection aside (and alongside the previously noted confusion), this is still a singularly unconvincing defense of the value of species diversity. The fact is that an extraordinarily tiny minority of creatures has benefited humanity as resource, now or previously. Furthermore, there is no reason to believe that this circumstance will change in the future. These facts combine with the other that any economic resource competes with other economic demands. As a consequence, from an economic point of view (which includes both resource and "service" value, the topic of Section 5.3 on "Biodiversity as service provider"), there is scarcely ever justification for not letting a species go extinct – even if the effort required is minimal. Certainly, many, if not most of the symbolic creatures – such as Ursus maritimus (polar bear) and Eubalaena spp. (right whales) – fall into this category. When, as in the case of both these creatures, there is, in fact, a significant economic cost to saving them – for polar bears, reversing climate warming, 124 for right whales, slowing down the ships that traverse their thoroughfares – then the mere possibility of a future benefit from their incremental contribution to species diversity is an essentially nil "expected net present value" (to use the standard economic jargon) by comparison. Faith is one among a group of conservation biologists who fails to understand this when pressing for the "option value" of biodiversity as a resource. 125 There is another objection to the resource rationale. Insofar as conserving biodiversity preserves the likelihood of conserving one or more valuable resources in the future, it also preserves the likelihood of conserving creatures that are destructive of resources or otherwise harmful. Disease organisms, "pests", and parasites contribute to biodiversity or at least species diversity at least as much (and possibly much more) than (for example) the trees that provide good building materials. In fact, because parasitism might be the predominant "lifestyle" on the planet (by some estimates, outnumbering free-living species by a factor of four), conserving biodiversity is far more likely to ensure that parasitic creatures continue to be in good supply. 126 Parasites even come with a diversity bonus – namely, the species on which they are parasitic (their hosts). Polyphagous parasites deliver multiple bonuses. 127 Finally, contrary to the random sample assumption, food for people – the most essential of resources for humans – is actually supplied by organisms in a set that is vanishingly small in the total (species) diversity picture, and that for the most part are carefully maintained and managed by humans on farms. The best recent estimates are that there are around 7,000 cultivated crop species of plants. 128 That is only about 2% of the estimated 320,000 kinds of plants on earth. 129 But that percentage is enormous in comparison to the number of livestock species. There are an estimated 7,600 breeds (in the 2006 Global Databank for Farm Animal Genetic Resources of the FAO – the Food and Agricultural Organization of the United Nations) of perhaps 40 species. 130 That is a barely noticeable diversity in the context of over 9 million other animal species. This news should relieve those who worry about the loss of resources from the loss of biodiversity. Apparently, great diversity of species, at least, is not of any great benefit, considered as either actual or potential resource

### 2nc – hurricanes check

**Studies and tech solve**

**Buck 06** – Specialist in Natural Resources Policy Resources, Science, and Industry Division (updated 9/20/2006, Eugene, CRS report for Congress, “Marine Dead Zones: Understanding the Problem”, http://ncseonline.org/NLE/CRSreports/06Oct/98-869.pdf, WEA)

In response to a January 1995 petition from the Sierra Club Legal Defense Fund (currently known as Earthjustice Legal Defense Fund) on behalf of 18 environmental, social justice, and fishermen’s organizations, the Gulf of Mexico Program 39 held a conference in December 1995 to outline the issue and identify potential actions. Following that conference, Robert Perciasepe, Assistant EPA Administrator for Water, convened an interagency group of senior Administration officials (the “principals group”) to discuss potential policy actions and related science needs. Subsequently, this “principals group” created a Mississippi River/Gulf of Mexico Watershed Nutrient Task Force. Additionally, the White House Office of Science and Technology Policy’s Committee on Environment and Natural Resources (CENR) conducted a Hypoxia Science Assessment at the request of EPA. The CENR assessment was peer-reviewed, made available for public comment, and submitted to the task force to assist in developing policy recommendations and a strategy for addressing hypoxia in the northern Gulf of Mexico. In response to an integrated scientific assessment of hypoxia in the northern Gulf of Mexico by the multi-agency Watershed Nutrient Task Force,40 a Plan of Action for addressing hypoxia was released in January 2001.41 Estimates based on water-quality measurements and streamflow records indicate that a 40% reduction in total nitrogen flux to the Gulf is necessary to return to average loads comparable to those during 1955-1970. Model simulations suggest that, short of this 40% reduction, nutrient load reductions of about 20%-30% would result in a 15%-50% increase in dissolved oxygen concentrations in bottom waters. Strategies selected focus on encouraging voluntary, practical, and cost-effective actions; using existing programs, including existing state and federal regulatory mechanisms; and following adaptive management. A reassessment of progress on implementing this action plan was initiated in 2005.42

**Empirically denied – tons of deadzones now that trigger the impact**

**Borenstein 8** (Seth, Staff Writer – AP, “Floodwaters to Widen ‘Dead Zone’ in Gulf of Mexico”, Associated Press, 6-20, http://www.loveforlife.com.au/node/4903)

Floodwaters loaded with farm runoff are heading down the Mississippi River, and scientists fear the deluge will dramatically increase this summer's dead zone in the Gulf of Mexico, covering an area the size of Maryland. The dead zone is a region of the gulf that becomes starved for oxygen during much of the summer and cannot support fish or other sea life. **There are hundreds of dead zones around the world** that wreak havoc with marine ecology and cut off vast areas for commercial fishing. The zone in the gulf is the largest in the Western Hemisphere.

### Cerrado

#### Soy is king in Brazil – it’ll drive Cerrado destruction.

Newell ‘11

Philip Newell is internally citing the WWF Report– Soya and the Cerrado: Brazil’s forgotten jewel. He is a research intern with the Nourishing the Planet project. August 2nd – http://blogs.worldwatch.org/nourishingtheplanet/wwf-report-soya-and-the-cerrado-brazil%E2%80%99s-forgotten-jewel/

According to a recent report released by WWF UK, the increased use of soy beans has had painful consequences for the Cerrado region of Brazil. The Cerrado is the unique savannah south of the Amazon Rainforest. This landscape, once covering a quarter of Brazil, holds an amazing 5 percent of all life on Earth. Since the prehistoric days when there was only one continent, this grassy expanse has harbored not only 11,000 flowering plants (nearly half are found only in the Cerrado) but also countless animal species, including the giant anteater and maned wolf. This rich history also imbues the land with cultural significance, as it has played a key role for over 10,000 years in the culture and religion of a variety of indigenous Brazilian societies.¶ Currently, however, the Cerrado is being converted into farmland for the express purpose of growing soybeans (soya). In only 15 years, production of soy has doubled, now covering an area almost the size of Egypt worldwide. In Brazil, there are 24.1 million hectares planted with soy, equivalent to the size of the United Kingdom. Such a prolific conversion has devastated the natural biodiversity of the region. A recent survey suggests that by 2008, almost half of the original vegetation cover had been lost, disappearing at a rate significantly greater than the Amazon rainforest. This also has significant consequences for climate change. According to WWF, in the six year period between 2002 and 2008, land-use change in the Cerrado released 275 million tons of CO2 per year-more than half the total emissions for the United Kingdom.¶ A whopping 80 percent of the soy grown worldwide is used for feeding cows, pigs, chickens and other livestock, according to the report. Current trends suggest that developing countries will continue to increase their meat consumption, until they match levels of developed countries. If soy remains one of the main components of livestock feed, then soy production will increase. Since most land planted with soy has already achieved maximum production levels (only the Indian region has room for improving yields), demand for land for soy planting will grow.

#### ( ) Soy and Livestock farming overwhelm Aff solvency.

Hance ‘10

Jeremy – writer for Mongabay – Currently he has written over 2,000 articles. Jeremy has long been passionate about wildlife and conservation, but a two-week trek into Peru's Amazon basin in 2006 awakened him to the urgent need for environmental action. He holds an undergraduate degree from Macalester College and a Master's degree from St. John's College;

<http://www.mongabay.com/profiles/cerrado.html>

¶ The cerrado is a vast tropical and subtropical biome covering more than 20 percent of Brazil, it includes a number of ecosystems from tall closed forests to marshlands to open grassland. The largest savannah in South America, the name of the ecosystem, cerrado, translates as 'closed', and the region was long-considered by Brazilians as essentially worthless land. That was until the 1960s when farmers from the US began conditioning the soil with the chemical lime, improving its quality and growing capacity, and thereby transforming the savannah into agricultural fields. ¶ ¶ Now the cerrado is one of Brazil's most threatened ecosystems. Half of the ecosystem has been destroyed for mechanized soy farms and cattle ranches. Over the past decade, two million hectares of the cerrado vanished every year to agriculture and pasture. Conservationists predict the possibility of a complete eradication of the ecosystem by 2030.

# Ag Da

## Overview

### 2nc - warming

#### Warming causes extinction – none of their impact cards come close to saying that the war would actually kill everyone

Flournoy 12 – Citing Feng Hsu, PhdD NASA Scientist @ the Goddard Space Flight Center, Don FLournoy, PhD and MA from UT, former Dean of the University College @ Ohio University, former Associate Dean at SUNY and Case Institute of Technology, Former Manager for Unviersity/Industry Experiments for the NASA ACTS Satellite, currently Professor of Telecommunications @ Scripps College of Communications, Ohio University, “Solar Power Satellites,” January 2012, Springer Briefs in Space Development, p. 10-11

In the Online Journal of Space Communication , Dr. Feng Hsu, a  NASA scientist at Goddard Space Flight Center, a research center in the forefront of science of space and Earth, writes, “The evidence of global warming is alarming,” noting the potential for a catastrophic planetary climate change is real and troubling (Hsu 2010 ) . Hsu and his NASA colleagues were engaged in monitoring and analyzing climate changes on a global scale, through which they received first-hand scientific information and data relating to global warming issues, including the dynamics of polar ice cap melting. After discussing this research with colleagues who were world experts on the subject, he wrote: I now have no doubt global temperatures are rising, and that global warming is a serious problem confronting all of humanity. No matter whether these trends are due to human interference or to the cosmic cycling of our solar system, there are two basic facts that are crystal clear: (a) there is overwhelming scientific evidence showing positive correlations between the level of CO2 concentrations in Earth’s atmosphere with respect to the historical fluctuations of global temperature changes; and (b) the overwhelming majority of the world’s scientific community is in agreement about the risks of a potential catastrophic global climate change. That is, if we humans continue to ignore this problem and do nothing, if we continue dumping huge quantities of greenhouse gases into Earth’s biosphere, humanity will be at dire risk (Hsu 2010 ) . As a technology risk assessment expert, Hsu says he can show with some confidence that the planet will face more risk doing nothing to curb its fossil-based energy addictions than it will in making a fundamental shift in its energy supply. “This,” he writes, “is because the risks of a catastrophic anthropogenic climate change can be potentially the extinction of human species, a risk that is simply too high for us to take any chances” (Hsu 2010 )

## 2nc – uniqueness

### 2nc – organic

#### In the Last 15 years Cuba has been focused on an organic and environmentally friendly agriculture system

Aguilar, 09 - PhD., Agro-ecologist, 2009 [Fernando Funes, 5/24/09, Food First- institute for Food and Development Policy, “Transgenic Food Production in Cuba; The Need for a Participatory and Serious Debate”, <http://www.foodfirst.org/en/node/2451>, Accessed: 7/1/13)

The excessive use of imported agrochemicals, the implementation of large scale, monoculture systems of production, the concentration of farmers in urban centers and rural towns, along with the dependency on a few export products, made for a vulnerable agricultural system. This vulnerability became evident in the nineties, with the disintegration of the socialist block of Eastern Europe and the USSR, when Cuba lost preferential pricing on the majority of the inputs needed, both financially and materially. At this point, Cuban agriculture along with other sectors of the national economy, entered the largest crisis in recent history, while at the same time, these factors created an excellent environment for a new, alternative and much more sustainable national agricultural model. During the last 15 years agricultural development has taken a new course. The present focus, like never before, is on food self-sufficiency and environmental protection. In 1994, Cuba created the National Program for Development and the Environment (Cuba’s version of the United Nations Agenda 21), and two years later approved the National Strategy for the Environment. In 1997, the “Law for the Protection of the Environment” allowed environmental protection to become national policy. Even though environmental protection is not enforced consistently as established by the today’s laws, it is undeniable that the government’s support for environmental protection has allowed Cuban agriculture take a more sustainable course.

