

The U.S. Indirect Intervention Model in Ukraine

Impacts on Deterrence and Defense across the Taiwan Strait

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Chapter

U.S. Air Force Airmen load military supplies bound for Ukraine onto a C-17 transport aircraft (U.S. Air Force photo by Airman 1st Class Cydney Lee)

War with New and Old Characteristics

In the post-Cold War era, the United States based its force planning on a "two-war construct" that required the U.S. military to be capable of winning two major theater wars unfolding nearly simultaneously. Since the Barack Obama administration, however, the country has sought a more optimized force construct that balances limited defense resources with potential international security risks. In contrast, the Donald J. Trump administration has indicated that its policy is to focus primarily on great power competition with China and Russia in order to defeat aggression by one great power and deter opportunistic aggression by the other. This "defeat and deterrence" principle marks a de facto shift to a "one-war construct." The subsequent Joseph R. Biden Jr. administration not only followed this construct, but made it even clearer that dealing with China in the Indo-Pacific region was its top priority.

Nevertheless, if U.S. "deterrence" were to fail in a comparatively low-priority region, would it really be possible for the United States, a global power with alliances and interests around the world, to stand by on the sidelines without actually intervening in the crisis or conflict? Or is there a third way, beyond intervention or non-intervention, by which it could address such regional crises without compromising its national defense priorities? And if so, how and to what extent would the United States become involved in a contingency?

With these issues in mind, this chapter focuses on the United States' approach of indirectly intervening in regional conflicts. Indirect intervention,² also known as proxy strategy,³ is an approach in which the United States

¹⁾ U.S. Department of Defense (DOD), 2022 National Defense Strategy (October 27, 2022).

²⁾ Stephen Tankel, "US Counterterrorism in the Sahel: From Indirect to Direct Intervention," International Affairs 96, no. 4 (2020): 875–893; Tyrone L. Groh, Proxy War: The Least Bad Option (Stanford: Stanford University Press, 2019); Raphael S. Cohen, et al., Great Power Competition and Conflict in the 21st Century outside the Indo-Pacific and Europe (Santa Monica: RAND Corporation, 2023); Niklas Karlen, et al., "Forum: Conflict Delegation in Civil Wars," International Studies Review 23, no. 4 (2021): 2048–2078.

³⁾ Vladimir Rauta, "Proxy Warfare and the Future of Conflict: Take Two," RUSI Journal 165, no. 2 (2020): 1–10; Daniel Byman, "Why Engage in Proxy War? A State's Perspective," Lawfare, May 21, 2018; Andrew Mumford, "Proxy Warfare and the Future of Conflict," RUSI Journal 158, no. 2 (2013): 40–46; Eli Berman, et al., "Introduction: Principals, Agents, and Indirect Foreign Policies," in Proxy Wars: Suppressing Violence through Local Agents, ed. Eli Berman and David A. Lake (Ithaca: Cornell University Press, 2019), 1–27; Geraint Hughes, My Enemy's Enemy: Proxy Warfare in International Politics (Eastbourne: Sussex Academic Press, 2012).

leaves active combat to regional parties, but seeks to influence the course of the conflict and gain a strategic advantage by providing military assistance to certain parties. Because it is less costly and entails fewer risks than direct intervention, which requires the mobilization of vast resources, indirect intervention is garnering attention as an approach particularly suited to the strategic environment of great power competition.⁴

However, there are not enough studies that examine the advantages and risks of this approach as applied to specific cases of U.S. global engagement. In addition, because research on indirect intervention and proxy wars tends to focus on domestic conflicts, many studies have yet to analyze intervention in interstate conflicts. Therefore, considering U.S. military assistance to Ukraine as a typical approach to indirect intervention, this chapter first describes the characteristics of this approach and then examines its effectiveness in the context of strategic competition with China.

