# 1NC

#### Text: The President of the United States should issue an executive order to <modified plan>

#### XO has supreme law of the land.

Nelson 2009

[Anne E. J.D. Candidate, University of Arizona James E. Rogers College of Law, 2010, “Muddled to Medellin: A Legal History of Sole Executive Agreements”, <http://www.arizonalawreview.org/pdf/51-4/51arizlrev1035.pdf>, 1036-1027, accessed 9/21, CC]

Can the President of the United States unilaterally make federal law? For most students of American Government, the knee-jerk reaction to this question is an emphatic "no," as they are taught that it is the legislature's role to create laws and the President's role to see that the laws are faithfully executed. n1 Indeed, the United States' political identity depends on a delicate separation of powers that prevents the President from accumulating too much power. n2 Over time, however, the delicate separation of powers balance has shifted, and this emphatic "no" has [\*1036] transformed into a more muddled "maybe," with the President's use of sole executive agreements.¶ Sole executive agreements present a unique challenge to traditional separation of powers principles. These agreements are legal tools the President can use to unilaterally resolve foreign disputes with other countries. The Supreme Court has upheld the President's authority to enter into sole executive agreements and has broadly held that these agreements, being analogous to treaties, are fit to preempt conflicting state law. Thus, sole executive agreements are a means by which the President can sideline the legislature and unilaterally create federal law.¶ Sole executive agreements have been used since the early days of the Republic. n3 Since the turn of the twentieth century and the rise of the United States as a global power, Presidents have aggressively used sole executive agreements to resolve significant matters of foreign policy. The expansive use of sole executive agreements has attracted debate amongst scholars as to their constitutional validity, why they have been held to preempt federal law, and, most importantly, how the preemptive effect of these agreements could be limited to better harmonize with the Supremacy Clause and traditional separation of powers principles. n4¶ Until recently, the Supreme Court has not provided much guidance to this debate. In a series of decisions, n5 the Supreme Court has sanctioned the use of sole executive agreements and concluded that such agreements can be considered "the supreme Law of the Land." n6 In doing so, the Court has granted sweeping power to the President to effectively create federal law through sole executive agreements without any meaningful limitations.

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#### CIR will pass- renewed Boehner commitment

Saenz 13 (Arlette Saenz, December 4th, 2013, ABC News Digital Journalist covering politics & Washington, D.C. “On Immigration, Reid Predicts Boehner Will 'Cave In'” <http://abcnews.go.com/m/blogEntry?id=21097974&ref=http%3A%2F%2Fnews.google.com%2F> MB Accessed: 12/5/13)

Senate Majority Leader Harry Reid still sees hope for an immigration bill to pass the House, telling a local newspaper on Tuesday that he thinks House Speaker John Boehner is "going to cave in." "I think there's going to be so much pressure on the House that they'll have to pass it," Reid told the Las Vegas Sun editorial board Tuesday. "This is an issue that isn't going to go away," he said. "It's here. We have 11 million people here who are not going to be sent back to their country of origin. They can't do that. They can't do it fiscally. They can't do it physically. It's nearly impossible." The Senate passed a comprehensive immigration bill last summer, but the House of Representatives has not acted on the legislation yet. Though it won't see any substantial progress this year, Boehner has said immigration reform is "absolutely not" dead. "Is immigration reform dead? Absolutely not," Boehner said last month. "I believe that Congress needs to deal with this issue. Our committees are continuing to do their work. There are a lot of private conversations that are underway to try to figure out, how do we best move on a common-sense, step-by-step basis to address this very important issue … because it is a very important issue." Just yesterday, Boehner announced the hiring of Rebecca Tallent, director of immigration policy at the Bipartisan Policy Center, as his point person on immigration issues. The addition of Tallent, an immigration policy expert, to the staff could signal a renewed emphasis Boehner intends to place on immigration reform.

#### Congress Wont Lift the Embargo when Castro is in power

Rajo, Political analyst, 13

(Carlos, Journalist for NBC, 3/2/13, World News on NBC, “Analysis: Castro brothers’ successor may inherit a very different Cuba”, http://worldnews.nbcnews.com/\_news/2013/03/02/17133513-analysis-castro-brothers-successor-may-inherit-a-very-different-cuba?lite, 7/18/13, AL)

Raul Castro’s recent announcement that he will leave power in 2018, and his appointment of 52-year-old Miguel Diaz-Canel as first vice president and his de facto successor, are signs of the glacial pace of political change in Cuba.

Certainly, these announcements won’t satisfy those who for decades have been waiting for the Castro brothers’ exit.

Nevertheless, the move marks the beginning of the passing of the torch of power to a new generation.

For the first time in half a century, there is the real possibility that a person who did not fight in the Cuban Revolution will lead the country. Diaz-Canel was not even born when Fidel Castro overthrew Fulgencio Batista in January 1959. Since then, a Castro has been in power in Cuba: first the now-retired, 86-year-old Fidel, and from 2006 to now, his younger brother, Raul, 81.

This generational change does not mean that Cuba will move to a different political system. There is no going back to capitalism, Raul Castro told the National Assembly on Sunday. Nevertheless, the move toward a generational change must be seen in the context of other reforms implemented by the younger Castro.

Cuba's new Vice President Miguel Diaz-Canel, right, was not even born when Fidel Castro overthrew Fulgencio Batista in January 1959.

These reforms already are changing the face of Cuban socialism. Castro has introduced private farms, cooperatives in industries and activities outside agriculture, and an array of small business. Granted, these are restricted and heavily regulated, but still they are earning profits and starting to create a segment of wealthier, successful entrepreneurs. Cubans are also now allowed to sell houses and cars, and more recently, to travel abroad if they can get a visa from another country.

While little is known of Diaz-Canel’s ideology, it is likely that as the appointed Castro successor he is on board with the reforms.

The U.S. State Department reacted tepidly to Castro’s announcement and made clear that it would not be sufficient to prompt a lifting of the U.S. trade embargo. Although President Barack Obama doesn’t have election constraints in formulating a Cuba policy in his second term, the issue remains emotionally and politically charged in the U.S., and Congress is not likely to change its mind and lift the embargo while a Castro remains in power.

#### Immigration key to the economy – competitiveness, growth, jobs, innovation

Palomarez 3-6-13 [Javier, President & CEO of the United States Hispanic Chamber of Commerce., "The pent up entreprenuership that immigration reform woudl unleash" Forbes -- www.forbes.com/sites/realspin/2013/03/06/the-pent-up-entrepreneurship-that-immigration-reform-would-unleash/]

Out of countless conversations with business leaders in virtually every sector and every state, a consensus has emerged: our broken and outdated immigration system hinders our economy’s growth and puts America’s global leadership in jeopardy.¶ Innovation drives the American economy, and without good ideas and skilled workers, our country won’t be able to transform industries or to lead world markets as effectively as it has done for decades.¶ Consider some figures: Immigrant-owned firms generate an estimated $775 billion in annual revenue, $125 billion in payroll and about $100 billion in income. A study conducted by the New American Economy found that over 40 percent of Fortune 500 companies were started by immigrants or children of immigrants.¶ Leading brands, like Google, Kohls, eBay, Pfizer, and AT&T, were founded by immigrants. Researchers at the Kauffman Foundation released a study late last year showing that from 2006 to 2012, one in four engineering and technology companies started in the U.S. had at least one foreign-born founder — in Silicon Valley it was almost half of new companies.¶ There are an estimated 11 million undocumented workers currently in the U.S. Imagine what small business growth in the U.S. would look like if they were provided legal status, if they had an opportunity for citizenship. Without fear of deportation or prosecution, imagine the pent up entrepreneurship that could be unleashed. After all, these are people who are clearly entrepreneurial in spirit to have come here and risk all in the first place.¶ Immigrants are twice as likely to start businesses as native-born Americans, and statistics show that most job growth comes from small businesses.¶ While immigrants are both critically-important consumers and producers, they boost the economic well-being of native-born Americans as well.¶ Scholars at the Brookings Institution recently described the relationship of these two groups of workers as complementary. This is because lower-skilled immigrants largely take farming and other manual, low-paid jobs that native-born workers don’t usually want.¶ For example, when Alabama passed HB 56, an immigration law in 2012 aimed at forcing self-deportation, the state lost roughly $11 billion in economic productivity as crops were left to wither and jobs were lost.¶ Immigration reform would also address another important angle in the debate – the need to entice high-skilled immigrants. Higher-skilled immigrants provide talent that high-tech companies often cannot locate domestically. High-tech leaders recently organized a nationwide “virtual march for immigration reform” to pressure policymakers to remove barriers that prevent them from recruiting the workers they need.¶ Finally, and perhaps most importantly, fixing immigration makes sound fiscal sense. Economist Raul Hinojosa-Ojeda calculated in 2010 that comprehensive immigration reform would add $1.5 trillion to the country’s GDP over 10 years and add $66 billion in tax revenue – enough to fully fund the Small Business Administration and the Departments of the Treasury and Commerce for over two years.¶ As Congress continues to wring its hands and debate the issue, lawmakers must understand what both businesses and workers already know: The American economy needs comprehensive immigration reform.

#### Prevents global decline

Caploe ‘9

(David Caploe is CEO of the Singapore-incorporated American Centre for Applied Liberal Arts and Humanities in Asia., “Focus still on America to lead global recovery”, April 7, The Strait Times, lexis)=

IN THE aftermath of the G-20 summit, most observers seem to have missed perhaps the most crucial statement of the entire event, made by United States President Barack Obama at his pre-conference meeting with British Prime Minister Gordon Brown: 'The world has become accustomed to the US being a voracious consumer market, the engine that drives a lot of economic growth worldwide,' he said. 'If there is going to be renewed growth, it just can't be the US as the engine.' While superficially sensible, this view is deeply problematic. To begin with, it ignores the fact that the global economy has in fact been 'America-centred' for more than 60 years. Countries - China, Japan, Canada, Brazil, Korea, Mexico and so on - either sell to the US or they sell to countries that sell to the US. This system has generally been advantageous for all concerned. America gained certain historically unprecedented benefits, but the system also enabled participating countries - first in Western Europe and Japan, and later, many in the Third World - to achieve undreamt-of prosperity. At the same time, this deep inter-connection between the US and the rest of the world also explains how the collapse of a relatively small sector of the US economy - 'sub-prime' housing, logarithmically exponentialised by Wall Street's ingenious chicanery - has cascaded into the worst global economic crisis since the Great Depression. To put it simply, Mr Obama doesn't seem to understand that there is no other engine for the world economy - and hasn't been for the last six decades. If the US does not drive global economic growth, growth is not going to happen. Thus, US policies to deal with the current crisis are critical not just domestically, but also to the entire world. Consequently, it is a matter of global concern that the Obama administration seems to be following Japan's 'model' from the 1990s: allowing major banks to avoid declaring massive losses openly and transparently, and so perpetuating 'zombie' banks - technically alive but in reality dead. As analysts like Nobel laureates Joseph Stiglitz and Paul Krugman have pointed out, the administration's unwillingness to confront US banks is the main reason why they are continuing their increasingly inexplicable credit freeze, thus ravaging the American and global economies. Team Obama seems reluctant to acknowledge the extent to which its policies at home are failing not just there but around the world as well. Which raises the question: If the US can't or won't or doesn't want to be the global economic engine, which country will? The obvious answer is China. But that is unrealistic for three reasons. First, China's economic health is more tied to America's than practically any other country in the world. Indeed, the reason China has so many dollars to invest everywhere - whether in US Treasury bonds or in Africa - is precisely that it has structured its own economy to complement America's. The only way China can serve as the engine of the global economy is if the US starts pulling it first. Second, the US-centred system began at a time when its domestic demand far outstripped that of the rest of the world. The fundamental source of its economic power is its ability to act as the global consumer of last resort. China, however, is a poor country, with low per capita income, even though it will soon pass Japan as the world's second largest economy. There are real possibilities for growth in China's domestic demand. But given its structure as an export-oriented economy, it is doubtful if even a successful Chinese stimulus plan can pull the rest of the world along unless and until China can start selling again to the US on a massive scale. Finally, the key 'system' issue for China - or for the European Union - in thinking about becoming the engine of the world economy - is monetary: What are the implications of having your domestic currency become the global reserve currency? This is an extremely complex issue that the US has struggled with, not always successfully, from 1959 to the present. Without going into detail, it can safely be said that though having the US dollar as the world's medium of exchange has given the US some tremendous advantages, it has also created huge problems, both for America and the global economic system. The Chinese leadership is certainly familiar with this history. It will try to avoid the yuan becoming an international medium of exchange until it feels much more confident in its ability to handle the manifold currency problems that the US has grappled with for decades. Given all this, the US will remain the engine of global economic recovery for the foreseeable future, even though other countries must certainly help. This crisis began in the US - and it is going to have to be solved there too.

