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Research Report

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Economic Deterrence in a China Contingency

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About This Report

This report explores the use of economic measures to deter aggressive actions by China toward Taiwan. It explores what economic measures the United States, Australia, Japan, and the United Kingdom likely would employ as threats to deter a Chinese blockade or invasion of Taiwan if there were a perceived likelihood of such aggression occurring within an ensuing three to six months. It then presents an analysis of how such measures might influence China's actions and how such measures might affect the global economic system. The report concludes with policy implications for U.S. and allied policymakers as they navigate an increasingly complex relationship with China.

Research for this report was concluded in fall 2024, with a final workshop held in March 2025 to review conclusions and policy options. The concluding section takes account of relevant changes in the United States since January 2025.

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Summary

Deterring China from launching an attack on Taiwan is a central focus of U.S. and allied security planning. This planning encompasses creation and revision of military strategies, the establishment of partnerships with like-minded nations, and the gaming and simulation of conflict scenarios. Restrictive economic measures, such as sanctions, are also part of the deterrence toolkit. However, their timing, effectiveness, and desirability remain uncertain. This report addresses the use of economic measures for deterrence, with a special focus on using them as a specific preemptive action to forestall a Chinese invasion of Taiwan if strong evidence suggests that such an invasion seems likely within an ensuing three to six months. In doing so, the report explores how these measures might influence China, how China would respond, and how such measures would affect the global economy. We found that U.S. policymakers may well institute such preemptive economic measures, that the chances of success will depend heavily on the specific scenario under which they are instituted, and that allies are highly unlikely to join in such preemptive economic measures absent strong U.S. pressure and leadership.

Applying the Record on Sanctions to the China Case

Restrictive economic actions include sanctions, such as investment bans, and other measures, such as export controls; for convenience, we collectively term these *sanctions*. Despite its size, the Chinese economy could be vulnerable to sanctions, especially given economic weaknesses, such as heavy internal debt, an aging population, a declining labor force, and reliance on exports for growth. Sanctions can impose substantial economic costs but have less success in achieving political objectives. Sanctions could be inadequately designed to change the behavior they are intended to change or could trigger unintended consolidation of domestic support within targeted states. Lack of international cooperation can decrease effectiveness because non-sanctioning states could provide new trade and investment opportunities to the sanctioned state.

The United States and Its Allies in the Lead

The United States will need to lead Western economic action against China in a Taiwan contingency, counting on Australia, Japan, and the United Kingdom (UK) to join. Other countries and groupings of countries, such as the European Union (EU), might join but would be unlikely to do so without the leadership of the United States.

The United States

The United States has one of the most, if not the most, well-articulated legal regimes on economic restrictions and can institute a wide variety of measures. These include restrictions on financial or economic exchanges with U.S. entities, limits on investment abroad by U.S. entities, restrictions on entry into the United States, trade restraints, restrictions or cutoffs of foreign assistance, and even the ability to restrict economic exchanges between third countries. As the world's largest economy and the central player in global finance, the United States also has the most power to exercise restrictions. This is enhanced by the fact that it is the largest purchaser of goods imports, which makes other countries, especially China, dependent on open U.S. markets to maintain economic activity. At the same time, trade is less important to the United States than it is to other major economies, insulating it from international disruptions.

If it were well-supported that China were to embark on an invasion of Taiwan within an ensuing three to six months, it is possible, but not certain, that the United States would institute preemptive sanctions. In contemplating sanctions, the United States would look to allies to join, with Australia and Japan the most important of those in the Pacific area.

Australia

Despite Australia's opposition to a Chinese attack on Taiwan, Australia will seek to use other levels of national power before joining in on sanctions. Australia will prefer discreet tools, such as intelligence-gathering and reporting, and may well supplement these with diplomatic and military measures, particularly through proxies or in peripheral contexts. Economic deterrence would likely take place only at the performative or symbolic level or after other measures have been undertaken. Australia would embrace tools of economic deterrence only if the threat from China was believed to be existential to Australia or if the threat significantly and irreversibly threatened Australia's immediate security interests. Absent these conditions, the United States would need to exert significant pressure on Australia to have it join meaningful, preemptive actions.

Japan

Japan has the technical ability to impose a variety of sanctions on China relatively quickly, but the political decision would be difficult. Although an impending attack on Taiwan threatens Japan's security interests, Japan has a deep, interdependent economic relationship with China, and there is a significant presence of Japanese businesses and citizens in China. Factors Japan would weigh in considering whether to institute meaningful, preemptive sanctions include their likely effectiveness; the likelihood of Chinese retaliation; the safety of Japanese nationals and assets in China; and international pressure, particularly from the United States.

The United Kingdom

Throughout successive governments, the UK's position regarding a Chinese invasion of Taiwan has remained indiscernible. Furthermore, the possible costs to the UK economy of Chinese retaliation

are high, and the returns to a strategy of UK sanctions are uncertain. Should the UK decide to take economic actions, it would seek to do so multilaterally and try to match the type and severity of allied actions. The measures most consistent with current policy practices are targeted and country-agnostic, to minimize Chinese retaliation and damage to the economy. However, no option would be off the table, and the UK could be persuaded to impose severe penalties on China if there were a strong consensus and pressure from UK allies, particularly the United States, to act.

China's Calculations and Response

Preemptive economic actions could help deter a Chinese attack on Taiwan under specific conditions. Prospects for success would be highest if the actions were limited and punitive, if the Chinese leadership and public were divided, if the Chinese government still valued economic growth, and if the sanctioning coalition was large. In such a case, China might retaliate with in-kind economic measures but privately seek face-saving de-escalation. However, if Chinese leaders were fully committed to launching a large-scale attack, economic actions would have little deterrent effect but could hamper the military operation by denying China resources, components, and markets. Chinese leaders who contemplated such an attack would likely have downgraded economic growth in importance and expected to fight the U.S. military.

Economic Consequences

We modeled the economic consequences of different combinations of sanctions. These included partial versus complete sanctions and different sets of sanctioning entities—the United States, Taiwan, the UK, Japan, Australia, the EU, Canada, and South Korea. With complete multilateral sanctions, China's decline in gross domestic product is estimated to exceed 2.5 percent annually. Unilateral sanctions impose substantial costs on the sending state. The United States is estimated to experience a reduction in annual gross domestic product of up to 0.5 percent in scenarios involving unilateral complete sanctions (done in cooperation with Taiwan). Emphasizing the importance of multilateral action, EU participation has particularly negative effects on China and has modest positive effects on the United States because it cuts off a major market for China and increases trade with the United States.

Policy Considerations

The United States is already using a variety of economic measures to deter a Chinese attack on Taiwan, with policy actions that are aimed at degrading China's military capabilities to make such an invasion more difficult. Whether it would institute preemptive measures if an attack were reasonably known to be planned within an ensuing three to six months remains uncertain.

Issues

The United States should consider the following issues:

- **Preconditions.** The most important variable is whether China has made a final decision that the economic pain of sanctions and war is bearable for its geostrategic goals.
- **Methods.** The United States has a wide array of economic actions it could take. Financial measures would be most effective because of the dominant role of the United States in global finance and because such measures would also impair trade.
- **Allies and partners.** Acting alone, the United States could impose negative consequences for China's economy. Multilateral action would be more effective. However, allies and partners may need both positive and negative incentives from the United States.
- **U.S. and allied vulnerabilities.** If the United States and allies act preemptively, it is certain that China will institute countermeasures. U.S. allies are likely to feel greater negative effects because they are more exposed to trade with China than is the United States.
- **China's vulnerabilities.** Perhaps the biggest unknown in gauging the effectiveness of preemptive sanctions is the extent to which China is prepared for them. China has been building an economy less susceptible to outside pressures. However, China's economy and employment remain highly dependent on exports.
- **A political dimension.** Given the potential cost, Congress and the American public will need to be convinced that instituting economic measures against China is worth it. Consequently, the effective use of economic measures will involve not just technical aspects of estimating how such measures will affect China's economy and national security decisionmaking but will also involve a political dimension and require a convincing explanation.

Next Steps for the United States

The United States can better position itself for the implementation of effective economic restrictions:

- **Institutional capacity.** The most significant gap is underdeveloped institutional capacity within the U.S. government to correctly gauge the likely consequences of economic measures and, therefore, to select those that might be most effective at delivering strategic effects while minimizing costs. Filling this gap will call for expanding expertise in economic analysis; developing and implementing more-sophisticated modeling and simulation of consequences; and better learning from the experience of trade policy measures, sanctions, and export controls instituted since 2017.
- **Coordination and planning.** Greater coordination among relevant agencies can help, potentially through the establishment of a coordinating committee for economic measures. Contingency plans should be developed in advance to enhance the ability of the United States to take effective and timely action. Noting the existence of such plans publicly can also signal to China that there would be consequences were China to proceed against Taiwan.

- **Involving the private sector.** Coordination and planning need to involve the private sector because businesses do not always act as governments would want, and markets adjust to keep goods and services flowing. A dialogue can help the government better understand what private businesses will do and can help private businesses better prepare, increasing U.S. resilience.
- **Allies and partners.** For maximum effectiveness, allies and partners will need to be on board. Any contingency plan should also have positive and negative inducements that the United States can use.
- **Synchronizing with noneconomic measures.** Sanctions alone are unlikely to deter. However, they can serve as an important element in a combination of tools, including assembling a diplomatic coalition, bringing the issue to international forums, and posturing armed forces for a convincing military response. The use of such tools should be part of broader contingency planning.

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Chapter 1

Introduction

Deterring China from launching an attack on Taiwan is a central focus of U.S. and allied security planning. This comprehensive planning encompasses creating and revising military strategies, establishing partnerships with like-minded nations, and simulating various conflict scenarios to explore how to deter such an attack and, if deterrence fails, how to defeat China.

Although economic measures to deter China may have received less attention, they have not been disregarded. However, their timing, effectiveness, and desirability remain uncertain for several reasons. The size of the Chinese economy, the significant role of Taiwan in global industrial supply chains, and the strategic importance of the Taiwan Strait for global shipping and logistics all contribute to this uncertainty. Even without resorting to war, the use of economic tools could potentially destabilize the strait, disrupt the economies of participating and bystander states, and trigger unknown second-order effects on the global economy.

Timing also presents a challenge. If the United States were to know with high certainty that China would be embarking on an aggressive action within an ensuing three to six months, preemptive economic measures could serve as a deterrent. But other countries might be more reluctant to sign on, blunting the ability of the United States to build a multinational coalition. Additionally, such a preemptive move could provide an excuse for China to embark on its planned action, blaming the United States as the primary cause and claiming that its action was defensive.

In this report, we aim to enhance understanding of the use of economic tools to deter a Chinese attack on Taiwan and the associated consequences of their use. Specifically, it asks the following questions:

1. What economic measures would the United States and its allies and partners likely employ as threats to deter a Chinese blockade or invasion of Taiwan if there is a perceived likelihood of such aggression occurring within an ensuing three to six months?
2. If these measures were implemented, how would they influence China's intent, and how would China respond? This includes examining both countermeasures and the potential for postponement or pursuit of a takeover of Taiwan.
3. If these economic measures and countermeasures were implemented, how would the global economic system likely evolve over the subsequent five years under different China-Taiwan scenarios, including a Chinese blockade or full invasion of Taiwan?
4. In light of the answers to these questions, what steps, if any, should American policymakers take to strengthen their repertoire of economic tools in anticipation of their potential use? This should also consider actions that could mitigate potential Chinese countermeasures.
5. Additionally, it is important to remain cognizant of how the unique role of Taiwanese semiconductor manufacturing factors into this issue. If economic measures were implemented,

will the capabilities persist, transfer to other regions, or face destruction, and what would be the resulting consequences?

We found that U.S. policymakers might well institute preemptive economic measures if they had confidence that China intended to invade Taiwan within an ensuing three to six months, that the chances of success of such measures depend heavily on the specific scenario under which they are instituted, and that allies are highly unlikely to join in such preemptive economic measures absent strong U.S. pressure and leadership.

We conducted this project in loose cooperation with three other research organizations: Center for a New American Security (CNAS) and an alliance of the Atlantic Council and the Rhodium Group. Each organization analyzed the interests and likely responses of three different countries, with CNAS conducting case studies of Germany, India, and Singapore, and the Atlantic Council and Rhodium Group conducting case studies of Brazil, South Korea, and Indonesia. Each group broadly used the same methods, although conducted differently, and included reviews of relevant literature, including that covering historic sanctions policies; data analysis, especially of the relationship between the relevant country and China; and interviews with current or former policymakers and experts, in person or virtually, individually, or in groups through workshops. Researchers from all organizations met periodically to discuss progress and held a midcourse workshop about these issues with experts, former senior policymakers, and current policymakers. Although the outputs of the three groups—RAND, CNAS, and Atlantic Council-Rhodium—are separate, we all benefited from the interchange. Policymakers and those interested in these issues might benefit from reviewing all the related publications.[1]

Hypotheses About Economic Tools to Deter China

We start with a set of hypotheses regarding these core questions, hypotheses that we developed before starting research. We begin by underscoring two overarching hypotheses. First, we expect the core group of countries countering China to be the United States, Australia, Japan, and the United Kingdom (UK). We do not have strong prior expectations about how countries and regional groupings close to the core group, such as the European Union (EU) and individual EU member states, will act.

Second, we expect that preemptive economic measures alone may serve only to postpone, rather than deter, a Chinese takeover of Taiwan. Economic measures have rarely blocked a country from acting on what it views as core interests, and if China is intent on invading Taiwan, that most certainly would be considered a core interest. Consequently, it becomes imperative to deploy these measures in conjunction with other deterrence strategies. We next turn to hypotheses about each of the five questions.

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[1] Reports produced under this collaboration as of October 2025 include Logan Wright, Agatha Kratz, Charlie Vest, and Matt Mingey, *Retaliation and Resistance: China's Economic Statecraft in a Taiwan Crisis*, Atlantic Council and Rhodium Group, April 1, 2024, and Matthew Mingey, Laura Gormley, and Logan Wright, *Avoiding Entanglement: G20 Responses to a Taiwan Crisis*, Atlantic Council and Rhodium Group, November 12, 2024. The CNAS report will build on Emily Kilcrease, *No Winners in This Game: Assessing the U.S. Playbook for Sanctioning China*, Center for a New American Security, December 1, 2023.

What Economic Measures Would the United States and Its Allies Use?

Building on the precedent set following Russia's full-scale invasion of Ukraine, we expect the core group to aggressively institute a set of preemptive measures designed to damage China's economy and hamper its military industries. These include financial sanctions; limits on natural resource shipments to China; export controls on dual-use technology; and individual sanctions on Chinese companies, vessels, and people.

Note that our proposition assumes that the core group would implement these measures prior to any invasion or blockade occurring. This stands in stark contrast to the approach taken with Russia, in which sanctions were only threatened before the invasion but implemented after the invasion. We are suggesting that threats rather than implementation would not be effective in deterring China for two key reasons. First, the threat of sanctions did not serve as a deterrent for Russia. Second, given the potential severe repercussions for the global economy resulting from a Chinese takeover of Taiwan and an ensuing conflict, more-substantial measures are warranted.

China's Response

If China were to plan an invasion of Taiwan, it would likely anticipate many of the aforementioned measures. Consequently, well in advance, China would strive to bolster its resilience. This could entail such actions as diversifying commodity sources, stockpiling commodities and industrial goods, redirecting and mobilizing resources for the war effort, and psychologically preparing both the domestic population and the diaspora. It could also get resource suppliers or other trade partners to commit to continued supply in the event of sanctions, such as through contracts or other inducements.

Once the core group has implemented restrictive measures, China would respond with retaliatory countermeasures designed to minimize the impact on its own economy. These countermeasures would primarily focus on imposing restrictions on the export of intermediate goods, including components used in manufacturing and processed rare earths. Additionally, China would impose import bans on items originating from the core group, provided that the banned items could be obtained from other countries. China may select measures that maximize political difficulty for the core group by aiming measures at politically important industries or populations. Notably, China would strive to divide the international community in its efforts to counter the core group's restrictions.

Pursuit of a takeover of Taiwan would slow as China assesses the decisiveness, effectiveness, and potential consequences of the core group's actions and evaluates its own ability to undermine these efforts. However, we expect that China's ultimate objective of taking over Taiwan within the following year or two would remain undeterred.

Evolution of the Global Economic System

In the absence of a takeover of Taiwan, the most significant outcome is expected to be a decline in global gross domestic product (GDP) growth and, likely, an absolute decline in global GDP, at least over the short term, leading to a global recession. We anticipate that restrictive measures would

remain even if there were no takeover of Taiwan, and direct trade and investment between China and the core group, as well as between China and the entire developed world, would gradually diminish. Over the entire five-year period, we expect that the declines in economic growth will be mitigated, although China's growth would continue to be low because, although China serves as a significant trading partner for numerous countries, its growth heavily relies on exports to advanced economies, and those relationships would decline.

If a takeover of Taiwan were to occur, we hypothesize that the consequences would be similar in the long term but distinctly different in the short term. In the event of a brief war stopping China's takeover of Taiwan, an immediate global recession would ensue. If the war were to become protracted, the United States, the UK, Japan, and Australia would adjust more swiftly than China. At the very least, even if the EU did not join in on restrictive measures, European companies would redirect investments and reestablish supply chains away from China because that country would have become far riskier than otherwise.

Under both scenarios, with or without a takeover of Taiwan, we anticipate a division within the global economic system in the long term, leading to reduced economic cooperation. This division would manifest as two blocs emerging: one comprising the core group, along with Canada, the EU 27,[2] and South Korea, and the other comprising China, Russia, Iran, North Korea, and selected Central Asian countries caught between China and Russia. In between, India, most Southeast Asian and Northern African countries, Latin America, and sub-Saharan African nations would be a permeable economic membrane between the two blocs.

Policy Measures

Our hypothesis is that economic measures alone are unlikely to deter a Chinese invasion. Therefore, a crucial initial step is to articulate alternative objectives that should guide the design and implementation of these measures. For instance, objectives may focus on degrading the capability or capacity of the People's Liberation Army (PLA) in ways that favor Taiwan or supporting allied forces engaged in a protracted war. This would entail targeting industrial capabilities essential for repairing, replenishing, or constituting Chinese forces in a conflict over Taiwan. Another objective could be to enhance the relative military balance in a postwar competition by impeding China's ability to reconstitute an exhausted or depleted PLA. This objective may involve disrupting defense supply chains and manufacturing capabilities that are critical to extending Chinese influence beyond the first island chain.[3] Furthermore, an objective might be to improve the relative economic posture in a postwar competition, anticipating the disintegration of the global economy into blocs. This would involve focusing efforts on commodities and industries to enhance competitiveness in the energy transition, even if they are not instrumental in deterring or defeating a war.

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[2] The EU consists of 27 countries: Austria, Belgium, Bulgaria, Croatia, Cyprus, Czechia, Denmark, Estonia, Finland, France, Germany, Greece, Hungary, Ireland, Italy, Latvia, Lithuania, Luxembourg, Malta, Netherlands, Poland, Portugal, Romania, Slovakia, Slovenia, Spain, and Sweden.

[3] The first island chain is a series of islands east of China considered by Chinese military theorists as forming a natural maritime perimeter (Office of the Secretary of Defense, *Military and Security Developments Involving the People's Republic of China 2012*, May 2012, p. 40).

Above all, our hypothesis underscores the importance of maintaining a conventional military force posture that serves as a credible deterrent against a Chinese invasion. This highlights the need to design and implement economic tools that enhance the resiliency of supply chains and manufacturing capabilities required for Taiwan and supporting allied forces to prevail.

Taiwan's Unique Role in Semiconductor Manufacturing

Taiwan plays a unique role in semiconductor manufacturing, serving as the main location for the production of the most-advanced chips. We do not anticipate semiconductors functioning as a deterrent, just as economic measures are unlikely to deter China. However, semiconductors will drive the collateral costs of a conflict, and whether Taiwan reunifies with China will be a significant milestone in long-term techno-economic competition.

In the short term, if Taiwan reunites with China (peacefully or otherwise) with Taiwan's semiconductor manufacturing capacity remaining largely intact, China will gain access to advanced node manufacturing. This could potentially disrupt U.S.-led export controls aimed at restraining China. Conversely, if these manufacturing capabilities are destroyed or are removed from Taiwan, the United States and its Indo-Pacific allies would, in the short term, dominate the remaining global advanced node manufacturing, gaining some advantage if global capacity diminishes. Both scenarios, however, will incentivize competition and innovation in markets currently dominated by Taiwan.

Regardless of these outcomes, we anticipate that the immediate, direct effects resulting from disrupted semiconductor manufacturing would be overshadowed by the impacts of broader economic measures, as hypothesized, to be enacted by the United States, its allies, or China.

Methods

We explored these hypotheses through a collaboration of RAND, RAND Europe, and RAND Australia, along with discussions with our research institution partners CNAS and Atlantic Council–the Rhodium Group. RAND researchers resident in Australia and the UK researched those countries, while a RAND researcher resident in the United States and fluent in Japanese researched Japan. A RAND researcher resident in the United States and fluent in Chinese researched China's responses. The research team used multiple methods, including the following:

- **Literature reviews.** We examined the portfolio of available economic measures in each country, along with the legal authorities that underpin them; past events to understand which economic actions had been undertaken, particularly focusing on preemptive measures; the findings regarding the identified consequences; and research on China to gain insights into how China would react to economic measures.
- **Expert interviews.** For each country in the core group, we talked with former senior-level policymakers and people close to policymaking to gain insights into the decisionmaking processes behind the use of such measures in each country.
- **Economic modeling.** Over the span of several years, RAND Europe has developed a dynamic computable general equilibrium (DCGE) model of the global economy. We used this model

to quantify the consequences of economic countermeasures against China and analyze the performance of the countries' economies and the global economy. In particular, this allowed us to analyze the consequences of declines in semiconductor shipments, albeit bluntly—our model included a broader sector that contained semiconductors but not the narrow semiconductor sector itself.

- **Workshops.** We participated in one expert workshop that included all four research institutions and conducted a second, internal workshop. The first, hosted by all four research groups, featured people with senior-level policy experience in the United States, Europe, and Australia and involved three sessions exploring different aspects of restrictive economic measures and a China contingency. The second, conducted within RAND, included seven RAND associates who had research, government, and business experience (in all cases in at least two of these categories and, in some cases, all three) and focused on a discussion of research results and an exploration of policy and security responses to the identified economic consequences.

What Have We Already Learned About Sanctions and War and Sanctions on China?

Although examples of blockades and economic punishments in wartime can be found back to antiquity, the modern practice of economic sanctions originally derived from the devastating experience of World War I. Officials in Western countries sought a means of compelling adversaries to cease threatening behavior through measures other than total war. They sought to use severe economic sanctions, such as blockades, to cause an adversary to exhaust itself or collapse.[4] After World War II, countries embraced economic sanctions as a tool of modern diplomacy and war. Governments no longer confined threats of economic punishments to the problem of deterring aggression but instead applied sanctions to punish human rights violations, stop the development of nuclear weapons, combat money laundering, contest election results, and even force changes in government.[5] Sanctions have evolved in complexity and scope, especially in the post–Cold War period, with a significant increase in their use. Modern sanctions now include financial restrictions, trade bans, and travel limitations, reflecting a broader arsenal of economic pressure tactics.[6]

As we will discuss next, although sanctions can impose substantial economic costs on the target state, their success in achieving political objectives remains inconsistent. The effectiveness of economic sanctions depends on a complex interplay of factors, including the target state's political structure, the design of the sanctions, and the level of international coordination. The degree of international cooperation and the potential economic damage the sanctions can impose on the sanctioned state play pivotal roles in increasing the effectiveness of sanctions.

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[4] Nicholas Mulder, *The Economic Weapon: The Rise of Sanctions as a Tool of Modern War*, Yale University Press, 2022.

[5] David Nutt, "Economic Sanctions Evolved into Tool of Modern War," *Cornell Chronicle*, November 1, 2022.

[6] Constantinos Syropoulos, Gabriel Felbermayr, Aleksandra Kirilakha, Erdal Yalcin, and Yoto V. Yotov, "The Global Sanctions Data Base–Release 3: COVID-19, Russia, and Multilateral Sanctions," *Review of International Economics*, Vol. 32, No. 1, February 2024.

The Effectiveness of Sanctions

The existing evidence shows that sanctions do result in high economic costs for target states, reducing annual GDP growth between 2.3 percent and 5 percent, depending on the severity of imposed sanctions.[7] Despite their increasing prevalence, the strategic effectiveness of sanctions remains contested, and economic damage does not guarantee compliance with the sender's political objectives. Existing studies highlight a sanctions success rate between 4 percent and 40 percent.[8]

Sanctions often fail to achieve the intended objectives for a variety of reasons.[9] First, the types of sanctions are inadequately designed and, therefore, unable to achieve their objective. The design and enforcement of sanctions are critical determinants of their success. For example, small-scale incremental sanctions often fail because they allow target states to gradually adjust to the sanctions, but sanctions that inflict immediate major economic damage before the target can implement countermeasures have a higher chance of success.[10] Furthermore, targeted sanctions, such as asset freezes, financial restrictions, and travel bans, have gained prominence for their ability to pressure specific individuals or sectors in the target state directly, whereas conventional sanctions, including large-scale trade and investment restrictions, could cause widespread unintended consequences for the target state's population by leading to poverty and economic hardship.[11] However, the evidence suggests that targeted sanctions may not be more effective than conventional sanctions in achieving their intended objectives.[12]

Second, sanctions can trigger unintended consolidation of domestic support within targeted states by uniting citizens against a common enemy (the sending state).[13] The political structure of the target state significantly influences sanctions' effectiveness. Authoritarian regimes are more likely to withstand economic pressures because they can transfer the burden onto their populations, thereby insulating elites from the effects of sanctions. In contrast, democracies are more susceptible to sanctions because of their reliance on public approval; in hybrid regimes, opposition groups may

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[7] Matthias Neuenkirch and Florian Neumeier, "The Impact of US Sanctions on Poverty," *Journal of Development Economics*, Vol. 121, July 2016; Peter Egger, Constantinos Syropoulos, and Yoto V. Yotov, "Analyzing the Effects of Economic Sanctions: Recent Theory, Data, and Quantification," *Review of International Economics*, Vol. 32, No. 1, February 2014.

[8] Gary Clyde Hufbauer, Jeffrey J. Schott, Kimberly Ann Elliott, and Barbara Oegg, *Economic Sanctions Reconsidered*, 3rd ed., Peterson Institute Press, 2009; Robert A. Pape, "Why Economic Sanctions Still Do Not Work," *International Security*, Vol. 23, No. 1, Summer 1998; Aleksandra Kirilakha, Gabriel Felbermayr, Gabriel, Constantinos Syropoulos, Erdal Yalcin, and Yoto Yotov, "The Global Sanctions Data Base: An Update that Includes the Years of the Trump Presidency," School of Economics Working Paper Series 2021-10, LeBow College of Business, Drexel University, revised March 15, 2021.

[9] Daniel W. Drezner. *The Sanctions Paradox: Economic Statecraft and International Relations*, Cambridge University Press, 1999; Hufbauer et al., 2009.

[10] Francesco Giumelli, "A Comprehensive Approach to Sanctions Effectiveness: Lessons Learned from Sanctions on Russia," *European Journal on Criminal Policy and Research*, Vol. 30, No. 2, June 2024; Hufbauer et al., 2009; Dursun Peksen, "When Do Imposed Economic Sanctions Work? A Critical Review of the Sanctions Effectiveness Literature," *Defence and Peace Economics*, Vol. 30, No. 6, 2019b.

[11] Peksen, 2019b.

[12] Thomas Biersteker, Sue E. Eckert, Marcos Tourinho, and Zuzana Hudáková, "UN Targeted Sanctions Datasets (1991–2013)," *Journal of Peace Research*, Vol. 55, No. 3, May 2018.

[13] Peksen, 2019b.

leverage economic hardship to undermine incumbents, potentially increasing the effectiveness of sanctions.[14]

Third, the existing economic ties of the sanctioned state matter. Strong economic ties with non-sanctioning states will impair the effectiveness of sanctions because new trade and investment relationships can substitute for those affected by sanctions, or allies of the sanctioned state may intervene with economic support, undermining the sanctions' intended effects. Furthermore, access to transnational illicit markets for goods and services reduces the adverse impact of sanctions on the targeted state.[15] Importantly, the empirical evidence further suggests that the degree of economic dependence of the target state from the sender state has only minor effects on the ability of sanctions to achieve their political objectives.[16]

Fourth, lack of international cooperation can decrease sanctions effectiveness. Existing evidence suggests that multilateral sanctions under the lead of international institutions are more effective than those imposed by a single state.[17] Some have written that broad and unified sanctions coalitions are the biggest determinants of success.[18] Broader international support reduces the ability of the sanctioned state to find alternative trade and investment partners. However, if the economic costs of the sanctions are unevenly distributed among sanctioning allies, this unequal distribution may undermine the stability of multilateral agreements and, therefore, reduce the effectiveness of the sanctions.[19] Thus, if the state targeted by sanctions can sell its goods to other markets, the restrictions on exports by the offending country may have little effect. And if countries easily defect from multilateral coalitions to purchase goods from the offending country, the sanctions will lose effectiveness.[20]

Sanctions and War

Just as sanctions have been found to be of uncertain strategic effectiveness generally, the academic literature has concluded that economic sanctions alone are of doubtful effectiveness in preventing war.[21] Scholars have noted some cases in which the threat of economic sanctions appears to have deterred aggression but only against smaller states. In 1921, Yugoslavia halted an incursion into northern Albania after the League of Nations threatened an embargo.[22] The threat of such sanctions

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[14] Abel Escribà-Folch and Joseph Wright, "Dealing with Tyranny: International Sanctions and the Survival of Authoritarian Rulers," *International Studies Quarterly*, Vol. 54, No. 2, June 2010.

[15] Hufbauer et al., 2009; Bryan Early and Dursun Peksen, "Searching in the Shadows: The Impact of Economic Sanctions on Informal Economies." *Political Research Quarterly*, Vol. 72, No. 4, December 2019.

[16] Jin Mun Jeong and Dursun Peksen, "Domestic Institutional Constraints, Veto Players, and Sanction Effectiveness," *Journal of Conflict Resolution*, Vol. 63, No. 1, January 2019.

[17] Bryan R. Early and Robert Spice, "Economic Sanctions, International Institutions, and Sanctions Busters: When Does Institutionalized Cooperation Help Sanctioning Efforts?" *Foreign Policy Analysis*, Vol. 11, No. 3, July 2015.

[18] Jack Connolly, *Between War and Words: Can Economic Deterrence Help Uphold International Stability?* Blavatnik School of Government, September 2023.

[19] Syropoulos et al., 2024.

[20] Tyler Kustra, "Economic Sanctions as Deterrents and Constraints," *Journal of Peace Research*, Vol. 60, No. 4, July 2023.

[21] Peter A. G. van Bergeijk, ed., *Research Handbook on Economic Sanctions*, Elgard Publishing, 2021.

[22] Mulder, 2022.

also appears to have defused a brewing conflict between Greece and Bulgaria.[23] Against larger countries, however, threats of economic sanctions have been less successful. In the run-up to World War II, Italy, Germany, and Japan became even more aggressive in response to such threats.[24]

Sanctions related to war might have several purposes, depending on their timing. Prior to war, international leaders could threaten to cripple an adversary's economy through multilateral sanctions. With enough stress, a targeted economy could destabilize, triggering political unrest. This was the original logic of economic sanctions as developed in the early 20th century. Once war has begun, sanctions can also be used to degrade the effectiveness of an aggressor's military operations. A review of U.S.-led sanctions against Russia after its invasion of Ukraine concluded, for example, that the sanctions had "substantially diminished" Russia's ability to properly prosecute the war.[25]

Accordingly, we propose two main functions for war-related economic sanctions: (1) deterrence of aggression through the threat of retaliatory sanctions and (2) degradation of an enemy's ability to prosecute the war by denying it important components, technologies, and supplies.[26] The goals could evolve over time, however. For example, failed efforts to use sanctions could deter an adversary or could lead a government to adopt new sanctions to degrade the adversary's ability to prosecute the war.[27]

Economic Sanctions to Deter China

U.S. officials have increasingly favored the threat of sanctions to deter China from attacking Taiwan. In 2023, U.S. lawmakers introduced a bill that would require broad sanctions if China launched an invasion.[28] The problem is daunting, given that China is the world's second-largest economy and a major actor in global trade. Sanctions on the largest of Chinese banks alone could disrupt "at least $3 trillion in trade and financial flows."[29] Chinese scholars also expect that the United States would employ financial and economic sanctions in the event of a Taiwan contingency.[30]

Some experts believe that, despite its size, China could be vulnerable. Former U.S. Department of Defense (DoD) official David Trachtenberg speculated that China's slowing economy could make it sensitive to economic sanctions.[31] He noted, "China's economic problems may make threatened

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[23] F. S. Northedge, *The League of Nations: Its Life and Times, 1920–1946*, Holmes and Meier Publishers, 1986.

[24] Mulder, 2022.

[25] Amaechi F. Nwador, Franklin A. Sanubi, and Esekumemu V. Clark, "Sanctions as Tool for Strategic Deterrence: An Assessment of Targeted Sanctions in Russia," *Journal of Public Administration, Finance, and Law*, No. 27, 2023.

[26] Gerard DiPippo, "Deterrence First: Applying Lessons from Sanctions on Russia to China," Center for Strategic and International Studies, May 3, 2022.

[27] Charlie Vest and Agatha Kratz, *Sanctioning China in a Taiwan Crisis*, Atlantic Council, June 2023.

[28] Erik Wasson and Mike Dorning, "Republican Lawmakers Seek Trigger for China Sanctions If Taiwan Invaded," Bloomberg, March 30, 2023.

[29] Vest and Kratz, 2023.

[30] Chen Hongxiang [陈鸿祥], "Logical Analysis of U.S. Financial Sanctions and China's Contingency Plans" ["美国金融制裁的逻辑辨析与中国预案"], *Contemporary Finance* [现代金融], October 10, 2022.

[31] Executive Order 14347, signed September 5, 2025, authorized the use of Department of War as a secondary name for the Department of Defense. This publication was written before that order was released and thus refers to the secretary and department by their current statutory names under Public Law 81-216, National Security Act Amendments of 1949.

economic pressure much more useful as a deterrent and help shift Beijing's calculations away from an attack on Taiwan."[32] Others disagree. Experts with the Atlantic Council concluded that economic statecraft "cannot do the job alone" and would only be effective if economic sanctions complemented military and diplomatic tools.[33] Gerard DiPippo and Jude Blanchette also expressed skepticism, warning that Western leaders might resist adopting sanctions until it was too late or that China might have anticipated such disruptions in its planning. They also noted that the economic implications of any blockade or war would make sanctions potentially moot.[34]

U.S. officials have proposed various economic deterrence strategies. In a commentary, Representative French Hill (R-Ark.) urged Group of Seven (G7) leaders to "make it clear that use of force to attempt to change the status quo between Taiwan and the mainland will result in immediate, punishing multilateral trade sanctions." Hill also urged the G7 to "reiterate that the Taiwan Strait is in international waters" and to remain "committed to a free and open South China Sea and Indo-Pacific region" while also revising "inbound and outbound investment laws" in every country to "counter malign Chinese activity."[35]

Michael O'Hanlon recommended graduated economic measures to counter China, including the provision of emergency supplies, such as medicines and even food, by sea or airlift.[36] However, graduated sanctions have historically proven less effective in deterring conflict than blanket, large-scale sanctions.[37] By contrast, DiPippo and Blanchette recommended using sanctions "earlier and with greater severity than Beijing expects" to "dissuade or impede future actions."[38] David Trachtenberg argued that "transitioning from a reactive to a proactive approach that organizes and brandishes economic sanctions in advance of a crisis could yield important deterrent benefits" because of its ability to "clearly communicate U.S. intentions and the prospect of economic loss before China engages in aggression."[39]

Although experts disagree on the question of whether sanctions should be applied in a graduated or immediate fashion, they have generally agreed that multilateral sanctions offer the best prospects for success. The Atlantic Council offered cautious hope that the G7 could "implement sanctions and other economic countermeasures targeting China" across the three main avenues of its financial sector, individuals and entities associated with political and military leadership, and industrial sectors linked to the military.[40] However, others have urged caution in assuming that the international community would back highly disruptive sanctions. DiPippo and Blanchette warned that Western governments

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[32] David J. Trachtenberg, *Deterring China in the Taiwan Strait: Potential Economic Tools for a Victory Denial Strategy*, National Institute Press, 2022.

[33] Vest and Kratz, 2023.

[34] Gerard DiPippo and Jude Blanchette, "Sunk Costs: The Difficulty of Using Sanctions to Deter China in a Taiwan Crisis," Center for Strategic and International Studies, June 12, 2023.

[35] French Hill, "Combating China with Economic Deterrence," *The Hill*, May 17, 2023.

[36] Michael O'Hanlon, "How to Defend Taiwan: Leading with Economic Warfare," *Washington Quarterly*, Vol. 44, No. 4, 2022.

[37] Hufbauer et al., 2009.

[38] DiPippo and Blanchette, 2023.

[39] Trachtenberg, 2022.

[40] Vest and Kratz, 2023.

might object that sanctions are premature or that sanctions might lead to exactly the economic and financial crisis that the United States was warning a Chinese attack on Taiwan would cause.[41]

What should be targeted is another topic of debate. Analysts have tended to focus on three groups of potential sanctions: China's financial sector, people related to the Chinese Communist Party (CCP) or the PLA, and industrial companies in sectors related to China's defense industrial base.[42] Sanctions that target China's financial sector are widely viewed as potentially the most disruptive. O'Hanlon has argued in favor of the "nuclear option" of impeding payments, loans, and access to liquidity in general by effectively denying China access to U.S. banks by cutting off Chinese banks from the global financial messaging system, the Society for Worldwide Interbank Financial Telecommunication (SWIFT). He emphasized that this option should only be used in the extreme case of defending the security of Taiwan, not for routine disputes, because this would only encourage China to develop alternatives to SWIFT.[43] Trachtenberg agrees that financial sanctions may be the most effective weapon. He stated, "Financial sanctions may be more effective than trade-related measures and may provide the most important leverage by targeting a vulnerable sector of China's economy."[44] DiPippo and Blanchette also recommended major sanctions that target China's banks.[45] Financial sanctions could be targeted or extensive, depending on the situation. However, they could result in second-order consequences, such as more-restrictive global trade financing conditions, emerging market currency weakness, major supply chain disruptions, interruptions to worldwide consumer-goods manufacturing, and short-term inflation.[46]

Analysts have also proposed sanctions that target Chinese political and military leaders. These could entail seizures of accounts or travel bans, among other measures. Targeted sanctions offer the advantage of minimizing negative effects on bystanders. However, most analysts concede that such measures are unlikely to have much effect on a leadership's decision to risk war.[47]

Another option is to target sanctions on defense industries and entities that rely heavily on inputs, markets, and technologies from the G7 leading industrial economies.[48] These would be applied primarily to degrade China's warfighting capabilities. Trachtenberg argued that sanctions should "target what the CCP values most. This may not be limited solely to traditional economic, financial, or trade entities but may also include key portions of China's war-making enterprise, including its nuclear, missile, space, cyber, and biotechnology sectors."[49]

In sum, experts have tentatively suggested that sanctions could be employed against China to either deter an attack or degrade China's ability to prosecute war. Although the experts disagree on whether sanctions should be applied in a graduated or sudden manner, they agree that multilateral

[41] DiPippo and Blanchette, 2023.

[42] Vest and Kratz, 2023.

[43] O'Hanlon, 2022.

[44] Trachtenberg, 2022.

[45] DiPippo and Blanchette, 2023.

[46] Vest and Kratz, 2023.

[47] Vest and Kratz, 2023.

[48] Vest and Kratz, 2023.

[49] Trachtenberg, 2022, p. vii.

sanctions involving the richest countries offer better prospects than unilateral sanctions. They also suggest sanctions that target China's financial system or defense industries could be more effective than those that target individual political and military leaders.

The Plan for This Report

As will become clear throughout the report, we found that our initial hypotheses were not entirely correct (but were not entirely incorrect either). Notably, U.S. use of preemptive sanctions, although not out of the question, is far less certain than we had presumed. In addition, partner countries will be reluctant to join the United States in a sanctions regime. If pressed, some are likely to do so, but they will also try to minimize their actions.

This stems from two overriding causes. First, all countries are intertwined economically with China and are reluctant to take steps that will cause economic damage to themselves. Any strict sanctions regime against China will rebound against the countries instituting the sanctions, although they will also have negative consequences for China.

Second, there are doubts about the efficacy of sanctions against China because of its size, any advance planning it will do if it is contemplating war, and the way it is intertwined with the global economy. It appears more likely that sanctions will be planned for and might be threatened but will be instituted after the contingency manifests.

This report is organized as follows. In Chapter 2, we discuss the U.S. approach to sanctions, how experienced policymakers view the problem, and why the United States is the key decisionmaker in determining whether to exercise economic measures to deter China. In the next three chapters, we discuss the economic relationship that close U.S. allies Australia, Japan, and the UK have with China and the approach they would take toward sanctions. We present China's likely reactions in Chapter 6, as well as conditions under which preemptive sanctions might work. In Chapter 7, we provide macroeconomic modeling results of how such actions would affect the global economy, as well as major countries. We conclude with reflections and policy implications in Chapter 8, including guidance for U.S. policymakers. Research for this report was concluded in fall 2024 with a final workshop held in March 2025 to review conclusions and policy options. We take account of more-recent political changes in the United States in Chapter 8. The appendix provides additional information relevant to the methodology.

Chapter 2

The United States

The United States has one of the most, if not the most, well-articulated legal regimes on economic restrictions. It also has the most power when it comes to exercising these restrictions because of its weight in the global economy.

In this chapter, we first review the economic strength of the United States to show why it is the essential player in any multinational sanctions effort. We then discuss the legal authorities behind U.S. economic restrictions and the variety of these measures. Next, we review the empirical record of sanctions, focusing on recent sanctions on Russia in the wake of its full-scale invasion of Ukraine. As part of this, we also discuss outcomes. Finally, we discuss what might happen in the case of a China contingency.

Methods for this chapter included analysis of economic data to better understand the U.S. role in the global economy; reviews of the literature on economic sanctions produced by policy research institutions, sanctions practitioners, and government agencies; and government websites and other documents reporting sanctions measures. We also held discussions with eight former U.S. policymakers who, since the 1990s, had held either presidentially appointed, Senate-confirmed positions in the U.S. Department of the Treasury (the Treasury), senior staff positions in the White House, or both, to better understand the decisionmaking underlying sanctions.[50]

The United States in the Global Economy

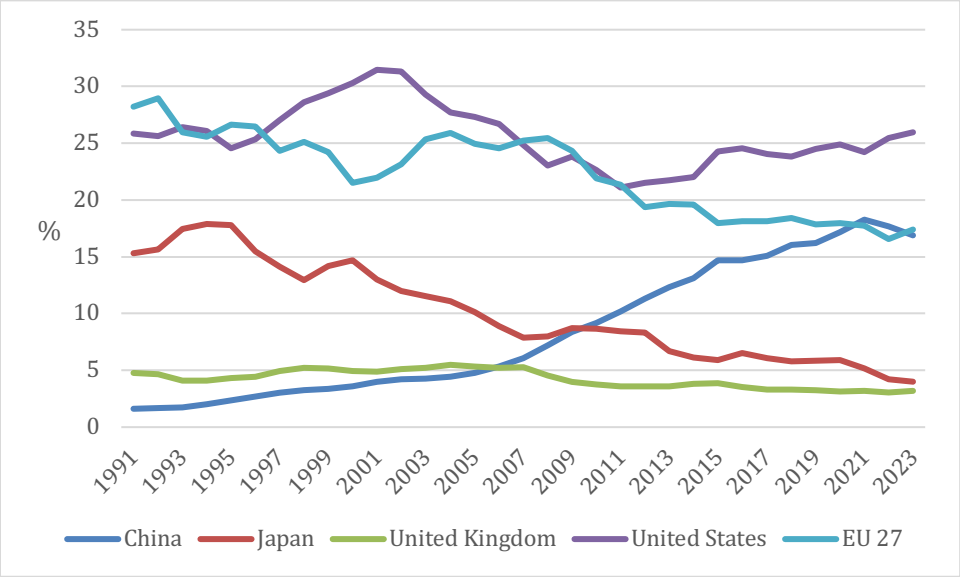
The United States is the premier economic power in the world. Of all major economies, it is also the most insulated from the global economy. This means that U.S. participation in sanctions can greatly enhance their power while creating less risk for the United States as a sanctioning entity than other sanctioning entities might face.