More specifically, this chapter focuses on the situation in Taiwan and asks the following two questions. First, to what extent does indirect intervention in Ukraine impact the deterrence posture of U.S. forces in the Indo-Pacific region, including Taiwan, with respect to China? This will be one of the indicators used to confirm the effectiveness of indirect intervention by the United States in the strategic competition with China—the greater the negative impact on its deterrence posture, the lower its effectiveness. Given the growing recognition of a trade-off relationship between U.S. support for Ukraine and support for Taiwan,⁵ analyzing the impact of U.S. support for

⁴⁾ Frank Hoffman and Andrew Orner, "The Return of Great-Power Proxy Wars," War on the Rocks, September 2, 2021; Raphael S. Cohen, "Ukraine and the New Two War Construct," War on the Rocks, January 5, 2023; Daniel Byman, "Are Proxy Wars Coming Back?," The Washington Quarterly 46, no. 3, (2023): 149–164; Seth G. Jones, The Role of Special Operations in Great Power Competition, Subcommittee on Intelligence and Special Operations, House Committee on Armed Services, February 8, 2023; Alexandra Chinchilla, et al., "Irregular Warfare in Strategic Competition," Defense Studies 24, no. 1 (2024): 148–158; Jacob Shapiro and Liam Collins, "Great Power Competition Will Drive Irregular Conflict," War on the Rocks, April 8, 2024.

⁵⁾ Michael Poznansky, "The Ukraine-Taiwan Tradeoff," Foreign Affairs, January 5, 2024; Alex Velez-Green, Managing Trade-offs between Military Aid for Taiwan and Ukraine (Washington, DC: Heritage Foundation, 2023); Elbridge A. Colby and Kevin Roberts, "The Correct Conservative Approach to Ukraine Shifts the Focus to China," Time, March 21, 2023; Jung-Ming Chang and Che-Jen Wang, "Delayed US Arms Transfers to Taiwan: Déjà Vu?" Diplomat, July 16, 2024; Alex N. Wong and Kimberly T. Glas, 2022 Report to Congress of the U.S.-China Economic and Security Review Commission (Washington, DC: U.S. Government Publishing Office, 2022).

Ukraine through the lens of the Department of Defense's (DOD) specific budget items and various program trends may be helpful in understanding the effectiveness of indirect intervention.

Second, can the U.S. model of indirect intervention in Ukraine also be applied to a Taiwan contingency? Up until now, research on U.S. intervention in a Taiwan contingency has tended to focus on U.S. intentions and preferences regarding the need for intervention, or on the capabilities of both the United States and China, assuming direct intervention as a given. In contrast, the debate on the potentiality and effectiveness of non-direct intervention methods in a Taiwan contingency is less mature. If politics and public opinion in the United States were to call for indirect intervention during a Taiwan crisis due to the potentially high costs and risks of direct intervention, indirect intervention's effectiveness would become a crucial issue.

However, there are caveats to the issue framing here. Discussions of the above two questions may provide useful insight into the approach the United States would take if the "deterrence" part of "defeat and deterrence"—the cornerstone of the one-war construct—were to fail. On the other hand, the question remains as to under what contingencies the United States would pursue "defeat." What does "defeat" really mean, especially if the United States would avoid direct military intervention in conflicts that directly involve China, the country it sees as its most consequential challenger?

Simply put, "defeat" is a phrase that roughly indicates the extent of the force the United States intends to build. It is used in the context of developing

⁶⁾ Steve Tsang, ed., If China Attacks Taiwan: Military Strategy, Politics and Economics (New York: Routledge, 2006); Kwang Kyu Nam, "U.S. Strategy and Role in Cross-Strait Relations: Focusing on U.S.-Taiwan Relations," Journal of East Asian Affairs 33, no. 1 (2020): 155–176; Nien-chung Chang-Liao and Chi Fang, "The Case for Maintaining Strategic Ambiguity in the Taiwan Strait," The Washington Quarterly 44, no. 2 (2021): 45–60; Charles Chong-Han Wu, "The End of Washington's Strategic Ambiguity? The Debate over U.S. Policy toward Taiwan," China Review 21, no. 2 (2021): 177–202; Hoo Tiang Boon and Hannah Elyse Sworn, "Strategic Ambiguity and the Trumpian Approach to China-Taiwan Relations," International Affairs 96, no. 6 (2020): 1487–1508.