#### Nuclear war

**Auslin ‘9**

(Michael, Resident Scholar – American Enterprise Institute, and Desmond Lachman – Resident Fellow – American Enterprise Institute, “The Global Economy Unravels”, Forbes, 3-6, http://www.aei.org/article/100187)

What do these trends mean in the short and medium term? The Great Depression showed how social and global chaos followed hard on economic collapse. The mere fact that parliaments across the globe, from America to Japan, are unable to make responsible, economically sound recovery plans suggests that they do not know what to do and are simply hoping for the least disruption. Equally worrisome is the adoption of more statist economic programs around the globe, and the concurrent decline of trust in free-market systems. The threat of instability is a pressing concern. China, until last year the world's fastest growing economy, just reported that 20 million migrant laborers lost their jobs. Even in the flush times of recent years, China faced upward of 70,000 labor uprisings a year. A sustained downturn poses grave and possibly immediate threats to Chinese internal stability. The regime in Beijing may be faced with a choice of repressing its own people or diverting their energies outward, leading to conflict with China's neighbors. Russia, an oil state completely dependent on energy sales, has had to put down riots in its Far East as well as in downtown Moscow. Vladimir Putin's rule has been predicated on squeezing civil liberties while providing economic largesse. If that devil's bargain falls apart, then wide-scale repression inside Russia, along with a continuing threatening posture toward Russia's neighbors, is likely. Even apparently stable societies face increasing risk and the threat of internal or possibly external conflict. As Japan's exports have plummeted by nearly 50%, one-third of the country's prefectures have passed emergency economic stabilization plans. Hundreds of thousands of temporary employees hired during the first part of this decade are being laid off. Spain's unemployment rate is expected to climb to nearly 20% by the end of 2010; Spanish unions are already protesting the lack of jobs, and the specter of violence, as occurred in the 1980s, is haunting the country. Meanwhile, in Greece, workers have already taken to the streets. Europe as a whole will face dangerously increasing tensions between native citizens and immigrants, largely from poorer Muslim nations, who have increased the labor pool in the past several decades. Spain has absorbed five million immigrants since 1999, while nearly 9% of Germany's residents have foreign citizenship, including almost 2 million Turks. The xenophobic labor strikes in the U.K. do not bode well for the rest of Europe. A prolonged global downturn, let alone a collapse, would **dramatically raise tensions** inside these countries. Couple that with possible protectionist legislation in the United States, unresolved ethnic and territorial disputes in all regions of the globe and a loss of confidence that world leaders actually know what they are doing. The result may be a series of small explosions that coalesce into a big bang.

# 1NC

#### China is increasing influence in Latin America while US engagement is faltering

Mallen 13 (June 28, Patricia Mallen- Covers Latin America for the International Business Times, “Latin America Increases Relations With China: What Does That Mean For The US?”, http://www.ibtimes.com/latin-america-increases-relations-china-what-does-mean-us-1317981)

As if to confirm the declining hegemony of the United States as the ruling global superpower, China is gaining influence in its hemispheric "backyard," Secretary of State John Kerry's unintentionally insulting designation for Latin America. China has had its sights on Latin America for the past decade and is now positioning itself as a competitive trade partner in the region. The populous, rapidly developing Asian nation covets oil, soybeans and gold, of which Latin America has plenty, and has been slowly but steadily increasing its presence and its trade with several countries there. The U.S., whose history of blocking outside political influence in Latin America going back to the Monroe Doctrine, has been directing its attention elsewhere, as Michael Cerna of the China Research Center observed. “[The U.S.'] attention of late has been focused on Iraq and Afghanistan, and Latin America fell lower and lower on America’s list of priorities. China has been all too willing to fill any void,” Cerna said.

Between 2000 and 2009, China increased its two-way trade with Latin America by 660 percent, from $13 billion at the beginning of the 21st century to more than $120 billion nine years later. Latin American exports to China reached $41.3 billion, almost 7 percent of the region's total exports. China’s share of the region’s trade was less than 10 percent in 2000; by 2009, the number had jumped to 12 percent.

As impressive as that growth is, the numbers still pale in comparison to the U.S.' stats in its commercial relationship with Latin America. The U.S. still holds more than half of the total trade, adding up to $560 billion in 2008. Notably, though, America’s trade participation in Latin America has remained static, while China is closing the gap more and more each year -- having already surpassed the U.S. in some countries, including powerhouse Brazil. Concomitant with this burgeoning interest from the Far East, Latin America is undergoing an economic rebirth. After decades of devastating economic crises, the region is experiencing unprecedented growth: On average, annual GDP growth for Latin American countries will be 3.7 percent this year, according to United Nations estimates, almost double the average for the rest of the world. That has prompted several countries to form quasi-governmental entities to further promote the progress of the region. One such entity is the recently formed Pacific Alliance. Born with the specific goal of increasing relations with Asia, its members include Mexico, Colombia, Chile and Peru, which together represent half of the region’s total exports and 35 percent of its GDP. In a meeting in Colombian capital Bogotá last month, the Pacific Alliance signed an agreement to open its member countries' economies to Asian markets; the U.S., despite an invitation, did not attend. Though a recent trip to the region by Vice President Joe Biden seems to run counter to the Pacific Alliance snub, China’s President Xi Jinping has also visited recently, and likewise met with Latin American leaders, illustrating how the two global powers are going after the same prize. Biden traveled to Colombia, Trinidad and Tobago and Brazil in May, with the last leg of his trip coinciding with the beginning of Xi’s in Trinidad, before jumping to Costa Rica and Mexico. Both leaders met with several Latin American presidents and discussed trade and cooperation. The outcomes of their trips were very different, however. Xi’s trip was the first visit from a Chinese official to the region in almost a decade. Trinidad and Tobago’s main newspaper, Newsday, called the visit a “historic occasion” and a “visit from China to a good friend.” Prime Minister Kamla Persad-Bissessar said she was committed to boosting relations with China and accepted an invitation to Beijing for November of this year. In Costa Rica, Xi signed a $400 million loan to build a cross-country road and reaffirmed relations with its main ally in the region. Costa Rica is the only country in Latin America that sides with China in the mainland-Taiwanese dispute and does not recognize the island as a nation. Even more significant was Xi’s visit to Mexico. President Enrique Peña Nieto welcomed his Chinese counterpart, whom he had visited in Beijing in April, and made his intentions clear: Mexico wants closer trade relations with China, with whom it has a gap of $45 billion in export and import -- an important development considering that Mexico is, for now, America's biggest trade partner in the world. Biden’s visit was not as successful. His meeting in Trinidad and Tobago was called “brutal and tense” by Persad-Bissessar, and Colombian journalist Andrés Oppenheimer deemed the trip a sympathy visit after Secretary John Kerry called Latin America “Washington’s backyard” in a much-berated slip last April. While Biden had pleasant meetings in Rio and Bogotá, no agreements were signed during his trip. Perhaps the biggest development in China’s investment in the area is the recent decision by the Nicaraguan congress to allow a Chinese company to build a canal through the country. Although still in the proposal stages, the project would bring profound change to the geopolitics of the region -- and even the world. If built, the canal could significantly affect commerce through the Panama Canal, which, though it is now part of Panama's domain, was built by the U.S. and remains a symbol of the nation's historical dominance in the region. That dominance is in decline. After decades of uncontested U.S. influence in the region, some Latin American leaders have started making decidedly anti-American policies. The most notable was the late Venezuelan Comandante Hugo Chávez, who was very vocal about his disdain for the U.S., but he is far from the only one. Bolivia's President Evo Morales, for instance, kicked out USAID after Kerry's verbal slip, and has gone so far as to ban Coca-Cola from the country.

But now it's Ecuador bumping heads with its northern neighbor, mostly in regard to Ecuador granting entry to NSA-secrets leaker Edward Snowden. President Rafael Correa openly said that they would welcome the whistle-blower because he was a "free man," no matter what the U.S. said. Disagreements between the governments have led to the cancellation of a special trade agreement, which Ecuador has called "an instrument of blackmail." Beyond the lack of understanding with its former main trade partner, why is Latin America so smitten with China? Kevin Gallagher, a professor of international relations at Boston University, says China speaks to the region’s newfound confidence. “China is offering attractive deals to Latin American economies while the United States continues to lecture and dictate,” Gallagher wrote for The Globalist. “For too long, the United States has relied on a rather imperial mechanism, just telling Latin America what it needs,” he added. “Compare that to China’s approach: It offers Latin America what it wants.”

Gallagher argued that the U.S.’ biggest offer to Latin America is the Trans-Pacific Partnership, which offers access to the U.S. market on three conditions: deregulate financial markets, adopt intellectual property provisions that give preferences to U.S. firms, and allow U.S. firms to sue governments for violating any of its conditions.

China, on the other hand, has been providing more financing to Latin America than the World Bank, the Inter-American Development Bank and the U.S. Export-Import Bank combined since 2003, with no previous conditions and very few strings attached. “Latin America is very sensitive to any notions of conditionality due to painful past experiences with the IMF and the World Bank,” Gallagher said. “China makes sure that its policy is not based on conditionalities.”

#### B. Empirics prove US-China influence is zero-sum – economic engagement is key

Frost 09 (April 18, Patrick, “Latin America: Bush, China, & Obama,” Hello, I’m Patrick Frost the creator, writer, and host for GPP. I’m a Californian who has a BA in modern history, a MA in International Relations from NYU, write for Foreign Policy Association’s blog network, and have taught political science/international relations at San Diego City College, http://greatpowerpolitics.com/?p=1282)

The Bush administration’s track record in Latin America had its moments (Free trade agreements with Central America, Chile, and one with Colombia yet to be ratified, effective assistance in helping the Colombian state come close to defeating the FARC), but he rightly deserves criticism for a lack of attention to many of Latin America’s needs and wants. For instance, in his visits to the region he seemed to focus on global terrorism, when the leaders and peoples of the region were really concerned with economic growth and trade. The downside to this lack of attention was the growth of Chinese influence that can now be found in the region.¶ Beijing has effectively utilized its checkbook diplomacy with no strings attached to gain a strong foothold in many South American countries and in many ways this is a zero-sum game where US interests have been compromised. The Chinese have provided aid and loans in the billions of dollars to Venezuela, Brazil, and Argentina, securing oil shipments and political influence in return. This has come at a time when the US sponsored and controlled Inter-American Bank is losing money and appears to be struggling to maintain relevance, as Brazil has not even taken billions of dollars put in it for them alone. China’s money must seem welcoming to these South American powers as it comes from a far away power who demands less oversight and domestic changes in return for the financial resources.