Multiple measures can provide evidence of the United States as the premier economic power. Despite volatility, the United States has remained the largest economy in the world since 1991, the year the Soviet Union fell, as measured by GDP at market rates (Figure 2.1). And with the exception of only eight years, the U.S. economy has remained larger than that of the EU, a customs union of 27 countries. Among advanced major economies, the United States has been the only one to maintain its weight in the global economy. In 1991, U.S. GDP constituted 25.8 percent of global GDP. In 2023, that figure was 25.9 percent. Comparable figures for the EU were 28.2 percent and 17.4 percent and for Japan were 15.3 percent and 4.0 percent. Notably, China, the major competitor country to the

[50] Ground rules for the discussions were that the information could be used for this report but that names and affiliations would not be identifiable. Accordingly, when we reference these officials, we refer to them only as former officials.

United States, rose from 1.6 percent to 16.9 percent during that period, but its share of the global economy peaked in 2021 (although this could change again in the future).

Figure 2.1. Major Economy Share of World Nominal GDP



SOURCE: World Bank, "World Development Indicators," webpage, last updated September 19, 2024.
NOTE: Variable is "GDP (current US$)," Series Code NY.GDP.MKTP.CD. China excludes Hong Kong and Macao. EU 27 refers to the 27 countries of the EU as of 2023. The EU 27 value is aggregated from the GDP of each of the 27 countries. Data are missing for Estonia in 1991 and 1992 and for Latvia and Lithuania for 1991 through 1994.

Just as the United States is the largest national economy, it also has the highest productivity among major economies as measured by constant purchasing power parity (PPP) GDP per employee (Figure 2.2).[51] The United States was not only ahead of other advanced economies in 1991 but has experienced the fastest growth of productivity.

There are a variety of other measures of economic weight in the world, and we provide one more—that of the dollar. As of 2023, dollar-denominated instruments constituted 54 percent of total known foreign reserves, 64 percent of global debt, 60 percent of international payments (excluding those within the eurozone[52]), and 54 percent of foreign trade invoices.[53] This is important in understanding U.S. power regarding sanctions. Because of the essential role of the dollar, any cutoff of

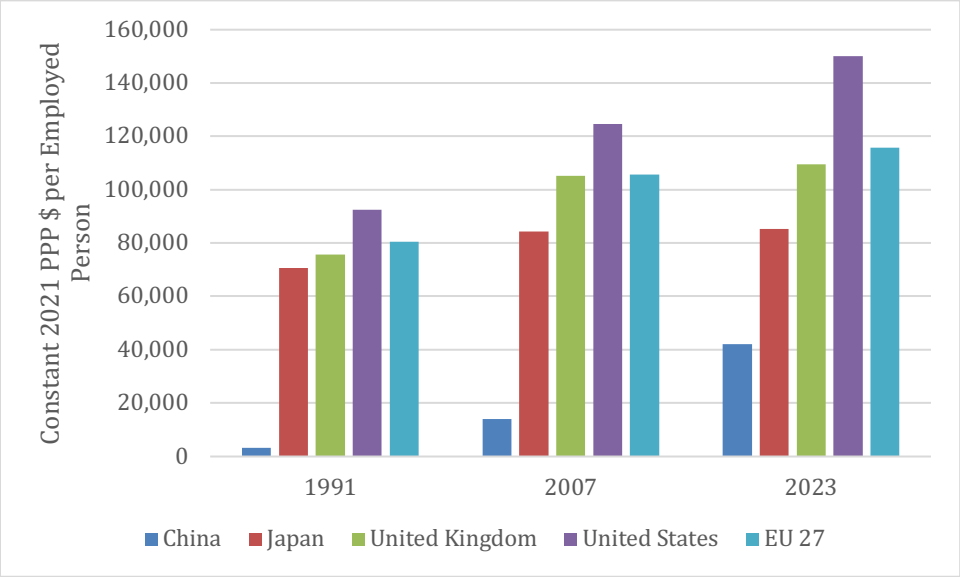
[51] PPP measures account for the fact that similar services in different countries may be priced very differently at market rates. The archetypal example is that of the haircut. In the United States or Europe, a haircut might be relatively expensive, but in Vietnam, a haircut of similar quality might be much cheaper at market rates.

[52] The *eurozone* is a currency union of 20 states: Austria, Belgium, Croatia, Cyprus, Estonia, Finland, France, Germany, Greece, Ireland, Italy, Latvia, Lithuania, Luxembourg, Malta, Netherlands, Portugal, Slovakia, Slovenia, and Spain.

[53] For a discussion of these statistics and the specific statistics for global debt and foreign trade invoicing, see Sam Boocker and David Wessel, "The Changing Role of the U.S. Dollar," Brookings, August 23, 2024. Data on reserves are for 2023, from International Monetary Fund (IMF), "Currency Composition of Official Foreign Reserves (COFER)," IMF Data, last updated September 27, 2024. Data on international payments are for December 2023, from SWIFT, "RMB Tracker: Monthly Reporting and Statistics on Renminbi (RMB) Progress Toward Becoming an International Currency," January 2024.

an institution or country from the U.S. dollar financial system could lead to grave economic consequences for the target country.

Figure 2.2. Major Economy Productivity, GDP per Employee, Constant PPP Dollars

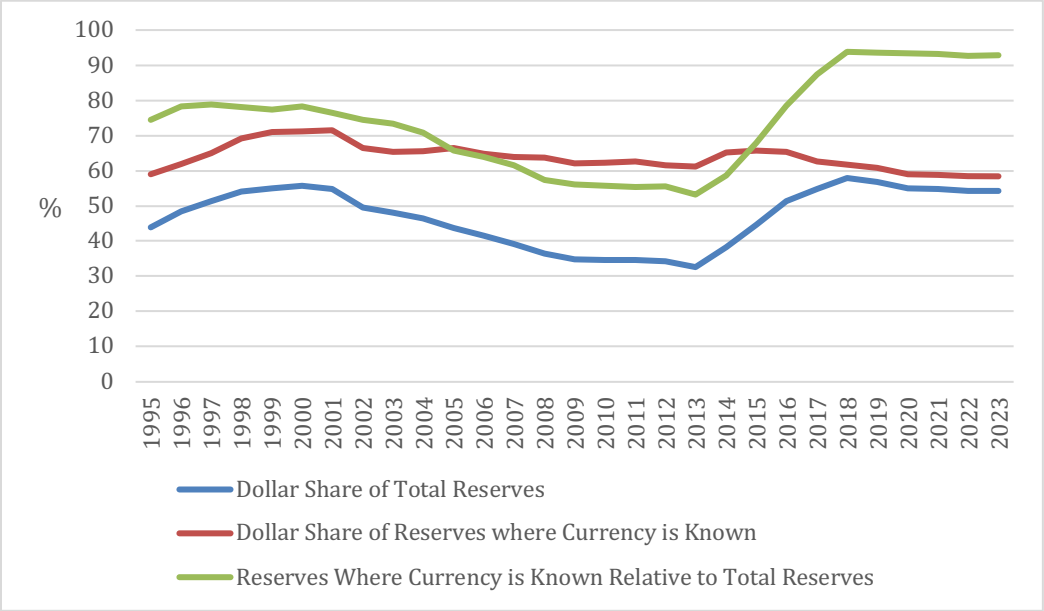


SOURCE: World Bank, 2024.
NOTE: *PPP* is a measure that adjusts prices to take account of different price levels for the same product in each country. In effect, it provides a quantity measure rather than a price measure for GDP. The productivity variable is derived from "GDP, PPP (constant 2021 international $)," Series Code NY.GDP.MKTP.PP.KD, divided by employment ages 15 and above. The employment variable is derived from "Employment to population ratio, 15+, total (%) (modeled ILO estimate)," Series Code SL.EMP.TOTL.SP.ZS, multiplied by the sum of "Population ages 15–64, total," Series Code SP.POP.1564.TO, and "Population ages 65 and above, total," Series Code SP.POP.65UP.TO. China excludes Hong Kong and Macao. *EU 27* refers to the 27 countries of the EU as of 2023. For the EU 27, the variable was derived by first multiplying the employment to population ratio for ages 15 and above by population ages 15 and above for each country and then summing the total to get an overall level of employment ages 15 and above. Likewise, PPP GDP was derived by summing the values for the 27 countries.

One concern is that dollar strength is declining. Evidence for this is not clear, although some countries wish it were true.[54] It is true that the dollar share of global reserves for which the currency denomination has been identified has declined (Figure 2.3). However, the dollar share of total reserves, including reserves for which no denomination is known, has risen. At the same time, the share of reserves with no known denomination has fallen. And because the total is calculated by converting all reserves into dollars, regardless of denomination, the U.S. dollar share also depends on the exchange rate at the time. The bottom line is that it is unlikely that the magnitudes in question—the shares as of 2023—are less consequential in terms of national power and sanctioning authorities that the shares as of the previous decade.

[54] "Putin's Plan to Defeat the Dollar," *The Economist*, October 20, 2024.

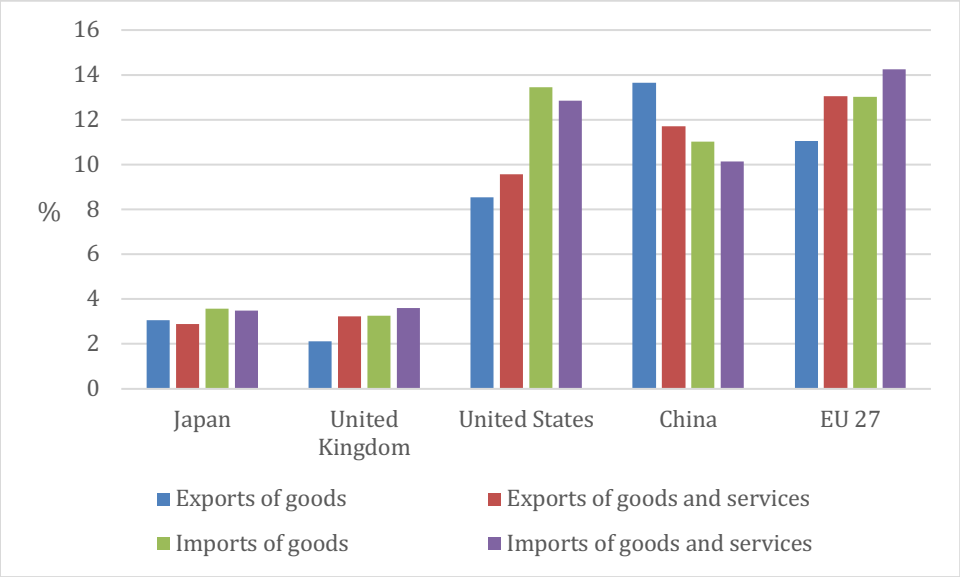
Figure 2.3. U.S. Dollar Share of Global Reserves



SOURCE: IMF, 2024.
NOTE: 1995 is the earliest date available in the public data.

A final element in assessing U.S. leverage in sanctions is the extent of U.S. trade integration, and this illustrates an important factor in that leverage. On the one hand, the United States exports and imports a large share of global exports and imports (Figure 2.4). Of these two trade flows, imports are more important for leverage. If the United States were a small market and increased barriers to imports, the seller country would likely to be able to find alternative markets. However, given that the United States is the largest single-economy recipient of goods imports, at 13.5 percent of the global total in 2022, redirecting that trade to other markets would require decreases in prices and could create frictions with other exporters and with domestic firms in the new markets. The EU is also a large recipient of imports, giving it the same leverage as the United States and suggesting that the two economies acting in concert would be a powerful combination.

Figure 2.4. Shares of Global Trade, 2022

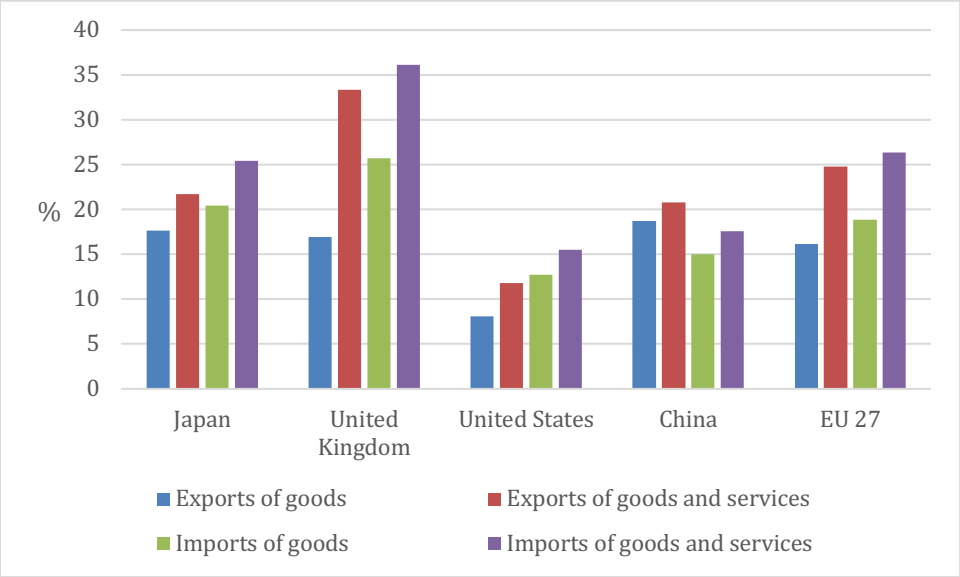


SOURCE: World Bank, 2024; Eurostat, "Welcome to Eurostat," online database, undated.
NOTE: EU data include only trade external to the EU. Such data for aggregate goods *and* services are available only for 2022. The Eurostat variable for the EU is "Intra and Extra-EU Trade by Member State and by Product Group [ext_lt_itratrd_custom_13329812]." All other variables are from World Development Indicators: "Goods exports (balance of payments [BoP], current US$)," Series Code BX.GSR.MRCH.CD; "Exports of goods and services (BoP, current US$)," Series Code BX.GSR.GNFS.CD; "Goods imports (BoP, current US$)," Series Code BM.GSR.MRCH.CD; and "Imports of goods and services (BoP, current US$)," Series Code BM.GSR.GNFS.CD.

Although the United States is a major trading economy, trade is much less important to the United States than it is to other major economies (Figure 2.5). Exports of goods are valued at only 8.1 percent of GDP for the United States, compared with 16.2 percent for the EU, 16.9 percent for the UK, 17.7 percent for Japan, and 18.7 percent for China. Restrictions on exports would have fewer consequences for the United States than for comparable economies. Likewise, imports of goods are valued at 12.7 percent of U.S. GDP, compared with 15.0 percent for China (which has embarked on a drive for self-sufficiency), 18.9 percent for the EU, 20.4 percent for Japan, and 25.7 percent for the UK. As with exports, the United States is more insulated from disruptions in trade than are comparable economies.

The United States is not only the world's largest economy but plays a central role in innovation, finance, and trade. At the same time, it is relatively insulated from the vicissitudes of trade disruptions compared with smaller and even comparable economies. This combination of economic characteristics gives it enormous power to institute sanctions and other economic restrictions, such as export controls. It has certainly exercised this power, as discussed in the next sections.

Figure 2.5. Trade Relative to Gross Domestic Product, 2022



SOURCES: World Bank, 2024; Eurostat, undated.
NOTE: EU data include only trade external to the EU. Such data for aggregate goods *and* services are available only for 2022. The Eurostat variable for the EU is "Intra and Extra-EU Trade by Member State and by Product Group [ext_lt_itratrd_custom_13329812]." All other variables are from World Development Indicators: "Goods exports (BoP, current US$)," Series Code BX.GSR.MRCH.CD; "Exports of goods and services (BoP, current US$)," Series Code BX.GSR.GNFS.CD; "Goods imports (BoP, current US$)," Series Code BM.GSR.MRCH.CD; "Imports of goods and services (BoP, current US$)," Series Code BM.GSR.GNFS.CD; and "GDP (current US$)," Series Code NY.GDP.MKTP.CD.

U.S. Sanctions and Economic Restrictions Authorities

The United States can institute a wide variety of sanctions and other economic restrictions. These include restrictions on financial or economic exchange with U.S. entities, limits on investment abroad by U.S. entities, restrictions on entry into the United States, trade restraints, and restrictions or cutoffs of foreign assistance.[55] To institute these, the United States has a detailed and finely articulated legal structure for exercising economic restrictions. Although the structure is aimed at national security purposes, it has evolved since 2017, and these authorities have begun to include economic purposes. As an example, the Export Control Reform Act of 2018 was the first export control measure in a long series since 1940 to identify economic security as an element of national security.[56] This section reviews two broad types of authorities: sanctions, in which U.S. entities are prohibited in some way from interacting with foreign entities, and export controls, in which U.S. entities cannot send certain goods or services to certain countries or foreign entities.

[55] Edward J. Collins-Chase, *Sanctions Primer: How the United States Uses Restrictive Mechanisms to Advance Foreign Policy or National Security Objectives*, Congressional Research Service, R47829, November 6, 2023.

[56] Paul K. Kerr and Christopher A. Casey, *The U.S. Export Control System and the Export Control Reform Act of 2018*, Congressional Research Service, R46814, June 7, 2021, p. 19. The Export Control Reform Act of 2018 is Title XVII, Subtitle B of Public Law 115-232, John S. McCain National Defense Authorization Act for Fiscal Year 2019, August 13, 2018.

Sanctions and Related Measures

The United States institutes sanctions largely through two methods. The first is by the President issuing an executive order as authorized by law. These sanctions can be reversed easily by modifying or rescinding the executive order. The second is directly through legislation. These sanctions are more difficult to reverse because that requires an act of Congress. In both cases, legislation is required because only Congress has the constitutional authority to set trade policy; Article 1, Section 8 specifies that Congress "shall have Power . . . To regulate Commerce with foreign Nations, and among the several States, and with the Indian Tribes. . . ."[57]

The *executive order* pathway is executed through two pieces of legislation. First, the President declares a national emergency under the National Emergencies Act.[58] Then, under the International Emergency Economic Powers Act, the President can regulate economic transactions and institute sanctions.[59] A third law, the Trading with the Enemy Act, gives the President additional powers, including the seizure of assets but only during a time of war.[60]

The *legislation* pathway locks in sanctions against certain countries but has been much more selective than the executive order pathway. Two recent examples include the Countering America's Adversaries through Sanctions Act and the Caesar Syria Civilian Protection Act.[61] The Countering America's Adversaries through Sanctions Act imposed new sanctions on North Korea, Iran, and Russia. Notably, although removing these sanctions will require new laws, both laws include flexibility in application by granting the President waiver authority. For example, the Caesar Act allows the President to "waive the application of any provision of this title" for 180 days if he provides a certification to Congress.[62]

Several other laws and authorities allow for other types of sanctions. The Immigration and Nationality Act permits the President to block the entry of people into the United States. It also provides for the U.S. Department of State (DoS) to designate foreign terrorist organizations. In addition, the Foreign Assistance Act of 1961 provides for withholding aid in response to actions of recipient countries.[63] The United States also honors United Nations sanctions.

One other legal authority was created after the September 11, 2001, terrorist attacks that has proved consequential. Section 311 of the USA PATRIOT Act empowers the Treasury's Financial Crimes Enforcement Network (FinCEN) to declare a foreign entity—a financial institution or even a

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[57] The Constitution of the United States, 1787.

[58] Public Law 94-412, National Emergencies Act, September 14, 1976, as encoded in U.S. Code, Title 50, War and National Defense, Chapter 34, National Emergencies.

[59] Collins-Chase, 2023, p. 2; International Emergency Economic Powers Act, Title II of Public Law 95-223, Wartime or National Emergencies. Presidential Powers, December 28, 1977, as encoded in U.S. Code, Title 50, War and National Defense, Chapter 35, International Emergency Economic Powers.

[60] Collins-Chase, 2023, p. 2.

[61] Public Law 115-44, Countering America's Adversaries Through Sanctions Act, August 2, 2017; Caesar Syria Civilian Protection Act of 2019, Title LXXIV of Public Law 116-92, National Defense Authorization Act for Fiscal Year 2020, December 20, 2019.

[62] Section 7432, "Waivers and Exemptions," Caesar Syria Civilian Protection Act of 2019, Title LXXIV of Pub. L. 116-92, 2019.

[63] Collins-Chase, 2023, p. 3.

country—to be a money-laundering concern.[64] Once it has done so, FinCEN has a menu of five actions it can take, one of which prohibits U.S. financial institutions from maintaining correspondent accounts with the foreign financial institution, cutting it off from the U.S. dollar system.[65] Given the importance of the dollar to the international financial system, this could put the designated financial institution out of business.[66]

This authority is in some ways more powerful than traditional sanctions. FinCEN does not need an executive order or any other special measure to implement the law. In addition, even announcing a Section 311 measure without even making it final through regulations can lead to U.S. banks ending any relationships they have with the foreign entity.[67]

Given the enormous economic power of the United States and the centrality of the dollar to the global economy, the United States is also able to extend its sanctioning authority to foreign nationals. Ordinarily, U.S. sanctions are directed against a foreign entity or country but also involve a transaction with a U.S. nexus. A *U.S. nexus transaction* would be one that "involves a U.S. person or U.S.-origin products, software, or technology, or if it causes or involves activity within U.S. territory."[68] However, the United States can effectively carry out sanctions when there is a non-U.S. nexus. Known as *secondary sanctions*, these operate by threatening the foreign entity with a cutoff from the United States (such as a cutoff from the U.S. financial system) if that foreign entity were to carry out a transaction with the target of the sanctions.[69] One example is an executive order President Joe Biden issued on December 22, 2023, authorizing sanctions on foreign financial institutions that aid Russia's military-industrial base.[70] The measure led to greater financial difficulties for Russian exporters and some foreign banks ending their relationships with Russian banks.[71]

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[64] Stephen Heifetz and Evan Sherwood, "Those Other Economic Sanctions: Section 311 Special Measures," *Banking Law Journal*, Vol. 131, No. 8, September 2014. See also Section 311, Special Measures for Jurisdictions, Financial Institutions, or International Transactions of Primary Money Laundering Concern, of Public Law 107–56, Uniting and Strengthening America by Providing Appropriate Tools Required to Intercept and Obstruct Terrorism (USA PATRIOT ACT) Act of 2001, October 26, 2001. The President signed the act less than two months after the terrorist attacks.

[65] Heifetz and Sherwood, 2014, p. 690.

[66] According to Clifford Chance, given that "FinCEN's Section 311 designation could mean a 'death penalty' to many foreign banks, we have seen litigation challenging FinCEN's Section 311 authority in recent years. However, the case law in this area has generally served in FinCEN's favor, giving the agency more incentive in using its authority in the future" (Clifford Chance, "Looming Resurgence of FinCEN's Section 311 Authority," March 2022, p. 6).

[67] Heifetz and Sherwood, 2014, p. 693.

[68] Roberto J. Gonzalez and Joshua R. Thompson, "Sanctions USA 2025," in *ICLG Sanctions 2025*, International Comparative Legal Guides, Global Legal Group, September 20, 2024.

[69] Collins-Chase, 2023, p. 9.

[70] Executive Order 14114, "Taking Additional Steps with Respect to the Russian Federation's Harmful Activities," Executive Office of the President, December 22, 2023.

[71] Alexander Kolyandr and Alexandra Prokopenko, "Russia Feels the Bite of Secondary Sanctions," The Bell, March 29, 2024.

Export Controls

The United States regulates the export of three categories: goods that can be used for both military and civilian purposes (dual-use goods) and technology; defense articles and services; and items for the development or delivery of nuclear, chemical, or biological weapons.[72]

The U.S. Department of Commerce (DoC) Bureau of Industry and Security (BIS) administers the controls on dual-use goods and technology under the Export Control Reform Act of 2018.[73] This law was the first major reform of the export control law since 1979. In fact, the previous law, the Export Administration Act of 1979,[74] had expired by 1994 and, except for a ten-month period in 2000 and 2001, when it was reauthorized temporarily, was kept in force by the President through the International Emergency Economic Powers Act.[75]

In implementing export controls, DoC keeps two lists through BIS: the Control List and the Entity List. The BIS Commerce Control List covers "the specific commodities, technologies, and software controlled" by the Export Administration Regulations, which are the implementing regulations for the Exports Control Reform Act.[76] The BIS Entity List, rather than listing commodities as the Commerce Control List does, lists foreign entities that may be limited in what they can import from the United States and the end uses for which the export of U.S. goods and services might be limited.[77] Export controls do not necessarily block exports. In some cases, exports are barred, but in most cases, exports must go through a licensing procedure, under which they might be permitted or barred.

The other major area of export controls is that of defense articles. These come under the authority of the International Security Assistance and Arms Export Control Act of 1976.[78] The law established the U.S. Munitions List, the defense items that come under export controls. The law is implemented by the International Traffic in Arms Regulations, which govern the licensing requirements for export of items on the U.S. Munitions List and for temporary imports.[79] Laws and regulations governing trade in defense items are implemented by the Directorate of Defense Trade Controls in the Bureau of Political-Military Affairs at DoS.[80]

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[72] Kerr and Casey, 2021, p. 1.

[73] Pub. L. 115-232, 2018, Title XVII, Subtitle B.

[74] Public Law 96-72, Export Administration Act of 1979, September 29, 1979.

[75] Kerr and Casey, 2021, p. 5; Pub. L. 95-223, 1977, Title II.

[76] Kerr and Casey, 2021, p. 6; Pub. L. 115-232 2018, Title XVII, Subtitle B.

[77] Kerr and Casey, 2021, p. 23; Public Law 94-329, International Security Assistance and Arms Export Control Act of 1976, June 30, 1976.

[78] Kerr and Casey, 20211, p. 11.

[79] Kerr and Casey, 2021, pp. 11–12; Code of Federal Regulations, Title 22, Chapter I, Subchapter M, International Traffic in Arms Regulations.

[80] DoS, "Directorate of Defense Trade Controls," webpage, undated.

The United States also participates in four multilateral export control regimes, some informal and all voluntary, meaning enforcement is not always as strict as the groups' intent. These include the following:

- the Australia Group, which focuses on "dual-use chemical manufacturing and biological equipment, chemical weapons precursors, and biological agents"
- the Missile Technology Control Regime, which focuses on equipment, technology, and services that could help build a missile capable of delivering a 500-kg warhead at 300 km or more
- the Nuclear Suppliers Group, which focuses on exports of nuclear-related material to nonnuclear weapon states
- the Wassenar Arrangement, which focuses on conventional arms and dual-use items and is a successor group to a multilateral group that controlled exports to the former Soviet Union and its satellites and that had strict enforcement mechanisms (which the Wassenar Arrangement does not have).[81]

Flexibility and Comprehensiveness

The United States has an array of legal authorities that allow it to freeze foreign assets held in the United States, cut off economic relations, bar exports or investments, block entry to the United States, and take other steps to restrain foreign entities and countries economically. In publicly reporting sanctions or other economic measures, the United States is careful to tie them to specific legal authorities. However, given the variety of legal authorities, the United States has tremendous flexibility in applying sanctions and other economic restrictions. In the words of one former policymaker, if the President decides to apply sanctions, the White House staff and relevant executive departments will find a way to do so.[82]

Major Changes but No Preemption

First with the Trump administration's revised policy toward economic competition and toward China and then with the Biden administration's response to Russia's full-scale invasion of Ukraine, U.S. economic restrictions have both become more powerful and been exercised more powerfully than in the past.

The United States has used these legal authorities liberally. Between 2000 and 2021, the number of entities designated by the Treasury's Office of Foreign Assets Control grew 933 percent, from 912 to 9,421.[83] As of November 2024, there were 38 different sanctions programs, of which 23 had been updated in 2024 and an additional eight in 2022.[84] Likewise, the number of listings on the BIS Entity

[81] Kerr and Casey, 2021, p. 17.

[82] Former policymaker, discussion with the authors, October 15, 2024.

[83] The Treasury, *The Treasury 2021 Sanctions Review*, October 2021.

[84] Office of Foreign Assets Control, "Sanctions Programs and Country Information," webpage, U.S. Department of the Treasury, undated.

List—companies to which U.S. exports are limited or barred—has grown substantially. From 2010 to 2020, the BIS added 832 companies to the list, 420 percent more than it added in the previous ten years.[85]

The major changes in how the United States executes economic restraints can be seen through its approach to China and Russia. These countries became the focus of U.S. attention with the December 2017 national security strategy shifting the United States away from counterinsurgency and counterterrorism toward great power competition.[86] China was the focus of most measures initially, with Russia becoming far more prominent following its full-scale invasion of Ukraine on February 24, 2024. Because of the multiplicity of measures taken, this section selectively highlights those that are most unusual or might have the greatest salience for the future.

Notable Measures Related to China

U.S. concerns about the Chinese telecommunications company Huawei as a threat had been present in national security discussions for at least a decade leading up to the first Trump administration. After 2017, U.S. efforts to stall the company and to get allied powers to remove its equipment from their telecommunications networks accelerated. In May 2020, the administration implemented a little-used provision called the Foreign-Direct Product Rules against Huawei, with significant consequences.[87] The rule prohibited exports of items to Huawei that were produced with U.S.-origin software and technology, essentially adding an extraterritorial dimension to U.S. export controls.[88] The measure proved effective in causing economic damage and resulted in Huawei's revenue falling by 29 percent in 2021.[89] The rule has since been at the core of numerous other export control measures.

The Trump administration also revitalized the seemingly ignored Section 1237 of the Fiscal Year 1999 National Defense Authorization Act (Public Law 105-261) by requiring DoD to list "'Communist Chinese military companies' operating directly or indirectly in the United States."[90] In November 2020, the Trump administration banned U.S. investment in these companies.[91]

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[85] Jeremy Ney, "United States Entity List: Limits on American Exports," *Harvard Library Bulletin*, February 2021.

[86] White House, *National Security Strategy of the United States*, December 2017.

[87] "The History and Limits of America's Favourite New Economic Weapon," *The Economist*, February 8, 2023; Code of Federal Regulations, Title 15, Section 734.9, Foreign-Direct Product (FDP) Rules.

[88] Gibson Dunn, "2020 Year-End Sanctions and Export Controls Update," webpage, February 5, 2021.

[89] "The History and Limits of America's Favourite New Economic Weapon," 2023.

[90] Public Law 105-261, Strom Thurmond National Defense Authorization Act for Fiscal Year 1999, October 17, 1998; DoD, "DoD Releases List of Additional Companies, in Accordance with Section 1237 of FY99 NDAA," press release, December 3, 2020b; DoD, "Qualifying Entities Prepared in Response to Section 1237 of the National Defense Authorization Act for Fiscal Year 1999 (Public Law 105-261)," June 12, 2020a.

[91] Executive Order 13959, "Addressing the Threat from Securities Investments That Finance Communist Chinese Military Companies," Executive Office of the President, November 12, 2020.

The Biden administration continued and reformed these measures.[92] First, Congress revised the requirement in section 1260H of the Fiscal Year 2021 National Defense Authorization Act, requiring DoD to identify "Military-Civil Fusion contributors operating directly or indirectly in the United States."[93] In addition, the Biden administration issued a new executive order, expanding the restrictions of the Trump administration executive order.[94]

Measures since 2021 have been both broad and deep. By broad, we mean the number of measures has expanded. By deep, we mean that there has been a focus on certain types of semiconductors. In terms of numbers, the Trump administration placed sanctions on 216 Chinese entities and added 259 Chinese entities to the BIS Entity List for export controls. It also applied the Foreign-Direct Product Rules to a Chinese company for the first time.[95] Through August 30, 2024, the Biden administration, sanctioned 432 Chinese entities and added 412 Chinese entities to the BIS Entity List for export controls. It also applied the Foreign-Direct Product Rule to 142 Chinese companies.[96]

In terms of focus, the Biden administration produced three waves of significant export controls on semiconductors and semiconductor manufacturing equipment. On October 7, 2022, DoC introduced new export controls to "restrict the PRC's [People's Republic of China's] ability to obtain advanced computing chips, develop and maintain supercomputers, and manufacture advanced semiconductors," with a focus on technology that enables artificial intelligence.[97] The justifications included their use in military systems and decisionmaking and in enabling human rights abuses. One year later, DoC updated and expanded controls on advanced semiconductors and semiconductor manufacturing equipment, again with a focus on artificial intelligence.[98] Finally, on December 2, 2024, DoC announced a new package of export controls, "to further impair the People's Republic of China's capability to produce advanced-node semiconductors that can be used in the next generation of advanced weapon systems and in artificial intelligence (AI) and advanced computing, which have significant military applications."[99]

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[92] Notably, when Biden took office, he said this about Chinese leader Xi Jinping: "I've said to him all along that we need to not have a conflict. But there's going to be extreme competition" (Joe Biden, interview, Face the Nation, CBS News, February 7, 2021).

[93] DoD, "DoD Releases List of Chinese Military Companies in Accordance with Section 1260H of the National Defense Authorization Act for Fiscal Year 2021," press release, July 3, 2021; Public Law 116-283, William M. (Mac) Thornberry National Defense Authorization Act for Fiscal Year 2021, January 1, 2021.

[94] Executive Order 14032, "Addressing the Threat from Securities Investments That Finance Certain Companies of the People's Republic of China," Executive Office of the President, June 3, 2021.

[95] Eleanor Hume and Rowan Scarpino, "Sanctions by the Numbers: Comparing the Trump and Biden Administrations' Sanctions and Export Controls on China," Center for a New American Security, October 23, 2024. By placing sanctions on something, we refer specifically to something being designated on the Specially Designated Nationals and Blocked Persons list.

[96] Hume and Scarpino, 2024.

[97] BIS, "Commerce Implements New Export Controls on Advanced Computing and Semiconductor Manufacturing Items to the People's Republic of China (PRC)," press release, October 7, 2022a.

[98] BIS, "Commerce Strengthens Restrictions on Advanced Computing Semiconductors, Semiconductor Manufacturing Equipment, and Supercomputing Items to Countries of Concern," press release, October 17, 2023.

[99] BIS, "Commerce Strengthens Export Controls to Restrict China's Capability to Produce Advanced Semiconductors for Military Applications," press release, December 2, 2024b.

Notable Measures Related to Russia

The measures related to China provide one example of how the United States is expanding its use of economic measures for national security purposes. The measures related to Russia provide a second and different example in that they are both unprecedented and involve a sizable multinational coalition. What makes them unprecedented in part is that Russia is a Group of 20 (G20) country and, until 2014, was even a member of what became the group of eight major industrial nations (G8), with Russia being added to the G7 in 1998.[100]

The United States has instituted one of the most invasive regimes of sanctions and restrictive economic measures against Russia following that country's full-scale invasion of Ukraine in 2022. In fact, the sanctions for this renewed part of Russia's war on Ukraine started a bit earlier, after Russia recognized the independence of the so-called Donetsk and Luhansk People's Republics. On February 22, 2022, the United States sanctioned two banks, Corporation Bank for Development and Foreign Economic Affairs [Vnesheconombank] and Promsvyazbank Public Joint Stock Company.[101]

But the landmark steps took place immediately following Russia's full-scale invasion. On February 24, 2024—the same day as the invasion—the United States announced sanctions against Russia's largest financial institutions, several state-owned enterprises, and a select group of Russian elites in concert with allies and partners.[102] Australia, Canada, the EU, Japan, and the UK took similar actions.[103] The next day, again with allies and partners, the United States announced sanctions on Russian President Vladimir Putin, Foreign Minister Sergei Lavrov, and others.[104]

The most invasive move came on February 28, when the United States announced sanctions on the Russian central bank, the National Wealth Fund (a sovereign wealth fund that Russia uses to stabilize its government spending in the face of oil price volatility), the Russian Direct Investment Fund, and the Ministry of Finance—unprecedented measures taken against a G20 country. In concert, the G7 froze all Russian sovereign assets held in their territory, estimated to amount to about $300 billion.[105] Building off this cooperation, Australia, Canada, the European Commission, Germany, Italy, France, Japan, the UK, and the United States formed the Russian Elites, Proxies, and Oligarchs multilateral task force on February 26, 2022, to coordinate and enforce sanctions.[106]

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[100] Zachary Laub, "The Group of Eight (G8) Industrialized Nations," Council on Foreign Relations, last updated March 3, 2014. The members of the G7 are Canada, France, Germany, Italy, Japan, the UK, and the United States, with the EU as a so-called non-enumerated member. The G20 includes those plus Argentina, Australia, Brazil, China, India, Indonesia, Republic of Korea (ROK), Mexico, Russia, Saudi Arabia, South Africa, Turkey, the EU, and the African Union.

[101] The Treasury, "U.S. Treasury Imposes Immediate Economic Costs in Response to Actions in Donetsk and Luhansk Regions," press release, February 22, 2022a.

[102] The Treasury, "U.S. Treasury Announces Unprecedented & Expansive Sanctions Against Russia, Imposing Swift and Severe Economic Costs," press release, February 24, 2022b.

[103] White House, "Joined by Allies and Partners, the United States Imposes Devastating Costs on Russia," fact sheet, February 24, 2024.

[104] The Treasury, "U.S. Treasury Imposes Sanctions on Russian Federation President Vladimir Putin and Minister of Foreign Affairs Sergei Lavrov," press release, February 25, 2022c.

[105] The Treasury, "Treasury Prohibits Transactions with Central Bank of Russia and Imposes Sanctions on Key Sources of Russia's Wealth," press release, February 28, 2022d; Janet L. Yellen, "Statement from Secretary of the Treasury Janet L. Yellen on G7 Finance Ministers and Central Bank Governors Meeting," press release, U.S. Department of the Treasury, March 1, 2022.

[106] The Treasury, "U.S. Departments of Treasury and Justice Launch Multilateral Russian Oligarch Task Force," Press Release, March 16, 2022e.

Beyond sanctions, the other notable measures taken by the United States and multiple other countries included export controls. On February 24, 2022, DoC announced export controls on a broad range of products, applicable to Russia effective immediately and to Belarus effective the following week.

As part of these measures, DoC instituted two new applications of the Foreign-Direct Product Rules, one for all of Russia and Belarus, and the other for Russian and Belarusian military end users.[107] In a sign of how broad-based these measures were, the United States exempted the 27 countries of the EU and six other countries from application of the Foreign-Direct Product Rules because these were "partner countries that have committed to implementing substantially similar measures."[108]

The United States has followed up these initial steps with wave after wave of sanctions and enforcement measures. Of these, the most notable likely was the threat of secondary sanctions on financial institutions globally, a measure that had deleterious effects on the Russian economy.[109] The pattern was set early on and included invasive measures taken multilaterally.

Implications of Recent Sanctions and Economic Restraints Measures

Several issues stand out from the way that sanctions and other economic restraints have evolved since 2017. Enforcement has strengthened, as exemplified by the Chinese military companies list and investment ban. Related, existing authorities have been revived, and their use has increased, as exemplified by the use of the Foreign-Direct Product Rules.

The United States has also been willing to take much bigger steps than previously, as exemplified by sanctions on the Russian Central Bank and the freezing of Russian sovereign assets. Finally, these actions are notable for their multilateral nature, with dozens of countries joining the United States in the case of Russia. What the United States has not done, however, is institute sanctions preemptively to forestall an action for which it had strong advance information.

The Potential for Preemptive Sanctions

To better understand the potential for the U.S. use of preemptive sanctions to forestall an action reasonably confidently expected to be executed within an ensuing three to six months, we discussed the issue with eight former U.S. policymakers who, since the 1990s, had held either presidentially appointed, Senate-confirmed positions in the Treasury, senior staff positions in the White House, or both. The goal in each discussion was to focus on the most-important aspects of this issue and to better understand how any decisions would be made. Accordingly, each discussion was based on three broad questions:

- If we were relatively certain that China was going to invade Taiwan within the span of an ensuing three to six months, would the United States consider and institute preemptive

[107] BIS, "Russia and Belarus Fact Sheet," Office of Public Affairs, February 24, 2024a.

[108] BIS, 2024a.

[109] Executive Order 14114, 2023.

sanctions? What if there were a less dire contingency, such as a peaceful takeover of Kinmen, an island that is part of Taiwan but sits less than four miles from mainland China?[110]
- What factors would go into that decision?
- With which main allies would the United States try to act in concert, and what would the United States expect of them?

Each person was also told that, although the topic is highly speculative, such a speculative discussion might still be useful because the United States has already moved deeply into new territory with sanctions and economic statecraft measures since 2017.

Preemptive Sanctions and War

Four out of seven interviewed said that preemptive sanctions likely would not be instituted but that there was nothing in law or regulation stopping them from being instituted (we did not put this question to one of the interviewees). Rather, several issues would militate against the use of preemptive sanctions. First, it would be a break from current practice, and policymakers would be reluctant to take that step.[111] Second, although the United States likely would threaten sanctions, instituting preemptive sanctions would lessen U.S. leverage going into the war.[112] Third, instituting preemptive sanctions might fully tip the hand of the United States as to how much it knew of China's war plans.[113] Finally, there is a recognition that sanctioning China would cause financial distress in the United States, and policymakers would want to avoid that as much as possible.[114]

Those who said that preemptive sanctions could be used conditioned that on the quality of information available to the United States. If the United States were confident that its information was correct, preemptive sanctions would be instituted.[115] One other condition was that instituting sanctions would not tip off China as to what exact information the United States had.[116] Notably, one former official said that, if the United States believed a Chinese invasion of Taiwan was inevitable, the United States absolutely would institute preemptive sanctions.[117] Such a decision might also emerge from administration discussions with Congress or an administration desire to get ahead of a Congress that would demand sanctions.[118] There was some disagreement about the nature of preemptive sanctions, with one policymaker anticipating they would be quite far-reaching and another

[110] Nick Aspinwall, "6 km from China, Taiwan's Kinmen Charts Its Own Path," *The Diplomat*, September 4, 2018.

[111] Former policymaker, discussion with the authors, October 22, 2024; discussion with first of two former policymakers, October 10, 2024.

[112] Discussion with first of two former policymakers, October 10, 2024.

[113] Discussion with second of two former policymakers, October 10, 2024.

[114] Former policymaker, discussion with the authors, October 9, 2024.

[115] Former policymaker, discussion with the authors, October 15, 2024; former policymaker, discussion with the authors, October 28, 2024.

[116] Former policymaker, discussion with the authors, October 15, 2024.

[117] Former policymaker, discussion with the authors, October 15, 2024.

[118] Former policymaker, discussion with the authors, October 28, 2024.

anticipating that they would be carried out quietly, aiming at specific chokepoints as a signal of what might come next.[119]

The former officials had far more agreement on the efficacy of preemptive sanctions. Specifically, they doubted such an action would deter China from attacking Taiwan.[120] In part, that was because they expected that, if China were to embark on war, it would have determined that doing so was truly its best course of action, would have anticipated sanctions, and would have planned accordingly.[121] Furthermore, sanctions take time to work; in this scenario, the three- to six-month lead notice held by the United States would probably not be enough time for sanctions to start damaging the Chinese economy.[122]

Nevertheless, policymakers agreed that sanctions would be instituted at some point, if not preemptively. One noted five different objectives of sanctions: (1) deter a foreign target from taking an action; (2) cause a foreign target to change an action; (3) punish a foreign actor, with effectiveness increasing over time; (4) take an action, just to do something and to avoid taking the more dire step of using the U.S. armed forces; and (5) create a mechanism allies can rally around for collective action.[123] In the case of a Chinese invasion of Taiwan, objective four—taking an action to be seen to take an action—would be operative, although objectives three and five would also be relevant.

Opinions varied as to what the United States might do in the case of an action short of war by China, and there was no clear consensus. The argument against preemptive sanctions is that such a step could actually drive China into taking the action and blaming the United States.[124] However, the counterargument is that a preemptive measure could serve as a strong signal that a small action by China could expand into a major crisis that would best be avoided.[125] There is also risk of miscommunication when what the United States considered a small sanction, China might consider a large sanction.[126]

The Decision Process for Preemptive Sanctions

All policymakers said there likely would be active discussions about how to approach sanctions, with DoD, DoS, the Treasury, and the National Security Council being the main entities at the table and the intelligence community in a supporting role. Ultimately, however, any decision would be a

[119] Former policymaker, discussion with the authors, October 15, 2024; former policymaker, discussion with the authors, November 4, 2024.

[120] Former policymaker, discussion with the authors, July 11, 2024; former policymaker, discussion with the authors, October 9, 2024.

[121] Discussion with first of two former policymakers, October 10, 2024; former policymaker, discussion with the authors, October 15, 2024; former policymaker, discussion with the authors, October 28, 2024.

[122] Former policymaker, discussion with the authors, October 22, 2024.

[123] Former policymaker, discussion with the authors, October 28, 2024.

[124] Former policymaker, discussion with the authors, October 15, 2024.

[125] Former policymaker, discussion with the authors, October 22, 2024.