⁷⁾ Mark F. Cancian, Matthew Cancian, and Eric Heginbotham, The First Battle of the Next War: Wargaming a Chinese Invasion of Taiwan (Washington, DC: Center for Strategic and International Studies, 2023); Ian Easton, The Chinese Invasion Threat: Taiwan's Defense and American Strategy in Asia (Arlington: Project 2049 Institute, 2017); Stacie Pettyjohn, Becca Wasser, and Chris Dougherty, Dangerous Straits: Wargaming a Future Conflict over Taiwan (Washington, DC: Center for a New American Security, 2022).

the U.S. military to have the size and capabilities necessary to ensure victory under the assumption of a war with China, while deterring aggression from elsewhere. In other words, the force construct sets the defense planning standard for U.S. forces; it does not define the advantages or disadvantages of direct intervention in specific conflicts, including a potential Taiwan contingency.⁸ While there is much room for debate about what constitutes the size and capabilities necessary for "defeat and deterrence," it can at least be said here that decisions about whether or not to use this force, when and where to use it, or how to use it will be made in light of individual contingencies and circumstances.

Based on the above, this chapter examines the military impacts of the model of indirect intervention in Ukraine on Taiwan security. The main arguments of this chapter are as follows. First, the United States' approach to indirect intervention in Ukraine has been successful in the sense that it has avoided depleting the country's strategic resources. In particular, when focusing on its deterrence posture in the Pacific, there is no sufficient evidence that indirect intervention in Europe has had a significant negative impact on the budget, procurement, or other developments of the U.S. military, nor on the backlog of deliveries of weapons sold to Taiwan, despite frequent concerns that this would be affected by the Russo-Ukrainian War. On the contrary, the provision of indirect military assistance to Ukraine has significantly enhanced the domestic and foreign arms production capacity of the United States, and in the medium to long term this may provide an opportunity to strengthen arms and ammunition stockpiles in the Pacific.

The other argument, however, is that this indirect intervention model could not be applied to a Taiwan contingency. The indirect intervention approach is incompatible with the situation in Taiwan due to Taiwan's geographical features of being surrounded by the sea. Moreover, in the event of a Taiwan contingency, both the United States and China would have an incentive to directly attack the other in the early stages of conflict. Furthermore, regardless of how the United States intervenes, it would be extremely difficult for the country to forcibly carry out logistical operations such as the transport of military supplies and personnel to Taiwan. Given these factors, this chapter argues that military assistance will be more

⁸⁾ Mark Gunzinger, Shaping America's Future Military: Toward a New Force Planning Construct (Washington, DC: Center for Strategic and Budgetary Analysis, 2013).

important in peacetime than in wartime, particularly with respect to the defense of Taiwan.

This chapter consists of three sections. The first overviews the major pillars of America's indirect intervention model in Ukraine, drawing from proxy war literature. The second section explores what impact indirect intervention in Ukraine has made on deterrence against China in the Pacific. In particular, it focuses on developments in various programs in the U.S. DOD, as well as the backlog of U.S. arms sales to Taiwan. The third section examines whether the indirect intervention model could be applied to a Taiwan contingency mainly from three perspectives: Taiwan's geographical characteristics, the escalation structure between the United States and China, and the effectiveness of logistical operations. Finally, after summarizing the findings of this study, the chapter concludes by discussing academic and policy issues for future research.

Ukraine Aid as an Indirect Intervention Model

Conceptualizing Indirect Intervention

Strategists have long recognized the importance of achieving strategic objectives while avoiding a direct war.⁹ This indirect approach was first systematically introduced to the world by the British strategist Basil H. Liddell-Hart, but on the grounds that its applications range from war tactics to strategy, its conceptual utility has been questioned.¹⁰ By contrast, "indirect intervention," which is the focus of this chapter, is a concept that refers more narrowly to a country's approach to conflict intervention. Drawing primarily from proxy war theory in conflict studies, the following formulates this concept by dividing it into three pillars: (1) avoidance of direct participation in combat, (2) motivation driven by strategic interests, and (3) control over the parties involved.

