

Power and Interdependence with China

When economists describe US-China interdependence, they tend to focus on the welfare benefits of growing trade and investment. They argue that, while the effects can be negative for particular groups within countries, the gains from trade make interdependence a positive sum game at the national level. Strategists, on the other hand, tend to focus on relative gains and their effect on the distribution of national power: while both countries may have made absolute gains, China has gained more in relative terms over the past two decades. As Vice President Mike Pence put the case in 2019, “over the past 17 years, China’s GDP has grown more than nine-fold; it has become the second largest economy in the world ... As President Trump has said many times, we rebuilt China over the last 25 years.” While disavowing any policy desire to “decouple” from China, Pence pointed out that the president’s 2017 national security strategy “now recognizes China as a strategic and economic rival.”¹ Gone is earlier administrations’ positive rhetoric about engagement, and many observers argue that decoupling has already begun.² President Trump’s tariffs on China are seen as the first step.

Trump has been accused of weaponizing economic globalization. Sanctions, tariffs, and restricting access to dollars have been major instruments of his foreign policy, unconstrained by allies, institutions, or rules in using them.

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Defenders of the Trump administration argue that his unorthodox style and willingness to break rules and spurn institutions will produce major gains on issues like China's coerced technology transfer and neo-mercantilist practices. Others are skeptical that basic Chinese practices have altered. Trade expert Claude Barfield argues that Trump's coercive manipulation of trade interdependences has failed, and the limited deal reached in 2019 signals that "the Trump administration has given up on the legitimate demands made over the past three years" that included China's lax intellectual property laws and regulations, forced technology transfers, closed markets for key high-tech sectors, and sweeping definitions of national and cyber security, among other issues.³

Trump is not the first president to manipulate economic interdependence, nor is the United States the only country to do so. In 1973, for example, Arab states used an oil embargo to punish the United States for supporting Israel in the Yom Kippur

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War. Shortly thereafter, Robert O. Keohane and I published *Power and Interdependence*, a book that explored the variety of ways in which interdependence can be manipulated as a source of power.⁴ We argued that coercive power rests in asymmetrical vulnerability. Interdependence without asymmetry generates little power, but when asymmetry exists, interdependence creates weapons that can be

used in strategic competition. Centrality in information networks creates asymmetry. Information is sometimes a public good, but with strategic information, asymmetric priority creates power. Informal access to new information before it is publicly available is what makes for success, and this access has been an important source of American power.⁵

Keohane and I warned, however, that policy measures and changing circumstances can create alternatives that alter vulnerability over time and reduce its value as a strategic weapon, jeopardizing at least elements of interdependence in the process. When that happens, short-term gains can turn into long-term losses. For example, President Richard M. Nixon restricted US soybean exports in a futile hope of dampening inflation, but in the longer term, soybean production in Brazil expanded rapidly and competed successfully with the United States. More recently, after a collision of Chinese and Japanese ships near the disputed Senkaku/Diaoyu Islands in the East China Sea in 2010, China punished Japan by restricting exports of rare-earth metals, which are essential in modern electronics. The result was that Japan lent money to an Australian mining company with a refinery in Malaysia, which today meets nearly one-third of Japanese demand. In addition, the

Mountain Pass mine in California, which had shut in the early 2000s, was reopened. China's share of global rare-earth production has fallen from more than 95 percent in 2010 to 70 percent over a half dozen years.⁶ Short-term manipulation of interdependence encouraged the development of alternatives to reduce long-term vulnerability.

The United States (along with other countries) has valid complaints about Chinese economic behavior, such as the theft of intellectual property and subsidies to state-owned companies that have tilted the playing field in trade. Moreover, there are important security reasons for the United States and others to avoid becoming dependent on Chinese companies like Huawei for 5G wireless telecommunications. Economists warn, however, that banning companies like Huawei from developing 5G infrastructure abroad risks creating a world of diverging technical standards and a "splinternet,"⁷ but such decoupling preceded Donald Trump. For more than a decade, China has refused to allow Facebook or Google to operate within its Great Firewall for security reasons: freedom of speech threatens the security of an authoritarian political system. But it is one thing to restrict certain technologies and companies for security reasons and quite another to cause massive disruption of commercial supply chains in an effort to cause damage or develop political influence. It is not clear how long the influence would last or what the long-term costs would be.

