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### Case – Space

#### No one’s going to war over a downed satellite

Bowen 18 [Bleddyn Bowen, Lecturer in International Relations at the University of Leicester. The Art of Space Deterrence. February 20, 2018. https://www.europeanleadershipnetwork.org/commentary/the-art-of-space-deterrence/]

Space is often an afterthought or a miscellaneous ancillary in the grand strategic views of top-level decision-makers. A president may not care that one satellite may be lost or go dark; it may cause panic and Twitter-based hysteria for the space community, of course. But the terrestrial context and consequences, as well as the political stakes and symbolism of any exchange of hostilities in space matters more. The political and media dimension can magnify or minimise the perceived consequences of losing specific satellites out of all proportion to their actual strategic effect.

#### Won’t go nuclear – seen as a normal conventional attack because of integration with ground forces

Firth 7/1/19 [News Editor at MIT Technology Review, was Chief News Editor at New Scientist. How to fight a war in space (and get away with it). July 1, 2019. MIT Technology Review]

Space is so intrinsic to how advanced militaries fight on the ground that an attack on a satellite need no longer signal the opening shot in a nuclear apocalypse. As a result, “deterrence in space is less certain than it was during the Cold War,” says Todd Harrison, who heads the Aerospace Security Project at CSIS, a think tank in Washington, DC. Non-state actors, as well as more minor powers like North Korea and Iran, are also gaining access to weapons that can bloody the noses of much larger nations in space.

**Pursuit of dominance leads to Sino-Russia alliance**

**Porter, DPhil, 19**

(Patrick, ModernHistory@Oxford, ProfInternationalSecurityAndStrategy@Birmingham, Advice for a Dark Age: Managing Great Power Competition, The Washington Quarterly, 42:1, 7-25)

Even the United States cannot prudently take on every adversary on multiple fronts. The costs of military campaigns against these adversaries in their backyards, whether in the Baltic States or Taiwan, would outstrip the losses that the U.S. military has sustained in decades. Short of all-out conflict, to mobilize for dominance and **risk escalation on multiple such fronts** would court several dangers. It would **overstretch the country**. The U.S. defense budget now approaches $800 billion annually, not including deficit-financed military operations. This is a time of ballooning deficits, where the Congressional Budget Office warns that “the prospect of large and growing debt poses substantial risks for the nation.”27 If in such conditions, current expenditure is not enough to buy unchallengeable military preponderance—and it may not be—then the failure lies not in the failure to spend even more. Neither is the answer to sacrifice the quality of civic life at home to service the cause of preponderance abroad. The old “two war standard,” a planning construct whereby the United States configures its forces to conduct two regional conflicts at once, would be unsustainably demanding against more than one peer competitor, or potentially with a roster of major and minor adversaries all at once.28 After all, the purpose of American military power is ultimately to secure a way of life as a constitutional republic. To impose ever-greater debts on civil society and strip back collective provision at home, on the basis that the quality of life is expendable for the cause of hegemony, is perversely to set up power-projection abroad as the end, when it should be the means. The problem lies, rather, in **the inflexible pursuit of hegemony itself**, and the **failure to balance commitments** with scarce resources. To attempt to suppress every adversary simultaneously would **drive adversaries together, creating hostile coalitions**. It also may not succeed. Counterproliferation in North Korea is difficult enough, for instance, but the task becomes more difficult still if U.S. enmity with China drives Beijing to refuse cooperation over enforcing sanctions on Pyongyang. Concurrent competitions would also split American resources, attention and time. Exacerbating the strain on scarce resources between defense, consumption and investment raises the polarizing question of whether preponderance is even worth it, which then undermines the domestic consensus needed to support it. At the same time, reduced investment in infrastructure and education would damage the economic foundations for conducting competition abroad in the first place. Taken together, indiscriminate competition risks creating the thing most feared in traditional U.S. grand strategy: **a hostile Eurasian alliance** leading to continuous U.S. mobilization against hostile coalitions, turning the U.S. republic into an illiberal garrison state. If the prospect for the United States as a great power faces a problem, it is not the size of the defense budget, or the material weight of resources at the U.S. disposal, or popular reluctance to exercise leadership. Rather, the problem lies in the scope of the policy that those capabilities are designed to serve. To make the problem smaller, Washington should take steps to make the pool of adversaries smaller.

#### A strong Sino-Russian alliance combined with expanded US military presence ensures joint retaliation — that escalates to the use of nuclear force

Klare 18 – Professor of peace and world security studies at Hampshire College. (Michael T., “The Pentagon Is Planning a Three-Front ‘Long War’ Against China and Russia,” April 4, 2018, https://fpif.org/the-pentagon-is-planning-a-three-front-long-war-against-china-and-russia/)//sy

In relatively swift fashion, American military leaders have followed up their claim that the U.S. is in a new long war by sketching the outlines of a containment line that would stretch from the Korean Peninsula around Asia across the Middle East into parts of the former Soviet Union in Eastern Europe and finally to the Scandinavian countries. Under their plan, American military forces — reinforced by the armies of trusted allies — should garrison every segment of this line, a grandiose scheme to block hypothetical advances of Chinese and Russian influence that, in its global reach, should stagger the imagination. Much of future history could be shaped by such an outsized effort. Questions for the future include whether this is either a sound strategic policy or truly sustainable. Attempting to contain China and Russia in such a manner will undoubtedly provoke countermoves, some undoubtedly difficult to resist, including cyber attacks and various kinds of economic warfare. And if you imagined that a war on terror across huge swaths of the planet represented a significant global overreach for a single power, just wait. Maintaining large and heavily-equipped forces on three extended fronts will also prove exceedingly costly and will certainly conflict with domestic spending priorities and possibly provoke a divisive debate over the reinstatement of the draft. However, the real question — unasked in Washington at the moment — is: Why pursue such a policy in the first place? Are there not other ways to manage the rise of China and Russia’s provocative behavior? What appears particularly worrisome about this three-front strategy is its immense capacity for confrontation, miscalculation, escalation, and finally actual war rather than simply grandiose war planning. At multiple points along this globe-spanning line — the Baltic Sea, the Black Sea, Syria, the South China Sea, and the East China Sea, to name just a few — forces from the U.S. and China or Russia are already in significant contact, often jostling for position in a potentially hostile manner. At any moment, one of these encounters could provoke a firefight leading to unintended escalation and, in the end, possibly all-out combat. From there, almost anything could happen, even the use of nuclear weapons. Clearly, officials in Washington should be thinking hard before committing Americans to a strategy that will make this increasingly likely and could turn what is still long-war planning into an actual long war with deadly consequences.

#### Space wars don’t cause escalation

James Pavur 19, Professor of Computer Science Department of Computer Science at Oxford University and Ivan Martinovic, DPhil Researcher Cybersecurity Centre for Doctoral Training at Oxford University, “The Cyber-ASAT: On the Impact of Cyber Weapons in Outer Space”, 2019 11th International Conference on Cyber Conflict: Silent Battle T. Minárik, S. Alatalu, S. Biondi, M. Signoretti, I. Tolga, G. Visky (Eds.), <https://ccdcoe.org/uploads/2019/06/Art_12_The-Cyber-ASAT.pdf>

A. Limited Accessibility Space is difficult. Over 60 years have passed since the first Sputnik launch and only nine countries (ten including the EU) have orbital launch capabilities. Moreover, a launch programme alone does not guarantee the resources and precision required to operate a meaningful ASAT capability. Given this, one possible reason why space wars have not broken out is simply because only the US has ever had the ability to fight one [21, p. 402], [22, pp. 419–420]. Although launch technology may become cheaper and easier, it is unclear to what extent these advances will be distributed among presently non-spacefaring nations. Limited access to orbit necessarily reduces the scenarios which could plausibly escalate to ASAT usage. Only major conflicts between the handful of states with ‘space club’ membership could be considered possible flashpoints. Even then, the fragility of an attacker’s own space assets creates de-escalatory pressures due to the deterrent effect of retaliation. Since the earliest days of the space race, dominant powers have recognized this dynamic and demonstrated an inclination towards de-escalatory space strategies [23]. B. Attributable Norms There also exists a long-standing normative framework favouring the peaceful use of space. The effectiveness of this regime, centred around the Outer Space Treaty (OST), is highly contentious and many have pointed out its serious legal and political shortcomings [24]–[26]. Nevertheless, this status quo framework has somehow supported over six decades of relative peace in orbit. Over these six decades, norms have become deeply ingrained into the way states describe and perceive space weaponization. This de facto codification was dramatically demonstrated in 2005 when the US found itself on the short end of a 160-1 UN vote after opposing a non-binding resolution on space weaponization. Although states have occasionally pushed the boundaries of these norms, this has typically occurred through incremental legal re-interpretation rather than outright opposition [27]. Even the most notable incidents, such as the 2007-2008 US and Chinese ASAT demonstrations, were couched in rhetoric from both the norm violators and defenders, depicting space as a peaceful global commons [27, p. 56]. Altogether, this suggests that states perceive real costs to breaking this normative tradition and may even moderate their behaviours accordingly. One further factor supporting this norms regime is the high degree of attributability surrounding ASAT weapons. For kinetic ASAT technology, plausible deniability and stealth are essentially impossible. The literally explosive act of launching a rocket cannot evade detection and, if used offensively, retaliation. This imposes high diplomatic costs on ASAT usage and testing, particularly during peacetime. C. Environmental Interdependence A third stabilizing force relates to the orbital debris consequences of ASATs. China’s 2007 ASAT demonstration was the largest debris-generating event in history, as the targeted satellite dissipated into thousands of dangerous debris particles [28, p. 4]. Since debris particles are indiscriminate and unpredictable, they often threaten the attacker’s own space assets [22, p. 420]. This is compounded by Kessler syndrome, a phenomenon whereby orbital debris ‘breeds’ as large pieces of debris collide and disintegrate. As space debris remains in orbit for hundreds of years, the cascade effect of an ASAT attack can constrain the attacker’s long-term use of space [29, pp. 295– 296]. Any state with kinetic ASAT capabilities will likely also operate satellites of its own, and they are necessarily exposed to this collateral damage threat. Space debris thus acts as a strong strategic deterrent to ASAT usage.

#### Loss of satellites will shut down terrestrial mining

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Resource Location

Looking for rare minerals to be mined for our many gadgets, household appliances, and industrial machines? Soil type is often a strong indicator of whether or not underground deposits of metals and minerals are located. By using satellite data to identify promising surface structural features and different soil types, mining companies can better identify promising mining locations, wasting less time and effort in finding the best places to obtain much-needed industrial resources. Without satellite images, the finding and assessment of promising new mines would grind to a halt as the industries retooled back into the days of much slower and labor-intensive field surveys (but without GPS!).

#### Amazon mining will cause extinction

Charito Ushiñahua 11, Anthropologist Working for the Preservation of Indigenous Amazonian Cultures, “Yanomami Indians: The Fierce People?”, http://www.amazon-indians.org/yanomami.html

A mineralogical survey of the northern Amazon by the Brazilian government in 1975 revealed the presence of gold ore in the Roraima region of Brazil. By the early 1980's, miners in search of gold began invading the Yanomami territory in Brazil and by 1987 it had become a full-fledged gold rush. Over 30,000 prospectors entered Yanomami lands and established over a hundred clandestine mining operations. The resulting massacres and diseases brought by these invaders is estimated to have caused the death of over 2,000 Yanomami. One of the problems with gold mining is the environmental destruction it causes. In order to separate gold from rocks and soil, mercury is used. Mercury in the rivers and streams bio-accumulates and permeates the entire ecosystem. The mercury accumulates in predators and hunters (such as the Yanomami) higher up the food chain and creates a neurotoxin that causes birth defects and abnormal child development. The Yanomami have had increased child mortality rates while their birth rates have declined putting their very existence into risk. Moreover, malaria increased in the area due to the stagnant pools left by the miners that increase the mosquito populations that are vectors of the disease. Some have estimated that malaria is responsible for the deaths of about 13% of the Yanomami population every year. However, the negative influence of the miners extends beyond physical health. Their introduction of alcohol and other western goods has had an immense negative effect on Yanomami society itself.

In response to the crisis created by the gold miners, in 1992 the Yanomami territory was protected by the Brazilian government by creating a federal indigenous reserve. However, the gold miners were not happy about the creation of the reserve and in July, 1993, a group of miners tried to exterminate an entire village in what has become to be known as the "Haximu Massacre." At lease 16 Yanomami were killed in what many have called genocide. Some of the miners were tried and convicted and after numerous appeals on the 7th of August, 2006 the Brazilian Supreme Federal Court reaffirmed that the crime known as the Haximu Massacre and upheld the ruling sentencing the miners to 19 years in prison for genocide. However, to this day there is political pressure by the mining industry to reduce the Yanomami territory and allow commercial mining operations on their lands.

In the year 2000, a journalist named Patrick Tierney published a book called, "Darkness in El Dorado," and accused anthropologist Napoleon Chagnon and his colleague geneticist James Neel of numerous misdeeds, among them intentionally creating an epidemic of measles among the Yanomami people in order to study the effects of natural selection on primitive societies. Tierney states that the resulting epidemic caused the death of hundreds of Yanomami. Incredibly, Tierney charged that the experiments were funded by the US Atomic Energy Commission, who sought to model the societal consequences of mass mortality caused by nuclear war. In addition to the measles epidemic, Tierney charged that Chagnon mischaracterized the Yanomami as "The Fierce People" when in fact it was Chagnon who was causing the violence by introducing enormous amounts of western goods such as machetes into the Yanomami society, thus stimulating warfare over the introduced goods. Tierney also accused Chagnon of fraud by staging films, such as "The Axe Fight" that he helped produce. The journalist charged that the anthropologist prescripted the films and that they were not spontaneous as portrayed.

Tierney's book caused an uproar in the anthropological community and the American Anthropological Association (AAA) got involved in the debate. In fact, the AAA convened a special commission to investigate the allegations against Chagnon and Neel. The report by the AAA issued in May, 2002 exonerated the anthropologist and geneticist from causing a measles epidemic among the Yanomami. Nonetheless, the AAA criticized some aspects of Chagnon's research, including his portrayal of the Yanomami as "The Fierce People," and his bribing of Venezuelan officials. However, the AAA debate was not over and three years later in June, 2005 they rescinded the acceptance of the 2002 report.

As someone who is working to support indigenous people, I would like to point out that over the many years since publishing his first book on the Yanomami (whose revenues made him a millionaire), Chagnon has failed to bring significant aid to the Yanomami people. In fact, he sought to damage the indigenous movement by publicly criticizing Davi Kopenawa, a Yanomami activist who helped establish the Yanomami reserve in Brazil. One might ask if it was proper behavior for an anthropologist to hurt the efforts of an indigenous Amazonian activist attempting to defend his people. Interestingly, the Yanomami leader Davi Kopenawa has predicted the destruction of the entire human race if the Amazon Rainforest is destroyed. Kopenawa states, "The forest-land will only die if it is destroyed by whites. Then, the creeks will disappear, the land will crumble, the trees will dry and the stones of the mountains will shatter under the heat. The xapiripë spirits who live in the mountain ranges and play in the forest will eventually flee. Their fathers, the shamans, will not be able to summon them to protect us. The forest-land will become dry and empty. The shamans will no longer be able to deter the smoke-epidemics and the malefic beings who make us ill. And so everyone will die." Many ecologists seem to agree with Kopenawa, believing that the Amazon Rainforest are the "lungs of the Earth" and that if the Amazon is destroyed, it will cause a global ecological disaster resulting in the eventual destruction of the human race.