### 2nc – no dependency

#### Import dependency is low

Altieri and Funes-Monzote 12 (Miguel A. Altieri, Profesor of Agroecology at Berkeley and President of the Latin American Scientific Society of Agroecology, Fernando R. Funes-Monzote, founder of Cuban Association of Organic Agriculture, Monthly Review, Volume 63, Issue o8(January), “The Paradox of Cuban Agriculture,http://monthlyreview.org/2012/01/01/the-paradox-of-cuban-agriculture, js)

Avery has used this misinformation to promote a campaign discrediting authors who studied and informed about the heroic achievements of Cuban people in the agricultural field: he has accused these scientists of being communist liars.¶ The Truth About Food Imports in Cuba¶ Avery referred to statements of Magalys Calvo, then Vice Minister of the Economy and Planning Ministry, who said in February 2007 that 84 percent of items “in the basic food basket” at that time were imported. However, these percentages represent only the food that is distributed through regulated government channels by means of a ration card. Overall data show that Cuba’s food import dependency has been dropping for decades, despite brief upturns due to natural and human-made disasters. The best time series available on Cuban food import dependency (see Chart 1) shows that it actually declined between 1980 and 1997, aside from a spike in the early 1990s, when trade relations with the former Socialist Bloc collapsed.7¶ However, Chart 2 indicates a much more nuanced view of Cuba’s agricultural strengths and weaknesses after more than a decade of technological bias toward ecological farming techniques. Great successes have clearly been achieved in root crops (a staple of the Cuban diet), sugar and other sweeteners, vegtables, fruits, eggs, and seafood. Meat is an intermediate case, while large amounts of cooking oil, aascereals, and legumes (principally rice and wheat for human consumption, and corn and soybeans for livestock) continue to be imported. The same is true for powdered milk, which does not appear on the graph. Total import dependency, however, is a mere 16 percent—ironically the exact inverse of the 84 percent figure cited by Avery. It is also important to mention that twenty-three other countries in the Latin American-Caribbean region are also net food importers.8

## 2nc – link

### 2nc – Specific

#### Aff crushes the Cuban model—technology and investment

Escandon, 2008, independent scholar and former professor of political science(Jennifer Escandon,“End the US-Cuba embargo: It's a win-win Normalizing ties would be smart policy and politics.”, http://www.csmonitor.com/Commentary/Opinion/2008/1009/p09s02-coop.html/(page)/2)//Holmes

Secondly, direct US engagement could allow two of the nation's largest revenue generators, the Cuban nickel and sugar industries, to expand into more capital-intensive energy research through university and private-sector partnerships. Most Cuban exports are currently destined for Canada, China, or the Netherlands as raw or lightly refined materials. Yet, with funding for technology and without the fear of embargo-based repercussions from the US, Cuban research opportunities and export products could have the potential to diversify. By gaining the freedom and cooperative assistance to make this transition, Cuba could address its own energy dependence while leap-frogging years ahead on modernization. For starters, Cuba could explore the sugar-bioenergy market and the energy-related uses of nickel. Given the abundance of well-trained but under-employed Cuban engineers, the ingredients for a perfect storm of innovation are already present.

### 2nc – tech link

#### Access to more technology will lead to monoculture

Altieri ,Professor of Division of Insect Biology @ University of California, Berkeley, 2K

[Miguel, 7/30/00, Agroecology in Action, “Modern Agriculture: Ecological impacts and the possibilities for truly sustainable farming”, <http://nature.berkeley.edu/~miguel-alt/modern_agriculture.html>)

Today monocultures have increased dramatically worldwide, mainly through the geographical expansion of land devoted to single crops and year-to-year production of the same crop species on the same land. Available data indicate that the amount of crop diversity per unit of arable land has decreased and that croplands have shown a tendency toward concentration. There are political and economic forces influencing the trend to devote large areas to monoculture, and in fact such systems are rewarded by economies of scale and contribute significantly to the ability of national agricultures to serve international markets. The technologies allowing the shift toward monoculture were mechanization, the improvement of crop varieties, and the development of agrochemicals to fertilize crops and control weeds and pests. Government commodity policies these past several decades encouraged the acceptance and utilization of these technologies. As a result, farms today are fewer, larger, more specialized and more capital intensive. At the regional level, increases in monoculture farming meant that the whole agricultural support infrastructure (i.e. research, extension, suppliers, storage, transport, markets, etc.) has become more specialized.

### \*2nc – at: no link uniqueness

#### Status quo prevents Cuban use of chemical farming- the aff reverses that

Ü 10 (Elizabeth Ü, Founder & Executive Director of Finance for Food, is passionate about connecting sustainable food- and ag-based businesses with capital. 4/12/10. "Defining Sustainable Agriculture – in Cuba". RSF Social Finance". rsfsocialfinance.org/2010/04/sustainable-agriculture-cuba/)

So most of the fruits and vegetables in Cuba are local and organic – or so we heard, so we believe. But I couldn’t shake the knowledge that farmers in Cuba don’t use pesticides, herbicides, fungicides, or chemical fertilizers in part because the U.S. won’t allow U.S. companies to sell these products in Cuba. The farmers we visited told us that they would use at least some of these products, particularly fertilizers, if they were available. (Nitrogen sources are scarce, and we saw few farm animals – which produce fertilizer in the form of manure – during our visits). And across the board, everyone who met with us expressed hope that the U.S. embargo prohibiting exports to Cuba – or at least, the majority of exports – would be lifted.

## 2nc – impact

### 2nc – food security module

#### Oil shocks are inevitable and will devastate food security- only adapting to the Cuban model can solve

Rodman 11 (Sarah Rodman, Doctoral Fellow and Research Assistant Center for a Livable Future. 9/27/11. "Food Systems After Peak Oil: A Look at Cuba". www.livablefutureblog.com/2011/09/food-systems-after-peak-oil-a-look-at-cuba)

Peak oil is fast approaching, a reality that is widely recognized by many scientific communities and governmental bodies. Many estimate that oil will peak by 2030, if it has not already. When this occurs, oil supplies will begin to decline, making it harder and more expensive to extract every drop. Our food system as it stands today is not prepared to gracefully withstand that decline.¶ As Roni Neff and colleagues illustrate in their article “Peak Oil, Food Systems, and Public Health,” recently published in the American Journal of Public Health as part of a supplement addressing peak petroleum, our globalized industrial food system relies heavily on oil at every step. Pesticides and herbicides are petroleum products. Farm machinery is manufactured with and runs on petroleum as an energy source. And transporting food extraordinary distances is only possible because of the oil that powers planes, ships and trucks. A large shock in oil prices would have an enormous impact on the current food system.¶ Given the inevitability of peak oil and the obvious effects it would have on food production and consumption, “transitioning to a postpetroleum food system is not optional,” argue Neff et al. And the authors have an idea of what that transition should entail:¶ “The lower-oil agriculture we describe is not a return to the past. Rather, the shift is toward knowledge-intensive ecological agriculture, combining new science and localized data analysis with historical wisdom to manage ecological forces in their complexity and relationships for resilient food needs.”¶ As I read this call for a more resilient food production, I was reminded of a food system I’ve seen before. It’s a food system that focuses on diverse, local production with minimum transportation. It has a heavy emphasis on research, local data collection, ecological harmony and sustainable methods. It harkens back to the wisdom of the past but moves forward in its adaptation to a changing environment and growing food needs. And what’s more, it became that way after experiencing its own “peak oil.”¶ While Cuba may be far away from the U.S. politically, ideologically, geographically and historically, its food system once looked much like ours. From the 1960s to 1990s, Cuba enjoyed a special trade relationship with the Soviet Union. Big state farm enterprises worked more than 80% of the land, which was dedicated to monocrop production of a few crops—mainly sugar, tobacco and citrus—that were mainly exported to the Soviet bloc. Cuba, in return, received heavily subsidized oil and other agricultural inputs (pesticides, fertilizers, herbicides) to make their agricultural system work. Cuba also relied heavily on food imports because so much of its land was dedicated to production for export. But by the end of 1991, the Soviet Union collapsed, and Cuba’s agricultural inputs sharply declined.¶ When Cuba lost over two-thirds of its oil and other oil-based agricultural inputs, its heavily petroleum-dependent food system went into major shock. There was no oil to power the tractors to transport food, no pesticides to fight off the pests or fertilizer to grow the crops (in a system without integrated pest management or methods of fertilizing organically). The 1990s were dubbed the “Special Period in Peacetime,” a chilling title considering the population lost on average 5 to 25% of its body weight. In 1993, Cubans were only able to satisfy less than two-thirds of their caloric needs. The absence of oil in the presence of an oil-dependent food system made for widespread food insecurity and starvation.¶ With a trade embargo from the U.S. and a lack of friendly trading partners, Cuba had to rebuild strength from within and completely rethink where its food was going to come from. People with no farming experience began growing food in any land available—vacant lots, rooftops, backyard gardens. Animal labor took the place of tractors. Soon after, the government recognized the importance of that movement and the need for food. They decentralized agriculture by breaking up state-held land for smaller scale producers. They gave away state land in usufruct to thousands of people. Every level of government has since institutionalized investment in the success of sustainable agriculture in Cuba, and there are now several support systems to help farmers produce without the oil-based inputs the country’s agriculture was once so dependent upon. Education and research have been ramped up to find the most productive, lowest-input systems to produce as much food as possible within an agroecological framework. Farmers have organized into cooperatives and now make living wages. As of 2005, it is estimated that 350,000 jobs were created in urban agriculture alone.¶ By 2005, Cuba was satisfying its own needs of the UN-established 300 grams of fruits and vegetables per capita per day. According to an FAO report in 2008, Cuba has met their World Food Summit and Millennium Development Goals—fewer than 5% of Cubans are undernourished.¶ It is important to note that Cuba is still dependent on food imports for some products other than fruits and vegetables. In 2000, the U.S. made an exception to its embargo for agricultural products and food, and within two years became its largest supplier of those commodities. Any shocks to the U.S. food system due to peak oil would now affect Cuba. However, Cuba’s own agricultural production is undeniably more resilient than ours to declining global oil supplies.¶ Despite obvious differences between our countries, the story of Cuba’s food system surely has lessons we can learn from—the devastating effects of declining oil on an ill-prepared food system and what a new system must entail to weather that shock. The question remains whether we will be willing to learn before or after the effects of peak oil can no longer be ignored. As Neff et al, point out:¶ “Perhaps the largest challenge is that few want to think about peak oil and other ecological threats such as climate change and soil depletion— never mind committing to precautionary change… Change carries cost and risk. So, however, does inaction.”