[126] The second of two former policymakers, discussion with the authors, October 10, 2024.

presidential decision, and legal mechanisms are broad enough to allow the President to take any decision he or she wanted.[127]

A variety of factors would be considered, including

- the effectiveness of proposed sanctions[128]
- the cost to the United States and allied countries, including financial market reactions[129]
- what the end game might be, specifically considerations of how far the United States will go to defend Taiwan, with the implication that it will not institute sanctions if, in the end, the United States will not take the risk of defending Taiwan[130]
- whether to proceed unilaterally or multilaterally and, if multilaterally, how many allies with which to proceed[131]
- whether to take actions loudly and publicly or quietly[132]
- China's anticipated reaction and whether measures would be escalatory or reinforce deterrence.[133]

Agencies are unlikely to be unanimous. The National Security Council staff would have the most weight in the discussion, and the White House would want to be the policy creator rather than the policy taker.[134] The Treasury would be concerned about financial markets and the effects on U.S. economic growth, while DoS might express concerns about consequences for U.S. diplomatic relations and be reluctant to proceed.[135] DoD's position would likely to be more ambiguous—on the one hand, sanctions might be seen positively as an action taken in lieu of sending troops, but on the other hand, sanctions could be seen as complicating the situation or as escalatory and heightening risk.[136]

Finally, those engaging in discussions would likely have Congress at the back of their minds.[137] Congress can independently pass its own sanctions measures, and these might not be desirable to the

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[127] Former policymaker, discussion with the authors, October 15, 2024; former policymaker, discussion with the authors, October 28, 2024.

[128] Former policymaker, discussion with the authors, October 9, 2024.

[129] Former policymaker, discussion with the authors, October 15, 2024; discussion with second of two former policymakers, October 10, 2024; former policymaker, discussion with the authors, October 22, 2024; former policymaker, discussion with the authors, October 28, 2024.

[130] Discussion with second of two former policymakers, October 10, 2024. In this vein, the policymaker said that those considering the decision would ask whether the United States could peacefully walk away from Taiwan and continue to trade with China. Such a course of action would be possible but not probable, the policymaker noted.

[131] Former policymaker, discussion with the authors, October 22, 2024; former policymaker, discussion with the authors, October 28, 2024.

[132] Former policymaker, discussion with the authors, October 28, 2024.

[133] Former policymaker, discussion with the authors, October 22, 2024; former policymaker, discussion with the authors, November 4, 2024.

[134] Former policymaker, discussion with the authors, October 22, 2024.

[135] Former Treasury policymaker, discussion with the authors, October 15, 2024; former policymaker, discussion with the authors, October 28, 2024; former DoS policymaker, discussion with the authors, November 4, 2024.

[136] Former policymaker, discussion with the authors, October 15, 2024; former policymaker, discussion with the authors, October 22, 2024; former policymaker, discussion with the authors, November 4, 2024.

[137] Former policymaker, discussion with the authors, November 4, 2024.

administration, so the administration would have to craft actions that might go beyond its first, best choice to forestall what it considered to be worse outcomes.

Calling on Allies and Partners

The United States would try to gather support from allies and partners. The allies on which the United States would concentrate would be Australia and Japan first, followed by South Korea, New Zealand, and the Philippines. Of these, Australia would be the most likely to join, followed by Japan and, maybe, South Korea.[138] The United States would hope for other countries in the region, but those interviewed said it is unlikely that India and Singapore, the principal next targets, would join, with the same holding true for other Southeast Asian countries.[139]

Bringing in allies and partners would make preemption more difficult.[140] Because of the value of having a multinational sanctions effort, the United States would likely resort to pressure to bring them onboard.[141] The United States would also consider positive incentives.[142] If forced to choose between the United States, their principal security partner, and China, their principal trade partner, most countries would in the end choose the United States but would work very hard not to choose.[143] It is likely that European and the North Atlantic Treaty Organization partners would also be part of the conversation but would strive to stay on the sidelines.[144]

Implications and Conclusion

The United States has aggressively expanded its use of sanctions and other economic restraints certainly since 2017 and even since the terrorist attacks of September 11, 2001. These tools have been effective in causing economic pain for the targets but have not necessarily resulted in the desired strategic effects. In the case of preventing, or responding to, an attack by China on Taiwan, their strategic effect is in even greater doubt.[145]

Even so, there is little doubt that they will be used. As one former policymaker noted, sanctions can punish China for its actions, at least over the longer term; can provide a U.S. response short of military action; and can lead to greater collective action, which would be more effective than unilateral measures.[146]

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[138] Former policymaker, discussion with the authors, October 15, 2024; former policymaker, discussion with the authors, October 28, 2024.

[139] Former policymaker, discussion with the authors, October 15, 2024; former policymaker, discussion with the authors, October 28, 2024.

[140] Former policymaker, discussion with the authors, October 9, 2024.

[141] Former policymaker, discussion with the authors, November 4, 2024. Others concurred.

[142] Former policymaker, discussion with the authors, October 15, 2024.

[143] Former policymaker, discussion with the authors, October 22, 2024.

[144] Former policymaker, discussion with the authors, October 22, 2024.

[145] The former policymakers with whom we talked from July through November 2024 were consistent in their skepticism about the strategic effects of sanctions and other economic restraints on China.

[146] Former policymaker, discussion with the authors, October 28, 2024.

Should such a contingency occur, there is also little doubt that the United States would have to take the lead on forming an economic response. Given its size and centrality in the global economy, the United States can cause great damage to other economies through economic measures. Equally important from a U.S. policymaker perspective is that the United States is more insulated from the global economy than U.S. allies and partners and so can afford to take greater risks.

The open question is whether such measures will be used preemptively. President Biden's Deputy National Security Advisor for International Economics, Daleep Singh, raised the strongest point in a presentation about sanctions on Russia: "Deploying these measures preemptively, as some argued for, would have only broken unity with our partners and given Putin the pretext to invade under the guise that the U.S. never had a genuine intention to preserve the peace."[147] However, a future administration may determine otherwise, depending on the personalities involved, the quality of the information about the upcoming contingency, and assessments of the outcome of instituting sanctions.

Subsequent chapters focus on how key allies and partners could approach this contingency. The content of these chapters, combined with the results of the interviews in this chapter, suggests that U.S. policymakers are well-informed not only about the use of sanctions and economic restrictions but about how U.S. allies and partners are likely to react. This should enable to United States to create courses of action in the case of a Chinese attack, or planned attack, on Taiwan and to better prepare for the use economic measures, whether preemptively or after hostile Chinese action.

[147] Daleep Singh, "Hollow Myths and Harsh Realities," keynote address at Sanctions on Russia: What's Working? What's Not? Brookings, May 28, 2024b.

Chapter 3

Australia

The complex dimensions of the economic relationship between Australia and China will have significant implications for strategic thinking about allied deterrence using economic tools and the consequences of their use when an invasion or blockade of Taiwan is imminent. In recent years, Australia has prospered through strong economic ties with China. At the same time, it has supported U.S.-led security arrangements and, increasingly so, as a form of deterrence to a more threatening China. This recently culminated in the Australia, UK, and the United States (AUKUS) initiative. This balancing of dynamics, in which economic and security partners are in tension but not in conflict, has largely served Australia well.

As Beijing's strategic demands have evolved and as it has pursued its interests in a more belligerent manner, China is increasingly coming into conflict with the interests of other countries, including Australia. The decline in relations has seen China specifically target Australia through coercive economic means: the imposition of selective sanctions on Australia's largest export sectors (in dollar terms[148]), resources and agriculture.[149] Although these sanctions were intended to be punitive, and the damage appears largely to have been mitigated in the short term, these events demonstrated to Australia that its economic ties with China may pose a strategic threat. Chinese sanctions were a turning point for the main political parties in Australia and for many in business and the broader society. Australia's economic interdependence with China had resulted in significant security vulnerabilities. China had demonstrated its readiness to quickly become aggressive toward Australia and its willingness to use informal mechanisms as economic countermeasures.

Against a hypothetical scenario that China is planning an attack on Taiwan within an ensuing three to six months and that the attack might involve some form of blockade, an immediate invasion, or a blockade leading to an invasion, this chapter analyses how Australia might respond in the context of a strategy of allied deterrence using economic measures. Although one of our key observations is that Australia would be reticent to enact economic measures, understanding that decisionmaking would be largely context dependent, we explore potential points of leverage that, under certain conditions, might be pursued. Given the complexities of the economic relationship between Australia and China, we explore some of the constraints or impediments to the imposition of economic deterrence measures and briefly canvass some noneconomic measures or measures below the threshold of sanctions that may be implemented, either unilaterally or in complementarity with those of other countries.

[148] Unless otherwise stated, all references in this chapter to *dollars* or *$* refer to Australian dollars.

[149] In 2020, the Chinese government imposed import restrictions and discriminatory purchasing measures on eight commodities: coal, copper ores and concentrates, frozen beef, wine and grapes, cotton, barley, timber products, and rock lobster.

Method and Sources

We used a variety of research methods and sources to understand the landscape and gain multiple perspectives. We conducted a review of recent academic literature exploring contemporary thinking on the dominant models for how Australia might respond to a potential conflict over Taiwan, providing a qualitative baseline from which to analyze additional data we collected. We collected information on the dimensions of the economic relationship between Australia and China, demonstrating both the specific economic features and the extent of the entanglement between the two countries. We surveyed the gray literature to assess both the mechanisms available to Australia for pursuing economic deterrence measures and the appetite for their implementation. We extracted data from polls and expert interviews with senior policy experts to gauge perspectives of a diverse set of the population on and around the issue of a potential conflict over Taiwan, complemented by analyses available in the informed public discourse.[150]

Chapter Framework

The first section of this chapter surveys the dominant debates over the Taiwan question in Australia, providing a baseline from which to understand potential measures Australia might pursue against the hypothetical scenario. The next section provides a brief examination of the economic relationship between Australia and China because this is the primary backdrop against which Australia would determine its response. Following that, the third section identifies potential economic levers that might be deployed as result of this complex interdependency relationship and the mechanisms by which they might be implemented. As an important counterpoint, the next section explores the constraints on taking economic deterrence measures that are emerging because of this relationship. The following section briefly explores some of the noneconomic responses Australia would likely take in complementarity with U.S. economic deterrence measures. The concluding section outlines key findings but also posits a prospective set of conditions under which economic leverage would be deployed to dissuade China from an attack on Taiwan.

Strategic Context

Australian policymakers have, in general terms, been reluctant to publicly discuss how Australia would respond to the prospect of a Taiwan conflict. In part, this may be a strategic decision to keep a low profile on the issue because Australia-China relations have become increasingly tense and because of the reality of Australia's economic dependence on China as its major trading partner.[151] Even so, three dominant perspectives on how Australia might conduct itself in that event have emerged: deterrence, accommodation, and ambiguity.[152]

[150] Regarding expert interviews, it is important to note that, while we did find some policy specialists who were willing to discuss the topic, there was marked reservation among both current and former policy experts to engage in conversation on these issues.

[151] Brendan Taylor, "Taiwan Flashpoint: What Australia Can Do to Stop the Coming Taiwan Crisis," Lowy Institute, February 26, 2020.

[152] Brendan Taylor, "Taiwan: What Could, Should and Will Australia Do?" *Washington Quarterly*, Vol. 45, No. 3, 2022.

Deterrence

For those in the deterrence camp, the view is that, if Beijing took a more overtly aggressive stance toward Taiwan and managed to seize control, the power balance in the Indo-Pacific would undergo a fundamental shift because of China's increased ability to project military power. The regional alliance system, which has long been considered a key pillar in Australian security interests, may also be threatened. Moreover, any attack on Taiwan has historically also been a moral or values-based question. Because Taiwan is democratic, at least since the 1980s, there is a moral obligation to deter an attack against it or defend it in the event of conflict.[153]

The deterrence mode of thinking is an appeal to both values and interests. As former senior defense official Paul Dibb stated, "it's in our interest to stand up for the defense of a successful democracy living on an island. If Taiwan isn't worth defending, why would anyone come to Australia's defence."[154] Advocates of the deterrence position suggest that Australia already has pieces in place to deter China from aggression toward Taiwan, such as submarine capabilities within the AUKUS agreement, and formal expressions of diplomatic support, such as Australia–United States Ministerial Consultations talks.

Accommodation

For accommodationists, the argument is that any U.S.-led efforts to impose deterrence measures on China in the event of a potential attack on Tawain are no longer credible because of shifts in the balance of military power in the Taiwan Strait. The United States would once have been able to project its military with relative success in the Taiwan theater, but the anti-access and area-denial capabilities China has developed over recent decades mean that the United States would likely incur severe losses, and the outcome would, at best, be a stalemate.[155]

Hugh White, a key proponent of this perspective, has argued that, in the event of a potential Taiwan conflict, the United States either

> steps back and abandons Taiwan, fatally weakening its entire position in Asia, or it starts a war it has no clear way of winning, with a very real risk of going nuclear. But America cannot save Taiwan or its position in Asia by fighting that war. So, either way, whether it fights or not, America's leadership in Asia would be finished.[156]

For Australia and other U.S. allies, this would prompt doubts as to the U.S. commitment to them and to a strong presence in the region.[157]

[153] Taylor, 2022, p. 133.

[154] Taylor, 2022, p. 133.

[155] Taylor, 2022, pp. 134–135.

[156] Hugh White, "Sleepwalk to War: Australia's Unthinking Alliance with America," *Quarterly Essay*, No. 86, 2022, pp. 44–45.

[157] Taylor, 2022, p. 135.

Ambiguity

The ambiguity position, which the current Anthony Albanese government appears to have adopted, is that Australia should neither abandon nor commit to the defense of Taiwan. In the event of a Taiwan contingency, a position of strategic ambiguity should be maintained, and no unilateral adjustments should be made to the status quo. Advocates hold that there is no benefit in publicly signaling how Australia would respond.[158] The underpinning reasoning for the ambiguity approach is threefold. This has been Canberra's position since the normalization of Australia-China diplomatic relations in 1972; it aligns with that of the United States; and it is largely in keeping with the position adopted by Taiwan.

Australia-China Economic Relationship

Against the scenario of an invasion or blockade of Taiwan occurring within an ensuing three to six months, the extent to which the Australian response aligns with one of the perspectives just discussed when deterrence measures are economic will be determined by both the conditions caused by the attack and the dimensions of the economic relationship between Australia and China.

Historical Context

The economic landscape is the primary determinative context for Australia's calculus under these conditions, largely because China is the most important market for Australia in several key sectors. This occurred because of "an intense phase of structural complementarity between the two economies, framed by high demand from China for raw materials, food and energy, and Australia's position as a leading exporter of those commodities."[159] For decades, Australia's economic statecraft was the promotion of an open, transparent, and rules-based market as a means of advancing Australia's prosperity and security.[160]

In 2015, Australia and China signed a free-trade agreement that was, until very recently, seen as a positive factor for economic growth for Australia.[161] This was reinforced by the optimistic tone in the 2017 Department of Foreign Affairs and Trade White Paper, which sought to use economic levers to reduce international tensions.[162] Indeed, Australia's high degree of trade dependence on China makes it unusual among the more advanced economies.[163] Because of these close economic ties, there has been a general desire to maintain a mutually beneficial trading relationship, even as political tensions arise, and more recently, have been mounting.

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[158] Taylor, 2022, p. 136.

[159] Euan Graham, "The Political Economy of Australia–China Relations," *Adelphi Series*, Vol. 61, Nos. 490–492, May 2021.

[160] Victor A. Ferguson, Darren J. Lim, and Benjamin Herscovitch, "Between Market and State: The Evolution of Australia's Economic Statecraft," *Pacific Review*, Vol. 36, No. 5, 2023.

[161] Department of Foreign Affairs and Trade, "China–Australia Free Trade Agreement (ChAFTA)," webpage, Australian Government, 2015.

[162] Department of Foreign Affairs and Trade, *2017 Foreign Policy White Paper*, Australian Government, 2017a.

[163] Graham, 2021.

Chinese Sanctions 2020–2021

There was a shift in the dynamics of the Australia-China economic relationship during the 2020–2021 financial year (FY 2020–21),[164] when China targeted Australia through coercive economic means, imposing selective sanctions on Australia's largest export sectors. The sanctions included four of Australia's main agricultural exports: barley beef, lamb, and cotton, along with wine, lobster, and timber.[165] However, Australia proved more resilient than expected. The Productivity Commission estimated that the aggregate impact on GDP was –0.009 percent because Australia found new markets and commodity prices rose.[166] The net effect was to force Australia to decouple (e.g., India and Japan as markets for coal) and diversify imports and export markets into other parts of Asia.[167]

In addition, the sanctions brought about a significant shift in Australia's political and security environment that has spilled into the economic one. Australia placed new restrictions on the ownership of certain critical infrastructure with the Security Legislation Amendment (Critical Infrastructure Protection) Act 2022, amending the Security of Critical Infrastructure Act 2018.[168] The Future Made in Australia policy is another outcome, targeting domestic production of clean energy technologies and critical minerals processing.[169]

Although it has been noted that "Australia is now emerging from three years of Chinese bullying in remarkably good shape,"[170] these events demonstrated to decisionmakers, the business community, and the broader Australian society the extent to which economic ties with China had resulted in significant security vulnerabilities.

Contemporary Context

In the contemporary context, China remains Australia's largest export and import partner, and China is reliant on Australia for raw materials to fuel its industrial development and substantial export machine.[171] Certainly, China's continued preeminence as Australia's main trading partner is such that any shifting dynamics within the economic relationship have a substantive effect on Australia's decisionmaking calculus.

From an import-export perspective, the economic relationship with China is pivotal to Australia's overall economic well-being. As of December 2023, the share of two-way trade between these two

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[164] The Australian financial year runs from 1 July to 30 June.

[165] Productivity Commission, *Trade and Assistance Review 2021–22*, annual report series, Australian Government, 2023, pp. 85–88.

[166] Productivity Commission, 2023, pp. 91–92.

[167] David Uren, "Australia's Trade Diversification Away from China Picks Up Pace," Australian Strategic Policy Institute, October 13, 2022.

[168] Department of Home Affairs, "Security Legislation Amendment (Critical Infrastructure Protection) Act 2022," webpage, Australian Government, last updated June 7, 2023.

[169] Australian Government, The Treasury, *Future Made in Australia: National Interest Framework*, May 14, 2024.

[170] "Australia Has Faced Down China's Trade Bans and Emerged Stronger," *The Economist*, May 23, 2023.

[171] Victor A. Ferguson, Scott Waldron, and Darren J. Lim, "Market Adjustments to Import Sanctions: Lessons from Chinese Restrictions on Australian Trade, 2020–21," *Review of International Political Economy*, Vol. 30, No. 4, 2023.

countries, as a percentage of all Australian trade, was 30 percent.[172] The dominance of China has grown from 22.4 percent in 2015, when Australia and China signed the free-trade agreement,[173] and been relatively stable over time, peaking at 32.2 percent for FY 2020–21.[174] China ranks first in imports and exports, contributing roughly the same amount as the United States, Japan, and South Korea combined—these nations occupy the next three places in both categories (Table 3.1).

Table 3.1. Australia's Goods and Services Trade with Key Partners, FY 2022–23

	Exports		Imports	
Country	**$M**	**% (ranking)**	**$M**	**% (ranking)**
China	203,498	29.7 (1)	113,375	21.5 (1)
Japan	114,969	16.8 (2)	28,401	5.4 (3)
South Korea	49,546	7.2 (3)	28,036	5.3 (4)
United States	32,556	4.7 (4)	62,071	11.8 (2)
Japan, South Korea, and United States combined	197,071	28.7	118,508	22.5
Others	285,602	41.6	270,150	56.1

SOURCE: Australian Bureau of Statistics, "International Trade: Supplementary Information, Financial Year," webpage, Australian Government, December 14, 2023.
NOTE: By way of comparison, according to U.S. DoC data for 2022, China represents 6.5 percent of total United States exports and 14.2 percent of total U.S. imports. See U.S. Bureau of Economic Analysis, "China—International Trade and Investment Country Facts," fact sheet, 2024.

Therefore, any economic measures Australia undertakes would have a more significant impact on the overall economy than what the United States would feel, given the dominance of the Chinese market for Australia's top five exports.[175]

[172] Department of Industry, Science and Resources, *Resources and Energy Quarterly: December 2023*, Australian Government, 2023, p. 15.

[173] Department of Foreign Affairs and Trade, "Profile of Australia's Trade 2015," webpage, Australian Government, August 25, 2017b.

[174] Department of Foreign Affairs and Trade, "China Country Brief," webpage, Australian Government, 2023.

[175] According to Department of Foreign Affairs and Trade figures, the top five exports in 2022 were iron ore, liquified natural gas (LNG), thermal coal, metallurgical coal, and education (including travel-related expenses). This represented 57.7 percent of all exports to China in dollar terms. See Department of Foreign Affairs and Trade, "Australia's Top 25 Exports, Goods & Services," Australian Government, last updated January 2025a.

Economic Levers

The significant economic entanglements between Australia and China that we have outlined may offer multiple points that might be leveraged to deter Chinese aggression toward Taiwan. Under certain conditions, there may be a case for enacting unilateral sanctions-based measures in support of economic deterrence measures enacted by the United States.

Sanctions Mechanisms

Australia implements two types of sanctions: "United Nations Security Council (UNSC) sanctions, which Australia must impose as a member of the UN [United Nations]" and autonomous sanctions, "which are imposed as a matter of Australian foreign policy" and "situations of international concern."[176] The Autonomous Sanctions Act 2011 and the Australian Autonomous Sanctions Regulations 2011 provide a general framework to enable flexibility on the variety of measures available and the ability to implement sanctions in relative alignment with those of like-minded countries.[177] However, the extent of the utility of the legislation is still developing; the implementation of unilateral sanctions is still a "relative novelty" for Australia; and specific case law remains limited.[178]

Australian autonomous sanctions instruments were expanded in 2021 by the Autonomous Sanctions Amendment (Magnitsky-style and Other Thematic Sanctions) Act.[179]

Sanctions may include the following:

- **Restrictions on trade in goods and services** are prohibitions on export and import of goods and provisions of some services, typically to the country or region subject to the sanctions. They may also apply to specific persons, groups, or entities.
- **Restrictions on engaging in commercial activities** are prohibitions on such activities as "purchasing or selling shares in entities operating in certain industries or providing credit to certain entities."[180]
- **Targeted financial sanctions** are bans on "directly or indirectly making an asset available to (or for the benefit of) a designated person or entity," or a ban on "an asset-holder using or dealing with an asset that is owned or controlled by a designated person or entity."[181]

[176] Department of Foreign Affairs and Trade, "Sanctions: What You Need to Know," Australian Government, undated-d; Minister for Foreign Affairs (Australia), "Explanatory Statement, Issued by the Authority of the Minister for Foreign Affairs, Autonomous Sanctions Regulations 2011: Autonomous Sanctions Amendment (Russia) Regulations 2022," 2022.

[177] Marise Payne, 'Strengthening Australia's Sanctions Regime," press release, Minister for Foreign Affairs, Minister for Women, December 2, 2021; Autonomous Sanctions Act 2011, Federal Register of Legislation, Australian Government, May 26, 2011, as amended to April 2024a; Autonomous Sanctions Regulations 2011, Federal Register of Legislation, Australian Government, December 7, 2011, as amended to November 2024b.

[178] Lorenzo Pasculli and Ben Stanford, "Form and Flexibility: The Normalisation of 'Magnitsky Sanctions' in the Face of the Rule of Law," *Hague Journal on the Rule of Law*, Vol. 15, No. 1, April 2023.

[179] Autonomous Sanctions Amendment (Magnitsky-Style and Other Thematic Sanctions) Act 2021, Federal Register of Legislation, Australian Government, December 7, 2021.

[180] Department of Foreign Affairs and Trade, undated-d.

[181] Department of Foreign Affairs and Trade, undated-d.

- **Travel bans on certain persons** are prohibitions on entry into or transit through Australia of designated persons.[182]

Recent examples of Australia imposing autonomous sanctions include the cases of Russia and Iran. Autonomous sanctions imposed on Russia were in response to the threat "to the sovereignty and territorial integrity of Ukraine."[183] Sanctions "were first imposed in 2014 and extended in 2015, 2022 and 2023."[184] Restrictions include the following:

- restrictions on the export or supply of certain goods
- restrictions on the import, purchase, or transport of certain goods
- restrictions on certain commercial activities, restrictions on the provision of certain services
- restrictions on providing assets to designated persons or entities
- restrictions on dealing with the assets of designated persons or entities
- travel bans on designated persons.[185]

In the case of Iran, Australia enacted autonomous sanctions in complementarity with UNSC sanctions in response to Iran's refusal to suspend its uranium enrichment program. Restrictions include the following:

- restrictions on the export or supply of certain goods
- restrictions on the provision of certain services
- restrictions on providing assets to designated persons or entities
- restrictions on dealing with the assets of designated persons or entities, and
- travel bans on designated persons.[186]

Australia currently implements the sanctions regimes illustrated in Figure 3.1.

Potential Leverage Points: Commodities

The main drivers of the economic relationship between Australia and China are commodities; the export landscape may therefore offer the strongest points of economic leverage for Australia. The following exports are examples of possible opportunities:

- **Iron ore:** Australia is the world's largest exporter of iron ore (57 percent of global trade), with China being by far its biggest market (85 percent).[187] This represents just over 60 percent of China's total iron ore imports, with Brazil providing just over 20 percent of the remainder.[188]

[182] Department of Foreign Affairs and Trade, undated-d.

[183] Department of Foreign Affairs and Trade, "Sanctions: Russia Sanctions Framework," undated-c.

[184] Department of Foreign Affairs and Trade, undated-c.

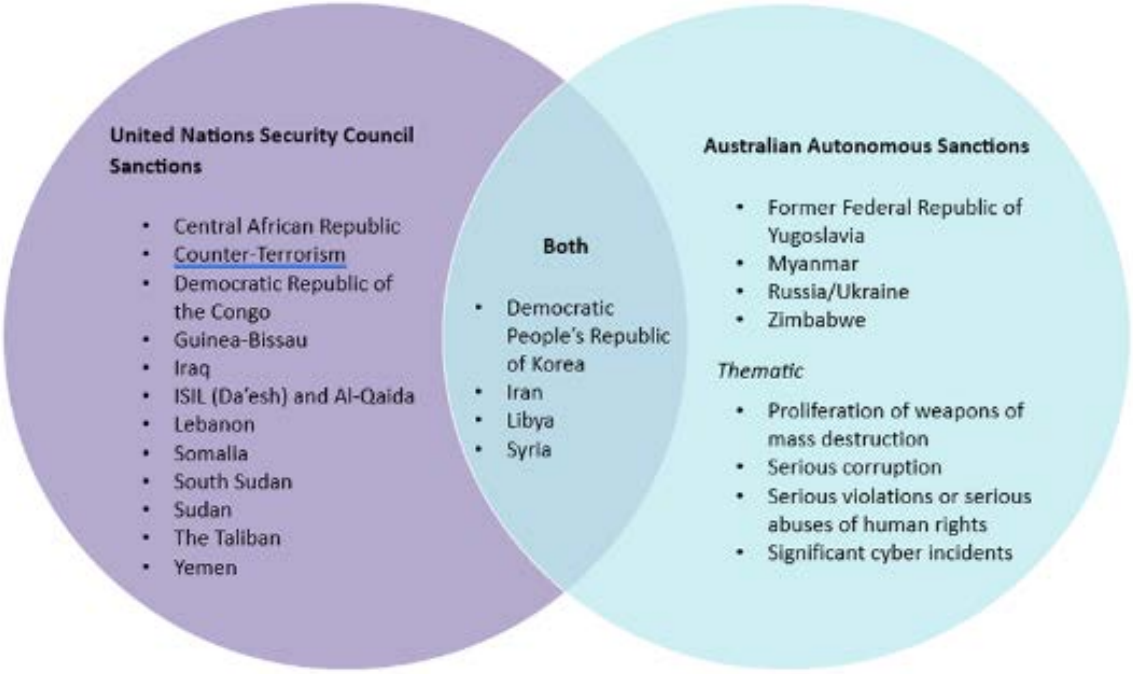
[185] Department of Foreign Affairs and Trade, undated-c.

[186] Department of Foreign Affairs and Trade, "Sanctions: Iran Sanctions Framework," webpage, Australian Government, undated-b.

[187] Department of Industry, Science and Resources, 2023, pp. 34–35.

[188] Department of Industry, Science and Resources, 2023, p. 36.

Figure 3.1. Australia's Sanctions Regimes



SOURCE: Contains information from Department of Foreign Affairs and Trade, "About Sanctions," webpage, Australian Government, undated-a.
NOTE: ISIL = Islamic State of Iraq and the Levant.

For China, iron ore may be a point of strategic vulnerability. China possesses low-quality iron ore reserves, but the output is relatively insignificant because of a preference for the high-quality ores of Australia and Brazil. If iron ore were used as point of economic leverage in a conflict situation, China would need to revert to its low-quality reserves, which would require revitalizing domestic production. This would take time, and steel output would drop because of the inability of newer steel mills to process low-quality local ore without beneficiation.[189] Moreover, the gap would be unlikely to be filled by Brazilian iron ore because of Brazil's recent inability to maintain high production levels.[190]

- **Metallurgical coal:** Australia produces more than half of the global supply of metallurgical coal. The United States, Russia, and Canada are the next three largest exporters. China represents the biggest global export market. Prior to 2020, China represented 29 percent of Australia's export market for metallurgical coal, by value, in FY 2019–20.[191] This was one of the exports on which China placed sanctions on in 2020. Consequently, Russia's exports significantly increased, as did those of Indonesia, Colombia, South Africa, and the United States. However, Australia was able to fill the gap when traditional customers of those

[189] *Beneficiation* is "the treatment of raw material (such as iron ore) to improve physical or chemical properties especially in preparation for smelting" ("Beneficiation," Merriam-Webster Dictionary Online, undated).

[190] Uren, 2022.

[191] Department of Industry, Science and Resources, 2023, pp. 45–48.

suppliers were left short. Australia was able to increase sales to India, Japan, and South Korea and largely replace sales to China.[192]

- **Thermal coal:** Australia is the world's second largest exporter of thermal coal, after Indonesia. Traditionally, Japan has been Australia's largest export market, with China second. Prior to China's sanctions (FY 2019–20), Japan accounted for 41 percent by value and China 19 percent. However, a significant rise in thermal coal prices (more than tripling between FY 2020–21 and FY 2022–23) has seen income from thermal coal exports increase by 220 percent, in part because China increased its coal inventory from less than 100 million tons in mid-2021 to more than 500 million tons in early 2023.[193] However, the Australian government is projecting a significant reduction in exports over the next two financial years, to approximately 40 percent of the FY 2019–20 export value.[194] In FY 2022–23, Japan represented 58 percent, by value, of imports of Australian thermal coal exports with Taiwan second at 14 percent.[195]
- **LNG:** Australia's principal markets for LNG export are Japan (49 percent, FY 2022–23), China (22 percent, FY 2022–23), and South Korea (20 percent in FY 2022–23). Exports of LNG are generally sold on long-term contracts. This balance has shifted significantly in recent years, with Japan, China, and South Korea representing 38 percent, 37 percent, and 11 percent, respectively, in FY 2020–21.[196] Although Australia remains China's largest source of imports of LNG (along with Qatar), China has become more self-reliant, having significantly increased domestic production of natural gas to meet increasing demand.[197] Moreover, if LNG became a point of economic leverage, China could revert to coal reserves, so the loss of Australian LNG would not necessarily carry a significant strategic cost.[198]

In terms of commodities, iron ore, coal, and (potentially, but less likely) LNG may offer the most economic leverage. However, if Australia was to implement sanctions or restrictions around any of these products, the effect on China would not be immediate. Enacting these actions three to six months, specifically out to six months, in advance of a Chinese invasion does provide a more viable time frame for these actions to have economic consequences and, thus, act as a deterrent, although much of that time would be consumed by consideration and imposition of export bans, so any measures will still have a relatively short period in which to do their work. Because China has been diversifying sources of imports and stockpiling resources, the impact overall might well be limited. Moreover, although the longer the period that economic deterrence measures operate, assuming they are effective, the more that China will drain its stockpiles but will also have time to adjust its economy and find new suppliers, implying that export bans will have an uneven effect.

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[192] David Uren, *What If . . . ? Economic Consequences for Australia of a US-China Conflict over Taiwan*, Australian Strategic Policy Institute, June 2021.

[193] Department of Industry, Science and Resources, 2023, pp. 55–57.

[194] Department of Industry, Science and Resources, 2023, p. 64.

[195] Department of Industry, Science and Resources, 2023, p. 145.

[196] Department of Industry, Science and Resources, 2023, p. 145.

[197] Department of Industry, Science and Resources, 2023, p. 68.

[198] Uren, 2021.

Potential Leverage Points: Rare Earth and Critical Minerals

Given the strategic relevance of rare earths and other critical minerals, it is worth considering two other products for which Australia has significant reserves or production capacity: lithium and nickel.

- **Lithium**: Australia holds the second largest lithium reserves in the world and mines 50 percent of global lithium production.[199] Its contribution to Australia's exports in FY 2022–23 ($20 billion) ranked sixth in resource and commodity exports, or one-sixth that contributed by iron ore.[200] In FY 2022–23, China represented 98.5 percent of Australia's export market. China is concurrently increasing domestic production—currently second globally.[201] However, lithium may offer a point of leverage. Over the past decade, the need for reliable access has become a priority because lithium is a necessary input for a wide variety of defense and industrial technologies. Lithium-based power remains vital to many battery technologies, and demand is likely to continue to increase because of growth in the electric-vehicle market.
- **Nickel**: At 22 percent, Australia possesses the largest reserves globally. As a producer, Australia rates fifth, behind Indonesia, the Philippines, New Caledonia, and Russia,[202] although it contributed only $5 billion in exports in FY 2022–23 (11th in terms of resources and energy commodity exports).[203] However, the processing of nickel is largely undertaken in Indonesia and China.[204] Given the low levels of production and processing, there is limited potential to use nickel within a sanctions regime with any noticeable effect.

Potential Leverage Points: Other

It is not just commodities that may provide economic leverage points. In the services sector, Australia's most significant net export is education, which ranks as Australia's fourth most valuable export. According to the Organisation for Economic Co-operation and Development, international students make up 26 percent of all tertiary enrolments in Australia, including 49.8 percent of masters enrollments and 33.5 percent of doctoral. enrollments.[205] They represent a higher proportion of tertiary fees because they must pay full fees (domestic student courses are subsidized) and must pay while studying (domestic students can defer payment until their income rises above certain thresholds). Therefore, foreign students represent a vital source of income for the academic sector.[206]

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[199] Department of Industry, Science and Resources, 2023, p. 135.

[200] Department of Industry, Science and Resources, 2023, p. 13.

[201] Department of Industry, Science and Resources, 2023, pp. 137–138.

[202] Department of Industry, Science and Resources, 2023, p. 124.

[203] Department of Industry, Science and Resources, 2023, p. 13.

[204] Mike Foley, "'We Would Be a Superpower': Australia's Next Gold Rush Beckons," S*ydney Morning Herald*, November 12, 2023.

[205] Study in Australia, "International Students in Australia Statistics," last updated 2023.

[206] The issue of limiting visas to Chinese students and the pros and cons of doing so also apply to the UK and the United States because both accept large numbers of Chinese university and graduate students. The Chinese reaction to an announced U.S.

Chinese students represented the highest number of international students studying in Australia in 2023 (21 percent).[207] Indeed, education and research capacities have become important considerations in China's geoeconomic strategy. In recent years, China has made significant investments in the expansion of research and education, becoming a major player in the sector and underpinning its deliberate transformation into a global techno-power and Xi Jinping's objective of national rejuvenation.[208]

Inbound foreign direct investment (FDI) represents another avenue for economic engagement between China and Australia. Historically, the United States, the UK, and Japan have been the major contributors to inbound FDI, combining to account for about half of that investment.[209] In contrast, China's direct investments in Australia rank a distant fourth (4.8 percent in 2022).[210] Notwithstanding concerns that this could be underreported because the ultimate beneficial owner of that investment might be unknown,[211] the majority of this inbound investment from China (including Hong Kong) is focused on the residential and commercial real estate markets.[212] Although the data showed a steep decline from 2016, recent evidence is showing that Chinese investment in the Australian property market is surging again in response to expectations of significant capital growth and high rental returns.[213]

Constraints

This significant entanglement also presents a dependency relationship that imposes constraints, the consequence of which is that economic sanctions would only be levied under certain conditions. In deciding when to apply autonomous sanctions, the government assesses "Australia's national interest, including bilateral, regional and multilateral equities, and the impact of sanctions on Australia's economic, security or other interests."[214] The fundamental question to be asked in the determination is

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revocation of student visas suggests such a measure would increase leverage on China, with the Foreign Ministry spokesperson calling the measure "fully unjustified" as well as "politically motivated and discriminatory" (Ministry of Foreign Affairs, People's Republic of China, "Foreign Ministry Spokesperson Mao Ning's Regular Press Conference on May 29, 2025," May 29, 2025). However, it would also hurt Western countries, not only because it would reduce revenue to universities but because the Chinese students contribute to research at their institutions and often remain in the host country to form an important component of the science and technology workforce (Nadia Almasalkhi, "U.S.-China High-Skilled Return Migration: Implications for Strategic Economic Competition," in Howard J. Shatz and Daniel Egel, eds., *U.S.-China Economic Competition: Gains and Risks in a Complex Economic and Geopolitical Relationship*, RAND Corporation, RR-A1947-1, 2025).

[207] Australian Government Department of Education, "International Student Numbers by Country, by State and Territory," webpage, 2025.

[208] Jane Golley, Amanda Barry, Paul Harris, and Darren J. Lim, "Geoeconomics and the Australian University Sector: A 'Geoeducation' Analysis," *Security Challenges*, Vol. 16, No. 4, 2020.

[209] Productivity Commission, 2023, pp. 65–66.

[210] Department of Foreign Affairs and Trade, "Foreign Investment Statistics: Statistics on Who Invests in Australia," webpage, Australian Government, 2022.

[211] Productivity Commission, "Foreign Investment in Australia," Australian Government, 2020. For a detailed discussion, see Annex B.

[212] Productivity Commission, 2020, p. 74.

[213] Tom McIlroy, "China Leading Asian Investor Surge in Australian Property," November 3, 2023.

[214] Minister for Foreign Affairs (Australia), 2022.

"the cost of foregoing [sic] a trade relationship."[215] Although we have identified potential economic leverage points and the mechanisms for pursuing these points, the dependencies that arise from Australia's economic relationship with China may make sanctions appear to be against the national interest. Certainly, multiple recent examples might be instructive in assessing the extent to which the economic relationship with China may constrain enacting economic deterrence measures.

The China Exception

When China implemented a variety of trade restrictions targeting Australia's exports in 2020 and 2021, the Australian government was reluctant to impose direct measures against China outside World Trade Organization (WTO) dispute action. Rather, the government suggested that any industries that were affected by the measures should pursue market diversification and moved to intensify dialogue with the Quad.[216] Much of the political and business communities believed that any direct actions taken outside WTO rules would prompt China to pursue additional punitive measures against Australia.[217] Ultimately, Australia's resilience in countering China's trade restrictions meant that the final economic impact was insubstantial.[218]

When China imposed the Hong Kong National Security Law, Australia was one of several countries to suspend both its extradition treaty and mutual legal assistance treaty and announced measures that provide a path to permanent residence for some Hong Kong citizens residing in Australia.[219] When Australia passed the Magnitsky Act in 2021, there was no recognition that the bill was responding to events in Hong Kong, even as, according to the inquiry report, "the Sub-committee received over 400 form letters, expressing concern for human rights in Hong Kong and calling for Australia to develop a Magnitsky-style targeted sanctions regime consistent with other jurisdictions."[220] However, the Australian government did not impose sanctions under the Autonomous Sanctions Act or other legislation.[221]

Likewise, Australia's response to claims of human rights violations against the Uyghurs in the Chinese province of Xinjiang has been mixed. Australia was one of the states that put forward the motion for debate in the Human Rights Council and has been relatively outspoken about forced labor

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[215] Victor Ferguson and Darren J. Lim, "Economic Power and Vulnerability in Sino-Australian Relations," in Jane Golley and Linda Jaivin, eds., *China Story Yearbook: Crisis*, ANU Press, 2021.

[216] The Quad is a diplomatic grouping of Australia, India, Japan, and the United States "committed to supporting a peaceful, stable and prosperous Indo-Pacific that is inclusive and resilient" (Department of Foreign Affairs and Trade, "Regional Architecture: The Quad," webpage, Australian Government, July 2025b). Heads of state and heads of departments (such as the foreign ministers and secretary of state) meet periodically to coordinate on Indo-Pacific issues (for example, see DoS, "Joint Statement from the Quad Foreign Ministers' Meeting in Washington," press release, July 1, 2025).

[217] Justin Brown, "Countering Chinese Economic Coercion: Enhanced Cooperation Between Australia and Europe," Lowy Institute, April 27, 2023.

[218] Ferguson, Waldron, and Lim, 2023.

[219] Bernie Lai, "Australia's Response to the Hong Kong Democracy and Human Rights Crisis," Parliamentary Library Research Papers, Parliament of Australia, September 13, 2022.

[220] Parliament of the Commonwealth of Australia, *Criminality, Corruption and Impunity: Should Australia Join the Global Magnitsky Movement? An Inquiry into Targeted Sanctions to Address Human Rights Abuses*, Joint Standing Committee on Foreign Affairs, Defence and Trade, December 2020.

[221] Lai, 2022.

conditions in Xinjiang. Although this was deemed to be "exactly the situation that these sanctions were intended to address" and that autonomous sanctions could be "a quicker way of implementing bans on products produced by forced labor, as they can restrict the provision of assets to designated persons or entities,"[222] Australia did not bring sanctions against relevant Chinese authorities that were responsible.

This general reticence has come with reputational damage. As China analyst Ben Herscovitch has noted, "Canberra has shown itself willing to impose sanctions when the economic blowback and diplomatic costs are minimal, including in the cases of Russia, Iran, and Myanmar, while refusing to do the same when it comes to egregious human rights abuses in China."[223]

Concern over Countermeasures

The response of Chinese government officials to any rhetorical posturing from Australian political leaders on the issue of Taiwan has been that Australian politicians must "refrain from doing anything that's destructive to our relationship."[224] Beijing has repeatedly argued that Australia and other countries should not interfere in "China's internal affairs."[225] Having already been targeted by China for selective sanctions on some of its largest export sectors in 2020 and 2021, amid the Scott Morrison government's call for an independent inquiry into the origins of coronavirus disease 2019 (COVID-19), the potential for abrupt economic disruption continued to generate widespread concern. The fear remains that Australia continues to be too economically dependent on China and has been left vulnerable to economic coercion.[226]

Even as Australia appears to have recovered from Chinese sanctions over 2020 and 2021, if Australia were to pursue sanctions-based economic deterrence measures in support of U.S. measures, Australians would continue to be concerned about the risk of economic isolation through Chinese economic countermeasures. As export-led growth has slowed and as China recalibrates to decrease demand for certain categories of imports, those that are deprioritized will likely become more readily exploited through economic coercive means.[227] Relatedly, Australia's diversification away from natural resources into services and consumer products may result in potential substitution via alternative markets. However, commodities are expected to remain the central export over the next decade. Given Australia's dependence on Chinese markets, commodity exports no longer provide Australia with a level of economic immunity or protection from disruption.[228] China may be able to leverage this dependence in an attempt to coerce Australia to refrain from acting in the interests of Taiwan or supporting allies that do so. Certainly, Australia's economic stability could be impinged on if those

[222] Melanie O'Brien, "China's Persecution of the Uyghurs: Australian Action," Australian Institute of International Affairs, November 3, 2022.

[223] Benjamin Herscovitch, "The Murky Morality of Relationship Repair with China," *ANU Reporter*, November 8, 2023.

[224] Daniel Hurst, "Australia Cannot Be 'Passive Bystanders' in a War Between US and China, Richard Marles Says," *The Guardian*, October 18, 2023.

[225] Hurst, 2023.

[226] Ferguson, Waldron, and Lim, 2023.

[227] Ferguson and Lim, 2021.

[228] Ferguson and Lim, 2021.

efforts significantly increased Australia's trade deficit and, in doing so, placed downward pressure on the Australian dollar (relative to other currencies). This could, in extremis, cause social disruption as critical imports, such as fuels and medicines, become unaffordable.

Limited Utility of Economic Sanctions

In the post–COVID-19 economic landscape, there is a view among some Australian policy experts that economic sanctions can have only a limited effect because of the fragmentation of economies and global supply chains. The associated reduction of trade impedes the efficacy of economic sanctions as a deterrence tool. Moreover, it is largely accepted among experts that China likely already has mechanisms in place to manage economic restrictions imposed against it during conflict, having factored those costs into its strategic decisionmaking.[229]

Public Sentiment

Disruption to the economy would also disrupt the day-to-day experiences of domestic populations. Any significant domestic pushback would affect the government's mandate to act. Similarly, the government of the day might choose not to act if there were a perception that to do so jeopardies the political capital required to maintain members' position in government.