#### C. Latin American influence is key to global PRC power projection

Malik 06 (June 12, Mohan Malik- PhD in International Relations, "China's Growing Involvement in Latin America,", http://uyghuramerican.org/old/articles/300/1/info@uyghuramerican.org)

China's forays into Latin America are part of its grand strategy to acquire "comprehensive national power" to become a "global great power that is second to none." Aiming to secure access to the continent's vast natural resources and markets, China is forging deep economic, political and military ties with most of the Latin American and Caribbean countries. There is more to China's Latin American activism than just fuel for an economic juggernaut. China now provides a major source of leverage against the United States for some Latin American and Caribbean countries. As in many other parts of the developing world, China is redrawing geopolitical alliances in ways that help propel China's rise as a global superpower. Beijing's courtship of Latin American countries to support its plan to subdue Taiwan and enlist them to join a countervailing coalition against U.S. global power under the rubric of strengthening economic interdependence and globalization has begun to attract attention in Washington. Nonetheless, Beijing's relations with the region are neither too cozy nor frictionless. For Latin America and the Caribbean countries, China is an enviable competitor and rival, potential investor, customer, economic partner, a great power friend and counterweight to the United States, and, above all, a global power, much like the United States, that needs to be handled with care. As in Asia and Africa, China is rapidly expanding its economic and diplomatic presence in Latin America -- a region the United States has long considered inside its sphere of influence. China's interest in Latin America is driven by its desire to secure reliable sources of energy and raw materials for its continued economic expansion, compete with Taiwan for diplomatic recognition, pursue defense and intelligence opportunities to define limits to U.S. power in its own backyard, and to showcase China's emergence as a truly global great power at par with the United States. In Latin America, China is viewed differently in different countries. Some Latin American countries see China's staggering economic development as a panacea or bonanza (Argentina, Peru, and Chile view China as an insatiable buyer of commodities and an engine of their economic growth); others see it as a threat (Mexico, Brazil, and the Central American republics fear losing jobs and investment); and a third group of countries consider China their ideological ally (Bolivia, Cuba, and Venezuela). While China's growing presence and interests have changed the regional dynamics, it still cannot replace the United States as a primary benefactor of Latin America. Chinese investment in the region is US$8 billion, compared with $300 billion by U.S. companies, and U.S.-Latin America trade is ten times greater than China-Latin America trade. Nonetheless, China is the new kid on the block that everyone wants to be friendly with, and Beijing cannot resist the temptation to exploit resentment of Washington's domineering presence in the region to its own advantage. For Washington, China's forays into the region have significant political, security and economic implications because Beijing's grand strategy has made Latin America and Africa a frontline in its pursuit of global influence. China's Grand Strategy: Placing Latin America in the Proper Context China's activities in Latin America are part and parcel of its long-term grand strategy. The key elements of Beijing's grand strategy can be identified as follows: Focus on "comprehensive national power" essential to achieving the status of a "global great power that is second to none" by 2049; Seek energy security and gain access to natural resources, raw materials and overseas markets to sustain China's economic expansion; Pursue the "three Ms": military build-up (including military presence along the vital sea lanes of communication and maritime chokepoints), multilateralism, and multipolarity so as to counter the containment of China's regional and global aspirations by the United States and its friends and allies; Build a network of Beijing's friends and allies through China's "soft power" and diplomatic charm offensive, trade and economic dependencies via closer economic integration (free trade agreements), and mutual security pacts, intelligence cooperation and arms sales.

#### D. Chinese leadership turns case and solves global stability, econ, warming, and terrorism

Zhang 12 (Prof of Diplomacy and IR at the Geneva School of Diplomacy. “The Rise of China’s Political Softpower” 9/4/12 http://www.china.org.cn/opinion/2012-09/04/content\_26421330.htm)

As China plays an increasingly significant role in the world, its soft power must be attractive both domestically as well as internationally. The world faces many difficulties, including widespread poverty, international conflict, the clash of civilizations and environmental protection. Thus far, the Western model has not been able to decisively address these issues; the China model therefore brings hope that we can make progress in conquering these dilemmas. Poverty and development The Western-dominated global economic order has worsened poverty in developing countries. Per-capita consumption of resources in developed countries is 32 times as large as that in developing countries. Almost half of the population in the world still lives in poverty. Western countries nevertheless still are striving to consolidate their wealth using any and all necessary means. In contrast, China forged a new path of development for its citizens in spite of this unfair international order which enabled it to virtually eliminate extreme poverty at home. This extensive experience would indeed be helpful in the fight against global poverty. War and peace In the past few years, the American model of "exporting democracy'" has produced a more turbulent world, as the increased risk of terrorism threatens global security. In contrast, China insists that "harmony is most precious". It is more practical, the Chinese system argues, to strengthen international cooperation while addressing both the symptoms and root causes of terrorism. The clash of civilizations Conflict between Western countries and the Islamic world is intensifying. "In a world, which is diversified and where multiple civilizations coexist, the obligation of Western countries is to protect their own benefits yet promote benefits of other nations," wrote Harvard University professor Samuel P. Huntington in his seminal 1993 essay "The Clash of Civilizations?". China strives for "being harmonious yet remaining different", which means to respect other nations, and learn from each other. This philosophy is, in fact, wiser than that of Huntington, and it's also the reason why few religious conflicts have broken out in China. China's stance in regards to reconciling cultural conflicts, therefore, is more preferable than its "self-centered" Western counterargument. Environmental protection Poorer countries and their people are the most obvious victims of global warming, yet they are the least responsible for the emission of greenhouse gases. Although Europeans and Americans have a strong awareness of environmental protection, it is still hard to change their extravagant lifestyles. Chinese environmental protection standards are not yet ideal, but some effective environmental ideas can be extracted from the China model. Perfecting the China model The China model is still being perfected, but its unique influence in dealing with the above four issues grows as China becomes stronger. China's experiences in eliminating poverty, prioritizing modernization while maintaining traditional values, and creating core values for its citizens demonstrate our insight and sense of human consciousness. Indeed, the success of the China model has not only brought about China's rise, but also a new trend that can't be explained by Western theory. In essence, the rise of China is the rise of China's political soft power, which has significantly helped China deal with challenges, assist developing countries in reducing poverty, and manage global issues. As the China model improves, it will continue to surprise the world.

# Science

#### 1. Science diplomacy can’t solve cooperation and distorts science- turns the advantage

Dickson 09 (June 2, Scott Dickson- Researcher and Reporter at the Science and Development Network, “Science Diplomacy: The Case for Caution”, http://scidevnet.wordpress.com/category/new-frontiers-in-science-diplomacy-2009/)

There has been much lively discussion on the value of international collaboration in achieving scientific goals, on the need for researchers to work together on the scientific aspects of global challenges such as climate change and food security, and on the importance of science capacity building in developing countries in order to make this possible.

But there remained little evidence at the end of the meeting on how useful it was to lump all these activities together under the umbrella term of “science diplomacy”.

More significantly, although numerous claims were made during the conference about the broader social and political value of scientific collaboration – for example, in establishing a framework for collaboration in other areas, and in particular reducing tensions between rival countries – little was produced to demonstrate whether this hypothesis is true.

If it is not, then some of the arguments made on behalf of “science diplomacy”, and in particular its value as a mechanism for exercising “soft power” in foreign policy, do not stand up to close scrutiny.

Indeed, a case can be made that where scientific projects have successfully involved substantial international collaboration, such success is often heavily dependent on a prior political commitment to cooperation, rather than a mechanism for securing cooperation where the political will is lacking.

Three messages appeared to emerge from the two days of discussion. Firstly, where the political will to collaborate does exist, a joint scientific project can be a useful expression of that will. Furthermore, it can be an enlightening experience for all those directly involved. But it is seldom a magic wand that can secure broader cooperation where none existed before.

Secondly, “science diplomacy” will only become recognised as a useful activity if it is closely defined to cover specific situations (such as the negotiation of major international scientific projects or collaborative research enterprises). As an umbrella term embracing the many ways in which science interacts with foreign policy, it loses much of its impact, and thus its value.

Finally, when it comes to promoting the use of science in developing countries, a terminology based historically on maximising self-interest – the ultimate goal of the diplomat – and on practices through which the rich have almost invariably ended up exploiting the poor, is likely to be counterproductive.

In other words, the discussion seemed to confirm that “science diplomacy” has a legitimate place in the formulation and implementation of policies for science (just as there is a time and place for exercising “soft power” in international relations).

But the dangers of going beyond this – including the danger of distorting the integrity of science itself, and even alienating potential partners in collaborative projects, particularly in the developing world – were also clearly exposed.

#### 2. Status quo solves- Obama increasing science diplomacy even with budget cuts

Maughan 13 (January 29, Heather Maughan- Reporter at the Science Development Network, Microbiology Consultant, Content reviewer at American Journal Experts, “US Science Diplomacy: The Rocky Road Ahead”, http://www.scidev.net/global/funding/feature/us-science-diplomacy-the-rocky-road-ahead--1.html)

The Obama administration is expected to continue including science and technology (S&T) in its diplomacy agenda, according to interviews with a number of people recognised for their contributions to international science cooperation.

But in the face of government spending cuts that could occur in 2013, US diplomatic efforts in S&T may be more reliant on collaboration with the private sector.

In his first four years, Obama revamped S&T diplomacy. His 2009 speech in Cairo pledged to make Muslim-majority countries a priority and led to his creation of a programme of science envoys, prominent US scientists who travel as diplomats to "identify opportunities for new partnerships in science and technology". [1]

Obama's appointments within the US Agency for International Development (USAID) have also strengthened the focus on S&T after "in recent decades, budget cuts and shifting mandates pulled the agency's focus away from emphasising science and technology", according to an article in Science. [2]

But since Obama's 2009 speech, the Arab Spring has occurred and the USAID budget could be cut by more than US$100 million if no compromise is found to avert mandatory cuts due to come into force in late March.

So will Obama be able to continue to use S&T as a force for good in the world?

Cathleen Campbell, chief executive officer and president of CRDF Global, a non-profit organisation created by the US Congress to promote international scientific and technical collaboration, thinks Obama will continue to be supportive of S&T development.

"I expect him to be investing in R&D, investing in new technology, and I also expect he is going to continue his emphasis on partnerships with countries around the world in the pursuit of research collaboration and entrepreneurship, new business development, and development of technology," she says.

She adds that working with Muslim-majority countries will continue to be a priority, and that Obama indicated on a recent trip to Asia the emerging importance of the region.

Others also think that diplomatic efforts focusing on Muslim-majority countries will improve in the wake of the Arab Spring.

For example, Charles M. Vest, president of the US National Academy of Engineering and an awardee of CRDF Global's 2012 George Brown Award for International Science Cooperation, says: "Anything that opens up communications, as has occurred to some extent in the Arab Spring, increases opportunities for people-to-people science discussion".

Laurie H. Glimcher, provost of medical affairs at Cornell University and the recipient of Argentina's 2012 Dr. Luis Federico Leloir Prize (for the promotion of the international scientific cooperation), points to another emerging priority: biomedical solutions to global health issues.

"We have an emerging crisis on our hands that is going to affect all of us and that transcends geographic areas or borders: our aging population," she says.

"For example, there are currently 25 million people in the world living with Alzheimer's disease. That's a staggering number and a heavy burden on our global healthcare system ... we have a challenge that could crush our existing global healthcare system if we don't find a solution."

She stresses that "international collaboration, beyond borders and nationalities, is crucial to finding the medical and scientific solutions we need".

Identifying key issues is easy. Finding the resources could be more challenging.

"One of the big challenges that we will be facing, like any other country, is the resource question. What kind of financial resources are going to be available to be able to pursue all the work that needs to be done?" asks Campbell.