Even if China and other countries are unable to extricate themselves from US networks of interdependence in the short term, or vice versa, incentives to do so will strengthen in the long term. In the meantime, there will be costly damage to international institutions that limit conflict and create global public goods. As Henry Kissinger pointed out, world order depends not only on a stable balance of power, but also on a sense of legitimacy to which institutions contribute.⁸ The future of those institutions as well as interdependence will depend on the next steps by both China and the United States.

Dimensions of US-China Interdependence

There are many strands of interdependence in the US-China relationship, and the symmetry of vulnerability varies with each one. Former Australia Prime Minister Kevin Rudd recently summarized six different dimensions.⁹

Trade

Over the past decade, the United States received 19 percent of China's exports, while China represented only 8 percent of US total exports. China's leadership knows that the United States can inflict more damage on China from trade

than vice versa, but they also know that US consumers are dependent on a range of goods that cannot be readily replaced in the near-term. Thus, despite a two to one asymmetry, “America does not have all the cards in this game, and China knows it.”¹⁰ There are limits to the power that comes from asymmetrical interdependence.

Foreign Direct Investment

In 2019, the total stock of US FDI in China reached US\$269 billion while Chinese FDI in the United States reached US\$145 billion, but annual flow rates have been decreasing as distrust on both sides tightens policy constraints.

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Rudd concludes that decoupling is happening in this area more rapidly than expected.

Technology

China’s program “Made in China 2025” and the goal to be first in Artificial Intelligence by 2030 have led the American government and companies to be more wary about a high degree of technology interdependence with

China. Rudd concludes that a significant degree of technological decoupling is underway and that it “began nearly two decades ago when China decided to embark on internet sovereignty to restrict the free flow of information to its citizens.”

Capital Markets

The overall financial relationship is over US\$5 trillion, including nearly two trillion in Chinese listings on US stock exchanges and US\$1.3 trillion in Chinese official holdings of US government bonds. Rudd argues that “whatever strategic difficulties these two governments may have with each other, it continues to be in each countries’ interests to maintain these arrangements.” In other words, little decoupling.

Currency Markets

While China would like to see the yuan play a larger role in world markets, it is unwilling to make the domestic reforms to create deep and flexible convertible currency markets and a rule of law needed for the yuan to become a major reserve currency. Only 2 percent of global reserves are held in yuan; 62 percent are held in US dollars. The status quo will persist for a time.

Education, Research, and Talent

Over three million Chinese students have been educated in American universities over the past 20 years, and over 350,000 Chinese students study in the US each year. Over the past two years, however, there was a decline in international enrollments in American universities, and policy changes have made various types of visas more difficult to obtain. Rudd concludes that there are early signs of decoupling in the area of talent.

Military

There are other dimensions of interdependence in addition to the economic ones surveyed by Rudd, and they include military and environmental interdependence. In military terms, both countries hold each other hostage in nuclear deterrence, and despite the aspirations for strategic missile defense technology, it is unlikely that this relationship can be decoupled (for one thing, there are many ways to deliver weapons of mass destruction). Moreover, both countries are positively interdependent in slowing the spread of such weapons. Previously a one-time proliferator, China has become a supporter of the international non-proliferation regime.

Environmental

In the case of the environment, scientific evidence shows that climate change can do great damage to both countries. For example, melting glaciers in the Himalayas as well as in Greenland could inflict serious costs. China has now surpassed the United States as the largest producer of greenhouse gases, and together, China and the United States produce 40 percent of the global total. Neither country can solve this problem alone, nor can either decouple from it. Climate change obeys the laws of physics, not politics. And the 2020 coronavirus reminds us that pandemics respond to the laws of biology. Although epidemiological interdependence is asymmetrical, using it as a strategic weapon instead of cooperating would run a high risk of unintended consequences with uncertain strategic gains.