#### Satellites are crucial for large, industrial megafarms

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Agriculture

To feed the Earth's growing population affordably, farming has gone from a mostly decentralized, family-owned business to corporate farming on a scale never before imagined. These industrial megafarms are a primary reason that many people in the world can enjoy plentiful and varied foods at a reasonable cost. On this scale, deciding what crop to plant in a given field is not just business - it's science. And the science relies, in large part, on data from space.

Companies such as the Satellite Imaging Corporation (SIC) provide data from space on overall crop health, soil analysis, and irrigation impacts and efficiencies. From space, you can easily map soil variations, finding areas rich in organic matter and others less so - this allows optimized planting to take advantage of crops that thrive in any given soil environment. Very large farms also use satellite images to assess the overall health of their crops by land area, spotting those that are being impacted by non-optimal soil moisture content, etc., allowing the farmer to take corrective action while there is still time to save the crop.

#### Industrial ag’s unsustainable and causes extinction

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We hear a lot about how we’re running out of antibiotics. But we are also doomed to run out of pesticides, because insects inevitably develop resistance, whether toxic chemicals are sprayed directly or genetically engineered into the plants.

Worse yet, weeds, insects, and fungus develop resistance in just 5 years on average, which has caused the chemicals to grow increasingly lethal over the past 60 years. And it takes on average eight to ten years to identify, test, and develop a new pesticide, though that isn’t long enough to discover the long-term toxicity to humans and other organisms.

And this devil’s bargain hasn’t even provided most of the gains in crop yields, which is due to natural-gas and phosphate fertilizers plus soil-crushing tractors and harvesters that can do the work of millions of men and horses quickly on farms that grow only one crop on thousands of acres.

Yet before pesticides, farmers lost a third of their crops to pests, after pesticides, farmers still lose a third of their crops.

Even without pesticides, industrial agriculture is doomed to fail from extremely high rates of soil erosion and soil compaction at rates that far exceed losses in the past, since soil couldn’t wash or blow away as easily on small farms that grew many crops.

But pest killing chemicals are surely accelerating the day of reckoning sooner rather than later. Enormous amounts of toxic chemicals are dumped on land every year — over 1 billion pounds are used in the United State (US) every year and 5.6 billion pounds globally (Alavanja 2009).

This destroys the very ecosystems that used to help plants fight off pests, and is a major factor biodiversity loss and extinction.

Evidence also points to pesticides playing a key role in the loss of bees and their pollination services. Although paleo-diet fanatics won’t mind eating mostly meat when fruit, vegetable, and nut crops are gone, they will not be so happy about having to eat more carbohydrates. Wheat and other grains will still be around, since they are wind-pollinated.

Agricultural chemicals render land lifeless and toxic to beneficial creatures, also killing the food chain above — fish, amphibians, birds, and humans (from cancer, chronic disease, and suicide).

Surely a day is coming when pesticides stop working, resulting in massive famines. But who is there to speak for the grandchildren? And those that do speak for them are mowed down by the logic of libertarian capitalism, which only cares about profits today. Given that a political party is now in power in the U.S. that wants to get rid of the protections the Environmental Protection Agency (EPA) and other agencies provide, may make matters worse if agricultural chemicals are allowed to be more toxic, long-lasting, and released earlier, before being fully tested for health effects.

Meanwhile chemical and genetic engineering companies are making a fortune, because the farmers have to pay full price, since the pests develop resistance long before a product is old enough to be made generically. Except for glyphosate, but weeds have developed resistance. Predictably.

In fact, the inevitability of resistance has been known for nearly seven decades. In 1951, as the world began using synthetic chemicals, Dr. Reginald Painter at Kansas State University published “Insect Resistance in Crop Plants”. He made a case that it would be better to understand how a crop plant fought off insects, since it was inevitable that insects would develop genetic or behavioral resistance. At best, chemicals might be used as an emergency control measure.

Farmers will say that we simply must carry on like this, there’s no other choice. But that’s simply not true.

Consider the corn rootworm, that costs farmers about $2 billion a year in lost crops despite spending hundreds of millions on chemicals and the hundreds of millions of dollars chemical companies spend developing new chemicals.

To lower the chances of corn pests developing resistance, corn crops were rotated with soybeans. Predictably, a few mutated to eat soybeans plus changed their behavior. They used to only lay eggs on nearby corn plants, now they disperse to lay eggs on soybean crops as well. Worse yet, corn is more profitable than soy and many farmers began growing continuous corn. Already the corn rootworm is developing resistance to the latest and greatest chemicals.

But the corn rootworm is not causing devastation in Europe, because farms are smaller and most farmers rotate not just soy, but wheat, alfalfa, sorghum and oats with corn (Nordhaus 2017).

Before planting, farmers try to get rid of pests that survived the winter and apply fumigants to kill fungi and nematodes, and pre-emergent chemicals to reduce weed seeds from emerging. Even farmers practicing no-till farming douse the land with herbicides by using GMO herbicide-resistant crops. Then over the course of crop growth, farmers may apply several rounds of additional pesticides to control different pests. For example, cotton growers apply chemicals from 12 to 30 times before harvest.

Currently, the potential harm is only assessed for 2 to 3 years before a permit is issued, even though the damage might occur up to 20 years later.

Although these chemicals appear to be just like antibiotics, that isn’t entirely true. We develop some immunity to a disease after antibiotics help us recover, but a plant is still vulnerable to the pests and weeds with the genetics or behavior to survive and chemical assault.

Although there are thousands of chemical toxins, what matters is how they kill, their method of action (MOA). For herbicides there are only 29 MOAs, for insecticides, just 28. So if a pest develops resistance to one chemical within an MOA, it will be resistant to all of the thousands of chemicals within that MOA.

The demand for chemicals has also grown due the high level of bioinvasive species. It takes a while to find native pests and make sure they won’t do more harm than good. In the 1950s there were just three main corn pests. By 1978 there were 40, and they vary regionally. For example, California has 30 arthropods and over 14 fungal diseases to cope with.

When I was learning how to grow food organically back in the 90s, I remember how outraged organic farmers were that Monsanto was going to genetically engineer plants to have the Bt bacteria in them. This is because the only insecticide organic farmers can use is Bt bacteria, because it is found in the soil. It’s natural. Organic farmers have been careful to spray only in emergencies so that insects didn’t develop resistance to their only remedy. Since 1996, GMO plants have been engineered to have Bt in them, and predictably, insects have developed resistance. For example, in 2015, 81% of all corn was planted with genetically engineered Bt. But corn earworms have developed resistance, especially in North Carolina and Georgia, setting the stage for damage across the nation. Five other insects have developed resistance to Bt as well.

GMO plants were also going to reduce pesticide use. They did for a while, but not for long. Chemical use has increased 7% to 202,000 tons a year in the past 10 years.

Resistance can come in other ways than mutations. Behavior can change. Cockroach bait is laced with glucose, so cockroaches that developed glucose-aversion now no longer take the bait.

It is worth repeating that chemicals and other practices are ruining the long-term viability of agriculture. Here is how author Dyer explains it:

“Ultimately the practice of modern farming is not sustainable” because “the damage to the soil and natural ecosystems is so great that farming becomes dependent not on the land but on the artificial inputs into the process, such as fertilizers and pesticides. In many ways, our battle against the diverse array of pest species is a battle against the health of the system itself. As we kill pest species, we also kill related species that may be beneficial. We kill predators that could assist our efforts. We reduce the ecosystem’s ability to recover due to reduced diversity, and we interfere with the organisms that affect the biogeochemical processes that maintain the soils in which the plants grow.

Soil is a complex, multifaceted living thing that is far more than the sum of the sand, silt, clay, fungi, microbes, nematodes, and other invertebrates. All biotic components interact as an ecosystem within the soil and at the surface, and in relation to the larger components such as herbivores that move across the land. Organisms grow and dig through the soil, aerate it, reorganize it, and add and subtract organic material. Mature soil is structured and layered and, very importantly, it remains in place. Plowing of the soil turns everything upside down. What was hidden from light is exposed. What was kept at a constant temperature is now varying with the day and night and seasons. What cannot tolerate drying conditions at the surface is likely killed. And very sensitive and delicate structures within the soil are disrupted and destroyed.

Conventional tillage disrupts the entire soil ecosystem

. Tractors and farm equipment are large and heavy; they compact the soil, which removes air space and water-holding capacity. Wind and water erosion remove the smallest soil particles, which typically hold most of the micronutrients needed by plants. Synthetic fertilizers are added to supplement the loss of oil nutrients but often are relatively toxic to many soil organisms. And chemicals such as pre-emergents, fumigants, herbicides, insecticides, acaricides, fungicides, and defoliants eventually kill all but the most tolerant or resistant soil organisms. It does not take long to reduce a native, living, dynamic soil to a relatively lifeless collection of inorganic particles with little of the natural structure and function of undisturbed soil”.

When I told my husband all the reasons we use agricultural chemicals and the harm done, my husband got angry and said “Farmers aren’t stupid, that can’t be right!”

I think there are a number of reasons why farmers don’t go back to sustainable organic farming.

First, there is far too much money to be made in the chemical herbicide, pesticide, and insecticide industry to stop this juggernaut. After reading Lessig’s book “Republic, Lost”, one of the best, if not the best book on campaign finance reform, I despair of campaign financing ever happening. So chemical lobbyists will continue to donate enough money to politicians to maintain the status quo. Plus the chemical industry has infiltrated regulatory agencies via the revolving door for decades and is now in a position to assassinate the EPA, with newly appointed Scott Pruitt, who would like to get rid of the EPA.

Second, about half of farmers are hired guns. They don’t own the land and care about passing it on in good health to their children. They rent the land, and their goal, and the owner’s goal is for them to make as much profit as possible.

Third, renters and farmers both would lose money, maybe go out of business in the years it would take to convert an industrial monoculture farm to multiple crops rotated, or an organic farm.

Fourth, it takes time to learn to farm organically properly. So even if the farmer survives financially, mistakes will be made. Hopefully made up for by the higher price of organic food, but as wealth grows increasingly more unevenly distributed, and the risk of another economic crash grows (not to mention lack of reforms, being in more debt now than 2008, etc).

Fifth, industrial farming is what is taught at most universities. There are only a handful of universities that offer programs in organic agriculture.

Sixth, subsidies favor large farmers, who are also the only farmers who have the money to profit from economies of scale, and buy their own giant tractors to farm a thousand acres of monoculture crops. Industrial farming has driven 5 million farmers off the land who couldn’t compete with the profits made by larger farms in the area.

But farmers will have to go organic whether they like it or not

It’s hard to say whether this will happen because we’ve run out of pesticides, whether from resistance or a financial crash reducing new chemical research, or whether peak oil, peak coal, and peak natural gas will cause the decline of chemical farming. Agriculture uses about 15 to 20% of fossil fuel energy, from natural gas fertilizer, oil-based chemicals, farm vehicle and equipment fuel, the agricultural cold chain, distribution, packaging, refrigeration, and cooking to name a few of the uses.

At some point of fossil decline, there won’t be enough fuel or pesticides to continue business as usual.

Farmers will be forced to go organic at some point. Wouldn’t it be easier to start the transition now?

## Case – Heg

#### Sustainable bipolarity is possible but requires a reorientation of American grand strategy – it’s an impact filter that’s key to economic stability, pandemic response, climate action, and prolif – unipolarity is unsustainable and invites escalatory great power war

Campbell and Sullivan 19, September/October 2019, (KURT M. CAMPBELL is Chair and CEO of the Asia Group. He is 2018–19 Kissinger Fellow at the McCain Institute and was U.S. Assistant Secretary of State for East Asian and Pacific Affairs from 2009 to 2013., JAKE SULLIVAN is a Nonresident Senior Fellow at the Carnegie Endowment for International Peace. He served as National Security Adviser to the U.S. Vice President in 2013–14 and as Director of Policy Planning at the U.S. Department of State in 2011–13.), "Competition Without Catastrophe," Foreign Affairs, <https://www.foreignaffairs.com/articles/china/competition-with-china-without-catastrophe> mvp

The rapid coalescence of a new consensus has left these essential questions about U.S.-Chinese competition unanswered. What, exactly, is the United States competing for? And what might a plausible desired outcome of this competition look like? A failure to connect competitive means to clear ends will allow U.S. policy to drift toward competition for competition’s sake and then fall into a dangerous cycle of confrontation.

U.S. policymakers and analysts have mostly, and rightly, discarded some of the more optimistic assumptions that underpinned the four-decade-long strategy of diplomatic and economic engagement with China (which one of us, Kurt Campbell, detailed in these pages last year, writing with Ely Ratner). But in the rush to embrace competition, policymakers may be substituting a new variety of wishful thinking for the old. The basic mistake of engagement was to assume that it could bring about fundamental changes to China’s political system, economy, and foreign policy. Washington risks making a similar mistake today, by assuming that competition can succeed in transforming China where engagement failed—this time forcing capitulation or even collapse.

Despite the many divides between the two countries, each will need to be prepared to live with the other as a major power. The starting point for the right U.S. approach must be humility about the capacity of decisions made in Washington to determine the direction of long-term developments in Beijing. Rather than relying on assumptions about China’s trajectory, American strategy should be durable whatever the future brings for the Chinese system. It should seek to achieve not a definitive end state akin to the Cold War’s ultimate conclusion but a steady state of clear-eyed coexistence on terms favorable to U.S. interests and values.

Such coexistence would involve elements of competition and cooperation, with the United States’ competitive efforts geared toward securing those favorable terms. This might mean considerable friction in the near term as U.S. policy moves beyond engagement—whereas in the past, the avoidance of friction, in the service of positive ties, was an objective unto itself. Going forward, China policy must be about more than the kind of relationship the United States wants to have; it must also be about the kinds of interests the United States wants to secure. The steady state Washington should pursue is rightly about both: a set of conditions necessary for preventing a dangerous escalatory spiral, even as competition continues.

U.S. policymakers should not dismiss this objective as out of reach. It is true, of course, that China will have a say in whether this outcome is possible. Vigilance will thus need to remain a watchword in U.S.-Chinese relations in the period ahead. Although coexistence offers the best chance to protect U.S. interests and prevent inevitable tension from turning into outright confrontation, it does not mean the end of competition or surrender on issues of fundamental importance. Instead, coexistence means accepting competition as a condition to be managed rather than a problem to be solved.