#### That guarantees instability and great power wars

CRIBB 2010 (Julian, Julian Cribb is a science communicator, journalist and editor of several newspapers and books. His published work includes over 7,000 newspaper articles, 1,000 broadcasts, and three books and has received 32 awards for science, medical, agricultural and business journalism. He was Director, National Awareness, for Australia's science agency, CSIRO, foundation president of the Australian Science Communicators, and originated the CGIAR's Future Harvest strategy. He has worked as a newspaper editor, science editor for "The Australian "and head of public affairs for CSIRO. He runs his own science communication consultancy, “The coming famine: the global food crisis and what we can do to avoid it,” p. 20)

The threat or conflict over food, land, and water is not, however, confined to the marginal world. Increasingly it imperils the economic powerhouses of the global economy in the early twenty-first century. In 2001 the Australian strategic analyst Alan Dupont predicted, "Food is destined to have greater strategic weight and import in an era of environmental scarcity. While optimists maintain that the world is perfectly capable of meeting the anticipated increases in demand for essential foodstuffs, there are enough imponderables to suggest that prudent governments would not want to rely on such a felicitous outcome." Anticipating the food crisis of 2007-8 by several years, he presciently added, "East Asia's rising demand for food and diminishing capacity to feed itself adds an unpredictable new element to the global food equation for several reasons. The gap between production and consumption of key foodstuffs globally is narrowing dangerously and needs to be reversed." Bearing out his words, Singapore president Lee Ilsieng Loong told a 2008 international defense conference, "In the longer term, the trends towards tighter supplies and higher prices will likely reassert themselves. This has serious security implications. The impact of a chronic food shortage will be felt especially by the poor countries. The stresses from hunger and famine can easily result in social upheaval and civil strife, exacerbating conditions that lead to failed states. Between countries, competition for food supplies and displacement of people across borders could deepen tensions and provoke conflict and wars."15

## Disease

### 2nc - generic

#### Past pandemics prove that disease doesn’t lead to extinction

**Peters and Chrystal ‘03** (Dr. Clarence, Director of Biodefense and Emerging Infectious Diseases @ UT, and Dr. Ronald, Chairman of Genetics Medicine @ Cornell, FDCH Political Transcripts, “U.S. REPRESENTATIVE CHRISTOPHER COX (R-CA) HOLDS HEARING ON COUNTERING THE BIOTERRORISM THREAT”, 3-15, L/N)

PETERS: I think we have one example from the movement of **the Conquistadors to the New World**. They **brought measles, smallpox and a variety of other diseases with them. They didn't wipe out the Indians,** but they destroyed their civilization and were instrumental in the Spaniards being able to conquer the New World with relatively few people. I think we have something going on right now with SARS that we don't know exactly what the end of it's going to be, but we already know that Asian economies are suffering tremendously. My prediction is that they will not be able to control it in China. If that's true, then we will be dealing with repeated introductions in this country for the indefinite future so that we may see a change in our way of life where we are taking temperatures in airports, in addition to taking your shoes off and putting them through the X-ray machine. And we may see emergency rooms rebuilt so that if you have a cough you go in one entrance and go into a negative pressure cubicle until your SARS test comes back. So I think that while **wiping out human life is extremely unlikely**, we have unengineered examples of bugs that have made great impacts on civilizations. COX: Dr. Crystal? CRYSTAL: **The natural examples of what you suggested were, as hundreds of years ago, with smallpox and also with the plague. The plague wiped out one-third of the civilization.** We now have treatments for ordinances (ph) like the plague because they were engineered to be resistant. And if they infected a number of people and had the capability of being spread rapidly from individual to individual, it would cause enormous havoc. I agree with the panel -- **I don't think it would wipe out civilization,** but the consequences to our society would be enormous.

# Heg

### Solvency

#### ( ) Fidel’s shadow is too large – Cuba won’t allow ethanol.

Frank ‘8

Havana-based Reuters correspondent Marc Frank is a former writer for the People's Daily World – Reuters – Feb 22, 2008 – http://www.reuters.com/article/2008/02/22/cuba-castro-ethanol-idUSN2261316320080222

Cuba will only jump on the ethanol bandwagon if it can produce the biofuel from sugar cane as a by-product that does not affect its sugar output, local experts said on Friday.¶ Fidel Castro's retirement this week fueled speculation that ethanol could become a billion-dollar export industry for the cash-strapped communist country under his brother Raul Castro.¶ The younger Castro, who is expected to be confirmed as Cuba's new leader on Sunday, is considered less ideological and more pragmatic than his brother, and has indicated an interest in drawing more foreign investment in recent speeches.¶ But Fidel Castro is expected to retain huge influence in Cuba and he has repeatedly branded the use of food crops to produce fuel as a crime against humanity because rising prices will increase hunger.¶ A local economist with ties to the sugar industry said Cuba is working to develop technology to produce fuel from milled sugar cane bagasse. If successful, Cuba could become more interested in making ethanol, he said.¶ "It is inconceivable while Fidel is still alive that his brother Raul, or anyone else, would convert a significant proportion of our sugar crop or vacant land to ethanol," the economist said, asking not to be identified.¶ "Even after Fidel dies, I can't imagine that happening for quite some time," he said.

#### Fidel won’t allow Cuban ethanol – too worried about food tradeoff

Benjamin-Alvadaro ‘10

Jonathan Benjamin-Alvadaro, PhD Poly Sci @ Nebraska, 2010, “Cuba’s Energy Future: Strategic Approaches to Cooperation,” Brookings – obtained via MSU Library ebook.

Castro has rightly pointed out that there can be a direct trade-off between using land for food production and for ethanol. And in many areas of the world, the shift in land use to crops for ethanol has resulted in rapidly rising costs for food. There are also trade-offs between increasing acreage devoted to crops for ethanol and other objectives such as issues related to climate, environment, and biodiversity. In Brazil, for example, increasing acreage under sugarcane cultivation has resulted in shifting other crops to newly cleared areas, often in the rainforest, a process that ultimately could have devastating effects on climate and biodiversity within and beyond Brazil.

### 2nc – no impact

#### Credibility theory is incoherent — empirically denied

Jonathan Mercer 8/28, 2013, associate professor of political science at the University of Washington in Seattle and a Fellow at the Center for International Studies at the London School of Economics. Bad Reputation, 28 August 2013, www.foreignaffairs.com/articles/139376/jonathan-mercer/bad-reputation

Even if Assad were so simpleminded, the administration’s critics are wrong to suggest that the president should have acted sooner to protect U.S. credibility. After the red line was first crossed, Obama could have taken the United States to war to prevent Assad from concluding that an irresolute Obama would not respond to any further attacks -- a perception on Syria’s part that seems to have now made a U.S. military response all but certain. But going to war to prevent a possible misperception that might later cause a war is, to paraphrase Bismarck, like committing suicide out of fear that others might later wrongly think one is dead.

It is also possible that the United States did not factor into Assad’s calculations. A few months before the United States invaded Iraq, Saddam Hussein’s primary concerns were avoiding a Shia rebellion and deterring Iran. Shortsighted, yes, but also a good reminder that although the United States is at the center of the universe for Americans, it is not for everyone else. Assad has a regime to protect and he will commit any crime to win the war. Finally, it is possible that Assad never doubted Obama’s resolve -- he just expects that he can survive any American response. After all, if overthrowing Assad were easy, it would already have been done.

#### Capability outweighs credibility — US actions appear irrational, so countries don’t interpret our signals

Steve Chapman 9/5/13, columnist and editorial writer for the Chicago Tribune, “War in Syria: The Endless Quest for Credibility,” http://reason.com/archives/2013/09/05/war-in-syria-the-endless-quest-for-credi

The United States boasts the most powerful military on Earth. We have 1.4 million active-duty personnel, thousands of tanks, ships and planes, and 5,000 nuclear warheads. We spend more on defense than the next 13 countries combined. Yet we are told we have to bomb Syria to preserve our credibility in world affairs.¶ Really? You'd think it would be every other country that would need to confirm its seriousness. Since 1991, notes University of Chicago security scholar John Mearsheimer, the U.S. has been at war in two out of every three years. If we haven't secured our reputation by now, it's hard to imagine we ever could.¶ On the surface, American credibility resembles a mammoth fortress, impervious to anything an enemy could inflict. But to crusading internationalists, both liberal and conservative, it's a house of cards: The tiniest wrong move, and it collapses.¶ In a sense, though, they're right. The U.S. government doesn't have to impress the rest of the world with its willingness to defend against actual attacks or direct threats. But it does have to continually persuade everyone that we will lavish blood and treasure for purposes that are irrelevant to our security.¶ Syria illustrates the problem. Most governments don't fight unless they are attacked or have dreams of conquest and expansion. War is often expensive and debilitating even for the winners, and it's usually catastrophic for losers. Most leaders do their best to avoid it.¶ So even though the Syrian government is a vicious, repressive dictatorship with a serious grudge against Israel, it has mostly steered clear of military conflict. Not since 1982 has it dared to challenge Israel on the battlefield. When Israeli warplanes vaporized a Syrian nuclear reactor in 2007, Bashar al-Assad did nothing. The risks of responding were too dire.¶ But the U.S. never faces such sobering considerations. We are more secure than any country in the history of the world. What almost all of our recent military interventions have in common is that they involved countries that had not attacked us: Libya, Iraq, Serbia, Haiti, Somalia, Panama, Grenada and North Vietnam.¶ With the notable exception of the Afghanistan invasion, we don't fight wars of necessity. We fight wars of choice.¶ That's why we have such an insatiable hunger for credibility. In our case, it connotes an undisputed commitment to go into harm's way even when -- especially when -- we have no compelling need to do so. But it's a sale we can never quite close.¶ Using force in Iraq or Libya provides no guarantee we'll do the same in Syria or Iran or Lower Slobbovia. Because we always have the option of staying out, there's no way to make everyone totally believe we'll jump into the next crisis.¶ The parallel claim of Washington hawks is that we have to punish Assad for using nerve gas, because otherwise Iran will conclude it can acquire nuclear weapons. Again, our credibility is at stake. But how could the Tehran regime draw any certain conclusions based on what happens in Syria?¶ Two American presidents let a troublesome Saddam Hussein stay in power, but a third one decided to take him out. George W. Bush tolerated Moammar Gadhafi, but Barack Obama didn't. Ronald Reagan let us be chased out of Lebanon, only to turn around and invade Grenada. If you've seen one U.S. intervention, you've seen one.¶ What should be plain to Iran is that Washington sees nuclear proliferation as a unique threat to its security, which Syria's chemical weapons are not. Just because we might let Assad get away with gassing his people doesn't mean we will let Iran acquire weapons of mass destruction that would be used only against other countries. Heck, we not only let Saddam get away with using chemical weapons against Iran -- we took his side.¶ Figuring out the U.S. government's future impulses is hard even for Americans. There's no real rhyme or reason. But because we're so powerful, other governments can ill afford to be wrong. What foreigners have to keep in the front of their minds is not our inclination to act but our capacity to act -- which remains unparalleled whatever we do in Syria.¶ Credibility is overrated. Sure, it's possible for hostile governments to watch us squabble over Syria and conclude that they can safely do things we regard as dangerous. But there are graveyards full of people who made that bet.

