### Taiwan PIC

#### Counterplan: countries will prohibit the production of nuclear power except for Taiwan, which will continue the construction of their fourth nuclear power plant and keep the other three running.

### Energy DA

#### Taiwan’s economy is close to failing but safe now.

Yi-chu and Huang 9/5 Tsai Yi-chu and Frances Huang “UBS: Taiwan economy faces hard road to clear recovery in short term” September 5th 2016 Focus Taiwan News Channel <http://focustaiwan.tw/news/aeco/201609050013.aspx> JW

Taipei, Sept. 5 (CNA) It will be difficult for Taiwan's economy to stage a meaningful recovery in the short term since the country is suffering from insufficient domestic investment, Switzerland-based banking group UBS said Monday. Kevin Zhao, head of UBS's global sovereign, currency and fixed income division, said that people in Taiwan have a large chunk of savings but remain reluctant to invest in the domestic market to push up the real economy. According to the Directorate General of Budget, Accounting and Statistics (DGBAS), Taiwan's excess savings, the amount of savings that exceed planned investments, are expected to total NT$2.61 trillion (US$82.86) in 2016. At the same time, the excessive savings rate, the ratio of savings to the gross national income, is likely to hit a new high of 14.89 percent in 29 years. While domestic investments in Taiwan are slowing, Zhao said, Taiwanese are keen to move their funds overseas, imposing an adverse impact on the local economy. Data compiled by Taiwan's central bank showed that Taiwan registered a net outflow of US$15.4 billion in financial account, which measures the flow of direct investment and portfolio investments, in the second quarter of this year. It was the 24th consecutive quarter in which Taiwan has recorded a net financial account outflow. Zhao said that the current obstacles Taiwan's economy is faced with are likely to keep the country's economy weak over the next two years, so it is unlikely for the economy to have any immediate turnaround. Zhao said that he understood the local central bank has been trying to make the Taiwan dollar cheaper to boost the country's global competitive edge and strengthen its export performance in a bid to help the economy steam ahead. But, he said that the efforts to push down the Taiwan dollar will be limited since Taiwan is sitting on a large amount of foreign exchange reserves. As of the end of July, Taiwan's forex reserves hit a new record high of US$434.09 billion, marking the sixth consecutive month forex reserves have smashed the previous record. Zhao said that the central bank has a hard time using its financial tools to help the local economy. Taiwan heavily depends on the U.S. and China markets, but with the two major export markets becoming aged societies and their consumer structures changing as a result, Taiwan's export-oriented economy is expected to feel the pinch of the impact of such unfavorable circumstances. The Taiwan government appeared more upbeat, saying there have been signs that the local economy is improving. The DGBAS has raised its forecast for Taiwan's economic growth to 1.22 percent from an earlier estimate of a 1.06 percent increase.

#### Lack of domestic energy production in Taiwan is spurring an energy crisis that will damage the economy.

Liao and Jhou 13 Huei-Chu Liao and Sih Ting Jhou “Taiwan’s Severe Energy Security Challenges” Brookings September 12th 2013 <https://www.brookings.edu/opinions/taiwans-severe-energy-security-challenges/> JW

A brawl among legislators in Taiwan’s legislative chamber on August 2 underlined the practical, political, and even emotional challenges of energy security for the island. The legislators were fighting over plans for a public referendum on the Fourth Nuclear Power Plant (4NPP), which is currently the focus of the energy security challenge in Taiwan―but the problem extends far beyond this single issue. Taiwan depends on imports for near 98 percent of its energy consumption, and almost all of that is fossil fuels from turbulent areas such as the Middle East. This creates not only strategic vulnerability, but also economic risks. Energy imports increased from 3.88 percent of Taiwan’s GDP in 2002 to 14.55 percent in 2012. Most people, however, do not feel the severity of the situation as two national own companies control the retail energy price as part of Taiwan’s economy stabilization strategy. The frozen electricity price has induced significant losses for the Taiwan Power Company (Taipower) with NT$1,341 billion (around US$45 billion) accumulated liability at the end of 2012. This article illustrates Taiwan’s energy security challenges, describes trends in Taiwan’s energy usage and supply, and finally assesses policy solutions that have been proposed by Taiwan’s government. Severe energy challenges Taiwan’s current energy practices are, in many ways, unsustainable. The reliance on imported energy, expensive subsidies, high-volume greenhouse gas emissions, lack of advanced technology, and lack of international cooperation combine to create an impending energy crisis for Taiwan.

#### Taiwan needs nuclear power- otherwise they won’t have any reliable sources of energy.

Shapiro 13 Don “Taiwan Economy: Near-term Uptick, Longer-term Challenges” Brookings March 11th 2013 <https://www.brookings.edu/opinions/taiwan-economy-near-term-uptick-longer-term-challenges/> JW

The issue of energy security may be coming to a head later this year as the government has agreed to the opposition party’s calls for a national referendum on whether Taiwan should continue with nuclear-power development. The vote will determine whether a fourth nuclear plant, construction of which is nearing completion after numerous delays, would be allowed to become operational. Japan’s Fukushima disaster of 2011 lent added momentum to what was already a strong anti-nuclear movement in Taiwan. Risks regarding nuclear safety will need to be weighed against the risk of serious power shortages and substantially higher electricity costs if Taiwan abandons the nuclear option. Nuclear power currently accounts for about 17 percent of the electricity generated in Taiwan, and President Ma has already stated that the existing three nuclear plants will be decommissioned when their authorized 40-year lifespans expire between 2018 and 2025. Without a new nuclear plant or extension of the old ones, it is questionable whether Taiwan has feasible options for meeting its energy needs. Renewable sources such as solar and wind energy are not sufficient to take up that slack, coal-fired plants face opposition on environmental grounds, and heavy reliance on liquefied natural gas (LNG) – which is highly expensive to transport and store – could be so expensive as to undermine Taiwan industry’s competitiveness.

### Impact: Warming

#### Taiwan’s economy is key to innovative solutions to climate change.

Michelle Winglee 15, Researcher at the Carnegie Endowment for International Peace, 12/2/2015, “No Seat at the Table: Taiwan and the Global Fight Against Climate Change”, http://thediplomat.com/2015/12/no-seat-at-the-table-taiwan-and-the-global-fight-against-climate-change/

As over 150 nations meet for the 21st session of the Conference of Parties (COP21) climate talks in Paris this week, all eyes are on the United States and China. Many forget about Taiwan, a subtropical island intensely vulnerable to the impacts of climate change that will not be present around the negotiating table. The impact of being effectively left out of the international dialogue on climate change has repercussions on the politics and lives of the 23 million people of Taiwan, as well as the international community. Located off the southeastern coast of mainland China, Taiwan is hit by an average of four typhoons per year. Typhoon Morakot in 2009 was particularly devastating, killing over 500 people with three meters of rainfall within four days. “The weather type has changed in the past 20 years,” Eugene Chien of the Taiwan Institute for Sustainable Energy told a group of international reporters visiting the NGO as part of a Taiwanese government-organized delegation to boost awareness of Taiwan’s green initiatives in the lead up to Paris. In addition to heavier rainfalls, stronger typhoons, and vulnerabilities to coastal flooding, Taiwan’s National Weather Bureau has also reported longer dry seasons and a rise in average temperatures by 1.6 degrees Celsius since 1901 — higher than the global average. “All the climate changes show up in Taiwan so we must be prepared for the climate change influence,” says Chien. Though not a member of the United National Framework Convention on Climate Change (UNFCCC), Taiwan still declared its intended nationally determined contribution (INDC) in the lead up to the Paris climate talks. Taiwan’s greenhouse gas reduction goal aims to reduce emissions by 20 percent below 2005 levels by 2030. Equivalent to a 50 percent reduction from 2030 business-as-usual levels, the target is ambitious compared to its economic competitor South Korea’s goal of a 37 percent cut in business-as-usual emissions. However, Taiwan was not allowed to submit its INDC due to complications over its recognition as a country. Taiwan has not been a member of the United Nations since 1971, when the People’s Republic of China took over China’s seat in the international body. “Taiwan’s failure to participate on climate change in the international arena is a big issue,” said Yeh Junrong, a professor of environmental law at National Taiwan University who helped draft Taiwan’s recent bill on greenhouse gas emissions. Taiwan is only allowed to participate in peripheral events as a UNFCCC NGO observer. Being left out of the international discussion on climate change has had its effect on domestic politics. “In the area of climate change Taiwan needs more international linkage,” said Yeh, adding that “being a part of international discussions forces the government and different departments to think deeper about climate change.” While Yeh acknowledged the positive step in creating an emission reductions target for the UNFCCC in spite of not being required to set one, he noted that the topic of carbon reductions had yet to make a cabinet level meeting. Earlier this year, in June, Taiwan’s government passed a Greenhouse Gas Reduction and Management Act, setting out a goal to cut carbon emissions by 50 percent of 2005 levels by 2050, adding new regulation on greenhouse gasses, and moving the economy towards a domestic carbon market. Though the Green House Gas Emission and Reduction Act did make it past a bipartisan vote, Yeh pointed out that it only passed after nine years of sitting on legislative sidelines. He also voiced his opinion that the primary reason the act finally passed was so that Taiwan could bolster its case for official observer status at the climate talks in Paris rather than out of true political will to tackle climate change. “Compared to environmental issues, the government does not recognize climate change as a serious problem,” said Yeh. He noted that Taiwan’s success in implementing environmental policies, cleaning up once smog-filled skies and polluted waterways, was largely domestically driven and tied to Taiwan’s process of democratization. However, “climate does not provide the same momentum for change,” said Yeh, citing the greater need for international pressure and connection. Yeh also commented on how frequent elections and party turnover prevented the government from being held accountable for long term commitments. Even without international linkages to hold Taiwan accountable, Yeh hopes to see a concrete three-year mitigation strategy as well as a more holistic approach to emissions reductions and adaptation strategies that incorporates the energy sector and industrial structure. “The true test will be in the follow up to Paris,” he said. Beyond shaping domestic politics on climate change, Taiwan’s push to gain observer status in the UNFCCC is rooted in deeper insecurities. In addition to natural disasters, Taiwan faces the risk of being isolated from the international community, particularly stymieing in an era of connectivity and global trade. Since joining the World Trade Organization (WTO) in 2002, in which the Taiwanese economy benefited immensely from reduced tariffs, Taiwan has only pulled off a handful of Free Trade Agreements due to the repercussions trade partners face from mainland China over recognizing Taiwan. Taiwan has also not been granted membership to the current Trans-Pacific Partnership trade deal, though it is actively courting participation. In an economy where nearly 30 percent of economic output is composed of exports, being left out of the global network hits Taiwan hard. For the past decade Taiwan’s wages have stagnated and its projected economic growth sits at 1.06 percent this year. Exclusion from trade pacts not only puts Taiwanese exports at a disadvantage – especially given the tightly woven nature of the Asian production assembly line – it also means that Taiwan has not been compelled to take on the domestic reforms that could increase Taiwan’s competitiveness, such as opening its services sector to greater competition and investment. Despite the economic challenges that Taiwan faces, Yeh also emphasized Taiwan’s potential. “The world should not overlook Taiwan’s contributions to international trade and [its] potential to be a part of the global solution on climate change,” said Yeh who sees innovation in the climate change arena as part of Taiwan’s growth solution. “Trade can be a double dividend that can help the economy and environment as well,” said Shih-Fang Lo, Supervisor of Taiwan’s Green Trade Project Office, an office within Taiwan’s Ministry of Economic Affairs designed to promote Taiwan’s green exports, worth 14 percent of Taiwan’s total exports. Taiwan’s contributions include its role as the second largest global producer of solar cells by value added and as one of the top manufacturing countries for LED lighting. In addition, Taiwan has won R&D 100 Awards for technologies like its High-Efficiency Calcium Looping Technology which captures carbon dioxide for microalgae cultivation farms. It also boasts one of the most efficient recycling systems in the world, with a municipal waste recycling rate above the Netherlands, the U.K., and the United States. Yeh also noted Taiwan’s influence on neighboring mainland China. “They learn from Taiwan,” said Yeh, “when China’s looking for an international example for regulations on air quality or recycling they look to Taiwan… it’s already in Chinese.” Though it is too late for Taiwan to be included in this round of climate change dialogues, Yeh remains optimistic about the future. With a presidential election set for January 2016 and a likely turnover from the ruling Kuomintang (KMT) to the Democratic Progressive Party (DPP), Yeh hopes there will be more concrete action on climate change. However, he also added, “I place my hopes on society, not a leader.” Yeh maintains that the momentum for climate change policy will need to develop domestically. “I really think that we can provide a good example of how a medium sized economy can transform and turn negatives of climate change into positives because we’ve learned how to deal with this issue.” In the meantime, the world will have to decide whether or not Taiwan and its experiences will be included in the next round of international climate talks.