COLD WAR LESSONS, NOT COLD WAR LOGIC

Given the current hazy discourse on competition, there is an understandable temptation to reach back to the only great-power competition Americans remember to make sense of the present one: the Cold War. The analogy has intuitive appeal. Like the Soviet Union, China is a continent-sized competitor with a repressive political system and big ambitions. The challenge it poses is global and lasting, and meeting that challenge will require the kind of domestic mobilization that the United States pursued in the 1950s and 1960s.

But the analogy is ill fitting. China today is a peer competitor that is more formidable economically, more sophisticated diplomatically, and more flexible ideologically than the Soviet Union ever was. And unlike the Soviet Union, China is deeply integrated into the world and intertwined with the U.S. economy. The Cold War truly was an existential struggle. The U.S. strategy of containment was built on the prediction that the Soviet Union would one day crumble under its own weight—that it contained “the seeds of its own decay,” as George Kennan, the diplomat who first laid out the strategy, declared with conviction.

No such prediction holds today; it would be misguided to build a neo-containment policy on the premise that the current Chinese state will eventually collapse, or with that as the objective. Despite China’s many demographic, economic, and environmental challenges, the Chinese Communist Party has displayed a remarkable ability to adapt to circumstances, often brutally so. Its fusion of mass surveillance and artificial intelligence, meanwhile, is enabling a more effective digital authoritarianism—one that makes the collective action necessary for reform or revolution hard to contemplate, let alone organize. China may well encounter serious internal problems, but an expectation of collapse cannot form the basis of a prudent strategy. Even if the state does collapse, it is likely to be the result of internal dynamics rather than U.S. pressure.

The Cold War analogy at once exaggerates the existential threat posed by China and discounts the strengths Beijing brings to long-term competition with the United States. Although the risk of conflict in Asia’s hot spots is serious, it is by no means as high, nor is the threat of nuclear escalation as great, as it was in Cold War Europe. The kind of nuclear brinkmanship that took place over Berlin and Cuba has no corollary in U.S.-Chinese ties. Nor has U.S.-Chinese competition plunged the world into proxy wars or created rival blocs of ideologically aligned states preparing for armed struggle.

Despite the diminished danger, however, China represents a far more challenging competitor. In the last century, no other U.S. adversary, including the Soviet Union, ever reached 60 percent of U.S. GDP. China passed that threshold in 2014; in purchasing-power terms, its GDP is already 25 percent greater than that of the United States. China is the emerging global leader in several economic sectors, and its economy is more diversified, flexible, and sophisticated than the Soviet Union’s ever was.

Beijing is also better at converting its country’s economic heft into strategic influence. Whereas the Soviet Union was hamstrung by a closed economy, China has embraced globalization to become the top trading partner for more than two-thirds of the world’s nations. The kinds of economic, people-to-people, and technological linkages that were lacking in the militarized U.S.-Soviet conflict define China’s relationship with the United States and the wider world. As a global economic actor, China is central to the prosperity of American allies and partners; its students and tourists flow through global universities and cities; its factories are the forge for much of the world’s advanced technology. This thick web of ties makes it difficult to even start to determine which countries are aligned with the United States and which are aligned with China. Ecuador and Ethiopia might look to Beijing for investment or for surveillance technologies, but they hardly see these purchases as part of a conscious turn away from the United States.

Even as China emerges as a more formidable competitor than the Soviet Union, it has also become an essential U.S. partner. Global problems that are difficult enough to solve even when the United States and China work together will be impossible to solve if they fail to do so—climate change foremost among them, given that the United States and China are the two biggest polluters. A host of other transnational challenges—economic crises, nuclear proliferation, global pandemics—also demand some degree of joint effort. This imperative for cooperation has little parallel in the Cold War.

Washington should heed the lessons of the Cold War while rejecting the idea that its logic still applies.

While the notion of a new Cold War has brought calls for an updated version of containment, resistance to such thinking has come from advocates of an accommodative “grand bargain” with China. Such a bargain would go well beyond the terms of U.S.-Soviet détente: in this scenario, the United States would effectively concede to China a sphere of influence in Asia. Proponents defend this concession as necessary given the United States’ domestic headwinds and relative decline. This position is sold as realistic, but it is no more tenable than containment. Ceding the world’s most dynamic region to China would do long-term harm to American workers and businesses. It would damage American allies and values by turning sovereign partners into bargaining chips. A grand bargain would also require stark and permanent U.S. concessions, such as the abrogation of U.S. alliances or even of the right to operate in the western Pacific, for speculative promises. Not only are these costs unacceptable; a grand bargain would also be unenforceable. A rising China would likely violate the agreement when its preferences and power changed.

Advocates of neo-containment tend to see any call for managed coexistence as an argument for a version of the grand bargain; advocates of a grand bargain tend to see any suggestion of sustained competition as a case for a version of containment. That divide obscures a course between these extremes—one that is not premised on Chinese capitulation or on U.S.-Chinese condominium.

#### China’s drive for regional hegemony can be peaceful and mutually beneficial with the US BUT that’s dependent on avoiding aggressive containment strategies

Heer 19 [Paul, National Intelligence Officer for East Asia in the Office of the Director of National Intelligence from 2007 to 2015, the Robert E. Wilhelm Research Fellow at the Massachusetts Institute of Technology’s Center for International Studies and an Adjunct Professor at George Washington University’s Elliott School of International Affairs, Jan 8, 2019, “Rethinking U.S. Primacy in East Asia,” <https://nationalinterest.org/print/blog/skeptics/rethinking-us-primacy-east-asia-40972>]

First, China is pursuing hegemony in East Asia, but not an exclusive hostile hegemony. It is not trying to extrude the United States from the region or deny American access there. The Chinese have long recognized the utility—and the benefits to China itself—of U.S. engagement with the region, and they have indicated receptivity to peaceful coexistence and overlapping spheres of influence with the United States there. Moreover, China is not trying to impose its political or economic system on its neighbors, and it does not seek to obstruct commercial freedom of navigation in the region (because no country is more dependent on freedom of the seas than China itself). In short, Beijing wants to extend its power and influence within East Asia, but not as part of a “winner-take-all” contest.

China does have unsettled and vexing sovereignty claims over Taiwan, most of the islands and other features in the East and South China Seas, and their adjacent waters. Although Beijing has demonstrated a willingness to use force in defense or pursuit of these claims, it is not looking for excuses to do so. Whether these disputes can be managed or resolved in a way that is mutually acceptable to the relevant parties and consistent with U.S. interests in the region is an open, long-term question. But that possibility should not be ruled out on the basis of—or made more difficult by—false assumptions of irreconcilable interests. On the contrary, it should be pursued on the basis of a recognition that all the parties want to avoid conflict—and that the sovereignty disputes in the region ultimately are not military problems requiring military solutions. And since Washington has never been opposed in principle to reunification between China and Taiwan as long as it is peaceful, and similarly takes no position on the ultimate sovereignty of the other disputed features, their long-term disposition need not be the litmus test of either U.S. or Chinese hegemony in the region.

Of course, China would prefer not to have forward-deployed U.S. military forces in the Western Pacific that could be used against it, but Beijing has long tolerated and arguably could indefinitely tolerate an American military presence in the region—unless that presence is clearly and exclusively aimed at coercing or containing China. It is also true that Beijing disagrees with American principles of military freedom of navigation in the region; and this constitutes a significant challenge in waters where China claims territorial jurisdiction in violation of the UN Commission on the Law of the Sea. But this should not be conflated with a Chinese desire or intention to exclusively “control” all the waters within the first island chain in the Western Pacific. The Chinese almost certainly recognize that exclusive control or “domination” of the neighborhood is not achievable at any reasonable cost, and that pursuing it would be counterproductive by inviting pushback and challenges that would negate the objective.

So what would Chinese “hegemony” in East Asia mean or look like? Beijing probably thinks in terms of something much like American primacy in the Western Hemisphere: a model in which China is generally recognized and acknowledged as the de facto central or primary power in the region, but has little need or incentive for militarily adventurism because the mutual benefits of economic interdependence prevail and the neighbors have no reason—and inherent disincentives—to challenge China’s vital interests or security. And as a parallel to China’s economic and diplomatic engagement in Latin America, Beijing would neither exclude nor be hostile to continued U.S. engagement in East Asia.

A standard counterargument to this relatively benign scenario is that Beijing would not be content with it for long because China’s strategic ambitions will expand as its capabilities grow. This is a valid hypothesis, but it usually overlooks the greater possibility that China’s external ambitions will expand not because its inherent capabilities have grown, but because Beijing sees the need to be more assertive in response to external challenges to Chinese interests or security. Indeed, much of China’s “assertiveness” within East Asia over the past decade—when Beijing probably would prefer to focus on domestic priorities—has been a reaction to such perceived challenges. Accordingly, Beijing’s willingness to settle for a narrowly-defined, peaceable version of regional preeminence will depend heavily on whether it perceives other countries—especially the United States—as trying to deny China this option and instead obstruct Chinese interests or security in the region.

#### \*Empirics go neg – most qualified studies disprove hegemonic stability theories.

Fettweis 17 –Christopher J. Fettweis is an American political scientist and the Associate Professor of Political Science at Tulane University. “Unipolarity, Hegemony, and the New Peace, Security Studies” 26:3, 423-451; EG)

Even the most ardent supporters of the hegemonic-stability explanation do not contend that US influence extends equally to all corners of the globe. The United States has concentrated its policing in what George Kennan used to call “strong points,” or the most important parts of the world: Western Europe, the Pacific Rim, and Persian Gulf.64 By doing so, Washington may well have contributed more to great power peace than the overall global decline in warfare. If the former phenomenon contributed to the latter, by essentially providing a behavioral model for weaker states to emulate, then perhaps this lends some support to the hegemonic-stability case.65 During the Cold War, the United States played referee to a few intra-West squabbles, especially between Greece and Turkey, and provided Hobbesian reassurance to Germany’s nervous neighbors. Other, equally plausible explanations exist for stability in the first world, including the presence of a common enemy, democracy, economic interdependence, general war aversion, etc. The looming presence of the leviathan is certainly among these plausible explanations, but only inside the US sphere of influence. Bipolarity was bad for the nonaligned world, where Soviet and Western intervention routinely exacerbated local conflicts. Unipolarity has generally been much better, **but whether or not this was due to US action is again unclear.** Overall US interest in the affairs of the Global South has dropped markedly since the end of the Cold War, as has the level of violence in almost all regions. There is less US intervention in the political and military affairs of Latin America compared to any time in the twentieth century, for instance, and also less conflict. Warfare in Africa is at an all-time low, as is relative US interest outside of counterterrorism and security assistance.66 **Regional peace and stability exist where there is US active intervention, as well as where there is not**. No direct relationship seems to exist across regions. If intervention can be considered a function of direct and indirect activity, of both political and military action, a regional picture might look like what is outlined in Table 1. These assessments of conflict are by necessity relative, because there has not been a “high” level of conflict in any region outside the Middle East during the period of the New Peace. Putting aside for the moment that important caveat, some points become clear. The great powers of the world are clustered in the upper right quadrant, where US intervention has been high, but conflict levels low. **US intervention is imperfectly correlated with stability, however. Indeed, it is conceivable that the relatively high level of US interest and activity has made the security situation in the Persian Gulf and broader Middle East worse.** In recent years, substantial hard power investments (Somalia, Afghanistan, Iraq), moderate intervention (Libya), and reliance on diplomacy (Syria) have been equally ineffective in stabilizing states torn by conflict. While it is possible that the region is essentially unpacifiable and no amount of police work would bring peace to its people, it remains hard to make the case that the US presence has improved matters. **In this “strong point,” at least, US hegemony has failed to bring peace.** In much of the rest of the world, the United States has not been especially eager to enforce any particular rules. Even rather incontrovertible evidence of genocide has not been enough to inspire action. Washington’s intervention choices have at best been erratic; Libya and Kosovo brought about action, but much more blood flowed uninterrupted in Rwanda, Darfur, Congo, Sri Lanka, and Syria. The US record of peacemaking is not exactly a long uninterrupted string of successes. During the turn-of-the-century conventional war between Ethiopia and Eritrea, a highlevel US delegation containing former and future National Security Advisors (Anthony Lake and Susan Rice) made a half-dozen trips to the region, but was unable to prevent either the outbreak or recurrence of the conflict. Lake and his team shuttled back and forth between the capitals with some frequency, and President Clinton made repeated phone calls to the leaders of the respective countries, offering to hold peace talks in the United States, all to no avail.67 The war ended Table 1. Post-Cold War US intervention and violence by region. High Violence Low Violence High US Intervention Middle East Europe South and Central Asia Pacific Rim North America Low US Intervention Africa South America Former Soviet Union in late 2000 when Ethiopia essentially won, and it controls the disputed territory to this day. The Horn of Africa is hardly the only region where states are free to fight one another today without fear of serious US involvement. Since they are choosing not to do so with increasing frequency, something else is probably affecting their calculations. Stability exists even in those places where the potential for intervention by the sheriff is minimal. Hegemonic stability can only take credit for influencing those decisions that would have ended in war without the presence, whether physical or psychological, of the United States. It seems hard to make the case that the relative peace that has descended on so many regions is primarily due to the kind of heavy hand of the neoconservative leviathan, or its lighter, more liberal cousin. Something else appears to be at work.

#### Best data proves unipolar systems are four times more war-prone than multipolar alternatives

Nuno P. Monteiro 12, Assistant Professor of Political Science at Yale University, “Unrest Assured: Why Unipolarity is Not Peaceful,” International Security, Winter 2012, Vol. 36, No. 3, p. 9-40

How well, then, does the argument that unipolar systems are peaceful account for the first two decades of unipolarity since the end of the Cold War? Table 1 presents a list of great powers divided into three periods: 1816 to 1945, multipolarity; 1946 to 1989, bipolarity; and since 1990, unipolarity.46 Table 2 presents summary data about the incidence of war during each of these periods. Unipolarity is the most conflict prone of all the systems, according to at least two important criteria: the percentage of years that great powers spend at war and the incidence of war involving great powers. In multipolarity,18 percent of great power years were spent at war.In bipolarity, the ratio is 16 percent**.** In unipolarity, however, a remarkable 59 percent of great power years until now were spent at war. This is by far the highest percentage in all three systems. Furthermore, during periods of multipolarity and bipolarity**,** the probability that war involving a great power would break out in any given year was, respectively, 4.2 percent and 3.4 percent. Under unipolarity, it is 18.2 percent—or more than four times higher.47 These figures provide no evidence that unipolarity is peaceful.48

#### We’ve entered a bipolar world – heg is dead, it’s now a question of ensuring peaceful coexistence

Tunsjo 18 (Oystein Tunsjo is a Senior Research Fellow, Norwegian Institute for Defence Studies, Oslo, Norway. He holds a PhD in International Relations from the University of Wales, Aberystwyth, UK.), 2018, The Return of Bipolarity in World Politics: China, the United States, and Geostructural Realism, ISBN: 9780231546904 mvp

By drawing on the method of measuring and counting poles in the international system elaborated on in the previous chapter, this chapter contends that China has increased its combined score across all dimensions of power sufficiently to have reached top ranking, even though China has not obtained power parity with the United States. This chapter’s analysis examines the power gap between the United States and China on the different combinations of capabilities to establish that China can be elevated from great-power to superpower status, if only barely. I show, according to one of the three criteria used to determine the distribution of capabilities in the international system, that is, the power gap between the first- and second-ranked power, how China has become a pole in a new bipolar international system. The next step, undertaken in chapter 4, will be to examine the last two criteria and demonstrate both that no third power is able to challenge the top two and that the distribution of capabilities at the start of the contemporary bipolar system is roughly similar to the distribution at the origins of the previous bipolar system.