# 1nr

## Add-On

#### Engagement doesn’t cause peace – statistical models ignore other factors like economic growth

Mousseau 12, Professor IR Koç University (Michael, “The Democratic Peace Unraveled: It’s the Economy” International Studies Quarterly, p 1-12)

Model 2 presents new knowledge by adding the control for economic type. To capture the dyadic expectation of peace among contract-intensive nations, the variable Contract- intensive EconomyL (CIEL) indicates the value of impersonal contracts in force per capita of the state with the lower level of CIE in the dyad; a high value of this measure indicates both states have contract-intensive economies. As can be seen, the coefficient for CIEL ()0.80) is negative and highly significant. This corroborates that impersonal economy is a highly robust force for peace. The coefficient for DemocracyL is now at zero. There are no other differences between Models 1 and 2, whose samples are identical, and no prior study corroborating the democratic peace has considered contractintensive economy. Therefore, the standard econometric inference to be drawn from Model 2 is the nontrivial result that all prior reports of democracy as a force for peace are probably spurious, since this result is predicted and fully accounted for by economic norms theory. CIEL and DemocracyL correlate only in the moderate range of 0.47 (Pearson’s r), so the insignificance of democracy is not likely to be a statistical artifact of multicollinearity. This is corroborated by the variance inflation factor for DemocracyL in Model 2 of 1.85, which is well below the usual rule-of-thumb indicator of multicollinearity of 10 or more. Nor should readers assume most democratic dyads have both states with impersonal economies: While almost all nations with contract-intensive economies (as indicated with the binary measure for CIE) are democratic (Polity2 > 6) (Singapore is the only long-term exception), more than half—55%—of all democratic nation-years have contract-poor economies. At the dyadic level in this sample, this translates to 80% of democratic dyads (all dyads where DemocracyBinary6 = 1) that have at least one state with a contract-poor economy. In other words, not only does Model 2 show no evidence of causation from democracy to peace (as reported in Mousseau 2009), but it also illustrates that this absence of democratic peace includes the vast majority—80%—of democratic dyad-years over the sample period. Nor is it likely that the causal arrow is reversed—with democracy being the ultimate cause of contract-intensive economy and peace. This is because correlations among independent variables are not calculated in the results of multivariate regressions: Coefficients show only the effect of each variable after the potential effects of the others are kept constant at their mean levels. If it was democracy that caused both impersonal economy and peace, then there would be some variance in DemocracyL remainin, after its partial correlation with CIEL is excluded, that links it directly with peace. The positive direction of the coefficient for DemocracyL informs us that no such direct effect exists (Blalock 1979:473–474). Model 3 tests for the effect of DemocracyL if a control is added for mixed-polity dyads, as suggested by Russett (2010:201). As discussed above, to avoid problems of mathematical endogeneity, I adopt the solution used by Mousseau, Orsun and Ungerer (2013) and measure regime difference as proposed by Werner (2000), drawing on the subcomponents of the Polity2 regime measure. As can be seen, the coefficient for Political Distance (1.00) is positive and significant, corroborating that regime mixed dyads do indeed have more militarized conflict than others. Yet, the inclusion of this term has no effect on the results that concern us here: CIEL ()0.85) is now even more robust, and the coefficient for DemocracyL (0.03) is above zero.7 Model 4 replaces the continuous democracy measure with the standard binary one (Polity2 > 6), as suggested by Russett (2010:201), citing Bayer and Bernhard (2010). As can be observed, the coefficient for CIEL ()0.83) remains negative and highly significant, while DemocracyBinary6 (0.63) is in the positive (wrong) direction. As discussed above, analyses of fatal dispute onsets with the far stricter binary measure for democracy (Polity = 10), put forward by Dafoe (2011) in response to Mousseau (2009), yields perfect prediction (as does the prior binary measure Both States CIE), causing quasi-complete separation and inconclusive results. Therefore, Model 5 reports the results with DemocracyBinary10 in analyses of all militarized conflicts, not just fatal ones. As can be seen, the coefficient for DemocracyBinary10 ()0.41), while negative, is not significant. Model 6 reports the results in analyses of fatal disputes with DemocracyL squared (after adding 10), which implies that the likelihood of conflict decreases more quickly toward the high values of DemocracyL. As can be seen, the coefficient for DemocracyL 2 is at zero, further corroborating that even very high levels of democracy do not appear to cause peace in analyses of fatal disputes, once consideration is given to contractintensive economy. Models 3, 4, and 6, which include Political Distance, were repeated (but unreported to save space) with analyses of all militarized interstate disputes, with the democracy coefficients close to zero in every case. Therefore, the conclusions reached by Mousseau (2009) are corroborated even with the most stringent measures of democracy, consideration of institutional distance, and across all specifications: The democratic peace appears spurious, with contract-intensive economy being the more likely explanation for both democracy and the democratic peace.

## Top

### 2nc – warming module

**CIR is key to green tech and solves warming**

**Herman and Smith ‘10**, \*founder of a immigration and business law firm in Cleveland, Ohio which serves a global clientele in over 10 languages, \*veteran journalist who covers international cultures and immigration issues for the Cleveland Plain Dealer (Richard and Robert, “Why Immigrants Can Drive the Green Economy,” Immigration Policy Center, 2010, http://immigrationpolicy.org/perspectives/why-immigrants-can-drive-green-economy)

It should come as no surprise that **immigrants will help drive the green revolution**. America’s young scientists and engineers, especially the ones drawn to emerging industries like alternative energy, tend to speak with an accent. The 2000 Census found that **immigrants, while accounting for 12 percent of the population, made up nearly half of the all scientists and engineers with doctorate degrees**. Their importance will only grow. Nearly 70 percent of the men and women who entered the fields of science and engineering from 1995 to 2006 were immigrants. Yet, the connection between immigration and the development and commercialization of alternative energy technology is rarely discussed. **Policymakers envision millions of new jobs as the nation pursues renewable energy sources, like wind and solar power, and builds a smart grid to tap it. But** Dan Arvizu, the leading expert on solar power and the director of the National Renewable Energy Laboratory of the U.S. Department of Energy in Golden, Colorado, warns that **much of the clean-technology talent lies overseas, in nations that began pursuing alternative energy sources decades ago**. **Expanding our own clean-tech industry will require working closely with foreign nations and foreign-born scientists**, he said. **Immigration restrictions are making collaboration difficult**. His lab’s efforts to work with a Chinese energy lab, for example, were stalled due to U.S. immigration barriers. “We can’t get researchers over here,” Arvizu, the son of a once-undocumented immigrant from Mexico, said in an interview in March 2009, his voice tinged with dismay. “It makes no sense to me. We need a much more enlightened approach.” Dr. Zhao Gang, the Vice Director of the Renewable Energy and New Energy International Cooperation Planning Office of the Ministry of Science and Technology in China, says that America needs that enlightenment fast. “The Chinese government continues to impress upon the Obama administration that **immigration restrictions are creating major impediments to U.S.-China collaboration on clean energy development**,” he said during a recent speech in Cleveland. So what’s the problem? Some of it can be attributed to national security restrictions that impede international collaboration on clean energy. But Arvizu places greater weight on immigration barriers, suggesting that national secrecy is less important in the fast-paced world of green-tech development. “We are innovating so fast here, what we do today is often outdated tomorrow. Finding solutions to alternative energy is a complex, global problem that requires global teamwork,” he said. **We need an immigration system that prioritizes the attraction and retention of scarce, high-end talent needed to invent and commercialize alternative energy technology and other emerging technologies**. **One idea** we **floated** by Arvizu **was** a new immigrant “Energy Scientist Visa,” **providing fast-track green cards for Ph.D.s** with the most promising energy research, as reviewed by a panel of top U.S. scientists. Arvizu enthusiastically responded, “Wow, that’s a brilliant idea.” As the recent submission of the Startup Visa Act bill suggests, there’s really no shortage of good ideas of leveraging immigration to jumpstart the economy. The challenge is getting the American people to understand that high-skill immigration creates jobs, that the current system is broken, and that action is required now.

### 2nc – heg

#### CIR key to heg- visas solve innovation for hard power and creates linkages that solve soft power

Joseph S. Nye, a former US assistant secretary of defense and chairman of the US National Intelligence Council, is University Professor at Harvard University, 12-10-2012, http://www.project-syndicate.org/commentary/obama-needs-immigration-reform-to-maintain-america-s-strength-by-joseph-s--nye#3lbxO0TM6Q8JpxEA.99

CommentsAs a result, several prominent Republican politicians are now urging their party to reconsider its anti-immigration policies, and plans for immigration reform will be on the agenda at the beginning of Obama’s second term. Successful reform will be an important step in preventing the decline of American power.¶ CommentsFears about the impact of immigration on national values and on a coherent sense of American identity are not new. The nineteenth-century “Know Nothing” movement was built on opposition to immigrants, particularly the Irish. Chinese were singled out for exclusion from 1882 onward, and, with the more restrictive Immigration Act of 1924, immigration in general slowed for the next four decades.¶ CommentsDuring the twentieth century, the US recorded its highest percentage of foreign-born residents, 14.7%, in 1910. A century later, according to the 2010 census, 13% of the American population is foreign born. But, despite being a nation of immigrants, more Americans are skeptical about immigration than are sympathetic to it. Various opinion polls show either a plurality or a majority favoring less immigration. The recession exacerbated such views: in 2009, one-half of the US public favored allowing fewer immigrants, up from 39% in 2008.¶ CommentsBoth the number of immigrants and their origin have caused concerns about immigration’s effects on American culture. Demographers portray a country in 2050 in which non-Hispanic whites will be only a slim majority. Hispanics will comprise 25% of the population, with African- and Asian-Americans making up 14% and 8%, respectively.¶ CommentsBut mass communications and market forces produce powerful incentives to master the English language and accept a degree of assimilation. Modern media help new immigrants to learn more about their new country beforehand than immigrants did a century ago. Indeed, most of the evidence suggests that the latest immigrants are assimilating at least as quickly as their predecessors.¶ CommentsWhile too rapid a rate of immigration can cause social problems, over the long term, immigration strengthens US power. It is estimated that at least 83 countries and territories currently have fertility rates that are below the level needed to keep their population constant. Whereas most developed countries will experience a shortage of people as the century progresses, America is one of the few that may avoid demographic decline and maintain its share of world population.¶ CommentsFor example, to maintain its current population size, Japan would have to accept 350,000 newcomers annually for the next 50 years, which is difficult for a culture that has historically been hostile to immigration. In contrast, the Census Bureau projects that the US population will grow by 49% over the next four decades.¶ CommentsToday, the US is the world’s third most populous country; 50 years from now it is still likely to be third (after only China and India). This is highly relevant to economic power: whereas nearly all other developed countries will face a growing burden of providing for the older generation, immigration could help to attenuate the policy problem for the US.¶ CommentsIn addition, though studies suggest that the short-term economic benefits of immigration are relatively small, and that unskilled workers may suffer from competition, skilled immigrants can be important to particular sectors – and to long-term growth. There is a strong correlation between the number of visas for skilled applicants and patents filed in the US. At the beginning of this century, Chinese- and Indian-born engineers were running one-quarter of Silicon Valley’s technology businesses, which accounted for $17.8 billion in sales; and, in 2005, immigrants had helped to start one-quarter of all US technology start-ups during the previous decade. Immigrants or children of immigrants founded roughly 40% of the 2010 Fortune 500 companies.¶ CommentsEqually important are immigration’s benefits for America’s soft power. The fact that people want to come to the US enhances its appeal, and immigrants’ upward mobility is attractive to people in other countries. The US is a magnet, and many people can envisage themselves as Americans, in part because so many successful Americans look like them. Moreover, connections between immigrants and their families and friends back home help to convey accurate and positive information about the US.¶ CommentsLikewise, because the presence of many cultures creates avenues of connection with other countries, it helps to broaden Americans’ attitudes and views of the world in an era of globalization. Rather than diluting hard and soft power, immigration enhances both.¶ CommentsSingapore’s former leader, Lee Kwan Yew, an astute observer of both the US and China, argues that China will not surpass the US as the leading power of the twenty-first century, precisely because the US attracts the best and brightest from the rest of the world and melds them into a diverse culture of creativity. China has a larger population to recruit from domestically, but, in Lee’s view, its Sino-centric culture will make it less creative than the US.¶ CommentsThat is a view that Americans should take to heart. If Obama succeeds in enacting immigration reform in his second term, he will have gone a long way toward fulfilling his promise to maintain the strength of the US.