⁹⁾ Sun Tzu, *The Art of War*, translated by Samuel B. Griffith (Oxford: Oxford University Press, 1980).

¹⁰⁾ Basil H. Liddell Hart, Strategy, 2nd revised ed. (New York: Meridian, 1991); Azar Gat, Fascist and Liberal Visions of War: Fuller, Liddell Hart, Douhet, and Other Modernists (Oxford: Oxford University Press, 1998).

The most obvious characteristic of indirect intervention is its indirectness. While the intervening party has an interest in the outcome of the conflict, it will leave the actual combat to its local partner and avoid deploying troops to the combat zone, instead involving itself only through logistical support, such as providing the local partner with financial assistance, military training, intelligence sharing, and munitions. For example, with the provision of financial assistance, modern weapons, and military training from Iran, the Lebanon-based Hezbollah has become a highly skilled force capable of fighting the Israeli military and carrying out international terrorist activities. Although such indirect measures can sometimes have a decisive impact on the war situation, the risk of direct retaliation against an indirectly intervening party or of escalation into fighting involving that party is considered to be much lower than that of direct intervention, since the act of refraining from direct intervention itself sends a signal of restraint to the opposing country. Assistance of the conflict intervention itself sends a signal of restraint to the opposing country.

It should be noted that economic sanctions and naming and shaming are not included in this concept of indirect intervention. Indirectness here refers to attempts by a third party intervening from outside of the region to influence the course of the conflict by providing assistance to a party involved in the conflict. While external actors can use economic sanctions and naming and shaming to influence the outcome of a conflict through non-military means, these methods directly affect the assets or reputation of the target party and are not necessarily implemented via a party receiving assistance. In this sense, "non-military means" are not equivalent to "indirect means." The premise of indirect intervention is that the intervening party supports a local partner engaged in combat, primarily through military assistance, without taking direct action.

The second feature of indirect intervention is that the intervening party is motivated to intervene on the basis of its own interests. Although the definition of "interests" can vary depending on the context, such as in international relations and domestic politics, here it refers to strategic interests that contribute to the country's ability to compete advantageously

¹¹⁾ Mumford, "Proxy Warfare."

¹²⁾ Jack Watling, "Proxy Warfare: Iran," in The Future Conflict Operating Environment Out to 2030, ed. Peter Roberts (London: Royal United Services Institute, 2019), 11–18.

¹³⁾ Byman, "Are Proxy Wars Coming Back?"

with a particular rival. Outsiders to a conflict choose indirect intervention rather than direct intervention based on conditions of the intervening party, including concerns about escalation, lack of domestic and international support, and insufficient capabilities for direct intervention. On top of these factors, they seek to maximize their strategic gains while minimizing the costs of intervention.¹⁴

Naturally, this type of intervention differs from humanitarian intervention. As noted above, indirect intervention stems from calculations regarding one's own strategic interests. On the other hand, humanitarian intervention, including humanitarian aid, is motivated by the moral obligation to "save strangers." While the diffusion of international norms may change "national interests" to include the value of humanitarian assistance, these interests are nonetheless distinct from the strategic interests that motivate indirect intervention. In addition, during humanitarian crises, countries may also choose to provide indirect humanitarian assistance rather than engage in direct military intervention due to constraints such as insufficient military resources and a lack of domestic and international support. However, even in such cases, the motivation for intervention is a moral one and should be considered separately from the concept of indirect intervention addressed here.

The third pillar of indirect intervention is the intervening party's control over the actions of the local actor. While an intervening party may seek to achieve its strategic goals by assisting a local party, the recipient of this assistance does not necessarily share the interests of the intervening party. The local actor is not a proxy for the interests of the intervening party, and instead often acts based on its own interests and objectives. This relationship between the intervening party and the local actor is often called the principal—agent relationship. This relationship tends to cause problems

¹⁴⁾ Groh, Proxy War.