China’s rise has been phenomenal. “Never before in the history has a state risen so far, so fast, on so many dimensions of power.”1 China’s economy was smaller than that of the Netherlands in 1980, but in 2014, China’s GDP growth was roughly equal to that of the entire Dutch economy.2 The following analysis is not based on using China’s current rates of economic growth to project China’s future growth. Instead, it is assumed that China will manage about half of the 2016 official economic growth rate of 6.5 percent over the next two decades.

It is further assumed that this economic growth, which is not a best-case scenario for China’s economy but instead represents a considerable slowdown in economic growth, will allow China to keep its position in the top ranking, generate enough funding to continue to expand and modernize its military, maintain high levels of R&D spending and promote innovation, and sustain the CCP’s monopoly of power and ability to contain challenges to social stability. To assess top-ranking status, we will look at China’s economy, military, population, geography, resource endowment, political stability, and competence rates. Each aspect will be examined separately in the following seven sections.

ECONOMIC POWER

Historically, forecasts and projections have tended to underestimate China’s extraordinary economic growth over the last three decades, surprising even the most bullish analysts. The U.S. economy is still larger than China’s if we measure GDP at market exchange rates (MER), but China is narrowing that gap at a remarkable rate. China’s nominal GDP currently accounts for more than 60 percent of that of the United States.3 This contrasts sharply with the early 1990s, when U.S. nominal GDP was about fifteen times larger than China’s, or in 2000, when it was approximately eight times larger.4

Based on World Bank and IMF datasets, China now accounts for roughly 15 percent of global GDP in MER, up from about 4 percent in 2000, whereas the United States accounted for 31 percent in 2001 and about 23 percent in 2017. Datasets developed by other economists, such as Arvind Subramanian at the Peterson Institute for International Economics and Angus Maddison, show that U.S. and Chinese shares of global GDP are roughly the same, at about 18 percent.5

It has been argued that economic power is better measured in terms of per capita income and that the United States has increased its lead across most indicators by amounts that exceed China’s total capabilities.6 In 2015, according to the World Bank, China’s per capita GDP (in PPP current international $) was US$13,572, and the comparable figure for the United States was approximately US$52,704. The gap in GDP per capita between the United States and the Soviet Union in 1950 was almost 1:4, roughly similar to the contemporary gap between the United States and China. Moreover, the Soviet Union’s GDP in MER was never more than about 50 percent of the U.S. GDP.7 China’s GDP in MER has surpassed 60 percent of the U.S. GDP in MER.

There is a proviso, however, noted by the U.S. National Intelligence Council in Global Trends 2030. While MER-based measures are important for trade and financial analysis, purchasing power parity (PPP)–based measures are also an indicator of economic strength.8 Economists disagree on how to measure PPP in a way that accommodates the fact that prices in China are low. PPP-converted GDPs measure what one can buy in each country to compare the relative size of the economies. However, PPP measurements are tied to domestic consumption and do not measure either the U.S. or Chinese ability to buy things from global markets. Most analysts now believe China’s GDP has surpassed that of the United States and become the world’s largest economy based on PPP-based measures.9 Nonetheless, here the argument that China is a top-ranking economic power is based on nominal GDP figures.10

The debate is often about whether absolute differences or relative distribution and capability ratios are most important. Is it more important that China, over the course of 1991 to 2011, narrowed the ratio of U.S. to Chinese GDP from 15:1 to 2:1 or that the U.S. economy is still roughly US$7 trillion larger than China’s? Is it more important that the ratio of American per capita GDP to Chinese per capita GDP fell from 67:1 in 1991 to 5:1 in 2013 or that the gap in per capita incomes in real terms widened by US$19,000 during the same period?

Beckley answers this by comparing a Ph.D. student living on US$20,000 per year who lands a job as a professor earning US$80,000 a year with a banker earning US1$ million per year and receiving a US$200,000 bonus, raising her annual income to $1.2 million. “The ratio of the banker’s income to the scholar’s dropped from 50:1 to 15:1,” he writes, “yet the scholar is now US$140,000 poorer compared to the banker than he was as a graduate student.”11 But if this ratio continued to drop for only another three years, then the professor would be earning more than the banker.12 This is the trend in the contemporary economic balance between the United States and China, and it has shifted the distribution of economic capabilities.

Joffe, building on Beckley’s analysis, acknowledges that “higher growth will eventually beat lower growth,” but whichever way one plays the numbers, “the upshot is that it will take many, many years for China to best the United States.” Remember, however, that the argument positing the return of bipolarity does not depend on China achieving power parity with the United States. China has already surpassed the Soviet Union’s relative economic strength during the previous bipolar era and is now closing the economic gap with the United States even in absolute terms. According to Joffe, in the mid-1990s, when China was growing at roughly 10 percent, it added $200 billion to its GDP in one year. The American economy, growing at a mere 3 percent, added $360 billion per annum to its GDP. Similarly, according to Joffe, in 2012 China added $450 billion to its $7 trillion economy by growing at 7 percent, while the United States added $480 billion to its $16 billion economy growing at 3 percent.13

Following Joffe’s method, if we assume China’s economic growth was 5 percent in 2015, toward the low end of reasonable estimates (the official growth rate was 6.9 percent), it adds $550 billion to an $11 trillion economy. The U.S. GDP growth in 2015 was 2.4 percent, which added $432 billion to an $18 trillion economy. China is now narrowing the economic gap in both absolute and relative terms, even if it is likely to take another decade or two before the Chinese economy surpasses the U.S. economy based on MER. When considering the various measurements of economic power, the absolute size of the economy, regardless of per capita GDP, provides for large government revenues that can be allocated to defense and innovation. In this respect, assuming domestic stability, absolute GDP is the critical factor in measuring the bases of power.

China reportedly surpassed the United States in 2012 to become the world’s largest trading nation.14 In terms of output, China is now the world’s top manufacturing country, taking the title from the United States, which held it for more than a century.15 However, despite the redistribution of trade and that the large part of the production and manufacturing of goods are being transferred to China, it is mostly the assembly of the final products or the last stage of the supply chain that has relocated to China. As the WTO writes, the production of the core components often remains within the original country. Thus, most of the content of the products, and their economic value, are still being developed and produced outside China, in the United States, Europe, and developed countries in East Asia. Caveats that acknowledge the issue of “value added,” question the concept of “country of origin,” and provide new measurements of international trade should therefore be taken into account.16

Equally important, if not more significant than trade data, is China’s market power in trade relations. Export to the Chinese market is critical to many countries and companies today, and this enhances China’s economic power. China is the world’s largest holder of foreign reserves, a major investor in the world, and a major recipient of foreign direct investments (FDI).17 As Allison puts it regarding the relative rankings of China and the United States, in 1980, China had 10 percent of America’s GDP as measured by PPP, 7 percent of its GDP at current US$ exchange rates, and 6 percent of its exports, and the foreign currency held by China was just one-sixth the size of America’s reserves. By 2014, those figures were 101 percent of GDP, 60 percent at US$ exchange rates, and 106 percent of exports, and China’s reserves were twenty-eight times larger than America’s.18 Economically, China is obviously more powerful than in the past: its share of the world economy has increased considerably, and it can now be ranked in the top tier in terms of economic capability.

CHINA’S ECONOMIC CHALLENGES

China’s leaders have recognized that the economic model that has provided double-digit growth in the past is becoming unsustainable. Since Hu Jintao’s report to the Eighteenth Party Congress in 2012, Chinese leaders have argued that China must recalibrate its economy. Reforms seek to rebalance economic growth from one based on exports and investments in infrastructure, real estate, and heavy industry to a more service-oriented economy where domestic consumption and innovation increase their share of the economy, state-owned enterprises are transformed, and more entrepreneurship can flourish. The fundamental imbalance in China’s economy is the low GDP share of consumption. China’s economic growth has for too long relied on repressing household consumption to make modernizing investments. In consequence, China’s growth has been driven mainly by the need to keep investment rates at an extraordinarily high level.19 This dependence on investments has further snowballed into a significant increase in debt. To rebalance the economy, China needs to increase consumption’s share of GDP. Rising domestic consumption is linked to the challenge of building a welfare system that allows households to spend more rather than save their money for child care, education, healthcare, and pensions. Challenging reforms are also needed to tackle corruption, restructure state-owned companies, adopt new financial and monetary policies, and prevent further environmental degradation.

President Xi Jinping continues to push ahead with economic reforms and has sought to implement the economic-reform agenda announced at the Third Plenum of the CPC’s Eighteenth Party Congress in 2013.20 The Five-Year Plan for National Economic and Social Development adopted by the Fifth Plenary Session of the Eighteenth Communist Party of China (CPC) Central Committee on October 29, 2015, resolved to maintain medium to high growth and prioritized the reform of the economic system.21

These high rates of economic growth cannot be sustained. The main question posed by economists today is whether China will be able to slow its growth to a more sustainable pace. At the same time, even some of the bearish estimates and projections of China’s future economic growth suggest that China will retain its top-ranking position and continue to narrow the economic power gap with the United States, albeit at a slower pace.

With the growth rate expected to edge lower in the years ahead, recent projections of China’s economic growth seem to have been too optimistic. The IMF, World Bank, and the majority of private analysts are now, in contrast to only a few years ago, much more bearish and are busy lowering their estimates of China’s growth potential. One study that considered various revised forecasts developed a multiscenario working model of Chinese growth to 2020. China, the authors write, can hope to deliver 6 percent annual growth by 2020—if it does it right. But if the reforms fall short, “the story is more dire and China can only look forward to 1–3% GDP growth six years from now.”22

Larry Summers and Lant Pritchett have suggested, in what has been referred to as a bearish or more cautious economic forecast (the World Bank and the IMF’s forecasts are less pessimistic), that China’s economy will grow at an average rate of “only” 3.9 percent annually for the next two decades.23 If we assume a hard landing (average growth of 5.2 percent from 2014–2020) and a crisis scenario (average growth of 4.2 percent from 2014–2020), using the multiscenario working model devised by the Rhodium Group, and combine it with Summers and Pritchett’s cautious estimates, then China’s annual economic growth is projected to be about 4–5 percent in the period 2014–2020, 4 percent in 2020–2025, 3.5 percent in 2025–2030, and 3 percent in 2030–2035.24 These projections are lower than the targets proposed by the Chinese government and the IMF and World Bank forecasts. Nevertheless, even when we rely on such bearish projections, China can catch up economically with the United States, assuming the U.S. economy will grow at roughly 2 percent over the same period, which is a high estimate, since the U.S. economy is likely to be affected negatively by a crisis or hard landing in China.

Despite the economic slowdown and crisis in the Chinese stock market in the summer of 2015, which led to headlines about “the great fall of China,” China’s economy is now so large that even a 5 percent growth rate in 2015—a low estimate—would add more to world output than the 14 percent expansion China posted in 2007, according to the Economist.25 China’s economy is not collapsing, and its economic growth is likely to remain strong in absolute and relative terms over the coming years.

Nonetheless, China’s extraordinary economic growth presents Chinese leaders with more challenges than declining GDP growth.26 China’s rising debt is causing alarm in many circles. The Chinese economy, they say, is addicted to stimulus and investment. The debt-to-GDP ratio has changed from 100 percent of GDP in 2007 to about 280 in 2015, inflating the risk in the real estate and credit sectors.27 At the same time, economists point out that state debt in China has only reached 55 percent of GDP, substantially lower than in much of the West; China’s government therefore has plenty of financial elbow room to weather a crisis.28

China needs to rebalance its model of economic growth and manage its economy so that its growth doesn’t slow too rapidly, and decision makers cannot delay making certain adjustments for too much longer. Chinese leaders will be forced to make difficult decisions that will entail some cost to near-term growth and require measures that entail some vulnerabilities and risks. In raising household income, the cost of production is likely to rise, and China will lose competiveness abroad. In exchange, domestic consumption is likely to increase as households benefit from the rebalancing project. The benefits are likely to be healthier economic growth and a lowered risk of a debt crisis.29 If China rebalances successfully, it can sustain medium to high growth, providing higher incomes and growth in the longer term.

We have learned over the last two decades that it is difficult to estimate and project China’s future economic growth. But despite uncertainty in this respect, we do not need to extrapolate from China’s growth to determine its future economic power. As of today, China has vaulted into the top rank in terms of economic strength even though it has not obtained power parity with the United States. Relatively, the United States is less economically powerful in comparison than it was in the 1990s and 2000s, and China has outpaced all other contenders for top-ranking status in terms of economic strength.

MILITARY STRENGTH

China’s military budget has grown by about 10 percent annually for about two decades, while military expenditure has remained fairly steady at 2 to 2.2 percent of GDP. As the Pentagon and other observers have noted, the official Chinese budget does not include several major categories of expenditures, such as the procurement of foreign weapons and equipment.30 SIPRI estimated China’s defense spending in 2014 at US$216 billion, 64 percent higher than the official Chinese figure. In 2016 and 2017, China announced that it would keep its defense spending to a single-digit-percentage increase, respectively 7.6 and 7.0 percent, amounting to US$147 billion and US$151 billion. According to SIPRI’s estimate of a 64 percent higher budget than official figures, China’s defense spending in 2016 was about US$225 billion. China’s share of world military spending rose to 13 percent in 2016, up from 9.5 percent in 2012, 6.6 percent in 2010, and 4 percent in 2005, according to SIPRI.

Comparative numbers by SIPRI show that U.S. military expenditure declined from a high in 2010 of US$749 billion to a low in 2015 of US$598 billion. In 2016, U.S. military spending saw its first increase since 2010, amounting to US$606 billion, and the new Trump administration has called for a further increase in defense spending.31 According to SIPRI, the U.S. share of world military expenditures has decreased from 48 percent in 2005 to 43 percent in 2010, 39 percent in 2012, and 36 percent in 2016.

Currently, U.S. military spending is about two to three times that of China. This contrasts sharply with 2000, when the U.S. defense budget was more than ten times that of China (US$311 billion versus US$30 billion), not to mention the early 1990s, when the U.S. defense expenditure was more than twenty times higher.

FIGURE 3.1 U.S. and Chinese defense spending, 2007–2016.

Source: SIPRI Military Expenditure Database.