#### Warming is real, anthropogenic, and causes extinction.

Jamail 15 Dahr “Mass Extinction: It's the End of the World as We Know It” July 6 2015 Truthout <http://www.truth-out.org/news/item/31661-mass-extinction-it-s-the-end-of-the-world-as-we-know-it> JW

Guy McPherson is a professor emeritus of evolutionary biology, natural resources and ecology at the University of Arizona, and has been a climate change expert for 30 years. He has also become a controversial figure, due to the fact that he does not shy away from talking about the possibility of near-term human extinction. While McPherson's perspective might sound like the stuff of science fiction, there is historical precedent for his predictions. Fifty-five million years ago, a 5-degree Celsius rise in average global temperatures seems to have occurred in just 13 years, according to a study published in the October 2013 issue of the Proceedings of the National Academy of Sciences. A report in the August 2013 issue of Science revealed that in the near term, earth's climate will change 10 times faster than during any other moment in the last 65 million years. McPherson fears that we are well along in the process of causing our own extinction. Prior to that, the Permian mass extinction that occurred 250 million years ago, also known as the "Great Dying," was triggered by a massive lava flow in an area of Siberia that led to an increase in global temperatures of 6 degrees Celsius. That, in turn, caused the melting of frozen methane deposits under the seas. Released into the atmosphere, those gases caused temperatures to skyrocket further. All of this occurred over a period of approximately 80,000 years. The change in climate is thought to be the key to what caused the extinction of most species on the planet. In that extinction episode, it is estimated that 95 percent of all species were wiped out. Today's current scientific and observable evidence strongly suggests we are in the midst of the same process - only this time it is anthropogenic, and happening exponentially faster than even the Permian mass extinction did. In fact, a recently published study in Science Advances states, unequivocally, that the planet has officially entered its sixth mass extinction event. The study shows that species are already being killed off at rates much faster than they were during the other five extinction events, and warns ominously that humans could very likely be among the first wave of species to go extinct. So if some feel that McPherson's thinking is extreme, when the myriad scientific reports he cites to back his claims are looked at squarely and the dots are connected, the perceived extremism begins to dissolve into a possible, or even likely, reality. The idea of possible human extinction, coming not just from McPherson but a growing number of scientists (as well as the aforementioned recently published report in Science), is now beginning to occasionally find its way into mainstream consciousness. "A Child Born Today May Live to See Humanity's End, Unless ..." reads a recent blog post title from Reuters. It reads: Humans will be extinct in 100 years because the planet will be uninhabitable, according to Australian microbiologist Frank Fenner, one of the leaders of the effort to eradicate smallpox in the 1970s. He blames overcrowding, denuded resources and climate change. Fenner's prediction is not a sure bet, but he is correct that there is no way emissions reductions will be enough to save us from our trend toward doom. And there doesn't seem to be any big global rush to reduce emissions, anyway. McPherson, who maintains the blog "Nature Bats Last," told Truthout, "We've never been here as a species and the implications are truly dire and profound for our species and the rest of the living planet." Truthout first interviewed McPherson in early 2014, at which time he had identified 24 self-reinforcing positive feedback loops triggered by human-caused climate disruption. Today that number has grown to more than 50, and continues to increase. A self-reinforcing positive feedback loop is akin to a "vicious circle": It accelerates the impacts of anthropogenic climate disruption (ACD). An example would be methane releases in the Arctic. Massive amounts of methane [is] are currently locked in the permafrost, which is now melting rapidly. As the permafrost melts, methane - a greenhouse gas 100 times more potent than carbon dioxide on a short timescale - is released into the atmosphere, warming it further, which in turn causes more permafrost to melt, and so on. As soon as this summer, we are likely to begin seeing periods of an ice-free Arctic. (Those periods will arrive by the summer of 2016 at the latest, according to a Naval Postgraduate School report.) Once the summer ice begins melting away completely, even for short periods, methane releases will worsen dramatically. Is it possible that, on top of the vast quantities of carbon dioxide from fossil fuels that continue to enter the atmosphere in record amounts yearly, an increased release of methane could signal the beginning of the sort of process that led to the Great Dying? McPherson, like the scientists involved in the recent study that confirms the arrival of the sixth great extinction, fears that the situation is already so serious and so many self-reinforcing feedback loops are already in play that we are well along in the process of causing our own extinction. Furthermore, McPherson remains convinced that it could happen far more quickly than generally believed possible - in the course of just the next few decades, or even sooner.

### Impact: Global Econ

#### Taiwan’s key to global economy and international peace.

Pei-chun and Kao 9/20 Tang Pei-chun and Evelyn Kao “Taiwan's economy vital to world trade: WTO official” Focus Taiwan News Channel September 20th 2016 <http://focustaiwan.tw/news/aeco/201609200029.aspx> JW

Taipei, Sept. 20 (CNA) Taiwan's economic activity is very important to global trade integration, while booming global trade will help bring peace to the world, a World Trade Organization (WTO) official said in Taipei Tuesday. Victor do Prado, director of the Council and Trade Negotiations Committee Division at the WTO, told the media that promoting economic and trade relations among its members is the WTO's core business and that trade not only increases prosperity in countries, but also has been shown to promote world peace. Prado said that since the WTO was established in 1995, the world has undergone rapid growth in the areas of innovation, globalization and technology development. Prado made the comments after he delivered a keynote speech titled "Trade in a Troubled World -- Can the WTO Help?" at the Center for Integrative Environmental Research (CIER) earlier in the day. The former Brazilian diplomat said that Taiwan's economic activity is fairly important to global trade integration and that he was surprised at the massive amount of trade between Taiwan and Brazil, adding that the two countries should continue to promote it. Brazil is Taiwan's top partner in Latin America, with bilateral trade reaching US$3.05 billion in 2015, according to official data. Asked about his views on whether the Taiwanese government's promotion of its "new southbound policy," which is aimed at enhancing trade and economic relations with countries in Southeast Asia, will affect its push for economic and trade ties with China, Prado said that its members are free to choose which countries they want to carry out trade with, as long as their deals are made in line with WTO rules. He added that his current visit in Taiwan is aimed at drumming up support for a multilateral WTO trade system.

#### Economic decline and volatility heightens the risk of nuclear global conflict.

Burrows and Harris 9 - Counselor in the National Intelligence Council, Member at the National Intelligence Council - 2009 (Mathew J. Burrows, Global Trends 2025: A Transformed World—an unclassified report by the NIC published every four years

Of course, the report encompasses more than economics and indeed believes the future is likely to be the result of a number of intersecting and interlocking forces. With so many possible permutations of outcomes, each with ample [end page 35] opportunity for unintended consequences, there is a growing sense of insecurity.Even so, history may be more instructive than ever.While we continue to believe that the Great Depression is not likely to be repeated, the lessons to be drawn from that period include the harmful effects on fledgling democracies and multiethnic societies (think Central Europe in 1920s and 1930s) and on the sustainability of multilateral institutions (think League of Nations in the same period). There is no reason to think that this would not be true in the twenty-first as much as in the twentieth century. For that reason, the ways in which the potential for greater conflict could grow would seem to be even more apt in a constantly volatile economic environment as they would be if change would be steadier. In surveying those risks, the report stressed the likelihood that terrorism and nonproliferation will remain priorities even as resource issues move up on the international agenda. Terrorism’s appeal will decline if economic growth continues in the Middle East and youth unemployment is reduced. For those terrorist groups that remain active in 2025, however, the diffusion of technologies and scientific knowledge will place some of the world’s most dangerous capabilities within their reach. Terrorist groups in 2025 will likely be a combination of descendants of long established groups—inheriting organizational structures, command and control processes, and training procedures necessary to conduct sophisticated attacks—and newly emergent collections of the angry and disenfranchised that become self-radicalized, particularly in the absence of economic outlets that would become narrower in an economic downturn. The most dangerous casualty of any economically-induced drawdown of U.S. military presence would almost certainly be the Middle East. Although Iran’s acquisition of nuclear weapons is not inevitable, worries about a nuclear-armed Iran could lead states in the region to develop new security arrangements with external powers, acquire additional weapons, and consider pursuing their own nuclear ambitions. It is not clear that the type of stable deterrent relationship that existed between the great powers for most of the Cold War would emerge naturally in the Middle East with a nuclear Iran. Episodes of low intensity conflict and terrorism taking place under a nuclear umbrella could lead to an unintended escalation and broader conflict if clear red lines between those states involved are not well established. The close proximity of potential nuclear rivals combined with underdeveloped surveillance capabilities and mobile dual-capable Iranian missile systems also will produce inherent difficulties in achieving reliable indications and warning of an impending nuclear attack. The lack of strategic depth in neighboring states like Israel, short warning and missile flight times, and uncertainty of Iranian intentions may place more focus on preemption rather than defense, potentially leading to escalating crises. [end page 36] Types of conflict that the world continues to experience, such as over resources, could reemerge, particularly if protectionism grows and there is a resort to neo-mercantilist practices. Perceptions of renewed energy scarcity will drive countries to take actions to assure their future access to energy supplies. In the worst case, this could result in interstate conflicts if government leaders deem assured access to energy resources, for example, to be essential for maintaining domestic stability and the survival of their regime. Even actions short of war, however, will have important geopolitical implications. Maritime security concerns are providing a rationale for naval buildups and modernization efforts, such as China’s and India’s development of blue water naval capabilities. If the fiscal stimulus focus for these countries indeed turns inward, one of the most obvious funding targets may be military. Buildup of regional naval capabilities could lead to increased tensions, rivalries, and counterbalancing moves, but it also will create opportunities for multinational cooperation in protecting critical sea lanes. With water also becoming scarcer in Asia and the Middle East, cooperation to manage changing water resources is likely to be increasingly difficult both within and between states in a more dog-eat-dog world.