Overall, while some types of interdependence produce asymmetrical vulnerabilities that can be used as weapons, other types produce a mutual vulnerability that is difficult to escape without cooperative measures. If power is the ability to affect others to get the outcomes one wants, it is important to distinguish power *over* others from power *with* others. In some instances, such as climate change, power over interdependence can only be obtained *with* others.

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Entanglement and Deterrence

Entanglement is an important means of contributing to deterrence.

Understanding power and interdependence in the US-China relationship depends on understanding strategic objectives. If the US relationship with China is zero sum and China's long-term objective is to destroy it, much like the aspirations of Hitler's Germany in the 1930s, then the less interdependence the better—though, as we have seen, some will be unavoidable. If, on the other hand, the relationship is more a mixed game or a cooperative rivalry in which coexistence

is built into the environment, then US strategic objectives must include stability as well as competition, and interdependence can be used for both cooperative and rivalrous goals.

Deterrence is one example of when interdependence can be beneficial to enhance cooperative goals. Entanglement, or the existence of various interdependences, can

mean that an attack would cause serious costs to both the attacker and target; it can mean that there are benefits to continuing the status quo. In other words, entanglement is an important means of making an actor perceive that the costs of an action will exceed the benefits, thus contributing to deterrence.

In 2009, for example, the People's Liberation Army urged the Chinese government to sell some of China's massive holdings of dollars to punish the United States for selling arms to Taiwan. China's Central Bank pointed out, however, that doing so would impose large costs on China. As a result, the government was deterred from selling the holdings and ultimately sided with the Central Bank. Similarly, in scenarios that envisage a Chinese cyberattack on the US power grid imposing great costs on the US economy, the two countries' economic interdependence would mean costly damage to China as well. Precision targeting of minor economic targets might not produce much direct blowback in the absence of retaliation, but the rising importance of the internet to economic growth increases general incentives for self-restraint. The legitimacy of the Chinese Communist Party depends heavily upon economic growth, and Chinese economic growth increasingly depends upon the internet.¹¹

Critics of unsophisticated claims that economic interdependence causes peace point to World War I as evidence that economic ties did not prevent catastrophic war among major trading partners. Such criticisms go too far, however, in dismissing any possibility that states will take interdependence into account and thus reduce the *probability* of conflict. Norman Angell and others were wrong to argue before World War I that economic interdependence had made war impossible, but they were not wrong that it had greatly increased war's cost.¹²

The preceding examples of China's behavior reveal that policymakers do take interdependence into account. Of course, conflict is always possible because of human miscalculation. Most European leaders in 1914 incorrectly envisaged a short war with limited costs, and it is doubtful that the kaiser, the czar, and the Austro-Hungarian emperor would have made the decision to go to war if they had foreseen the loss of their thrones and dismemberment of their empires. Miscalculation and accident can undercut any type of deterrence. Trade between the United States and Japan did not prevent the Japanese attack on Pearl Harbor. Indeed, the attack was caused, in part, by the US embargo of exports to Japan. The embargo manipulated the asymmetrical US-Japan interdependence in a way that led the Japanese to fear that failing to take a risky alternative would lead to their strangulation.

An international deterrent relationship is an intricate set of repeated interactions between complex organizations that are not always unitary actors. These actors can adjust their perceptions in non-homogeneous ways over time, as has been the case in the US-China economic relationship. Deterrence rests on various means: punishment, denial, entanglement, and norms. As Robert Axelrod notes in his classic work on cooperation, iterative relationships can develop a long shadow of the future that can lead to cooperative restraint in prisoner's dilemma games.¹³ In addition, some interdependence is systemic, in which a state has a general interest in not upsetting the status quo and may develop interests in systemic stability. Of course, interdependence is a two-edged sword, and entanglement is not the most important cause of deterrence, but it can be easy to overlook the fact that, if carefully wielded, it can also contribute to deterrence and stability.

A Thucydides Trap as a Strategic Challenge?