The White House has proposed to reduce public spending by at least US$1 trillion over the next ten years. This would include the Department of State, through which many diplomatic efforts are funded.

But budgetary constraint need not mean science diplomacy efforts must suffer. As Campbell says, collaboration between organisations and governments, and between the public and private sectors, could make up for some of the shortfall.

#### 3. Politicizing science means scientific evidence will be determined by government officials- they can’t solve their impacts Laframboise, journalist, writer, 13 (Donna Laframboise, journalist and writer. She holds a degree in women's studies, The IPCC: Politicizing Science Since 1988, June 13 2013, <http://nofrakkingconsensus.com/2013/06/13/the-ipcc-politicizing-science-since-1988/>, 7-12-13, DAG)

From September 23 to 26, the Intergovernmental Panel on Climate Change (IPCC) will host a meeting in Stockholm, Sweden.¶ The purpose of that meeting should raise eyebrows. There, in the historic Brewery Conference Centre, with its “breathtaking views” and “large terraces and balconies” all pretense that the IPCC is a scientific organization will vanish.¶ Representatives of national governments – diplomats, politicians, and environmental bureaucrats – will gather to do something extraordinary. They will take a document authored by scientists and spend four days rewriting it.¶ That document is supposed to be a summary of the contents of Part 1 of the forthcoming IPCC assessment (the previous assessment was released in 2007). Authored by the IPCC’s Working Group 1, this is the portion of the report that concentrates on hard science. This is the place in which the IPCC is supposed to answer the question: What does the most reliable climate research tell us is happening?¶ Writing such a summary is a difficult task. It involves boiling down 14 chapters of dense textual information, graphs, and charts into a few dozen pages.¶ My book-length exposé of the IPCC, The Delinquent Teenager, reveals that there are sound reasons to question the judgment of some of the scientists who helped write that underlying text. Rather than being rigorously neutral, dispassionate professionals, certain IPCC personnel have close links to activist organizations. Others have been described by their own colleagues as “not competent” and “clearly not qualified.”¶ But even if every last individual who worked on the science section was of the highest integrity, and even if every last one of them was among the world’s best and brightest, it might not matter. Because the purpose of the Stockholm meeting is to both sanitize and politicize.¶ According to those who’ve attended similar meetings, “every sentence” will be projected onto a screen “in front of representatives of more than 100 governments” who will then argue about it. Eventually, these political animals will collectively negotiate wording that everyone can live with. Then they will move on to the next sentence.¶ Yes, you read that right. The exact phrasing of what is supposed to be a summary of scientific evidence will be determined not by scientists but via political negotiations.¶ The IPCC has long claimed to be a transparent organization, but the Stockholm negotiations will be held behind closed doors. I observed some time ago that, if those proceedings were televised, the reality of the situation would become screamingly obvious.¶ The IPCC is not, in fact, about science. If it were a scientific body, scientists would summarize those 14 chapters and that would be the end of the matter.¶ Instead, governments from around the world will send people to Stockholm to ensure that “the science” is expressed in a manner that’s acceptable to them. Scientists don’t have the last word at the IPCC – their political masters do.¶ First, the scientists who participate in the IPCC are selected by national governments. Afterward, those national governments have the last word regarding what the report they write actually says¶

### Ozone

#### Ozone depletion has tiny impact on humans – Only 350 in the U.S.

Bjorn Lomborg 01, Associate Professor Political Science, University of Aarhus, 2001, The Skeptical Environmentalist, p. 275

About 95 percent of skin cancers today consist of the highly curable basal and squamous cell cancers, whereas the last 5 percent consist of the much more lethal melanoma skin cancer.  **In total, the US experiences about 50,000 new melanoma cases each year and about a million new basal and squamous cell cancers, with almost all mortality stemming from the melanomas. Assuming no change in behavior (sun exposure, etc.) and full compliance with the CFC protocols,** it is estimated that the current ozone minimum will lead to more cancers in the future, reaching a maximum in 2060 of 27,000 extra annual skin cancers in the US, or an increase in total skin cancer of about 3 percent. Since the vast majority of extra cancers will be the almost entirely curable skin cancers, the maximum extra deaths in 2060 in the US are estimated at about 350 **or about 5 percent of all skin cancer deaths.** Thus, even at ozone depletion’s greatest impact, it will cause a relatively slight increase in the cancer incidence and death rate.

#### The impact wouldn’t be felt for decades

Rivet 8 (Yannick, 9/19, pg. http://www.defimedia.info/articles/3818/1/Saving-the-ozone-layer/Page1.html)

After decades of chemical attack, it is estimated that another 60 years will be needed for the ozone layer to recover fully. While the 191 parties to the Montreal Protocol have achieved excellent results to date, much remains to be done as nursing the Ozone layer back to health will be more of a long journey than a quick fix.

**Status quo international agreements will solve.**

European Commission 3/29/2004, Briefing, http://www.hri.org/news/europe/midex/2004/04-03-30.midex.html

**The European Commission welcomes the outcome of an extraordinary meeting of the Parties to the 1987 Montreal Protocol, on 24-26 March in Montreal, the Protocol's birthplace. The 183 Parties agreed how to respect a scheduled ban on the production and consumption of methyl bromide, a highly ozone damaging pesticide still in use in some countries. Under the Montreal Protocol, the ban is to come into effect in industrialised countries on 1 January 2005. Demands for far-reaching exemptions put forward by the US and a number of other countries, including some EU Member States, had jeopardised the phase-out timetable and were the main reason that a previous conference of the Parties in Nairobi last November collapsed. "This is the best piece of news I received last weekend," said Margot Wallstrom, Commissioner for the Environment. "**The Montreal Protocol is the most successful environmental treaty to date. **I am relieved and glad that the disagreement over methyl bromide has been resolved, thanks to flexibility and commitment by all Parties.** This will allow us to continue the Protocol's implementation as previously agreed. We simply have to stick to the timetable to phase out all ozone-damaging substances as agreed. Only this will allow the ozone layer to regain its full protective power and save current and future generations from the sun's dangerous ultraviolet radiation." **Ban on methyl bromide production and import Methyl bromide is a pesticide that is still used by some strawberry and tomato growers and mill owners to kill pests in soils and food processing facilities. Its damaging effect on the Earth's protective ozone layer became known in the early 1990s, prompting the Parties to the Montreal Protocol to agree on a phase-out schedule and a production and import ban to come into effect in industrialised countries in 2005. Critical use exemptions to the ban are to be granted by the 183 Parties themselves, acting in agreement, in a very limited number of cases where there are no technically and economically feasible alternatives. For the vast majority of uses, there are alternatives that are now in use in many countries around the world. The sticking point among the 183 Parties were the critical use exemptions that the US and 16 other industrialised countries requested to the 2005 ban on production and import of methyl bromide in industrialised countries. In total, they had asked to produce or import 14,000 tonnes of methyl bromide under the ban, with the US alone requesting 9,500 tonnes and EU member states demanding 4,000 tonnes. The US request exceeded current levels of methyl bromide production and import in the US (7,500 tonnes) and asked for more methyl bromide than 126 developing countries at present use in total. Some other** 80 countries have already familiarised their farmers and mill owners with alternatives so that methyl bromide is hardly used in these countries any longer, if at all. **They include the Netherlands, Denmark, Germany and Japan, but also developing countries such as Brazil, Costa Rica and Argentina. A regular conference of the Parties last November in Nairobi collapsed as the Parties could not resolve the exemption issue. Last week's extraordinary meeting in Montreal was specifically scheduled to find a solution to the issue. Outcome of the Montreal meeting In Montreal, the Parties agreed on the following: Critical-use exemptions and permitted levels of production and consumption for methyl bromide are granted for the year 2005 on the basis of the scientific and technical recommendations of two expert panels set up under the Montreal Protocol: the Technical and Economic Assessment Panel (TEAP) and the Methyl Bromide Technical Options Committee (MBTOC). The assessment methodology of the MBTOC for critical use exemptions will be reviewed over the coming months in order to strengthen it. This will ensure that exemptions are only granted in cases where there are no technically and economically feasible alternatives. This also provides end users of methyl bromide with certainty with regard to the 2005 season and will allow the start of the licensing process in the EU and elsewhere. Nonetheless,** in each country permitted consumption and production levels in 2005 must not exceed current levels, which are at 30% of the 1991 base year level. Only the US is at this level with other countries well below.

**Ozone is rapidly recovering**

EDIE News, August 8, 2003, “Ozone layer benefits from CFC ban,” http://www.edie.net/news/news\_story.asp?id=7352&channel=0

A team of researchers **from the University of Alabama in Huntsville, has** found that not only is the ozone depletion rate in the upper stratosphere slowing, but the rate of production for ozone-destroying chlorine is also dropping. **The scientists** believe that this is due to the success of the Montreal Protocol - an international ban on chlorofluorocarbons (CFCs), chemicals used in refrigerants and aerosol propellants, **which came into force in 1989. Professor Michael Newchurch, who led the research, said: “**This is the beginning of a recovery of the ozone layer. We had a monumental problem of global scale that we have started to solve. Now we can say that what we are doing is working and we should continue the ban.**” CFC molecules take several years to percolate into the stratosphere where they are broken up by ultra-violet light, releasing chlorine. This free chlorine reacts with ozone and converts it into three oxygen molecules, before bonding with hydrogen to form hydrogen chloride. Eventually it drifts back down into the lower atmosphere, dissolves into water vapour and gets rained back down to earth. The whole process can take decades.** Using data from three NASA satellites and three international ground stations, the team found that ozone depletion in the upper atmosphere – **between 35 and 45 kilometres above the ground** – has slowed **since 1997.**

**Ozone damage inevitable- Warming and CFC's**

**LA Times 11** (October 5, "Arctic Ozone Layer Fell to an Unprecedented Low in 2011", http://latimesblogs.latimes.com/nationnow/2011/10/arctic-ozone-layer-fell-to-unprecedented-low-in-2011.html)

NASA scientists this week published a study reporting **that the ozone layer over the Arctic fell to unprecedentedly low levels over the winter and spring of 2011.** Of course, back in the '80s, the concern was about the ozone hole over Antarctica, but still ... **we all stopped using that CFC-spewing hairspray decades ago. Shouldn't this be over by now?** According to atmospheric scientists Michelle Santee and Nathaniel Livesey, two of the co-authors of the new study, the answer is no. **Although industry and scientists around the world came together to stop the release of new ozone-destroying CFCs (chlorofluorocarbons) in the '90s, the CFCs that had already been released into the atmosphere have a long shelf life. It will be another 50 or so years before the level of CFCs in the stratosphere start noticeably decreasing**. Scientists are not surprised that the ozone hole continues to show up in Antarctica. But a new hole emerging in the Arctic? That's troubling. What happened in the Arctic is that **the temperature in the stratosphere stayed colder for longer in 2011, and CFCs break down ozone faster when the stratosphere is colder.** "The challenge facing the scientific community is to try to tease out why this winter was so much colder," said Livesey in an interview with The Times. **Although climate change is causing warmer temperatures on Earth's surface, Santee said, it appears to be causing colder temperatures in the stratosphere.** Scientists are continuing to investigate how the two phenomena are linked, she told The Times.

### Biodiversity

#### No extinction

Easterbrook, New Republic Senior Fellow 3

(Gregg, senior fellow at the New Republic, “We're All Gonna Die!”, <http://www.wired.com/wired/archive/11.07/doomsday.html?pg=1&topic=&topic_set>=)

If we're talking about doomsday - the end of human civilization - many scenarios simply don't measure up. A single nuclear bomb ignited by terrorists, for example, would be awful beyond words, but life would go on. People and machines might converge in ways that you and I would find ghastly, but from the standpoint of the future, they would probably represent an adaptation. Environmental collapse might make parts of the globe unpleasant, but considering that the biosphere has survived ice ages, it wouldn't be the final curtain. Depression, which has become 10 times more prevalent in Western nations in the postwar era, might grow so widespread that vast numbers of people would refuse to get out of bed, a possibility that Petranek suggested in a doomsday talk at the Technology Entertainment Design conference in 2002. But Marcel Proust, as miserable as he was, wrote *Remembrance of Things Past* while lying in bed.