Polls conducted by the Lowy Institute reveal the complexity of navigating public sentiment on this issue. The polls showed that, in the event of a military conflict between the United States and China, 56 percent believed Australia should remain neutral, and 42 percent believed Australia should support the United States.[230] However, although 42 percent believed Australia should send military personnel to Taiwan in the event of China invading the island, 76 percent supported economic and diplomatic sanctions.[231] If China were to attack Taiwan, there was strong support for economically isolating China (60 percent versus 12 percent against). However, in contrast to the Lowy poll, a majority (46 percent versus 22 percent against) of those surveyed by the United States Study Centre at the University of Sydney supported sending military forces "to help the United States defend Taiwan."[232] Confusingly 38 percent supported "not getting involved," and 30 percent were opposed to this statement.[233]

A poll conducted by the University of Technology in Sydney showed a relatively even split on the issue of a potential conflict over Taiwan: "If China launches a military attack on Taiwan, Australia should send troops to go to Taiwan's defence," with 37 percent of Australians in agreement, 28 percent taking a neutral view, and 36 percent disagreeing. However, when the scenario also included American involvement, there was greater agreement among respondents, with 52 percent

[229] DiPippo and Blanchette, 2023.

[230] Ryan Neelam, *Lowy Institute Poll 2023*, 2023, p. 20.

[231] Neelam, 2023, p. 20.

[232] Jared Mondschein, Victoria Cooper, Samuel Garrett, and Ava Kalinauskas, "One Year from the 2024 Presidential Election: The Stakes for Australia and the Alliance," United States Studies Centre, University of Sydney, November 2023, p. 18.

[233] Jared Mondschein and Victoria Cooper, *US Midterms 2022: The Stakes for Australia and the Alliance*, United States Studies Centre, University of Sydney, October 2022, p. 20.

agreeing that, "[i]n the event of a military conflict between the United States and China over Taiwan, Australia should lend military support to the United States" and 49 percent advocating neutrality.[234] This suggests that an Australian government could not count on blanket popular support in the event of deciding to join a U.S.-led war with China over Taiwan. Indeed, there is growing anxiety that a choice will need to be made between its largest trading partner, China, and its closest ally, the United States: "Most believe that it will be Beijing that forces Australia's hand, but an increasing proportion believe it will be Washington."[235]

The recently changed tenor of the relationship between Australia and China has affected perceptions of, and within, Chinese communities in Australia and is likely to be a factor for consideration in Australian decisionmaking regarding implementation of economic deterrence measures.[236] Significantly, approximately seven in ten Chinese Australians "believe Australia should remain neutral in the event of a military conflict between China and the United States."[237] According to Collinson and Burke, "[f]ifty-six percent of Australians say that 'Political tensions in the Australia-China relationship are negatively impacting Australians of Chinese origin,' a steady decrease from 2022 (59 percent) and 2021 (63 percent)."[238] Collinson and Burke also noted that "[f]orty-three percent of Australians say that 'Australians of Chinese origin can be mobilised by the Chinese government to undermine Australia's interests and social cohesion,' a slight increase from 2022 (42 percent) and 2021 (39 percent)."[239]

Supplementary and Complementary Levers

Because of the constraints outlined in this report—taking action within an ensuing three to six months in advance of an invasion—Australia may be more likely to deploy facets of statecraft that complement U.S. economic sanctions. In discussions with policy experts, several noneconomic levers were canvassed in general terms across the intelligence, diplomatic, and military domains. Some experts held the view that the most valuable contribution Australia could make is in actions it is already taking in intelligence-gathering and -reporting and in providing peripheral support, building on the continuity of the close Australia-U.S. relationship.

Australia would also likely work closely in concert with other countries and make use of its involvement in such groupings as the Quad to pursue strong collective economic and diplomatic measures, recognizing that common values may be under threat.[240] In a recent statement at the G7, to which Australia was invited, the liberal democratic nations made an explicit commitment to "use our

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[234] Elena Collinson and Paul Burke, *UTS: ACRI/BIDA Poll 2023, The Australia-China Relationship: What Do Australians Think?* Australia-China Relations Institute, University of Technology Sydney, July 2023.

[235] Collinson and Burke, 2023.

[236] Bang Xiao, "Chinese-Australians' Political Awakening Was a Big Factor in Labor's Win in Aston," Australian Broadcasting Corporation, April 3, 2023.

[237] Collinson and Burke, 2023.

[238] Collinson and Burke, 2023.

[239] Collinson and Burke, 2023.

[240] Lavinia Lee, "Assessing the Quad: Prospects and Limitations of Quadrilateral Cooperation for Advancing Australia's Interests," Lowy Institute, May 20, 2020.

existing tools, review their effectiveness and develop new ones as needed to deter and counter the use of coercive economic measures," and to do so in a coordinated and collective way.[241]

Finally, if the United States expected an Australian contribution and if Australia remained reticent in pursing direct economic sanctions, various indirect measures or those that sit below the threshold of sanctions could be pursued. This may include the use of proxies or exploitation of secondary points of vulnerability, such as exerting pressure on other countries to target aspects of the supply chains.

There is certainly an argument for developing an integrated approach to working with the United States and other allies in fashioning economic levers to deter China from certain actions and manage the multidimensional risks.[242] But that integrated approach would be enhanced by incorporating noneconomic levers, particularly if there is reticence among certain players to pursue economic actions.

Conclusion: Conditions for Preemptive Sanctions

Economic deterrence runs counter to decades of Australian economic and public policy by both of the main federal political parties. This is not to say that Australia would not use economic sanctions if certain conditions were met, but our findings suggest that there would be significant reticence. Australian decisionmakers may well decide that the cost may be higher—both economically and politically—for Australia to forgo certain trade than it would be for China.[243] In terms of risk versus reward, the decisionmaking calculus for implementation of economic deterrence measures against China in the context of a conflict with Taiwan may be quite different from that of the United States. Miscalculation is seen as a major strategic risk.

The primary context for determining Australia's response and decisionmaking is the Australia-China economic landscape in conjunction with the specific conditions of the attack. Here, there is an obvious conservatism in Australia toward imposing sanctions, particularly when the target country is China. Even when Australia has implemented sanctions regimes on other countries, it has often been after others have already acted. This is certainly the case when compared with U.S. processes, tools, experience, and political support in sanctions-based actions. If Australia was, for argument's sake, to take sanctions-based action in coordination with the United States, the measures would likely be implemented slowly and be quite different in form and effect.

In short, because of the significant economic ties between Australia and China, Australia would be unlikely to pursue economic deterrence measures except under any of the following conditions:

- The economic measures were of a largely symbolic nature, such that they would not permanently rupture the foundations of the Australia-China economic relationship.
- The threat from China was believed to be existential to Australia or significantly and irreversibly threatened Australia's immediate security interests.

[241] "G7 Leaders' Statement on Economic Resilience and Economic Security," G7G20 Documents Database, May 20, 2023.

[242] Helen Mitchell, "Unlocking Economic Security: A Strategic Playbook for Australia," United States Studies Centre, University of Sydney, March 2024.

[243] Ferguson and Lim, 2021.

- There was significant pressure from the United States to implement certain economic measures because of the fundamental importance to an effective response.

Chapter 4

Japan

Over the past decade, Japan has tried to achieve a "mutually beneficial relationship based on common strategic interests" with China by managing two important but conflicting aspects of their bilateral ties.[244] On the one hand, Japan has robust, interdependent trade and investment relations with China that are important for Japanese economic growth. On the other hand, Japan is deeply worried about China's rapid military modernization and the country's activities that challenge the rules-based international order.[245] Japanese concerns about China's intentions increased after Russia's full-scale invasion of Ukraine in 2022, which Japan interpreted as an example of an attempt to change the status quo with military force. Japan is worried that such developments could also take place in the Indo-Pacific region.[246] A potential Chinese attack on Taiwan, which China sees as its territory, is a top security concern for Japan.

How would Japan respond if the country discovered that China was planning an attack on Taiwan and if the United States and its allies were considering the use of economic measures to deter China from taking such actions? This chapter explores Japanese options in a hypothetical scenario that China is planning such an attack within an ensuing three to six months and that the attack might involve some form of a blockade, an invasion, or a blockade leading to an invasion. Using this scenario, we explore Japan's options under the current legal framework, the country's decisionmaking process regarding such economic measures, and the factors that the country is likely to weigh in any decisionmaking regarding such economic measures.[247] An understanding of Japanese options and decisionmaking regarding potential sanctions against China should be of interest to policymakers in the United States and other U.S. allies.

Method and Sources

In this chapter, we use a variety of primary and secondary sources. These included a review of official documents, academic journal articles, and analyses by experts inside and outside Japan to understand Japan's policy toward China and Japan's position regarding a potential conflict over Taiwan. We also examined official documents, Japanese government websites, and newspaper articles to understand Japan's legal framework regarding sanctions and the decisionmaking process. For the

[244] Ministry of Foreign Affairs of Japan (MOFA), *Diplomatic Bluebook 2024* [外交青書 2024], June 28, 2024c, p. 22.

[245] Ministry of Defense (Japan), *Defense White Paper 2024* [防衛白書 2024], July 2024, p. 24.

[246] Ministry of Defense (Japan), 2024, p. 40.

[247] We use *economic measures* here as a broader term than *economic sanctions*, which aims to coerce a target government to change its behavior by lowering the target's economic welfare. *Economic measures* here include, for example, a ban on exchange of people, not just restrictions on trade and financial interactions.

elements that are likely to go into Japan's decisionmaking on sanctions, we relied on official materials, academic journal articles, newspaper articles, and expert analyses. In addition, we conducted interviews with six subject-matter experts (SMEs)—three academics, one from the business sector, and two with experience in the Japanese government—to better understand Japanese processes and thinking on these matters.

Chapter Framework

In the next section, we start by surveying both the economic and security aspects of the Japan-China bilateral relationship and Japanese perceptions regarding a potential Taiwan crisis to establish a baseline from which to understand Japan's potential reactions to such a development. Next, we examine Japan's position regarding a response to a Taiwan contingency and Japan's vision of economic security. In the following section, we discuss the Japanese sanctions regime to understand Japan's options and decisionmaking process. We then explore the factors that Japan is likely to consider in its response to a Taiwan contingency, including the country's economic leverage against China and the constraints it faces when imposing economic sanctions against China. In the following section, we survey the multilateral and unilateral options that Japan could take in response to the scenario. A final section concludes with key takeaways.

Japan's Relationship with China

Japan's relationship with China has been characterized both by economic interdependence and political tensions in recent years. Japan has tried to achieve a "mutually beneficial relationship based on common strategic interests" with China by both hedging against and engaging with the country to manage the two aspects of the relationship.[248] In this section, we describe the economic and security dimensions of Japan's relations with China and examine Japan's approach toward a potential contingency in the Taiwan Strait, which is of great interest to the country given its geographical proximity, to establish a baseline from which to evaluate Japan's potential responses to the hypothetical scenario described earlier in the report.

Economic Dimension

Japan's economic relations with China remain strong, characterized by robust trade and investment activities. China became Japan's largest import partner in 2002 and the biggest export partner in 2009, surpassing the United States.[249] China continued to be Japan's largest trading partner in 2023, with trade totaling 42.2 trillion yen ($300.7 billion).[250] Japanese exports to China stood at

[248] MOFA, 2024c, p. 22.

[249] Kwan Chi Hung [関志雄], "China, Which Has Become the Biggest Exporter in the World: From a Large Trading Country to a Strong Trading Country" ["世界一の輸出大国となった中国　貿易大国から貿易強国へ"], Research Institute of Economy, Trade and Industry, February 24, 2010.

[250] In this chapter, equivalents are in U.S. dollars.

17.6 percent of the country's total exports, with semiconductor-related equipment and materials being some of the main export items. Imports from China made up 22.2 percent of Japanese imports. For China, Japan was the second biggest trading partner in 2023, following the United States.[251] Japan has also been a major investor in China; Japanese FDI stock stood at almost $130 billion at the end of 2023.[252]

There is also a large presence of Japanese businesses and citizens in China. Among the countries in which Japanese businesses operate, China topped the list with 31,324 Japanese businesses in October 2022. Japanese nationals living in China totaled 101,786 in 2023, the second on the list of countries with the largest Japanese population, following the United States.[253] Although still significant, the number in China has declined from the peak in 2012 of roughly 150,000.[254] This was due to bilateral tensions that will be explained in more detail later, as well as the deteriorating business environment in China that includes China's passage of the anti-espionage law in 2023 that raised risks for investigation and prosecution of international businesses.[255]

Security Dimension

Japan's relations with China face security challenges that stem from both the general rise of China's military power and bilateral problems between the two countries. Japan considers China's rapid military modernization and activities that challenge the status quo as a serious concern and "an unprecedented and greatest strategic challenge."[256] The concern is articulated in the 2024 Japanese Defense White Paper, which notes that China has increased its defense spending without transparency for over 30 years.[257] The document also states that China's nuclear warheads are likely to surpass 1,000 by 2030 and that China is expected to continue to expand its arsenal until 2035. Additionally, it points out that China is increasing its number of submarines, constructing its second aircraft carrier, and producing more-modern fighters and drones.[258] Japan finds China's increasing military activities near Taiwan and in the South China Sea to be problematic behavior that raise tensions in the region.

Japan also has bilateral security problems with China. Topping the list of these problems is the territorial dispute over Senkaku Islands, which both countries claim.[259] Since a Chinese nuclear-powered submarine entered waters near the islands in 2008, China has increased incursions into areas

[251] MOFA, "Japan-China Economic Relations, Chinese Economy," webpage, June 27, 2024b.

[252] "Japan's Companies Sour on China After Years of Brushing Off Risk," Bloomberg, September 8, 2024.

[253] MOFA, "Survey Statistics of the Number of Japanese Nationals Living Abroad" ["海外在留邦人数調査統計"], webpage, March 5, 2024.

[254] Takashi Kawakami, "Japanese Expats in China Near 20-Year Low as Tensions Simmer," Nikkei Asia, September 28, 2023.

[255] Kawakami, 2023.

[256] Ministry of Defense (Japan), 2024, p. 65.

[257] Ministry of Defense (Japan), 2024, p. 65.

[258] Ministry of Defense (Japan), 2024, pp. 68–74.

[259] Japan, China, and Taiwan claim the Senkaku Islands.

near the islands, which led to a clash between a Chinese fishing boat and the Japanese Coast Guard in 2010.[260]

Russia's full-scale invasion of Ukraine in 2022 increased Japan's concerns about attempts to change the status quo by military force. Japan has expressed concerns that such actions that break the rules of the fundamentals of international order could also take place in the Indo-Pacific region.[261] A potential Chinese attack on Taiwan, which China sees as its territory, is a primary concern for Japan because its southwesternmost island of Yonaguni is only 70 miles from Taiwan.

Japan's Potential Security Response in a Taiwan Contingency

Although Japan severed official diplomatic relations with Taiwan in 1972 when it normalized relations with China, Tokyo has maintained unofficial working relations with Taipei.[262] Trade between Japan and Taiwan remains strong and totaled about 12 trillion yen in 2022, making Taiwan Japan's fourth largest trading partner following China, the United States, and Australia.[263] Japan and Taiwan also continue to have robust people-to-people relations, and a total of 20,345 Japanese nationals lived in Taiwan as of October 2022.[264]

Japan's policy concerning Taiwan's status is characterized by ambiguity. This is because it was shaped by Japan's geopolitical calculations surrounding the sensitive question of Taiwan's relations with the U.S.-Japan mutual defense treaty. In an attempt to balance the U.S. desire to use its military bases in Japan in the event of a Taiwan contingency and Chinese demands that Japan abide by the "One China" principle, Japan took the position that it supports a peaceful solution to the disagreement between China and Taiwan, while maintaining the option to apply the U.S.-Japan security treaty for potential deployments of U.S. forces in Japan in a Taiwan contingency. This remains the basis of Japan's position as of late 2024.[265]

Japan's possible response to a Taiwan contingency is complicated further by the country's constraints on the use of its Self-Defense Forces (SDF). Article 9 of the Japanese constitution renounces war and the threat or use of force as a means of settling international disputes.[266] Under this constitution, Japan has followed an "exclusively national defense-oriented" policy that traditionally allowed the use of force only if the country came under direct armed attack. Although recent policy and legislative changes have broadened the scope of possible SDF activities, they are permitted only under limited conditions. For example, the Japanese cabinet reinterpreted the constitution in 2014 to allow the country to exercise the right to collective self-defense in some cases. This paved the way for Japan to possibly use force when such an attack "against a foreign country that is in a close relationship

[260] Ministry of Defense (Japan), 2024, p. 6.

[261] Ministry of Defense (Japan), 2024, p. 40.

[262] MOFA, "Taiwan (Basic Data)," webpage, October 25, 2023.

[263] Japan Customs, "Changes in the Top 10 Trading Partners" ["貿易相手国上位 10 カ国の推移"], spreadsheet, undated.

[264] MOFA, 2023.

[265] For a more detailed history of Japan's position on Taiwan, see, for example, Inoue Masaya, "Why Taiwan Is More Important Than Ever to the Japan-U.S. Relationship," Asia Pacific Initiative, June 29, 2021.

[266] Prime Minister's Office (Japan), "The Constitution of Japan," November 3, 1946.

with Japan occurs," such as the United States in a Taiwan contingency.[267] The SDF, however, can do so only if three conditions are met: when Japan's survival at stake, when there are no other means of repelling the attack, and when the use of force is limited to the minimum level necessary.[268]

Moreover, a decision on whether a situation warrants the deployment of the SDF depends on the judgement of the top Japanese political leadership. Japanese leaders will base their decisions on factors that likely include not only the level of threat to Japan but also how the contingency started and how other stakeholders have responded.[269] Depending on these judgements, Japan could deploy the SDF to provide logistical support or to counter attacks against Japanese or U.S. troops. Given these complexities and, as scholar Adam Liff has noted, a desire "to avoid pre-committing to any particular course of action," Japan has maintained an ambiguous position over what its response would be should there be a contingency in the Taiwan Strait.[270]

Japan's Economic Security Policy

Tensions over Taiwan have increased at a time when U.S.-China strategic competition is creating fissures in economic relations. Against this background, Japan has begun a government-wide push to protect Japan from economic coercion by establishing economic security, leading the world in such an effort.[271]

Although there is no official definition of the term, *economic security* is understood in Japan to be a means of securing the country's interests, including peace, security, and prosperity, through economic measures.[272] The Japanese economic security initiative aims to increase the country's self-reliance and ensure its essential role in the global economy.[273] It tries to do so by focusing on four areas: (1) securing the supply chains of critical materials, (2) ensuring the security of basic infrastructure, (3) encouraging the development and use of advanced technology, and (4) protecting intellectual property through patent system reforms.[274]

[267] MOFA, "Japan's Security Policy: Cabinet Decision on Development of Seamless Security Legislation to Ensure Japan's Survival and Protect Its People," webpage, July 2, 2014.

[268] MOFA, 2014.

[269] Adam P. Liff, "The U.S.-Japan Alliance and Taiwan," *Asia Policy*, Vol. 17, No. 3, July 2022, p. 158.

[270] Liff, 2022, p. 158.

[271] Discussions about the concept began around 2020, led by the ruling Liberal Democratic Party. See Suzuki Kazuto, "What Is Economic Security?" ["経済安全保障とは何か"], in *What Is Economic Security* [経済安全保障とは何か], Toyo Keizai Shimpo, May 15, 2024a.

[272] Cabinet Office (Japan), "Status of Efforts Regarding the Economic Security Promotion Law" ["経済安全保障推進法の取組状況"], webpage, June 2024.

[273] Cabinet Office (Japan), 2024.

[274] Suzuki, 2024a.

Japan established a law to promote the effort, while also introducing institutional mechanisms to implement the plan. Japan

- added a new cabinet position dedicated to economic security in October 2021[275]
- enacted the Economic Security Promotion Law in May 2022[276]
- unveiled an economic security action plan based on that law in November 2023[277]
- reorganized METI, including by renaming the Trade and Economic Cooperation Bureau to the Trade and Economic Security Bureau, in July 2024
- established an economic security policy office in the Ministry of Finance.[278]

The Japanese efforts have two characteristics. The first is the comprehensive, all-of-government approach that involves not only the Cabinet Office, METI, and the Ministry of Finance (MOF) but also such entities as the Ministry of Land, Infrastructure, Transport and Tourism and the Public Security Intelligence Agency.[279] Japan is implementing measures based on the far-reaching legislative framework and is also creating posts in key ministries, although some of the efforts involve the renaming of offices and appointing officials to concurrent posts.[280]

The second is the initiative's defensive nature. Because the concept grew out of Japan's concerns about exposure to economic coercion, the measures the Japanese government has pursued are aimed at protecting important elements of the country's economy from potential harm and at increasing resilience so that the economy can withstand negative shocks. Although increasing resilience could possibly deter another country's economic coercion, that is not how the Japanese government has been portraying the measures. Japanese scholar Suzuki Kazuto points out that the defensive character of the measures is one of the key differences between Japan's understanding of economic security and the understanding of the concept in the United States, where the President can take economic measures, including sanctions, for security purposes under the International Emergency Economic Powers Act.[281] In contrast, the Japanese initiatives do not include sanctions, which are dealt with separately, as explained in the next section. Suzuki, however, also noted that Japan's understanding of the concept

[275] Sheila A. Smith, "Japan Turns Its Attention to Economic Security," Council on Foreign Relations, May 16, 2022.

[276] National Diet of Japan, Act on the Promotion of Ensuring National Security Through Integrated Implementation of Economic Measures, webpage, Japanese Law Translation, May 18, 2022.

[277] Ministry of Economy, Trade, and Industry (METI), "Action Plan for Strengthening the Industry and Technology Related to Economic Security" ["経済安全保障に係る産業・技術基盤強化"], October 2023.

[278] "Ministry of Finance Establishes Economic Security Policy Supervisory Office" ["財務省、安全保障政策統括室を新設 三村財務官がトップ"], *Nihon Keizai Shimbun*, August 7, 2024.

[279] Ministry of Land, Infrastructure, Transport and Tourism (Japan), "Economic Security" ["経済安全保障"], webpage, undated; Public Security Intelligence Agency, "Feature Page for Economic Security" ["経済安全保障特集ページ"], webpage, June 10, 2022.

[280] METI, "METI Organization Order Is Being Revised, and METI Is Being Reorganized" ["経済産業省組織令等を改正し、経済産業省の組織を見直します"], webpage, June 25, 2024; "Ministry of Finance Establishes Economic Security Policy Supervisory Office," 2024.

[281] Suzuki Kazuto, "Comparison of Countries' Concept of Economic Security," 経済安全保障概念の各国比較], Center for International Economic Collaboration, July 12, 2024b; Pub. L. 95-223, 1977, Title II.

could be evolving to include more active measures to protect its economy, such as the "onshoring" of the production of critical items.[282]

Japan's Sanctions Regime

Japan's use of economic sanctions has evolved over time. Historically, Japan treated sanctions as a tool to be used within the framework of international cooperation and exclusively focused on applying sanctions that were supported by the UNSC or like-minded multilateral groups. This changed after a series of North Korean missile tests began in the late 1990s, and Japan began to use unilateral sanctions more proactively as a policy tool against North Korea in the mid-2000s.[283] In this section, we examine Japan's current sanctions policy framework and decisionmaking process to outline the options that Japan has when reacting to the hypothetical scenario of a Chinese attack on Taiwan within an ensuing three to six months.

Policy Framework

Legal Framework

Japan does not have an overarching enabling legislation for sanctions. Japan has used three main pieces of legislation to implement both multilateral and unilateral sanctions: the Foreign Exchange and Foreign Trade Act (FEFTA), the Immigration Control and Refugee Recognition Act, and the Act on Special Measures Concerning Prohibition of Entry of Specified Ships into Ports, which govern different types of restrictions.[284]

Foreign Exchange and Foreign Trade Act

Originally enacted in 1949, FEFTA has served as the basic legal framework that allows Japan to apply sanctions against other countries. The law is applied to restrictions of cross-border movements of goods and funds.[285] Given the authority provided by this law, METI implements the sanctions that involve goods and services, while MOF does so for sanctions that restrict the flow of funds.[286]

FEFTA initially only allowed Japan to implement multilateral economic sanctions that were supported either by UNSC resolutions or a group of like-minded states. For example, this law served

[282] Suzuki, 2024b.

[283] Machiko Kanetake, "Implementation of Sanctions: Japan," in Masahiko Asada, ed., *Economic Sanctions in International Law and Practice*, Routledge, 2019, p. 137.

[284] E-Gov, Act on Special Measures Concerning Prohibition of Entry of Specified Ships into Ports, [特定船舶の入港の禁止に関する特別措置法], 2004.

[285] Hirozane Ikuro [広実郁郎], "On North Korea Sanctions" ["北朝鮮制裁について"], webpage, Center for Information on Security Trade Control, undated; Cabinet Secretariat (Japan), Foreign Exchange and Foreign Trade Act (Act No. 228 of December 1, 1949), undated (English translation).

[286] Hirozane, undated.

as a basis for Japan's implementation of financial sanctions against Iran for failing to stop its uranium enrichment program in response to UNSC Resolution 1737, which passed in 2006.[287]

The law was revised in 2004 to allow the country to impose unilateral sanctions. This followed calls for such sanctions against North Korea for its missile tests and the abduction of Japanese nationals by North Korean agents in the 1970s and 1980s, which North Korea admitted to in the early 2000s. Following the passage of this law, Japan implemented a complete ban on trade with North Korea in response to the country's nuclear tests in 2006, 2009, and 2013.[288]

Immigration Control and Refugee Recognition Act

The Immigration Control and Refugee Recognition Act, enacted in 1951, provides the legal basis for Japan to restrict the movements of individuals. Sanctions related to this law are implemented by the Ministry of Justice.[289] The Japanese government began using the law as the basis for sanctions in the early 1990s, when it faced the need to implement sanctions against Yugoslavia under UNSC Resolution 820, which required countries to impound vessels, vehicles, and aircraft from Yugoslavia. This was because those actions could not be covered by the FEFTA, which deals with cross-border movements of goods, services, and funds, not the confiscation of materials within Japanese borders.[290] Since then, Japan has used the law as the basis for banning entry into Japan of designated North Korean nationals involved in the country's development of weapons of mass destruction.[291]

Act on Special Measures Concerning Prohibition of Entry of Specified Ships into Ports

The Act on Special Measures Concerning Prohibition of Entry of Specified Ships into Ports is a basis for preventing designated foreign ships from entering Japanese ports. The implementation of these measures is carried about by the Ministry of Land, Infrastructure, Transport and Tourism.[292] The Japanese parliament passed the law in 2004 to deal more effectively with the North Korean problem, including its missile launches and the abduction issue noted earlier.[293] Japan's first unilateral sanctions was based on this law. In 2006, Japan prohibited the entry into Japanese ports of a North Korean ferry that carried people and goods between the two countries, following North Korea's missile test in July of that year.[294] A summary of the laws and their roles for sanctions are presented in Table 4.1.

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[287] Center for Information on Security Trade Control [安全保証貿易情報センター], "Economic Sanctions Measures" ["経済制裁措置"], webpage, undated.

[288] Center for Information on Security Trade Control, undated.

[289] Hirozane, undated.

[290] Kanetake, 2019, p. 137.

[291] For example, MOFA, "North Korea: Report on Our Country's Implementation of UNSC Resolution 2321 to the UNSC (Summary)" ["国連安全保障理事会決議第 2321 号の我が国における実施に関する同理事会への報告（概要）"], February 28, 2017.

[292] Hirozane, undated.

[293] Inagi Hirochika, "The Background of the Establishment of the Act on Special Measures Concerning Prohibition of Entry of Specified Ships into Ports" ["特定船舶入港禁止法の成立経緯と入港禁止措置の実施"], House of Councillors, undated.

[294] Center for Information on Security Trade Control, undated.

Table 4.1. Japanese Legal Framework for Economic Sanctions

Types of Restrictions	Legal Framework	Implementing Authority
Restrictions on movements of people	Immigration Control and Refugee Recognition Act (1951)	Ministry of Justice
Restrictions on movements of goods and services	FEFTA	METI
Restrictions on movement of funds	FEFTA	Ministry of Finance
Restrictions on foreign vessels	Act on Special Measures Concerning Prohibition of Entry of Specified Ships into Ports (2004)	Ministry of Land, Infrastructure, Transport and Tourism

SOURCE: Center for Information on Security Trade Control, undated.

Decisionmaking Process

The prime minister's office plays a key role in determining whether and what types of sanctions should be imposed on a country. Other actors involved may include MOFA, MOF, and METI, which support the prime minister's office by preparing options and drafts of plans, as well as the cabinet and parliament, depending on the types of approval needed.[295]

The decisionmaking process differs depending on the types of sanctions that Japan is trying to impose. If no domestic law revisions are necessary, the prime minister's office works with the relevant ministries to draw up options and a schedule and to obtain cabinet approval. Once approved, the implementing authorities proceed with the sanctions. If domestic law revisions are necessary, a draft of the revision is prepared by the relevant ministries or agencies. Following cabinet approval, the draft is put to a vote at Japan's bicameral parliament, known as the Diet.[296]

Economic Measures Against China

Japan has imposed economic pressure short of sanctions against China in the past to try to influence its behavior. The first time this took place was after China suppressed prodemocracy protestors on Tiananmen Square in June 1989. Although the measures that Japan took were not technically economic sanctions, the postponement of the roughly 810 billion yen in loans Japan had promised China in the 1990 to 1995 period had the same effect.[297] Japan's actions at the time indicate that it was reluctant to take punitive measures against China. For example, Japan's decision came only after similar decisions by the United States and some European countries. Japan also agreed to issue a G7 summit statement criticizing China for its actions in July 1989 only after the countries agreed to

[295] SME, interview with the authors, March 1, 2024.

[296] SME, interview with the authors, March 1, 2024.

[297] Togo Yuta [東郷雄太], "Japanese Diplomacy over the Tiananmen Incident: The Formation of the Policy 'Avoid Isolation of China'" ["天安門事件をめぐる日本外交:「中国の孤立化回避」方針の形成過程"], 神戸法学雑誌 73 巻 3 号, December 2023.

include a phrase that said it will avoid isolating China, according to Japanese media reports which cite declassified Japanese diplomatic documents.[298] In addition, Japan reversed the freeze on the yen loans in November 1990, leading the way for other countries to loosen their sanctions.[299]

A more recent example of Japan's use of economic measures against China is the restrictions on exports of advanced semiconductor-manufacturing equipment from July 2023. This was implemented to contribute to efforts led by the United States to curb China's ability to produce cutting-edge semiconductors that can be used for military purposes. The implementing agency for this measure was METI, which revised an ordinance under the FEFTA.[300] Under this arrangement, Japan added 23 items related to semiconductor production to items that require approval for export. This meant that exports of these items would have to be approved individually, unless they were for 42 trusted countries and regions, including the United States. Although Japan did not name China as a target for this measure, China reacted by decreasing exports of two rare earth metals—gallium and germanium—for which Japan relies on China as a supplier for Japanese semiconductor production.[301]

Recent Uses of Sanctions

Japan's reaction to the Russian full-scale invasion of Ukraine in 2022 is an example of how swiftly Japan can take a variety of economic measures against a country that it believes is violating international laws and norms. A day after the start of the invasion, Japan announced that it was suspending visas to designated Russian individuals, freezing assets of Russian banks in Japan, and imposing sanctions on exports to Russian military-related organizations.[302] Japan has since expanded measures against Russia to include preventing Russia from receiving financing from multinational financial institutions, such as the IMF; prohibiting exports of luxury goods to Russia; and revoking Russia's most-favored-nation status in trade.[303] (A full list of measures is listed in Table 4.2.)

Japan's removal of Russia's most-favored-nation status in trade is a notable example of how quickly the country can put a measure in place, even when it requires revising domestic laws, which is normally a cumbersome process that requires months to complete. On March 12, 2022, Japan announced that it was revoking most-favored-nation status for Russia after similar announcements by Canada and the United States. Following the announcement, the Japanese government drafted revision proposals for the FEFTA and the Temporary Customs Tariff Measures Act and acquired

[298] "Government, on Day of Tiananmen, 'Reject Sanctions Against China' Diplomatic Documents Revealed from 1989, Temporary Opposed G7 Summit Statement Due to Concern About Isolating China," ["政府、天安門当日「対中制裁拒否」外交文書公開 1989 年、中国孤立懸念 G7 首脳宣言に一時反対"], *Nihon Keizai Shimbun*, December 23, 2023.

[299] Togo, 2023.

[300] "Export Restrictions of Advanced Semiconductors, to Be Implemented from July 23, METI Revises Ordinance," ["先端半導体の輸出規制、7 月 23 日施行　経産省が省令改正"], Nikkei, May 23, 2023.

[301] Kitatsuji Kazuki [北辻宗幹], "Restrictions on Exports of Semiconductor Production Equipment: Limited Downward Pressure on Economy" ["半導体製造装置の輸出規制、景気下押し影響は限定的"], Japan Research Institute, July 11, 2023.

[302] Hayashi Yoshimasa, "Sanction Measures Following the Launch of Military Actions by Russia in Ukraine (Statement by Foreign Minister Hayashi Yoshimasa)," press release, February 25, 2022.

[303] Prime Minister's Office (Japan), "Japan Stands with Ukraine," October 19, 2023.

cabinet approval of the drafts in early April.[304] The drafts were then submitted to the Diet, where the House of Representatives deliberated on it, followed by the House of Councillors. The draft legislation was passed and became law on April 20, 2022.[305]

Table 4.2. Japanese Sanctions Against Russia

Type	Specific Measures
Financial measures	• Prevent financing to Russia from leading multilateral financial institutions, including the IMF and World Bank • Respond to sanctions evasion by Russia • Restrict transactions with Russia's central bank • Freeze assets of government officials, including President Vladimir Putin and Russian oligarchs • Freeze assets of 12 Russian banks and their subsidiaries in Japan • Join in efforts to isolate Russia from the international financial system and the global economy • Prohibit issuance or transaction of new Russian sovereign debt in the primary and secondary markets • Take measures to prohibit new investment in Russia • Prohibit the provision of services, including accounting, auditing, and management consultant services
Trade measures	• Revoke Russia's most-favored-nation status • Prohibit imports of machinery, some wood products, vodka, gold, and other items • Prohibit exports to Russian military-related entities • Prohibit exports to Russia of (1) controlled items listed on the internationally agreed list; (2) dual-use goods, such as semiconductors; (3) items that involve cutting-edge technologies; (4) equipment for refining petroleum; (5) goods that could enhance Russian industrial capacities; (6) items related to chemical and biological weapons • Phase out imports of Russian coal and oil • Prohibit the provision of services, including accounting, auditing, and management consultant services
Visa measures	• Suspend visa issuance to Japan for designated Russian individuals

SOURCE: Prime Minister's Office (Japan), 2023.

Japan's actions in 2022 were a stark contrast with those in 2014, when the country took largely symbolic steps against Russia for its annexation of Crimea. At that time, Japan froze the assets of only

[304] "Cabinet Decision on Draft Revision of Anti-Russia Law" ["対ロ法改正案閣議決定"], *Asahi Shimbun*, April 6, 2022.

[305] "Russia's Most-Favored-Nation Status Revoked, Revised Law Enacted, Tariff to Raise for Seafood" ["ロシアの最恵国待遇撤回　改正法成立　水産物の関税上げ"], *Nihon Keizai Shimbun*, April 20, 2022.

two entities and 40 individuals and restricted imports from Crimea, measures that were believed to have had limited impact, given the small amount of assets and imports that were affected.[306]

In 2022, Japan's attitude changed for three reasons. The first was Japan's alarm at the size of the 2022 full-scale invasion of Ukraine, which, for Japan, symbolized an attempt to change the status quo with military force that could take place in its own neighborhood. The second was because, by this time, Japan was placing less emphasis on trying to solve its territorial dispute with Russia over the four islands in the Kuril Islands chain, known as the Northern Territories in Japan. The third was because, by this time, Japan also had less hope of using a positive relationship with Russia as part of a strategic calculation to deal with the threat Japan faces from China, given the increasing alignment between Russia and China.[307]

Japan's Economic Leverage and Challenges

Japan has potential leverage over China in some industrial sectors important to China's economy. Although taking measures against these areas could hurt China's economic interests and help influence China's thinking regarding a potential attack on Taiwan, doing so could invite Chinese retaliation. In some cases, these measures may have limited consequences for the Chinese economy. This section examines some areas of Japan's potential points of economic leverage and the risks and challenges Japan faces when considering whether to impose economic measures on China. These risks and challenges will likely be key factors that Japan would consider in any decisionmaking process regarding such measures.

Potential Points of Economic Leverage

Equipment and Materials for Semiconductor Production

Japan has strong competencies in elements of advanced semiconductor manufacturing. For example, Japan is an important global source for the equipment for extreme ultraviolet lithography, which is cutting-edge technology used for producing semiconductors at the most advanced level. Japan's Tokyo Electron has close to 100 percent of the market share for extreme ultraviolet lithography coaters and developers, which are used to coat silicon wafers with chemical material. Japan Electron Optics Laboratory Co., Ltd., and NuFlare Technology, Inc., meanwhile, account for 91 percent of the global market share for devices that trace circuit patterns on photomasks for extreme ultraviolet lithography.[308] In addition, Japan has been the largest maker of semiconductor materials in the world for decades, accounting for 50 percent of the 14 most needed materials required for producing semiconductors, including photoresist and silicon wafers.[309]

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[306] Martin Fackler, "Japan Imposes New Sanctions on Russia but Keeps a Diplomatic Door Open," *New York Times*, August 5, 2014.

[307] Tomohiko Satake, "How Japan's Russia Policy Changed After Ukraine," East Asia Forum, June 24, 2022.

[308] Sujai Shivakumar, Charles Wessner, and Thomas Howell, "Japan Seeks to Revitalize Its Semiconductor Industry," Center for Strategic and International Studies, August 25, 2023, p. 5.

[309] Shivakumar, Wessner, and Howell, 2023, p .5.

Access to the Japanese Market

Japan is an important market for China, and access to it is another area that Japan could use as leverage. China's exports to Japan in 2021 totaled $175 billion, the third largest following the United States and Hong Kong, consisting of 4.93 percent of China's total exports. Top export items include machinery, electronic goods, and consumer items.[310] Japan could deny China the Japanese market to try to pressure China to change its decision calculus.

Challenges

In addition to the risks and constraints noted earlier, Japanese leaders must balance the potential benefits of any economic measures against the following challenges.

Concerns About the Effectiveness of Economic Measures

One factor Japan must consider when imposing any economic measure on China is whether it will be effective. There is some agreement among scholars that economic sanctions against autocratic governments are less likely to result in the intended policy change than those imposed on democratic governments. One reason for this is that autocratic leaders can redirect resources to their support base to avoid the pressure created by sanctions.[311] An SME interviewed for this project noted that, in China, the economic pain the public and businesses feel is unlikely to smoothly translate into pressure for the country's leadership because of the authoritarian regime and that, because of this, sanctions will likely have to be massive in scale and intensity to have the intended result.[312]

Legal Concerns

To use the economic measures preemptively against China ahead of an attack on Taiwan, Japan must assess any legal problems that may arise from such a step. There are generally two types of economic sanctions: those that are unilaterally imposed or supported by a group of like-minded nations and those that are supported by the UNSC. Because China is a permanent member of the UNSC with veto power, any sanctions in the scenario considered in this report will, in all likelihood, belong to the first type of sanctions. The legality of such measures can be established if the target nation's actions violate international law.[313] Whether Japan can impose any economic measures against China using current domestic laws must also be assessed.

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[310] World Bank, "China Trade," webpage, World Integrated Trade Solution, undated-b.

[311] See, for example, Dursun Peksen, "Autocracies and Economic Sanctions: The Divergent Impact of Authoritarian Regime Type on Sanctions Success," *Defence and Peace Economics*, Vol. 30, No. 3, 2019a.

[312] SME, interview with the authors, February 6, 2024.

[313] Nakatani Kazuhiro [中谷和弘], "Economic Sanctions: From the Perspective of International Law" ["経済制裁：国際法の観点から"], Japan Institute of International Affairs, February 22, 2021.

Economic Concerns

If Japan were to impose economic measures against China, it would also have to weigh the impact of potential Chinese retaliatory measures. China has used economic coercion against Japan in the past. When the two countries had a diplomatic dispute over a collision between a Chinese fishing boat and two Japan Coast Guard vessels in September 2010, China's exports of rare earth minerals to Japan reportedly fell to zero for about two months, although Chinese officials denied ordering an export halt.[314] This de facto export ban set off a panic in Japanese industry because Japan had depended on China for about 90 percent of its rare earth materials, which are used in such items as automobiles.[315] Japan has reduced its reliance on China for such materials to about 60 percent, but measures that focus on such vulnerabilities are a particular concern for Japan.

As mentioned earlier, China retaliated when Japan imposed export control measures on semiconductor-related equipment in July 2023 by decreasing exports of two rare earth metals.[316] Should Japan take further measures, China could take additional steps that could harm the Japanese semiconductor market. There are also questions about the effectiveness of such Japanese measures. Although Japan has a large market share on some items, it is not the only supplier to China of semiconductor-producing materials and equipment. This is true for lower-end semiconductors, for which materials and inputs can be obtained from other sources. China is also working to reduce foreign dependencies in its semiconductor supply chain.[317] Depending on where China is in this process, denial by Japan of items may have limited effect. Furthermore, whether such Japanese measures would change China's calculations regarding an attack on Taiwan is an open question. This is the case for advanced semiconductors, which China does not necessarily need to attack Taiwan.[318]

Should Japan consider denying Chinese access to Japanese markets as an option, Japan would have to consider the potential consequences of the measure for its own economy. As noted earlier, China is Japan's largest trading partner, and the retaliatory denial of access to the Chinese market would significantly harm the Japanese economy. Economic disruptions for Japan also include the negative effects on the country's employment situation; for example, an Atlantic Council study has shown that sanctioning China would result in a loss of 1.5 percent of all Japanese jobs.[319]

Concerns About Japanese Citizens in China

Another concern for Japan is the risk that China may take retaliatory steps against Japanese businesses and nationals in the country. Concerns about the Chinese treatment of Japanese nationals have increased in Japan because China has detained 17 Japanese nationals on charges of espionage and

[314] Yuka Hayashi and James T. Areddy, "Japan Scrambles for Rare Earths," *Wall Street Journal*, October 15, 2010; Jay Alabaster, "China Restarts Rare Earth Shipments to Japan," Associated Press, November 24, 2010.

[315] Tatsuya Terazawa, "How Japan Solved Its Rare Earth Minerals Dependency Issue," World Economic Forum, October 13, 2023.

[316] Kitatsuji, 2023.

[317] Ryan McMorrow and Cheng Leng, "China Raises $47 Billion for Chip Industry in Drive for Self-Sufficiency," *Financial Times*, May 27, 2024.

[318] SME, interview with the authors, February 6, 2024.

[319] Atlantic Council, "G7-China Economic Radar," webpage, undated.

other national security-related offenses since 2015.[320] As noted earlier, there are more than 30,000 Japanese companies in China, and more than 100,000 Japanese citizens are based in China. The safety of these Japanese citizens would be a primary concern that the Japanese government must consider when considering the range of economic measures against China and the possible retaliatory measures it can take.

Political Considerations

Whether the Japanese public will support economic measures that may invite retaliation and whether such support could be sustained are more questions that Japan must consider when thinking about taking economic measures against China. Japan's concerns about the possibility of a Taiwan contingency have increased since Russia's full-scale invasion of Ukraine in 2022. Recent opinion polls show that the Japanese public continues to worry about the effect that would have on Japan. An *Asahi Shimbun* opinion poll from May 2023 found that 80 percent of the respondents were worried about Japan becoming entangled in a U.S.-China conflict over Taiwan. But whether that concern will translate into support for economic measures against China is uncertain; 70 percent of the respondents in the same poll said that Japan should deepen diplomatic and economic relations with China to increase Japan's security, compared with 26 percent who said Japan should strengthen its defense capabilities.[321]

Diplomatic Considerations

Another factor Japan must consider is the consequence of inaction. Japan could face two types of political costs should it not take economic measures against China. The first is the damage to its reputation. This could hurt Japanese diplomacy at a time when the country is promoting the concept of a free and open Indo-Pacific, which emphasizes maintaining the international order based on the rule of law.[322] The second is the possible impact it would have on other countries that may not want to abide by international rules and norms. Inaction could signal to bad actors that they can break the rules without cost.

Options

This section considers some of the options for economic measures that Japan could take, given the country's legal framework for sanctions, its points of economic leverage over China, and some of the challenges that it must balance should it consider taking steps against China, discussed in the previous sections. This is not an exhaustive list. The intention here is to cover some of the main steps Japan could consider.