### Impact: Tech Leadership

#### Economic stability is key to Taiwanese semiconductor exports.

Chen Hui-ping 16 Staff writer at the Taipei Times, 3/4/2016, “Tsai pledges action in semiconductor industry”, http://www.taipeitimes.com/News/front/archives/2016/03/04/2003640767

The government must take a more active role in helping the semiconductor industry if the nation expects to maintain its advantage in the field, president-elect Tsai Ing-wen (蔡英文) said yesterday during a tour of industries at the Hsinchu Science Park (新竹科學園區). Tsai cited China’s supply chain in the industry as the greatest competition, adding that Taiwan needs to foster its own talent while creating an environment that would retain talent in the industry. Tsai said that she had not specifically included the semiconductor industry in her research and development plan in the five innovative industries. The semiconductor industry will prove mutually beneficial with the five innovative industries — green energy, “Asian Silicon valley,” national defense, biotechnology and medicine and smart machinery — as it will provide the impetus for research and development, while benefiting from applications in different technologies, she said. They will serve to pull along the other industries within their supply chains, just as a locomotive pulls carriages, Tsai said. The government must become more active if the nation wishes to maintain its edge and it must form partnerships with corporations, Tsai said, adding that the incoming government pledges stable water and electricity supplies, as well as land, for companies to manufacture products. Coordinating Taiwan’s expertise with that of other nations, such as software in the US, as well as industries in Japan that supply key components, could solidify the nation’s foothold in foreign markets, with a chance of becoming a major supply center for information and communications technology products on a global scale, Tsai said. Meanwhile, Etron Technology president Nicky Lu (盧超群) said that the government should seek to manage Chinese investment in Taiwanese information and communication design industries, rather than stonewalling Chinese investors. The Taiwan Semiconductor Industry Association, which Lu chairs, polled member companies on allowing Chinese investment in the Taiwanese integrated circuit (IC) design industry, with a majority backing the idea, Lu said.

#### Semiconductors key to US Tech leadership

Ian Easton 16, Visiting fellow at the Japan Institute for International Affairsin Tokyo. Previously a China analyst at the Center for Naval Analyses, March 2016, “Strategic Standoff The U.S.-China Rivalry and Taiwan”, http://www.project2049.net/documents/Strategic%20Standoff\_US\_China\_Rivalry\_Taiwan.pdf

Taiwan is currently America's ninth largest trading partner, ahead of Saudi Arabia, India, and Brazil.32 The Taiwanese excel when it comes to researching, designing, and manufacturing the advanced technology that drives much of America's economy. Integrated circuits (or microchips) are the brains of our handheld devices and computers. The global chip making business as we know it was invented by Taiwan in the 1980s, and the high-tech island nation still occupies a strong position on the global supply chain. However, the PRC is rapidly catching up, something that poses a serious threat to the security of the world's hardware.33 America needs Taiwan as a "Silicon Shield," keeping the technology of tomorrow from being controlled and corrupted by an adversary.

#### Tech leadership key to heg

Adam Segal 4, Researcher for the Council on Foreign Relations, November/December 2004, Foreign Affairs, “Is America Losing Its Edge?”, https://www.foreignaffairs.com/articles/united-states/2004-11-01/america-losing-its-edge

The United States' global primacy depends in large part on its ability to develop new technologies and industries faster than anyone else. For the last five decades, U.S. scientific innovation and technological entrepreneurship have ensured the country's economic prosperity and military power. It was Americans who invented and commercialized the semiconductor, the personal computer, and the Internet; other countries merely followed the U.S. lead. Today, however, this technological edge-so long taken for granted-may be slipping, and the most serious challenge is coming from Asia. Through competitive tax policies, increased investment in research and development (R&D), and preferential policies for science and technology (S&T) personnel, Asian governments are improving the quality of their science and ensuring the exploitation of future innovations. The percentage of patents issued to and science journal articles published by scientists in China, Singapore, South Korea, and Taiwan is rising. Indian companies are quickly becoming the second-largest producers of application services in the world, developing, supplying, and managing database and other types of software for clients around the world. South Korea has rapidly eaten away at the U.S. advantage in the manufacture of computer chips and telecommunications software. And even China has made impressive gains in advanced technologies such as lasers, biotechnology, and advanced materials used in semiconductors, aerospace, and many other types of manufacturing. Although the United States' technical dominance remains solid, the globalization of research and development is exerting considerable pressures on the American system. Indeed, as the United States is learning, globalization cuts both ways: it is both a potent catalyst of U.S. technological innovation and a significant threat to it. The United States will never be able to prevent rivals from developing new technologies; it can remain dominant only by continuing to innovate faster than everyone else. But this won't be easy; to keep its privileged position in the world, the United States must get better at fostering technological entrepreneurship at home.

#### Heg solves every impact. Decline causes extinction.

Barnett 11 Thomas (Former Senior Strategic Researcher and Professor in the Warfare Analysis & Research Department, Center for Naval Warfare Studies, U.S. Naval War College American military geostrategist and Chief Analyst at Wikistrat., worked as the Assistant for Strategic Futures in the Office of Force Transformation in the Department of Defense) “The New Rules: Leadership Fatigue Puts U.S., and Globalization, at Crossroads,” March 7 2011 World Politics Review http://www.worldpoliticsreview.com/articles/8099/the-new-rules-leadership-fatigue-puts-u-s-and-globalization-at-crossroads

Let me be more blunt: As the guardian of globalization, the U.S. military has been the greatest force for peace the world has ever known. Had America been removed from the global dynamics that governed the 20th century, the mass murder never would have ended. Indeed, it's entirely conceivable there would now be no identifiable human civilization left, once nuclear weapons entered the killing equation. But the world did not keep sliding down that path of perpetual war. Instead, America stepped up and changed everything by ushering in our now-perpetual great-power peace. We introduced the international liberal trade order known as globalization and played loyal Leviathan over its spread. What resulted was the collapse of empires, an explosion of democracy, the persistent spread of human rights, the liberation of women, the doubling of life expectancy, a roughly 10-fold increase in adjusted global GDP and a profound and persistent reduction in battle deaths from state-based conflicts. That is what American "hubris" actually delivered. Please remember that the next time some TV pundit sells you the image of "unbridled" American military power as the cause of global disorder instead of its cure. With self-deprecation bordering on self-loathing, we now imagine a post-American world that is anything but. Just watch who scatters and who steps up as the Facebook revolutions erupt across the Arab world. While we might imagine ourselves the status quo power, we remain the world's most vigorously revisionist force. As for the sheer "evil" that is our military-industrial complex, again, let's examine what the world looked like before that establishment reared its ugly head. The last great period of global structural change was the first half of the 20th century, a period that saw a death toll of about 100 million across two world wars. That comes to an average of 2 million deaths a year in a world of approximately 2 billion souls. Today, with far more comprehensive worldwide reporting, researchers report an average of less than 100,000 battle deaths annually in a world fast approaching 7 billion people. Though admittedly crude, these calculations suggest a 90 percent absolute drop and a 99 percent relative drop in deaths due to war. We are clearly headed for a world order characterized by multipolarity, something the American-birthed system was designed to both encourage and accommodate. But given how things turned out the last time we collectively faced such a fluid structure, we would do well to keep U.S. power, in all of its forms, deeply embedded in the geometry to come. To continue the historical survey, after salvaging Western Europe from its half-century of civil war, the U.S. emerged as the progenitor of a new, far more just form of globalization -- one based on actual free trade rather than colonialism. America then successfully replicated globalization further in East Asia over the second half of the 20th century, setting the stage for the Pacific Century now unfolding.

# 2NR Frontlines

## Energy F/L

### Nuke Power Key

#### Nuclear power is Taiwan’s only option.

Stromberg 15 Stephen “The world can’t shun nuclear power” Washington Post May 1st 2015 https://www.washingtonpost.com/opinions/powering-taiwans-future/2015/05/01/589f04ae-ef7f-11e4-a55f-38924fca94f9\_story.html?utm\_term=.0945e880b07d JW

TAIPEI Tackling climate change using all the technologies we have will be hard enough. Trying to do it while swearing off nuclear power would be plainly ridiculous. That’s the lesson from Taiwan, a densely packed island state with few natural resources and a rising aversion to reactors. Taiwan “cannot really be picky about energy,” President Ma Ying-jeou told me in an interview this week. But the Taiwanese behave as though they can. Taiwan faces many constraints, some natural, some self-imposed, explained Chien You-hsin, a former environmental minister: Most people understand that greenhouse-gas emissions warm the planet, but they fear nuclear power, refuse to live near onshore wind turbines, insist that offshore wind platforms not disturb aquatic habitats and lack wide-open spaces for solar generation. Meanwhile, the biggest share of the island’s electricity comes from burning dirty coal. In one key way, the Taiwanese attitude resembles that of people in Japan and Germany: Their advanced economies depend on abundant energy, but they recoil from the choices that reality entails, with counterproductive results. Taiwan imports about 98 percent of its energy supplies, mostly the fossil fuels that keep its fluorescent streetscapes flashing and its many factories humming. It burns lots of coal and large amounts of natural gas, which is cleaner than coal but still produces carbon-dioxide emissions. Relying on fossil fuels also makes the island vulnerable: Its shipped-in supplies could run dangerously low in a major storm, Ma said. The small island — it is slightly smaller than Maryland and Delaware combined — can’t produce more than a meager amount of hydropower. Solar power not only requires lots of area but also is not as much help during the rainy season. Taiwan has between 300 and 400 onshore wind turbines, but siting restrictions will make it difficult to add many more, according to Wang Ren-chain of the Industrial Technology Research Institute, a state-supported research group. His outfit is looking at installing offshore turbines, but that technology presents ecological concerns and is expensive. New technology might ease the constraints, eventually. But, for now, even if the government meets its deployment goals by 2030, renewable energy would generate only about 12 percent of the island’s electricity, the institute reckons. That leaves nuclear power. Three nuclear plants currently provide 18 percent of Taiwan’s electricity. They don’t require large-scale fuel imports and produce virtually no carbon emissions. Unsurprisingly, the government concluded that the island needs more of them, and Taiwan began work on a fourth station that would house two reactors and supply some 9 percent of the island’s electricity. Work was nearly finished on the first reactor when the government halted the project last year in response to huge street protests. Now, with a large investment made, the reactor sits unused, waiting for the island to have the sense to insert the fuel rods. Ma insisted that the government hasn’t scrapped the project. It can be activated in short order if future conditions demand. It’s hard to see how they wouldn’t. Yet in the same breath he declared that the government’s ultimate goal is a full transition off nuclear power. What Ma says also might not matter much; the anti-nuclear opposition party is poised to do well in presidential elections next year, and whoever’s in charge will be constrained by the public mood.