#### Won’t collapse the environment

Washington Post 97

(“Diversity Is Not Enough to Ensure Hardy Ecosystems,” p. A03, l/n)

Ecologists have long maintained that diversity is one of nature’s greatest strengths, but new research suggests that diversity alone does not guarantee strong ecosystems. In findings that could intensify the national debate over endangered species and habitat conservation, three new studies suggest that a greater abundance of plant and animal varieties does not always translate to better ecological health. At least equally important, the research found, are the types of species and how they function together. “Having a long list of Latin names isn’t always better than a shorter list of Latin names,” said Stanford University biologist Peter Vitousek, co-author of one of the studies published in the journal Science. Separate experiments in California, Minnesota and Sweden found that diversity often had little bearing on the performance of ecosystems -- at least as measured by the growth and health of native plants. In fact, the communities with the greatest biological richness were often the poorest when it came to productivity and the cycling of nutrients. One study compared plant life on 50 remote islands in northern Sweden that are prone to frequent wildfires from lightning strikes. Scientist David Wardle of Landcare Research in Lincoln, New Zealand, and colleagues at the Swedish University of Agricultural Sciences, found that islands dominated by a few species of plants recovered more quickly than nearby islands with greater biological diversity.

Similar findings were reported by University of Minnesota researchers who studied savannah grasses, and by Stanford’s Vitousek and colleague David Hooper, who concluded that functional characteristics of plant species were more important than the number of varieties in determining how ecosystems performed. “In aiming to protect natural ecosystems, we cannot just manage for species variety alone,” the Stanford researchers wrote. British plant ecologist J.P. Grime, in a commentary summarizing the research, said there is not yet “convincing evidence that species diversity and ecosystem function are consistently and causally related.” “It could be argued,” he added, “that the tide is turning against the notion of high biodiversity as a controller of ecosystem function and insurance against ecological collapse.”

#### Adaptation and migration solve

Ian **Thompson et al. 9**, Canadian Forest Service, Brendan Mackey, The Australian National University, The Fenner School of Environment and Society, College of Medicine, Biology and Environment, Steven McNulty, USDA Forest Service, Alex Mosseler, Canadian Forest Service, 2009, Secretariat of the Convention on Biological Diversity “Forest Resilience, Biodiversity, and Climate Change” Convention on Biological Diversity

While resilience can be attributed to many levels of organization of biodiversity, the genetic composition of species is the most fundamental. Molecular genet- ic diversity within a species, species diversity within a forested community, and community or ecosystem diversity across a landscape and bioregion represent expressions of biological diversity at different scales. The basis of all expressions of biological diversity is the genotypic variation found in populations. The individuals that comprise populations at each level of ecological organization are subject to natural se- lection and contribute to the adaptive capacity or re- silience of tree species and forest ecosystems (Mull- er-Starck et al. 2005). Diversity at each of these levels has fostered natural (and artificial) regeneration of forest ecosystems and facilitated their adaptation to dramatic climate changes that occurred during the quaternary period (review by: DeHayes et al. 2000); this diversity must be maintained in the face of antici- pated changes from anthropogenic climate warming. Genetic diversity (e.g., additive genetic variance) within a species is important because it is the basis for the natural selection of genotypes within popu- lations and species as they respond or adapt to en- vironmental changes (Fisher 1930, Pitelka 1988, Pease et al. 1989, Burger and Lynch 1995, Burdon and Thrall, 2001, Etterson 2004, Reusch et al. 2005, Schaberg et al. 2008). The potential for evolutionary change has been demonstrated in numerous long- term programmes based on artificial selection (Fal- coner 1989), and genetic strategies for reforestation in the presence of rapid climate change must focus on maintaining species diversity and genetic diversi- ty within species (Ledig and Kitzmiller 1992). In the face of rapid environmental change, it is important to understand that the genetic diversity and adap- tive capacity of forested ecosystems depends largely on in situ genetic variation within each population of a species (Bradshaw 1991). Populations exposed to a rate of environmental change exceeding the rate at which populations can adapt, or disperse, may be doomed to extinction (Lynch and Lande 1993, Burger and Lynch 1995). Genetic diversity deter- mines the range of fundamental eco-physiological tolerances of a species. It governs inter-specific competitive interactions, which, together with dispersal mechanisms, constitute the fundamental de- terminants of potential species responses to change (Pease et al. 1989, Halpin 1997). In the past, plants have responded to dramatic changes in climate both through adaptation and migration (Davis and Shaw 2001). The capacity for long-distance migration of plants by seed dispersal is particularly important in the event of rapid environmental change. Most, and probably all, species are capable of long-distance seed disper- sal, despite morphological dispersal syndromes that would indicate morphological adaptations primarily for short-distance dispersal (Cwyner and MacDon- ald 1986, Higgins et al. 2003). Assessments of mean migration rates found no significant differences be- tween wind and animal dispersed plants (Wilkinson 1997, Higgins et al. 2003). Long-distance migration can also be strongly influenced by habitat suitabil- ity (Higgins and Richardson 1999) suggesting that rapid migration may become more frequent and vis- ible with rapid changes in habitat suitability under scenarios of rapid climate change. The discrepancy between estimated and observed migration rates during re-colonization of northern temperate forests following the retreat of glaciers can be accounted for by the underestimation of long-distance disper- sal rates and events (Brunet and von Oheimb 1998, Clark 1998, Cain et al. 1998, 2000). Nevertheless, concerns persist that potential migration and ad- aptation rates of many tree species may not be able to keep pace with projected global warming (Davis 1989, Huntley 1991, Dyer 1995, Collingham et al. 1996, Malcolm et al. 2002). However, these models refer to fundamental niches and generally ignore the ecological interactions that also govern species dis- tributions.

# Biotech Frontline

#### Status quo solves- Cuban biotech is booming

New York Daily News 13 (April 25, “Cuban biotech industry expected to double in five years”, http://india.nydailynews.com/business/7895b15f186d3707d70ae40527992322/cuban-biotech-industry-expected-to-double-in-five-years)

Havana, April 25 — Cuba's biotechnology industry is expected to double over the next five years, bringing in more than $5 billion in export revenues, an official said.

There is increasing international recognition of Cuba's biotech industry and the revenue for the 2013-17 period is projected to double the $2.5 billion that earned in the last five years, said Jose Luis Fernandez Yero, vice president of the country's biotech firm BioCubaFarma, in a recent TV interview.

Products manufactured by the biotech industry are currently sold in more than 50 countries and authorities are working to expand the market, reported Xinhua.

BioCubaFarma, said Fernandez, was founded in April 2011 after the Sixth Congress of Cuba's Communist Party called for strengthening domestic pharmaceutical and biotechnology industries to boost the economy as the sectors had the greatest export potential.

BioCubaFarma is to develop new products for the domestic market and help push Cuba towards a more high-tech economy, Fernandez said.

#### The status quo solves, licenses and visas are attainable in the status quo

Ordoñez 12 Franco covers immigration and the U.S. Department of Labor for McClatchy Newspapers, based in Washington, D.C. He also writes for The Charlotte Observer. (“Scientists work to bridge political gap between Cuba, U.S.”—5/21/2012 <http://www.mcclatchydc.com/2012/05/21/149603/scientists-work-to-bridge-political.html#.Udid10CTjYs> KW)

Cuban and American scientists have joined forces in an effort to protect baby sea turtles and endangered sharks. They’re studying Caribbean weather patterns that fuel the hurricanes that have devastated the Southeastern United States.¶ In the process, they’re chipping away at a half-century of government feuding, helping to bring the nations together for talks on vital matters, such as what to do in case of an oil spill.¶ The two countries are so geographically close, and the environmental concerns so similar, that scientists say it’s crucial to combine forces.¶ “If we’re going to have any hope of protecting our environment in the future, from climate change to our shared resources in the Gulf of Mexico, we have to collaborate,” said Dan Whittle, the Cuba program director at the Environmental Defense Fund.¶ Under the Obama administration, cooperation between scientific organizations has increased, scientists say. Visas are being granted more regularly to Cuban scientists and it’s easier for Americans to get the U.S. government licenses needed to do research on the island.¶ Peter Agre, a Nobel laureate in chemistry and the head of the Johns Hopkins Malaria Research Institute, led 18 U.S. scientists associated with the American Association for the Advancement of Science on a trip to Cuba in December to meet with counterparts about potential cooperation in marine and atmospheric sciences, and sustainable fisheries.¶ For some American scientists, going to Cuba is like tasting a piece of forbidden fruit. The scientific landscape has been largely untouched for decades.¶ The U.S. trade embargo, which has been in place for 50 years, has in many ways been a gift to Cuba’s forests, fish populations and coral reefs. It helped insulate Cuba’s ecosystem from the type of tourist development that’s wracked other nations.¶ Sea turtles that feed in Florida journey back each year to nest in Cuba. Many grunts and snapper fish that live off the North Carolina coast also spawn in Cuba. The oceanic whitetip shark has almost disappeared from U.S. waters, but preliminary studies show the predators in abundance around the island.¶ Cuban scientists see the collaboration with Americans as an honest exchange of work, as opposed to a plea for funding or resources.¶ They complain that they don’t get enough credit for their science, and they boast that Cuba represents 2 percent of the Latin American population but has 11 percent of the scientists in the region. There are thousands of Cuban doctors and health professionals on medical missions abroad.¶ The country includes more than 84 protected areas, making up almost 14 percent of the island. In Western Cuba at the 37,500-acre Vinales National Park, environmentalists study ways to protect the vast mountains that are home to an array of native plants and animals, including the renown “painted snails.” Legend has it that the sun painted their vibrant orange and yellow swirled shells.¶ “Of maximum importance is the need to protect and conserve the environment,” said Yamira Valdez, a Cuban environmental specialist at the park. “Our countries can share experiences, criteria. They can see what works here. And we can apply their experience to the work we do.”¶ Scientists and scholars have helped break through political barriers before. An environmental agreement reached with the Soviet Union in the 1970s is often credited with easing Cold War tensions.¶ “So later when things began to loosen up and relations warmed, there was a network of people who knew each other quite well who had actually had dinners together and been to each other’s homes,” said William Reilly, the head of the Environmental Protection Agency under President George H.W. Bush. “That is enormously constructive.”¶ The researchers understand that anything involving Cuba is going to be controversial. A decision to grant President Raul Castro’s daughter a visa to attend an academic conference in San Francisco this week sparked a wave of criticism from Cuban-American groups, calling her an enemy of democracy. But the researchers say their work is focused on science, not politics. Their cooperation will serve as a foundation for future dialogue, they say.¶ “The political relationship at some point, in five years, 50 years, 500 years, whatever it is, will change,” said Vaughan Turekian, an atmospheric geochemist and chief international officer at the American Association for the Advancement of Science.¶ In a rare move last year, the Environmental Defense Fund received State Department approval to bring a senior official from the National Oceanic and Atmospheric Administration to Cuba to meet with officials about rebuilding fish stocks for species of fish that populate the region.¶ Oil is a key area of cooperative interest.¶ Scientists have helped facilitate talks between the nations as the specter of an oil spill has raised concerns in both of them.¶ Cuban oceanographers reached out to their U.S. counterparts after the 2010 BP spill to help them gain reassurances that the U.S. government would step in should the gushing petroleum come near Cuban shores.¶ “The ocean doesn’t have borders. It’s more about the currents. It’s more how nature works and which are the vulnerable species,” said Roberto Perez, a scientist at the Antonio Nunez Jimenez Foundation of Man and Nature in Havana. “Fortunately, it didn’t come to our waters, but the idea really opened up the window of opportunity for the governments to talk.”¶ Those conversations have increased as Cuba prepares to drill for oil just 70 miles from the Florida Keys.¶ Last year, the U.S. Treasury Department granted a group of environmentalists and drilling experts, led by the Environmental Defense Fund, permission to travel to Cuban to meet with top officials at the Ministry of Basic Industry, which regulates the energy sector, as well as the state-run petroleum company. The group included Reilly, the co-chair of a bipartisan commission that investigated the 2010 BP spill. He said his goal was to share the commission’s findings with Cuban officials, who had no experience regulating offshore oil and gas, in hopes that they wouldn’t make the same mistakes that led to the BP disaster.¶ When he returned to the United States, Reilly briefed the Bureau of Ocean Energy Management, Regulation and Enforcement and other administration agencies, whose officials, Reilly said, were very interested to learn that the Cubans were reading the Interior Department’s regulatory reports and planned to adhere to American standards.¶ “That was not known,” he said.¶ U.S. officials also have engaged with the International Maritime Organization, which has sent technical teams to Cuba to evaluate its oil drilling procedures, and Cuban and U.S. officials met in the Bahamas in December along with officials from Mexico and Jamaica to discuss disaster plans. A similar meeting was held in Trinidad and administration officials say more will come.¶ “In fact, we’re all comfortable all the entities that would need licenses to respond appropriately either have them or are in the process of getting them at this point,” said a senior administration official, who requested anonymity in order to speak freely.¶ Reilly notes that his delegation spent several days speaking directly with top Cuban officials and was able to gather specific details about Cuban plans that may not have been discussed at other multinational meetings.¶ “On the oil and gas issues, we’ve been moderately successful in getting the two governments to start talking with each other,” said the Environmental Defense Fund’s Whittle, who helped lead the trip and had several meetings with administration officials.¶ There are still considerable obstacles to be overcome. In addition to needing visas to travel to the United States, Cuban scientists work with fewer resources. The Internet also is not easily accessible.¶ In February, Fabian Pina, a scientist with Cuba’s Center for Coastal Ecosystems Research in Cayo Coco, Cuba, was awarded a $150,000 Pew Fellowship in Marine Conservation to study goliath grouper populations in Cuba, the first time a Cuban researcher has received the prestitigous grant, a kin, in the marine science world, to winning a MacArthur “genius grant.”¶ But Pina was supposed to be in the 2011 class. It took months to get proper approvals from U.S. officials, who were concerned the grant money would be taken or taxed by the Cuban government.