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[320] Sotaro Hata, "China Upholds 12-Year Prison Term on Japanese Man for Spying," *Asahi Shimbun*, November 13, 2023.

[321] "Taiwan Contingency 'Concerns About Japan Getting Caught Up in It' 80% Asahi Opinion Poll by Post" ["台湾有事「日本が巻き込まれる不安」80% 朝日郵送世論調査"], *Asahi Shimbun*, May 1, 2023.

[322] MOFA, "Japan's Effort for a 'Free and Open Indo-Pacific,'" undated.

Unilateral Measures

Given the danger that a potential Chinese attack on Taiwan would pose to Japanese businesses and citizens in China, Japan could issue recommendations for Japanese businesses to leave China and refrain from making new investments. It could also issue a recommendation for Japanese citizens to refrain from visiting China.[323] These steps would be some of the least challenging for Japan to take because they are meant to protect the country's citizens and assets and are unlikely to invite large-scale economic retaliation from China.[324] But these steps are also the least likely to impose economic pain on China to help change the leadership's decision calculus. Japanese businesses are fully aware of the risks, and some are believed to have contingency plans in the case of an attack on Taiwan; given the tensions involved in the scenario, businesses may have already taken steps to move employees with Japanese citizenship outside China.[325] If that were to be the case, the government's recommendations might be more symbolic than steps that change the facts on the ground.

Multilateral Measures

Japan is likely to strongly prefer taking multilateral economic measures against China rather than unilateral measures, according to SMEs interviewed for this project.[326] This is because a stamp of approval from the international community—even a limited number of countries, such as those in the G7—could help gain support for the measures from the Japanese public. Another reason for this is that multilateral sanctions have a better chance of affecting the Chinese economy. For example, even if Japan further restricted its exports of semiconductor-related equipment unilaterally, the effect on the Chinese economy could be limited if China could purchase substitutes elsewhere. Multilateral measures will make such opportunities less likely.

The SMEs also said that Japan will likely pay close attention to the policies and choices of the United States.[327] This is not only because of the close relationship Japan has with its ally, but also because the United States could hold the key to many of the potential economic measures that could have consequences for the Chinese economy.

Among the measures some SMEs view as symbolic but less politically sensitive for Japan is the freezing of assets of designated Chinese individuals. This is because members of the Chinese leadership are not believed to have major assets in Japan.[328] But if the steps do not lead to economic pressure, they are unlikely to change the Chinese leadership's decisionmaking calculus.

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[323] The Japanese Foreign Ministry issued a recommendation for Japanese citizens to refrain from visiting North Korea for the first time in 2006. The ministry revoked this recommendation in 2014 but reinstated it in 2016, with exceptions for athletes visiting for competitions. See, for example, "Don't Go to Watch Soccer: Ministry of Foreign Affairs, Renews Recommendation Not to Visit North Korea" ["サッカー観戦行かないで　外務省、北朝鮮への渡航自粛改めて要請"], *Mainichi Shimbun*, March 19, 2024.

[324] SME, interview with the authors, March 5, 2024.

[325] SME, interview with the authors, February 7, 2024.

[326] SMEs, interviews with the authors, February 6, 2024; SMEs, interviews with the authors, March 1, 2024; and SMEs, interviews with the authors, March 5, 2024.

[327] SMEs, interviews with the authors, January 17, 2024, February 6, 2024, and February 7, 2024.

[328] SME, interview with the authors, January 17, 2024.

In terms of trade, countries can coordinate multilateral steps that restrict Chinese imports, control export items to China, or revoke China's most-favored-nation status. Depending on the level of restrictions, these measures can harm the Chinese economy, although whether they would be sufficient to convince members of the Chinese leadership to change their minds is unclear. Countries identifying and restricting exports of specific materials that are necessary for China's warfighting capabilities may help slow China's preparations for an attack; Japan may be willing to contribute to the effort as needed.[329]

Multilaterally coordinated financial sanctions could be effective in pressuring the Chinese economy. Of these, excluding select Chinese banks from the SWIFT financial messaging system could have dramatically negative consequences for China. China has been working to de-dollarize and ensure greater use of its own currency, the renminbi (RMB), such as by starting its own combined international financial clearing and messaging system, called the Cross-Border Interbank Payment System (CIPS). However, China is still heavily dependent on the dollar. CIPS is dwarfed by SWIFT, and some CIPS payments use SWIFT. Between 25 percent and 30 percent of Chinese trade is settled in RMB, meaning that most Chinese trade payments are settled in dollars or euros.[330] In addition, China's leading financial institutions are highly dollar-exposed and use dollar financing for overseas lending.[331]

But whether such financial sanctions, even a SWIFT cutoff, would lead to a change in Chinese behavior is open to question. (Table 4.3 lists possible measures.) Notably, Japan could take many of these multilateral measures unilaterally but is unlikely to do so.[332] If Japan were to act alone, it would risk becoming a target of strong retaliation from China for measures that are less likely to have an effect on China.

Conclusions

Japan's policies regarding Taiwan are characterized by ambiguity, and Japan has no predetermined response to a Taiwan contingency. Japan is taking a comprehensive, all-of-government approach to establish economic security but has focused on defensive measures aimed at protecting the country from economic coercion rather than on measures that are designed to increase pressure on another country, such as sanctions, which are likely to be the focus of economic measures that would be taken to deter China's invasion of Taiwan.

[329] SME, interview with the authors, February 6, 2024.

[330] Bastian von Beschwitz, "Internationalization of the Chinese Renminbi: Progress and Outlook," webpage, Board of Governors of the Federal Reserve System, August 30, 2024.

[331] Robert Greene, *China's Dollar Dilemma*, Carnegie Endowment for International Peace, October 2024.

[332] A SWIFT cutoff would require consent of the Europeans because SWIFT is headquartered in Belgium.

Table 4.3. List of Measures Japan May Consider

Category	Measure	Sensitivity Level for Japan
Diplomatic	• Requests to Japanese residents not to visit China	Low
	• Requests to Japanese businesses to leave China	Low
Trade	• Import restrictions	High
	• Export controls	High
	• Tariff adjustments or revoking of most-favored-nation status	High
Financial	• Targeted asset freezes	Medium
	• Requests to Japanese businesses not to make new investments in China	Low
	• Block Chinese banks' access to multilateral financial institutions	High

Japan has changed its approach toward sanctions over time. Although Japan has historically implemented only sanctions supported by the UNSC or a group of like-minded nations, it has implemented unilateral sanctions against North Korea in recent years. Japan also reacted swiftly to enact a series of measures against Russia for its 2022 full-scale invasion of Ukraine and, in the process, demonstrated that it can revise domestic laws in a matter of weeks to enable the implementation of sanctions.

Although this means that Japan has the technical ability to impose a variety of sanctions on China within a relatively short time, a political decision to do so would be difficult. This is because of Japan's deep economic relationship with China and a significant presence of Japanese businesses and citizens in China. Although an impending attack on Taiwan would threaten Japan's security interests, Japan is likely to be wary of imposing any sanctions that might invite retaliation from China and harm the Japanese economy or that threaten the safety of Japanese citizens and assets in China.

Should Japan discover that China was planning an attack on Taiwan within an ensuing three to six months and if Japan were in discussions with the United States and other U.S. allies about the possibility of using economic measures against China to deter such an event, Japan would be likely to make a decision balancing several factors. The most important of these would likely be the following: the effectiveness of the economic measures; the likelihood of Chinese retaliation; the safety of Japanese nationals and assets in China; and pressure from the international community, particularly from the United States.

If Japan were to take unilateral measures, they would likely be those that emphasize ensuring the safety of Japanese nationals and assets in China. These include recommendations to Japanese businesses to leave China and to refrain from investing in China, as well as recommendations for Japanese nationals to refrain from visiting China. These steps are unlikely to invite large-scale retaliation from China but are also unlikely to be useful for deterring China from attacking Taiwan, given the limited effect on the Chinese economy. It is possible for Japanese businesses to begin

relocating their employees and assets because of the tensions, in which case the government's recommendations would be symbolic rather than any measure that materially changes the situation.

Japan may be more open to steps that pressure the Chinese economy at the risk of retaliation depending on the level of consensus among like-minded countries and the pressure it may come under from the international community and the United States. If Japan decided that taking more forceful multilateral measures is necessary or worth the risk of Chinese retaliation and the danger to Japanese businesses and citizens, it might choose to take them. In this case, symbolic steps, such as freezing the assets of designated Chinese nationals, could be the easiest for Japan to take. Large-scale trade or financial sanctions have a better chance at pressuring the Chinese economy but are almost certain to invite Chinese retaliation and, hence, will be the most difficult to pursue. Japan's decision to pursue these measures will likely require U.S. leadership, a similarly strong response from allies and partners, and (potentially) U.S. pressure that will both encourage Japanese leadership to take these steps and help insulate Japan against political and economic backlash.

Chapter 5

United Kingdom

In this chapter, we examine the economic options that the UK has and how it might use them to deter a potential Chinese attack on Taiwan, if such aggression is perceived to be likely within an ensuing three to six months. The analysis is agnostic of any specific crisis or event (i.e., blockade, island seizure, or full-scale invasion of Taiwan) to better inform scenario design and modeling.

Our analysis draws on three targeted literature reviews of English-language academic and gray literature concerning the UK's approach to economic deterrence, its relationship with China and Taiwan, and its historical approach to sanctioning China. This is further enriched by semistructured interviews with five former UK officials experienced in sanctions regimes, economic deterrence, and UK-China relations. The data collection and analysis were conducted in the first quarter of 2024, during the Conservative government led by Rishi Sunak, and have not been updated since. An update section before the conclusion covers key developments following the change of government in July 2024.

The UK's Catalogue of Options

How the UK would react to a potential Chinese invasion of Taiwan is a well-kept secret. Nothing is certain, except that the UK's response would be firmly anchored in existing legal and policy frameworks.[333] These frameworks form the UK's catalog of options, outlining the national objectives it might seek to achieve (ends), the courses of action to achieve them (ways), and the resources (means) available to respond to such an event.

[333] These include the Integrated Review Refresh (Cabinet Office [UK], *Integrated Review Refresh 2023: Responding to a More Contested and Volatile World*, UK Government, March 2023a), the Sanctions Strategy (Foreign, Commonwealth & Development Office and The Rt Hon Lord Cameron, *Deter, Disrupt and Demonstrate—UK Sanctions in a Contested World*, UK Government, February 22, 2024), the Sanctions and Anti–Money Laundering Act 2018 (UK Parliament, Sanctions and Anti–Money Laundering Act 2018, May 23, 2018), the Critical Imports and Supply Chains Strategy (Department for Business and Trade, *Critical Imports and Supply Chains Strategy*, UK Government, January 2024a), the International Technology Strategy (Department for Science, Innovation & Technology and Foreign, Commonwealth & Development Office, *The UK's International Technology Strategy*, UK Government, March 22, 2023), the Critical Minerals Strategy (Department for Business, Energy and Industry Strategy, and Department for Business and Trade, *Resilience for the Future: The United Kingdom's Critical Minerals Strategy*, UK Government, 2022), the Critical Minerals Refresh (Department for Business and Trade, *Critical Minerals Refresh: Delivering Resilience in a Changing Global Environment*, UK Government, March 13, 2023a), the Energy Security Strategy (Department for Energy Security and Net Zero, Prime Minister's Office, and Department for Business, Energy & Industrial Strategy, *British Energy Security Strategy: Secure, Clean and Affordable British Energy for the Long Term*, UK Government, April 7, 2022), the Energy Security Plan (Department for Energy Security and Net Zero, *Powering Up Britain: Energy Security Plan*, UK Government March 2023), the Battery Strategy (Department for Business and Trade, *UK Battery Strategy*, UK Government, November 26, 2023b), the UK Government Resilience Framework (Cabinet Office [UK], *UK Government Resilience Framework*, UK Government, December 2022), and the National Security and Investment Act (UK Parliament, National Security and Investment Act 2021, November 11, 2020).

Ends

Whether the UK might want to prevent a Chinese attack, uphold the status quo, provide substantial support to Taiwan while preserving economic ties with China, or express nominal support and safeguard its own economic prosperity from external shocks—and thus adopt a strategy toward these ends—is difficult to determine because the UK policy toward Taiwan is generally ambiguous.[334] The UK does not recognize Taiwan as a state and has no formal defense or security commitment to it. The official policy advocates for a peaceful resolution of the Taiwan issue "without the threat or use of force or coercion."[335] Yet, it falls short of articulating what the UK's national interests, objectives, desired outcomes, or criteria for success are. Officials are not much clearer on the matter. They have notoriously been reluctant to discuss the issue publicly, possibly to create uncertainty and deter China or because of differing opinions over Taiwan's strategic importance to the UK.

This uncertainty is further compounded by the lack of a clear UK strategy on China, which could guide its actions in potential crises and conflicts with Beijing, including in the Taiwan Strait. Although a classified version exists, the former chair of the Foreign Affairs Committee, Alicia Kearns MP, complained that the classification is so high that even key senior ministers are not privy to its specifics.[336] A China policy has been published but also fails to describe how the UK would respond to a conflict with China. It states that

> the UK does not accept that China's relationship with the UK or its impact on the international system are set on a predetermined course. . . . But [the UK] believe[s] that this will depend on the choices China makes and will be made harder if trends towards greater authoritarianism and assertiveness overseas continue.[337]

The UK does not plan to publish a strategy dedicated to the Indo-Pacific either. In 2023, the House of Commons Foreign Affairs Committee conducted an inquiry assessing UK Defence's standing in the Indo-Pacific. It concluded that the "strategy to which [the UK's military presence in the region] contributes is unclear" and urged "the government to create a single, cross-government Indo-Pacific strategy," including a defense and diplomatic response to China's growing threat.[338] In its response, the government rejected any recommendation for publishing a dedicated strategy, believing that its vision had been sufficiently explained in the Integrated Review and Defence Command Paper and their 2023 updated versions—although none provides a framework for understanding the UK's approach to a potential conflict with China in the region.[339]

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[334] UK SME 1, interview with the authors, February 2024.

[335] UK Parliament, House of Commons, "Taiwan Strait," Hansard, Vol. 747, March 25, 2024.

[336] Becky Morton, "James Cleverly Begins China Talks as UK MPs Criticise Approach," BBC, August 30, 2023.

[337] Cabinet Office (UK), 2023, p. 30.

[338] House of Commons Defence Committee, "UK Defence and the Indo-Pacific—Report Summary," UK Parliament, October 24, 2023, p. 3.

[339] House of Commons Defence Committee, "UK Defence and the Indo-Pacific: Government Response to the Committee's Eleventh Report of Session 2022–23," UK Parliament, January 11, 2024; Ministry of Defence (UK), *Defence's Response to a More Contested and Volatile World*, July 2023; Cabinet Office (UK), 2023a.

Ways

Strategists cannot formulate the ends without considering possible courses of action or ways of achieving them. The UK might want to observe the situation, accommodate China's interests, find a compromise between Taiwan and China, shape the strategic situation, persuade China to act otherwise, enable Chinese actions, support Taiwan's defense, send assurances, coerce, compel, subdue, or deter China.[340]

Should the UK decide that using economic means to *deter* a China attack were in its interest, policy documents are clearer on this issue and suggest three non–mutually exclusive economic deterrence strategies for the UK: *deterrence by punishment*, *deterrence by denial*, and *deterrence through resilience* (see Table 5.1).

Deterrence by punishment strategies involve imposing or threatening to impose penalties (e.g., sanctions) so high on an adversary that the cost of an aggression far outweighs any potential gain. This approach aims to alter the adversary's cost-benefit analysis, making the prospect of engaging in the undesired action unattractive because of the severe punitive repercussions the adversary would face if it pursued its aims.[341]

Deterrence by denial strategies, on the other hand, aim to make aggression infeasible by blocking an adversary's ability to act. This approach involves denying an adversary the opportunities to carry out hostile activities, for example, by restricting access to critical technologies and know-how or cutting off the economic resources needed to pursue and sustain military operations.[342]

Deterrence through resilience strategies are a third option and the latest buzz in Whitehall. This approach focuses on strengthening a country's own ability and that of its allies and partners to withstand and recover from shocks, coercion, or other hostile actions, thereby reducing vulnerabilities an adversary could exploit. The aim is to maintain one's credibility and freedom of action by limiting the effect an adversary's hostile activities could have.[343]

[340] Joint Doctrine Note 1-18, *Strategy*, Joint Staff, April 25, 2018.

[341] Michael J. Mazarr, *Understanding Deterrence*, RAND Corporation, PE-295-RC, 2018; Ministry of Defence (UK), *Deterrence: The Defence Contribution*, Joint Doctrine Note 1/19, February 2019.

[342] Mazarr, 2018; Ministry of Defence (UK), February 2019.

[343] Guillaume Lasconjarias, "Deterrence Through Resilience: NATO, the Nations and the Challenges of Being Prepared," NATO Defense College, May 31, 2017.

Table 5.1. Economic Deterrence Approaches Mentioned in Policy Documents Published Under the 2022 to 2024 Sunak Conservative Government

Policy Document	Economic Deterrence Through Punishment	Economic Deterrence Through Denial	Economic Deterrence Through Resilience
Battery Strategy	N/A	N/A	"Securing investment into the battery value chain is key to our economic security. The UK currently meets most domestic demand for batteries and their components through imports. Like most countries, the UK currently relies on China as the largest import source of lithium-ion batteries for all applications" (Department for Business and Trade, 2023b, p. 11)
Critical Imports and Supply Chains Strategy	N/A	N/A	"In a rapidly changing world, we will ensure that the UK has access to the critical goods it needs for our prosperity and security, now and in the future. We will do this by [. . .] Ensuring supply chain resilience while promoting free trade, economic security and without compromising on environmental, social and governance standards." (Department for Business and Trade, 2024a, p. 13)
Critical Minerals Refresh	N/A	N/A	"Looking ahead, and in the face of rapid global developments, the UK is now reaffirming its commitment to improving the resilience of critical mineral supply chains over the next decade. Improving resilience of critical mineral supply chains is a long-term undertaking but requires action now." (Department for Business and Trade, 2023a)

Policy Document	Economic Deterrence Through Punishment	Economic Deterrence Through Denial	Economic Deterrence Through Resilience
Defence Command Paper	"An integrated approach to deterrence and defence. This approach requires us to enhance integration: [. . .] across Government [. . .] to bring to bear all the levers of national power, including for example through the imposition of sanctions". (Ministry of Defence [UK], 2023, p. 5)	"Risks exist through the targeted use by hostile states of research collaboration, employment of defence and technical experts from the UK, and the use of business partnerships and technical support contracts that include the transfer of specialist defence knowledge. This knowledge transfer can be used to boost the military capabilities of our adversaries and undermine our effectiveness [. . .] We will reconfigure our capability within Defence to allow us to contribute to addressing the full range of potential threats." (Ministry of Defence (UK), 2023, p. 91)	N/A
Integrated Review Refresh	"Beyond our military instruments, an integrated approach to deterrence and defence requires us to bring together the wider levers of state power to increase the costs of aggression by hostile actors above and below the threshold of armed conflict. The UK will continue to develop new levers to adapt to the changing threat environment, and better integrate existing levers for strategic effect." (Cabinet Office [UK], 2023a, p. 36)	"The UK's updated Russia strategy focuses on [. . .] Increasing the cost and denying the benefit to Russia of disrupting UK and Euro-Atlantic stability, security and prosperity." (Cabinet Office [UK], 2023a, p. 41)	"At home and abroad, the government's first duty is to promote and protect the United Kingdom's core national interests: the sovereignty, security and prosperity of the British people, ensuring that our borders are secure and that the UK and its Overseas Territories and Crown Dependencies are free from coercion, protected from harm, and able to maximise our economic and social wellbeing." (Cabinet Office [UK], 2023a, p. 16) "Address vulnerabilities through resilience[:] Strengthen the strategic vulnerabilities that leave the UK exposed to coercion and global crises." (Cabinet Office [UK], 2023a, p. 17)

Policy Document	Economic Deterrence Through Punishment	Economic Deterrence Through Denial	Economic Deterrence Through Resilience
International Technology Strategy	"Our top priorities to protect our security are to [. . .] Respond to hostile actors attempting to exploit our innovations by increasing the cost of activity against the UK [. . .] [and] Consult with business on how the export controls regime could be expanded to ensure that we can tackle national security risks arising from sensitive emerging technology transfers." (Department for Science, Innovation and Technology and Foreign, Commonwealth & Development Office, 2023a, p. 52)	"Our approach and actions will be guided by 6 strategic priorities [. . .] ensuring sensitive technology does not fall into hostile hands and that we retain critical technology capabilities in the UK. (Department for Science, Innovation and Technology and Foreign, Commonwealth & Development Office, 2023a, p. 13)	"With our partners, we will build resilience into supply chains that allow innovation and growth without the threat of authoritarian sanction. We will work with partners to tackle malign influence or control sought through investment in our critical technologies." (Department for Science, Innovation and Technology and Foreign, Commonwealth & Development Office, 2023a, p. 11) "Our top priorities to protect our security are to [. . .] Build capability on investment security in technology sectors, with economies that may be open to exploitation and/or expose the UK to vulnerabilities via integrated global supply chains and financing." (Department for Science, Innovation and Technology and Foreign, Commonwealth & Development Office, 2023a, pp. 52–53)
Sanctions Strategy	"[S]anctions are a vital tool for pursuing our interests and protecting our values. They send a signal. But they also have a tangible impact. By targeting particular individuals or resources, they impose costs on those we target, thereby changing their calculus." (Foreign, Commonwealth & Development Office and The Rt Hon Lord Cameron, 2024, p. 5)	The Sanctions and Anti–Money Laundering Act (2018) "provides a wide range of measures to deny malign actors the benefits of interacting with the UK economy." (Foreign, Commonwealth & Development Office and The Rt Hon Lord Cameron, 2024, p. 5)	N/A

Policy Document	Economic Deterrence Through Punishment	Economic Deterrence Through Denial	Economic Deterrence Through Resilience
National Semiconductor Strategy	N/A	"We will protect our strengths, using appropriate levers, including investment screening and the use of export controls, to prevent hostile actors building tech capability that causes national security harm." (Department for Science, Innovation & Technology, *National Semiconductor Strategy*, UK Government, May 2023, p. 4)	"We are building greater resilience in semiconductor-dependent critical sectors through domestic and international action, maximising UK influence in the global market to mitigate extreme disruption scenarios" (Department for Science, Innovation & Technology, 2023, p. 4)

A fourth approach to economic deterrence, known as *deterrence by encouragement of restraint*, exists but has not yet been mentioned in UK policy documents. Instead of inflicting pain through punitive or coercive measures (sticks), this approach proposes to use incentives (carrots), such as trade deals and technology alliances, to "positively induce and attract countries via the prospect of mutual gain." The aim is to entice the adversary with rewards to prefer restraint.[344]

The latter strategy is reminiscent of the position Western allies took vis-à-vis China at the turn of the century. Western allies then expected that China's accession to the WTO would lead to greater economic liberalization, adherence to international norms, and (possibly) democratization. Instead, China has leveraged its WTO membership to advance its own strategic interests, often at the expense of Western economies and values.

Means

Sanctions are the cornerstone of the UK's approach to economic deterrence, being the most developed and widely used tool for pursuing its interests and countering hostile activities. The Sanctions and Anti–Money Laundering Act 2018, effective from 2020, is the primary legal framework for the UK's sanctions post-Brexit.[345] The 2024 UK Sanctions Strategy builds on this act, outlining the approach to implementing and enforcing sanctions.[346] Under these frameworks, the UK can impose trade sanctions, including arms embargoes; financial sanctions, such as asset freezes; immigration sanctions; and transport sanctions. The UK might do so unilaterally or multilaterally under United Nations sanctions or with allies and partners, including the EU.[347] Table 5.2 describes these measures and how the UK has previously used them against China.

Table 5.2 describes the economic deterrence instruments available to the UK government and provides a nonexhaustive list of examples of how the UK has used them against China in the past.

In addition to sanctions, the government is progressively expanding its use of other economic statecraft instruments, including tariffs, investment screening, supply chain diversification, export controls, and other research security measures.[348] The *Integrated Review Refresh 2023*, which sets out the UK's approach to national security, officially mentioned boosting these tools for the first time.[349] This marked a change from previous policy papers, which did not consider any economic tools other than sanctions to protect the UK's interests.[350]

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[344] Ministry of Defence (UK), 2019; Daleep Singh, "Forging a Positive Vision of Economic Statecraft," Atlantic Council, February 22, 2024a.

[345] UK Parliament, 2018.

[346] Foreign, Commonwealth & Development Office and The Rt Hon Lord Cameron, 2024

[347] Foreign, Commonwealth & Development Office and The Rt Hon Lord Cameron, 2024.

[348] Cabinet Office (UK), "Written Evidence Submitted by the Cabinet Office," UK Parliament, January 31, 2024a.

[349] Cabinet Office (UK), 2023.

[350] See, for example, Cabinet Office (UK), *Global Britain in a Competitive Age: The Integrated Review of Security, Defence, Development and Foreign Policy*, UK Government, July 2, 2021; Prime Minister's Office (UK), *National Security Strategy and Strategic Defence and Security Review 2015: A Secure and Prosperous United Kingdom*, November 2015.

Table 5.2. Economic Deterrence Instruments Available to the UK and Past Examples of Their Use Against China

Instrument	Definition	Example of Measures Taken by the UK vis-à-vis China
Trade sanctions	Measures that restrict the import, export, transfer, and movement of goods and technologies and the provisions of some services.[a]	Import controls: In 2008, the EU (including the UK) banned imports of baby foods containing Chinese milk after a scandal involving the contamination of milk with melamine.[b] In 2021, the UK government investigated the possibility of restrictions on the import of goods from Xinjiang (including cotton, health products, solar products), but has not enforced any controls or bans since.[c] "The Modern Slavery Act requires UK companies to report on what they are doing to free their supply chains from slave labor but places no duty on them to do anything other than report."[d] Export controls: In May 2022, the UK added China to the list of banned destinations for the export of items intended for military use.[e]
Arms embargoes	Measures restricting or prohibiting the export, import, or transfer of weapons and military equipment to a specific country, group, or entity.	The EU imposed an arms embargo on China in 1989 following the Tiananmen Square massacre, and the UK has been a party to this embargo since its inception.[f] Since Brexit, the UK has enforced an autonomous partial arms embargo on Mainland China and Macao, which was extended to Hong Kong in 2020 in response to the National Security Law, under the Export Control Order 2008.[g] This embargo targets the sale to China of "weapons, and equipment which could be used for internal repression."[h] The extension of the UK arms embargo to Hong Kong echoes measures that Australia, Canada, the EU, and the United States took the same year.[i]
Financial sanctions	Measures that control the movement of financial assets, investments, and services.[j]	Asset freeze: In March 2024, the UK government froze the assets of a front company and two individuals deemed responsible for malicious cyber activities targeting the UK's democratic institutions and parliamentarians.[k]

Instrument	Definition	Example of Measures Taken by the UK vis-à-vis China
		Inward FDI: The National Security and Investment Act 2021 allows the UK government to scrutinize and intervene in acquisitions within 17 sensitive sectors to mitigate national security risks, including blocking or imposing conditions on transactions to protect technology and safeguard critical infrastructure. As of March 2023, the UK government had exercised its power to block or impose conditions on acquisitions 15 times. Of these, eight of the final orders made were associated with investments coming from China.[l] Outward FDI: In 2024, the Sunak government explored the possibility of screening outbound investments in strategic technological sectors, in particular with regards to China.[m] It subsequently expanded the application of the National Security and Investment Act to acquisitions outside the UK in an updated guidance published in May 2024.[n]
Immigration sanctions or travel bans	Measures that control the entry, stay, and transit of individuals to and through the UK.[o]	As of December 2023, the UK government refused nine Chinese nationals permission to enter or remain in the country on grounds of involvement in terrorist, cyber, and human rights violation activities.[p] All UK immigration sanctions against Chinese nationals were taken in concert with allies, including the EU, Canada, and the United States.[q] Moreover, all international students, including Chinese students, who are subject to immigration controls and who, at the postgraduate level, study or research one of more than 44 topics that could support the development of advanced conventional military technology, weapons of mass destruction, or their means of delivery, need an Academic Technology Approval Scheme certificate before entering the UK.[r]
Transport sanctions	Measures that control "the ownership, registration or movement of ships and aircraft."[s]	As of December 2023, the UK government imposed secondary transport sanctions (including chartering of ships, crew servicing of ships and aircraft, and prohibition of port entry) on five entities domiciled in China for their involvement in the facilitation of North Korea's military programs, as part of *The Democratic People's Republic of Korea (Sanctions) (EU Exit) Regulations 2019*.[t]

Instrument	Definition	Example of Measures Taken by the UK vis-à-vis China
Trade-remedy tariffs	Taxes imposed on imported goods to protect domestic industries and influence international trade relations.	The UK currently imposes antidumping tariffs on imports of e-bikes, steel, and aluminum extrusions from China. Since 1993, the UK has an antidumping duty on imports of foreign electric bikes (including but not only from China) to protect local manufacturers. In 2022, the UK drastically lowered those tariffs for two Chinese electric bike exporters.[u] Since 2019, the UK has unilaterally imposed tariffs on foreign steel imports (including from China but also all other countries) to protect the UK steel industry.[v] Since 2022, the UK has applied an antidumping duty on the imports of aluminum extrusions from China to protect the UK aluminum industry.[w] In December 2023, it revoked the measure applied on one-piece cast alloy wheels.[x]
Research security measures	Measures that aim to bolster the security and integrity of the research ecosystem while promoting international research collaborations. These measures range from restricting participation to foreign talent recruitment programs and scrutinizing transnational education programs all the way to bans on scientific collaborations. The measures also include export controls and arms embargoes.	N/A

[a] Foreign, Commonwealth & Development Office, "Guidance: UK Sanctions," UK Government, July 25, 2024b; Foreign, Commonwealth and Development Office and The Rt Hon Lord Cameron, 2024.

[b] "China Milk Banned in Asia, Africa, European Union," Reuters, September 26, 2008; "EU Bans Baby Food Made with Chinese Milk," NBC News, September 25, 2008.

[c] Emilio Casalicchio, "UK Hints at Banning Chinese Imports with Forced Labor Links," Politico, December 20, 2021; Eleni Courea, "UK Ministers Ready Ban on Health Goods from China's Xinjiang," Politico, April 21, 2022; Noa Hoffman, "Government 'Spooked' by Attempts to Block Medical Equipment from Regions with 'Genocide Risk,'" Politics Home, March 21, 2022; Ruth Ingram, "UK Parliament: The Battle Continues on 'Genocide' Health Purchases from Xinjiang," Bitter Winter, April 4, 2022; Joshua Nevett, "Solar Panels Used by British Army Linked to Claims of Forced Labour in China," BBC, December 2, 2023; Steerpike, "NHS Accused of Exploiting Forced Labour," *The Spectator*, March 28, 2022.

[d] Patrick Wintour, "UK Solar Could Be 'Dumping Ground' for Products of Chinese Forced Labour, Ministers Warned," *The Guardian*, September 3, 2023.

[e] Robert Clark, *Inadvertently Arming China? One Year On*, Civitas, October 2022.

[f] Stockholm International Peace Research Institute, "UK Interpretation of the Arms Embargo Against China," March 2016.

Instrument	Definition	Example of Measures Taken by the UK vis-à-vis China

[g] Foreign, Commonwealth & Development Office and Export Control Joint Unit, "UK Arms Embargo on Mainland China and Hong Kong," UK Government, December 31, 2020; Clark, 2022; UK Parliament, House of Commons, "China," Hansard, Vol. 678, July 20, 2020.

[h] Stockholm International Peace Research Institute, 2016.

[i] Sven Bates and Sunny Mann, "EU Agrees to Restrict Sensitive Exports to Hong Kong," *Global Sanctions and Export Controls Blog*, July 30, 2020; Dominic Raab, "Hong Kong and China: Foreign Secretary's Statement in Parliament," UK Government, July 20, 2020.

[j] Foreign, Commonwealth & Development Office, 2024b; Foreign, Commonwealth and Development Office and The Rt Hon Lord Cameron, 2024.

[k] Foreign, Commonwealth & Development Office, National Cyber Security Centre, Cabinet Office, Home Office, The Rt Hon Lord Cameron, The Rt Hon James Cleverly MP, and The Rt Hon Oliver Dowden CBE MP, "UK Holds China State-Affiliated Organizations and Individuals Responsible for Malicious Cyber Activity," UK Government, April 2, 2024.

[l] Cabinet Office (UK), *National Security and Investment Act 2021: Annual Report 2022–23*, UK Government, 2023b.

[m] Graham Lanktree, "UK Signals Potential Curbs on Chinese Investment amid 'Derisking' Push," Politico, April 17, 2024.

[n] Cabinet Office (UK), "How the National Security and Investment Act Could Affect People or Acquisitions Outside the UK," UK Government, May 21, 2024b.

[o] Foreign, Commonwealth & Development Office, 2024b; Foreign, Commonwealth and Development Office and The Rt Hon Lord Cameron, 2024.

[p] Foreign, Commonwealth & Development Office, "Guidance: The UK Sanctions List," UK Government, August 9, 2024c.

[q] See, for example, Scilla Alecci, "EU, US, Canada, and UK Sanction Chinese Officials for Human Rights Violations in Xinjiang," International Consortium of Investigative Journalists, March 22, 2021; Patrick Wintour, "US and Canada Follow EU and UK in Sanctioning Chinese Officials over Xinjiang," *The Guardian*, March 22, 2021; "China Slaps UK with Sanctions After Being Accused of Rights Abuses Against Uighur Muslims," France 24, March 26, 2021; Foreign, Commonwealth & Development Office, Home Office, The Rt Hon Lord Cameron, and The Rt Hon James Cleverly MP, "UK and Allies Sanction Human Rights Abusers," UK Government, December 8, 2023.

[r] Foreign & Commonwealth Office and Foreign, Commonwealth & Development Office, "Academic Technology Approval Scheme (ATAS)," UK Government, February 19, 2024a; Lucy Fisher, "Chinese Students Face Ban amid Security Fears," *The Times*, October 1, 2020.

[s] Foreign, Commonwealth & Development Office, 2024b; Foreign, Commonwealth and Development Office and The Rt Hon Lord Cameron, 2024.

[t] Foreign, Commonwealth & Development Office, 2024c.

[u] Alex Bowden, "UK Slashes Anti-Dumping Tariffs for Two Chinese e-Bike Manufacturers to 'Help Meet Growing Demand,'" ebiketips, December 6, 2022; Trade Remedies Authority, "New Tariff Rates for Chinese e-Bike Exporters Approved," UK Government, November 29, 2022a.

[v] Lisa O'Carroll, "UK to Impose Steel Import Tariffs for Another Two Years, Government Says," *The Guardian*, June 29, 2022; Dharshini David, "Steel Import Tariffs Extended for Two Years," BBC, June 29, 2022.

[w] Trade Remedies Authority, "New Measures Tackling China's Dumping of Aluminum Extrusions to Come into Force," UK Government, December 16, 2022b; Chad Bray, "Britain Adopts New Tariffs on Imports of Chinese Aluminum Extrusions to Tackle Dumping," *South China Morning Post*, December 16, 2022.

[x] Trade Remedies Authority, "TRA's Recommendation to Revoke Measure on Alloy Wheels Accepted," UK Government, December 15, 2023.

The UK's Room for Maneuver

In the event of a likely Chinese invasion of Taiwan within an ensuing three to six months, the UK would theoretically consider every option available in its catalog. No option would be off the table.[351] UK officials would first compile a comprehensive list of potential economic measures. This list would be color-coded from green to red, signifying a spectrum from the least- to the most-severe actions. As the situation evolves, policymakers would progressively consider options further down the list, moving toward more-stringent actions. This incremental approach allows for proportionate escalation.[352]

But there is a distinction between what the UK would ideally want to achieve and what it could realistically implement. This gap forms the basis of a credible deterrence posture. Adversaries should see the UK as having both the capability and the will to deter, not just the intent. If the goals are too risky, are too expensive, or lack the necessary support or resources, any threat of punishment or of denial of benefits will not be credible, and the strategy will likely fail.[353] The UK would therefore have to also consider the leverages and constraints affecting its freedom of action when designing its economic deterrence strategy for a Taiwan invasion. The circumstances leading to a Chinese attack would also influence the UK's approach. However, because this analysis is agnostic of crisis or conflict scenario, we do not explore this critical variable.

Constraints

Three factors would likely constrain the UK's room for maneuver: its economic relations with China, its China capability, and its legal framework.

First, the economic context would be a determining factor in the UK's strategic considerations, primarily because China, with its larger economy and significant global influence, holds more economic leverage over the UK than the UK does over China. This asymmetry is evident in several areas:

- **Trade**: China is one of the UK's largest trading partners, ranking sixth, behind the United States, Germany, the Netherlands, France, and Ireland.[354] In comparison, the UK's position in China is far less reciprocal, being only China's 16th largest trading partner.[355] At the end of March 2024, the UK had a total trade deficit with China of £25.9 billion, meaning it imported more from China (£56.2 billion) than it exported to China (£30.3 billion).[356]

[351] UK SME 1, interview with the authors, February 2024; UK SME 2, interview with the authors, February 2024; UK SME 3, interview with the authors, February 2024; UK SME 4, interview with the authors, February 2024; UK SME 5, interview with the authors, February 2024.

[352] UK SME 2, interview with the authors, February 2024; UK SME 3, interview with the authors, February 2024.

[353] Joint Doctrine Note 1-18, *Strategy*, 2018.

[354] Department for Business and Trade, "Trade and Investment Factsheets: China," UK Government, August 2, 2024b.

[355] World Bank, "China Trade Balance, Imports and Exports by Country 2021," webpage, World Integrated Trade Solution, undated-a.

[356] Department for Business and Trade, 2024b.

- **Critical imports and supply chains**: The trade relationship between the UK and China is heavily skewed toward goods rather than services. Goods make up a staggering 94.6 percent of all UK imports from China and 66.7 percent of all UK exports to China.[357] Many of these goods are what the UK *Critical Imports and Supply Chains Strategy* calls *critical imports*—goods deemed essential for the country's security and prosperity, often sourced from markets with limited supply alternatives. The highest number of these critical imports for the UK comes from China, followed by Germany and the United States.[358] These include critical minerals, such as lithium, cobalt, silicon, tin, and rare earth elements. Of the 18 critical minerals identified in the UK's *Critical Minerals Strategy*, "China is the largest producer for 12 of those minerals, either as a raw material or refined product."[359]
- **Critical national infrastructure**: China has also varying influence in major UK infrastructure assets, including the Bradwell nuclear project, Heathrow Airport, Thames Water, the National Grid, North Sea oil fields, British Steel, South Western Railway, and Crossrail.[360]

To state the obvious, the UK is not, alone, in a position to inflict significant economic damage on China through penalties that would deter an attack on Taiwan. The costs the UK could impose on the Chinese economy through trade and financial sanctions would be significantly lower than the risks of potential Chinese retaliation to the UK economy.

Admittedly, the UK government could argue that national security takes priority over economic interests. But, if history is any indicator, this scenario is highly improbable. Britain has typically sanctioned smaller economies, not larger ones, such as China. This would be a new paradigm.[361] The UK has also tended to prioritize its economic interests over national security, particularly in its dealings with Beijing. During the Korean War, British companies found ways to bypass restrictions; more recently, UK universities have formed lucrative partnerships with Chinese entities, despite concerns about transferring sensitive technologies and know-how.[362]

The UK could also consider instituting tariffs or symbolic sanctions in sectors in which the UK trade balance is relatively even. The automotive sector is a prime example, although a growing electric vehicle industry in China might alter this balance in the future.[363] As of June 2024, the UK exported £4.6 billion worth of cars to China, the same amount as it imported from China.[364] However, there is no guarantee that China would reciprocate by targeting the British car industry. The imposition of sanctions is a tit-for-tat game, but not always a symmetric one. China might decide to escalate and target an entirely different sector, posing a risk that might be too big for the UK to pursue.[365]

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[357] Department for Business and Trade, 2024b.

[358] Department for Business and Trade, 2024b.

[359] Department for Business, Energy and Industry Strategy and Department for Business and Trade, 2023.

[360] Jon Lunn, John Curtis, and Matthew Ward, "The UK-China Relationship," UK Parliament, September 14, 2020.

[361] UK SME 1, interview with the authors, February 2024; UK SME 2, interview with the authors, February 2024; UK SME 5, interview with the authors, February 2024.

[362] UK SME 1, interview with the authors, February 2024.

[363] UK SME 2, interview with the authors, February 2024; UK SME 3, interview with the authors, February 2024.

[364] Department for Business and Trade, 2024b.

[365] UK SME 2, interview with the authors, February 2024.

Alternatively, the UK could seek to limit UK FDI in China. In 2021, the accumulated value of all UK investments in China was £10.7 billion. By contrast, Chinese FDI in the UK totaled £5.0 billion, or 0.3 percent of the UK's total inward FDI stock.[366] The biggest challenge, again, for the UK would be to manage retaliation in other sectors. China has strategically invested in the UK's critical national infrastructure, and any Chinese countermove could put the UK's critical national infrastructure at risk, as the case of the Hinkley Point C nuclear station showed.[367] In 2022, "China's [General Nuclear Power Group] stopped backing overruns at Hinkley after it was removed from the plant's sister project, Sizewell C in Suffolk, over security fears."[368] The UK could certainly confiscate these assets but is unlikely to do so preemptively.

Beyond economic constraints, the UK also faces governance limitations. The government has a China capabilities shortfall, meaning a shortfall in experience on China. In July 2023, the Intelligence and Security Committee of Parliament Report on China highlighted that "there is no evidence that Whitehall policy departments have the necessary resources, expertise or knowledge of the threat to investigate and counter the Chinese whole-of-state approach."[369] This comes as figures disclosed under the U.K. Freedom of Information Act show that more could be done to ensure that some parts of government have the literacy on China required to address the China challenge.[370] The *Integrated Review Refresh 2023* underlined the need to bolster the UK's capacity and capabilities to better understand China. It highlighted the need to "build China capabilities across government to better understand China," and took the first steps toward setting up a China capability program that will double government funding for 2024–2025 to develop China knowledge and skills across government.[371]

This shortfall in expertise on China means that policymakers may not fully understand how the Chinese economic system works, how different individuals and entities are connected, and the likely impact of any measures.[372] Lack of an institutional setup might limit the use of tools of economic statecraft beyond sanctions.

Third, the UK does not have the legal framework and historical precedents for deploying preemptive sanctions packages. It has never used sanctions preemptively, making it even more improbable that the UK would take such a drastic step against China.[373]

Under those conditions, the UK would be unlikely to pursue a *deterrence by punishment* strategy and establish trade or financial sanctions, other than arms embargoes, at least not on its own. If past behavior is any indicator, the UK might consider applying targeted or smart sanctions restricting transactions with or the movement of specific persons and entities, but these steps would be only

[366] Department for Business and Trade, 2024b.

[367] UK SME 2, interview with the authors, February 2024.

[368] Alex Lawson, "EDF Takes €12.9bn Hit After Hinkley Point C Delays and Cost Overruns," *The Guardian*, February 16, 2024.

[369] Intelligence and Security Committee of Parliament, *China*, July 13, 2023.

[370] George Greenwood, "Lack of Mandarin Speakers Raise Fears for Future Diplomacy," *The Times*, August 30, 2022; UK Parliament, Freedom of Information Act 2000, November 30, 2000.

[371] Cabinet Office (UK), 2023.

[372] UK SME 5, interview with the authors, February 2024.

[373] UK SME 1, interview with the authors, February 2024; UK SME 3, interview with the authors, February 2024.

symbolic; as one former UK official interviewed noted, the impact of instituting travel bans on CCP elites would likely be minimal.[374]

Although effective actions in the immediate period before an invasion could be limited, anticipating that such a crisis might emerge, Britain could still seek ways to minimize economic fallout by diversifying supply chains, strengthening inbound investment screening regimes, building strong international partnerships, developing domestic capabilities, and so on (i.e., a deterrence through resilience strategy). The *Integrated Review Refresh* (2023), the *Critical Imports and Supply Chains Strategy* (2024), the *Critical Minerals Strategy* (2022), the *Critical Minerals Refresh* (2023), the *Energy Security Strategy* (2022), the *Energy Security Plan* (2023), the *Battery Strategy* (2023), the *UK Government Resilience Framework* (2022), and the *National Security and Investment Act 2021* (2020) already pave the way in this direction.[375]

Leverage

The UK could still deter a Chinese attack on Taiwan using economic means by denying China the opportunities to do so (i.e., a deterrence by denial strategy). In this case, it would have to identify what strategic commodities and critical technologies it has that China would need to pursue and sustain military operations and a war economy.