Failure of the United States to successfully cope with the rise of China could have disastrous consequences for the United States and the rest of the world. Ever since the Peloponnesian war, realists have warned that the interaction of an established power and a rising power could lead to miscalculations that could disrupt this century, much as the last century was devastated in 1914. Graham Allison has recently labelled this strategic problem a "Thucydides Trap" and asserted that it has occurred in 12 out of 16 cases of hegemonic transition in recent history.¹⁴ While his numbers have been contested, the strategic problem has long been recognized.¹⁵

To avoid such an outcome, a successful US strategy on China must neither over nor underestimate Chinese power. Underestimation breeds complacency, while overestimation creates fear—either of which can lead to miscalculation.

Contrary to current conventional wisdom, China has not yet replaced the United States as the world's largest economy. Measured in purchasing power parity, the Chinese economy became larger than the American economy in 2014, but purchasing power parity is an economist's device for comparing estimates of

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welfare, not for measuring power. Current exchange rates are a better measure of power, and they show that China is about two-thirds the size of the United States. Many economists do expect China to surpass the United States someday as the world's largest economy (measured as GDP in dollars), but the estimated date varies from 2030 to midcentury depending on what one assumes about the rates of Chinese and American

growth. Moreover, Gross Domestic Product (GDP) is a crude measure of power. Including per capita income gives a better index of the sophistication of an economy, and US per capita income is many times that of China's. By any measure, however, the gravitational pull of China's economy is increasing, and China is rising.

Thucydides famously attributed the Peloponnesian war to two causes: the rise of a new power and the fear that an established power creates. Most analysts focus on the first half of his statement, but the second is more within our control. It is unlikely that US foreign policy can prevent the rise of China's economy, but the United States can avoid exaggerated fears that could create a new cold or hot war if it uses contextual intelligence well. Even if China someday passes the United States in total economic size, there are other measures of geopolitical power. China is well behind the United States on military and soft power indices. US military expenditure is several times that of China's. While Chinese military capabilities have been increasing in recent years and pose new challenges to US forces, analysts who look carefully at the military balance conclude that China is not a global peer and will not be able to exclude the United States from the Western Pacific so long as the United States maintains its alliance and bases in Japan. And opinion polls as well as a recent index published by Portland, a London consultancy, ranked China in twenty-sixth place in soft power, while the United States ranked near the top.¹⁶ Mao's Communism had a far greater transnational soft power appeal in the 1960s than "Xi Jinping thought" does today.

On the other hand, China's huge economic scale matters. The United States was once the world's largest trading nation and largest bilateral lender—in 2001, more than 80 percent of countries traded more with the United States than with China. By 2018, only 30 percent reported the same, with 128 out of

190 countries trading more with China than with the United States.¹⁷ China plans to lend more than a trillion dollars for infrastructure projects with its “Belt and Road” initiative over the next decade, while the United States has cut back aid. China’s economic success story enhances its soft power, and government control of access to its large market provides hard-power leverage. Moreover, China’s authoritarian politics and mercantilist practices make its economic power readily usable by the government. China will gain economic power from the sheer size of its market as well as its overseas investments and development assistance. Of the seven giant global companies in the age of Artificial Intelligence (Google, Facebook, Amazon, Microsoft, Baidu, Alibaba, and Tencent), nearly half are Chinese. With its large population and data resources that are becoming the “new oil” of world politics, China is poised to become the Saudi Arabia of big data.¹⁸

The United States has some long-term power advantages that will persist regardless of current Chinese actions. One is geography. The United States is surrounded by oceans and neighbors that are likely to remain friendly; China has borders with fourteen countries and has territorial disputes with India, Japan, and Vietnam that set limits on its soft power. Energy is another American advantage. A decade ago, the United States seemed hopelessly dependent on imported energy. Now, the shale revolution has transformed it from an energy importer to exporter, and North America may be self-sufficient in the coming decade.¹⁹ At the same time, China is becoming more dependent on energy imports, and much of the oil it imports is transported through the Indian Ocean and the South China Sea, where the United States and others maintain a significant naval presence. Eliminating this vulnerability will take decades. As we have seen, the United States enjoys financial power derived from its large transnational financial institutions. Although the dollar cannot remain pre-eminent forever, the yuan is unlikely to displace the dollar as a reserve currency in the near term.