### AT: Renewables Solve

#### Renewables won’t solve.

Liao and Jhou 13 Huei-Chu Liao and Sih Ting Jhou “Taiwan’s Severe Energy Security Challenges” Brookings September 12th 2013 <https://www.brookings.edu/opinions/taiwans-severe-energy-security-challenges/> JW

2. Unlikely mission for 100 percent renewable energy Many people in Taiwan hope that development of renewable energy will solve the island’s energy problem, and environmental groups are pushing the government to pursue the 100 percent renewable energy use in the future. In 2012, the relative share of renewable energy accounted for only 1.89 percent of Taiwan’s total energy supply; biomass and waste accounted for 1.32 percent, conventional hydro power 0.38 percent, solar photovoltaic (PV) and wind power 0.11 percent, and solar thermal 0.08 percent (see Figure 1). Among renewable sources, the Taiwan government currently prioritizes wind and solar power, but both face development obstacles. Although the generation cost of wind power is competitive with that of traditional fossil energy, Taiwan’s terrain and small size limit suitable locations for building up onshore wind power facilities. In fact, complaints and protests from areas that already host wind power facilities are increasing. Offshore wind power also faces challenges; fishermen and coastal area environmental protection groups have raised many questions and concerns. Currently, no offshore wind power sites have been built. The development of solar power is also problematic. The generation cost of solar PV power is two to three times that of fossil energy. People in Taiwan are unlikely to accept yet another increase in electricity prices that a shift to solar power would entail. As with wind power, land limitation is another constraint for building more solar PV. The intermittent characteristics of both wind and solar power present yet another complication. Intermittent power supply will reduce the power supply reliability, which is particularly unacceptable for many high technology industries such as the electronic products industry which is important to Taiwan’s economy. Taiwan is an island, and the physical isolation makes intermittent power even more unfavorable. It is impossible for Taiwan to sell or buy power to balance the surplus or shortage of intermittent power supply. Except for wind, solar, hydro-power (which accounts for a very small share), most of the other potential sources of renewable energy remain in the research or demonstration stages. Ocean energy and deep geothermal energy are two sources that could be beneficial for Taiwan, but they need to be developed. In brief, the poor economic, environmental and geographic conditions in Taiwan limit the possibilities for renewable energy, and it will be all but impossible to reach the aim of 100 percent renewable energy use before 2050.

### K2 Global Economy

#### Taiwan’s key to global economy.

Chang 13 Ta-Tung Jacob Chang “The importance of US-Taiwan economic relations” The Hill August 23rd 2013 <http://thehill.com/opinion/op-ed/312985-the-importance-of-us-taiwan-economic-relations> JW

Taiwan is one of the most dynamic nations in Asia. Taiwan shows how it is possible to use market-oriented policies to transform from a developing, largely agrarian economy to an industrial and high-tech, knowledge-based economic powerhouse. Its experience has inspired many other developing countries in the world to adopt domestic reforms and actively participate in global trade. While Taiwan is one of the key players that contribute to the buoyant economic growth in Asia, its participation in the regional free trade arrangement boom during the last decade has just been catching up.

## AT: Taiwan War

### Frontline

#### No Taiwan war; relations check

**Paal 12**

<Douglas Paal (vice president for studies at the Carnegie Endowment for International Peace), 6/12/12, "Taiwan: Outlook for Cross-Strait Relations," http://carnegieendowment.org/2012/06/12/taiwan-outlook-for-cross-strait-relations/bkih>

**With the inauguration of** Taiwan President **Ma** Ying-jeou for his second and final four-year term in May, **cross-strait relations appear more stable than they have been in** more than **sixty years**. That does not mean, however, that observers should expect further big steps to improve relations between Taipei and Beijing. We are entering an era of limited aspirations and restrained expectations. On the home front, by contrast, Ma announced in his inaugural address an ambitious reform program that is already encountering some stiff resistance. Ma repeated his campaign promise calling for a “golden decade” built on five pillars of reform: economic transformation, creating employment and realizing social justice, green energy, invigorating culture, and development of Taiwan’s most important resource, its human talent. In cross-strait relations, the outlook is only for incremental improvements. **Taiwan expects** to expand its **preferential trade arrangements with the mainland**, establish representative offices on the mainland and Taiwan to manage relations, complete an investment protection agreement, expand educational opportunities in both directions, and advance cooperation against crime. Despite their limited scope, these will be politically sensitive and tricky to implement without triggering negative reactions.

#### Won’t escalate

Pike 4

<John Pike, Global Security, “China’s Options in the Taiwan Confrontation”, 2004, http://www.globalsecurity.org/military/ops/taiwan-prc.htm>

**China would** almost certainly **not contemplate a nuclear strike against Taiwan, nor would Beijing embark on** a course of **action that posed** significant **risks of the use of nuclear weapons. The mainland's** long term **goal is to liberate Taiwan, not to obliterate it, and any use of nuclear weapons** by China **would run a substantial risk of the use of nuclear weapons by the U**nited **S**tates. An inability to control escalation beyond "demonstrative" detonations would cause utterly disproportionate destruction.

#### No Taiwan war. Multiple checks on both sides.

**Bhakal 12**

<Maitreya Bhakal, 1/24/12, "Five reasons why China will not invade Taiwan, and an analysis of Cross-strait Relations," http://blog.hiddenharmonies.org/2012/01/china-taiwan-america-us-cross-strait-relations-invade-five-reasons/>