Cataloging technologies that might aid the PLA and conducting a net technical assessment is beyond the scope of this report. Depending on where the advantage lies, however, the UK might consider "expanding the list of dual-use items subject to an export prohibition" (i.e., list-based export controls); "prohibit[ing] the export of all [UK]-origin items, whether sensitive or not, destined for a military end-use in China" (i.e., end-use export controls); or "eliminat[ing] exceptions that permit certain items to be exported to China without a license" (i.e., arms embargo without exemptions).[376] In 2022 and 2023 combined, the UK authorized exports of £55.3 billion worth of military-related equipment to China, despite a partial arms embargo.[377]

Besides the technologies themselves, the UK could also focus on targeting the methods China uses to transfer foreign technologies and know-how, such as the following:

- **State-backed investments in foreign research:** Chinese state-backed entities, including Chinese military entities, fund UK research to influence the direction of research and tap into UK expertise to develop its own military capabilities. Between 2017 and 2023, it is estimated that 16 to 20 percent of all Chinese funding to UK universities came from sources listed on

[374] UK SME 4, interview with the authors, February 2024.

[375] Cabinet Office [UK], 2023a; Department for Business and Trade, 2024a; Department for Business, Energy and Industry Strategy, and Department for Business and Trade, 2022; Department for Business and Trade, 2023a; Department for Energy Security and Net Zero, Prime Minister's Office, and Department for Business, Energy & Industrial Strategy, 2022; Department for Energy Security and Net Zero, 2023; Department for Business and Trade, 2023; Cabinet Office [UK], 2022; UK Parliament, 2020.

[376] Kilcrease, 2023.

[377] Caolán Magee, "Revealed: UK Exporting Military Equipment to China Despite Arms Embargo," INews, June 23, 2024.

the BIS Entity List, which includes companies controlled by the Chinese military.[378] Currently, there are no restrictions on sources of foreign funding in UK universities. The government is considering measures to improve the transparency of university funding but, in the event of an impending conflict, might escalate the response by freezing all Chinese investments in its research ecosystem.[379]

- **Conferences and colloquia**: Chinese research institutions often invite foreign researchers to give lectures or participate in conferences in China, covering all travel expenses. Once in China, foreign researchers' electronic devices can be siphoned, or the researchers can be asked to share knowledge that lies outside their published results. In the event of a conflict, the UK could advise against traveling to China.
- **Joint research collaboration**: China is now the UK's second biggest research partner, after the United States.[380] In 2021, UK-based academics published around 25,000 papers that had at least one coauthor affiliated with a Chinese institution.[381] There were more than 150 joint UK-China research centers.[382] China exploits these venues and the openness of foreign academia to transfer foreign technologies and know-how. In the event of an impending conflict, the government might freeze joint funding and halt all research collaborations.
- **Talent recruitment programs**: China aims to recruit outstanding overseas scholars—both Chinese and foreign—via talent recruitment programs or talent plans. Participants are encouraged, through generous material packages, to relocate to China or stay at home but serve Chinese interests by conducting research on topics aligned with Chinese government priorities, transferring knowledge and know-how, and recruiting other participants. To this day, the number of scholars from the UK who participate in Chinese talent recruitment program is unknown, and the UK has not restricted participation in foreign talent recruitment programs. If a conflict appeared imminent, the UK might consider banning participation in Chinese talent recruitment programs for all researchers who also receive research funding from the UK government.
- **Foreign-based alumni and professional associations**: Sino-foreign alumni and professional associations help broker relationships between UK-based researchers and Chinese entities to facilitate technology transfer efforts. In the event of an impending conflict, the government might prohibit membership in Sino-foreign alumni and professional associations.
- **Start-up competitions:** Start-up competitions, such as the Chunhui Cup (春晖杯), are one method China employs to identify and attract overseas talents to found start-ups in China. In the event of an impending conflict, the government might ban these types of events on UK soil.

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[378] Robert Clark, *The Strategic Dependence of UK Universities on China—and Where Should They Turn Next?* Civitas, November 2023.

[379] Nathan Williams, "Foreign States Targeting UK Universities, MI5 Warns," BBC, April 26, 2024.

[380] UK Research and Innovation, "Our International Offices: UKRI China," webpage, last updated May 14, 2025.

[381] RAND Europe analysis of the Dimensions database (Digital Science & Research Solutions Inc., "Dimensions: A Digital Science Solution," homepage, undated).

[382] RAND Corporation, *Exploring the Opportunities and Challenges of Research Engagement with China*, RAND Corporation, RB-A1839-1, 2022.

- **Transnational education**: Transnational education programs involve partnerships between Chinese and foreign universities to create joint education initiatives that facilitate student, faculty, and research exchanges, both in person and online. The aim is to leverage foreign teaching to boost the skills of the Chinese workforce. According to Winnie Eley, "China is the largest host country for UK transnational education programmes. In 2020–21, it hosted 59,265 students on such programmes."[383] In the event of an impending conflict, the government might decide to shut UK transnational education in China.

At the far end of the spectrum, the UK might cut all scientific ties with China, as it did with Russia following its invasion of Ukraine in 2022.

None of these measures is without cost for the UK. The same interconnectedness that allows the UK to inflict pain on China and deny technological access could also harm its own higher education and research sectors.[384] Any move risks chilling UK-China academic collaboration and could lead to a decline in Chinese student enrollment, affecting tuition revenue.[385] This could result in budget shortfalls, affecting not only the financial stability of the sector but also the state of British research and development, one of the UK's crown jewels.

This means that the UK government would likely be reticent to implement stringent research security measures beyond expanding its list-based export controls, end-use export controls, and arms embargo. If past behaviors are any indicator, none of these measures would specifically target China, at least not explicitly. The UK government typically favors a country-agnostic approach in its approach to research security, as shown in "Trusted Research Guidance for Academia."[386] The UK might also consider tightening its visa screening, short of imposing travel bans, but could escalate to imposing travel bans targeting specific Chinese military organizations, especially if the UK lacked the resources to conduct additional screenings and due diligence.

However, even such research security measures would "require a longer time horizon to be effective and may have less utility in an immediate run-up period to a potential conflict."[387] The lack of clear communication of a country-agnostic approach could also diminish the impact of any deterrence by denial strategy.

The U.S. Factor

China is not the only player in the equation. The relationships the UK maintains with its allies and partners, especially the United States but also increasingly Australia and Japan, would also significantly influence a UK response.[388]

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[383] Winnie Eley, "China and UK," British Council, 2022.

[384] UK SME 1, interview with the authors, February 2024; UK SME 3, interview with the authors, February 2024; UK SME 4, interview with the authors, February 2024.

[385] UK SME 3, interview with the authors, February 2024.

[386] National Protective Security Authority, "Trusted Research Guidance for Academia," webpage, last updated July 18, 2025.

[387] Kilcrease, 2023.

[388] UK SME 3, interview with the authors, February 2024.

The UK standard line is that it seeks to impose economic costs multilaterally because economic tools have more consequences this way.[389] All five former UK officials interviewed were unanimous: It is unlikely that the UK would consider instituting economic measures, including sanctions, in the absence of similar actions by its allies.[390] The UK would also be unlikely to take the lead, preferring instead to band together with the United States.[391]

The paradox, as one former UK official pointed out during our discussions, is that the weaker Britain becomes vis-à-vis China, the more antagonistic it seems to become. Although in some respects Britain lacks the tools to affect China on its own, it is becoming more willing to use these instruments, especially with others.[392] Whitehall would therefore likely try to match the type and level of intensity of U.S. measures, although sectoral sanctions might differ because of the distinct nature of the UK's trade with China compared with U.S. trade with China.[393]

The UK would seek to align with the United States as much as possible but might consider imposing economic measures, including sanctions, without U.S. backing if the UK deemed the United States an unreliable partner. At the time of their interviews, two former UK officials believed this could particularly be the case if Donald Trump were to win the 2024 U.S. presidential election and if the United States chose not to act.[394] Three other former officials interviewed disagreed and stated that the UK would not want to stick its neck out.[395] If it did, three of these interviewees said the UK would still seek alignment with the EU and other partners. These measures would, however, primarily be symbolic.[396] Historically, the UK has shown a tendency to avoid conspicuous actions that could be perceived as bold or assertive, especially in its dealings with China.

Update

In July 2024, the UK underwent a change of government. Since assuming office, the new Labour government has undertaken a comprehensive nonpublic audit of the UK's relationship with China, which has informed the development of several key strategic documents. These documents include the

[389] UK SME 2, interview with the authors, February 2024.

[390] UK SME 1, interview with the authors, February 2024; UK SME 2, interview with the authors, February 2024; UK SME 3, interview with the authors, February 2024; UK SME 4, interview with the authors, February 2024; UK SME 5, interview with the authors, February 2024.

[391] UK SME 1, interview with the authors, February 2024.

[392] UK SME 1, interview with the authors, February 2024.

[393] UK SME 1, interview with the authors, February 2024; UK SME 2, interview with the authors, February 2024; UK SME 4, interview with the authors, February 2024.

[394] UK SME 2, interview with the authors, February 2024; UK SME 3, interview with the authors, February 2024.

[395] UK INT 1, interview with the authors, February 2024; UK SME 4, interview with the authors, February 2024; UK SME 5, interview with the authors, February 2024.

[396] UK SME 2, interview with the authors, February 2024; UK SME 3, interview with the authors, February 2024; UK SME 5, interview with the authors, February 2024.

Strategic Defence Review, the *National Security Strategy*, the *Modern Industrial Strategy*, and the *Trade Strategy*.[397]

These documents offer little additional clarity on the UK's interests with respect to a potential Taiwan conflict but collectively reaffirm the UK's established pattern of engagement with China, which continues to be guided primarily by economic imperatives. The previous Conservative governments of prime ministers Liz Truss and Rishi Sunak placed greater emphasis on derisking and managing strategic dependencies. The new Labour government of Prime Minister Keir Starmer acknowledges the need to address existing state threats but has shifted the focus more explicitly toward promoting long-term economic growth, rekindling an approach reminiscent of the years of Conservative Prime Minister David Cameron (2010 to 2016). Foreign Secretary David Lammy underscored this point in his House of Commons statement on the China audit, noting that "the audit made clear that our approach will always be guided by the UK's long-term economic growth priorities."[398]

This emphasis on economic growth aligns with the Labour government's broader growth agenda and self-stated number-one mission to prioritize national prosperity and competitiveness, often framing security and foreign policy decisions through the lens of economic benefit. In Whitehall, seat of the government, this approach is reflected institutionally, with the economic security teams now positioned under the growth directorates, further signaling the centrality of economic objectives in shaping the UK's China policy.

Conclusion

The evidence gathered for this case study suggests the following:

- Economic measures alone might not provide the UK with the necessary leverage to deter a Chinese invasion of Taiwan, if such aggression is perceived to be likely within an ensuing three to six months and if the UK decided Taiwan is worth saving.
- The UK has an array of measures at its disposal, from sanctions to tariffs to export controls. But a large divide separates what strategies and tools the UK has available from the actions it can feasibly carry out. The gap between aspirations and reality forms the basis of a credible deterrence posture.
- The scale of China's economy and its interconnectedness with that of the UK means that the effect on China of the punitive measures the UK could impose alone would be considerably lower than the threat of Chinese retaliation. Even within a multilateral coalition, the UK would not be as shielded as its allies, questioning the returns to the UK of matching the style and severity of allied sanctions.

[397] Ministry of Defence (UK), *Strategic Defence Review 2025—Making Britain Safer: Secure at Home, Strong Abroad*, June 2025; Cabinet Office (UK), N*ational Security Strategy 2025: Security for the British People in a Dangerous World*, June 2025; Department for Business and Trade, *The UK's Modern Industrial Strategy 2025*, 2025a; Department for Business and Trade, *The UK's Trade Strategy*, June 2025b.

[398] David Lammy, "China Audit: Foreign Secretary's Statement," Foreign, Commonwealth & Development Office, UK Government, June 24, 2025.

- Under these circumstances, the UK would likely aim to reduce the UK's vulnerabilities and strengthen its resilience to be able to withstand external shocks and aim to deny China the technological means of invading Taiwan.
- The measures most consistent with current policy practices are measures that would be targeted and country-agnostic to minimize the risk of retaliation and economic damage. These include tightening visa screenings and expanding the UK's list-based export controls, end-use export controls, and arms embargoes.
- The UK might also consider prohibiting all scientific collaborations with China, if deemed necessary, as the UK did with Russia following its invasion of Ukraine in 2022. However, the UK should do so only if it knew it had the means to support its universities, which are highly dependent on Chinese funding.
- The crux of the problem is that both the deterrence through resilience and deterrence by denial approaches take time to work. If aggression seems imminent within six months, it might be too little too late to act, rendering any measures largely symbolic.
- That being said, the UK would not rule out a deterrence by punishment strategy. The UK government might decide that imposing severe penalties on China is a risk worth taking, even at the expense of the British economy. But if past behaviors are any indicator, this option is highly improbable because it would mark an unprecedented paradigm shift in UK-China relations. The UK has typically prioritized its economic interests over national security in its dealings with China. Only significant pressure from Washington and the need for multinational action might be enough to convince the UK to go down this route.

Chapter 6

China's Reaction

In this chapter, we consider the question of whether economic measures could suffice to deter China from carrying out acts of aggression and explore what China might do in response to sanctions. Through a scenario analysis examining a hypothetical seizure of an offshore island and one of an invasion of Taiwan, we explore how changes in factors at the system, national, and individual levels could affect Beijing's sensitivity to sanctions. Key variables determining success include the relative unity and resolve of the leadership and public, the leadership's strategic outlook, and whether the United States implements sanctions early and in a multilateral manner.

For this analysis, we reviewed primarily Western academic writings on deterrence, economic sanctions, and the potential role of economic sanctions as applied to China. We also reviewed the political science literature on the structural causes of war that affect incentives for leaders.[399] Our research incorporated findings from experts on the causes of war to posit a framework for designing scenarios that aim to simulate some of the incentives leaders could face in a war situation. We drew from this prior RAND research to develop our own scenarios and present two of them to illustrate how changes in incentives could affect China's sensitivity to economic sanctions and then conclude with observations and recommendations. We next explain why we have chosen the scenario approach and how we have implemented it.

Causes of War and Incentives

Part of what makes judgments about the potential effectiveness of economic sanctions against a belligerent China so difficult is that such a conflict is completely hypothetical. This is a problem that affects the study of deterrence overall. Despite abundant theoretical writings, deterrence remains an intensely disputed concept.[400] Part of the issue is that deterrence theory attempts to cover all types of conflict situations. What might work in some situations may not work in others, which makes attempts to generalize principles of deterrence difficult.

The potential application of deterrence can perhaps be made more rigorous by specifying the types of circumstances of interest. We do not have access to the types of incentives and motivations that would confront a Chinese leader contemplating military action in situations that do not exist. But without access to this information, it is nearly impossible to assess the effectiveness of economic sanctions because their core logic involves decisions made in response to incentives. The only way to

[399] Timothy R. Heath and Matthew Lane, *Science-Based Scenario Design: A Proposed Method to Support Political-Strategic Analysis*, RAND Corporation, RR-2833-OSD, 2019.

[400] See "The Debates About Deterrence," in Barry Buzan, *An Introduction to Strategic Studies: Military Technology & International Relations*, Palgrave Macmillan, 1987.

overcome this dilemma is to articulate the structure of incentives that a leader might confront in a hypothetical situation. This is usually done in the form of a posited scenario and the assumptions that underpin such a scenario. To increase the rigor of our assessments, it is essential to base the assumptions and scenario on relevant social science research.

The academic study of what causes war in the first place is especially important here. This literature is important because, to be effective, economic sanctions ultimately depend on the incentives and choices a leader faces. Wars are caused by specific drivers and factors, which leaders respond to in a way that makes war seem like a reasonable option. Some of these factors can be economic, but many others are not. Economic sanctions alone may, thus, not drive a foreign leader to decide a certain way, but under some circumstances, the incentives economic sanctions offer could add a reason for a country to change its behavior.

What motivates leaders to start wars? George Blainey argued that wars start because of disagreements about the relative power between countries. This disagreement fuels the belief that countries can win wars.[401] John Vasquez and others pioneered groundbreaking research in noting the centrality of territorial disputes in many wars, especially among newly formed, contiguous states.[402] Others have built on this insight to note that feuds over relative influence and status, known as "positional rivalries," have fundamentally different drivers and logics than those centered around territorial disputes.[403]

Perhaps the most comprehensive approach has been that posed by William R. Thompson and Jack Levy, who outlined three levels of analysis for the causes of interstate war: system, nation, and individual.[404] System-level causes include the structure of the international system, distribution of power, and the nature of the system's political economy. Most international relations theories of war, such as realism and power transition theory, are system-level theories. Other examples include the nature of international norms and institutions.[405] The national- or nation-state–level of analysis includes factors associated with both the government and society. Government factors include such aspects as the institutions of the political system and the policymaking process. Society aspects include the nature of the country's economy, interest groups, public opinion, and the country's dominant political culture or ideology. Examples of how this level of analysis works are the theories offered that certain government bureaucracies, such as the military, might push for war to get more money or that domestic political groups might push for war to achieve their own ideological aims. The individual level of analysis aims to explain the foreign policy decisions political leaders make and includes such factors as individual belief systems, personalities, and psychological processes.

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[401] George Blainey, *The Causes of War*, Free Press, 1988.

[402] John Vasquez and Maria T. Henehan, *Territory, War, and Peace*, Routledge, 2010.

[403] Karen Rasler and William R. Thompson, "Explaining Rivalry Escalation to War: Space, Position, and Contiguity in the Major Power Subsystem," *International Studies Quarterly*, Vol. 44, No. 3, September 2000.

[404] Jack S. Levy and William R. Thompson, *Causes of War*, Wiley-Blackwell, 2010.

[405] Levy and Thompson, 2010.

Scenario Analysis: The Taiwan Conflict

We begin our analysis with two scenarios involving China and Taiwan. Because of U.S. security obligations, the risk of escalation into a broader war is a critical factor any Chinese leader would need to consider. Experts unanimously agree that a U.S.-China war could prove catastrophic. The economic disruption alone could be dramatic. The Rhodium Group has estimated that a Taiwan conflict could put "well over two trillion dollars in economic activity at risk" even before factoring in the impact of international sanctions or actual military conflict.[406] War could also entail massive destruction, calamitous loss of life, and even nuclear annihilation.[407]

The potential catastrophic cost of escalation into a broader war with the United States helps explain why there has been no great power war since the end of World War II. Charles Kegley has observed that the period from 1945 through the end of the Cold War was the longest period of peace between the great powers in the past five centuries of the modern era.[408] Scholars have advanced various explanations for this peace, including the advent of nuclear weapons and the overall destructiveness of modern war. If the incentives overwhelmingly favor avoiding war, what could drive China to act aggressively despite that? Many solutions have been proposed.

Some experts argue that China would begin a conflict with Taiwan only if it had committed fully to victory and was prepared to endure any and all costs to achieve it. A Center for Strategic and International Studies commentary stated, for example, that Chinese leaders are "likely to fully commit to achieving their military goals once forces are engaged."[409] The commentary added that this is because Beijing is "unlikely to order military actions against Taiwan if it believes sanctions, including export controls, would jeopardize its ability to sustain operations."[410] But why or how Beijing could get to the point that it disregarded the potential catastrophe of a war with the United States is almost never explained. No reason is provided for this potential mindset, and the reader is left to assume that the implied logic is one of irrationality.

Other analysts argue that China would seek to avoid war with the United States by gradually increasing the pressure. This suggests China could be swayed to reduce or cease its aggression if the United States signaled it might be willing to wage war. Michael O'Hanlon has argued that aggression against Taiwan would begin with "much lower levels of warfare," including deniable operations and "gray zone" tactics.[411] He suggested that such limited attacks as a blockade or gray zone operations are "the most likely forms of aggression that China would undertake against Taiwan."[412] The logic is not unproblematic, however. If Chinese leaders are not willing to risk war with the United States, they have little incentive to escalate any situation beyond the gray zone.

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[406] Charlie Vest, Agatha Kratz, and Reva Goujon, "The Global Economic Disruptions from a Taiwan Conflict," Rhodium Group, December 14, 2022.

[407] David Gompert, Astrid Stuth Cevallos, and Cristina Garafola, *War with China: Thinking the Unthinkable*, RAND Corporation, RR-1140-A, 2016.

[408] Charles W. Kegley, *Explaining Great-Power Peace: The Sources of Prolonged Postwar Stability*, Harper Collins, 1991.

[409] DiPippo, 2022.

[410] DiPippo, 2022.

[411] O'Hanlon, 2022.

[412] O'Hanlon, 2022.

Still others have dealt with the risk of war with the United States by proposing strategies that render U.S. intervention irrelevant. DiPippo and Blanchette argue that

> Beijing's calculation would likely be that if it can seize Taiwan relatively quickly and in the context of a compelling diplomatic or political justification for its actions, then thwarting the imposition of sanctions becomes important for limiting post-attack collateral costs.[413]

Clever stratagems intended to trick the United States and Taiwan have also been floated as a possibility. DiPippo and Blanchette argue that, if China adopted a more "asymmetrical or creative approach, such as claiming that one of its PLA destroyers was sabotaged or attacked by the Taiwan military, this would frustrate, constrain, or at least delay" the formation of a coalition in favor of sanctions.[414] Here again the logic is problematic. If Chinese leaders sincerely hope to avoid war with the United States, they have little incentive to provoke a war with a U.S. ally or partner. After all, it is far from clear that the trick would work. It is also impossible to predict how the United States might respond. The United States might choose to escalate the conflict even if China seized Taiwan. In World War II, the Allies did not give up after Germany seized Poland or Japan seized the Philippines but, instead, escalated the war.

In all these cases, analysts are speculating on what the war situation might entail and how Chinese leaders might respond accordingly. But the hazy and sometimes contradictory logic shows the limits of analyzing hypothetical situations when the assumptions and scenario details are not clearly stated.

Structuring Incentives

Structuring incentives that might more realistically confront a decisionmaker is important for scenarios that attempt to test the effectiveness of economic sanctions as a deterrent. Incentives can be structured if they are based on factors that a leader might plausibly confront in wartime. Previous RAND research has emphasized several different levels of analysis that could apply to scenarios focused on political questions, such as deterrence.[415] Drawing from that previous work and that of other experts on the causes of war, we have structured our scenarios around system-, national-, and individual-leader–related factors. To illustrate how it might work, we begin with an example as applied to China in peacetime.

System Level

At the system level, scholars have found that international trade; participation in international government organizations, such as the United Nations; and norms against war may have some

[413] DiPippo and Blanchette, 2023.

[414] DiPippo and Blanchette, 2023.

[415] Heath and Lane, 2019.

restraining effect.[416] Experts, such as realist theorists, have identified the relative stability and effectiveness of the order as a structural factor that could incentivize pacific behavior.[417]

The restraining influence of international economic dependence has been debated by scholars, and the consensus suggests that interdependence may slightly favor peace.[418] As applied to the United States and China, there has been a notable trend toward reductions in interdependence. Chinese exports to the United States declined significantly following the U.S. initiation of a trade war in 2018.[419] Even so, China's integration into the global economy remains profound, with the country having a trade dependency ratio of 38.5 percent (exports plus imports as a proportion of GDP).[420] Deeply integrated into the global economy, China maintains strong economic incentives to favor a stable international order.

Such countries as Nazi Germany and imperial Japan rejected the legitimacy of the international order and waged war to achieve their ends. But China remains a conditional supporter of the international order.[421] Even as it continues to shape intergovernmental and multilateral institutions, China has continued to uphold the authority of those institutions for managing disputes peacefully. To the extent that involvement in these entities has any restraining influence, this factor likely applies to China.

On the surface, the norm against interstate aggression appears to have been seriously weakened after Russia invaded Ukraine.[422] Since then, experts have speculated that Beijing could follow Moscow's example.[423] Still, the norm has not completely disappeared. Although the United States and Russia may be fighting each other indirectly, they have refrained from direct clashes. Moreover, China's government routinely invokes the norm against interstate war as a foreign policy principle, although it has made an important exception for Taiwan, which it regards as a renegade province.[424] Thus, the norm of direct combat between great powers arguably continues to hold, although it has weakened.

In sum, the system level of analysis suggests that, even in peacetime, factors that restrain great power war persist. Despite an increase in trade tensions with the United States and the West, China continues to face compelling economic incentives to uphold the existing order. If one accepts the balance of power theory—which argues that power imbalances cause wars and, therefore, that countries might start a war to avoid declining into a position of severe disadvantage—Chinese leaders might consider dramatic action to forestall future economic decline. But war is not the only way

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[416] Levy and Thompson, 2010.

[417] Robert Gilpin, "The Theory of Hegemonic War," *Journal of Interdisciplinary History*, Vol. 18, No. 2, Spring 1988.

[418] Håvard Hegre, John R. Oneal, and Bruce Russett, "Trade Does Promote Peace: New Simultaneous Estimates of the Reciprocal Effects of Trade and Conflict," *Journal of Peace Research*, Vol. 47, No. 6, November 2010.

[419] World Bank, "China Trade Statistics Summary 2022 Data," webpage, World Integrated Trade Solution, undated-c.

[420] World Bank, undated-c.

[421] Michael J. Mazarr, Timothy R. Heath, Astrid Stuth Cevallos, *China and the International Order*, RAND Corporation, RR-2423-OSD, 2018.

[422] Council on Foreign Relations, Center for Preventive Action, "War in Ukraine," webpage, Global Conflict Tracker, May 20, 2024.

[423] Michael McCartney, "Taiwan Issued Dire Warning About Russia-China Dual Threat," *Newsweek*, May 3, 2024.

[424] State Council Information Office, "A Global Community of Shared Future: China's Proposals and Actions," People's Republic of China, September 26, 2023.

countries have managed their eclipse. Great Britain and France, for example, chose to accommodate a superior United States in the 20th century rather than risk war. Granted, the chances of war were low to start with because all three countries had similar democratic and economic systems and had resolved their major territorial and other disputes. Moreover, in the 2020s, the norm against great power interstate war may have been shaken by the Russia-Ukraine war. However, China at least continues to claim to maintain this norm.

National Level

National-level factors include the government and society. Under Xi Jinping, China has adopted a tougher and less compromising stance on issues related to territorial and sovereignty disputes but has continued to avoid military conflict. Political authorities advocate a foreign policy that forswears military aggression and promotes negotiation as a means of resolving differences even while directing more bullying and coercive actions below the threshold of armed violence against rival claimants to disputed areas in the maritime domain, along the Indian border, and regarding Taiwan.[425] Political leaders have also consistently rejected the suggestion that war with the United States is inevitable or even desirable. Although they have refused to rule out the potential use of force against Taiwan, Chinese leaders have, in practice, tolerated the island's autonomy. There is a notable lack of any constituency in either the government or the public in favor of war with Taiwan and even less for war with the United States.[426]

Individual Level

Supreme leader Xi Jinping has steadily concentrated power in his hands since assuming power in 2012. Although Xi Jinping is a brutal autocrat, in foreign policy matters he has proven cautious regarding the use of military force. Xi may have adopted a harder line on the country's sovereignty and territorial disputes and has directed more coercive and bullying behavior against many neighbors, but he has not risked combat operations. When Chinese troops brawled with Indian troops, the Chinese government subsequently deescalated the situation.[427] Xi has stated that unification with Taiwan must be achieved and has refused to rule out a potential use of force. However, these statements do not differ significantly from similar statements made by his predecessors in the same types of venues.

More importantly, Xi has made no effort to change the government's focus on realizing the China Dream through comprehensive national development. He has not advocated a reprioritization of goals in favor of unification over economic development, for example. He also has not made the types of speeches that praise the glories of warfare and individual sacrifice for the sake of collective goals in the way Mao Zedong, founder of the People's Republic of China, routinely did.[428]

There is also no evidence that Xi believes a war to unify with Taiwan is feasible or inevitable. U.S. Central Intelligence Agency Director Bill Burns stated, "President Xi and his military leadership have

[425] State Council Information Office, 2023.

[426] Timothy R. Heath, "Is China Prepared for War? Indications and Warning of a Potential Chinese Conflict with the United States," RAND Corporation, CT-A3381-1, 2024.

[427] Jessie Yeung, "Indian and Chinese Troops Fight with Sticks and Bricks in Video," CNN, December 15, 2022.

[428] Heath, 2024.

doubts about whether they could accomplish the invasion."[429] In sum, China's supreme leader, Xi Jinping, although brutal and repressive, has shown no inclination to risk war.

Analysis

A review of the system, national, and individual levels suggests a lack of incentives that favor war. If Chinese leaders have little interest right now in risking war, U.S. sanctions to deter war are not really needed. Chinese leaders are already disincentivized to risk war.

Sanctions in this case are more likely to be useful as instruments of foreign policy for peacetime goals or to discourage Chinese competitive policies. These could include economic, human rights–related, or other policies. Indeed, the U.S. government has imposed sanctions on China for a variety of reasons, including to punish it for supporting Russia's war in Ukraine, to discourage the use of forced labor in Xinjiang, and to control technology transfers.

Chinese leaders and actors are sensitive to the effects of sanctions in some cases because the country continues to value economic growth and national development. Sanctions threaten access to the markets, technology, and resources needed to grow. Depending on their severity, sanctions could threaten key commercial actors or even the national economy. Thus, China has often responded to the threat of sanctions in the case of Iran nuclear nonproliferation.

Potential responses to sanctions are likely to include retaliation, as China did with its own controls on foreign investment in technology firms. Yet, given the country's dependence on foreign markets, technology, and resources, aggressive sanctions measures by China could prove unaffordably costly. Thus, it seems more reasonable to expect the government to pursue a strategy that mixes diplomatic efforts to reduce tensions, curtail sanctions, and dispute allegations through legal, diplomatic, and media methods. This is, in fact, the general approach Chinese authorities have taken to U.S.-imposed sanctions.

Scenario 1: The Island Grab

The disincentive to risk war will likely persist so long as the conditions described for the peacetime situation hold. However, China's willingness to risk major military conflict could change if the situation does. Because the system, national, and leadership factors are interlinked, it is likely that changes at all levels would occur as the country pivoted toward a more aggressive foreign policy. In this scenario, we explore how these changes could tilt the incentive for China to contemplate military aggression. We will consider how China might respond if the United States imposed sanctions once it realized Beijing's intentions within three to six months of a limited, punitive military action against Taiwan.

System Level

Research into the causes of war suggests that high levels of international disorder, lower levels of economic interdependence, ineffective intergovernmental institutions, and weak norms against

[429] Ivana Saric, "CIA Director: China Has Doubts Whether It Could Accomplish Invasion of Taiwan," Axios, February 26, 2023.

interstate violence could all contribute to higher risks of conflict.[430] We will modify our assumptions about these structural factors to reflect such findings.

At the system level, perhaps the most important change would be an intensification of international disorder and disruptions to the global economy. In particular, an intensification of disputes between states could contribute to a sense of disorder and weakening prohibitions against violence. A worsening of transnational dangers, such as climate change, international piracy, and other perils, could further underscore the ineffectiveness of international institutions and encourage countries to solve problems on their own. This could embolden politicians who favor a more aggressive national policy.

As part of the worsening disorder, tensions between China and Taiwan and between China and the United States could escalate further. Although the U.S. and Chinese governments each refrain from declaring hostilities against the other in our scenario, both governments treat the other as a threat and have imposed controls to limit the transfer of technologies and reduce the dangers of espionage and subversion. China's relations with Europe, Japan, and other U.S. allies have worsened as well, which renders Beijing less sensitive to potential censure from these countries.

Despite a worsening of tensions, China maintains relatively robust trade with the United States and the West. China's trade relations could vary by country, but, overall, the reductions in trade because of political and security-related tensions would be modest in this scenario. This incentivizes Chinese leaders to continue to value economic ties even as they contemplate more-aggressive measures against Taiwan and provides a countervailing argument against the Chinese elites who favor more aggressive action against Taiwan.

The norm against interstate aggression, although weakened by Russia's attack and the spread of international disorder, could still remain strong enough that Chinese leaders may hesitate to risk violating it with naked aggression. Moreover, the risks of major war with the United States, including economic collapse, social upheaval, and mass casualties—to say nothing of potentially nuclear annihilation—continue to weigh heavily on the minds of Chinese leaders.

Nation Level

The government and society have undergone important changes in response to the system-level developments. The CCP has undergone some radicalization, with a more militant and nationalist faction appearing more prominent. Criticism of the supreme leader, who could be Xi Jinping or a successor, has intensified in private and in public venues. Indeed, the leadership appears split between those favoring a continuation of comprehensive development to achieve the China Dream and those who argue that the old strategy has failed and that the situation with Taiwan has become intolerable. The autocrat may have purged some opponents, but elite opposition remains strong. Thus, a power struggle between rival factions continues.

Chinese society has become more divided as well. Although many continue to demand that the CCP focus on economic issues and, thus, increase jobs, a vocal and growing segment favors hardline policies. These voices, dominant in state media and popular culture, argue for a tough approach against Taiwan in particular.

[430] Thompson and Levy, 2010.

In general, the party-state and the public favor a tougher line on Taiwan but are divided about the risks of escalating tensions to a broader clash with Taiwan. Very few people support the idea of war with the United States, and a large segment of the populace remains concerned about how tensions with the United States could affect their livelihoods.

Individual Level

The country's supreme leader in this scenario could remain Xi Jinping or it could be a successor who shares many of Xi's inclinations. The leader routinely denounces Taiwan and criticizes the United States but also signals behind the scenes a desire to reduce tensions and get economic relations back on track if at all possible. Worried about the situation worsening and the social upheaval conflict with Taiwan could bring, the leader constantly feuds with rival elites who demand more-aggressive action. As a way to placate his opposition without provoking a larger conflict, the autocrat authorizes the military to seek courses of action that could send a powerful signal to Taiwan without starting a war.

Crisis

With this situation as a backdrop, we can consider how the Chinese leaders might respond should a crisis suddenly emerge. In our scenario, under murky circumstances, a standoff ensues between Chinese security forces and authorities on Taiwan's Kinmen Island (also known as Jinmen Island) and garrisoned Republic of China forces. Amid the crisis, U.S. intelligence learns of a planned military attack within three to six months through which the Chinese leadership intends to seize an offshore island, Kinmen, and "liberate" it through occupation. However, the leaders express concern over the situation spiraling out of control if mishandled.

The U.S. government criticizes China and announces punitive economic sanctions to forestall the attack. Among options, the U.S. government could (1) impose economic sanctions alone and with minimal military and diplomatic signaling or (2) impose multilateral economic sanctions in coordination with robust diplomatic and military signaling.

For the first option, the U.S. government could unilaterally prohibit Chinese exports to the U.S. market, which could inflict a severe blow to China's growth prospects, although potentially at a high cost to the United States. By cutting off both consumer goods and intermediate inputs, such a move could increase prices of numerous goods in the United States and precipitate a recession. The U.S. government could also restrict access to vital U.S. technologies that could have military applications. The impact of the sanctions could be significant enough to tip the balance in favor of the doves who doubt the wisdom of military aggression and worry about the consequences. However, it is just as likely that the objections of a minority dovish faction would be insufficient to change course. This is because a supreme leader who contemplated such a radical option probably had already judged U.S. opposition to be likely. Thus, sanctions would not be at all surprising. The government could announce retaliatory measures against the United States, such as a ban on U.S. exports, while proceeding with its planned military operation. Moreover, China could read the unilateral nature of the sanctions as a lack of international support for the U.S. position, which might further encourage China to pursue its military operation.

In the second option, the United States imposes a comprehensive set of sanctions in coordination with its allies and partners within the three-to-six-month window of a planned commencement of a military operation. The sanctions could include severely curtailing all trade activity and could, perhaps, even involve financial sanctions. The effect could be dramatic and could spur an economic crisis in China. The robust international response could be humiliating to China's leadership but also come as a shock. The effects could jolt even the most hawkish cabinet members, given their realization that the economic cost of seizing an island could far exceed what political benefit might be gained. In the face of a strong, unified, international response that delivered devastating economic effects, China's supreme leader would face strong incentives to back off the planned operation. He could save face by furiously denouncing the United States and ordering retaliatory measures against the United States and its allies in hopes of driving a wedge and breaking the sanctions regime. At the same time, the leader might send private emissaries to find a way to negotiate a face-saving exit from the crisis that imposes some symbolic punishment on Taiwan and easing of sanctions in exchange for a promise to refrain from military attack.

Analysis

In this environment, the structural and organizational factors have changed in a way that makes more aggressive action against Taiwan more appealing. However, the top leader still faces strong incentives not to risk major war with the United States. The divided leadership remains vulnerable to pressure from the United States. The autocrat's concern about maintaining the trajectory of economic growth and general ambivalence about the value of aggressive posturing against Taiwan provide openings for the United States and its allies and partners to deter China through economic sanctions combined with a robust diplomatic and military signaling response.

It would be a dicey proposition for the United States to impose unilateral sanctions three to six months away from the planned start of the military operation. If the faction opposing military action was powerful enough, the U.S. sanctions could be enough to tip the balance. The top leader might conclude that the potential costs of an attack might not be worth it. However, given the scenario assumptions—strained U.S.-China relations that motivate the top leader to solve the Taiwan crisis situation through invasion—the Chinese government might already anticipate unilateral sanctions, which would thus fail to prevent the military attack.

A robust multilateral sanctions package that imposes financial and trade restrictions would probably be more effective. Chinese leaders probably expect some sort of sanctions from the United States as Taiwan's security partner but would likely be surprised by widespread international support for a U.S. sanctions regime, especially given the high cost to all countries. China's response to U.S.-led multilateral sanctions could include retaliation in proportionate measures and efforts to drive wedges and break up the multilateral coalition. However, the sanctions would demonstrate a high cost in economic activity and China's international reputation if China continued on the path to war. This might be enough to convince China's top leader to seek a private, face-saving option to deescalate the situation. Although Beijing could back off the military operation, it could maintain a prolonged standoff. The crisis could persist until negotiations permit de-escalation, including responding to Chinese demands to roll back some of the U.S. sanctions.

Scenario 2: Taiwan Invasion

The second scenario modifies the factors yet again to elevate the appeal and logic of military aggression. Chinese leaders decide to pursue an invasion of Taiwan and potential war with the United States. This extreme nature of this scenario suggests a world radically different from our own. To paint a more rigorous picture of the types of incentives and factors that could motivate a Chinese leader to risk war, we modeled our scenario on previous examples of great power wars—specifically, World Wars I and II—and drew from the same social science literature on potential causes of great power wars to frame our analysis.

System Level

Key factors that elevate the risk of great power war include considerable international disorder, severe economic disruption, and the widespread disregard of international norms against interstate violence. Other structural factors that correlate with a higher risk of war include acute rivalries between coalitions of contending countries; the proliferation of intractable, bitterly contested disputes; a relentless arms buildup; the multilateralization of disputes; and the onset of a series of militarized crises. Heath, Gunness, and Finazzo outlined how these factors could collectively elevate the risk of U.S.-China war in more detail in a 2022 RAND report.[431]

A highly destabilized international order increases the uncertainty and focus on national security for all countries. Defunct or ineffective multilateral institutions could add an incentive for Chinese leaders to consider more-radical measures to achieve the nation's goals. As these contribute to international instability, conflict could break out around the world for years prior to the China-Taiwan conflict in the Middle East, Eastern Europe, or elsewhere. In the majority of the cases, aggression could appear to pay off, resulting in significant changes to international borders. In addition to fueling disorder, the successful acts of aggression could render the old norms against interstate violence largely irrelevant.

Severe economic disruption, perhaps through a global recession or even depression, could aggravate problems of international disorder. These problems could also undercut the appeal of national development strategies and, instead, embolden radical voices who disparage economic development as a dead end and argue for more aggressive measures to achieve China's goals.

Rivalries—competitive relations between two states with a history of viewing each other as profound threats—could intensify and even multiply as countries find more reasons to side with either the China or the United States against the other country. The formation of coalitions and alliances against the other side has historically correlated with a higher risk of war and this would likely happen as well.[432]

Arms buildups, the proliferation of intractable disputes, and hardening of threat perceptions would motivate both the U.S. and Chinese governments to regard each other as fundamentally hostile and untrustworthy. A similar dynamic would likely have occurred between China and Taiwan. At this

[431] Timothy R. Heath, Kristen Gunness, and Tristan Finazzo, *The Return of Great Power War: Scenarios of Systemic Conflict Between the United States and China*, RAND Corporation, RR-A830-1, 2022.

[432] John Vasquez, ed., *What Do We Know About War?* 2nd ed., Rowman and Littlefield, 2012.

point, both sides may have publicly identified the other country as an enemy. In this volatile climate, a series of militarized crises would only accelerate the momentum toward conflict.[433]

National Level

The Chinese party-state and society would likely have undergone radical changes in the lead-up to the war. Both responding to and accelerating the structural changes, a radicalized CCP would likely emerge from intense political disputes and feuding from rival factions. Eventually, moderates would be purged and removed from office and consolidation of a more militant CCP entity would occur. With regard to society, the radicalized CCP that emerged from the political struggles could carry out political mobilizations to whip up enthusiasm for war and repress those who challenged the new belligerent agenda of the government. Once the political conditions had been set, the leadership could deliberate on aggressive strategies to start a war.[434]

Individual Level

The leader who orders China to attack Taiwan would, in all likelihood, be someone other than Xi Jinping, who has shown no interest to date in risking war with the United States. Emerging from the political turmoil and infighting, the new leader would likely be in sync with the party-state group that consolidated power behind a radicalized, belligerent agenda. The leader would likely personally believe war with Taiwan and the United States would be either good or necessary and would be inclined to view any act against China as hostile and evidence of America's ill intentions.

Crisis

In this atmosphere of crisis, militant zeal, and deep fear and insecurity, the path to war would likely be paved by a series of severe, violent militarized crises. Each episode would aggravate threat perceptions, bolster the hand of radicalized elites, and spur the Chinese and U.S. militaries to step up preparations for war. Fears that war might break out would likely emerge many months and potentially years before Beijing planned an actual attack. During this time, Chinese leaders could be expected to step up measures to insulate the economy from anticipated U.S. sanctions as part of China's preparations. Any crisis that erupted between China and Taiwan could carry a high risk of escalation. Chinese leaders could also decide that they should proceed with a war to subjugate Taiwan and fight the United States, even in the absence of a serious crisis, because of their conviction that war is inevitable.

If the U.S. government learned of a Chinese planned large-scale invasion three to six months away from the planned attack, it could again consider options, including (1) unilateral sanctions and (2) multilateral sanctions complemented by robust diplomatic and military action.

Unilateral sanctions in this case would probably have little effect on China's planned attack. In a situation featuring serious economic disruption, hostile and deeply antagonistic U.S.-China ties, and a

[433] Heath, Gunness, and Finazzo, 2022.

[434] Heath, Gunness, and Finazzo, 2022.

sustained military buildup, Chinese leaders would fully expect punitive sanctions and would, therefore, have taken measures to reduce their vulnerability to financial and other sanctions.

Multilateral sanctions would probably have only a limited effect as well. A radicalized leadership, a government committed to war, and the unstable economic situation would likely desensitize the leadership to the economic costs of such an extreme act as initiating a large-scale war. The leadership already anticipates war with the United States and would likely have made preparations to mitigate the economic impact of major conflict. The leaders' response would probably be to retaliate with their own punitive economic measures while accelerating preparations for war.

Although sanctions may not do much to prevent a large-scale attack, they could degrade China's ability to sustain large-scale combat operations. Denying China access to fuel, food, and technologies could hamper the PLA's ability to continue fighting against Taiwan and the U.S. military. Beijing may have stockpiled many goods in anticipation of war, but the sheer size of the population would make it difficult to keep the public well supplied for long.

Analysis

Given the nature of these factors, the leadership would have virtually no incentive to respond favorably to sanctions. Indeed, the period of worsening tensions, radicalization of Chinese politics, and repeated militarized crises would give the leadership time to prepare for anticipated sanctions by stockpiling, building alternative financial mechanisms, and gradually reducing China's dependence on Western markets and suppliers. At most, the United States could threaten to impose sanctions to strangle or starve China's war machine once war appeared imminent.

Anticipating potential U.S. financial sanctions, China could double down on its efforts to build an alternative architecture. To discourage countries from participating in punitive sanctions, China could threaten retaliation, although, given the disruptions to the global market, it is not clear other countries would have much access to China's market.

Sanctions could be more useful as a means of degrading China's ability to sustain the war effort. China probably would have stockpiled many of these goods, but the stocks would likely deplete rapidly in the face of a robust international sanctions regime. In such a case, China's military might have to reconsider aspects of its operations, given the constraints on key supplies and resources.