The United States also has demographic strengths. It is the only major developed country that is currently projected to hold its place (third) in the demographic ranking of countries. While the rate of US population growth has slowed in recent years, it is not shrinking in population as will happen to Russia, Europe, and Japan. Seven of the world’s fifteen largest economies will face a shrinking workforce over the next decade and a half, but the US workforce is likely to increase by 5 percent while China’s will decline by 9 percent. China will soon lose its first place population rank to India, and its working age population already peaked in 2015.²⁰ Chinese citizens sometimes say they worry about “growing old before growing rich.”

The United States has been at the forefront in the development of key technologies (bio, nano, and information) that are central to this century’s

economic growth, and US research universities dominate higher education. In a 2019 ranking by Shanghai Jiaotong University, eighteen of the top twenty-five global universities were in the United States; none were in China.²¹ At the same time, China is investing heavily in research and development and competes well in some fields now, including artificial intelligence.²² Given the importance of machine learning as a general-purpose technology that affects many domains, China's gains in AI are of particular significance. Chinese technological progress is no longer based solely on imitation. However, a successful US response to China's technological challenge will depend more upon improvements at home than upon external sanctions. US complacency is always a danger, but so is lack of confidence and exaggerated fears that lead to overreaction. In the view of John Deutch, former provost of MIT, if the United States attains its innovation potential, "China's great leap forward will likely at best be a few steps toward closing the innovation leadership gap that the United States currently enjoys."²³

In short, the United States holds high cards in its poker hand, but hysteria could cause it to play its cards ineffectively. When the Clinton administration published its East Asian Strategy Report in 1995, it decided to reaffirm the US-Japan alliance well before seeking to engage China in the WTO. The US approach to the rise of China was to engage but hedge its bets first. Discarding its high cards of alliances and international institutions would be a serious mistake. If the United States maintains its alliance with Japan, China cannot push beyond the first island chain because Japan is a major part of that chain. Another possible mistake would be to try to cut off all immigration. When asked why he did not think China would pass the United States in total power any time soon, former Singapore Prime Minister Lee Kuan Yew cited the ability of the United States to draw upon the talents of the whole world and recombine them in diversity and creativity that was not possible for China's ethnic Han nationalism. If the United States were to discard its high cards of external alliances and domestic openness, Lee could be wrong.²⁴

A Kindleberger Trap as a Strategic Challenge?

As China's power grows, many observers worry the United States and China are destined for war, but few consider an opposite disruptive danger in hegemonic transitions. Rather than acting like a revolutionary power in the international order, China might decide to be a free rider like the United States was in the 1930s. I have called this a "Kindleberger Trap" after the renowned MIT economist who attributed the depths of the Great Depression and the instability of that decade to a rising America's failure to contribute to global public goods

at time when Great Britain could no longer do so alone.²⁵ In this version of the failure of hegemonic power transition, China may act too weakly rather than too strongly and refuse to contribute to an international order that it did not create. Some Sinologists say that this fear overstates the “not invented here” problem and that China knows it benefited from the overall post-1945 international order. As Iain Johnston has shown, one can distinguish at least eight different orders related to eight areas of interdependence, and China’s support for the orders is medium to high in most.²⁶

To date, China has been quite active in supporting institutions that facilitate world order and interdependence. In the UN Security Council, China is one of five countries with a veto. China is now the second largest funder of UN peacekeeping forces, participating in UN programs related to Ebola and climate change. China has also benefited greatly from economic institutions like the World Trade Organization (WTO) and the International Monetary Fund (IMF). On the other hand, China has started its own Asian Infrastructure Investment Bank (AIIB) and a “Belt and Road” initiative (BRI) of international infrastructure projects that some see as an economic offensive against the existing order. China has not practiced full reciprocity as a market economy, and its rejection of a 2016 Hague tribunal ruling regarding the South China Sea raised questions about whether China would treat its legal obligations *a la carte* (as the United States has sometimes done). US and allied navies’ freedom of navigation operations in the South China Sea remain essential to maintain this point. (It would also help if the US Senate would ratify the Law of the Sea Treaty.)