Journalists and analysts never forget to dutifully remind us that China has not “ruled out” the use of force against Taiwan. What they do not remind us with such regularity however, is that the **Chinese leadership has** regularly **stressed** that they seek **peaceful reunification** of Taiwan with the mainland. China has deployed, they say, 1500 missiles targeting Taiwan (or 2000, if one is feeling so inclined), due to which Taiwan should be regularly supplied with US arms to enable it to defend itself. They find the subtle politics of China’s missile deployments beyond the scope of their understanding. What they also fail to address is why China should redeploy or dismantle a major part of its defense arsenal (and one that faces the South China Sea and defends China’s most populated areas) just to placate Taiwan and US hawks. Moreover, even if the missiles were withdrawn, they could be redeployed at any time. These missiles are seen as an important deterrent to Taiwan’s independence and potential US intervention. Whatever the media wants its readers to believe, the only major reason why China would actually consider an invasion is if **Taiwan declares independence. This is in no danger of happening** in the near future. Especially given **Ma’s recent victory and his pledge of the “Three Nos**” – “**No independence**, No **unification**, No **use of force**”. It is reasonable to assume that the majority of the **Taiwanese public** agree with him, and **are happy with the status quo** (the latter has been demonstrated by numerous opinion polls as well). Here are five major reasons why a full-fledged Chinese invasion of the island is more suited for a video game rather than reality. 5. Economics: **China has always placed economics at the forefront** of most other matters. Despite the often-tumultuous state of Sino-Indian relations (and an unresolved border dispute), trade has touched $63 billion. China is India’s second largest trading partner. In the Senkaku island dispute with Japan, Deng Xiaoping, as soon as he came into power in 1978, proposed that China and Japan jointly explore the oil and gas deposits near the disputed islands without touching on the issue of sovereignty. China has also sought joint exploration in the resource-rich Spratlys, a solution which is the right step forward and is in fact more urgent than sovereignty, which the Philippines and Vietnam and have so far been reluctant to do. China doesn’t mind waiting and biding its time until sovereignty issues get resolved. As Deng Xiaoping famously remarked regarding the Senkaku dispute, “It does not matter if this question is shelved for some time, say, 10 years. Our generation is not wise enough to find common language on this question. Our next generation will certainly be wiser. They will certainly find a solution acceptable to all”. Unlike his predecessor Jiang Zemin, Hu Jintao has used a softer approach towards Taiwan, promoting stronger economic and cultural ties, high-level official visits and direct flights in order to reduce tensions. This pragmatic approach is on display even in the Taiwan dispute. **China is Taiwan’s largest trading partner, and Taiwan is China’s seventh largest.** Two-thirds of all Taiwanese companies have made investments in China in recent years. In 2010, China (including Hong Kong) accounted for over 29.0% of Taiwan’s total trade and 41.8% of Taiwan’s exports. The ECFA was heavily tilted in Taiwan’s favor. It cut tariffs on 539 Taiwanese exports to China and 267 Chinese products entering Taiwan. Under the agreement, approximately 16.1 % of exports to China and 10.5 % of imports to China will be tariff free by 2013. Taiwanese firms have invested $200 billion in the mainland, and trade between the two sides has exceeded $150 billion. **Both** China and Taiwan **have a lot to lose by fighting** with each other. Another factor to consider is the incalculable loss that an invasion will have on the Chinese economy, not to mention scaring away potential investors. 4. The Taiwanese public: China is, quite rightly, obsessed with “stability”, President Hu’s watchword. Analysts agree that this is one of the main reasons why it is not being “tough” on North Korea – that it wants a stable neighbor with no refugee spillover. With hundreds of protests happening in China every year, it most certainly wouldn’t want yet another headache on its hands and alienate the island’s inhabitants (even more than they are at the moment). There is very less support for reunification on the island, and opinion polls make clear that only a tiny minority of Taiwanese identify themselves as “Chinese”. The Anti-Secession also explicitly states in Article 9: In the event of employing and executing non-peaceful means and other necessary measures as provided for in this Law, the state shall exert its utmost to protect the lives, property and other legitimate rights and interests of Taiwan civilians and foreign nationals in Taiwan, and to minimize losses. At the same time, the state shall protect the rights and interests of the Taiwan compatriots in other parts of China in accordance with law. A **Chinese invasion might inevitably lead to riots and international condemnation**. China would thus risk flushing down the toilet many years’ hard work of patient diplomacy (in convincing other countries of its “peaceful rise”). This would in turn cause them to inch even closer to America, were they would be welcomed with open arms. 3. The threat of American intervention: The United States of America, the responsible superpower, has been engaged in more military conflicts around this world than any other. Since the Second World War, the US has: Attempted to overthrow more than 50 governments, most of them democratically-elected. Attempted to suppress a populist or national movement in 20 countries. Grossly interfered in democratic elections in at least 30 countries. Dropped bombs on the people of more than 30 countries. Attempted to assassinate more than 50 foreign leaders. Hence, the plain fact that needs to be realized is that the United States is more prone to violent outbursts than any other country. The PLA doctrinal textbook, Zhanyixue, explicitly states that China is not in the same league as “advanced countries” (The entire document never mentions the United States by name), argues Thomas J. Christensen in China’s Revolution in Doctrinal Affairs: Recent Trends in the Operational Art of the Chinese People’s Liberation Army (CNA, 2005). He further states, Moreover, unlike in the heady early days of the Great Leap Forward, PLA strategists do not envision China closing that overall gap anytime soon. There is no stated expectation of short-cuts or leapfrogging to great power military status. In other words, China will have to accept that its relative technological backwardness and weakness in power projection will persist for a long time. And then goes on to quote the text of Zhanyixue explicitly: “Our military equipment has gone through major upgrading (很大提高) in comparison with the past, but in comparison to advanced countries, whether it be now or even a relatively long period from now, there will still be a relatively large gap (仍有较 大的差距)…………….The most prominent objective reality that the PLA will face in fighting future campaigns is that in [the area of] military equipment, the enemy will be superior and we will be inferior.” As is clear, **Chinese policy-makers are realists, and** thus **can be relied upon to heavily weigh the consequences of** a possible **US intervention**. 2. China wants peace: China is one of the few rising powers in the whole of human history to announce peaceful intentions and no desire to rule or establish hegemony over the world. In what might come as a shock to most people who consider media reports as a textbook for Chinese foreign policy, **China has**, on the whole, **been a peaceful nation and** has **not engaged in military action unless provoked**. And the military action that it has been involved in in its modern history has been extremely limited in its duration and objectives. Barring a misadventure with Vietnam in 1979 (which was also quite limited), **China has only used war as a last resort**, when it was left with no other alternative. Resolutions of boundary disputes can be generally considered as a fundamental indication whether a country is pursuing expansionist or peaceful policies (which is one reason why a thorough analysis of China’s border disputes has been neglected by almost all western media outlets and analysts). China has had the highest number of border disputes of any country in the world and with no intention of living in an unfriendly atmosphere over a peace of land, has successfully handled and offered substantial compromises (this is the other reason) in most of them. China borders 14 countries by land; and as a result of territorial dismemberment and unequal treaties, the PRC government, when it came into power, found itself involved in territorial disputes with all of them. The way in which China resolved those disputes stands as testimony to its desire of peace at any cost and serves as an example to other countries. China has, in the interests of peace and stability on its borders, adopted a negotiation tactic favorable to rival claimants that other countries would do well to emulate. Many of these claimants were countries much weaker than China. China was under no obligation to offer such substantial compromises. The portion of land that China received in border settlements with various neighbouring countries is as follows. Afghanistan - 0% Tajikistan – 4% Nepal – 6% Burma – 18% Kazakhstan – 22% Mongolia – 29% Kyrgyzstan – 32% North Korea – 40% Laos – 50% Vietnam – 50% Russia – 50% Pakistan – 54% Some of this land was strategically important (such as the Wakhan corridor that was disputed with Afghanistan) and extremely rich in resources (such as the Pamir mountain range in case of Tajikistan). China has also not reiterated its claims on a majority of the territory which was seized from it by the unequal treaties (even if it meant being cut off from the strategic Sea of Japan). In the map below, the gray area was part of China when the Qing dynasty was at its height, and then was snatched away from it due to unequal treaties. China has pursued claims on no more than 7% of these territories. China has generally been known to attack when it has been taken advantage of or construed as weak, or when the enemy was at its very doorstep, such as during the Korean war. The Sino-Indian war of 1962 stands as a textbook example of this strategy. Nehru, the then Indian PM, rejecting all Chinese offers for negotiations, constituted a “Forward Policy” of pushing forward to enemy lines and made belligerent statements about China (“I have ordered the army to throw the Chinese out”), implicitly announcing Indian intentions to attack. Some of the Indian outposts established under this policy went even further then Chinese ones. China, correctly interpreting these actions as hostile and viewing India through the prism of British imperialist intentions on Tibet (as India had made itself the British successor in all matters regarding Tibet and China), made multiple diplomatic protests against the Forward Policy, but Nehru ignored them and never thought that China would have the guts to attack. After China finally did attack and occupied the disputed areas, it declared a unilateral ceasefire and withdraw to pre-war status quo borders without occupying an inch of territory. Hence, Chinese intentions were just to just India a lesson. It had no interest in occupying any territory. Hence, a peaceful South China Sea and Taiwan strait is in China’s interest. As China rises, the last thing it wants to do is anything that might be construed as provocative. It has indicated that it wants a peace treaty with Taiwan, and indeed, negotiating a peace agreement was one of the points that President Hu introduced as a blueprint for cross-strait relations in December 2008. Ma made a campaign promise to sign a peace treaty in the run up to the 2008 elections, but reneged on it after becoming president. Such a treaty will not only assure China’s maritime neighbors (including rival claimants in the South China Sea) of China’s peaceful intentions, but will have the effect of also formally ending the Chinese Civil War. 1. **Taiwan is not going to declare independence: The most important reason why China has not** yet **considered** an **invasion**. Ma has explicitly declared that he is not seeking independence, and the voters seem to be siding with him and are happy with the status quo. And so is China. Chinese leaders have a penchant for putting issues on the backburner. They adapt to changing situations and are happy to do what they can (business) and leave for future generations what they cannot (reunification).

#### Co-op outweighs conflict.

**Jie 12**

<Dalei Jie (Ph.D. candidate in the Department of Political Science at the University of Pennsylvania), 5/11/12, "Chinese Leadership Transition and Cross-Strait Relations: Continuity Amid Uncertainty," http://www.e-ir.info/2012/05/11/21100/>

**Beijing’s current Taiwan strategy** and policy **will** likely **endure after the leadership transition** simply **because it has been working**. In a recent editorial published in the Chinese Communist Party’s mouthpiece magazine, Wang Yi, director of Taiwan Affairs Office of the State Council, summarized the Peaceful Development strategy’s achievements as follows: **laying the political foundation** (opposing Taiwan independence, adhering to the 1992 Consensus) **for** the development of cross-Strait **relations; institutionalization of cross-strait** exchange and **cooperation and the signing of sixteen agreements**, including the landmark Economic Cooperation Framework Agreement (ECFA); realization of direct and two-way postal, air and sea, and trade links; significant expansion of all-level cross-Strait human exchanges; and the containment of Taiwan independence separatist activities.[3]

#### Taiwan is stable – no risk of war

**Rosenberg 9**

<David Rosenberg, Professor of Political Science – Middlebury College and Research Fellow at the Research School of Pacific and Asian Studies – Australian National University, “Dire Straits: Competing Security Priorities in the South China Sea”, The Asia-Pacific Journal, 3-20-9, http://japanfocus.org/-David-Rosenberg/1773>

**There is a** curious **pattern of accommodation in PRC-Taiwan relations**. On the one hand, the PRC views Taiwan as a renegade province while Taiwan views the mainland with cultural empathy but political disdain. **On many** South China Sea **issues,** however, **they are** often **in agreement**. They have not had any direct confrontations in the South China Sea. They make the same claims, use the same definitions, baselines, and maps in stating their interests in the region. There is even some direct cooperation between China and Taiwan on technical issues. Beyond these governmental links, **there are very** substantial corporate and **personal links between China and Taiwan**. Taiwanese firms have invested over US $100 billion on the mainland, more than any other country. Much of this involves the relocation of Taiwanese industries to the Shanghai-Suzhou and Fujian areas. To a large extent, **Taiwan's continued economic prosperity is tied to reintegration with the mainland**. These economic links of investment and trade are reinforced by millions of personal visits as well as mail and email correspondence. Bonds of marriage also strengthen these ties. Nearly 10% of Taiwanese men marry mainland brides, further tying migrant generations to ancestral origins. These deeply-rooted, long-term economic and demographic trends provide a counterbalance to the often strident political clashes. The longer and broader the cross-Strait engagement, the better the prospects for peaceful coexistence. Unfortunately, the cross-Strait issue has become immersed in domestic politics in Taiwan and China. The recent spate of threats and counter-threats over Taiwan's status is linked to maneuvering among domestic political forces seeking popular support. For example, in March 2005, after China passed its anti-secession law, there were widespread protest demonstrations in Taiwan led by Prime Minister Chen Shui-bian's Democratic Progressive Party (DPP). Soon after, a large delegation of Taiwan's main opposition party, the Kuomintang (KMT, Nationalist Party), visited the mainland to encourage trade and political dialogue with China and to pay respects to the memorial shrine of Sun Yat-sen, KMT's founder. This, in turn, was followed in early April by the visit of right-wing Taiwan Solidarity Union party leaders to the Yasukuni shrine, the Japanese war memorial in Tokyo. Clearly issues of national identity and national sovereignty can generate volatile reactions. The big danger across the Taiwan Strait is that misunderstanding and miscalculation, fueled by distrust, xenophobia, and opportunism, may lead to escalating conflict. Senior leaders on both sides of the Strait are beginning to realize the potential consequences if instability erupts into violence. Hu Jintao has recently been signaling that he advocates a long-term policy of stability for eventual reunification. Chen Shui-bian has recently dropped his independence demands. Several Southeast Asian leaders have opposed Taiwan's independence; most explicitly, Singapore's Prime Minister, Lee Hsien Loong. Lee bluntly stated, "If Taiwan goes for independence, Singapore will not recognize it. In fact no Asian country will recognize it. China will fight. Win or lose, Taiwan will be devastated." The prospect of a **military confrontation between the mainland and Taiwan is unlikely**, in part **because** **the consequences** of such a conflict **would be extremely destructive for both sides**. Diplomatic efforts are needed to avoid even this remote risk. In the March/April 2005 issue of Foreign Affairs, Kenneth Lieberthal offered a useful proposal to change the focus of negotiations over "independence" and "reunification" to a pragmatic question: what is needed to achieve long-term stability and peaceful coexistence between China and Taiwan? What confidence building measures are needed to reassure security strategists that defensive military developments are not offensive? What legal and administrative means are necessary to resolve routine conflicts that will inevitably occur as commercial and civil relations thicken? The current U.S. attempts to help Taiwan "contain" China and to mobilize support in its global war on terrorism threaten to complicate if not weaken regional security developments. As Ronald Montaperto notes, "the almost daily manifestations of Chinese economic power, the effort to demonstrate commitment to the 'new' principle that the economic development of individual nations is inseparable from the development of the region as a whole, and the broad perception within the region that the Chinese are willing to engage actively in multilateral, cooperative policies have combined to provide Beijing with an unprecedented measure of influence and even clout."[6] The **Beijing** regime **is obsessed with economic stability**, because it fears that a severe downturn would trigger social and political upheaval. **The last thing it wants is a military confrontation with its biggest trading partner**, the United States, or with Japan or **Taiwan**, each of which are major trade and investment partners. It may go on playing the nationalist card over Taiwan to curry domestic political favor, but there **has been no massive military build-up and there is no plausible threat of impending war.** [7] To the contrary, China is investing heavily in creating a regional security framework to pursue its domestic development. The U.S. goal of achieving genuine regional maritime security would best be served through cooperation with China -- one of its most important creditors, suppliers, and markets -- rather than confrontation.