China’s large absolute GDP and low defense spending as a percentage of GDP provide opportunities for increasing defense spending in the future and suggest that China will be able to continue narrowing the gap in military power. And when comparing military spending, it is useful to take PPP measurements into consideration: the cost of producing military equipment and of training soldiers in China is much lower than the comparable cost in the United States. For example, “a U.S. soldier costs approximately US$18,000 a year to put in the field, while his Chinese counterpart probably costs no more than US$2,000.” Whatever the actual figures may be, the key point is that “the Chinese military has much more money to spend on fewer troops than it did 15 years ago.”32 A roughly 10 percent annual increase in defense expenditures over the last two decades has contributed to a cumulative effect on China’s defense budget and spending.33

Conversely, it is argued that the United States has accumulated stocks of military equipment, technological sophistication, and organizational and management skills that suggest that it will sustain its military advantage over China even after China, sometimes toward the mid-twenty-first century, arrives at a larger economy and higher annual defense expenditure than the United States.34 Brooks and Wohlforth remind us that military capability is generated over years and decades and that defense spending understates the extent of the global military gap between the United States and its nearest rivals.35 Another scholar has emphasized that modernization matters and that “raw numbers do not mean as much in measuring military power as technological sophistication.”36

China still faces challenges in modernizing its armed forces, and it remains uncertain whether the PLA would be able to fight and win a war against a modern opponent in the twenty-first century.37 Currently, China and the PLA do not possess global power-projection capabilities that can contend with U.S. capabilities around the world. However, in the post–Cold War era, China has not prioritized developing “the capabilities necessary to wage high- or even medium-intensity warfare beyond China’s immediate vicinity”38 or sought to match U.S. defense spending. China’s military expenditure as a percentage of GDP has remained about half of the United States’ for the last two decades. Instead, China has sought to learn from the mistakes of the Soviet Union and emphasized domestic economic development and reforms, while at the same time sustaining a robust military buildup.

Recent trends, most significantly stated in the 2015 white paper China’s Military Strategy, suggest that China seeks to develop capabilities to defend national security interests globally and operate as a world-class maritime power.39 Discussing recent developments in China’s maritime forces and strategy, one leading observer of the PLAN points to a shift whereby China has developed new strategies, doctrines, and capabilities and conducted several operations, missions, and training exercises to enhance China’s readiness to carry out overseas contingency operations. “The emphasis on far-seas training is a strong indicator of the PLAN’s desire to better prepare for and routinely conduct the long-distance deployments currently conducted by the small task group assigned to the Gulf of Aden counterpiracy patrols.”40 This has led some to emphasize that the United States should take seriously the maritime challenges from a “risen China” rather than a “rising China.” With the rapid emergence of an increasingly global PLAN, the Center for a New American Security (CNAS) argues that the era whereby the United States has enjoyed largely uncontested blue-water naval supremacy will soon end.41

The United States is still ahead of China in military capabilities, but as the findings of a recent comprehensive RAND report show, China is closing several military gaps. In fact, the net change in capabilities is still moving in China’s favor.42 If another Taiwan Strait crisis erupts today, the PLA will be much more able to contest the sea, subsea, air, land, and space around Taiwan than it was during the 1995/1996 crisis.43 China’s military modernization has improved the quality of its armed forces. The PLA and its four branches, the Army, Navy, Air Force, and Second Artillery, are more advanced technologically and in terms of combat capability. The PLA is also conducting more realistic training exercises.

The RAND and CNAS reports concur with the findings of the 2015 U.S. Office of Naval Intelligence in confirming the “significant strides” taken by the PLA(N) since 2009 in operationalizing and modernizing its forces.44 Similar views on China’s military modernization are expressed in the U.S. Department of Defense 2015 Asia-Pacific Maritime Security Strategy report.45 Leading experts on the PLAN see the development and deployment of a strong Chinese navy,46 one that is increasingly modern, regionally powerful, and able to pose a significant “challenge in the Western Pacific to the U.S. Navy’s ability to achieve and maintain control of blue-water ocean areas in wartime—the first such challenge the U.S. Navy has faced since the end of the Cold War.”47 Figure 3.2 shows the current trend.48

FIGURE 3.2 U.S. and Chinese navies, 2000–2030.

Note: Attack submarines include nuclear- and diesel-powered vessels; small surface ships include frigates, littoral combat ships, and mine ships; large surface ships include cruisers and destroyers.

Source: Center for a New American Security, International Institute for Strategic Studies, Bloomberg.

With increased capabilities, the PLA Navy now operates in closer proximity to U.S. carrier battle groups, harassing U.S. Navy ships and planes. It has increasingly resisted U.S. surveillance activities within its exclusive economic zone. China has also channeled increased resources into coast guard and maritime surveillance agencies that can better safeguard its interests and enforce its interpretation of the international law of the sea. These capabilities go far beyond what the Soviet navy had in the maritime domain at the origins of the previous bipolar era in the late 1940s and early 1950s.

American allies provide bases and support, facilitating a forward U.S. military presence and contributing to its global power-projection capability, but these allies cannot simply be added to the United States’ combined military capabilities. It remains uncertain whether most of Washington’s allies would support the United States militarily in an armed conflict with China. And as long as so many states rely on the United States for their own security, and as long as U.S. forces are still needed globally to ensure security and stability, its global security commitments might become a liability in a conflict with China. The global power-projection capabilities of America’s allies in Europe are diminutive in comparison, and they are preoccupied with Russia and instability in the Near East and Africa. They would hardly pick a fight with China in East Asia.

China’s military modernization, consolidation of power on Asia’s mainland, and expanding naval capabilities suggest that, as Morgenthau professed with the previous bipolar system in mind, the “defection of an ally or the addition of another could no longer overturn the balance of power and thus materially affect the ultimate outcome of the struggle.”49 China and the United States are capable of avoiding defeat in a conventional war with any state or even a coalition of states. This places China and the United States in a league of their own. The United States still has a larger share of overall military capabilities, but China excels in its combined capabilities sufficiently to reach the top tier.

POPULATION

China’s population, at almost 1.4 billion, is the largest in the world, and it has always provided an important power base for the country’s economic strength and military capability. It offers the People’s Liberation Army (PLA) more soldiers to defend Chinese territory. This allowed inferior Chinese “volunteers” to outnumber and outcompete U.S. troops on the Korean Peninsula in the 1950s. China and the PLA also confronted and forced the Soviet Union, another superpower, into retreat from its borders in the 1960s and successfully defeated India’s military forces in 1962. Its large population has allowed China to emerge victorious from years of war and to survive blockades, embargoes, hunger, and other catastrophes. Undoubtedly, China has the population to “put up a good fight” and “avoid defeat” in war.50 Morgenthau’s argument that no country can remain or become a first-rate power if it does not belong to the more populous nations of the earth is still true.51 Population size, together with economic strength, remain the essential ingredients and the two most important components for generating military power among the top-ranking states.52

China’s “one billion workers”53 and huge market have attracted investors and stimulated unprecedented economic growth in recent decades. But China is also host to an aging population, rising pension payouts, gender disparity, and a shrinking labor force, all of which could undermine China’s economic prospects and leave the country in the “middle-income trap.”54 China could grow old before it grows rich. Demography is becoming a liability and is likely to slow China’s growth. Moreover, China is becoming old at a much earlier stage in its development cycle. Against this backdrop, Brooks and Wohlforth contend that the United States, with its high fertility rate and as a popular destination for immigration, will maintain a comparative advantage in the decades to come.55

All projections agree that China’s population will continue to grow for another decade, but there are marked differences in estimates of its peak population, which range from 1.35 to 1.67 billion between 2023 to 2050, given disagreement about the present fertility level in China and the effects of the government’s relaxation of the one-child policy. The working-age population will shrink when the population stops growing, but depending on policy measures introduced by the government, the size of China’s working-age population will range between 780 and 1,100 million in 2050. But even a reduced working-age population will remain enormous in terms of absolute size, as a proportion of the world’s population, and in comparison to that of many developed and developing countries.56 In addition, some argue that the impending robot revolution in China suggests that the Chinese manufacturing industry will remain strong and competitive despite a decline in the working-age population.57

The imbalance in sex ratio at birth has resulted in a deficit of young females and a marriage squeeze.58 The single-child generation will affect the country’s socioeconomic development and traditional family support system, putting pressure on social stability and order. The Chinese government has initiated policies and large reforms to tackle these challenges.59 The one-child policy has been relaxed to boost fertility, with the total fertility rate increasing from 1.6 births per woman in 2009 to 1.7 births in 2010–2012.60 The Thirteenth Five Year plan has now abolished the one-child policy and is aimed at “improving public services for reproductive health, maternal and child health, nurseries and kindergartens.”61 However, there is a strong negative correlation between fertility rates and GDP per capita growth. Some researchers argue that the current fertility rate is perhaps 1.4–1.6, which is consistent with the thesis that the fertility decline can be attributed to economic growth.62

Additionally, rising costs of living and education in cities and growing concerns about pollution might also lead to fewer children. The government has proposed raising the legal retirement age from fifty-five to sixty for women and sixty to sixty-five for men.63 Another response to the relative decline in the working-age population is to improve labor productivity by increasing efficiency in the labor market, allocating labor between sectors better and raising the educational level of the Chinese people.64 As discussed, the government aims to rebalance the economy, with a stronger focus on domestic consumption and services. Improvements to healthcare, education, pension systems, and social security can provide a new growth market for the new model of economic growth.65 China has opportunities to cope with future population-related socioeconomic changes.66

GEOGRAPHICAL SIZE

As a continental power, China has the capability to compete for regional hegemony based on its geographical size.67 China has showed that it has the strategic depth necessary to survive a military clash with another great power or superpower. It resisted and survived the Japanese occupation during World War II, just as the Soviet Union withstood the invasion by another great power, Nazi Germany.68

Conversely, China’s geographical position traditionally has been considered a relative disadvantage. China shares a land border with fourteen countries and an additional five states at sea. Four of its neighbors on the Asian continent possess nuclear weapons. Stability along its borders has been a major concern for Chinese leaders throughout its history. China also faces the challenge, confronted by most traditional land powers, of being constrained by its defense of continental interests as it seeks to develop naval power, expand its interests in the maritime domain, and challenge the maritime order and naval status quo.69 In comparison, the United States has the benefit of bordering only two states and no great powers and being insulated from Eurasia by the Atlantic and Pacific oceans.70

At the same time, for most of China’s neighbors, including Russia and India, bordering China is more of a problem for them than it is for China. Today China is much stronger than its neighbors, which permits it to focus on developing strong naval capabilities.71 Indeed, the PRC has never been more secure along its borders than it is today. Being responsible for the survival and security of their nation, China’s leaders may not allow themselves to be too sanguine about China’s border security. Nonetheless, none of China’s neighbors would even think of invading China. This was not the case even a few decades ago. China now occupies an advantageous position on the map of Central-East Asia, and its land borders at this junction in time seem to offer more opportunities than danger.72 This is mainly a result of the relative shift in the systemic distribution of capabilities.

Geostructural conditions have changed China’s security environment on the Asian mainland fundamentally, allowing China to expand its interests and influence over land and sea. China’s position on the map in the 1960s was the same as today, but China’s strategic environment was hardly favorable; it was at war with India to the southwest, embargoed by and in conflict with the United States in Southeast Asia and the Taiwan Strait, and confronted by the Soviet Union to the north. The recent shifts in the distribution of capabilities and the relative and absolute rise in China’s power have now turned China’s geographical location and long borders from a liability to an advantage and strength as China seeks to expand its dominance in East and Central Asia and challenge the United States in East Asian waters. There are few examples in modern history of a land power being as secure as China is as it seeks to maintain its dominance at land and challenge the dominant sea power. The PRC’s ambitious Belt and Road initiative,73 which emphasizes the land-based “silk road” economic belt and the oceangoing maritime silk road, suggests that China is taking advantage of its favorable geographical environment and growing capabilities.74

NATURAL RESOURCES

China is rich in energy sources, food production is high, and mineral resources are robust, as are several other resources of commercial importance.75

Energy Security

China’s rapid economic growth has been accompanied by an enormous rise in energy demand. Remarkably, and probably unprecedented in history, China’s energy consumption grew fivefold from 1978 to 2009, and between 2005 and 2010, China’s total electricity capacity doubled.76 In 2010, China became the largest energy consumer in the world, surpassing the United States. In 2013, it was reported that China had gone from exporting oil in 1993 to surpassing the United States as the world’s largest net oil importer.77 Despite this extraordinary rise in energy demand, almost 90 percent of China’s energy mix is still satisfied by domestic supplies.78

China’s energy mix is favorable in terms of energy security, but its heavy reliance on coal is not environmentally sustainable, and China is searching for alternative energy sources. The importation of hydrocarbons from abroad is likely to increase, together with domestic gas production and hydro and nuclear power. Investments in alternative energy sources such as solar and wind power are massive, but it remains to be seen if clean energy sources will substantially increase their share of China’s energy mix. Sustainability is a major issue when it comes to China’s natural resources and will affect how China’s resource endowments are measured. Even if China’s net oil imports continue to grow and if domestic energy production were to fall to 80 percent of its total energy consumption in the years ahead, China’s energy security can be sustained by domestic energy production. Abundant coal reserves are an important element in China’s energy security. The possibility of creating synthetic oil from these reserves could provide vital insurance in times of emergency or war.79

Oil is China’s second-largest source of energy, accounting for about 20 percent of its total energy consumption.80 In 2016, China was the world’s fourth-largest producer of oil (after the United States, Saudi Arabia, and Russia), accounting for about 7 percent of global production.81 It is projected that China’s oil production over the next decade will be above 4 mbd. China’s dependence on foreign oil exceeded 50 percent between 2007 and 2009, and it now imports about 60 percent of its oil needs. But contrary to conventional and popular wisdom that emphasizes the so-called Malacca Dilemma,82 China does not face any such concerns.

Were China confronted with a wartime contingency and a direct blockade of its seaborne oil supply routes, which only the U.S. Navy could enforce, and only in a wartime scenario, China’s war-fighting capability would not be hampered.83 In fiscal year 2004, the U.S. military, fighting wars in Iraq and Afghanistan as well as maintaining normal operations, used approximately 395,000 bpd of oil.84 China produces domestically more than ten times more oil than the United States needed to wage two wars and conduct military operations around the world. In 2015, China had a massive refining capacity of about 14 mbd.85

Since China’s current and future oil imports reflect current automobile use, and since car sales are increasingly consumption rather than industry driven, China’s energy security is not significantly challenged; personal car use can be curtailed, as it was during the 2008 Summer Olympics in Beijing and is regularly in many large cities. And if China found itself at war with the United States the Chinese people, it is reasonable to assume, would be willing to tighten their belts and reduce energy consumption. Additionally, China has hedged against a wartime scenario and a blockade of seaborne energy supplies by laying cross-border petroleum pipelines with Russia and Central Asia.