Conclusion

This analysis has explored the possibility of employing economic sanctions to deter China from acts of aggression against Taiwan. Analysts have generally agreed that sanctions could be effective but have disagreed on how they should be implemented. In many cases, the disagreements stem from unspoken assumptions about the conditions under which sanctions would be applied. Because leaders initiate wars in response to incentives and other factors, it is helpful to identify these to frame any scenario-based analysis. Structural, organizational, and individual-leader levels of analysis can contribute to a leader's decision to either start or refrain from war when presented with sanctions.

We then applied these insights to two scenarios. The first depicted a China that considered aggressive action to seize an offshore island. The structural, organizational, and individual-leader factors all presented mixed incentives, leaving China potentially vulnerable to outside pressure. This

analysis suggests that, under the right conditions, sanctions could play an important role in dissuading a top leader from pursuing military aggression. In particular, a divided leadership, weak public support for military aggression, and the persistence of relatively strong trade relations with the West favor the potential applications of sanctions. Unilateral U.S. sanctions might tip the balance in a heavily divided Chinese leadership featuring a large dove faction but may not be sufficient when the doves are a small minority. In such cases, a robust sanctions regime upheld by a large multilateral coalition could be more effective in shocking China's leadership into reconsidering the potential cost of their planned military operation and, potentially, seek a face-saving means of de-escalation.

In the second scenario, the factors at all levels result in a China that is much more determined to attack Taiwan. In an atmosphere of profound international instability, China's economic ties with the West have eroded considerably. A large constituency in the public and among an elite favor aggressive military action and the leader personally champions military conquest as a virtue. Under such conditions, economic sanctions are unlikely to deter China, but they could play a role in degrading the PLA's ability to sustain combat operations.

In sum, this chapter has emphasized the importance of incentives and factors in specific situations when evaluating the potential effectiveness of economic sanctions against China. The findings presented are hypotheses that could be further refined through testing. However, in theory, it is possible to apply sanctions against China to deter aggression under certain conditions. The most-promising conditions would probably be those in which the leadership had begun to deliberate on aggressive measures but had not yet gained strong public backing and elite consensus. The conditions are more promising if the Chinese leadership continues to value economic growth and remains dependent on Western markets and supplies. Limited aggression may be more vulnerable than large-scale acts of aggression to sanctions because of the implied limited changes in China's political conditions. By contrast, a leadership that has radicalized, that has consolidated elite and public support, that faces a highly destabilized international system, and that has decreased its dependence on Western markets and supplies may be less sensitive to sanctions in the lead up to a large-scale attack on Taiwan.

Chapter 7

Modeling Economic Measures for Deterrence

When introducing a sanctions regime, the United States and its allies will hope for it to have strategic effect—to stop China from carrying out an invasion or a lesser action. Sanctions will also have economic consequences. As discussed in Chapters 1 and 2, policymakers will be strongly attuned to these economic consequences, hoping to minimize them for the countries levying sanctions and maximize them for the target, China in this case. In this chapter, we present the long-term, global economic consequences for the United States and its allies of different sanctions scenarios targeting China.

We applied a global macroeconomic model to assess the potential impacts of sanctions imposed on China and on different countries' overall economies, as measured by GDP. GDP measures total output, providing a proxy for an economy's health. In addition to GDP, we examined sector-specific output values to assess heterogeneous effects across sectors. The next section describes the methodology, including an outline of the applied economic model, the applied scenarios, and the assumptions made to model economic sanctions. The following section reports the main results consisting of the estimated effects on global and national GDP and sector-specific production values. The final section offers chapter conclusions.

The appendix provides additional information relevant to the methodology.

Methodology

We used a multiregion DCGE model to assess the global economic consequences of imposing sanctions on China. This model conceptualizes the economies of various countries as open economies connected to each other and the rest of the world through trade in intermediate and final goods and services. The model is calibrated to economic data from the Global Trade Analysis Project (GTAP) database version 11.[435] Countries are grouped into 20 regions, each comprising eight aggregated industries (agrifood, energy, light manufacturing, heavy manufacturing, chemicals, metals, electronics, and services).[436] Adamie et al. have provided a detailed description of the model.[437]

[435] GTAP, "GTAP Global Trade Analysis Project," homepage, last modified November 29, 2023.

[436] The regional aggregation based on the GTAP 11 database and the sector aggregation are outlined in the appendix.

[437] Birhanu A. Adamie, Holy T. Akwar, Montserrat Arroypto, Heather Bayko, Marco Hafner, Stella Harrison, Morgan Jeannin, Deborah King, Sohwon Kweon, Nohkyum Daniel Kyeong, Fifi Olumogba, Ishmeala Rigby, Shinae Joy Song, Erez Yerushalmi, Javier Yugueros-Marcos, and Sana Zakaria, *Forecasting the Fallout from AMR: Economic Impacts of Antimicrobial Resistance in Food-Producing Animals*, World Organization for Animal Health and World Bank, 2024.

The analytical approach started by computing the economic projections for each of the modeled countries or regions using the current underlying economic situation in conjunction with how the future populations (including the labor supply) and economic output might evolve up to 2030.[438] This represents the so-called *status quo* or *baseline scenario*, and we subsequently compared it against a series of what-if scenarios in which we changed the economic input parameters for sanctions and their effects on economic indicators, such as sectoral production or GDP analyzed.

For the purpose of this analysis, we focused solely on changes in trade between the sending and the target country. It is important to highlight that calculating the difference in an economic indicator between the baseline scenario and a what-if scenario does not represent a detailed economic forecast of the economy across both scenarios but only considers the potential economic effects associated with imposing sanctions on the target country, all else being equal. In reality, many other factors would influence the economy's performance (e.g., technological developments or fiscal and monetary policies) over time. Hence, the estimates presented in this chapter show the relative effects between the baseline without trade sanctions and the counterfactual with trade sanctions, but in all scenarios, the economies modeled are expected to grow in the long term. All values reported are in 2025 U.S. dollars.

The modeled trade shocks broadly follow the results in Syropoulos et al.,[439] which demonstrate the heterogeneous effects of unilateral and multilateral sanctions on trade and differentiate between partial and complete sanctions using the Global Sanctions Database.[440] In this database, sanctions that apply to only a small set of goods or particular trade sectors are classified as *partial sanctions*, and those that apply to all sectors are classified as *complete trade sanctions*. Table 7.1 reports the modeled trade shocks from Syropoulos et al. expressed in terms of a percentage change in bilateral trade associated with imposed sanctions between the sending and the target country. For example, the imposition of unilateral partial sanctions is associated with a 5.6-percent decline in bilateral trade. In contrast, the imposition of complete multilateral sanctions is associated with a 74.2-percent decline in bilateral trade. In the analysis, we assumed that the sanctions are imposed in 2025 and continue up to 2030 and, therefore, that the trade shocks reported in Table 7.1 will persist from 2025 to 2030.

[438] Starting from a 2017 base year, which is the reference year of GTAP 11.

[439] Syropoulos et al., 2024.

[440] Gabriel Felbermayr, Heider Kariem, Aleksandra Kirilakha, Ohyun Kwon, Constantinos Syropoulos, Erdal Yalcin, and Yoto V. Yotov, "The Global Sanctions Database (GSDB)," webpage, Hochschule Konstanz—University of Applied Sciences; Drexel University School of Economics, LeBow College of Business; and WIFO—Österreichisches Institut für Wirtschaftsforschung, 2023.

Table 7.1. Modeled Direct Trade Shocks

Sanction Type	Change in Trade (percent)
Multilateral complete	–74.2
Unilateral complete	–71.0
Multilateral partial	–20.6
Unilateral partial	–5.6

SOURCE: Features data from Syropoulos et al., 2024.

NOTE: Entries represent bilateral trade flow changes between the sanction-sending and target countries.

To model the impact of the trade shocks within the DCGE model, the trade volume effects are converted into so-called tariff-equivalent effects by dividing the volume effect with the sector-specific trade elasticity provided by GTAP 11.[441] Table 7.2 summarizes our scenarios, which vary by the country or region that imposes sanctions against China and the scope of sanctions (partial or complete). We made four fundamental assumptions for each scenario:

1. that Taiwan would mirror U.S. sanctions against China
2. that China would reciprocate the same sanctions imposed against it[442]
3. that if three or more parties impose sanctions against China, they would be considered multilateral rather than unilateral[443]
4. that the same sanctions apply to imports and exports.[444]

Note that the model is a general equilibrium model with international trade linkages. Beyond the modeled direct trade shocks, the model implicitly considers any further indirect effects through trade in intermediate goods between trade partners. For example, sanctions distorting trade between China and the ROK for intermediate goods would have ripple effects on consumers of final goods exported from Korea to the rest of the world (i.e., countries not directly affected by the sanctions).

Computable general equilibrium (CGE) models are often used to analyze the economic impact of economic sanctions.[445] CGE models can offer valuable insights by simulating changes in economic activity across different sectors, even those not directly affected by sanctions. However, they have key limitations that must be considered when interpreting findings.

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[441] As explained in Yoto V. Yotov, Roberta Piermartini, José-Antonio Monteiro, and Mario Larch, *An Advanced Guide to Trade Policy Analysis: The Structural Gravity Model*, World Trade Organization, 2016. *Trade elasticity* measures how much the quantity of trade between two countries changes in response to changes in trade costs. For example, a high trade elasticity means that countries easily switch trade partners if prices or costs change. A low trade elasticity means that countries are less likely to switch, even with cost or price changes.

[442] For example, if the UK imposes complete sanctions against China, China will respond by imposing complete sanctions against the UK.

[443] For example, if two countries impose partial sanctions against China, we assume a 5.6 percent bilateral trade reduction. If three or more countries impose partial sanctions against China, we assume a bilateral trade reduction of 20.6 percent.

[444] For example, if the United States imposes partial sanctions against China, they apply equally to U.S. exports to China and U.S. imports from China (i.e., the same trade shock as described in Table 7.1 applies).

[445] Kornel Mahlstein, Christine McDaniel, Simon Schropp, and Marinos Tsigas, "Estimating the Economic Effects of Sanctions on Russia: An Allied Trade Embargo," *World Economy*, Vol. 45, No. 11, November 2022.

First, CGE models rely heavily on the quality and granularity of the input data, such as social accounting matrices and sectoral interdependencies, as well as the parameterization of the modeled economic shocks. In the context of sanctions, using accurate data becomes especially challenging. For example, sanctions can lead to shifts in informal or black-market activities, which are almost impossible to quantify within CGE models. As a result, such models may underrepresent the true scale of economic disruptions or compensatory mechanisms that emerge outside formal economic channels. Furthermore, the analysis relies on the GTAP 11 database, which aggregates sectors and regions, potentially inhibiting the ability to capture relevant heterogeneity in economic structures, trade relationships, and policy impacts. Reliance on such aggregated data can simplify real-world complexities, particularly for nuanced sectoral or regional effects.

Table 7.2. Sanctions Scenarios

Scenario	USA	Taiwan	UK	Japan	Australia	EU 27	Canada	ROK
1	P	P						
2	C	C						
3	P	P	P	P	P			
4	C	C	P	P	P			
5	C	C	C	C	C			
6	P	P	P	P	P	P		
7	C	C	P	P	P	P		
8	C	C	C	C	C	C		
9	P	P	P	P	P		P	P
10	P	P	P	P	P	P	P	P

NOTE: P = Partial sanctions; C = Complete sanctions.

Second, although the applied model is dynamic, it still only provides an equilibrium before and after the imposition of sanctions and considers only trade effects. However, sanctions will have wider-reaching effects because sanctioned economies may adapt by tapping into illicit markets or adopting technological change or innovation, which are not captured in the modeling approach. Furthermore, CGE models struggle to adequately account for the potential behavioral responses of economic agents under sanctions. Households, firms, and governments may react by shifting preferences, engaging in evasion tactics, or prioritizing strategic industries over broader economic efficiency. These behavioral responses are not captured in CGE models, which assume that these behavioral responses stay constant over time.

Results

Tables 7.3 and 7.4 and Figures 7.1 to 7.4 report estimated real GDP effects (in 2025 dollars) in percentages and absolute values. These values account only for effects on the real economy and represent the difference in GDP between a baseline economic projection without sanctions and a counterfactual economic projection with sanctions.

The findings suggest that for China, the scenario with complete sanctions by the United States, Taiwan, the UK, Japan, Australia, and the EU 27—Scenario 8—is associated with the highest economic loss, decreasing China's GDP by more than 2.5 percent annually. This is followed by Scenario 5 (complete sanctions by the same set of countries except the EU 27), predicted to decrease China's GDP by more than 1.7 percent. This suggests that, if the EU 27 imposed complete sanctions against China, China's GDP would decrease by an additional 0.8 percentage points.

From the global perspective, Scenario 8 is also associated with the largest worldwide economic loss, reducing global annual GDP by 0.5 percent or more. This decrease is associated with a $650 billion reduction in global GDP in 2025.

For the United States, the scenario in which only the United States and Taiwan impose complete sanctions against China (Scenario 2) is associated with the largest U.S. GDP loss (an annual loss of approximately 0.5 percent). This is followed closely by the other sanctions scenarios in which the United States and Taiwan impose complete sanctions, including Scenario 4 (in which the UK, Japan, and Australia impose partial sanctions), Scenario 5 (in which the UK, Japan, and Australia impose complete sanctions), Scenario 7 (in which the UK, Japan, Australia, and EU 27 impose partial sanctions), and Scenario 8 (described earlier). Interestingly, Scenario 8 is associated with the lowest relative loss in U.S. GDP from these complete U.S. sanctions scenarios. This is likely because other larger countries or regions, including the EU 27, imposing complete sanctions would redirect trade to the United States (known as trade diversion), which would help reduce, to some extent, the economic loss associated with decreased trade with China. As with the United States, from Taiwan's perspective, all scenarios assuming complete sanctions against China are associated with larger economic losses.

Table 7.3. GDP Effects by Year and Scenario, in Percent

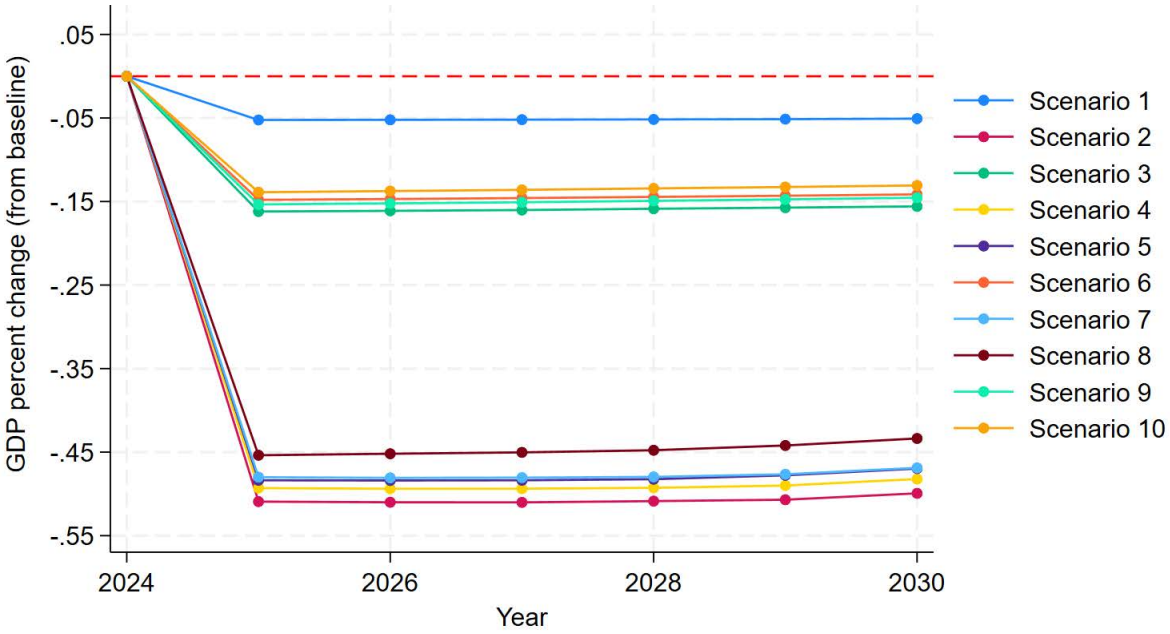
Scenario	Year	USA	China	Taiwan	UK	Australia	Japan	ROK	Canada	EU 27	ASEAN Plus	World
S1	2024	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
	2025	–0.052	–0.096	–0.285	0.016	0.007	0.010	0.019	0.041	0.013	0.026	–0.020
	2026	–0.052	–0.101	–0.307	0.014	0.005	0.007	0.014	0.040	0.011	0.021	–0.023
	2027	–0.052	–0.106	–0.329	0.012	0.003	0.005	0.010	0.039	0.009	0.016	–0.025
	2028	–0.052	–0.110	–0.350	0.010	0.001	0.002	0.005	0.038	0.007	0.011	–0.028
	2029	–0.051	–0.114	–0.372	0.008	–0.001	–0.001	0.001	0.037	0.004	0.007	–0.030
	2030	–0.051	–0.118	–0.379	0.007	–0.003	–0.003	–0.003	0.035	0.002	0.002	–0.033
S2	2024	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
	2025	–0.509	–0.941	–2.536	0.146	0.171	0.004	0.079	0.685	0.100	0.231	–0.189
	2026	–0.510	–0.995	–2.741	0.120	0.132	–0.020	0.021	0.682	0.075	0.160	–0.221
	2027	–0.510	–1.046	–2.941	0.095	0.096	–0.044	–0.033	0.678	0.050	0.094	–0.252
	2028	–0.509	–1.094	–3.137	0.072	0.069	–0.070	–0.086	0.670	0.026	0.037	–0.281
	2029	–0.507	–1.140	–3.329	0.051	0.044	–0.096	–0.136	0.663	0.003	–0.017	–0.308
	2030	–0.499	–1.179	–3.488	0.032	0.030	–0.118	–0.173	0.584	–0.019	–0.059	–0.334
S3	2024	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
	2025	–0.162	–0.608	–0.909	–0.133	–0.438	–0.386	0.107	0.152	0.066	0.186	–0.125
	2026	–0.161	–0.617	–0.980	–0.135	–0.459	–0.391	0.094	0.150	0.062	0.166	–0.133
	2027	–0.160	–0.626	–1.048	–0.136	–0.479	–0.395	0.082	0.147	0.057	0.146	–0.140
	2028	–0.159	–0.632	–1.108	–0.139	–0.494	–0.396	0.075	0.147	0.053	0.124	–0.146
	2029	–0.157	–0.639	–1.173	–0.141	–0.507	–0.400	0.064	0.145	0.049	0.106	–0.153
	2030	–0.156	–0.646	–1.223	–0.141	–0.520	–0.404	0.055	0.141	0.045	0.090	–0.159
S4	2024	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
	2025	–0.493	–1.216	–2.474	–0.043	–0.361	–0.391	0.135	0.711	0.123	0.326	–0.246
	2026	–0.494	–1.268	–2.686	–0.064	–0.388	–0.422	0.074	0.704	0.097	0.255	–0.277
	2027	–0.494	–1.312	–2.886	–0.084	–0.415	–0.446	0.021	0.700	0.074	0.187	–0.305
	2028	–0.493	–1.354	–3.080	–0.102	–0.446	–0.469	–0.028	0.692	0.052	0.125	–0.332

Scenario	Year	USA	China	Taiwan	UK	Australia	Japan	ROK	Canada	EU 27	ASEAN Plus	World
	2029	–0.490	–1.393	–3.269	–0.118	–0.469	–0.493	–0.075	0.669	0.031	0.071	–0.358
	2030	–0.482	–1.426	–3.429	–0.132	–0.483	–0.515	–0.114	0.584	0.011	0.027	–0.382
S5	2024	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
	2025	–0.484	–1.761	–2.481	–0.378	–1.226	–1.028	0.271	0.751	0.167	0.499	–0.354
	2026	–0.484	–1.799	–2.701	–0.391	–1.261	–1.064	0.211	0.745	0.145	0.425	–0.382
	2027	–0.484	–1.833	–2.914	–0.404	–1.293	–1.096	0.155	0.740	0.123	0.354	–0.408
	2028	–0.482	–1.864	–3.120	–0.414	–1.322	–1.125	0.102	0.733	0.103	0.287	–0.432
	2029	–0.478	–1.891	–3.313	–0.424	–1.346	–1.149	0.058	0.690	0.084	0.228	–0.454
	2030	–0.470	–1.911	–3.478	–0.430	–1.366	–1.168	0.021	0.608	0.067	0.181	–0.474
S6	2024	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
	2025	–0.148	–0.906	–0.912	–0.109	–0.364	–0.411	0.110	0.165	–0.119	0.251	–0.185
	2026	–0.147	–0.911	–0.991	–0.111	–0.374	–0.422	0.091	0.163	–0.126	0.230	–0.192
	2027	–0.146	–0.916	–1.067	–0.112	–0.382	–0.431	0.074	0.161	–0.131	0.211	–0.197
	2028	–0.144	–0.917	–1.134	–0.113	–0.387	–0.437	0.061	0.161	–0.135	0.189	–0.202
	2029	–0.143	–0.919	–1.206	–0.114	–0.392	–0.446	0.046	0.158	–0.139	0.171	–0.207
	2030	–0.141	–0.921	–1.262	–0.114	–0.398	–0.453	0.033	0.156	–0.142	0.154	–0.211
S7	2024	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
	2025	–0.480	–1.503	–2.448	–0.012	–0.331	–0.382	0.172	0.728	–0.050	0.393	–0.304
	2026	–0.481	–1.549	–2.658	–0.031	–0.358	–0.413	0.111	0.721	–0.074	0.321	–0.334
	2027	–0.480	–1.589	–2.860	–0.051	–0.379	–0.441	0.057	0.717	–0.097	0.253	–0.362
	2028	–0.480	–1.629	–3.059	–0.069	–0.401	–0.470	0.003	0.710	–0.119	0.189	–0.388
	2029	–0.476	–1.664	–3.249	–0.085	–0.419	–0.497	–0.045	0.682	–0.140	0.134	–0.412
	2030	–0.469	–1.692	–3.408	–0.099	–0.433	–0.519	–0.083	0.599	–0.159	0.089	–0.435
S8	2024	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
	2025	–0.454	–2.578	–2.455	–0.303	–1.171	–1.033	0.346	0.791	–0.352	0.674	–0.520
	2026	–0.452	–2.596	–2.665	–0.313	–1.202	–1.064	0.294	0.789	–0.368	0.600	–0.543
	2027	–0.450	–2.612	–2.869	–0.320	–1.231	–1.093	0.247	0.786	–0.381	0.529	–0.565
	2028	–0.448	–2.626	–3.064	–0.325	–1.256	–1.118	0.205	0.783	–0.394	0.462	–0.584

Scenario	Year	USA	China	Taiwan	UK	Australia	Japan	ROK	Canada	EU 27	ASEAN Plus	World
	2029	–0.442	–2.636	–3.247	–0.329	–1.278	–1.138	0.169	0.737	–0.408	0.403	–0.602
	2030	–0.434	–2.642	–3.408	–0.333	–1.295	–1.157	0.139	0.661	–0.421	0.355	–0.618
S9	2024	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
	2025	–0.153	–0.796	–0.897	–0.122	–0.386	–0.399	–0.785	–0.048	0.078	0.241	–0.164
	2026	–0.152	–0.801	–0.967	–0.123	–0.407	–0.403	–0.851	–0.051	0.075	0.220	–0.171
	2027	–0.151	–0.805	–1.035	–0.124	–0.427	–0.406	–0.913	–0.055	0.071	0.201	–0.178
	2028	–0.149	–0.807	–1.095	–0.126	–0.441	–0.408	–0.969	–0.056	0.069	0.180	–0.184
	2029	–0.147	–0.809	–1.157	–0.127	–0.454	–0.411	–1.023	–0.059	0.067	0.162	–0.190
	2030	–0.145	–0.812	–1.206	–0.128	–0.465	–0.415	–1.075	–0.063	0.065	0.147	–0.195
S10	2024	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
	2025	–0.139	–1.090	–0.877	–0.098	–0.344	–0.403	–0.764	–0.034	–0.105	0.304	–0.223
	2026	–0.137	–1.090	–0.954	–0.099	–0.353	–0.413	–0.834	–0.038	–0.109	0.284	–0.229
	2027	–0.136	–1.090	–1.029	–0.099	–0.362	–0.423	–0.900	–0.042	–0.113	0.265	–0.235
	2028	–0.134	–1.087	–1.095	–0.099	–0.367	–0.429	–0.958	–0.043	–0.115	0.244	–0.239
	2029	–0.133	–1.085	–1.162	–0.099	–0.372	–0.437	–1.015	–0.045	–0.117	0.226	–0.244
	2030	–0.131	–1.083	–1.216	–0.099	–0.376	–0.444	–1.069	–0.049	–0.119	0.210	–0.248

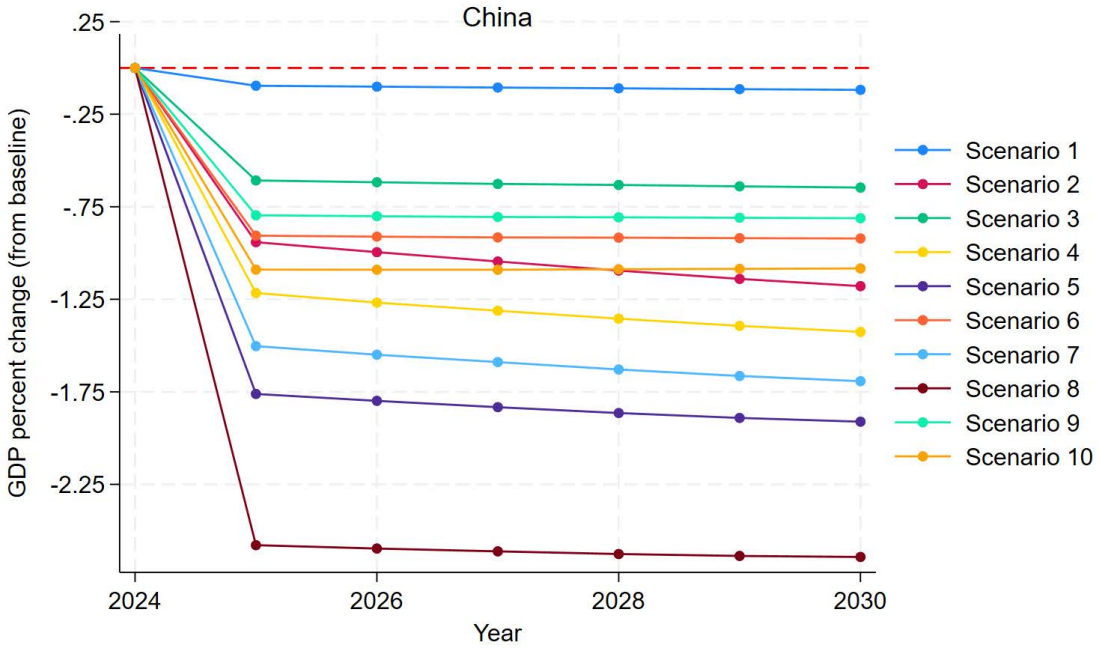
NOTE: ASEAN = Association of Southeast Asian Nations. The cell colors represent a range of economic loss (reds) to economic gain (greens), with yellow being neutral.

Figure 7.1. GDP Effects, by Year and Scenario, United States



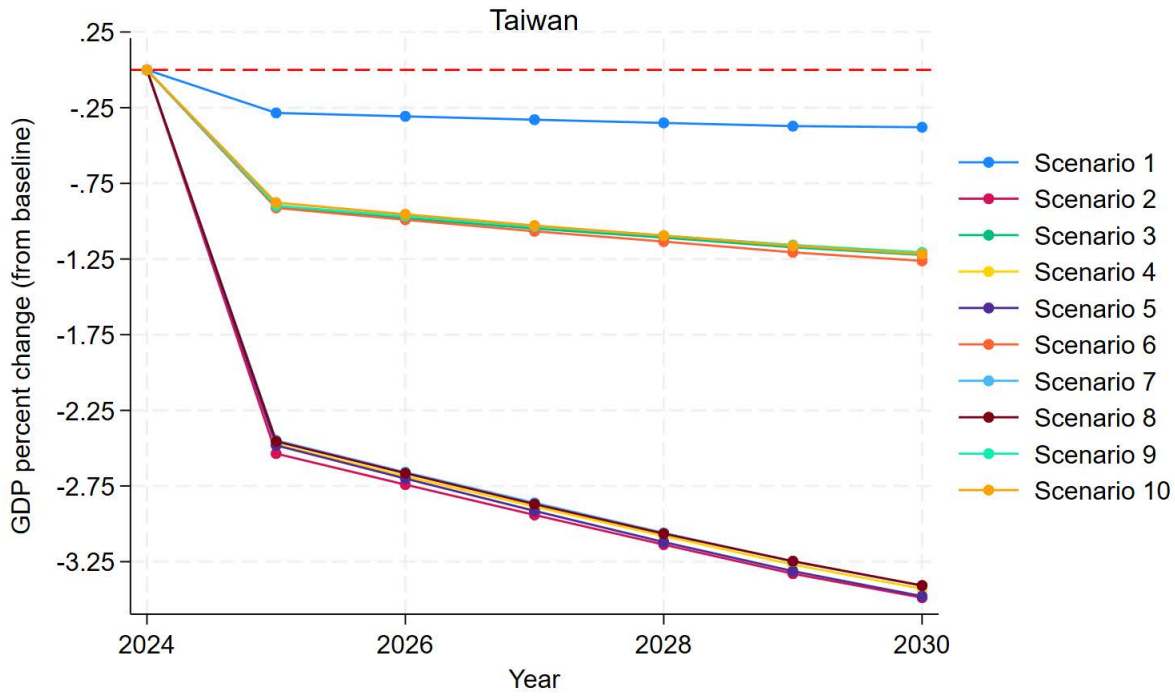
NOTE: The dashed orange line represents the baseline. Entries represent GDP difference in percent between the sanctions scenarios (1 to 10) and the baseline (no sanctions) scenario.

Figure 7.2. GDP Effects, by Year and Scenario, China



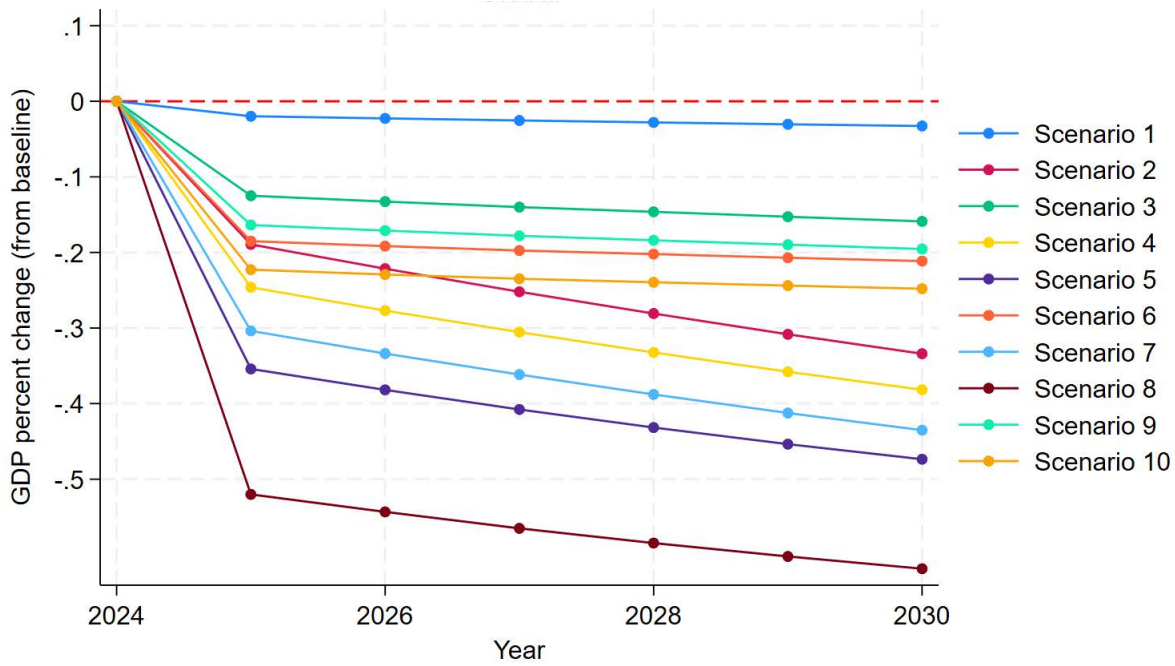
NOTE: The dashed orange line represents the baseline. Entries represent GDP difference in percent between the sanctions scenarios (1 to 10) and the baseline (no sanctions) scenario.

Figure 7.3. GDP Effects, by Year and Scenario, Taiwan



NOTE: The dashed orange line represents the baseline. Entries represent GDP difference in percent between the sanctions scenarios (1 to 10) and the baseline (no sanctions) scenario.

Figure 7.4. GDP Effects, by Year and Scenario, Global



NOTE: The dashed orange line represents the baseline. Entries represent GDP difference in percent between the sanctions scenarios (1 to 10) and the baseline (no sanctions) scenario.

Table 7.4. GDP Effects by Year and Scenario, in Billions of 2025 U.S. Dollars

Scenario	Year	USA	China	Taiwan	UK	Australia	Japan	ROK	Canada	EU 27	ASEAN Plus	World
S1	2024	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	2025	–14.9	–19.6	–2.4	0.6	0.1	0.7	0.5	1.0	2.7	1.5	–24.6
	2026	–15.1	–21.4	–2.6	0.6	0.1	0.5	0.4	1.0	2.3	1.3	–28.9
	2027	–15.3	–23.2	–2.9	0.5	0.1	0.3	0.3	1.0	1.9	1.0	–33.2
	2028	–15.5	–24.9	–3.1	0.4	0.0	0.1	0.1	1.0	1.5	0.7	–37.5
	2029	–15.6	–26.7	–3.3	0.4	0.0	–0.1	0.0	1.0	0.9	0.4	–41.8
	2030	–15.7	–28.4	–3.4	0.3	–0.1	–0.2	–0.1	0.9	0.5	0.2	–46.0
S2	2024	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	2025	–145.1	–192.4	–21.4	5.9	3.4	0.3	2.0	16.5	20.7	13.3	–236.1
	2026	–147.7	–211.1	–23.5	5.0	2.7	–1.4	0.5	16.8	15.7	9.5	–283.3
	2027	–150.3	–229.6	–25.5	4.1	2.0	–3.0	–0.9	17.0	10.7	5.8	–330.5
	2028	–152.3	–248.0	–27.6	3.2	1.5	–4.9	–2.3	17.1	5.6	2.4	–377.3
	2029	–154.4	–265.9	–29.7	2.3	1.0	–6.8	–3.7	17.3	0.6	–1.1	–424.1
	2030	–154.6	–283.2	–31.6	1.5	0.7	–8.4	–4.9	15.5	–4.2	–4.1	–470.4
S3	2024	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	2025	–46.1	–124.2	–7.7	–5.4	–8.7	–26.2	2.7	3.7	13.6	10.7	–155.8
	2026	–46.7	–130.9	–8.4	–5.6	–9.4	–26.8	2.4	3.7	12.9	9.9	–169.7
	2027	–47.2	–137.6	–9.1	–5.8	–10.0	–27.4	2.2	3.7	12.2	9.0	–183.6
	2028	–47.5	–143.2	–9.8	–6.1	–10.5	–27.7	2.0	3.8	11.5	8.0	–196.5
	2029	–47.9	–149.2	–10.5	–6.3	–11.1	–28.3	1.8	3.8	10.8	7.1	–210.1
	2030	–48.2	–155.2	–11.1	–6.5	–11.6	–28.8	1.5	3.8	10.2	6.2	–223.8
S4	2024	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	2025	-140.4	–248.6	–20.9	–1.7	–7.2	–26.5	3.4	17.1	25.4	18.7	–306.9
	2026	–143.1	–268.9	–23.0	–2.7	–7.9	–28.9	1.9	17.3	20.4	15.2	–354.2
	2027	–145.4	–288.1	–25.0	–3.6	–8.7	–30.9	0.6	17.5	15.8	11.6	–400.5
	2028	–147.6	–306.8	–27.1	–4.5	–9.5	–32.8	–0.8	17.7	11.3	8.0	–446.6

Scenario	Year	USA	China	Taiwan	UK	Australia	Japan	ROK	Canada	EU 27	ASEAN Plus	World
	2029	−149.2	−325.1	−29.2	−5.3	−10.2	−34.9	−2.1	17.4	6.9	4.7	−492.3
	2030	−149.3	−342.7	−31.1	−6.1	−10.8	−36.8	−3.2	15.5	2.4	1.8	−537.6
S5	2024	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	2025	−137.8	−360.1	−21.0	−15.4	−24.4	−69.8	6.8	18.1	34.5	28.7	−441.7
	2026	−140.2	−381.5	−23.1	−16.4	−25.7	−73.0	5.4	18.3	30.4	25.4	−488.5
	2027	−142.5	−402.5	−25.3	−17.3	−27.0	−76.0	4.0	18.6	26.2	22.0	−534.8
	2028	−144.5	−422.4	−27.5	−18.2	−28.2	−78.8	2.7	18.8	22.3	18.5	−580.0
	2029	−145.5	−441.2	−29.6	−19.0	−29.4	−81.2	1.6	18.0	18.6	15.2	−624.1
	2030	−145.4	−459.2	−31.5	−19.7	−30.5	−83.4	0.6	16.2	15.0	12.5	−667.1
S6	2024	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	2025	−42.1	−185.2	−7.7	−4.4	−7.2	−27.9	2.8	4.0	−24.6	14.4	−230.8
	2026	−42.6	−193.3	−8.5	−4.6	−7.6	−28.9	2.3	4.0	−26.4	13.8	−245.1
	2027	−42.9	−201.1	−9.3	−4.8	−8.0	−29.9	1.9	4.0	−27.9	13.1	−258.9
	2028	−43.2	−207.7	−10.0	−5.0	−8.3	−30.6	1.6	4.1	−29.2	12.1	−271.6
	2029	−43.5	−214.6	−10.8	−5.1	−8.6	−31.5	1.3	4.1	−30.5	11.4	−284.7
	2030	−43.8	−221.4	−11.4	−5.2	−8.9	−32.4	0.9	4.1	−31.8	10.7	−297.7
S7	2024	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	2025	−136.7	−307.2	−20.7	−0.5	−6.6	−26.0	4.3	17.5	−10.3	22.6	−378.9
	2026	−139.3	−328.6	−22.8	−1.3	−7.3	−28.3	2.8	17.7	−15.4	19.2	−427.1
	2027	−141.5	−349.0	−24.8	−2.2	−7.9	−30.5	1.5	18.0	−20.6	15.7	−474.2
	2028	−143.6	−369.1	−26.9	−3.0	−8.6	−32.9	0.1	18.1	−25.9	12.2	−521.1
	2029	−145.1	−388.4	−29.0	−3.8	−9.1	−35.2	−1.2	17.8	−30.9	9.0	−567.4
	2030	−145.1	−406.6	−30.9	−4.5	−9.7	−37.0	−2.3	15.9	−35.6	6.2	−612.8
S8	2024	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	2025	−129.2	−527.1	−20.8	−12.3	−23.3	−70.1	8.6	19.1	−72.6	38.7	−648.8
	2026	−130.9	−550.7	−22.8	−13.1	−24.5	−73.0	7.5	19.4	−77.1	35.8	−695.0
	2027	−132.6	−573.6	−24.9	−13.7	−25.7	−75.7	6.5	19.7	−81.2	32.8	−741.1

Scenario	Year	USA	China	Taiwan	UK	Australia	Japan	ROK	Canada	EU 27	ASEAN Plus	World
	2028	–134.1	–595.0	–27.0	–14.2	–26.8	–78.3	5.5	20.0	–85.5	29.7	–785.4
	2029	–134.6	–615.2	–29.0	–14.8	–27.9	–80.5	4.7	19.2	–90.0	26.9	–828.5
	2030	–134.3	–634.8	–30.9	–15.3	–28.9	–82.6	3.9	17.6	–94.4	24.5	–871.0
S9	2024	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	2025	–43.7	–162.8	–7.6	–5.0	–7.7	–27.1	–19.6	–1.1	16.0	13.8	–204.2
	2026	–44.1	–169.8	–8.3	–5.1	–8.3	–27.6	–21.7	–1.3	15.6	13.2	–218.8
	2027	–44.4	–176.8	–9.0	–5.3	–8.9	–28.2	–23.9	–1.4	15.2	12.5	–233.4
	2028	–44.7	–182.8	–9.6	–5.5	–9.4	–28.6	–26.0	–1.4	15.0	11.6	–247.1
	2029	–44.9	–188.8	–10.3	–5.7	–9.9	–29.1	–28.2	–1.5	14.7	10.8	–261.0
	2030	–45.0	–195.0	–10.9	–5.9	–10.4	–29.6	-30.3	–1.7	14.6	10.1	–275.2
S10	2024	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	2025	–39.5	–222.7	–7.4	–4.0	–6.8	–27.3	–19.0	–0.8	–21.6	17.5	–277.8
	2026	–39.8	–231.2	–8.2	–4.1	–7.2	–28.4	–21.3	–0.9	–22.9	16.9	–293.1
	2027	–40.0	–239.4	–8.9	–4.2	–7.5	–29.3	–23.6	–1.0	–24.0	16.4	–308.0
	2028	–40.2	–246.3	–9.6	–4.4	–7.8	–30.1	–25.7	–1.1	–24.9	15.7	–321.7
	2029	–40.4	–253.3	–10.4	–4.5	–8.1	–30.9	–27.9	–1.2	–25.8	15.1	–335.4
	2030	–40.5	–260.3	–11.0	–4.5	–8.4	–31.7	–30.2	–1.3	–26.6	14.5	–349.3

NOTE: Amounts represent billions of 2025 U.S. dollars. The cell colors represent a range of economic loss (reds) to economic gain (greens), with yellow being neutral.

Table 7.5 reports estimated changes in global production values across different sectors. Global production of electronic goods is estimated to drop substantially in all scenarios in which the United States and Taiwan impose complete sanctions against China. Scenario 8 predicts the largest decrease in production, about 14 percent in 2025, with negative production effects reducing in magnitude somewhat over time.