#### Their 1AC Starr also says that there is science cooperation right now. Castro has opened the door to biotechnology coop with the United States.

#### 2. Cuba not key- Chinas biotech sector solves

Hirsch, Manager of Events Communications at BIO, 13 (Abigail, July 23 2013, BIO, “Everyone is Engaging with China’s Biotech Industry, Including BIO”, [http://www.biotech-now.org/events/2013/07/everyone-is-engaging-with-chinas-biotech-industry-including-bio#](http://www.biotech-now.org/events/2013/07/everyone-is-engaging-with-chinas-biotech-industry-including-bio), Date accessed: 8/15/13, LE)

China has included biotechnology as one of seven strategic priorities for scientific and technological development in its 12th Five-Year Plan and because of this, China is set to become the second largest pharmaceutical market in the world by 2015.

According to Gang Wan, Head of Ministry of Science and Technology, “By 2020, the total output value of China’s biological industry will reach more than 4 percent of GDP.” Furthermore, according to IMSHealth, “At $50 billion, China is the world’s number two pharma market, but is forecast to rise to $100 billion by 2015, and to become the #1 market by 2020.”

With the government’s support of growing the industry, executives from biotechnology, pharmaceutical companies and investment firms from North America, Europe and Asia are increasingly looking to explore potential collaborations and business opportunities within China’s emerging biotech sector.

#### Scientific Diplomacy fails – Multiple warrants

Dickson, science journalist, 6/28/10 [David. Director of SciDev.net. “[Science in diplomacy: “On tap but not on top”](http://scidevnet.wordpress.com/2010/06/28/the-place-of-science-in-diplomacy-%E2%80%9Con-tap-but-not-on-top).” June 28, 2010. [http://scidevnet.wor...onference-2010/](http://scidevnet.wordpress.com/category/science-diplomacy-conference-2010/). JCook.]

**There’s a general consensus** in both the scientific and political worlds **that the principle of science diplomacy**, at least in the somewhat restricted sense of the need to get more and better science into international negotiations, **is a desirable objective.** There is less agreement**, however, on how far the concept can** – or indeed should – **be extended to embrace broader goals and objectives, in particular attempts to use science to achieve political or diplomatic goals at the international level.** S**cience, despite its international characteristics, is no substitute for effective diplomacy.** Any more than diplomatic initiatives necessarily lead to good science. These seem to have been the broad conclusions to emerge from a three-day meeting at Wilton Park in Sussex, UK, organised by the British Foreign Office and the Royal Society, and attended by scientists, government officials and politicians from 17 countries around the world. The definition of science diplomacy varied widely among participants. Some saw it as a subcategory of “public diplomacy”, or what US diplomats have recently been promoting as “soft power” (“the carrot rather than the stick approach”, as a participant described it). Others preferred to see it as a core element of the broader concept of “innovation diplomacy”, covering the politics of engagement in the familiar fields of international scientific exchange and technology transfer, but raising these to a higher level as a diplomatic objective. Whatever definition is used, three particular aspects of the debate became the focus of attention during the Wilton Park meeting: how science can inform the diplomatic process; how diplomacy can assist science in achieving its objectives; and, finally, how science can provide a channel for quasi-diplomatic exchanges by forming an apparently neutral bridge between countries. There was little disagreement on the first of these. Indeed for many, given the increasing number of international issues with a scientific dimension that politicians have to deal with, this is essentially what the core of science diplomacy should be about. Chris Whitty, for example, chief scientist at the UK’s Department for International Development, described how knowledge about the threat raised by the spread of the [highly damaging plant disease stem rust](http://www.scidev.net/en/news/deadly-wheat-disease-a-threat-to-world-food-secur.html)had been an important input by researchers into discussions by politicians and diplomats over strategies for persuading Afghan farmers to shift from the production of opium to wheat. Others pointed out that the scientific community had played a major role in drawing attention to issues such as the links between chlorofluorocarbons in the atmosphere and the growth of the ozone hole, or between carbon dioxide emissions and climate change. Each has made essential contributions to policy decisions. Acknowledging this role for science has some important implications. No-one dissented when Rohinton Medhora, from Canada’s International Development Research Centre, complained of the lack of adequate scientific expertise in the embassies of many countries of the developed and developing world alike. Nor – perhaps predictably – was there any major disagreement that diplomatic initiatives can both help and occasionally hinder the process of science. On the positive side, such diplomacy can play a significant role in facilitating science exchange and the launch of international science projects, both essential for the development of modern science. Europe’s framework programme of research programmes was quoted as a successful advantage of the first of these. Examples of the second range from the establishment of the European Organisation of Nuclear Research (usually known as CERN) in Switzerland after the Second World War, to current efforts to build a large new nuclear fusion facility (ITER). Less positively, increasing restrictions on entry to certain countries, and in particular the United States after the 9/11 attacks in New York and elsewhere, have significantly impeded scientific exchange programmes. Here the challenge for diplomats was seen as helping to find ways to ease the burdens of such restrictions. The broadest gaps in understanding the potential of scientific diplomacy lay in the third category, namely the use of science as a channel of international diplomacy, either as a way of helping to forge consensus on contentious issues, or as a catalyst for peace in situations of conflict. On the first of these, some pointed to recent climate change negotiations, and in particular the work of the Intergovernmental Panel on Climate Change, as a good example, of the way that the scientific community can provide a strong rationale for joint international action. But others referred to the failure of the Copenhagen climate summit last December to come up with a meaningful agreement on action as a demonstration of the limitations of this way of thinking. It was argued that this failure had been partly due to a misplaced belief that scientific consensus would be sufficient to generate a commitment to collective action, without taking into account the political impact that scientific ideas would have. Another example that received considerable attention was [the current construction of a synchrotron facility SESAME](http://www.scidev.net/en/news/middle-east-synchrotron-gets-the-goahead.html)in Jordan, a project that is already is bringing together researchers in a range of scientific disciplines from various countries in the Middle East (including Israel, Egypt and Palestine, as well as both Greece and Turkey). The promoters of SESAME hope that – as with the building of CERN 60 years ago, and its operation as a research centre involving, for example, physicists from both Russia and the United States – SESAME will become a symbol of what regional collaboration can achieve. In that sense, it would become what one participant described as a “beacon of hope” for the region. But others cautioned that, however successful SESAME may turn out to be in purely scientific terms, its potential impact on the Middle East peace process should not be exaggerated. Political conflicts have deep roots that cannot easily be papered over, however open-minded scientists may be to professional colleagues coming from other political contexts. Indeed, **there was even a warning that in the developing world, high profile scientific projects, particular those with explicit political backing, could end up doing damage by inadvertently favouring one social group over another.** Scientists should be wary of having their prestige used in this way; those who did so could come over as patronising, appearing unaware of political realities. Similarly, **those who hold science in esteem as a practice committed to promoting the causes of peace and development were reminded of the need to take into account how advances in science – whether nuclear physics or genetic technolog**y – **have also led to new types of weaponry**. Nor did science automatically lead to the reduction of global inequalities. “Science for diplomacy” therefore ended up with a highly mixed review. **The consensus seemed to be that science** **can prepare the ground for diplomatic initiatives – and** benefit from diplomatic **agreements**– **but cannot provide the solutions to either**. “On tap but not on top” seems as relevant in international settings as it does in purely national ones. With all the caution that even this formulation still requires.

#### The US breaks science diplomacy promises, undermines all solvency

National Research Council 12 The National Research Council (NRC) is the working arm of the United States National Academies, which produces reports that shape policies, inform public opinion, and advance the pursuit of science, engineering, and medicine. (“U.S. and International Perspectives on Global Science Policy and Science” [pg.35]—2012 <http://www.nap.edu/openbook.php?record_id=13300&page=33> KW)

Some workshop participants felt that another challenge to effective science diplomacy is the failure of governments to implement commitments made in bilateral, summit, and other meetings, thus undermining the credibility of the science diplomacy process. As observed by Michael Clegg, the United States and other advanced nations make commitments that they do not always honor. For example, unmet expectations of U.S. agency participation in joint project of the U.S.-Mexico Foundation for Science, created by good intentions, have led to an awkward situation between the two partners. Larry Weber of NSF noted a similar situation after the U.S government put forward a broad Middle Eastern agenda, fueling large expectations in the Arab and Muslim worlds. Considerable efforts and progress have been made, yet financial support was insufficient to meet high expectations created by publicly announced agendas. There may be too much of a tendency to assume that new initiatives are needed, noted Gebisa Ejeta. In many cases there are already existing programs and agencies for international cooperation that have important goals and have built capabilities but do not have enough resources , and it may be effective to provide the programs already in place with needed resources.