When it comes to China’s energy security, pipelines (Central Asian and Russian) are more likely to be “safer” in wartime threat scenarios and more “unsafe” in peacetime risk scenarios, while SLOCs are “safer” in peacetime risk scenarios and more “unsafe” in wartime threat scenarios. The key is that by maintaining both (pipelines and seaborne energy/building a large state-owned tanker fleet) in combination with other measures, such as building a strategic petroleum reserve, increasing the production of nuclear energy, and maintaining a high degree of self-sufficiency through coal and—although to a much lesser extent—hydro and gas, China is hedging against any disruptions to its energy supplies and bolstering its energy security.86

Food and Water Security

Food and water security has been a major concern for China. The country has to feed roughly 20 percent of the world’s population with only about 11 percent of the world’s arable land and roughly 7 percent for the world’s freshwater resources.87 China’s food crisis during the Great Leap Forward between 1959 and 1962 remains a lesson for Chinese leaders in terms of the importance of food security. China has in recent years managed to increase its food production, decrease the number of undernourished people from 21 to 12 percent, and is self-sufficient in major crops, such as wheat and rice, and livestock, such as bovines and poultry.88

As a result, after several thousand years, hunger as a social problem has largely been eradicated, and the government continues to issue guidelines that guarantee maintaining farmland at a level that sustains food security.89 As Morgenthau acknowledged when discussing the role of food and natural resources in influencing the power of nations, self-sufficient or nearly self-sufficient countries have a great advantage over those that are not and are obliged to import the foodstuffs they do not grow themselves, or face starvation. “Self-sufficiency in food has . . . always been source of great strength,” Morgenthau avers.90 China scores higher on this power measurement today than it did in the past. When the most populous country in the world is able to feed its population, such a development contributes in elevating China to top-ranking power status.91

The future, however, presents a number of challenges. Farmland and water resources are shrinking and increasingly polluted. The population is still growing (albeit more slowly) and is consuming more meat. This has a significant knock-on effect on grain demand, since more grain is needed to produce the beef, pork, and poultry.92 Rapid urbanization and rising prosperity stimulate meat consumption and simultaneously create an exodus of rural labor into cities, limiting China’s ability to expand its meat production further. But while all this will indeed increase China’s dependence on imports in the coming years,93 it is important to note that meat production is not the same thing as food security. Insufficient production of meat may cause domestic instability, but it does not threaten starvation, as was the case in past decades. Surviving on meat is not a requirement in food-security terms. Moreover, estimates and projections about China’s food scarcity may have underestimated the importance of genetically modified food production to curb dependency on imports.

Roughly 60 percent of China’s water resources are used in agricultural production.94 Industry-driven economic growth, urbanization, and higher living standards have increased water consumption. China’s average availability of fresh water is only one-third of global levels, and groundwater quality in both rural and urban areas is often bad.95 Water shortages already affect major cities in China, and increasingly polluted water supplies endanger public health and economic growth.96 In 2004, Elizabeth Economy noted how the government was having to pursue “expansive river diversion and pollution remediation projects” but found few improvements ten years on: water resources were continuing to decrease, and the widespread pollution of groundwater and rivers continued to increase.97

Clearly, Chinese leaders face daunting challenges in managing scarce water resources and combating deteriorating water quality, but according to some, China is improving its resource management.98 Constraining water demand, improving efficiency in the usage of scarce water supplies, recycling more water in the industrial sector, and fining and punishing polluters more strongly are some of the important measures the government has initiated and can enforce with greater dexterity in the future.99 The Chinese government has invested in large projects to transfer water from central and southwestern China to augment the flow of the Yellow River to meet water demand in the Beijing-Tianjin region.100 However, these are very costly projects that cannot solve the water problem in the long term if demand, consumption, and efficiency issues are not tackled. Bureaucratic fragmentation and regional rivalries remain impediments to the central government’s policy responses to address water-quality issues, and this shows that a deeper and more systematic reform of governance systems and institutions are needed.101

Minerals

China ranks third in the world in terms of mineral reserves. Its national reserves of rare-earth elements are larger than the (known) combined total in the rest of the world. However, on a per capita basis, China’s known mineral reserves are less than half the world average.102 With China’s double-digit growth in the consumption of mineral resources, shortages of mineral resources and security of supplies will increasingly preoccupy Chinese decision makers. Nonetheless, China’s total amount and relative share of important minerals place it in the top rank.

In sum, despite being the world’s most populous country and the world’s most energy hungry, China is able to feed its population and is almost self-sufficient in food and energy production. After taking power in 1949, the Communist Party was forced to maintain a high degree of self-reliance as a result of the Western embargo, diplomatic isolation, and the split with the Soviet Union. Nonetheless, during the previous bipolar period China contended with the superpowers and shaped their behavior. China has now improved its energy production, increased food security, and has a strong base of mineral resources. Taken together, this tells us that China scores among the top rankers with respect to resource endowments.

POLITICAL STABILITY

Will China’s Communist Party sustain its rule, or will it collapse? According to many, the destabilizing forces are overwhelming. Debt, corruption, pollution, rising levels of income, and asset inequality all are undermining the CCP’s legitimacy, pushing China’s economic elite to flee abroad and forcing President Xi to intensify political repression, signifying the CCP’s leaders’ deep anxiety and insecurity.103 The collapse of the CCP has been predicted by many over the years,104 but its system of one-party control and leadership has survived. The Chinese state, in the opinion of some, is not fragile. On the contrary, the regime is strong, increasingly self-confident, and lacks any organized opposition.105 Examining the power of China’s current leader, two prominent observers arrive at different assessments. On the one hand, President Xi is described as the most powerful leader in China since Mao;106 on the other, Chinese leaders are said to have become progressively weaker in relation to one another and to society.107 The scholars Minxin Pei and David Shambaugh argue that without “fundamental and far-reaching political reforms, China’s economy will stagnate, and the regime may well collapse.”108 Conversely, another recent study based on two large surveys in China suggests that the CCP has done a good job in improving its approval rating and sustaining popular support.109

A middle-ground perspective is provided by leading scholars’ contributions to a volume discussing China’s new leadership. Few anticipate the collapse of China or the fall of the CCP, but China’s leaders face a different and more complex set of challenges.110 It is difficult to know whether Xi’s reforms and anticorruption campaign will be successful and whether they will weaken or strengthen his position within the party. Few observers have knowledge of the inner workings of the Communist Party or the black box of decision making within the Politburo. And political predictions are notoriously difficult. Strong controversy over the future political stability in China will remain. What we know is that the CCP has remained in power and overseen unprecedented growth in the economy over the last three decades. Such an accomplishment would have been impossible without political stability. The CCP’s resilience has been strong, and it can be argued that China still scores relatively high on political stability.111

The CCP and the PLA find themselves in a boat that cannot be rocked and hanging from a “stability rope” that cannot be cut. The PLA is probably still willing to use force to maintain CCP power and stability. There is little to indicate that China’s civilian and military leaders would be better off with another revolution or civil war. The Bo Xilai and Zhou Yongkang cases only serve to illustrate Xi’s and the CCP’s continued control of the PLA and domestic security apparatus.112 Xi has also initiated a major reorganization of the PLA and proclaimed a reduction of 300,000 PLA personnel, bringing the size of the active-duty PLA down to two million.113 It would be unlikely that Xi would have initiated such steps were he not confident in his abilities to control the PLA.

We cannot foresee the future. What we do know is that the CCP remains in power. Durability is a defining characteristic of stability. The CCP has survived major internal crises and demonstrated its political stability. The history of the PRC has included significant conflicts, and Chinese leaders have been willing to use force to retain control. A one-party state is likely to prioritize its own survival, even at the expense of people’s livelihoods and China’s national interests. The PRC is ethnically homogenous, with the Han ethnic group constituting about 92 percent of the population. The CCP leadership can draw on China’s history as an ancient civilization with traditions dating back several thousand years. As Terrill points out, China can boast of a political governance of its core territory longer than that of any other nation in the world.114 All of these factors foster stability.

COMPETENCE

Competence and innovation constitute a source of state power. High-income countries are dominating research and development, but of late China has been climbing up the technology ladder.115 Production is no longer limited to low-tech and low-end manufacturing. In the early 1990s China’s R&D progress and innovation were practically negligible, but since then the overall trend, as the UN Educational, Scientific, and Cultural Organization (UNESCO) and the UN World Intellectual Property Organization (UNWIPO) note, is unmistakable: China has increased and the United States has decreased its relative share of world GDP, gross domestic expenditure of research and development (GERD), researchers, and publications.116 China’s GERD as a percentage of GDP (GERD/GDP) reached 1.98 percent in 2012, more than tripling since 1995 and surpassing the twenty-eight member states of the European Union, whose aggregate GERD/GDP was at 1.96 percent.117 China has continued to stay ahead of the European Union.118

As science becomes increasingly internationalized, China is playing a key role in the change in the sources of global scientific publications. China increased its share of world scientific publications from about 10 to 20.2 percent in the period 2008–2014; the U.S. share declined from 28.1 to 25.3 percent during the same period.119 China is now the second-highest producer of research output in the world.120 China has also increased its world share of researchers from 16.7 to 19.1 percent from 2009 to 2013.121 China annually graduates four times more students than the United States in STEM subjects (science, technology, engineering, and mathematics), which provide the core competencies driving modern economies.122 China is also a leader in emerging fields such as nanotechnology and renewable energy.123

Cong Cao points to some outstanding achievements of Chinese scientists and engineers since 2011 in areas such as basic research, strategic high technology, deep-ground drilling, supercomputing, and aerospace. Furthermore, several gaps in technology and equipment have been filled in recent years, and China has taken a great leap forward in the medical sciences.124 According to the Economist, “the common perception that China is incapable of innovation needs re-examining. China is moving up the value chain and China’s new entrepreneurs are coming up with entirely new industries.”125 Moreover, reports suggest that China now outspends the United States on the later stages of R&D, those that turn discoveries into commercial products.126

The growth trend in R&D spending, patent and trademark applications, and scientific publications indicates an increasing capacity to innovate, but the issue of quality is still a problem.127 The number of patents and trademark applications may not necessarily be reflective of an ability to innovate, and high levels of R&D spending may not actually produce much innovative output.128 As the UNESCO Science Report 2015 shows, there is a difference between patent applications and patents submitted. China’s world share of patents submitted to the U.S. Patent and Trademark Office (USPTO) has remained low, increasing from 1.1 to 2.7 percent in the period 2008–2013. Trends in triadic patents worldwide show a contraction in the U.S. world share and an increase in China’s, but China’s share stood at only 3.6 percent in 2013, up from 0.5 percent in 2002.129

Beckley urges us to be careful before using R&D spending, numbers of graduating scientists and engineering students, and scientific publications as yardsticks because the rush to increase quantity is reducing the quality of China’s education, research, and innovation.130 Shaped by the political system, the educational system and research environment in China lack the freedom of exploration and critical thinking that allow innovation to thrive and prosper. China still scores poorly in terms of the number of scientific citations.131

After examining the “believers” versus the “doubters,” Steinfeld concludes that while the “diametrically opposed schools of thought” actually agree on the main facts, they are completely at odds about what those facts mean. And no amount of additional aggregate data—whether regarding patent output, numbers of new inventions, types of products introduced, or really anything else—is likely to persuade one side of the other’s claims, he writes. China’s innovation is thriving, Steinfeld adds, thanks to an emerging system of globalized R&D that has forged “a symbiotic relationship between multinational and indigenous Chinese producers.”132 Despite these caveats, it is reasonable to assume that China’s overall score on competence, whether developed indigenously or via multinational corporations and globalization, places the country in contention for a spot among the top-ranking nations.

CONCLUSION: CHINA’S BID FOR TOP RANKING

One issue runs through my assessment of China’s rise in power, the shifting distribution of capabilities, and the narrowing of the power gap between China and the United States: quality versus quantity. On the seven dimensions of power we have attempted to measure, we still cannot resolve the quality-versus-quantity issue, and it remains embedded in the debate between “believers” and “doubters.” One wonders whether China’s high-growth economy can be said to be strong when it remains inherently unhealthy and unsustainable. Would China be economically stronger if growth was only 3 percent and the economy much healthier? Similarly, would China be stronger if it had a leaner, meaner, and more modern PLA and a smaller population, say, about 700 million, roughly half of its current population, able to flourish on the country’s own natural resources? But a smaller population could not have produced the same GDP, had the same military capabilities, or made the same investments in R&D. China would not have been able to narrow the power gap with the United States or widen the power gap with other states as quickly as it has. The adage that quantity has a quality all its own applies to the rise of China and its rivalry with the United States.

Economies are never perfect. When we look at China’s economic growth, we find many deficiencies and challenges, but they need to be put into perspective and compared with those facing other major economies. The U.S. economy has recently recovered from one of its most devastating financial crises. But while its economy now seems healthier and able to fuel sustainable growth, there is also political dysfunction133 and deficiencies in fiscal policy, challenges related to healthcare and immigration, and rising rates of private debt and deficits in the U.S. balance of payment. The Russian economy is in recession and facing so many problems that it is vastly inferior to China’s. Japan suffers from stagnant growth, and the huge debt the government is absorbing will be difficult to manage with a rapidly aging population. The major powers in Europe are still struggling with slow growth in the aftermath of the debt and financial crisis, the recent refugee crisis is threatening to undermine some of the core foundations of the European Union, and most European countries face demographic challenges. India’s economy is, relatively speaking, much smaller than China’s, and it is questionable whether the high levels of economic growth needed to narrow the gap with China can be sustained. All the major economies, especially Russia, India, and Japan but also the United States and a number of European states, will be affected if the Chinese economy slows down or makes a hard landing, and it therefore remains to be seen how it will affect the distribution of capabilities and China’s relative power status.

China’s economic growth rate has dropped from about 10 percent to roughly 6 percent in only a few years, and it is unlikely that China will be able to sustain even 6 percent growth. However, this does not mark the end of China’s rise.134 The growth might be slower, but it potentially could be healthier. Since the absolute size of China’s economy is now so large, even a 3–4 percent growth rate in the years ahead would be strong and something most other major economies would envy. In 2007, when China was growing at record-high 14 percent, it added $490 billion to a $3.5 trillion economy. If China was growing at the official 6.9 percent in 2015, it would add $759 billion to an $11 trillion economy (even 5 percent growth, which would have been $550 billion in growth, would have been more in absolute numbers than in 2007). The argument here has never been that China will overtake the United States and rule the world.135 China does not even need to obtain power parity with the United States to reach a top-ranking slot. China’s nominal GDP is now more than 60 percent of the United States’. If China maintains 4 percent growth and the United States grows at 2 percent, then China will continue to narrow the gap between it and the United States, and widen the gap between it and any other great or major power, in terms of economic strength.

China, like most states, is constantly in transition and seeking development. There is evidence that China is both strong and weak; depending on whether you’re looking at nominal GDP, GDP measured in PPP, or per capita GDP, it can be contended that China is either a superpower or a developing state. The evidence marshaled above suggests that China has vaulted into the top ranking. China’s overall capability score remains lower than that of the United States. Nonetheless, asymmetry is to be expected, as the system will never be perfectly bipolar in the sense of China and the United States scoring equally on all the items that can be used to measure the distribution of capabilities. China’s combined score on the seven factors examined in this chapter place it in the top ranking. As we will see in the next chapter, the Soviet Union never scored as high as the United States in 1950 or at any time during the Cold War on the combined capabilities that define a pole. The power gap between the Soviet Union and the United States in 1950 is roughly similar to the uneven distribution of power between the United States and China today.