### Econ Checks

#### China US economic ties means there will never be a war over Taiwan – the costs are prohibitively high

**Buszynski 9**

Ph.D. (International Relations), London School of Economics and Political Science, Professor of International Relations at International University of Japan, author of several books and publications in journals (LESZEK BUSZYNSKI, “Sino-Japanese Relations: Interdependence, Rivalry and Regional Security”, Contemporary Southeast Asia: A Journal Of International & Strategic Affairs, 31(1), 143-171, 2009, EBSCO)//js

The US indeed would be the critical factor in Beijing's calculation of risk over Taiwan. America's relationship with China is perhaps the most outstanding example of high economic/trade interdependence in a conflictual context, one where strong economic and financial ties accompany strategic rivalry and security competition in the Asia-Pacific region. The US-China trade and economic relationship has underpinned global economic stability and both sides are aware of their heavy responsibility. In 2006 some 30 per cent of China's exports were directed to the US; in 2007 the percentage dropped slightly to 26 per cent; up to September 2008 China held around US$585 billion of US treasury bills and over the past decade had invested a reported US$1 trillion into US government bonds and mortgage debt."^ China's purchase of US treasury bills not only stabilized the US economy while America was running huge trade and budget deficits but ensured that interest rates could be kept low. US consumers were prompted to borrow and spend to the extent that an unprecedented economic boom was stimulated over 2000-07. America's subprime mortgage crisis which broke in August 2007 has since triggered a global financial crisis which demands even greater financial cooperation between the US and China."^ As America turns to China for financial support, Beijing, with its US$1.9 trillion in foreign reserves, is given extraordinary influence over the US economy; America's vulnerability is exposed.''^ In a situation of ongoing rivalry, shifts in power relations resulting from political or economic changes would result in adjustments to the calculation of risk. Misunderstandings may arise in the Taiwan situation based on the conviction that the US would be restrained from responding to Beijing's military pressure by its new found dependence upon China. The concern is not that a Chinese leadership would deliberately rupture an interdependent relationship from which it benefits and upon which its economy may depend. In taking a series of incremental steps intended to extract positional advantage ftom a changing situation it may, however, have that unintended result.

### US Deterrence

#### US intervention checks escalation

**AFP, ’10** (Agence France Presse – English, “US arms deal strengthens Taiwan deterrent: analysts”, 2-3, L/N)

"I don't think the arms package will change the balance. It's much more symbolic," said Bruce Jacobs, an expert on the relationship between China and Taiwan at Australia's Monash University. "The United States will be involved in a conflict. Unofficially, Australia will be involved, for example with intelligence gathering. Japan will be involved if China does invade. It wouldn't just be China and Taiwan." In case of war, the United States would be forced by its own past promises -- and by public opinion -- to come to the defence of Taiwan, meaning conflict could rapidly engulf the region, analysts said. "On the part of the US, the commitment is obviously there, and I think China also understands that the US will probably intervene, and it will be too costly for China," said Joseph Cheng, a China watcher at City University of Hong Kong. "China has no intention of engaging in war with United States. Attacking Taiwan militarily is almost unthinkable."

#### US has escalation dominance and China knows it – no risk of Taiwan war

Ross 2

Robert S. Ross is Professor of Political Science, Boston College, and Associate of the John King Fairbank Center for East Asian Studies, Harvard University. INTERNATIONAL SECURITY, FALL, p. )

The United States can continue to deter China from initiating war in the Taiwan Strait for many decades. In the absence of a Taiwan declaration of independence, China prefers to maintain the status quo and an international environment conducive to economic and military modernization. Moreover, Chinese analysts understand that China is vastly inferior to the United States in nearly all facets of international power and that it will remain so for a long time. One analyst estimated that Chinese military technology is fifteen to twenty years behind that of the United States.90 More important, Chinese analyses of “comprehensive national power,” which takes into account the military, technological, educational, and economic bases of national strength, estimated in 2000 that China would catch up to the United States in 2043 if Chinese comprehensive national power grew at a rate of 6 percent per year and U.S. comprehensive national power grew at 3 percent per year.91 During the Cold War, the most pessimistic U.S. civilian and government analysts insisted that only if the United States possessed war-winning capabilities and/or escalation dominance could it deter the Soviet use of force in Europe.92 In the twenty-first century, the United States possesses escalation dominance in the Taiwan Strait. At every level of escalation, from conventional to nuclear warfare, the United States can engage and defeat Chinese forces. Moreover, it can do so with minimal casualties and rapid deployment, undermining any Chinese confidence in the utility of asymmetric and fait accompli strategies. Chinese military and civilian leaders have acknowledged both U.S. resolve and its superior war-winning capabilities.

#### Only a full declaration of independence causes war with Taiwan – the US deters all other scenarios

Ross 2

(Robert S, Associate of the John King Fairbank Center for East Asian Studies, Harvard University, International Security, Fall)

This article argues that the United States can be very confident that, absent a Taiwan declaration of independence, it can continue to deter the use of force by China against Taiwan. The United States possesses the capabilities -- including a robust war-fighting force and "escalation dominance" -- that even the most cautious analysts argued were necessary for deterring Soviet aggression. n6 Moreover, Chinese leaders respect not only U.S. military capabilities but also U.S. resolve, and thus believe that American retaliatory threats are credible. Effective deterrence enables Washington to avoid policies that undermine U.S.China cooperation while maintaining peace in the Taiwan Strait.

### China Won’t Fight

#### No Chinese overreactions

-- econ dependence

-- Beijing’s leadership

**Yijiang ‘9** (Ding, Prof. Pol. Sci. and Chair IR Program – Okanagan U. College, Asian Affairs: An American Review, Beijing's New Approach and the Rapprochement in the Taiwan Strait”, (late 09, last issue pre 2010), 36:4)

The year 2008 saw major progress made in the reconciliation across the Taiwan Strait. Several factors contributed to this significant development, which has occurred amid China’s1 fast rise and a shifting balance of power in East Asia. The change of government in Taiwan has also been a factor. The cumulative effect of nearly twenty years of steadily deepening economic integration across the Taiwan Strait has played a role as well, with the People’s Republic of China (PRC) attracting a huge amount of Taiwanese investment, becoming home to hundreds of thousands of Taiwan’s businesspeople, and replacing theUnited States as Taiwan’s largest exportmarket every year since 2002. Taiwan’s exports to the Chinesemainland exceeded U.S.$100 billion in 2008, accounting for 40 percent of the island’s total exports and 26 percent of its total gross domestic product.2 This article, however, will focus on a single factor that has facilitated the recent rapprochement: a gradual change in Beijing’s strategy in the handling of its relationship with Taipei, which occurred between 2003 and 2008. Beijing’s reaction to 2007–8 presidential election campaigns in Taiwan marked a clear departure from its previous handling the provocative proindependence rhetoric that is characteristic of Taiwan’s election campaigns. The subsequent reconciliation with the newly elected Chinese Nationalist Party (KMT) government apparently proved that the change in its approach was working. The new strategy appears to be, “speak softly and carry a big stick” toward proponents of Taiwanese independence, relying on Washington to rein in the proindependence Democratic Progressive Party (DPP), and at the same time actively seeking reconciliation with the anti-independence KMT by offering economic benefits to Taiwan and by making limited concessions on some difficult bilateral issues, including the sovereignty issue, to promote economic and social relations and to undercut the support for Taiwanese independence. There have been some scholarly discussions on different aspects of Beijing’s new approach. Alan D. Romberg, for example, observes that Beijing “will look to Washington to keep things under control rather than having to play a heavy hand itself,” indicating its greater willingness to rely on the United States to rein in the DPP while exercising self-restraint toward the DPP’s proindependence rhetoric.3 Romberg’s observation is supported by Lin Chong-Pin, who also finds that Beijing has launched “soft offensives” by offering Taiwan a large number of various kind benefits, ranging from billions of dollars of loans to Taiwanese businesses, to no tariffs for Taiwanese farm products, to much lower tuition fees than previously charged to Taiwanese students.4 In the words of Erik Lenhart, Beijing’s carrot for Taiwan is “getting much sweeter,” even though its basic principles remain unchanged.5 Chu Shulong and Guo Yuli offer an analysis of the Hu Jintao leadership’s new thinking behind the change of approach toward the Taiwan issue.6 In this article, I analyze the origins of Beijing’s new approach, its evolution, the current rapprochement, its limitations, and its significance for the future relationship between Taiwan and China.

#### China won’t start the war

US deters, not competent enough, and wouldn’t risk losing trade

Corson 4 (Trevor Corson, Writer on East Asia, The Atlantic Monthly, “Strait-jacket”, Volume 294, Issue 5, December, 2004, http://www.theatlantic.com/magazine/archive/2004/12/strait-jacket/3631/)

On some level, of course, the idea that China would actually attack Taiwan—rather than merely threaten to do so, as it has for years—makes no sense. Attacking would invite a military response from the United States, and even without American intervention, it's not clear that China's military is up to the task of seizing the island. China would also risk losing the trade relationships that drive its economic growth.

#### China is too cautious to invade and doesn’t think military action is necessary to control Taiwan

Brzezinski 4

(Dr. ZBIGNIEW, Former National Security Advisor, Federal News Service, September 20, 2004, DAY ONE OF A CARNEGIE ENDOWMENT FOR INTERNATIONAL PEACE CONFERENCE, "CHINA'S PEACFUL RISE?")