¹⁵⁾ Nicholas J. Wheeler, Saving Strangers: Humanitarian Intervention in International Society (Oxford: Oxford University Press, 2000); Martha Finnemore, The Purpose of Intervention: Changing Beliefs about the Use of Force (Ithaca: Cornell University Press, 2003).

¹⁶⁾ Martha Finnemore and Kathryn Sikkink, "International Norm Dynamics and Political Change," *International Organization* 52, no. 4 (1998); 887–917.

Fiona Terry, Condemned to Repeat? The Paradox of Humanitarian Action (Ithaca: Cornell University Press, 2022), 17.

because of the information asymmetry between the two parties, which can lead the agent to act against the principal's interests.¹⁸

When this concept is applied to indirect intervention, the question arises: How can an intervening party that is not directly involved in the conflict control the behavior of a party that is involved and that has its own interests? The fact that a third party is intervening from outside to support a particular local actor means that the two parties already share aligned interests. However, a local party fighting on a battlefield and a third party providing military support from outside the battlefield may have different information that they interpret differently. In such cases, the self-interests defined by each side may also diverge.

When the interests of the intervening party and the local party diverge, the former attempts to use leverage to control the actions of the latter. The simplest method would be a combination of rewards and punishments. For example, rewards such as diplomatic compromise, military aid, and economic investment by the intervening party incentivize the recipient to take actions that serve the interests of its supporter, while punishments, such as suspending support and imposing sanctions, increase the costs of actions that work against those interests.²⁰ However, penalizing a specific action when many interests are still shared by the intervening party and the recipient is risky and can have a negative effect on the overall relationship and on the capabilities of the local actor.²¹

Another approach to controlling the local party's actions is to limit its options. In this approach, the intervening party seeks to remove an option available to the local party but undesirable to the intervener. This is done by restricting or blocking access to the material support that would make the action possible in the first place, rather than forcing a change in policy

Gary J. Miller, "The Political Evolution of Principal-Agent Models," Annual Review of Political Science 8 (June 2005): 203–225.

¹⁹⁾ Daniel Byman and Sarah E. Kreps, "Agents of Destruction? Applying Principal-Agent Analysis to State-Sponsored Terrorism," *International Studies Perspectives* 11, no. 1 (2010): 1–18; Ariel I. Ahram, *Proxy Warriors: The Rise and Fall of State-Sponsored Militias* (Stanford: Stanford University Press, 2011).

²⁰⁾ Eli Berman, et al., "Introduction: Principals, Agents, and Indirect Foreign Policies," in *Proxy Wars: Suppressing Violence through Local Agents*, ed. Eli Berman and David A. Lake (Ithaca: Cornell University Press, 2019), 12–13.

Matthew J. Nanes, "Lebanon and Gaza, 1975-2017: Israel's Extremes of Interest Alignment," in Berman and Lake, Proxy Wars, 110–136.

through punishment or other means.²² Whereas punishments and rewards control actions that have already been performed by the agent, restrictions on options control additional actions that are possible for the agent.

Thus, rather than entrusting everything to the local party to the conflict, the intervening party tries to control the former's actions to some degree by holding the reins of support. This form of support is intended to influence the outcome of the conflict in a manner consistent with the intervening party's own interests.

U.S. National Interests in the Russo-Ukrainian War

The United States' approach to intervening in the Russo-Ukrainian War is consistent with the concept of indirect intervention discussed above. However, the United States has not clarified its goals for the war as a supporter; this is also evident from the Biden administration's initial emphasis that decisions about Ukraine would be made by the Ukrainian people. Nevertheless, one can infer the United States' national interests in Ukraine from past discourse. Among these interests, the defense of Ukraine and the avoidance of escalation are considered to be key goals for the United States in the Russo-Ukrainian War. 24

(1) Defending Ukraine

First, the most obvious U.S. objective in the Russo-Ukrainian War is to prevent Ukraine from losing the war. The Biden administration's 2022 *National Security Strategy* set as one of its goals to make Russia's aggression in Ukraine end in "strategic failure." Three interrelated reasons are thought to underlie the United States' commitment to this goal.