#### Heg is unsustainable---retrenchment is gradual now, but recommitting makes it violent and forced.

Kupchan 20, professor of international affairs at Georgetown University and senior fellow at the Council on Foreign Relations. (Charles A., 10-21-2020, "America’s Pullback Must Continue No Matter Who Is President", *Foreign Policy*, https://foreignpolicy.com/2020/10/21/election-2020-smart-retrenchment/)

As the Trump era potentially comes to an end, many foreign-policy voices in the United States and abroad relish the prospect of the country’s roaring return to the global stage. But attempting a full-on comeback would be a mistake. If anything, the strategic pullback that President Donald Trump has initiated needs to continue—albeit in a more coherent and judicious manner.

Much of the debate surrounding the next administration’s foreign policy has focused on boldly reasserting U.S. leadership in the world. And it’s true: Global interdependence and upheaval do require steady U.S. leadership and engagement. What’s been largely missing from this debate, however, are the challenges facing the next president when it comes to right-sizing U.S. engagement abroad—especially military involvement—and bringing the nation’s strategic commitments back into line with it means and purposes.

The American electorate has turned sharply inward in response to military overreach in the Middle East, the economic dislocations brought about by innovation and globalization, and the national calamity caused by COVID-19. The nation’s next president would be wise to take note—and craft a brand of global statecraft that is effective but also politically sustainable. Otherwise, the strategic pullback that needs to take place will occur by default rather than by design, risking that U.S. overreach could turn into even more dangerous underreach. Indeed, that’s what’s been happening during Trump’s presidency. He seems to have understood the need to retrench. But his troop withdrawals from Afghanistan, Iraq, Syria, and Germany have been haphazard, making a hash of the effort. Retrenchment cannot be done by tweet, in unpredictable fits and starts, and couched in an abrasive “America first” unilateralism that has alienated allies and set the world on edge.

Democratic candidate Joe Biden is far better suited to restore an equilibrium between the nation’s foreign policy and its political will. Throughout his career, he has been a pragmatic and prudent internationalist; looking forward, pragmatism and prudence will require a more selective and discriminating internationalism, not restoration of the status quo ante. Three-quarters of the American public want U.S. troops to leave Afghanistan and Iraq—it is time to downsize the U.S. footprint in the Middle East. U.S. foreign policy has become over-militarized—the next administration should reallocate priorities and resources, putting more emphasis on diplomacy, cybersecurity, global public health, and climate change. Washington should also return to being a team player if it is to lighten its load; retrenchment and multilateral engagement go hand in hand. Meeting the threat posed by China, managing international trade and finance, preventing nuclear proliferation, addressing pandemics—these and other urgent challenges all require broad international cooperation. And as the United States pulls back from its role as global policeman, it will want like-minded partners to help fill the gap. These partnerships become stronger through diplomacy and teamwork.

The top priorities of the next president will be at home: taming the pandemic, repairing the economy, and reviving democratic institutions and norms. Only if the country’s democratic lights come back on can it effectively deal with the rest of the world. In the meantime, the next administration needs to continue Trump’s effort to downsize the nation’s foreign entanglements—but in a smart and measured way. The United States needs to step back without stepping away. “Build back better” applies abroad just as much as it does at home.

#### China decline isn’t inevitable – answers Erickson and Collins

Robert May 20, Postgraduate Masters’s student in International Relations at Queen Mary University of London. He is also the CEO of a non-profit multinational education provider (ABE) a member of the Royal Overseas League, a member of the Royal Institute for International Affairs, and a Friend of UNESCO, “Is War Inevitable Between the US and China?” Atlas Institute for International Affairs, 9/7/2020, https://www.internationalaffairshouse.org/is-war-inevitable-between-the-us-and-china/

Since 1500 C.E., when a rising power has challenged an established power it has ended in violent conflict 80 percent of the time.4 This indicates that war between America and China is not inevitable, but it is highly probable. The applicability of structural analysis to the changes in relative strength and privilege in world order generates the principle anxieties and pressures that lead to war, but classical realism instead stresses the historical processes and biases that determine political action. Policymakers should realise that China is not Nazi Germany; in 2019, Xi Jinping stated, “Civilisations don’t have to clash, what is needed are eyes to see the beauty in all civilisations”, implying China will not use its role or influence to change the ideologies or political practices of other societies (Cited in Mahbubani, 2020:254-255). Neither is China nor the USSR; ‘The Chinese Communist Party is far more capable and adaptable than the Soviet Communist Party’ (Ibid, 271). China does not seek to export its political system around the world, its objective is international respect, not conversion; the grandest expression of Chinese power, the Great Wall, also denotes a consciousness of its limitations and vulnerability (Kissinger, 2014:214). Nevertheless, America is convinced of an existential threat to its hegemony and the emergence of new world order, which arguably has more to do with the failure of the liberal international order, and the misguided belief system that ‘the end-point of development and modernisation is defined by the contemporary West’ (Barkawi& Laffey, 2006:331). Those under attack feel compelled ‘to defend not only their territory but their basic way of life’ (Kissinger, 2014:366).

A realist recalibration of U.S. foreign policy around current national interest and a reassessment of whether its grand strategy of primacy is worth bleeding for may conclude that the U.S. has no necessity to confront China. America’s borders are not in danger of being breached, U.S. defence spending is still more than the next 10 countries combined and it remains the only superpower capable of projecting a military presence globally5. China’s territorial sphere remains limited to the Indo-Pacific region, ‘with more neighbours than any other country, it is deeply embedded in the Asian economic system’ and must balance multiple threats with nuclear powers on many fronts (Khanna, 2019:147). America must remain mindful that ‘War does not always arise from wickedness or folly. It sometimes arises from mere growth and movement (Murray, cited in Carr, 1940: 191). Washington should replace an improvisational China attitude rooted in exceptionalism, with a strategy to accommodate legitimate Chinese interests. It must strengthen, rather than withdraw from its Asian balancing alliances ‘forcing China to focus most of its attention closer to home’ (Walt, 2020) whilst also rebuilding diplomatic capability with China, and abandoning the temptation to view every Chinese action as inherently aggressive, rather as based on legitimate historical and domestic designs; ‘exaggerating the threat posed by small changes to the status quo and rejecting adaptation to the new balance of power in East Asia… could encourage the U.S. to adopt overly competitive policies’ (Glaser, 2019:52).

#### No Taiwan invasion – geography, and no heg solves because it removes the US from the war which keeps it conventional – answers warrants in their heg card

Michael A. Cohen, MA, 21 [Fellow @ The Century Foundation, Adjunct Lecturer in School of International and Public Affairs @ Columbia], "No, Neocons, China Is Not About to Invade Taiwan," New Republic, 11-19-2021 <https://newrepublic.com/article/164485/why-china-will-not-invade-taiwan> C.VC

Earlier this month, the Defense Department released its annual report to Congress on “Military and Security Developments Involving the People’s Republic of China.” While the report lays out the ways in which China’s “People’s Liberation Army” is seeking to modernize its forces, the threat to Taiwan of armed invasion is still minimal at best:

Large-scale amphibious invasion is one of the most complicated and difficult military operations, requiring air and maritime superiority, the rapid buildup and sustainment of supplies onshore, and uninterrupted support. An attempt to invade Taiwan would likely strain PRC’s armed forces and invite international intervention. These stresses, combined with the PRC’s combat force attrition and the complexity of urban warfare and counterinsurgency, even assuming a successful landing and breakout, make an amphibious invasion of Taiwan a significant political and military risk.

One might expect that a country intent on launching the largest and most difficult amphibious invasion in history would be making intense preparations. That’s not happening.

As the Pentagon report notes, Chinese naval investments have focused on building up the capacity to launch “regional and eventually global expeditionary missions rather than the large number of landing ship transports and medium landing craft that would be necessary for a large-scale direct beach assault.” The Pentagon also finds that while China is focusing on conducting joint operations that involve forces from the army, navy, and air force, as of present it currently lacks such capabilities.

That the Chinese military enjoys vast military superiority vis-à-vis Taiwan is not in doubt. But that such resources can be used to mount an amphibious assault is something else altogether. The Chinese military last fought a war in 1979 against Vietnam, and the PLA was badly bloodied. That means that the soldiers and officers who make up China’s military today have virtually no direct combat experience.

China’s own media outlets have, according to the Pentagon, noted the PLA’s shortcomings, which include that “commanders cannot (1) judge situations; (2) understand higher authorities’ intentions; (3) make operational decisions; (4) deploy forces; and, (5) manage unexpected situations.” These problems would be challenging enough in a conventional conflict. For a complex invasion of Taiwan, they would render such efforts virtually impossible.One big reason is that Taiwan is about as inhospitable an environment as can be imagined for an amphibious invasion. Ian Easton, a defense expert who has written extensively about Taiwan defense strategy, wrote earlier this year that the country’s “coastal terrain … is a defender’s dream come true. Taiwan has only 14 small invasion beaches, and they are bordered by cliffs and urban jungles.” Easton also notes that “many of Taiwan’s outer islands bristle with missiles, rockets, and artillery guns. Their granite hills have been honeycombed with tunnels and bunker systems.”

#### \*Heg encourages allies to reduce defense spending and encourages risky behavior – nuke war

Posen ’16 (Barry R; 8/7/2016; Ford International Professor of Political Science at MIT, Director of the MIT Security Studies Program Council on Foreign Relations International Affairs Fellow; Rockefeller Foundation International Affairs Fellow; Guest Scholar at the Center for Strategic and International Studies; Woodrow Wilson Center Fellow; Smithsonian Institution; Transatlantic Fellow of the German Marshall Fund of the United States, and most recently Visiting Fellow at the John Sloan Dickey Center at Dartmouth College. "The High Costs and Limited Benefits of America’s Alliances," National Interest, <http://nationalinterest.org/blog/the-skeptics/the-high-costs-limited-benefits-americas-alliances-17273?page=show//)MBA> HBJ

The United States stands at the center of a far flung global alliance system, which commits it to defend the security of countries rich and poor, great and small, liberal and illiberal. The principal U.S. formal alliances are the North Atlantic Treaty Organization, the U.S.-Japan security treaty, the Republic of Korea Treaty, and the Australia-New Zealand (ANZUS) treaty. The United States has less formal relationships with Israel and several Arab states, and many others around the world. The foreign-policy establishment insists that all of these alliances are central to our security. The reasons offered since the end of the Cold War to support this judgment are seldom clear, and the costs are always buried, if acknowledged at all. The value of U.S. alliances should be judged on their contribution to U.S. security--the ability to defend the safety, sovereignty, and territorial integrity of the United States. The combination of the inherent strengths of the U.S. economy, the nature of modern military technology--both nuclear and conventional, along with the American military's mastery of those technologies--and two vast ocean barriers, make it either unbelievably foolhardy or hugely difficult for others to constitute a major threat to the U.S. homeland. Given the relative ease of ensuring U.S. security without extensive help from others, it is a challenge to show that the security value of these alliances exceeds the costs and risks incurred for them. In no case do current allies directly "defend" the United States, though some do occupy important strategic geography, which contributes to our military power. At best, our allies defend themselves with vast assistance from the United States. What does this assistance cost? Costs The United States bears four principal costs for these alliances: 1) the direct military costs; 2) the costs of wars waged mainly for the purpose of reassuring these allies; 3) the nuclear risks necessary to "extend" nuclear deterrence to these allies and 4) the "moral hazard" consequences of security guarantees, which have the perverse effect of driving down the defense efforts of allies and further driving up U.S. military costs. Supporters of the present alliance system routinely minimize its military costs. The Department of Defense's accounting systems make the calculation of such costs difficult. One cannot find a clear official statement that apportions the DOD budget to Europe, the MIddle East, and Asia. If a lay person attempts such a calculation, they will be brought up short by the defining characteristic of U.S. post-Cold War force structure: the U.S. military is essentially a global strategic reserve that can concentrate in defense of whichever ally is most in need of assistance. Small numbers of U.S. troops live abroad in Europe, Asia and the Middle East, and these small numbers make the effort look tiny. We must therefore try to estimate the cost of the U.S. grand strategy that commits the country to defend all these places. I have argued that if the United States were more judicious in its promises abroad, perhaps a fifth of the defense budget could be cut (excluding the costs of actual wars), amounting to roughly one hundred billion dollars per year at current prices. This is a nontrivial sum with major opportunity costs: it could reduce the deficit; repair the country's crumbling infrastructure; retrain American workers to compete more effectively in the global economy, or simply be returned to the taxpayer. Instead it subsidizes the defense of prosperous allies, providing welfare for the rich. The "credibility" wars that the U.S. fights, or threatens are another cost of the alliance system. The Balkan Wars of the 1990s fall into this category. So far, the post-Cold War world has not seen very expensive wars of this kind, but there was nothing about the Balkan wars that threatened the United States. Currently, members of the foreign-policy establishment argue that the United States should be assisting Ukraine in its fight with Russia and subverting the brutal Assad regime, in part to convince others of U.S. credibility. Once committed to defend allies everywhere, a state becomes obsessed with its political and military prestige, and vulnerable to the claim that "small" wars must be fought in the hope of deterring large ones. This is especially true when the actual strategic value of these allies is modest.A third cost of these alliances is the commitment to nuclear war that they embody. We understood this during the Cold War, but no one discusses this anymore. Europe's principal potential challenger is Russia; Japan's is China; South Korea's is North Korea. To defend these regions or countries from their most plausible challengers, and to deter attack, the United States must convince those challengers that it would, if pressed, wage nuclear war on their behalf. (The difficulty of making its nuclear-escalation commitments plausible further tempts America to fight 'small' wars to build credibility.) Are these nuclear commitments strategically necessary? During the Cold War, at the margin, one could make the argument that they were. We did not want to see what the Soviet Union might extract from rich European states or Japan by way of extra resources, if it could cow or conquer them, and convert their economic assets into military power. Today, however, it is hard to argue that any of the challengers that these countries face today are capable of conquering these allies, or coercing them into making great contributions to the challenger's military war chest. The United States assumes nuclear risks in the absence of a clear case for doing so. To offer an extreme example, the Baltic states are members of NATO. The United States is committed to their defense if they are challenged by Russia. These states cannot defend themselves conventionally, and because of the peculiarities of their geography, neither can the United States (This was seldom discussed when these states were brought into NATO in the George W. Bush administration.) I believe that a full fledged Russian challenge over the Baltics is unlikely, but were it to occur the United States could face the alternative of a potentially irreversible military defeat or a dramatic and dangerous nuclear crisis. Finally, these alliance commitments create a special kind of "moral hazard." The extravagant insurance that we offer these countries encourages them to engage in risky behavior. For the Europeans and Japanese, this consists of buying too little military insurance for themselves. Their defense budgets are too small even to sustain their present force structures. U.S. defense secretaries from both parties dutifully chide allies for their shortfalls and then go on to ignore them as we move to provide more security welfare. In NATO, for example, all but four of the allies fail to spend 2 percent of GDP on defense, an alliance commitment, while the United States spends 3 percent excluding war costs. (Germany, the fourth-most-productive economy in the world and the NATO ally best placed to assist the Baltic states, spends barely 1.2 percent.) Yet in the face of European concerns about Russian adventurism, the United States has rushed into the breach with five billion dollars of additional spending on European security over the last three fiscal years, which the Pentagon smuggled into the budget for Overseas Contingency Operations, whose purpose is to pay for actual unexpected war costs, and which therefore escapes the scrutiny of normal budget politics.