#### **Nuclear war turns and outweighs climate change- It’s the only immediate threat to civilization**

Masters, ‘7 (Jeff, Director of Meteorology for The Weather Underground Inc., Ph.D. in meteorology from the University of Michigan, 2006 Merit Award as Alumnus of the year from UMich’s Atmospheric, Oceanic, and Space Sciences Department, Jan 29th, “Nuclear war and climate change”, http://www.wunderground.com/blog/JeffMasters/comment.html?entrynum=617&tstamp=20070)

It is sobering to realize that the nuclear weapons used in the Robock et al. study represented only 0.03% of the world’s total nuclear arsenal of 26,000 warheads. While significant progress was made in the 1990s to reduce the threat of nuclear war, that threat has increased in recent years. Last week’s move by the Bulletin of the Atomic Scientists to move the hands of their Doomsday Clock two minutes closer to midnight—the figurative end of civilization--helped call attention to this increased threat. In addition, they also mentioned climate change for the first time as part of the rationale for moving the clock closer to midnight. I believe that climate change does not pose an immediate threat to civilization—at least for the next 20 years or so—and there is still time to significantly reduce the threat of climate change to civilization if strong action is taken in the next 20 years to cut carbon emissions. Thus, setting the hands of the clock closer to midnight because of climate change is probably premature. However, climate change triggered by a limited nuclear war is a whole different situation. The twin disasters of a limited nuclear war, coupled with the devastating global climate change it could wreak, should remind us that there is no such thing as a small scale nuclear war. Nuclear war remains the greatest threat to the globe, and the most important cause to work for today is peace. There's no better way for an individual to do that than to make oneself more peaceful.

## Uniqueness

### Will Pass – Momentum From Shutdown

#### Victory From the Shutdown Means Obama Has the Momentum to Pass CIR

McMorris, 10/15/13(Evan McMorris, “Obama Has Already Won The Shutdown Fight And He’s Coming For Immigration Next”, http://www.buzzfeed.com/evanmcsan/obama-has-already-won-the-shutdown-fight-and-hes-coming-for)//Holmes

WASHINGTON — As the fiscal fight roiling Washington nears its end, the White House is already signaling that it plans to use the political momentum it has gained during the shutdown fight to charge back into the immigration debate. And this time, Democratic pollsters and advocates say, they could actually win. The final chapter of the current crisis hasn’t been written yet, but Democrats in Washington are privately confident that they’ll emerge with the upper hand over the conservatives in Congress who forced a government shutdown. And sources say the administration plans to use its victory to resurrect an issue that was always intended to be a top priority of Obama’s second-term agenda. Advocates argue the post-fiscal crisis political reality could thaw debate on the issue in the House, which froze in earlier this year after the Senate passed a bipartisan immigration bill that was led by Republican Sen. Marco Rubio and Democratic Sen. Chuck Schumer. “It’s at least possible with sinking poll numbers for the Republicans, with a [GOP] brand that is badly damaged as the party that can’t govern responsibly and is reckless that they’re going to say, ‘All right, what can we do that will be in our political interest and also do tough things?’” said Frank Sharry, executive director of the immigration reform group America’s Voice. “That’s where immigration could fill the bill.” The White House and Democrats are “ready” to jump back into the immigration fray when the fiscal crises ends, Sharry said. And advocates are already drawing up their plans to put immigration back on the agenda — plans they’ll likely initiate the morning after a fiscal deal is struck. “We’re talking about it. We want to be next up and we’re going to position ourselves that way,” Sharry said. “There are different people doing different things, and our movement will be increasingly confrontational with Republicans, including civil disobedience. A lot of people are going to say, ‘We’re not going to wait.’” The White House isn’t ready to talk about the world after the debt limit fight yet, but officials have signaled strongly they want to put immigration back on the agenda.

#### Obama using PC on CIR now and fiscal fights provide impetus for the GOP to compromise

Hartmann, 10/16/13, writer @ New Yorker(Margaret Hartmann, “Obama Is Over the Shutdown, Wants to Tackle Immigration Reform”, http://nymag.com/daily/intelligencer/2013/10/obama-plans-for-immigration-reform-post-shutdown.html)//Holmes

Shortly after John Boehner's last-ditch effort to end the shutdown and raise the debt ceiling ended in a humiliating defeat on Tuesday, reports emerged that President Obama was already plotting out his next move, saying of the fiscal crisis, "Once that’s done, you know, the day after – I’m going to be pushing to say, call a vote on immigration reform." While Democrats appear to have the upper hand, that still seemed a bit presumptuous. Things ended on Tuesday night with sources reporting that Harry Reid and Mitch McConnell are finalizing a deal, but the nation is still careening toward default. The full transcript of Obama's interview reveals that he actually made the comments earlier in the day, and was bashing House Republicans for starting a "crisis that was unnecessary," then throwing a "little bit of a wrench" in the Senate's effort to get us out of it. But yes, Obama does sound anxious to start talking about immigration again. Obama brought up immigration in an interview with KMEX, L.A.'s Univision affiliate, while rattling off a list of things Congress should be focusing on instead of engaging in childish brinksmanship, such as infrastructure, jobs, and raising the minimum wage. "We shouldn't be inflicting damage on the economy simply because one side doesn't get its way," he said. When asked about immigration reform specifically, Obama said it's not "just a Latino issue," but "an American issue." He explained: We know our economy will grow faster if immigration reform passes. We know businesses will do better if immigration reform passes. We know that deficits will be reduced if immigration reform passes; because people coming out of the shadows, paying more taxes growing, the growth accelerating, all that brings down the deficit, so it's important for everybody. Some advocates say passing immigration reform may actually be easier in the wake of the shutdown. "It’s at least possible with sinking poll numbers for the Republicans, with a [GOP] brand that is badly damaged as the party that can’t govern responsibly and is reckless that they’re going to say, 'Alright, what can we do that will be in our political interest and also do tough things?'" Frank Sharry, executive director of the immigration reform group America’s Voice, told BuzzFeed.

## Link

**General Link - Yes Spillover UNRELATED legislation\*\***

**Turns aren’t salient – cuba is low priority, sparks fight and drains PC necessary for immigration**

**Hakim et al, 12**

Peter Hakim, Andrés Rozental, Rubens Barbosa, Riordan Roett, Ruben Olmos

Inter-American Dialogue’s Latin America Advisor, Peter Hakim is president emeritus and senior fellow of the Inter-American Dialogue, a Washington-based think tank on Western Hemisphere affairs. He served as president of the Dialogue from 1993 to 2010, writes and speaks widely on hemispheric issues, and has testified more than a dozen times before Congress. His articles have appeared in Foreign Affairs, Foreign Policy, The New York Times, The Washington Post, Miami Herald, Los Angeles Times, and Financial Times, and in newspapers and journals in Argentina, Brazil, Chile, Colombia, Mexico, Peru, and other Latin American nations. He is a regular guest on CNN, BBC, CBS, CNN en Español and other prominent news stations around the world. He wrote a monthly column for the Christian Science Monitor for nearly ten years, and now serves as a board member of Foreign Affairs Latinoamerica and editorial advisor to Americaeconomia, where he also publishes a regular column11/8/12 http://www.thedialogue.org/page.cfm?pageID=32&pubID=3135

What Will Obama's Second Term Mean **for Latin America**? Q: Barack Obama was re-elected president of the United States on Tuesday. What is his vision for foreign policy and how does Latin America fit into his plans? How will Latin American leaders and their citizens react to the election results? **What** role did Latinos in the United States play in **the election** and what does that **mean for U.S. policy changes on** issues such as immigration, drugs and **Cuba**? A: Peter Hakim, member of the Advisor board and president emeritus of the Inter-American Dialogue: "Any speculation about Obama's second term has to come mainly from his first-term performance. The campaign was about the candidates and their biographies—not about issues. **Nothing suggests Congress will be more productive. The House remains** virtually **unchanged. The Senate will be more divisive** still as most remaining moderate Republicans and Democrats resigned or lost their seats. We will know soon whether compromise is possible when the lame-duck Congress returns next week, and begins discussion of the fiscal cliff embroglio. The best guess is that Congress will find a way, not to resolve the problem, but to defer its consequences. The election results focused attention on immigration policy, which both Republicans and Democrats may be motivated to address. President Obama's declared intention to address immigration was surely reinforced by the huge Latino vote. Many of the Republicans who blocked previous immigration initiatives will resist again. But some recognize their party may become irrelevant unless they take seriously the Latino and black constituencies that accounted for more than 40 percent of Obama's total. U.S. immigration reform would be a welcome change in most of Latin America, particularly in Mexico, Central America and the Caribbean. **Obama may seek** to pursue **further openings to Cuba**—**but these will be limited unless the Cuban government shows a willingness to reciprocate with new human rights measures or political changes**. Drug policy is not high on the U.S. agenda, but the approval in Colorado and Washington of ballot initiatives to legalize marijuana use may spark wider discussion on drug issues. But Mitt Romney offered the most significant policy proposal for Latin America, when called for more intensive U.S. efforts to pursue multiplying economic opportunities in the region." A: Andrés Rozental, member of the Advisor board, president of Rozental & Asociados in Mexico City and senior fellow at the Brookings Institution: "President Obama's re-election is a welcome development for Latin Americans in general, and Mexicans in particular. Although many of Obama's campaign promises in 2008 relevant to the region remain unrealized, there is a modicum of hope that as a leader in his second term, **with more political capital to spend, he can** **at least make a stronger effort to tackle comprehensive immigration reform** and trade issues critical to Latin American prosperity. **Although I don't foresee any major change in** the **U**nited **S**tates' foreign **policy toward the region, especially as long as Afghanistan, Iran and the Middle East remain priorities for Washington**, that may not necessarily be a bad thing. We often complain when Washington pays too much attention to us, and equally when there's less overt interest in the region, but I believe that Obama has mostly shown a much more mature attitude toward Latin America over the last four years than has traditionally been the case. This will hopefully also be the case as his administration continues through 2016. Presumably, there will continue to be a strong focus on completing ongoing trade negotiations, especially the Trans-Pacific Partnership, to open new opportunities for economic growth and hopefully a re-visiting of NAFTA as a key option to make North America more competitive on the global scene. Latinos played a key role in re-electing Obama, just as they did in 2008, and the one message that Republicans have to take home at this stage is that the anti-immigrant, exclusionary policies voiced during the campaign by Mitt Romney, the Tea Party and other conservatives were a key factor in their ultimate defeat. Many of Obama's liberal views on minority rights and tolerance turned out to be much more popular among Americans as a whole than the opposing Republican positions on those same issues." A: Rubens Barbosa, former ambassador of Brazil to the United States: "In his second term, Obama will be more interested in looking for his legacy in history. The U.S. government will tend to be more proactive and try to increase its influence in the current hot spots: Pakistan, Syria, Iran and elsewhere in the Middle East. The relationship with China will continue to be high on the foreign policy agenda. Having in mind this scenario, **Latin America will continue to be off the radar of U.S. decision makers: the region will remain a low priority for Washington.** Despite this fact, the reaction of the Latin American leaders and citizens to Obama's re-election has been very positive. The role of Latinos in the election was important and in some places crucial. **In terms of policy changes on** issues such as immigration, drugs and **Cuba, Obama will continue to face strong opposition from the Republican Party** but I would not be surprised if new ideas could be advanced by the administration especially in relation to immigration and Cuba." A: Riordan Roett, director of the Latin American Studies program at the Johns Hopkins School of Advanced International Studies: "While the president's re-election is welcome in general terms**, it is difficult to imagine Latin America will receive greater attention** in the next four years. **Congress remains deeply divided**. The administration's foreign policy priorities will continue to focus on China, the Middle East and the ongoing fiscal challenges. Given the strong turnout by the Latino community, **one area that should receive priority is** continued **immigration reform**, but it is the third rail for the Republican majority in the House. In general, the democratic governments of the region will welcome the president's election without great expectation for major policy initiatives. The populist regimes will continue to denounce any democratically elected administration. The **deadlock over Cuba will continue unless there is a dramatic leadership shift** to a new generation. The **major policy initiative** that would be welcome in the region is on drug policy, but that issue **will remain taboo**."