### Bioterror Turn

#### 3. Turn- Cuban biotech leads to bioterrorism

Suchlicki, Director, Inst. for Cuban & Cuban-American Studies at University of Miami, 13 (Jaime, April 4 2013, Cuba Transition Project, “Cuba’s Continuous Support for Terrorism”, <http://ctp.iccas.miami.edu/FOCUS_Web/Issue188.htm>, Date accessed: 8/17/13, LE)

Iran, Cuba and Venezuela have developed a close and cooperative relationship against the U.S. and in support of terrorism. The three regimes increasingly coordinate their policies and resources in a three way partnership aimed at counteracting and circumventing U.S. policies in the Middle East and Latin America. Within this relationship, Cuba plays a strategic role in terms of geography (proximity to the U.S.), intelligence gathering (both electronic eavesdropping and human espionage) and logistics.

Worrisome to the U.S. are reports that “have uncovered covert operations between Cuba and Iran in the development and testing of electromagnetic weapons that have the capacity to disrupt telecommunication networks, cut power supplies and damage sophisticated computers.” (1) Furthermore, Cuba can easily provide Iran with valuable information from its sophisticated espionage apparatus. Iran is also able to obtain information on biotechnology from Cuba. In the late 1990s, Cuba began “transferring (licensing) both its medical biotechnologies and, along with the technical know-how, implicit capabilities to develop and manufacture industrial quantities of biological weapons,” creating a significant security threat for the United States and Israel. (2)

In addition to its proven technical prowess to interfere and intercept U.S. telecommunications, Cuba has deployed around the world a highly effective human intelligence network. The type of espionage carried out by Ana Belén Montes, the senior U.S. defense intelligence analyst who spied for Cuba during some 16 years until her arrest in 2001, has enabled the Castro regime to amass a wealth of intelligence on U.S. vulnerabilities as well as a keen understanding of the inner-workings of the U.S. security system. Such information and analysis was provided to Saddam Hussein prior to the U.S. invasion of Iraq and would undoubtedly be provided to a strategic ally like Iran. While one may argue that factors such as Iran’s limited military capabilities and sheer distance diminish any conventional concerns, one should expect that Tehran, in case of a U.S.-Iran conflict would launch an asymmetrical offensive against the U.S. and its European allies through surrogate terrorist states and paramilitary organizations. In such a scenario, Cuban intelligence would be invaluable to Iran and its proxies and Cuban territory could be used by terrorist groups to launch operations against the U.S.

#### Bioterrorism causes extinction and outweighs nuclear war

Ochs 02 (Richard, June 9, former president of the Aberdeen Proving Ground Superfund Citizens Coalition, member of the Depleted Uranium Task force of the Military Toxics Project, member of the Chemical Weapons Working Group, "Biological Weapons Must Be Abolished Immediately", http://www.freefromterror.net/other\_articles/abolish.html)

Of all the weapons of mass destruction, the genetically engineered biological weapons, many without a known cure or vaccine, are an extreme danger to the continued survival of life on earth. Any perceived military value or deterrence pales in comparison to the great risk these weapons pose just sitting in vials in laboratories. While a "nuclear winter," resulting from a massive exchange of nuclear weapons, could also kill off most of life on earth and severely compromise the health of future generations, they are easier to control. Biological weapons, on the other hand, can get out of control very easily, as the recent anthrax attacks has demonstrated. There is no way to guarantee the security of these doomsday weapons because very tiny amounts can be stolen or accidentally released and then grow or be grown to horrendous proportions. The Black Death of the Middle Ages would be small in comparison to the potential damage bioweapons could cause. Abolition of chemical weapons is less of a priority because, while they can also kill millions of people outright, their persistence in the environment would be less than nuclear or biological agents or more localized. Hence, chemical weapons would have a lesser effect on future generations of innocent people and the natural environment. Like the Holocaust, once a localized chemical extermination is over, it is over. With nuclear and biological weapons, the killing will probably never end. Radioactive elements last tens of thousands of years and will keep causing cancers virtually forever. Potentially worse than that, bio-engineered agents by the hundreds with no known cure could wreck even greater calamity on the human race than could persistent radiation. AIDS and ebola viruses are just a small example of recently emerging plagues with no known cure or vaccine. Can we imagine hundreds of such plagues? HUMAN EXTINCTION IS NOW POSSIBLE.

**Multiple causes to ozone destruction and it will recover**

**The Guardian 11** (October 30, English based Newspaper, "Ozone Layer Hole Over Arctic in Sudden Expansion", http://www.guardian.co.uk/environment/2011/oct/03/arctic-ozone-layer-hole-expands)

**A huge hole that appeared in the Earth's protective ozone layer above the Arctic in 2011 was the largest recorded in the northern hemisphere, though the sudden appearance of the hole was not due to man-made causes**, scientists said in a report on Monday. The ozone layer high in the stratosphere acts like a giant shield against the sun's ultraviolet (UV) radiation, which can cause skin cancer and cataracts. Since the 1980s, scientists have charted the size of the ozone hole every summer above the Antarctic. **Some years, the holes have been so large that they covered the entire continent and stretched to parts of South America**. During extreme events, up to 70% of the ozone layer can be destroyed, before it recovers months later. **The hole above the Arctic was always much smaller – until March this year, when a combination of powerful wind patterns and intense cold temperatures high up in the atmosphere created the right conditions for already-present, ozone-eating chlorine chemicals to damage the layer.** The findings, reported on Monday in the journal Nature, show **that the hole had opened over northern Russia, parts of Greenland, and Norway, meaning people in these areas were likely to have been exposed to high levels of UV radiation.** "The chemical ozone destruction over the Arctic in early 2011 was, for the first time in the observational record, comparable to that in the Antarctic ozone hole," say the scientists, led by Gloria Manney of the Jet Propulsion Laboratory in Pasadena, California. The scientists say man-made chemicals such as chlorofluorocarbons (CFCs) destroy ozone in the stratosphere, after sunlight breaks up the complex chemicals into simpler forms that react with ozone. **While some of the chemicals are covered by a UN treaty that aims to stop their use, it will be decades before they are fully phased out of production.** Normally, atmospheric conditions high above the Arctic do not trigger a large-scale plunge in ozone levels. **But during the 2010/11 winter, a high-altitude wind pattern called the polar vortex was unusually strong, leading to very cold conditions in the stratosphere that also lasted for several months. This created the right conditions for the ozone-destroying forms of chlorine to slash ozone levels over a long period**. The report's authors said there was a risk that the spread of the Arctic hole could become an annual event.

## Disease

#### No Impact- Quarantines and vaccines solve

Keller 13 (March 17, Rebecca Keller- Ph.D. Biophysical Chemistry, Stratfor Reporter, Stratfor Intellligence, “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.

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.

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.

#### No impact to disease – they either burn out or don’t spread

Posner 05 (Winter, Richard Posner- Senior Lecturer at University of Chicago, “Catastrophe: the dozen most significant catastrophic risks and what we can do about them.”, http://findarticles.com/p/articles/mi\_kmske/is\_3\_11/ai\_n29167514/pg\_2?tag=content;col1)

Yet the fact that Homo sapiens has managed to survive every disease to assail it in the 200,000 years or so of its existence is a source of genuine comfort, at least if the focus is on extinction events. There have been enormously destructive plagues, such as the Black Death, smallpox, and now AIDS, but none has come close to destroying the entire human race. There is a biological reason. Natural selection favors germs of limited lethality; they are fitter in an evolutionary sense because their genes are more likely to be spread if the germs do not kill their hosts too quickly. The AIDS virus is an example of a lethal virus, wholly natural, that by lying dormant yet infectious in its host for years maximizes its spread. Yet there is no danger that AIDS will destroy the entire human race. The likelihood of a natural pandemic that would cause the extinction of the human race is probably even less today than in the past (except in prehistoric times, when people lived in small, scattered bands, which would have limited the spread of disease), despite wider human contacts that make it more difficult to localize an infectious disease. The reason is improvements in medical science. But the comfort is a small one. Pandemics can still impose enormous losses and resist prevention and cure: the lesson of the AIDS pandemic. And there is always a lust time.

# Solvency

### Squo Solves

#### Cuba and the US work together behind the scenes in the status quo

Haven, staff writer for the AP, 4-10

(Paul, Associated Press, “Under the radar, Cuba and U.S. often work together,” http://bigstory.ap.org/article/under-radar-cuba-and-us-often-work-together, 6/30/13, ND)

Indeed, diplomats and observers on both sides of the Florida Straits say American and Cuban law enforcement officers, scientists, disaster relief workers, Coast Guard officials and other experts work together on a daily basis, and invariably express professional admiration for each other.¶ "I don't think the story has been told, but there is a real warmth in just the sort of day-to-day relations between U.S. and Cuban government officials

," said Dan Whittle, who frequently brings scientific groups to the island in his role as Cuba program director for the Environmental Defense Fund. "Nearly every time I talk to American officials, they say they were impressed by their Cuban counterparts. There really is a high level of mutual respect."¶ Almost none of these technical-level interactions make the headlines, but examples are endless. Just last week, Cuba's top environmental official Ulises Fernandez and several island oil experts attended a conference in New York of the International Association of Drilling Contractors after the State Department expedited their visas.¶ The American government maintains a Coast Guard representative in Cuba, and the two countries work together to interdict suspicious boats. A U.S. diplomat involved in the process said that security officials on both sides are on a first-name basis and that the Cubans happily accept FBI and Coast Guard baseball caps as gifts.¶ "There are so many weird and abnormal aspects of the relationship between Cuba and the United States, things that don't occur between other countries, that when something normal happens it is a surprise," said Carlos Alzugaray, a former Cuban diplomat.¶ He said Cuba has in recent years taken a pragmatic approach, more often than not cooperating on drug enforcement and judicial issues. "It is important to highlight ... that in judicial matters there is a willingness to cooperate and that could open a path to other types of cooperation," he said, citing the return of Joshua Michael Hakken and his wife, Sharyn, as a case in point.

**No Solvency—Say No**

**Cuba doesn’t want US-Relations and the plan doesn’t solve for reform**

**Cave**, NY Times Correspondent based in Mexico City, **11/19**

(Damien, November 19 2013, New York Times, “Easing of Restrictions in Cuba Renews Debate on U.S. Embargo,” http://www.nytimes.com/2012/11/20/world/americas/changes-in-cuba-create-support-for-easing-embargo.html?pagewanted=all&pagewanted=print , Accessed 6/24/13. RJ)