#### Retrenchment doesn’t cause conflict, lashout, or draw-in

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

How do great powers respond to acute decline? The erosion of the relative power of the United States has scholars and policymakers reexamining this question. **The** central **issue is whether** prompt retrenchment **is** **desirable** or probable. Some **pessimists counsel** that **retrenchment is** a **dangerous** policy, because it shows weakness and invites attack. Robert Kagan, for example, **warns, "A reduction** in defense spending . . . **would unnerve** American **allies and undercut** efforts to gain greater **cooperation**. There is already a sense around the world, fed by irresponsible pundits here at home, that the United States is in terminal decline. Many fear that the economic crisis will cause the United States to pull back from overseas commitments. The announcement of a defense cutback would be taken by the world as evidence that the American retreat has begun."1 Robert **Kaplan** likewise **argues**, "Husbanding our power in an effort to slow America's decline in a post-Iraq and post-Afghanistan world would mean avoiding debilitating land entanglements and focusing instead on **being more of an offshore balancer**. . . . While this may be in America's interest, the very signaling of such an aloof intention **may encourage regional bullies**. . . . [L]essening our engagement with the world would have devastating consequences for humanity. The disruptions we witness today are but a taste of what is to come should our country flinch from its international responsibilities."2 The consequences of these views are clear: retrenchment should be avoided and forward defenses maintained into the indefinite future.3

Other observers advocate retrenchment policies, but they are pessimistic [End Page 7] about their prospects.4 Christopher Layne, for instance, predicts, "Even as the globe is being turned upside down by material factors, the foreign policies of individual states are shaped by the ideas leaders hold about their own nations' identity and place in world politics. More than most, America's foreign policy is the product of such ideas, and U.S. foreign-policy elites have constructed their own myths of empire to justify the United States' hegemonic role."5 Stephen Walt likewise advocates greater restraint in U.S. grand strategy, but cautions, "The United States . . . remains a remarkably immature great power, one whose rhetoric is frequently at odds with its conduct and one that tends to treat the management of foreign affairs largely as an adjunct to domestic politics. . . . [S]eemingly secure behind its nuclear deterrent and oceanic moats, and possessing unmatched economic and military power, the United States allowed its foreign policy to be distorted by partisan sniping, hijacked by foreign lobbyists and narrow domestic special interests, blinded by lofty but unrealistic rhetoric, and held hostage by irresponsible and xenophobic members of Congress."6 Although retrenchment is a preferable policy, these arguments suggest that great powers often cling to unprofitable foreign commitments for parochial reasons of national culture or domestic politics.7

**These arguments have** **grim implications for** contemporary **international politics**. With the rise of new powers, such as China, the international pecking order will be in increasing flux in the coming decades.8 Yet, if the pessimists are correct, **politicians and interests groups in the U**nited **S**tates **will be** unwilling or unable to realign resources with overseas commitments. **Perceptions of weakness and** declining U.S. credibility **will encourage policymakers to** hold on to burdensome overseas commitments, **despite their high costs** in blood and treasure.9 **Policymakers** in Washington **will** struggle to retire **from profitless military engagements** and restrain ballooning current accounts and budget deficits.10 For some observers, the wars in Iraq and Afghanistan represent the ill-advised last gasps of a declining hegemon seeking to bolster its plummeting position.11

In this article, we question the logic and evidence of the retrenchment pessimists. To date **there has been** neither a comprehensive study **of great power retrenchment** **nor a study that lays out the case** for retrenchment **as a practical or probable policy**. **This article fills these gaps by** systematically examining the relationship between acute relative decline and the responses of great powers. We examine eighteen cases of acute relative decline since 1870 and advance three main arguments.

First, **we challenge the** retrenchment pessimists' **claim that** domestic or international constraints **inhibit the ability of declining great powers to retrench**. In fact, **when states fall in the hierarchy of great powers**, peaceful retrenchment is the most common response, **even over short time spans**. Based on the empirical record, we find that great powers retrenched in no less than eleven and no more than fifteen of the eighteen cases, a range of 61-83 percent. **When international conditions demand it, states renounce risky ties, increase reliance on allies** or adversaries, **draw down** their military **obligations, and impose adjustments on domestic populations**.

Second, we find that the magnitude of relative decline helps explain the extent of great power retrenchment. Following the dictates of neorealist theory, **great powers retrench for the same reason they expand**: the rigors of great power politics compel them to do so.12 Retrenchment is by no means easy, but [End Page 9] necessity is the mother of invention, and **declining great powers face** **powerful incentives to contract their interests in a** **prompt and proportionate manner.** Knowing only a state's rate of relative economic decline explains its corresponding degree of retrenchment in as much as 61 percent of the cases we examined.

Third, we argue that the rate of decline helps explain what forms great power retrenchment will take. How fast great powers fall contributes to whether these retrenching states will internally reform, seek new allies or rely more heavily on old ones, and make diplomatic overtures to enemies. Further, our analysis suggests that **great powers facing acute decline are** less likely to initiate or escalate militarized interstate disputes. **Faced with diminishing resources**, **great powers** moderate their foreign policy ambitions **and offer concessions in areas of lesser strategic value**. Contrary to the pessimistic conclusions **of critics,** retrenchment neither requires aggression nor invites predation. **Great powers** are able to **rebalance their commitments through compromise, rather than conflict**. In these ways, states respond to penury the same way they do to plenty: they seek to adopt policies that maximize security given available means. Far from being a hazardous policy, **retrenchment can be successful**. **States that retrench** often regain their position in the hierarchy of great powers. Of the fifteen great powers that adopted retrenchment in response to acute relative decline, 40 percent managed to recover their ordinal rank. In contrast, none of the declining powers that failed to retrench recovered their relative position.

#### Heg causes war – best data – the Middle East and hard power investments prove.

Fettweis ‘17 (Christopher J, \*Associate Professor of Political Science at Tulane University, Ph.D. from the University of Maryland, College Park, “Unipolarity, Hegemony, and the New Peace,” Security Studies 26:3, 423-451)//cmr

Overall US interest in the affairs of the Global South has dropped markedly since the end of the Cold War, as has the level of violence in almost all regions. There is less US intervention in the political and military affairs of Latin America compared to any time in the twentieth century, for instance, and also less conflict. Warfare in Africa is at an all-time low, as is relative US interest outside of counterterrorism and security assistance.66 Regional peace and stability exist where there is US active intervention, as well as where there is not. No direct relationship seems to exist across regions. If intervention can be considered a function of direct and indirect activity, of both political and military action, a regional picture might look like what is outlined in Table 1. These assessments of conflict are by necessity relative, because there has not been a “high” level of conflict in any region outside the Middle East during the period of the New Peace. Putting aside for the moment that important caveat, some points become clear. The great powers of the world are clustered in the upper right quadrant, where US intervention has been high, but conflict levels low. US intervention is imperfectly correlated with stability, however. Indeed, it is conceivable that the relatively high level of US interest and activity has made the security situation in the Persian Gulf and broader Middle East worse. In recent years, substantial hard power investments (Somalia, Afghanistan, Iraq), moderate intervention (Libya), and reliance on diplomacy (Syria) have been equally ineffective in stabilizing states torn by conflict. While it is possible that the region is essentially unpacifiable and no amount of police work would bring peace to its people, it remains hard to make the case that the US presence has improved matters. In this “strong point,” at least, US hegemony has failed to bring peace. In much of the rest of the world, the United States has not been especially eager to enforce any particular rules. Even rather incontrovertible evidence of genocide has not been enough to inspire action. Washington’s intervention choices have at best been erratic; Libya and Kosovo brought about action, but much more blood flowed uninterrupted in Rwanda, Darfur, Congo, Sri Lanka, and Syria. The US record of peacemaking is not exactly a long uninterrupted string of successes. During the turn-of-the-century conventional war between Ethiopia and Eritrea, a highlevel US delegation containing former and future National Security Advisors (Anthony Lake and Susan Rice) made a half-dozen trips to the region, but was unable to prevent either the outbreak or recurrence of the conflict. Lake and his team shuttled back and forth between the capitals with some frequency, and President Clinton made repeated phone calls to the leaders of the respective countries, offering to hold peace talks in the United States, all to no avail.67 The war ended in late 2000 when Ethiopia essentially won, and it controls the disputed territory to this day. The Horn of Africa is hardly the only region where states are free to fight one another today without fear of serious US involvement. Since they are choosing not to do so with increasing frequency, something else is probably affecting their calculations. Stability exists even in those places where the potential for intervention by the sheriff is minimal. Hegemonic stability can only take credit for influencing those decisions that would have ended in war without the presence, whether physical or psychological, of the United States. It seems hard to make the case that the relative peace that has descended on so many regions is primarily due to the kind of heavy hand of the neoconservative leviathan, or its lighter, more liberal cousin. Something else appears to be at work.

#### Terrorism

#### A. Hegemony fails and propagates terrorism – it justifies intervention and empirically causes blowback.

Bandow 19 (Doug, senior fellow @ Cato Institute and JD Stanford, 6-2-2019, "Understanding the Failure of U.S. Foreign Policy: The Albright Doctrine," National Interest, <https://nationalinterest.org/blog/skeptics/understanding-failure-us-foreign-policy-albright-doctrine-60477)> AG

Since 9/11, Washington has been extraordinarily active militarily—invading two nations, bombing and droning several others, deploying special operations forces in yet more countries, and applying sanctions against many. Tragically, **the threat of Islamist violence and terrorism only have metastasized**. Although Al Qaeda lost its effectiveness in directly plotting attacks, it continues to inspire national offshoots. Moreover, while losing its physical “caliphate” the Islamic State added further terrorism to its portfolio.

Three successive administrations have ever more deeply ensnared the United States in the Middle East. War with Iran appears to be frighteningly possible. Ever-wealthier allies are ever-more dependent on America. Russia is actively hostile to the United States and Europe. Washington and Beijing appear to be a collision course on far more than trade. Yet the current administration appears convinced that doing more of the same will achieve different results, the best definition of insanity.

Despite his sometimes abusive and incendiary rhetoric, the president has departed little from his predecessors’ policies. For instance, American forces remain deployed in Afghanistan and Syria. Moreover, the Trump administration has increased its military and materiel deployments to Europe. Also, Washington has intensified economic sanctions on Cuba, Iran, North Korea, and Russia, and even penalized additional countries, namely Venezuela.

U.S. foreign policy suffers from systematic flaws in the thinking of the informal policy collective which former Obama aide Ben Rhodes dismissed as “The Blob.” Perhaps no official better articulated The Blob’s defective precepts than Madeleine Albright, United Nations ambassador and Secretary of State.

First is overweening hubris. In 1998 Secretary of State Albright declared that “If we have to use force, it is because we are America: **we are the indispensable nation**. We stand tall and we see further than other countries into the future, and we see the danger here to all of us.”

Even then her claim was implausible. America blundered into the Korean War and barely achieved a passable outcome. The Johnson administration infused Vietnam with dramatically outsize importance. For decades, Washington foolishly refused to engage the People’s Republic of China. Washington-backed dictators in Cuba, Nicaragua, Iran, and elsewhere fell ingloriously. An economic embargo against Cuba that continues today helped turn Fidel Castro into a global folk hero. Washington veered dangerously close to nuclear war with Moscow during the Cuban Missile Crisis in 1962 and again two decades later during military exercises in Europe.

U.S. officials rarely were prepared for events that occurred in the next week or month, let alone years later. Americans did no better than the French in Vietnam. Americans managed events in Africa no better than the British, French, and Portuguese colonial overlords. Washington made more than its share of bad, even awful decisions in dealing with other nations around the globe.

Perhaps the worst failing of U.S. foreign policy was ignoring the inevitable impact of **foreign intervention**. Americans would never passively accept another nation bombing, invading, and occupying their nation, or interfering in their political system. Even if outgunned, they would resist. Yet Washington has undertaken all of these practices, with little consideration of the impact on those most affected—hence **the rise of terrorism** against the United States. Terrorism, horrid and awful though it is, became the weapon of choice of weaker peoples against interventio

n by the world’s industrialized national states.

The U.S. record since September 11 has been uniquely counterproductive. Rather than minimize hostility toward America, Washington adopted a policy—highlighted by launching new wars, killing more civilians, and ravaging additional societies—guaranteed to create enemies, exacerbate radicalism, and spread terrorism. **Blowback is everywhere**. Among the worst examples: Iraqi insurgents **mutated into ISIS**, which wreaked military havoc throughout the Middle East and turned to terrorism.

#### B. Unipolarity is specifically responsible for the globalization of extremism.

Ibrahimi 18 (2/19/18; S. Yaqub Ibrahimi, [researcher and instructor of political science. PhD @ Carleton University] “Unipolar politics and global peace: a structural explanation of the globalizing jihad”; taylor and francis <https://www.tandfonline.com/doi/pdf/10.1080/17467586.2018.1428763?needAccess=true)>

* JSG = Jihadi-Salafi Groups

Three conclusions can be drawn from this paper. First, the peacefulness of the contemporary unipolar system could be discussed beyond the interstate conflict and the likelihood of great powers competition debate. The new forms of asymmetric warfare, particularly the emergence of JSGs and their violent activities at different levels of the global order, could be assessed as another variable in debates on the peacefulness of the system. These actors DYNAMICS OF ASYMMETRIC CONFLICT 59 emerged and operate under the unipolarity conditions. Unipolarity, in this sense, has generated conflict-producing mechanisms and nonstate actors that drove sovereign states in lengthy wars against JSGs. This argument makes a significant contribution to the unipolarity-peace puzzle, which is conventionally addressed from the interstate conflict perspective. Second, unipolarity transformed Islamist-oriented terrorism from domestic to global. In addition to other conflict-generating conditions produced under unipolarity, the United States’ unipolar policies in Muslim regions transformed the traditional near-enemy-centric narrative of jihad into a far-enemy-centric ideology. As a result of the transformation of this doctrine, new forms of JSGs emerged that posed a threat to peace and security at all levels. Finally, because of the unipolarity of the system, global peace depends largely on the sole great power’s foreign and military policies. The US interventionism, due to the absence of a challenging great power, might not generate interstate conflict. However, it would engage the US in asymmetric warfare with nonstate actors that would emerge independently or on behalf of states to disrupt the US hegemony through insurgency, terrorism, and other forms of violence at different levels. These all might not challenge the durability of unipolarity, drastically, but they would disrupt peace and security at all domestic, regional, and global levels.