**Costs Capital, outweighs turns and ensures spillover derailing Obamas top UNRELATED agenda priorities – several reasons**

**LeoGrande, 12**

William M. LeoGrande School of Public Affairs American University, Professor of Government and a specialist in Latin American politics and U.S. foreign policy toward Latin America, Professor LeoGrande has been a frequent adviser to government and private sector agencies, 12/18/12, http://www.american.edu/clals/upload/LeoGrande-Fresh-Start.pdf

**The Republicans'** sweeping **victory in the** 2010 mid-term **elections put the House back under their control and ended any hope of a progressive initiative on Cuba coming from Congress**. Ileana Ros-Lehtinen became chair of **the House Foreign Affairs Committee**, a post from which she **could hold Obama's foreign policy hostage over the issue of Cuba.** Mario Diaz Balart introduced legislation to roll back Obama's 2009 relaxation of restrictions on CubanAmerican travel and remittances, but it was dropped when President Obama threatened a veto.39 Tea Party darling Marco **Rubio** was elected to the Senate from Florida in 2010, and **joined the Foreign Relations Committee**. In 2011, **he put a hold on Obama's nominee** for Assistant Secretary of State for Western Hemisphere Affairs **until the administration promised to tighten regulations on** academic and educational **travel that Obama had authorized** in January. 40 Although the Democrats made significant gains in both the House and **Senate in 2012, Republicans retained control of the House and enough votes in the Senate to block any measure by filibuster.** Nevertheless, the election produced some important personnel changes that could have a bearing on Cuba policy. In the House, Ros-Lehtinen will step down as chair of the **Foreign Affairs Committee** because of Republican rules on term limits for chairs. Her likely replacement is Ed Royce (R-Calif), who criticized Obama in 2009 for turning off the electronic billboard on the U.S. Interests Section in Havana, but who has not been especially engaged in the debate over Cuba policy otherwise. Howard Berman (D-Calif), who had been the **ranking Democrat** on the Committee and a vocal critic of U.S. democracy promotion programs in Cuba, lost his bid for reelection. His successor as ranking member, Eliot Engel (D-NY), was ranking member of the Western Hemisphere Subcommittee in the previous Congress. In recent years, **Engel has voted consistently against** Democrats' **attempts to ease restrictions on travel and food sales to Cuba, and the U.S.-Cuba Democracy PAC has been among his top 20 campaign contributors** since the 2008 election cycle. **In short**, although the exact composition of **the Foreign Affairs Committee** is in flux, **it seems clear that conservative Republicans and Democrats together will retain a sufficient majority to block any progressive initiatives on Cuba emerging from the committee**. David Rivera (R-Fl.), one of the most extreme anti-Cuban voices in the House, was defeated by Joe Garcia, a moderate Cuban-American who defended Obama's Cuba policy. Jeff Flake (R-Ariz), a perennial voice for opening up to Cuba, traded his House seat for one in the Senate. In the Senate, Tea Party favorite Ted Cruz, won a seat from Texas. Although his father came from Cuba in 1957, Cruz did not identify himself as Latino or show any special interest in Latino issues or in Cuba. **Democratic gains in the Senate did not produce a filibuster-proof majority, and the determined opposition of Rubio and Menendez will probably be sufficient to prevent any progressive legislation on Cuba from making it through the Senate. Most likely, the next four years will reprise the last two, with conservatives fighting a legislative guerrilla war against Obama's Cuba policy by holding up nominations and threatening to filibuster must-pass legislation in an effort to brow-beat the administration into policy concessions. If there are to be any new initiatives on Cuba, they will have to come from the White House**. Despite HelmsBurton's constraints, the president retains substantial executive authority to selectively loosen the embargo for both commerce and travel.42

### 2NC Link Module

#### Boehner’s Loss of Support Means a Yes Vote is Likely – Cant Rally Support For Piecemeal

By Ron Fournier 10/16 October 16, 2013 Obama Wins! Big Whoop. Can He Lead? http://www.nationaljournal.com/white-house/obama-wins-big-whoop-can-he-lead-20131016?mrefid=LeadStoryTiles\_medium

Count on Obama's liberal chorus to take a victory lap, rubbing Republicans' noses in defeat. Their next step will be to discourage the president from engaging with the GOP on a big budget deal. In addition to the excuses above, they will make the patently false claim that red ink is no longer a national problem. They will repeat an Obama talking point -- "our deficits are falling at the fastest rate in 60 years" -- that is both technically wrong and selectively misleading. The deficit is indeed shrinking, comparative pace notwithstanding, but the nation's incredible debt load is not. In fact, the Congressional Budget Office's 2013 Long-Term Budget Outlook shows that the $16 trillion federal debt -- already high by historical standards -- will continue to grow even under some optimistic assumptions about future spending restraint. Already, the debt is 73 percent of the economy's annual output, and CBO projects it expanding to an astounding, practically unfathomable 100 percent of GDP by 2038. The longer we wait, the harder it gets.¶ Listen and watch the president. If he declares victory over the GOP or plays down the deficit problem, he is not serious about leading the country out of the fiscal and political wilderness.¶ There is already a lack of seriousness in the air. On Tuesday, the president declared immigration reform to be his top priority after the fiscal crisis. It's a curious choice, given the magnitude of the debt and the durability of the size-of-government debate. Does Obama really think immigration is a more serious problem? Or is it merely the best political issue for Democrats?¶ It is tempting to assume that Obama has abandoned any hope of governing and is obsessed instead on Democrats seizing control of the House next year, an unlikely occurrence given the GOP's structural advantages. "We can't govern," a senior White House aide told me, "without the House." Obama's immigration message is modeled suspiciously on his fiscal-crisis talking points. Blaming House Speaker John Boehner for preventing immigration from coming up for a vote in the past, Obama said Tuesday, "The only thing right now that's holding it back is, again, Speaker Boehner not willing to call the bill on the floor of the House of Representatives."¶ It looks like Obama plans to walk Republicans into another box canyon, this one of his making.

#### And the GOP is Looking for a New Platform to Distance Themselves From the Shutdown Failure – Means the Plan Will Unite Them Behind Boehner

Ryan Grim, HuffPo, 9/19/13, Ted Cruz, Liberal Hero, May Have Just Bailed Washington Out Of The Shutdown Crisis , www.huffingtonpost.com/2013/09/19/ted-cruz-shutdown-house-republicans\_n\_3954461.html?utm\_hp\_ref=politics

In one moment, with one statement, Sen. Ted Cruz (R-Texas) managed Wednesday to accomplish what House GOP leaders, Republican senators and the Wall Street Journal editorial page had failed to do for months: Persuade rank-and-file House Republicans that shutting down the government in an attempt to defund Obamacare was simply impossible.¶ On Wednesday, after House leaders said they'd go forward with the defund strategy Cruz had been pitching with ads on Fox News, his response boiled down to 'Thanks, you're on your own.'¶ "Harry Reid will no doubt try to strip the defund language from the continuing resolution, and right now he likely has the votes to do so," Cruz said in a statement. "At that point, House Republicans must stand firm, hold their ground, and continue to listen to the American people."¶ On the surface, House Republicans were seething. Members openly accused Cruz and his allies, Sens. Mike Lee (R-Utah) and Marco Rubio (R-Fla.), of waving the white flag before the fight had even begun. One House GOP aide even called Cruz a "joke, plain and simple."¶ But by admitting that he had no ability in the Senate to back up the House effort to defund Obamacare, and saying so on the same day that House Republicans had announced they would support the Cruz-inspired strategy, Cruz has inadvertently done more than any other lawmaker to avert a government shutdown.¶ "Cruz officially jumped the shark this week," said one GOP operative allied with House leadership, who, like others, requested anonymity to speak critically about fellow Republicans. "He's doing for the House Leaders what they couldn't do for themselves. House rank-and-file members are uniting with Boehner, Cantor over Ted Cruz's idiotic position."

### Rubio

#### Rubio determines immigration passage

Politico 5-6 [“Gang of Eight plots path to Senate supermajority”, May 6th, 2013, <http://www.politico.com/story/2013/05/gang-of-eight-immigration-supermajority-90949_Page2.html>, Chetan]

The second tier of senators, who are less likely to back the bill but could be swayed, includes John Barrasso of Wyoming, John Thune of South Dakota, Mike Crapo and Jim Risch of Idaho and Johnny Isakson of Georgia. This is a group that could vote yes if Rubio is still on board and other conservatives are falling into line. “The key is Rubio,” said Aguilar, executive director of the Latino Partnership for Conservative Principles. “Without Rubio, this bill would not get anywhere with Republicans. He gives them the cover.”

#### Rubio favors a hardline stance on Cuba – he hates any engagement

The Hill 12 [“Cuban-American senators hit brick wall with Obama administration on Cuba policy”, June 7th, 2012, <http://thehill.com/blogs/global-affairs/americas/231487-cuban-american-senators-hit-a-brick-wall-with-obama-administration-on-cuba-policy>, Chetan]

The Senate's two Cuban-Americans spent Thursday morning talking past the Obama administration's top official for the Americas on the issue of U.S. policy toward Cuba. Sens. Robert Menendez (D-N.J.) and Marco Rubio (R-Fla.) were the only two senators who showed up for the Senate Foreign Relations Committee subpanel hearing on freedom in Cuba. They called the administration's relaxing of travel restrictions to Cuba “naive” and bashed the State Department's decision to grant visas to high-profile Cuban officials, including President Raul Castro's daughter Mariela. “The Cuban people are no less deserving of America's support than the millions who were imprisoned and forgotten in Soviet gulags,” Menendez said. “I am compelled to ask again today — as I have before — why is there such an obvious double standard when it comes to Cuba?” Rubio said Castro government officials are master manipulators of U.S. policy and public opinion. The two senators favor a hard-line stance against Cuba until regime change takes place. Critics of that policy argue that more than 50 years of U.S. sanctions have only enabled Castro brothers Fidel and Raul to consolidate their power while impoverishing the Cuban people.

## Winners win

#### PC’s real, observable, and quantifiable---scholarly work proves---and you should reject quibbles like Hirsh

Kimberly L. Casey 8, Visiting Assistant Professor of Political Science at William Jewel College, 2008, “Defining Political Capital: A Reconsideration of Bourdieu’s Interconvertibility Theory,” http://lilt.ilstu.edu/critique/spring%202008/casey.pdf