²²⁾ Sara Plana, "Controlling Proxies: An Analytical Framework," in *Routledge Handbook of Proxy Wars*, ed. Assaf Moghadam, Vladimir Rauta, and Michel Wyss (London: Routledge, 2024), 218–228.

²³⁾ Joseph R. Biden Jr., "President Biden: What America Will and Will Not Do in Ukraine," New York Times, May 31, 2022.

²⁴⁾ Janice Gross Stein, "The Ukraine Dilemma: Can the West Save Kyiv without Starting a War with Russia?," Foreign Affairs, March 9, 2022; Kori Schake, "US Strategy in Ukraine," in War in Ukraine: Conflict, Strategy, and the Return of a Fractured World, ed. Hal Brands (Baltimore: Johns Hopkins University Press, 2024), 156–172.

²⁵⁾ White House, National Security Strategy (Washington, DC: White House, 2022), 26.

The first is Ukraine's value as a buffer zone. A buffer zone is a country or region located between major powers that serves as a "cushion" to absorb the conflict between them. The power struggle between these great powers results in an equilibrium in which a certain degree of neutrality is maintained, with neither side exercising control. ²⁶ Since the end of the Cold War, the West has long recognized Ukraine's importance as a buffer zone between it and Russia. For example, Zbigniew Brzezinski, who served as National Security Advisor under the Jimmy Carter administration, said that separating Ukraine from Russia curbs Russia's hegemonic behavior, but that if Russia were to take over Ukraine, it would lead to the reemergence of Russian imperialism. ²⁷

Following the Russian invasions in Ukraine, this view of Russia has become more prevalent in the current U.S. discourse space. ²⁸ While opinions are divided as to the extent to which the United States is or should be trying to bring Ukraine into the Western camp, ²⁹ there is at least agreement that maintaining Ukraine's neutrality is a vital national interest of the United States in the Russo-Ukrainian War, given Russia's ongoing invasion of Ukraine and attempt to establish a sphere of influence in the country. ³⁰

In connection with this, another U.S. goal in the Russo-Ukrainian War is to undermine Russia's national power. The U.S. government has already made this intention public. After a secret visit to Ukraine in April 2022, Secretary of Defense Lloyd Austin revealed to reporters that the United

²⁶⁾ Rajan Menon and Jack L. Snyder, "Buffer Zones: Anachronism, Power Vacuum, or Confidence Builder?" Review of International Studies 5 (2017): 962–986.

²⁷⁾ Zbigniew Brzezinski, "The Premature Partnership," Foreign Affairs 73, no. 2 (1994): 67–82.

²⁸⁾ Council on Foreign Relations, "Russia's War in Ukraine: How Does It End?" May 31, 2022; Alina Polyakova and Daniel Fried, "Putin's Long Game in Ukraine: How the West Can Still Protect Kyiv," Foreign Affairs, February 23, 2022; Angela Stent, "The Putin Doctrine: A Move on Ukraine Has Always Been Part of the Plan," Foreign Affairs, January 27, 2022; Hudson Institute, Symposium: Why the US Needs to Help Ukraine Defeat Russia, September 5, 2023.

²⁹⁾ John J. Mearsheimer, "Why the Ukraine Crisis Is the West's Fault: The Liberal Delusions That Provoked Putin," Foreign Affairs 93, no. 5 (2014): 77–84, 85–89; Rajan Menon and William Ruger, "NATO Enlargement and US Grand Strategy: A Net Assessment," International Politics 57 (2020): 371–400; Dave McCurdy, "The Evolving U.S. Policy toward Ukraine," SAIS Review 14, no. 1 (1994): 153–169.

³⁰⁾ Thomas Greminger and Jean-Marc Rickli, "Neutrality after the Russian Invasion of Ukraine: The Example of Switzerland and Some Lessons for Ukraine," PRISM 10, no. 3 (2022): 27–43; Stephen Van Evera, "To Prevent War and Secure Ukraine, Make Ukraine Neutral," Defense Priorities, February 19, 2022.