Now, conceivably some Chinese leaders might calculate that one could have a controlled collision, for example, over Taiwan, a controlled collision in which a conflict with the United States would generate such international anxiety that it would invoke political pressure on the United States and would not escalate. That is conceivable. But that is a limited conflict which would probably then not affect China's rise. Moreover, I have a sense that the Chinese themselves, while talking sometimes fiercely about Taiwan, are, in fact, reasonably cautious. The communist party propaganda department magazine, just in March of this year, wrote the following, and I quote: "Our opinion is that the basic pattern of cross-strait relations that have developed over a long time has been gravely challenged but not basically changed by the Taiwan nationalists. We have basically contained the overt threat of Taiwanese independence since Chen took office, avoiding a worst-case scenario and maintaining the status of Taiwan as part of China." The article concluded by saying, "The balance of power in the strait continues to be in our favor -- shifting in our favor." But a public opinion poll held in Beijing at the same time of about 4,000 people by the (Horizon?) research organization found 58 percent of the Chinese saying that military action is unnecessary. Only 15 percent supported military action to, quote/unquote, "liberate" Taiwan.

#### China won’t fight for Taiwan

Steketee 8 (Mike, The Australian, Aug 19, <http://www.theaustralian.com.au/news/china-wont-fight-over-taiwan-expert/story-e6frg6t6-1111117233275>) LL

CHINA is unlikely to be a military threat and the chances of a conflict over Taiwan are diminishing, according to a US defence expert. Jonathan Pollack, professor of Asian and Pacific studies at the US Naval War College, told The Australian that China would become a much more potent military force in the long run. "They see this as an inevitable and logical outgrowth of their economic emergence," Professor Pollack said. "For all the shiny new systems they are acquiring, China has not gone to war for 30 years. I don't see them as a kind of budding overlord of East Asia. I don't think that is the way they conceptualise these things." China has reported average real increases in military spending of 9.6per cent in the 15 years to 2005; outside estimates are much higher. The US Defence Department has been among those expressing concern about a military build-up that could put regional balances at risk. Professor Pollack, who has been visiting China for 30 years, said he could not preclude China becoming a military threat, but added: "I just don't see it as terribly likely." Professor Pollack is in Australia as a guest of the Centre for International Security Studies and the US Studies Centre, both at Sydney University. He recently visited Taiwan, whose Government, elected this year, comprised realists who knew they had to try to find a means of dealing with China. "They have to find a way to give China clear incentives to collaborate with them, hopefully in a transition to some longer-term accommodation, the terms of which they don't know yet," Professor Pollack said. "As long as you have a Government in Taipei that is going to work hard to not provoke the Chinese, I would see the probability (of China using military force against Taiwan) diminishing, not increasing, even as China becomes much more capable militarily."

#### No chance of war

**TT 11**—official website of the Philadelphia Trumpet newsmagazine (The Trumpet, Taiwan’s Strides Toward China Accelerate, http://www.thetrumpet.com/?q=7808.6407.0.0)

Ma = Taiwanese PM

Ma explained that since people on both sides of the Taiwan Strait share common ancestry, they should build mutual trust and dispel their disagreements. Their common culture, Ma said, should give Taiwan and China the wisdom to find satisfactory solutions to their quarrels. And **the thawing tensions extend far beyond words.** On January 3, Taiwanese media reported that Taipei has scrapped its plans to deploy its powerful new “Thunder 2000″ rocket system on islands near mainland China. Analysts believe Beijing could respond by reducing its battery of Taiwan-aimed missiles. Two weeks earlier, Beijing and Taipei signed deals regarding drug development and disease outbreaks, the latest in a **long string of agreements** between the two sides. On January 4, China and Taiwan tightened their economic ties by implementing a pivotal phase of the Economic Cooperation Framework Agreement (ecfa) called the “early harvest program.” Under the deal, China has cut tariffs on 539 Taiwanese products and Taiwan has reduced duties for 267 Chinese goods. By 2013, all of the duties on those goods will come down to zero. Also on the same day, in an indication of strengthening cultural ties, Taiwan’s Education Ministry announced that the island’s universities will admit their first batch of Chinese students this year.

### US won't intervene

#### US won't intervene.

**IBD, ‘10** (Investor's Business Daily, “China Draws A Line As U.S. Backs Off”, 3-1, L/N)

Col. Liu argues that China should use its growing revenues to become the world's biggest military power, to the point where the U.S. "would not dare and would not be able to intervene in military conflict in the Taiwan Strait." That possibility is increasingly real. As Defense Secretary Roberts Gates said in a recent speech to the Air Force Association: "Investments in cyber and anti-satellite warfare (by China), anti-air and anti-ship weaponry, and ballistic missiles could threaten America's primary way to project power and help allies in the Pacific -- in particular our forward air bases and carrier strike groups."

### No escalation

#### Won’t escalate or go nuclear

Roberts 5 (Brad, member of the research staff at the Institute for Defense Analyses, Carnegie Endowment for International Peace, 1/26 http://www.carnegieendowment.org/events/?fa=eventDetail&id=740)

In Roberts' assessment, there are at least five elements in this picture. While there is no official Chinese description of a possible nuclear confrontation, these elements seem to inform the thinking of Chinese experts both inside and outside their government. The first is the assumption that the burden of crisis escalation would fall on the U.S. The Chinese believe that they would largely hold the initiative in a crisis and would be able to choose the time and manner of engagement. In other words, it would be left to the United States to react to a losing situation by choosing whether or not to escalate. The second element is a belief that that because of the asymmetry of interests, it is unlikely that the United States would be willing to use nuclear weapons in a Taiwan crisis. Whereas Taiwan is vital to Beijing’s sense of national sovereignty and territorial integrity, as well as its regime survival, the U.S. interest in Taiwan is seen as less than vital. Thus, they believe that the United States would be unwilling to “trade Los Angeles for Taipei.” Third, the Chinese believe that the threshold for U.S. nuclear retaliation is high. As a consequence, they debate the possibility that there might be ways that China could use nuclear weapons without facing U.S. retaliation. Fourth, Chinese analysts tend to believe that any unwanted escalation would be manageable on their part. This has something to do with Chinese strategic culture and their belief in China’s skill in creating, exploiting, and if necessary prolonging crisis. Moreover, some Chinese analysts cite the experience of 1968 when China confronted the Soviet Union as proof of China’s nuclear crisis management ability. In particular, Beijing could seek to counter U.S. nuclear deterrence by demonstrating its resolve through its own nuclear attacks. The essence of such a tactic would be to exert escalation control by instilling escalation uncertainty. Fifth, and finally, Chinese analysts seem to believe that the final outcome of a worst case scenario in a nuclear Taiwan crisis would be the reversion to the status quo ante. Beijing, thus, would be no worse off than what it started with. Altogether, these notions seem to inform Chinese confidence in the viability of their nuclear deterrent and their ability to escape or even win a nuclear confrontation with the United States, despite the huge disparity in force size and capability. How does, however, the problem look from the U.S. side? The difference in Chinese and American views is striking. Indeed, a diametrically opposite set of assumptions seems to underpin U.S. thinking. Dr. Roberts noted that these assumptions are to be found in the thinking and commentary of analysts and are harder to trace in official statements, which seem not to have come directly to this topic. First, American analysts tend to believe that because of America’s military superiority, the burden of escalation falls not on the U.S., but on China. Second, there is a widely held conviction that the Chinese would never use nuclear weapons in a Taiwan crisis, for doing so would cause China to incur significant costs and severe punishment from the United States. Third, there is deep skepticism that Beijing would ever strike preemptively. Fourth, American analysts tend to believe that unwanted escalation would prove controllable—largely through U.S. escalation dominance. Strategic culture again plays a role, as American analysts tend to greatly credit the U.S.’s ability to manage and swiftly terminate crises on terms favorable to the U.S. Fifth, and finally, most American experts seem to hold completely different assumptions from their Chinese counterparts about the long-term consequences of nuclear confrontation over Taiwan. Few believe that the U.S. would allow a return to the status quo ante, as efforts would be undertaken to prevent the re-occurrence of nuclear confrontation .

#### China knows nukes are useless

Robert S. **Ross 2**, Fall 2002 (International Security, Vol 27, No. 2, “Navigating the Taiwan Strait: Deterrence, Escalation Dominance, and US-China.”) <Dr. Ross is a professor of political science at Boston College.>

Thus, Chinese deterrence of U.S. intervention in a Taiwan conflict depends on China’s conventional war-fighting capability. In this respect, China’s deterrence calculus resembles the U.S. deterrence calculus for Europe once the Soviet Union gained its second-strike capability in the early 1960s. Because U.S. policymakers could not be sure that the Soviet response to stability at the nuclear level was caution at the conventional level, presidents from John F. Kennedy to Ronald Reagan consistently sought a conventional war-fighting capability to deter a Soviet invasion of Western Europe. Chinese leaders are no different. They do not believe that Chinese nuclear forces can deter the United States from intervening with conventional forces in a mainland-Taiwan war.

### Air Defense

#### Air defenses check.

Eland 9

Ivan Eland is Senior Fellow and Director of the Center on Peace & Liberty at The Independent Institute, The independent, April 13

But what about Taiwan? Right now it is doubtful that China could conduct a successful amphibious invasion against Taiwan, which is an island. Island nations are easier to defend than other countries, because amphibious landings are one of the most difficult military operations to undertake. In Taiwans case, it has a very good air force that could probably sink any Chinese amphibious force, because Chinese ships are deficient in good air defenses. The greatest threat to Taiwan would be Chinese intimidation or actual attack with a growing number of short-range ballistic missiles.

## PICs Good

### C/I

Counter interp: on the September/October 2016 topic, the neg may read an unconditional PIC out of a single country if they have evidence that says that country currently has and needs nuclear power. I meet- my Shapiro 13 card says Taiwan needs the nuclear power it makes. Standards:

1. Depth. PICs focus the debate on a single issue instead of spreading ourselves thin on every single country. That’s the strongest link to education: nobody in the lit discusses international energy policy, it goes on a country-by-country basis. Depth outweighs breadth:

a) mirrors real world- real policy discussions are about whether one policy proposal would be good or bad, not on the net whether a hundred are good or bad. Cursory overviews can be attained by reading articles.

b) Depth leads to breadth- by focusing on new issues each round, we get a breadth of information anyways.

c) Studies prove depth is more educationally valuable.

#### **SCIENCE DAILY 09** [Science Daily, “Students Benefit From Depth, Rather Than Breadth, In High School Science Courses”, Source- University of Virginia, Published by ScienceDaily, March 10, 2009, DDA]

Robert Tai, associate professor at the University of Virginia's Curry School of Education, worked with Marc S. Schwartz of the University of Texas at Arlington and Philip M. Sadler and Gerhard Sonnert of the Harvard-Smithsonian Center for Astrophysics to conduct the study and produce the report. The study relates the amount of content covered on a particular topic in high school classes with students' performance in college-level science classes. "As a former high school teacher, I always worried about whether it was better to teach less in greater depth or more with no real depth. This study offers evidence that teaching fewer topics in greater depth is a better way to prepare students for success in college science," Tai said. "These results are based on the performance of thousands of college science students from across the United States." The 8,310 students in the study were enrolled in introductory biology, chemistry or physics in randomly selected four-year colleges and universities. Those who spent one month or more studying one major topic in-depth in high school earned higher grades in college science than their peers who studied more topics in the same period of time. The study revealed that students in courses that focused on mastering a particular topic were impacted twice as much as those in courses that touched on every major topic. The study explored differences between science disciplines, teacher decisions about classroom activities, and out-of-class projects and homework. The researchers carefully controlled for differences in student backgrounds. The study also points out that standardized testing, which seeks to measure overall knowledge in an entire discipline, may not capture a student's high level of mastery in a few key science topics. Teachers who "teach to the test" may not be optimizing their students' chance of success in college science courses, Tai noted. "President Obama has challenged the nation to become the most educated in the world by having the largest proportion of college graduates among its citizens in the coming decade," Tai said. "To meet this challenge, it is imperative that we use the research to inform our educational practice." The study was part of the Factors Influencing College Science Success study, funded by the National Science Foundation.