Abstract: This article examines the concept “political capital” (PC) and its context in American politics. Political capital is ill-defined, little understood, yet an important concept for understanding political exchange and relationships in the political arena. I establish a definition based upon Pierre Bourdieu’s interconvertibility theory, which indicates that capital types, such as economic, social, and symbolic forms, interact and can be exchanged for one another. Since the material and non-material components of capital variations are transposable, it can be argued that no capital form is essentially “pure”—every type of capital contains elements of other varieties. Political capital, therefore, is an amalgamation of capital types combined in various ways for specific political markets. It is market demand that shapes capital formation. Capital elements from other capital types inherent in the candidacy market are identified as an example. An index for measuring this variant of political capital is created, demonstrating its conceptual viability. ¶ Introduction: After the 2004 U.S. presidential election, George W. Bush publicized his intent to utilize “political capital” for future projects garnered as a result of his victory. But what exactly is political capital? However much the term is bandied about by politicians or the press, political capital has no established definition in political science literature. Although it remains ill-defined and unmeasured, it is an important concept for understanding political exchange and relationships in the political arena despite the reservations some political scientists have expressed about its applicability because of its complex material and nonmaterial associations. An analysis of sociologist Pierre Bourdieu’s interconvertibility theory allows for conceptualization of material and non-material of interactions among capital forms making it possible to define political capital and design an index to measure it based upon previous capital literature.¶ To develop an empirical basis for political capital, this article first examines the associations it connotes in the popular press today. In contrast, a definition of political capital based upon capitalization literature and Bourdieu’s interconvertibility theory is presented. Then, a theory of political capital functions and markets are suggested. Theorizing leads to proposals for objective means of identification and measurement. To illustrate the market association between capital and politics, an index associated with the resources associated with the candidacy market is offered. The paper concludes with directions that studying the concept of political capital may take towards theory-building and framework creation.¶ Defining Political Capital ¶ It is erroneous to refer a “body” of PC literature when seeking a definition. Most writers and concerned actors who invoke the term political capital assume that its meaning is understood. It is inferred to be an entity which political actors possess, build up and spend. 1 However, a definition of “political capital” is typically never stated—the reader or observer is left to determine their own definition based upon the politician’s or journalist’s usage of the term (Suellentrop 2004; Kennicott 2004; “A Year of Setbacks” 2005; and Froomkin 2004). The subjectivity is not reflective of what political capital conceptually means in and to the political arena. Without a sound definition that accurately portrays the elements of political capital as it works within a political marketplaces, such as the electoral arena, and among office holders (executive, legislative, and judicial), bureaucracy, and in society in general, the concept is meaningless. ¶ Defining and utilizing PC as a viable political variable can evolve from the proliferation of capital theories in various fields of study. Political capital can and should be associated with a wide variety of previous “capital” interpretations. The key to explicating political capital is within capital literatures and how they address materialism, non-materialism, and combining the two elements.2¶ The theory of capital is traditionally associated with economics. There is no clear consensus in defining capital as an ideological function applicable beyond material exchange as expounded in economic capital theory, however. Yet nonmaterial forms of capital are well established in scholarly literature. Most of the “capital type” definitions hover around the meaning and terminology of economic capital. Certain theorists believe that all capital forms, regardless of their composition or purpose, connect in some way with economic capital. 3 Pierre Bourdieu’s work is invaluable in understanding capital as conceptually distinguishable from its individual aberrations as a material phenomenon. Bourdieu extends the ideas and metaphor of economic interest (material or physical pursuits) to include non-economic goods and services (symbolic or nonmaterial pursuits). Within this conceptualization, Bourdieu constructs a science of practices that “analyzed all human functions as ‘oriented towards the maximization of material or symbolic profit.’” 4 His theory of capital has limitations, however. He relies on ideal types and lacks the empirical research needed to support much theory. It is impossible to refer to capital-types and not acknowledge Bourdieu’s contributions to multiple capital species (Bourdieu1986; Kane 2001; Putnam 2001; Becker 1993); Fitz-Enz 2000; Davenport 1999; Marr 2005).

#### Hirsh agrees with the thesis of the politics DA even if he disagrees with the term “political capital”

Michael Hirsh, National Journal, 2/7/13, There’s No Such Thing as Political Capital, www.nationaljournal.com/magazine/there-s-no-such-thing-as-political-capital-20130207

Presidents are limited in what they can do by time and attention span, of course, just as much as they are by electoral balances in the House and Senate. But this, too, has nothing to do with political capital. Another well-worn meme of recent years was that Obama used up too much political capital passing the health care law in his first term. But the real problem was that the plan was unpopular, the economy was bad, and the president didn’t realize that the national mood (yes, again, the national mood) was at a tipping point against big-government intervention, with the tea-party revolt about to burst on the scene. For Americans in 2009 and 2010—haunted by too many rounds of layoffs, appalled by the Wall Street bailout, aghast at the amount of federal spending that never seemed to find its way into their pockets—government-imposed health care coverage was simply an intervention too far. So was the idea of another economic stimulus. Cue the tea party and what ensued: two titanic fights over the debt ceiling. Obama, like Bush, had settled on pushing an issue that was out of sync with the country’s mood.¶ Unlike Bush, Obama did ultimately get his idea passed. But the bigger political problem with health care reform was that it distracted the government’s attention from other issues that people cared about more urgently, such as the need to jump-start the economy and financial reform. Various congressional staffers told me at the time that their bosses didn’t really have the time to understand how the Wall Street lobby was riddling the Dodd-Frank financial-reform legislation with loopholes. Health care was sucking all the oxygen out of the room, the aides said.

## XO

#### Congress key to visas- set quota levels

**Endelman 9** (Gary, Ph.D. in History – University of Delaware and JD – University of Houston, and Cyrus D. Mehta, JD – Columbia Law School and Managing Member – Mehta & Associates, “The Path Less Taken: Is There an Alternative to Waiting for Comprehensive Immigration Reform?”, 2-25, http://www.cyrusmehta.com/Print\_Prev .aspx?SubIdx=ocyrus200922512947

There are those who argue that only Congress can make immigration policy in this fundamental way and this reservation is both serious and worthy of deep respect. Yet, we have a dysfunctional Congress that is or appears to be incapable or unwilling to reach consensus on immigration. Do we as a society simply throw up our hands and do nothing, allowing a bad situation to become worse or do we use this challenge as an opportunity to create something better through temporary and targeted executive action that Congress can either overturn or accept at a later date? There are several examples of administrative action to create new immigration policy in the face of Congressional inaction in recent years. In the STEM OPT regulation, the USCIS openly admitted that granting an additional 17 months of employment authorization was a regulatory response to an inadequate H1B quota. When they limited the validity of a labor certification of 180 days, the US Department of Labor did so on their own without the fig leaf of legislative authorization.[17](http://www.cyrusmehta.com/Print_Prev.aspx?SubIdx=ocyrus200922512947" \l "_ftn20" \o ") Remember when the AAO handed down the decision in New York State Department of Transportation,[18](http://www.cyrusmehta.com/Print_Prev.aspx?SubIdx=ocyrus200922512947" \l "_ftn21" \o ") thus effectively repealing the national interest waiver statute for several years until the relaxation came?[19](http://www.cyrusmehta.com/Print_Prev.aspx?SubIdx=ocyrus200922512947" \l "_ftn22" \o ") Finally, under the Cuban Adjustment Act of 1996, even if the Cuban national entered without inspection, the former INS Commissioner Doris Meissner clarified that the Service could use its authority under the humanitarian and significant public benefit criteria in Section 212(d)(5) to parole Cubans who had entered without inspection under the fiction that the individual would surrender to the government, which in turn would release or parole him or her, and thus render them eligible for adjustment of status under the CAA.[20](http://www.cyrusmehta.com/Print_Prev.aspx?SubIdx=ocyrus200922512947" \l "_ftn23" \o ") Did Congress tell them they could do that? All of these actions, and many others not singled out, had profound effect but depended solely upon the imaginative exercise of executive authority yet consonant with a proper respect for separation of powers. So we can do so here. Those who do not think so ignore at their own peril and ours the fundamental distinction between making policy, which only Congress can do, and implementing tactical adjustments, which the Executive is uniquely suited to do. This is why only Congress can create a legal status while the Attorney General can authorize a period of stay. This is why only Congress can enlarge the EB quota but the Executive can allow adjustment applications without a quota expansion so long as final approval is not forthcoming. This is why only Congress sets visa limits while the Executive can grant parole. This is why only Congress sets work visa law but the Executive can issue EADs. To suggest that Congress must act in both a long and short term context is to ignore the historic and legitimate differences between the two branches of government. If Congress wants to overturn such executive action, it can do so. Likewise, if it supports the President, it can stay its hand. Either way, Congress is expressing its will, whether through positive action in the form of legislation or negative action in the form of silent acquiescence. Both action and its absence are authentic manifestations of congressional intent. In reality, we all know that there are 40 votes in the Senate to uphold such regulatory initiative. Congress will be more than content to allow the President to take the lead and solve what it has manifestly been powerless to solve- how to regulate both past and future migration flows; how to solve the growing unskilled worker backlog; how to ameliorate the gratuitous cruelty of the 3/10 year bars; how to reduce the size of the undocumented population who may already working here and contributing to the exchequer and how to satisfy the hungry manpower needs of employers once the dark cloud of recession lifts without creating a single new immigrant visa.

## 2nc – airpower module

**Visas must fill the gap in aerospace industry**

**Redorbit 8** (Science, Tech, and Space News Agency, “Aerospace Industry Faces Coming Worker Shortage”, 3-4, http://www.redorbit.com/news/space/1281235/aerospace\_industry\_faces\_coming\_worker\_shortage/)

**As the** large **baby boom generation retires over the next decade**, the **aerospace** and defense industries **will be** **particularly hard hit, and** industry officials worry **there are not enough qualified** young **Americans to take the place of** these **retiring** Cold War **scientists and engineers**. As of last year, nearly 60 percent of U.S. aerospace workers were 45 or older, according to an Associated Press report. **The problem could carry national security implications**, and significantly reduce the number of commercial product developments that begin with military technology.    Although there are two-and-a-half times the number of engineering, math and computer science graduates as there were 40 years ago, there is also more competition for these graduates. Defense companies must now compete with leading technology companies such as Google, Microsoft and Verizon. "It's about choices," said Rich Hartnett, director of global staffing at Boeing Co., in an Associated Press interview. "There are so many more options today with a proliferation in the kinds of degrees and career paths that people can follow." But despite the industry’s efforts to emphasize the appeal and growing importance of careers involved in national defense, Aerospace Industries Association Chief Executive Marion Blakey is concerned **the U.S. could be facing a "wake-up call,"** **similar to the** 1957 Soviet **launch of Sputnik**, the world's first satellite.  Blakey said China's recent success in shooting down one of its own satellites last year, combined with the upcoming retirement of the U.S. space shuttle fleet, demonstrate that **the U.S. can no longer afford to take its technological and military superiority for granted**.  Blakey formerly served as head of the Federal Aviation Administration. In addition to fierce competition for a limited number of technical experts from all corners of corporate America, **contractors working on classified government projects are** further **held back due to restrictions on hiring foreigners** or off-shoring work to other countries. "**The ability to attract and retain individuals with technical skills is a lifeblood issue for us**," said Ian Ziskin, corporate vice president and chief human resources and administrative officer for Los Angeles-based Northrop Grumman Corp. Ziskin told AP that he estimates roughly half of Northrop Grumman's 122,000 workers will be eligible to retire in the next five to 10 years.  Similar trends exist at **Lockheed Martin** Corp., of Bethesda, Md., which **could lose up to half of its** 140,000 **workers to retirement over the next decade**.

**Aerospace key to airpower**

**Thompson 9** (David, President – American Institute of Aeronautics and Astronautics, “The Aerospace Workforce”, Federal News Service, 12-10, Lexis)