Thus far, China has not tried to overthrow the world order from which it benefits—rather, it has tried to increase its influence from within—but this could change as Chinese power grows. The Trump administration labeled China a revisionist power, but so far it is moderate revisionism, unlike extreme revisionist powers such as Hitler’s Germany. China is interested not in kicking over the card table but in tilting the table so it can claim a larger share of the winnings. At the same time, China’s growing economic power and its tilt will create problems for the United States and the international order. In other words, it may act as a free rider as the United States did in the 1930s.

As Chinese power grows, the American “liberal international order” will have to change. It was never all liberal, orderly, or global, and China has little interest in liberalism or American domination. Therefore, Americans would be wise to discard the terms “liberal” and “American” and think in terms of an “open and

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rules-based” world order to manage the various types of interdependence. This would mean framing an open international order in terms of institutional cooperation. Ideological differences will persist, and there will be sharp differences over values like human rights, but this does not prevent negotiations and institutions to manage interdependence.²⁷ The US approach to an open international economy will need to be adjusted for greater oversight of Chinese trade and investments that threaten our technological and national security objectives, but there is still a basis for fruitful interdependence and negotiation of rules of the road to govern it.

Managing Interdependence

Some degree of decoupling is bound to increase, particularly in areas related to technology that directly affect national security. Both sides will wish to limit vulnerabilities that endanger critical infrastructure or have important implications for military postures. Some measures will be unilateral, such as those Beijing has been undertaking for more than a decade. As for US measures to restrict sensitive technology transfer via trade, investment, and scientific exchanges, “developing a control regime that reduces risk without imposing undue costs will not be easy.”²⁸

Negotiations can help prevent partial technological disengagement from degenerating into a stampede.

Intricate supply chains are not easily undone. But bilateral and multilateral negotiations can help to prevent partial technological disengagement from degenerating into a stampede toward full protectionism. One example is provided by a group of American and Chinese economists who have suggested a framework for trade policy between divergent nations that distinguishes the areas subject to bilateral negotiations from those where countries are allowed to undertake well-calibrated domestic policy adjustments that

minimize harm to its domestic economy or security. Other policies that involve damage spilling over to third countries could be handled by multilateral arrangements.²⁹

As China, India, and other economies grow, the US share of the world economy will be less than it was at the beginning of this century, and the rise of other countries will make it more difficult to organize collective action to promote global public goods. But no other country—including China—is about to replace the United States in terms of overall power resources in the next few

decades. The United States will continue to lead in production of global public goods, but it will need to increasingly share that role with China. Since the Nixon administration, China and the United States have cooperated despite ideological differences. Various forms of interdependence have grown, and efforts toward total decoupling would involve enormous costs. While interdependence has created new strategic vulnerabilities, it has also produced strategic opportunities.

Rapid Asian economic growth has encouraged a power shift to the region, but Asia has its own internal balance of power. Chinese power is balanced by Japan, India, and Australia, among others. None want to be dominated by China, though none wants to see a Cold War-style containment strategy that would force them into an economic divorce from China, either. The United States will remain crucial to that Asian balance of power. If the United States maintains those alliances, the prospects are slight that China can drive the United States from the Western Pacific, much less dominate the world. The United States has high cards for managing the traditional competitive parts of our cooperative rivalry with China and does not need to seek to sever the relationship entirely by completely decoupling in a fit of panic.

The more difficult question for an effective strategy will be whether the United States and China can develop attitudes that allow them to cooperate in producing global public goods and managing interdependence while competing in other areas. Worst case analyses may make such a balanced policy impossible. The US-China relationship is a cooperative rivalry where a successful strategy of “smart competition,” as advocated by Orville Schell and Susan Shirk, will require equal attention to both aspects of that description.³⁰ But such a future will require good contextual intelligence and careful management of all dimensions of our interdependence, both negative and positive. Exaggerated fears will make such a balanced policy difficult, and hasty efforts to decouple will lead to a failed strategy that reduces US power.

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