HAVANA — “If I could just get a lift,” said Francisco López, imagining the addition of a hydraulic elevator as he stood by a rusted Russian sedan in his mechanic’s workshop here. All he needed was an investment from his brother in Miami or from a Cuban friend there who already sneaks in brake pads and other parts for him.¶ The problem: Washington’s 50-year-old trade embargo, which prohibits even the most basic business dealings across the 90 miles separating Cuba from the United States. Indeed, every time Mr. López’s friend in Florida accepts payment for a car part destined for Cuba, he puts himself at risk of a fine of up to $65,000.¶ With Cuba cautiously introducing free-market changes that have legalized hundreds of thousands of small private businesses over the past two years, new economic bonds between Cuba and the United States have formed, creating new challenges, new possibilities — and a more complicated debate over the embargo.¶ The longstanding logic has been that broad sanctions are necessary to suffocate the totalitarian government of Fidel and Raúl Castro. Now, especially for many Cubans who had previously stayed on the sidelines in the battle over Cuba policy, a new argument against the embargo is gaining currency — that the tentative move toward capitalism by the Cuban government could be sped up with more assistance from Americans.¶ Even as defenders of the embargo warn against providing the Cuban government with “economic lifelines,” some Cubans and exiles are advocating a fresh approach. The Obama administration already showed an openness to engagement with Cuba in 2009 by removing restrictions on travel and remittances for Cuban Americans. But with Fidel Castro, 86, retired and President Raúl Castro, 81, leading a bureaucracy that is divided on the pace and scope of change, many have begun urging President Obama to go further and update American policy by putting a priority on assistance for Cubans seeking more economic independence from the government.¶ “Maintaining this embargo, maintaining this hostility, all it does is strengthen and embolden the hard-liners,” said Carlos Saladrigas, a Cuban exile and co-chairman of the Cuba Study Group in Washington, which advocates engagement with Cuba. “What we should be doing is helping the reformers.”¶ Any easing would be a gamble. Free enterprise may not necessarily lead to the embargo’s goal of free elections, especially because Cuba has said it wants to replicate the paths of Vietnam and China, where the loosening of economic restrictions has not led to political change. Indeed, Cuban officials have become adept at using previous American efforts to soften the embargo to their advantage, taking a cut of dollars converted into pesos and marking up the prices at state-owned stores.¶ And Cuba has a long history of tossing ice on warming relations. The latest example is the jailing of Alan Gross, a State Department contractor who has spent nearly three years behind bars for distributing satellite telephone equipment to Jewish groups in Havana.¶ In Washington, Mr. Gross is seen as the main impediment to an easing of the embargo, but there are also limits to what the president could do without Congressional action. The 1992 Cuban Democracy Act conditioned the waiving of sanctions on the introduction of democratic changes inside Cuba. The 1996 Helms-Burton Act also requires that the embargo remain until Cuba has a transitional or democratically elected government. Obama administration officials say they have not given up, and could move if the president decides to act on his own. Officials say that under the Treasury Department’s licensing and regulation-writing authority, there is room for significant modification. Following the legal logic of Mr. Obama’s changes in 2009, further expansions in travel are possible along with new allowances for investment or imports and exports, especially if narrowly applied to Cuban businesses.¶ Even these adjustments — which could also include travel for all Americans and looser rules for ships engaged in trade with Cuba, according to a legal analysis commissioned by the Cuba Study Group — would probably mean a fierce political fight. The handful of Cuban-Americans in Congress for whom the embargo is sacred oppose looser rules.¶ When asked about Cuban entrepreneurs who are seeking more American support, Representative Ileana Ros-Lehtinen, the Florida Republican who is chairwoman of the House Foreign Relations Committee, proposed an even tighter embargo.¶ “The sanctions on the regime must remain in place and, in fact, should be strengthened, and not be altered,” she wrote in an e-mail. “Responsible nations must not buy into the facade the dictatorship is trying to create by announcing ‘reforms’ while, in reality, it’s tightening its grip on its people.”¶ Many Cubans agree that their government cares more about control than economic growth. Business owners complain that inspectors pounce when they see signs of success and demand receipts to prove that supplies were not stolen from the government, a common practice here. One restaurant owner in Havana said he received a large fine for failing to produce a receipt for plastic wrap.¶ Cuban officials say the shortages fueling the black market are caused by the embargo. But mostly they prefer to discuss the policy in familiar terms. They take reporter after reporter to hospitals of frail infants, where American medical exports are allowed under a humanitarian exception. Few companies bother, however, largely because of a rule, unique to Cuba, requiring that the American companies do on-site monitoring to make sure products are not used for weapons.¶ “The Treasury Department is asking me, in a children’s hospital, if I use, for example, catheters for military uses — chemical, nuclear or biological,” said Dr. Eugenio Selman, director of the William Soler Pediatric Cardiology Center.¶ As for the embargo’s restriction on investment, Cuban officials have expressed feelings that are more mixed. At a meeting in New York in September with a group called Cuban Americans for Engagement, Cuba’s foreign minister, Bruno Rodríguez Parrilla, said business investment was not a priority.¶ “Today the economic development of Cuba does not demand investments of $100,000, $200,000, $300,000,” he said, according to the group’s account of the meeting. Rather, he called for hundreds of millions of dollars to expand a local port.¶ Owners of Cuba’s small businesses, mostly one-person operations at this point, say they know that the government would most likely find ways to profit from wider economic relations with the United States. The response to the informal imports that come from Miami in the suitcases of relatives, for instance, has been higher customs duties.¶ Still, in a country where Cubans “resolve” their way around government restrictions every day (private deals with customs agents are common), many Cubans anticipate real benefits should the United States change course. Mr. López, a meticulous mechanic who wears plastic gloves to avoid dirtying his fingers, said legalizing imports and investment would create a flood of the supplies that businesses needed, overwhelming the government’s controls while lowering prices and creating more work apart from the state.¶ Other Cubans, including political dissidents, say softening the embargo would increase the pressure for more rapid change by undermining one of the government’s main excuses for failing to provide freedom, economic opportunity or just basic supplies.¶ “Last month, someone asked me to redo their kitchen, but I told them I couldn’t do it because I didn’t have the materials,” said Pedro José, 49, a licensed carpenter in Havana who did not want his last name published to avoid government pressure.¶ “Look around — Cuba is destroyed,” he added, waving a hand toward a colonial building blushing with circles of faded pink paint from the 1950s. “There is a lot of work to be done.”

Nuclear War Probable

Blackman 09 (Christine Blackman, Science Writer Stanford News Service, Certificate in technical and professional writing San Francisco State University 2009, Chance of nuclear war is greater than you think: Stanford engineer makes risk analysis, July 2009, http://news.stanford.edu/news/2009/july22/hellman-nuclear-analysis-071709.html )

What are the chances of a nuclear world war? What is the risk of a nuclear attack on United States soil? \*The risk of a child born today suffering an early death due to nuclear war is at least 10 percent, according to Martin Hellman, a tall, thin and talkative Stanford Professor Emeritus in Engineering. \*Nuclear tensions in Iran and North Korea are increasing\* the need to take a long look at how the United States handles weapons of mass destruction, Hellman said. Auto manufacturers assess the risk of injury to drivers, and engineers assess potential risks of a new nuclear power plant. So why haven’t we assessed the risk of nuclear conflict based on our current arms strategy? Hellman and a group of defense experts, Nobel laureates and Stanford professors are calling for an

in-depth analysis. \*With more than 25,000 nuclear weapons in existence and the ability to build many times more, the choice is between creating a safer world and having no world at all\*\*,\* Hellman wrote in his paper “Risk Analysis of Nuclear Deterrence.” Weapons from the Cold War still remain, but public concern for nuclear strategy has dissipated, Hellman said. Many of those who do think about it, such as political leaders, say the fantasy of nuclear disarmament is too risky for national defense, he explained. \*“People who are saying change is too risky are implicitly assuming that the current approach is risk free, but no one really knows what the risk is if we don’t change,\*” Hellman said. Hellman first became concerned about nuclear war in the 1980s when Ronald Reagan became president. Reagan brought the nuclear threat into clearer focus by being honest about fighting plans, Hellman said. Also, a fellow Stanford professor, Harry Rathbun, started a group to convince people that nuclear weapons represented more than just scientific progress, but a real threat of global destruction. Hellman credited his wife, Dorothie, for getting him to join the group: “I never would have gotten involved if it wasn’t for her.” In 1982, Hellman took an 18-month, unpaid leave from Stanford to work as a volunteer for the group started by Rathbun. During this time, Hellman became convinced that nuclear destruction not only could happen, but would happen unless we changed some of our fundamental beliefs about national security and war. About fifteen years after Hellman became convinced of impending destruction, he began punching numbers to calculate the probability of such a catastrophe based on events focused around the Cuban Missile Crisis of 1962. According to Hellman’s numbers\*, the risk of a person not living out his or her natural life because of nuclear war is at least 10 percent\*\*.\* Hellman gives another analogy: “\*The risk that each one of us dies as a result of failed deterrence is thousands of times greater than the risk you would bear if a nuclear power plant were built right next to your home.”\* Determining such a risk seems a little like predicting the future, but Hellman is confident about his numbers. He justifies his probability by breaking down a catastrophe into a sequence of smaller failures, incorporating expert opinions, examining history and estimating within a range of numbers.

4. Any risk of extinction via nuclear weapons must be treated as certain

Schell 99 [Jonathan, Harold Willens Peace Fellow at the Nation Institute and acclaimed nuclear expert, Fate of the Earth and the Abolition, Stanford University Press, 1999. p 93-96]

To say that human extinction is a certainty would, of course, be a misrepresentation— just as it would be a misrepresentation to say that extinction can be ruled out. To begin with, we know that a holocaust may not occur at all. If one does occur, the adversaries may not use all their weapons. If they do use all their weapons, the global effects, in the ozone and elsewhere, may be moderate. And if the effects are not moderate but extreme, the ecosphere may prove resilient enough to withstand them without breaking down catastrophically. These are all substantial reasons for supposing that mankind will not be extinguished in a nuclear holocaust, or even that extinction in a holocaust is unlikely, and they tend to calm our fear and to reduce our sense of urgency. Yet at the same time we are compelled to admit that there may be a holocaust, that the adversaries may use all their weapons, that the global effects, including effects of which we are as yet unaware, may be severe, that the ecosphere may suffer catastrophic breakdown, and that our species may be extinguished. We are left with uncertainty, and are forced to make our decisions in a state of uncertainty. If we wish to act to save our species, we have to muster our resolve in spite of our awareness that the life of the species may not now in fact be jeopardized. On the other hand, if we wish to ignore the peril, we have to admit that we do so in the knowledge that the species may be in danger of imminent self-destruction. When the existence of nuclear weapons was made known, thoughtful people everywhere in the world realized that if the great powers entered into a nuclear-arms race the human species would sooner or later face the possibility of extinction. They also realized that in the absence of international agreements preventing it an arms race would probably occur. They knew that the path of nuclear armament was a dead end for mankind. The discovery of the energy in mass— of "the basic power of the universe"—and of a means by which man could release that energy altered the relationship between man and the source of his life, the earth. In the shadow of this power, the earth became small and the life of the human species doubtful. In that sense, the question of human extinction has been on the political agenda of the world ever since the first nuclear weapon was detonated, and there was no need for the world to build up its present tremendous arsenals before starting to worry about it. At just what point the species crossed, or will have crossed, the boundary between merely having the technical knowledge to destroy itself and actually having the arsenals at hand, ready to be used at any second, is not precisely knowable. But it is clear that at present, with some twenty thousand megatons of nuclear explosive power in existence, and with more being added every day, we have entered into the zone of uncertainty, which is to say the zone of risk of extinction. But the mere risk of extinction has a significance that is categorically different from, and immeasurably greater than, that of any other risk, and as we make our decisions we have to take that significance into account. Up to now, every risk has been contained within the frame of life; extinction would shatter the frame. It represents not the defeat of some purpose but an abyss in which all human purposes would be drowned for all time. We have no right to place the possibility of this limitless, eternal defeat on the same footing as risks that we run in the ordinary conduct of our affairs in our particular transient moment of human history. To employ a mathematical analogy, we can say that although the risk of extinction may be fractional, the stake is, humanly speaking, infinite, and a fraction of infinity is still infinity. In other words, once we learn that a holocaust might lead to extinction we have no right to gamble, because if we lose, the game will be over, and neither we nor anyone else will ever get another chance. Therefore, although, scientifically speaking, there is all the difference in the world between the mere possibility that a holocaust will bring about extinction and the certainty of it, morally they are the same, and we have no choice but to address the issue of nuclear weapons as though we knew for a certainty that their use would put an end to our species. In weighing the fate of the earth and, with it, our own fate, we stand before a mystery, and in tampering with the earth we tamper with a mystery. We are in deep ignorance. Our ignorance should dispose us to wonder, our wonder should make us humble, our humility should inspire us to reverence and caution, and our reverence and caution should lead us to act without delay to withdraw the threat we now pose to the earth and to ourselves.

In trying to describe possible consequences of a nuclear holocaust, I have mentioned the limitless complexity of its effects on human society and on the ecosphere— a complexity that sometimes seems to be as great as that of life itself. But if these effects should lead to human extinction, then all the complexity will give way to the utmost simplicity— the simplicity of nothingness. We— the human race— shall cease to be.