Aerospace systems are of considerable importance to U.S. national security, economic prosperity, technological vitality, and **global leadership**. Aeronautical and space systems protect our citizens, armed forces, and allies abroad. They connect the farthest corners of the world with safe and efficient **air transportation** and **satellite communications**, and they monitor the Earth, explore the solar system, and study the wider universe. The U.S. aerospace sector also contributes in major ways to America's economic output and high- technology employment. Aerospace research and development and manufacturing companies generated approximately $240 billion in sales in 2008, or nearly 1.75 percent of our country's gross national product. They currently employ about 650,000 people throughout our country. U.S. government agencies and departments engaged in aerospace research and operations add another 125,000 employees to the sector's workforce, bringing the total to over 775,000 people. Included in this number are more than 200,000 engineers and scientists -- one of the largest concentrations of technical brainpower on Earth. However, the U.S. aerospace workforce is now facing the most serious demographic challenge in his 100-year history. Simply put, today, many more older, experienced professionals are retiring from or otherwise leaving our industrial and governmental aerospace workforce than early career professionals are entering it. This **imbalance** is expected to become even more severe over the next five years as the final members of the Apollo-era generation of engineers and scientists complete 40- or 45-year careers and transition to well-deserved retirements. In fact, around 50 percent of the current aerospace workforce will be eligible for retirement within just the next five years. Meanwhile, the supply of younger aerospace engineers and scientists entering the industry is **woefully insufficient** to replace the **mounting wave** of retirements and other departures that we see in the near future. In part, this is the result of broader technical career trends as engineering and science graduates from our country's universities continue a multi-decade decline, even as the demand for their knowledge and skills in aerospace and other industries keeps increasing. Today, only about 15 percent of U.S. students earn their first college degree in engineering or science, well behind the 40 or 50 percent levels seen in many European and Asian countries. Due to the dual-use nature of aerospace technology and the **limited supply** of visas available to highly-qualified non-U.S. citizens, our industry's ability to hire the best and brightest graduates from overseas is also **severely constrained**. As a result, unless effective action is taken to reverse current trends, the U.S. aerospace sector is expected to experience a **dramatic decrease** in its technical workforce over the next decade. Your second question concerns the implications of a cutback in human spaceflight programs. AIAA's view on this is as follows. While U.S. human spaceflight programs directly employ somewhat less than 10 percent of our country's aerospace workers, its influence on attracting and motivating tomorrow's aerospace professionals is much greater than its immediate employment contribution. For nearly 50 years the excitement and challenge of human spaceflight have been tremendously important factors in the decisions of generations of young people to prepare for and to pursue careers in the aerospace sector. This remains true today, as indicated by hundreds of testimonies AIAA members have recorded over the past two years, a few of which I'll show in brief video interviews at the end of my statement. Further evidence of the catalytic role of human space missions is found in a recent study conducted earlier this year by MIT which found that 40 percent of current aerospace engineering undergraduates cited human space programs as the main reason they chose this field of study. Therefore, I think it can be predicted with high confidence that a major cutback in U.S. human space programs would be substantially detrimental to the future of the aerospace workforce. Such a cutback would put even greater stress on an already weakened strategic sector of our domestic high-technology workforce. Your final question centers on other issues that should be considered as decisions are made on the funding and direction for NASA, particularly in the human spaceflight area. In conclusion, AIAA offers the following suggestions in this regard. Beyond the previously noted critical influence on the future supply of aerospace professionals, administration and congressional leaders should also consider the collateral damage to the space industrial base if human space programs were substantially curtailed. Due to low annual production rates and highly-specialized product requirements, the domestic supply chain for space systems is relatively **fragile**. Many second- and third-tier suppliers in particular operate at **marginal** volumes today, so **even a small reduction** in their business could force some **critical suppliers** to exit this sector. Human space programs represent around 20 percent of the $47 billion in total U.S. space and missile systems sales from 2008. Accordingly, a major cutback in human space spending could have **large and highly adverse ripple effects** throughout commercial, defense, and scientific space programs as well, potentially triggering a series of disruptive changes in the common industrial supply base that our **entire** space sector relies on.

**That sparks WMD conflict --- particularly in the Mideast**

**Tellis 98** (Ashley, Senior Political Scientist – RAND, “Sources of Conflict in the 21st Century”, http://www.rand. org/publications/MR/MR897/MR897.chap3.pdf)

This subsection attempts to synthesize some of the key operational implications distilled from the analyses relating to the rise of Asia and the potential for conflict in each of its constituent regions. The first key implication derived from the analysis of trends in Asia suggests that American air and space power will continue to remain critical for conventional and unconventional deterrence in Asia. This argument is justified by the fact that several subregions of the continent still harbor the potential for full-scale conventional war. This potential **is m**ost conspicuous on the Korean peninsula **and**, to a lesser degree, **in South** Asia, the Persian Gulf, and the South China Sea. In some of these areas, such as Korea and the Persian Gulf, the United States has clear treaty obligations and, therefore, has preplanned the use of air power should contingencies arise. U.S. Air Force assets could also be called upon for operations in some of these other areas. In almost all these cases, U.S. air power would be at the forefront of an American politico-military response because (a) of the vast distances on the Asian continent; (b) the diverse range of operational platforms available to the U.S. Air Force, a capability unmatched by any other country or service; (c) the possible unavailability of naval assets in close proximity, particularly in the context of surprise contingencies; and (d) the heavy payload that can be carried by U.S. Air Force platforms. These platforms can exploit speed, reach, and high operating tempos to sustain continual operations until the political objectives are secured. The entire range of warfighting capability—fighters, bombers, electronic warfare (EW), suppression of enemy air defense (SEAD), combat support platforms such as AWACS and J-STARS, and tankers—are relevant in the Asia-Pacific region, because many of the **regional contingencies will involve armed operations** against large, fairly modern, conventional forces, most of which are built around large land armies, as is the case in Korea, China-Taiwan, India-Pakistan, and the Persian Gulf. In addition to conventional combat, the demands of unconventional deterrence will increasingly confront the U.S. Air Force in Asia. The Korean peninsula, China, and the Indian subcontinent are already arenas of WMD proliferation. While emergent nuclear capabilities continue to receive the most public attention, chemical and biological warfare threats will progressively become future problems. The delivery systems in the region are increasing in range and diversity. China already targets the continental United States with ballistic missiles. North Korea can threaten northeast Asia with existing Scud-class theater ballistic missiles. India will acquire the capability to produce ICBM-class delivery vehicles, and both China and India will acquire long-range cruise missiles during the time frames examined in this report.

### 2nc – tech innovation module

#### Key to tech leadership

Bush and McLarty 09 (Jeb, Former Governor – Florida and Thomas F. III, President – McLarty Associates, et al., “U.S. Immigration Policy”, CFR Independent Task Force Report, 63, July, http://www.cfr.org/publication/20030/ us\_immigration\_policy.html)

Immigrants are especially important in science, technology, and engineering, which are so **critical to U.S. economic competitiveness**. Foreign students and immigrants make up more than half the scientific researchers in the United States; in 2006, they received 40 percent of science and engineering PhDs and 65 percent of computer science doctorates. Among postdoctoral students doing research at the highest levels, 60 percent are foreign born. This is not a recent development; even in the 1980s, some 40 percent of engineering and computer science students in the United States came from abroad. On one significant measure of innovation, the number of patents issued each year, the United States far surpasses any country in the world; immigrants produce nearly 25 percent of those patents, or roughly twice their share of the U.S. population.30 Other studies have shown that an increase in the number of foreign graduate students in the United States results in significant increases in the number of patent applications.31 Overall, the share of all patents awarded to U.S. scientists of Chinese and Indian origin grew from just 4 percent in the late 1970s to 14 percent in the early part of this decade; at Intel, the world’s largest semiconductor maker, 40 percent of the patents are for work done by Chinese or Indian immigrants. Just as important, this increased innovation by recent immigrants actually coincided with an increase in the number of patents awarded to native-born scientists as well, indicating that American-born and immigrant scientists are **feeding off each other** to enhance the country’s **overall innovative capacity**.32 One in four engineering and technology companies established in the United States between 1995 and 2005 had an immigrant founder.33 The four countries that create the greatest number of new companies per capita—the United States, Canada, Australia, and Israel—all have large immigrant populations.34 It is not an overstatement to say that **the** **U**nited **S**tates **would not enjoy** anything close to its current **technological** and entrepreneurial **leadership if it** had **maintained** a **closed immigration policy**. Amy Chua, the Yale historian and legal scholar, argues in her recent book, *Day of Empire: How Hyperpowers Rise to Global Dominance—and Why They Fall*, that the successful great powers in history have been those able to attract and make use of the most talented people the world has to offer. “At any given historical moment,” she writes, “the most valuable human capital the world has to offer—whether in the form of intelligence, physical strength, skill, knowledge, creativity, networks, commercial innovation, or technological invention—is never to be found in any one locale or with any one ethnic or religious group. **To pull away from** its **rivals on a global scale**, a society must pull into itself and motivate the world’s best and brightest, regardless of ethnicity, religion or background.” America, she argues, has been more successful than any other country in the world in recent history in attracting and mobilizing such talents. The Task Force believes that maintaining robust levels of immigration, allowing for fluctuations based on the state of the economy, is firmly in America’s national interests. In particular, **continuing to attract highly skilled immigrants is critical to the competitiveness of the U.S. economy**, **and to America’s ability to remain the world’s leader in innovation**. The United States must open its doors more widely to such people.

**Solves extinction**

**Kurzweil 08**—BS in Computer Science and Literature in 1970 from MIT, header of tons of entrepreneurial projects (Ray, 13 April 2008, Making the World A Billion Times Better, <http://www.washingtonpost.com/wp-dyn/content/article/2008/04/11/AR2008041103326.html>) ellipses in original

This exponential progress in the power of information technology goes back more than a century to the data-processing equipment used in the 1890 census, the first U.S. census to be automated. It has been a smooth -- and highly predictable -- phenomenon despite all the vagaries of history through that period, including two world wars, the Cold War and the Great Depression. I say highly predictable because, thanks to its exponential power, only technology possesses the scale to address the major challenges -- such as energy and the environment, disease and poverty -- confronting society. That, at least, is the major conclusion of a panel, organized by the National Science Foundation and the National Academy of Engineering, on which I recently participated. Take energy. Today, 70 percent of it comes from fossil fuels, a 19th-century technology. But if we could capture just one ten-thousandth of the sunlight that falls on Earth, we could meet 100 percent of the world's energy needs using this renewable and environmentally friendly source. We can't do that now because solar panels rely on old technology, making them expensive, inefficient, heavy and hard to install. But a new generation of panels based on nanotechnology (which manipulates matter at the level of molecules) is starting to overcome these obstacles. The tipping point at which energy from solar panels will actually be less expensive than fossil fuels is only a few years away. The power we are generating from solar is doubling every two years; at that rate, it will be able to meet all our energy needs within 20 years. Nanotechnology itself is an information technology and therefore subject to what I call the "law of accelerating returns," a continual doubling of capability about every year. Venture capital groups and high-tech companies are investing billions of dollars in these new renewable energy technologies. I'm confident that the day is close at hand when we will be able to obtain energy from sunlight using nano-engineered solar panels and store it for use on cloudy days in nano-engineered fuel cells for less than it costs to use environmentally damaging fossil fuels. It's important to understand that exponentials seem slow at first. In the mid-1990s, halfway through the Human Genome Project to identify all the genes in human DNA, researchers had succeeded in collecting only 1 percent of the human genome. But the amount of genetic data was doubling every year, and that is actually right on schedule for an exponential progression. The project was slated to take 15 years, and if you double 1 percent seven more times you surpass 100 percent. In fact, the project was finished two years early. This helps explain why people underestimate what is technologically feasible over long periods of time -- they think linearly while the actual course of progress is exponential. We see the same progression with other biological technologies as well. Until just recently, medicine -- like energy -- was not an information technology. This is now changing as scientists begin to understand how biology works as a set of information processes. The approximately 23,000 genes in our cells are basically software programs, and we are making exponential gains in modeling and simulating the information processes that cracking the genome code has unlocked. We also have new tools, likewise just a few years old, that allow us to actually reprogram our biology in the same way that we reprogram our computers. For example, when the fat insulin receptor gene was turned off in mice, they were able to eat ravenously yet remain slim and obtain the health benefits of being slim. They didn't get heart disease or diabetes and lived 20 percent longer. There are now more than a thousand drugs in the pipeline to turn off the genes that promote obesity, heart disease, cancer and other diseases. We can also turn enzymes off and on, and add genes to the body. I'm an adviser to a company that removes lung cells, adds a new gene, reproduces the gene-enhanced cell a million-fold and then injects it back into the body where it returns to the lungs. This has cured a fatal disease, pulmonary hypertension, in animals and is now undergoing human trials. The important point is this: Now that we can model, simulate and reprogram biology just like we can a computer, it will be subject to the law of accelerating returns, a doubling of capability in less than a year. These technologies will be more than a thousand times more capable in a decade, more than a million times more capable in two decades. We are now adding three months every year to human life expectancy, but given the exponential growth of our ability to reprogram biology, this will soon go into high gear. According to my models, 15 years from now we'll be adding more than a year each year to our remaining life expectancy. This is not a guarantee of living forever, but it does mean that the sands of time will start pouring in rather than only pouring out. What's more, this exponential progression of information technology will affect our prosperity as well. The World Bank has reported, for example, that poverty in Asia has been cut in half over the past decade due to information technologies and that at current rates it will be cut by another 90 percent over the next decade. That phenomenon will spread around the globe.