Table 7.5. Global Production Effects, in Percent

Sector	Scenario	2025	2026	2027	2028	2029	2030
AgriFood	1	0.00	–0.01	–0.01	–0.01	–0.01	–0.01
	2	0.03	–0.01	–0.05	–0.07	–0.11	–0.16
	3	0.09	0.07	0.07	0.02	0.00	–0.01
	4	0.24	0.18	0.10	0.05	0.00	–0.06
	5	0.55	0.49	0.44	0.38	0.31	0.24
	6	0.29	0.29	0.27	0.23	0.21	0.19
	7	0.38	0.31	0.23	0.17	0.12	0.06
	8	1.19	1.09	1.00	0.90	0.79	0.72
	9	0.11	0.11	0.11	0.07	0.05	0.03
	10	0.33	0.33	0.32	0.28	0.25	0.24
Energy	1	0.04	0.02	0.02	0.01	0.01	0.01
	2	0.84	0.78	0.72	0.63	0.55	0.39
	3	0.24	0.21	0.19	0.15	0.13	0.11
	4	0.92	0.90	0.84	0.78	0.70	0.54
	5	1.07	1.08	1.08	1.08	1.03	0.89
	6	0.61	0.63	0.63	0.62	0.62	0.61
	7	1.12	1.08	1.04	1.02	0.95	0.80
	8	1.91	1.87	1.84	1.81	1.74	1.63
	9	0.35	0.33	0.32	0.29	0.27	0.25
	10	0.66	0.67	0.68	0.68	0.68	0.68
Light manufacturing	1	–0.06	–0.06	–0.06	–0.06	–0.06	–0.07
	2	–0.50	–0.52	–0.54	–0.56	–0.58	–0.60
	3	–0.45	–0.45	–0.45	–0.45	–0.45	–0.45
	4	–0.77	–0.78	–0.79	–0.80	–0.81	–0.83
	5	–1.32	–1.32	–1.31	–1.30	–1.30	–1.30
	6	–0.82	–0.81	–0.80	–0.79	–0.78	–0.77
	7	–1.16	–1.17	–1.17	–1.17	–1.18	–1.18
	8	–2.45	–2.43	–2.42	–2.39	–2.38	–2.36
	9	–0.48	–0.48	–0.48	–0.48	–0.47	–0.46
	10	–0.87	–0.86	–0.84	–0.83	–0.82	–0.80
Heavy manufacturing	1	–0.05	–0.05	–0.06	–0.06	–0.06	–0.07
	2	–0.51	–0.56	–0.62	–0.66	–0.70	–0.74

Sector	Scenario	2025	2026	2027	2028	2029	2030
	3	–0.23	–0.24	–0.25	–0.25	–0.25	–0.25
	4	–0.58	–0.63	–0.67	–0.71	–0.74	–0.76
	5	–0.75	–0.78	–0.81	–0.83	–0.84	–0.84
	6	–0.39	–0.38	–0.38	–0.38	–0.37	–0.36
	7	–0.73	–0.76	–0.80	–0.83	–0.85	–0.86
	8	–1.22	–1.22	–1.21	–1.20	–1.19	–1.17
	9	–0.40	–0.40	–0.40	–0.41	–0.40	–0.40
	10	–0.56	–0.55	–0.54	–0.53	–0.52	–0.50
Chemicals	1	0.01	0.02	0.02	0.01	0.00	0.00
	2	–0.05	–0.06	–0.07	–0.08	–0.09	–0.07
	3	–0.13	–0.12	–0.10	–0.08	–0.06	–0.04
	4	–0.25	–0.25	–0.25	–0.23	–0.21	–0.19
	5	–0.63	–0.59	–0.57	–0.53	–0.48	–0.41
	6	–0.22	–0.20	–0.18	–0.14	–0.12	–0.08
	7	–0.25	–0.23	–0.22	–0.21	–0.18	–0.14
	8	–0.81	–0.72	–0.63	–0.54	–0.45	-–0.35
	9	–0.09	–0.06	–0.04	–0.01	0.01	0.05
	10	–0.16	–0.13	–0.10	–0.06	–0.02	0.03
Metals	1	–0.10	–0.10	–0.10	–0.11	–0.12	–0.12
	2	–1.32	–1.36	–1.38	–1.38	–1.37	–1.41
	3	–0.96	–0.93	–0.90	–0.88	–0.83	–0.78
	4	–1.99	–2.05	–2.06	–2.03	–1.99	–1.96
	5	–2.90	–2.94	–2.96	–2.96	–2.92	–2.85
	6	–1.96	–1.98	–1.97	–1.94	–1.90	–1.85
	7	–2.59	–2.58	–2.61	–2.63	–2.60	–2.55
	8	–4.67	–4.71	–4.68	–4.69	–4.68	–4.64
	9	–1.12	–1.11	–1.08	–1.05	–0.99	–0.93
	10	–2.03	–2.03	–2.01	–1.98	–1.93	–1.87
Electronics	1	–0.39	–0.38	–0.39	–0.38	–0.37	–0.37
	2	–5.58	–5.53	–5.47	–5.39	–5.33	–4.63
	3	–2.48	–2.47	–2.45	–2.20	–2.19	–2.16
	4	–6.74	–6.63	–6.38	–6.29	–6.12	–5.55
	5	–9.77	–9.66	–9.56	–9.43	–9.08	–8.49
	6	–3.28	–3.26	–3.21	–2.97	–2.94	–2.90
	7	–7.52	–7.45	–7.14	–7.04	–6.83	–6.27
	8	–13.81	–13.20	–12.66	–12.03	–11.25	–10.43
	9	–3.89	–3.89	–3.88	–3.67	–3.59	–3.57
	10	–4.70	–4.68	–4.66	–4.44	–4.36	–4.31
Services	1	0.01	0.01	0.01	0.00	0.00	0.00
	2	0.13	0.10	0.07	0.04	0.01	–0.02

Sector	Scenario	2025	2026	2027	2028	2029	2030
	3	0.09	0.08	0.08	0.07	0.06	0.05
	4	0.18	0.15	0.12	0.09	0.06	0.03
	5	0.29	0.26	0.23	0.20	0.17	0.14
	6	0.14	0.13	0.12	0.11	0.10	0.09
	7	0.23	0.19	0.16	0.13	0.10	0.07
	8	0.43	0.40	0.36	0.33	0.30	0.27
	9	0.12	0.11	0.10	0.09	0.08	0.07
	10	0.17	0.16	0.15	0.14	0.13	0.11

NOTE: The cell colors represent a range of economic loss (reds) to economic gain (greens), with yellow being neutral.

Conclusions

Economic sanctions, although theoretically a potent tool of statecraft, can generate complex and often asymmetric effects on global and national economies. The outcomes vary depending on the scope of the sanctions and the level of multilateral cooperation.

From a macroeconomic perspective, unilateral sanctions impose substantial costs on the sending state, such as the United States, which is estimated to experience a reduction in annual GDP of up to 0.5 percent in scenarios involving unilateral complete sanctions (done in cooperation with Taiwan). The United States fares worse when imposing unilateral complete sanctions (e.g., Scenario 2) because the lack of international cooperation enables China to find alternative trading opportunities with non-sanctioning states, leaving the U.S. economy to bear a disproportionate share of the economic burden. Conversely, the United States experiences its smallest relative losses under multilateral scenarios, including broad participation from its allies, such as Scenario 8. In this case, although the overall global cost is higher, the redirection of trade to and from allied nations partially offsets the negative impacts on the U.S. economy, demonstrating the value of coordinated sanctions in mitigating the potential economic harm of sanctioning China.

China experiences the highest relative economic losses under complete multilateral sanctions, with GDP declines estimated to exceed 2.5 percent annually. This reflects the compounded pressure of coordinated international efforts and the lack of alternative trading partners to offset some economic costs associated with sanctions. These findings emphasize that multilateral sanctions, although costly globally, can potentially maximize pressure on the target state.

Sectoral findings reveal heterogeneous effects, with electronics and heavy manufacturing among the most adversely affected globally. For instance, global electronics production could decline by up to 14 percent annually under complete multilateral sanctions involving the United States and its allies. These disruptions extend beyond China, illustrating the interconnectedness of global supply chains and the ripple effects on allied economies. The findings highlight the critical role of international cooperation and the design of sanctions in determining their potential efficacy: Multilateral sanctions reduce opportunities for trade diversion and alternative economic alliances for the target state.

Economic sanctions can have powerful effects on China's economy, degrading its economic growth substantially. This is important because, although the CCP under Xi Jinping is seeking new sources of legitimacy, economic growth has been a bedrock element of its claims to the right to rule China as a Marxist-Leninist party state.[446] However, the same sanctions against China have the potential to cause significant disruptions to global trade and economic stability, with varying degrees of impact across regions and sectors. Although sanctions may weaken China's economy, their effectiveness in achieving political objectives remains contingent on multilateral alignment, strategic design, and consideration of long-term global economic ramifications. For the United States, the choice of sanction design and international cooperation is crucial in balancing the economic costs with strategic objectives, as unilateral approaches amplify domestic losses, while multilateral actions help diffuse the economic burden and enhance the likelihood of success.

[446] Chris Anstey, "Xi Drops Economic Growth for 'Values-Based Legitimacy,'" Bloomberg, October 21, 2023; Ana Palacio, "China's New Social Contract," Project Syndicate, December 17, 2024.

Chapter 8

Posturing the United States for More-Effective Economic Restrictions

The United States is using a variety of economic measures to deter China from an attack on Taiwan, with policy actions that effectively started with mounting export controls in the first Trump and Biden administrations to degrade China's military capabilities over the longer term to make such an invasion more difficult. This is exactly the reasoning behind the series of export controls on advanced semiconductors and other high-technology goods related to artificial intelligence started on October 7, 2022, by the Biden administration. In describing the justifications for export controls on advanced computing items, the BIS noted that the advanced integrated circuits that were being controlled were enabling the development of enhanced data processing and analysis capabilities in China, including through artificial intelligence. The bureau noted that, specifically related to military capabilities,

> [t]hese systems are being used by the PRC for its military modernization efforts to improve the speed and accuracy of its military decision making, planning, and logistics, as well as of its autonomous military systems, such as those used for cognitive electronic warfare, radar, signals intelligence, and jamming. Furthermore, these advanced computing items and "supercomputers" are being used by the PRC to improve calculations in weapons design and testing including for WMD [weapons of mass destruction], such as nuclear weapons, hypersonics and other advanced missile systems, and to analyze battlefield effects.[447]

The policy question remains, however, whether the United States would use preemptive economic measures to forestall an attack by China on Taiwan if the United States had nearly incontrovertible evidence such an attack would occur within an ensuing three to six months, much as it had evidence in fall 2021 that Russia would attack Ukraine. This chapter reviews the findings of our analysis and, drawing on the final internal workshop of RAND associates, discusses key issues to consider and presents ideas on how to strengthen U.S. capabilities for carrying out such a preemption policy. The core findings of this research are that U.S. policymakers may well institute preemptive economic measures if they had confidence that China intended to invade Taiwan within an ensuing three to six months, even though the United States has not previously instituted such measures; that the chances of success of these measures depend heavily on the specific scenario under which they are instituted; and that allies are highly unlikely to join in such preemptive economic measures absent strong U.S.

[447] BIS, "Implementation of Additional Export Controls: Certain Advanced Computing and Semiconductor Manufacturing Items; Supercomputer and Semiconductor End Use; Entity List Modification," Interim Final Rule; Request for Comments, *Federal Register*, Vol. 87, No. 197, October 13, 2022b

pressure and leadership. The major issue remaining is how to most effectively posture the United States for that action.

The Economic Dimension of Deterring China

Deterring China from launching an attack on Taiwan is a central focus of U.S. and allied security planning. Economic measures, be they sanctions, export controls, or other restrictions, are coming to play a role in this effort. If war were to be expected within an ensuing three to six months, it is possible they would be instituted preemptively in a large-scale fashion that has generally been reserved as a response to an event, such as Russia's 2022 full-scale invasion of Ukraine. In planning for such a possibility, such issues as timing, effectiveness, parties instituting them, and desirability of use will all play a role in their success.

Countries instituting economic measures have a broad arsenal, including financial restrictions, trade bans, travel limitations, and other economic pressure tactics. Although sanctions can impose substantial economic costs on the target state, their success in achieving political objectives remains inconsistent. The effectiveness of economic sanctions depends on a complex interplay of factors, including the target state's political structure, the design of the sanctions, and the level of international coordination. Beyond their effectiveness at achieving a wide variety of political objectives, sanctions have proved to be of doubtful effectiveness in achieving the specific political objective of preventing war. In some instances, the threat of economic sanctions appears to have deterred aggression—but against smaller states.

China presents a particularly challenging case because of its size, the way its economy is intertwined with the global economy, and the fact that China expects sanctions and likely would have prepared to mitigate them. China's size and its ability to prepare also mean that the specific circumstances of the scenario have consequences for whether economic restrictions should be attempted or will succeed. If the intention to initiate a military attack on Taiwan within an ensuing three to six months became clear to Taiwan's supporters, prospects for successful deterrence would be highest if the contemplated course of action was limited and punitive, if the Chinese leadership and public were divided, if the Chinese government still valued economic growth, and if the sanctioning coalition was large. However, if Chinese leaders intended to launch a large-scale attack to subdue Taiwan with the Chinese leadership and public united and cognizant of the likely economic costs, sanctions could hamper the military operation but would have little effect in halting the attack. In this case, sanctions can still be useful for degrading China's ability to sustain military operations by denying China access to vital resources, components, and markets.

Despite these complications, two broad issues argue in favor of instituting an economic restrictions regime and raising the chances of its success. First, China is vulnerable to pressure given its heavy internal debt, aging population, declining labor force, and dependence on export markets to maintain economic growth and employment. Second, the United States has enormous economic power, which would be magnified by acting in concert with allies.

The United States and Its Allies in the Lead

Should a Taiwan contingency occur and should Western powers decide they need to act to deter China, we suggest that it is likely that the core group of countries that would counter China would be the United States; Australia and Japan, given their Pacific security interests and their close relationship with the United States; and the UK, given its historic relationship with the United States and its historic role as a global security leader. Other countries and groupings of countries, such as the EU, might join the effort but would be unlikely to do so without the leadership of the United States and its allies.

The United States has one of the most, if not the most, well-articulated legal regimes on economic restrictions. It also has the most power when it comes to exercising these restrictions. It has the largest economy in the world and is the largest purchaser of goods imports, making other countries, especially China, dependent on open U.S. markets to keep their economic activity on track. At the same time, trade is much less important to the United States than it is to other major economies, as measured by trade value relative to GDP, insulating the United States from international disruptions.

Although the United States has generally exercised the power of economic restrictions after the fact, there have been anticipatory measures, such as the series of semiconductor export controls started in 2022 aimed to slow China's military modernization. If it were well-supported that China was to embark on an invasion of Taiwan, it is possible, but not certain, that the United States would institute preemptive sanctions. At issue would be confidence in the information related to China's actions and the effectiveness or consequences of instituting sanctions. It is also likely that the United States would look to its closest allies to join it, offering incentives or using considerable pressure to get them to do so.

Australia would aim to support the United States but might be reluctant to institute economic measures that would also result in retaliation, damaging its own economy, which is tightly linked to that of China. Instead, Australia would look to contribute to deterrence in other ways, such as through intelligence-sharing. If economic measures were to be instituted, Australia would favor measures that were more symbolic, such that they would not permanently rupture the foundations of the Australia-China economic relationship. However, if the threat from China were believed to be existential to Australia, if Australia's immediate security interests were significantly and irreversibly threatened, or if there was significant pressure from the United States, Australia could issue strong preemptive measures.

Japan has been developing economic statecraft institutions, authorities, and a policy framework. It has the technical ability to impose a variety of sanctions on China within a relatively short time, but a political decision to do so would be difficult because of Japan's interdependent economic relationship with China, including the presence of Japanese businesses and citizens in China. In making any decisions, Japan would weigh the potential effectiveness of the proposed economic measures, the likelihood of Chinese retaliation, the safety of Japanese nationals and assets in China, and pressure from the international community. Japan may be open to steps that pressure the Chinese economy, such as large-scale trade or financial sanctions, at the risk of retaliation if there were a strong consensus among like-minded countries and if there were pressure for Japan to cooperate, particularly from the United States.

Finally, the UK may join a U.S.-led coalition to institute preemptive economic actions to deter China, but the UK's ambiguous stance on Taiwan makes this uncertain. It is not clear whether the UK views Taiwan as a country worth saving and, if so, under what circumstances. Should the UK decide to institute economic restrictions, no option would be off the table, but it would seek to do so multilaterally, matching the type and severity of its allies. However, the UK would likely act if there were a strong consensus and pressure from its allies, particularly the United States.

Economic Consequences

Although the strategic effects of economic restraints are uncertain, the economic effects are not. Even if these economic effects do not drive short-term military or political decisions, they can and do have longer-term consequences. We modeled different levels of sanctions applied by different groups of countries to better understand economic consequences for both China—the target—and the sanctioning countries, which will also be affected because they are economically interconnected with China.

Unilateral sanctions impose substantial costs on the sending state. In the specific case of our modeling exercise, we always have the United States and Taiwan acting together. When only they institute complete sanctions against China, China experiences a reduction of GDP of about 1 percent, but the United States experiences a reduction of annual GDP of about 0.5 percent. GDP declines decrease for the United States when other countries join.

China experiences the highest relative economic losses under complete multilateral sanctions, with GDP declines estimated to exceed 2.5 percent annually. This reflects the compounded pressure of coordinated international efforts and the lack of alternative trading partners to offset some economic costs associated with sanctions. EU participation has particularly negative effects on China and has modest positive effects on the United States, presumably because it cuts off a major market for China and increases trade with the United States. These findings emphasize that multilateral sanctions, although costly globally, can maximize economic pressure.

Planning for the Exercise of Economic Measures

The research findings from this project suggest issues to consider and pathways on which to proceed for the United States and its allies to use economic measures to preemptively restrain China from aggressive actions.

Preconditions

The preconditions under which the United States exercises economic measures to forestall aggressive action by China have a bearing on the success of the restraints. Without specific details, it is difficult to decide whether the use of economic measures would be appropriate or would have the desired effect.

The most important variable is whether China has made a final decision that the economic pain of sanctions and war is bearable for its geostrategic goal. Economic measures to deter an attack will be

more effective if Chinese leadership views positive economic performance and employment generation as essential to social stability and the maintenance of CCP rule.

China will also likely build stockpiles of a variety of goods in anticipation of hostile economic measures were it intent on conducting an invasion of Taiwan. The extent of these stockpiles will be an important precondition in evaluating whether to take action. This also means that the United States and its allies and partners will need to ensure that they have visibility, by whatever means necessary, into China's arrangements for resilience before potential aggressive action.

Economic and Noneconomic Actions and Targets

The United States has a wide array of economic actions from which to choose, including trade bans, export controls, and financial measures. Of these, financial measures have the most power because the United States is the dominant financial power in the world. In addition, financial measures would be most effective as they perform multiple functions, impairing trade, investment, and even freedom of action by elites who may have influence over Chinese decisionmaking.

These measures can be directed at different targets. Analysts have tended to focus on three groups of potential targets for sanctions: China's financial sector, individuals associated with the CCP and the PLA, and industrial companies in sectors relevant to China's defense industrial base. Sanctions that target China's financial sector are widely viewed as potentially the most disruptive.

Restraints on trade in goods should not be off the table, however, for a challenge as important as forestalling a Chinese invasion. Even if it has built stockpiles, China cannot have stockpiled everything, and blocking exports of consumables to China will have consequences for the Chinese population and could erode popular support for a war.

Allies and Partners

Acting alone, the United States can cause negative consequences for China's economy. In 2023, U.S. GDP constituted 26 percent of world GDP at market rates, compared with 17 percent for China. However, U.S. allies and partners, broadly defined, constituted almost 60 percent of global economic activity when measured at market rates, suggesting an enormous ability to influence the economies of other countries.[448] For China, which has made a bet on supporting manufacturing and exporting to spur its economic growth, access to these markets is essential. In 2023, the United States

[448] Under a broad definition of U.S. allies, partners, and like-minded countries, the United States and these countries constituted 59 percent of global GDP in 2023. This set of countries includes all U.S. treaty allies (North Atlantic Treaty Organization, Australia, Korea, Japan, Philippines), and all members of the EU, the European Economic Area, and the European Single Market (World Bank, "World Development Indicators," webpage, World Integrated Trade Solution, last updated April 15, 2025, variable "GDP [current US$]," series code "NY.GDP.MKTP.CD").

absorbed about 14 percent of China's goods exports.[449] But the G7 countries combined absorbed more than twice that share—34 percent.[450]

The United States with its allies and partners are not only major markets but are the technological and financial leaders. In the fourth quarter of 2024, the U.S. dollar constituted almost 54 percent of global sovereign reserves.[451] Including the currencies of U.S. alliance partners the UK, Canada, Australia, and Japan raised that share to 68 percent, and including the EU, which includes many U.S. alliance partners, raised that total to 86 percent, suggesting considerable economic power.

U.S. Vulnerabilities

When considering economic measures to restrain China, it is important to remember that China will certainly select its own measures to hamper the U.S. economy. The costs will need to be accounted for in any policy formulation. Vulnerabilities created by the fact that China is a leading manufacturing supplier to the world and that its products are embedded as inputs in U.S. defense articles is a problem with which the United States has been wrestling.[452]

Semiconductors are particularly important, with Taiwan dominating the production of the most-advanced semiconductors and China a major producer of less-advanced, but still important semiconductors. Retaliation by blocking the supply of semiconductors from Taiwan to the rest of the world could set back U.S. artificial intelligence development efforts, with the United States able to continue its development efforts for anywhere from four to ten months before feeling the effects.[453] U.S. allies are likely to feel greater negative effects because they are more exposed to trade with China than is the United States.

China's Vulnerabilities

Perhaps the biggest unknown in gauging the effectiveness of preemptive sanctions is the extent to which China is prepared for them. For China, economic security is tightly bound to national security.[454] Bit by bit, China has been building what one analyst has called a "fortress economy,"

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[449] Trade data downloaded April 17, 2025, and April 20, 2025, from United Nations, "UN Comtrade Database," homepage, undated.

[450] The G7 countries are the United States, Japan, Germany, Italy, France, the UK, and Canada. The EU (which includes Germany, Italy, and France) is included in the G7 as a non-enumerated member. Were its imports to be included the calculation, the total share would be well above 34 percent.

[451] IMF, "Currency Composition of Official Foreign Exchange Reserves (COFER)," IMF Data, last updated March 31, 2025. Data downloaded April 20, 2025.

[452] DoD, *Securing Defense-Critical Supply Chains: An Action Plan Developed in Response to President Biden's Executive Order 14017*, February 2022. For example, in addressing the supply chain for lithium batteries, DoD notes on p. 19 that "[e]ven materials and components manufactured domestically often have reliance on China-produced precursors or are fragile suppliers and single point failures within the supply chain."

[453] We thank RAND researcher Lennart Heim for discussing this issue with us, although the conclusions are those of the authors.

[454] Timothy R. Heath, "China's Economic Security: A Key Driver of Competition with the United States," in Howard J. Shatz and Daniel Egel, eds., *U.S.-China Economic Competition: Gains and Risks in a Complex Economic and Geopolitical Relationship*, RAND Corporation, RR-A1947-1, 2025.

focusing on food security, energy independence, and supply-chain security.[455] This was most pronounced in the 14th Five-Year Plan, released in 2021, which "strongly incorporated self-sufficiency as a national economic security strategy."[456]

China is building resilience not only in the real economy but also in the financial economy. Chinese policymakers appear to know that the dominance of the dollar presents a major vulnerability in terms of economic measures against China but also appear to know that they cannot displace it without major reforms to their economic system, specifically fully opening up their capital markets so that capital can flow freely in and out of the country. Accordingly, China has been focusing on increasing the use of the RMB for trade payments so that if the United States were to place financial sanctions on China, China could continue to trade with most of its partners.[457] The Chinese leadership has also strengthened its control over the financial system and, in general, has honored U.S. sanctions and economic measures to avoid inviting financial sanctions. China has also both diversified and hidden its foreign exchange reserves to reduce its vulnerability.[458]

Still, it is not clear how effective these measures are or whether there are other vulnerabilities that China will find difficult to mitigate. For example, in 2024, the share of China's cross-border transactions settled in RMB was more than 50 percent for the first time.[459] In addition, according to available data, the RMB's share of global payments almost doubled between November 2014 and March 2025. But in share terms, the rise has been from 2.07 percent to only 4.13 percent of the global total, with the latter mark a retreat from earlier highs.[460] In addition, much of the use of RMB in cross-border payments can be attributed to flows between Hong Kong and mainland China, suggesting that, at least as of late 2023, the dollar accounted for the largest share of Chinese trade payments outside China.[461]

And then there is export dependence. For much of this century, China's growth model has centered on overinvestment in real estate and infrastructure. In 2020, China shifted its industrial policy—essentially large-scale subsidization—to manufacturing and industrial production.[462] Because China's consumption levels are low relative to its production levels, this also means an emphasis on exports of goods. The result has been an enormous manufactured goods trade surplus, which other

[455] Jimmy Goodrich, "China's Evolving Fortress Economy," Institute on Global Conflict and Cooperation, University of California, 2024.

[456] Goodrich, 2024, p. 9.

[457] Eyck Freymann and Calvin Heng, "The Logic of Partial RMB Internationalization: PRC Perspectives on 'Financial War,'" *China Quarterly*, June 2025.

[458] For the various policies China has instituted to build resilience to financial measures, see Freymann and Heng, 2025, pp. 11–13.

[459] Freymann and Heng, 2025, p. 12.

[460] SWIFT, "Archive of the RMB Tracker from 2014 to 2023," spreadsheet, April 6, 2024; SWIFT, "RMB Tracker: Monthly Reporting and Statistics on Renminbi (RMB) Progress Towards Becoming an International Currency," April 2025.

[461] Greene, 2024.

[462] Joe Cash and Christoph Steitz, "China's Growth Model Pushes Beijing into More Trade Conflicts," Reuters, January 29, 2024; Evelyn Cheng, "China Doubles Down on Manufacturing, Leaving Real Estate Behind," CNBC, March 8, 2024; Michael Pettis, "The Relationship Between Chinese Debt and China's Trade Surplus," Carnegie Endowment for International Peace, February 6, 2025.

countries have started to view as a threat to their own manufacturing sectors and are becoming increasingly reluctant to absorb.[463]

In 2023, China exported almost $3.4 trillion worth of goods and had a goods trade surplus of $823 billion. China's goods exports constituted about 15 percent of global goods exports, but its imports constituted only about 11 percent of global goods imports. Of China's exports, more than 14 percent went to the United States. Germany, the next highest recipient, absorbed 5.5 percent, and Japan absorbed 5.4 percent. The share going to the United States likely was higher because of transshipment through other countries and the use of Chinese inputs by other countries. Should the United States dramatically cut its imports of Chinese goods, it will be difficult for other countries to absorb this trade, leaving China with the options of either cutting production (and, with it, employment) or building unsold inventories. This gives the United States—and if it were to act together with major allies and partners—leverage over China.[464]

Posturing the United States for Effective Economic Actions

The United States has assembled an enormous array of economic measures it can deploy to influence the actions of other countries. According to Edward Fishman, "America's economic arsenal has demonstrated that it can inflict tremendous damage, but it has not proven that it can reliably advance U.S. strategic goals."[465] Thus, whether these measures can be used to hold China back from aggressive action toward Taiwan remains an open question.

There are several steps the United States should take to better prepare for the use of preemptive economic restraints. These steps will also be useful for any use, not just preemptive.

Institutional Capacity

The most significant gap that our research findings and our final workshop suggested is underdeveloped institutional capacity within the U.S. government to correctly gauge the likely consequences of economic measures and, therefore, to select those that will be most effective at delivering strategic effects while minimizing the costs to the United States and allied governments. Developing this capacity will involve issues of personnel, modeling, and learning from experience.

In terms of personnel, filling the gap will benefit from bringing onboard new government officials with expertise in the Chinese and global economies to enhance existing capabilities and personnel with experience in modeling the consequences of trade, financial, or other measures. In terms of modeling, the example in this report shows one method to investigate secondary and tertiary effects of sanctions and other restrictive measures. More-advanced models that work at a more detailed industry level and

[463] Brad W. Setser, Michael Weilandt, and Volkmar Bauer, "China's Record Manufacturing Surplus," Council on Foreign Relations, March 10, 2024; Mark Dittli, "The World Is Not Willing to Absorb the Overproduction Coming Out of China," The Market, July 25, 2024.

[464] Trade data downloaded April 17, 2025, and April 20, 2025, from United Nations, undated. Figures cited might not match other sources because some country data are incomplete. Furthermore, in some cases, national figures for imports from China were missing, so we used Chinese figures for exports to those countries.

[465] Edward Fishman, *Chokepoints: American Power in the Age of Economic Warfare*, Portfolio/Penguin, 2025, p. 8.

that can differentiate more finely between different economic measures can and should be developed. In terms of learning from experience, the trade policy changes, sanctions, and export controls instituted since 2017—and the responses from China, Russia, Iran, and other targets—have revealed a wealth of information about U.S. and foreign vulnerabilities, stress tested the U.S. economy, and served to encourage private-sector companies to adjust their supply chains to take account of the risk of future disruptions, making them and the U.S. economy more resilient to those disruptions.[466] A catalog of these policy measures and their effects can serve as a guide to future policymaking.

Coordination and Planning

Another gap that our research findings and final workshop suggested is the need for greater coordination among agencies so that the economic measures work together and are timed to be rolled out for maximum effect. This may involve an economic measure coordinating committee or council made up of the principals of national security and economic agencies with a dedicated staff. Economic contingency plans should also be developed in advance. Mitigation measures in contingency plans will need take into account that any war with China is likely to have negative economic consequences, although the magnitude of such consequences is uncertain.[467]

Accordingly, contingency plans need to cover both actions to take regarding China and mitigation measures for the U.S. and allied economies. Creating such plans will enhance the ability of the United States to take effective action in a timely manner. Noting their existence can also serve to signal convincingly to China that there would be serious consequences were China to proceed against Taiwan.[468]

It is important to note that, as of the 2020s, the United States had one potential sizable disadvantage regarding mitigation measures. A war is likely to shock financial markets initially and require intervention by the Federal Reserve; damage to the economy is also likely to require economic stimulus. However, federal debt held by the public hit 97.8 percent of GDP in 2024, the highest level since 1946, and the Congressional Budget Office has projected that it will keep rising.[469] Although the ability of the United States to issue debt has, so far, not been a challenge, if markets were to lose a

[466] Although U.S. dependence on China for processed rare earth elements has been a known vulnerability, China's export ban of seven such elements on April 4, 2025, served to illustrate the speed with which consequences can happen (for information about the ban and the known vulnerability, see Gracelin Baskaran and Meredith Schwartz, "The Consequences of China's New Rare Earths Export Restrictions," Center for Strategic and International Studies, April 14, 2025). In early May, Ford suspended production for one week at a plant in Chicago that produces Ford Explorers, among other vehicles, because of a shortage of inputs induced by the export ban on rare earths (Jenna Baer, "Ford Pauses Production at Chicago Plant," Argus Media, September 5, 2025; Keith Naughton and Matthew Miller, "Ford CEO Says Rare Earth Supply Is 'Day to Day' After Plant Halt," Bloomberg, June 13, 2025). Notably, the fact that the shutdown was for a week only and was during the export ban suggests that the company was able to find workarounds, at least to some extent.

[467] For an upper-bound estimate, see Jennifer Welch, Jenny Leonard, Maeva Cousin, Gerard DiPippo, and Tom Orlik, "Xi, Biden and the $10 Trillion Cost of War over Taiwan," Bloomberg, January 8, 2024.

[468] Such planning has started to take place outside the government. See, in particular, Hugo Bromley and Eyck Freymann, *On Day One: An Economic Contingency Plan for a Taiwan Crisis*, Hoover Institution, July 2024. We do not have insight into this type of planning within the U.S. government or among the U.S. government and allied governments.

[469] Congressional Budget Office, *The Long-Term Budget Outlook: 2025–2055*, March 2025. The data for debt from 1940 to 2024 are in the data file 61187-LTBO-data.xlsx. The data for debt through 2055 are in the supplementary data file 51119-2025-03-LTBO-budget.xlsx.

degree of faith in the country's ability to pay back its debt, the markets might demand higher interest rates, and any debt-fueled economic stimulus could prove far more costly than previous debt issuances. Therefore, preparations for mitigating the consequences of a contingency should also include improving the U.S. fiscal stance, whether by reducing federal spending, increasing taxes, speeding up economic growth, or all three.

Involving the Private Sector

Coordination and contingency planning will need to move beyond the government. Private businesses do not always act as governments wish them to, and markets adjust to keep goods and services flowing as best they can. Some of these effects can be captured in the enhanced modeling and simulation that needs to be added to the U.S. arsenal, but direct communication and coordination with major private-sector players is also needed. The United States already does this in peacetime through the U.S. Trade Representative's Advisory Committee system and BIS's Technical Advisory Committees.[470]

Within the bounds of not revealing national security strategy, a dialogue with the private sector regarding what actions the government plans to take, how the private sector will adjust, and what government actions might be most effective at lowest cost could pay dividends in two ways. First, it could provide valuable information for more-effective contingency planning, covering both offensive actions and mitigation measures. Second, having the private sector at the table is likely to get greater buy-in from major companies, increase their level of cooperation, and even to lead them to build their own contingency plans and prepare for sanctions, making U.S. and allied preemptive economic restraints more effective than otherwise.

Allies and Partners

For maximum effectiveness, allies and partners will need to be onboard. As the research findings for this project suggest, a combination of positive and negative inducements will be necessary to motivate allies and partners to join the United States in pressuring China. Allies and partners will need to see that the costs incurred by instituting economic measures (or the costs of *not* instituting economic measures if the United States uses pressure) will be outweighed by the benefits of restraining China from aggressive activity and, presumably, safeguarding the open international economy and a free and open Indo-Pacific.

Congress and the Public

Not only allies and partners, but Congress and the American public will need to be convinced that instituting economic measures against China is worth it. Congress has the ability to degrade economic measures if they were politically costly but can also convincingly institute deep and effective measures,

[470] U.S. Trade Representative, "Advisory Committees," webpage, undated; BIS, "Technical Advisory Committees (TAC)," webpage, 2020.

presenting the United States as unified politically, as it has with legislation against Syria, Russia, Iran, and North Korea.[471] And because economic actions against China, the world's second-largest economy, are likely to cause economic disruptions in the United States, the American public will need to understand why it is being asked to make economic sacrifices.

Steps for Instituting Economic Measures

Summing up the preceding discussion, the United States will benefit from preparing for the possibility of instituting preemptive sanctions in a China contingency from the following steps. In advance of any contingency:

- Build institutional capacity to model the consequences of proposed actions and to gather lessons learned from the more aggressive use of economic instruments since 2017.
- Improve coordination and develop contingency plans that contain both offensive measures and mitigation measures.
- In coordination efforts, establish links to the private sector, develop joint plans with allies and partners, and keep key congressional committees informed of developments.
- Develop a communication plan to maintain public support.

When the crisis seems likely within an ensuing three to six months, actual actions should stem from a detailed contingency plan, but one set of actions may proceed along this outline:

- Establish whether preemptive economic measures are likely to have any strategic effect on China's planned actions.
- If so, signal to China that sanctions and other economic restraints will be instituted preemptively.
- If China's plans proceed, institute financial sanctions, especially targeting China's major banks—those most exposed to the dollar economy—and China's Cross-Border Interbank Payment System or any other mechanisms that allow China to make cross-border payments.
- Institute export controls on goods that are important to China's military sustainment and to any occupation of Taiwan it may attempt.
- Ensure allied participation, using positive or negative inducements as necessary.

Beyond Economic Measures

Even with these steps, there is agreement that sanctions alone are unlikely to deter. Rather, a combination of tools would be most effective. Beyond sanctions, these would include assembling a diplomatic coalition to stand against the potential aggression, use of international law and international forums to demonstrate that the aggression will have a variety of negative consequences for China, and strong, unified messaging. Most important, visible and credible military preparations

[471] See, for example, the Caesar Syria Civilian Protection Act of 2019 (Title LXXIV of Pub. L. 116-92, 2019) and Pub. L. 115-44, 2017.

should be taken to demonstrate that China would be in for a difficult fight to prevent it from achieving its goal or to destabilize it even if it were to achieve the conquest of Taiwan.

Consequently, the effective use of economic measures will involve not just technical aspects—estimates of how such measures will affect China's economy and national security decisionmaking—but will also involve a political dimension and require a convincing explanation for the public, allies, and even China to enhance the probability these measures will be effective at forestalling aggressive action against Taiwan. The measures will also need to involve synchronization with noneconomic tools, arguing for the development of a broad institutional capacity to evaluate not only economic measures but how they can work in concert with diplomatic, information, and military measures to help the United States and its allies achieve their strategic objectives.

Appendix

Regional and Sectorial Aggregation in the Macroeconomic Model to Analyze Sanctions

The DCGE model used for Chapter 7 has more than 145 countries, economies, and country groups. To ease interpretation and make model runs more tractable, we grouped these into 20 countries and regions, as shown in Table A.1. In addition, the model has more than 60 different sectors. We grouped these into eight sectors, as shown in Table A.2.

Table A.1. Regional Aggregation

Region	Countries or GTAP Regions
ASEAN Plus	Hong Kong, Mongolia, Brunei, Cambodia, Indonesia, Laos, Malaysia, Philippines, Singapore, Thailand, Vietnam, rest of East Asia, rest of Southeast Asia
Australia	Australia
Brazil	Brazil
Canada	Canada
China	China
EU-25	EU 27 without France and Germany
France	France
Germany	Germany
India	India
Japan	Japan
Mexico	Mexico
Middle East and North Africa	Bahrain, Iran, Iraq, Israel, Jordan, Kuwait, Lebanon, Oman, Palestinian Territories, Qatar, Saudi Arabia, Syria, United Arab Emirates, Algeria, Egypt, Morocco, Tunisia, rest of Western Asia, rest of North Africa
Republic of Korea	Republic of Korea
Rest of Europe and Eurasia	Switzerland, Norway, Albania, Serbia, Belarus, Russian Federation, Ukraine, Kazakhstan, Kyrgyzstan, Tajikistan, Uzbekistan, Armenia, Azerbaijan, Georgia, Turkey, rest of Eastern Europe, rest of Europe, rest of European Free Trade Area
Rest of Latin America and the Caribbean	Argentina, Bolivia, Chile, Colombia, Ecuador, Paraguay, Peru, Uruguay, Venezuela, Costa Rica, Guatemala, Honduras, Nicaragua, Panama, El Salvador, rest of Central America, Dominican Republic, Haiti, Jamaica, Puerto Rico, Trinidad and Tobago, rest of Caribbean, rest of South America

Region	Countries or GTAP Regions
Sub-Saharan Africa	Benin, Burkina Faso, Cameroon, Côte d'Ivoire, Ghana, Guinea, Mali, Niger, Nigeria, Senegal, Togo, rest of Western Africa, Central African Republic, Chad, Congo, Democratic Republic of the Congo, Equatorial Guinea, Gabon, south-central Africa, Comoros. Ethiopia, Kenya, Madagascar, Malawi, Mauritius, Mozambique, Rwanda, Sudan, United Republic of Tanzania, Uganda, Zambia, Zimbabwe, rest of Eastern Africa, Botswana, Eswatini, Namibia, South Africa, rest of Southern African Customs Union
Taiwan	Taiwan
UK	UK
USA	United States of America
Rest of the world	All countries not listed

Table A.2. Sectorial Aggregation

Sector	GTAP Code	Description
AgriFood	pdr	Rice: seed, paddy (not husked)
	wht	Wheat: seed, other
	gro	Other Grains: maize (corn), sorghum, barley, rye, oats, millets, other cereals
	v_f	Veg & Fruit: vegetables, fruit and nuts, edible roots and tubers, pulses
	osd	Oil Seeds: oil seeds and oleaginous fruit
	c_b	Cane & Beet: sugar crops
	pfb	Fibres crops
	ocr	Other Crops: stimulants; spice and aromatic crops; forage products; plants and parts of plants used primarily in perfumery, pharmacy, or for insecticidal, fungicidal or similar purposes; beet seeds (excluding sugar beet seeds) and seeds of forage plants; natural rubber in primary forms or in plates, sheets or strip, living plants; cut flowers and flower buds; flower seeds, unmanufactured tobacco; other raw vegetable materials nec
	ctl	Cattle: bovine animals, live, other ruminants, horses and other equines, bovine semen
	oap	Other Animal Products: swine; poultry; other live animals; eggs of hens or other birds in shell, fresh; reproductive materials of animals; natural honey; snails, fresh, chilled, frozen, dried, salted or in brine, except sea snails; edible products of animal origin n.e.c.; hides, skins and furskins, raw; insect waxes and spermaceti, whether or not refined or coloured
	rmk	Raw milk
	wol	Wool: wool, silk, and other raw animal materials used in textile
	frs	Forestry: forestry, logging and related service activities
	fsh	Fishing: hunting, trapping and game propagation including related service activities, fishing, fish farms; service activities incidental to fishing
	cmt	Cattle Meat: fresh or chilled; meat of buffalo, fresh or chilled; meat of sheep, fresh or chilled; meat of goat, fresh or chilled; meat of camels and camelids, fresh or chilled; meat of horses and other equines, fresh or chilled; other meat of mammals, fresh or chilled; meat of mammals, frozen; edible offal of mammals, fresh, chilled or frozen

Sector	GTAP Code	Description
	omt	Other Meat: meat of pigs, fresh or chilled; meat of rabbits and hares, fresh or chilled; meat of poultry, fresh or chilled; meat of poultry, frozen; edible offal of poultry, fresh, chilled or frozen; other meat and edible offal, fresh, chilled or frozen; preserves and preparations of meat, meat offal or blood; flours, meals and pellets of meat or meat offal, inedible; greaves
	vol	Vegetable Oils: margarine and similar preparations; cotton linters; oil-cake and other residues resulting from the extraction of vegetable fats or oils; flours and meals of oil seeds or oleaginous fruits, except those of mustard; vegetable waxes, except triglycerides; degras; residues resulting from the treatment of fatty substances or animal or vegetable waxes; animal fats
	mil	Milk: dairy products
	pcr	Processed Rice: semi- or wholly milled, or husked
	sgr	Sugar and molasses
	ofd	Other Food: prepared and preserved fish, crustaceans, molluscs and other aquatic invertebrates; prepared and preserved vegetables, pulses and potatoes; prepared and preserved fruits and nuts; wheat and meslin flour; other cereal flours; groats, meal and pellets of wheat and other cereals; other cereal grain products (including corn flakes); other vegetable flours and meals; mixes and doughs for the preparation of bakers' wares; starches and starch products; sugars and sugar syrups n.e.c.; preparations used in animal feeding; lucerne (alfalfa) meal and pellets; bakery products; cocoa, chocolate and sugar confectionery; macaroni, noodles, couscous and similar farinaceous products; food products n.e.c.
	b_t	Beverages and Tobacco products
Energy	coa	Coal: mining and agglomeration of hard coal, lignite and peat
	oil	Oil: extraction of crude petroleum, service activities incidental to oil and gas extraction excluding surveying (part)
	gas	Gas: extraction of natural gas, service activities incidental to oil and gas extraction excluding surveying (part)
	oxt	Other Mining Extraction (formerly omn): mining of metal ores; other mining and quarrying
	p_c	Petroleum & Coke: manufacture of coke and refined petroleum products
	nmm	Manufacture of other non-metallic mineral products
Light manufacturing	tex	Manufacture of textiles
	wap	Manufacture of wearing apparel
	lea	Manufacture of leather and related products
	lum	Lumber: manufacture of wood and of products of wood and cork, except furniture; manufacture of articles of straw and plaiting materials
	ppp	Paper & Paper Products: includes printing and reproduction of recorded media
	mvh	Manufacture of motor vehicles, trailers and semi-trailers
	otn	Manufacture of other transport equipment
	omf	Other Manufacturing: includes furniture
Heavy manufacturing	rpp	Manufacture of rubber and plastics products
	eeq	Manufacture of electrical equipment

Sector	GTAP Code	Description
	ome	Manufacture of machinery and equipment n.e.c.
Chemicals	chm	Manufacture of chemicals and chemical products
	bph	Manufacture of pharmaceuticals, medicinal chemical and botanical products
Metal	i_s	Iron & Steel: basic production and casting
	nfm	Non-Ferrous Metals: production and casting of copper, aluminium, zinc, lead, gold, and silver
	fmp	Manufacture of fabricated metal products, except machinery and equipment
Electronics	ele	Manufacture of computer, electronic and optical products
Services	ely	Electricity; steam and air conditioning supply
	gdt	Gas manufacture, distribution
	wtr	Water supply; sewerage, waste management and remediation activities
	cns	Construction: building houses factories offices and roads
	trd	Wholesale and retail trade; repair of motor vehicles and motorcycles
	afs	Accommodation, food and service activities
	otp	Land transport and transport via pipelines
	wtp	Water transport
	atp	Air transport
	whs	Warehousing and support activities
	cmn	Information and communication
	ofi	Other Financial Intermediation: includes auxiliary activities but not insurance and pension funding
	ins	Insurance (formerly isr): includes pension funding, except compulsory social security
	rsa	Real estate activities
	obs	Other Business Services nec
	ros	Recreation & Other Services: recreational, cultural and sporting activities, other service activities; private households with employed persons (servants)
	osg	Other Services (Government): public administration and defense; compulsory social security, activities of membership organizations n.e.c., extra-territorial organizations and bodies
	edu	Education
	hht	Human health and social work
	dwe	Dwellings: ownership of dwellings (imputed rents of houses occupied by owners)

SOURCE: Adapted from GTAP, “GTAP Data Bases: Detailed Sectoral List,” September 30, 2019.

Abbreviations

AUKUS	Australia, United Kingdom, and the United States
BIS	U.S. Department of Commerce, Bureau of Industry and Security
BoP	balance of payments
CCP	Chinese Communist Party
CGE	computable general equilibrium
CIPS	Cross-Border Interbank Payment System
CNAS	Center for a New American Security
COVID-19	coronavirus disease 2019
DCGE	dynamic computable general equilibrium
DoC	U.S. Department of Commerce
DoD	U.S. Department of Defense
DoS	U.S. Department of State
EU	European Union
FDI	foreign direct investment
FEFTA	Foreign Exchange and Foreign Trade Act
FinCEN	Financial Crimes Enforcement Network
FY	financial year or fiscal year
G7	Group of Seven
GDP	gross domestic product
GTAP	Global Trade Analysis Project
IMF	International Monetary Fund
LNG	liquified natural gas
METI	Ministry of Economy, Trade, and Industry
MOF	Ministry of Finance
MOFA	Ministry of Foreign Affairs of Japan
PLA	People's Liberation Army
PPP	purchasing power parity
PRC	People's Republic of China
RMB	renminbi
ROK	Republic of Korea
SDF	Self-Defense Forces
SME	subject-matter expert
SWIFT	Society for Worldwide Interbank Financial Telecommunication
the Treasury	U.S. Department of the Treasury

UK	United Kingdom
UNSC	United Nations Security Council
WTO	World Trade Organization

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