Education is a voter; it’s the end goal of debate and provides portable skills for the real world. This outweighs fairness. A. Longevity-education affects us when we’re older but fairness matters in one round. B. Schools fund debate- without education we wouldn’t be able to afford tournaments which is a pre-requisite. C. Fairness violations inevitable- resource inequities and side bias mean some people have advantages. D. Value of debate-flipping a coin would be maximally fair but no one would participate.

2. Research incentive. PICs force you to do country-by-country research on whether nuclear power is good instead of sweeping generalizations about everything, means we get to learn about energy policy in multiple places. Key to education- ensures we’re gaining a good understanding of the topic.

3. Real-world decision-making. PICs are key.

Branson 7 Josh Branson, CSIS and just graduated from Harvard Law, 2007 (“[eDebate] Reflections about debate and policymaking”, http://www.mail-archive.com/edebate@www.ndtceda.com/msg01593.html)

Well, thats not the way it worked at all, at least for me. No doubt in a collegiate debate judged by one of ya’ll I could have killed them all on the Pan K, probably even if we talked slow, but in the real world, I was kind of surprised to find that the **knowledge generated by debate proved to be** fairly damn cursory and **artificial.** I could rattle off a list of most of the arguments for/against most of the general nonproliferation doctrines, but a lot of the empirical and factual basis for these arguments was completely missing in my brain. **I could make the basic claim for almost anything** in the field, **but the technical issues that underline**s **a lot of them** (the names and locations of the Russian CW destruction plants, an understanding of how the fine points of the budget process works, how a capital market sanction would actually be implemented, where did we get our intelligence that revealed Chinese serial proliferators selling bombs to AQ Khan, how does a centrifuge cascade work and why exactly would multilateral sanctions undermine Irans ability to get uranium gas piping technology, the names of the key players in the various foreign governments that make nonproliferation policy etc) **was** all **missing**. Maybe this stuff sounds pretty boring, and some of it is, but **this is the type of stuff that really determines whether or not policies are successful** and whether or not they are effectively promulgated. But the **details** pretty much **get left out in debates**, replaced by a simplistic and power-worded DA that culminates in nuclear winter.’ To my surprise, when setting out in the nonproliferation world, you dont get to make grand pronouncements about the impact of funding Nunn-Lugar on US soft power or whether funding it would cause a budget deficit which would collapse the global economy and cause multiple scenarios for nuclear war. Instead, most of the work that is done is deciding which and what type of Russian facilities to allocate the money to, knowing the specific people within the Russian government we can trust, which types of nuclear disposition is safest and what types of transportation we should use when moving spent fuel back to storage, etc. When dealing with these discussions repeatedly, I found that debate had provided me a very sound abstract conceptual frame through which to analyze the general issues being raised, but little in a way of meaningfully engaging the policy process. Of course, debaters can learn this language. There are plenty who have. But I’d wonder whether or not people who claim that debate has trained people for this life are mistaking correlation with causation. Two other interesting conclusions: A) To all the people who attack debate for propounding an overly elitist and undemocratic discourse and undermines good broadly appealing public speaking skills: I think you’ve got it backwards. Yes, a lot of debates involve jargon, no question. But at least in my experience, I found that debate provided me the opposite. The times I was most confident at CSIS were when we were doing public debates or discussions in front of unqualified audiences. I could take on even the most senior experts; in these types of forums, I could out debate them and rhetorically counteract their vast experience/knowledge advantage. On the flip side, when I was in conferences with only experts in the field, I often felt at a severe disadvantage. In forums like this, bad arguments get called out, and rhetorically powerful but intellectually flimsy claims are pretty much non-starters. Debate experience wasn’t a ton of help. In terms of research, I did feel that all the debate research I’ve done provided some advantages and gave me a marginal edge over a lot of other people at CSIS, but nothing enormous. Most of the people there, even though they’d never done debate, can research just as well as the average college debater (ESPECIALLY on technical issues). I realize there are problems with the sample size etc, but it made me think twice about the infallible research advantages supposedly generated by policy debate. B) **How to make debate more like the technical policy world**? Narrower debates. **PICs are vital** to this (sorry, Duck). Thinking back on my 8 years in debate, **the topic about which I can best converse with experts about is the design of emissions trading schemes**. That was **because** the literature was deep and the **prevalence of** upstream/downstream/auctioned/timetable **PICs narrowed the debates and forced** a **real in-depth discussion**. I just don’t think we get that in a ton of debates, because most PICs are either wanky rhetoric PICs (and yes I was an extreme culprit) or something even worse like Consultation. Thinking back on it, I don’t think that the legal topic was worded particularly poorly, I just think that our strategic norms of judging/debating create a lot of problems in generating the type of education a lot of us want. But one of the most striking thing for me about last year’s topic was that I learned more from Repko’s post about his day at the Supreme Court than I did from all the debates I judged combined. In any event, how to create the types of narrow debates that will general real sustainable expertise on topics is tough. I think that we’ve got to learn how to become accepting as a community of analytical smart arguments to answer carded-yet-stupid arguments, maybe start accepting intrinsicness (something that I might post on some other day) as a way to eliminate politics DAs and consultation CPs, and start modifying our theory dispositions to be willing to call out bullshit CPs (see DHeidts new judge philosophy), and finally moving away from the cult of new and surprise arguments (see below). This will also involve changing the way we teach kids as they enter debate; I know I, for one, am going to change the way I teach camp this summer to include at least a little of these thoughts. Of course, the focus must remain on winning above all else, but I think that that pursuit can be synthesized with a change in some of our debate practices. 2. Why an elite or technical discourse is important My second conclusion is directed at people who decry the topic process because it’s too technical, too narrow, drown out the personal or the things that people want to talk about. Again, my opinion is that this is backwards. I think it’s a major problem that more of the people who conduct policy and who are influential in the process are not well-schooled in the actual empirical pragmatic details of the policies that they are advocating. I’ve read a significant amount about Iraq lately, and got to talk to a bunch of people who were intimately involved in the process, and one of the primary problems was that too much of our policy was executed in a cavalier and emotion-laden fashion. The dangerous pursuit of the “liberation of the oppressed” Iraqis at the expense of all the obvious problems entailed with that pursuit, the complete “lack of a plan,” for how to stabilize the country, and an utter ignorance of the technical or real policy issues facing a peacebuilding operation of that magnitude---these are all issues that come up REPEATEDLY when discussing the reason we went into Iraq in such a cavalier and short-sighted manner. A bunch of the more scathing indicts of the topic committee’s work---that the topic is too technical, that it undermines creativity etc…these are traits that for me are reflected in some of the most loathsome policymakers we have. Bush is by all accounts an idiot when it comes to policy expertise, but he’s the president that most people would love to have a beer with, and one who has let his personal conviction guide his policymaking more than any I can remember. His administration appears to conceive of the world in relatively simple generic conceptual dichotomies (stay the course vs. cut and run, terrorists are good or evil, our intelligence is either 100% accurate or its not). Is that really what we want our topics to boil down to? A be nice to the Middle East topic? Because **its in the extra 60 words that the real problems with policy are revealed**, and its there that we find the difference between an effective invasion that removes a horrible dictator from power and one which kills thousands of people and causes the region to implode.

Outweighs: A. Prefer carded evidence on the theory debate- it’s most objective whereas their analytics are slanted by competitive bias. B. Affects our lives out of round- no one in 7 years will care about fairness losses but education lasts much later.

4. Ground. PICs check back against infinite aff prep for whatever they’ve decided to make the debate about. Ability to pick a plan, framework, and frontline extensively means I need some way to give the neg an advantage, otherwise I lose every round; I can’t read the coal DA every single round. That’s the strongest link to fairness because your interp means affs win 100% of the time.

### AT: moots aff

1. TURN- The aff advocacy text is the best and ONLY determiner of what CPs I get. A. Stratskew: the text of the aff is the only stable basis of neg ground. Placing ad hoc restrictions in the 1AR prevents me from forming an effective strategy because you’ll always exclude what I do. B. Textuality comes first- text of the resolution is the only predictable basis of neg ground because we have it in common before the round. I can’t predict random 1AR interps.

2. TURN-Their interp guts neg ground- under their interp, the aff can make it’s advocacy as broad as possible to include all good aspects of energy policy. Then the neg has to advocate for something that includes none of these good policy options so the negative will never be able to win the comparative desirability of a policy option.

3. TURN-my solvency advocate proves they are destroying core neg ground. Many experts agree Taiwan should have nuclear power so my ground is terrible if I have to defend nuclear power everywhere.

4. TURN-the PIC is better for your ground. Before, you had to prove that *every single part* of the aff advocacy is good, but now you only need to win that *one specific* part is good.

5. Ability to pick a plan makes it reciprocal. The aff gets to pick a subset of the resolution, the neg should be allowed to pick a subset of the plan. That’s the only reciprocal way to divide ground.

6. The PIC is just less of the aff which means the entirety of the aff is already a solvency deficit because I do less than you.

7. Impact turns solve- you don’t have to directly topically engage.

8. Not my fault you read a bad aff. You should design your aff to be multifunctional based on neg strategies so that your offense still functions.

9. Non-unique. If I read a kritik or an NC with a different ethical theory, they would still have to generate new 1AR offense. It’s the neg’s job to make the 1AR hard.

### AT: Predictability

1. Counter interp solves- there are only 40 countries currently with nuclear power. Of those, only a fraction will have viable disad ground.

2. Plans solve- no reason why you need to defend whole res and open yourself up for PICs.

3. Topic lit proves the PIC is most predictable- no one advocates for every single country having nuclear power, they say it should change on the basis of each country.

4. Predictability claims are unverifiable- they could have blocks on the issue but just don’t want to read them- don’t vote off unverifiable arguments- if you accuse somebody of abusing you the onus is on you to show that you were abused- impossible for you to do

5. T-Checks back against unpredictable affs- without PICs the aff can choose any advantage area and win because the neg won’t have a way to compete with their nuanced prep.