States' goal is to "see Russia weakened to the degree that it can't do the kinds of things that it has done in invading Ukraine." Around the same time, Chairman of the Joint Chiefs of Staff Mark Milley declared that maintaining Ukraine's freedom and independence was in the interest of the United States and its allies, and also expressed the view that the invasion of Ukraine would strengthen the solidarity of the North Atlantic Treaty Organization (NATO) and weaken Russia's national power. A noted above, the dominant view in the United States is pessimistic about Russia easing its aggressive posture once the Russo-Ukrainian War is over. A natural consequence of this perspective is trying to prevent further Russian aggression against Eastern European countries, including NATO members, by depleting Russia's strategic resources through the war.

The third reason the United States is committed to preventing Russian aggression against Ukraine is to maintain its reputation for resolve. There has been much debate in the field of international relations about whether a reputation built on past actions has a substantive effect on the present,³³ and whether it is even possible to build a reputation for resolve in the first place.³⁴ The generally accepted view, however, has always been that, especially in the face of significant military threats, decision makers tend to take a hardline stance in a current crisis to lend credibility to future actions.³⁵ In other words, leaders' decisions are thought to be constrained by the fact that their current actions also signal future resolve.

Beyond the immediate threat posed by Russia, this adds the potential future threat of China to the United States' strategic calculus. In fact, a senior Biden administration official has expressed concern that if the West allows Russian aggression in Ukraine to continue unchecked, it will send the wrong message to China about the United States' willingness to engage

³¹⁾ David E. Sanger, "Behind Austin's Call for a 'Weakened' Russia, Hints of a Shift," New York Times, April 25, 2022.

³²⁾ Jake Tapper, "Milley: We Want to See a Free Ukraine and a 'Weakened Russia," CNN, April 26, 2022.

³³⁾ Daryl G. Press, Calculating Credibility: How Leaders Assess Military Threats (Ithaca: Cornell University Press, 2005).

³⁴⁾ Jonathan Mercer, Reputation and International Politics (Ithaca: Cornell University Press, 1996).

³⁵⁾ Todd S. Sechser, "Reputations and Signaling in Coercive Bargaining," *Journal of Conflict Resolution* 62, no. 2 (2018): 318–334.

in a future crisis.³⁶ This suggests that even within the Biden administration, an awareness of the U.S. reputation for resolve and its implications for the future influenced policy decisions.

(2) Avoiding Escalation

Meanwhile, another goal that the United States is emphasizing besides the defense of Ukraine is avoiding escalation with Russia. Concerned that the devastation of war could spread not only throughout Ukraine but also to NATO members, the United States has taken a cautious stance on measures that could increase that risk. This stance is consistent with NATO's policy since the early stages of the war, which has been not to establish a no-fly zone over Ukraine or to deploy combat troops in the country, in order to avoid inadvertently engaging directly with Russia.³⁷ Given that the Biden administration has made it clear that a Russian attack on a NATO member would trigger NATO-wide retaliation under the treaty,³⁸ there is reasonable concern that establishing no-fly zones and deploying ground troops would increase the risk of drawing the United States and NATO members into the conflict.

A typical reason for U.S. concern about escalation is the fear of nuclear use by Russia.³⁹ For example, Vladimir Vladimirovich Putin's regime has tried to curb potential Western troop deployments to Ukraine by repeatedly

³⁶⁾ Joseph R. Biden Jr., "President Biden: What America Will and Will Not Do in Ukraine," New York Times, May 31, 2022; Jim Garamone, "DOD Official Restates Why Supporting Ukraine Is in U.S. Interest," DOD News, February 9, 2024.

³⁷⁾ Steven Erlanger and Lara Jakes, "NATO Rejects Intervening in Ukraine, including with a No-Fly Zone," New York Times, March 4, 2022; Judy Dempsey, "Judy Asks: Are Europeans Prepared to Send Troops to Ukraine?," Carnegie Europe, May 2024; Jayne McCroary and Patricia Lewis, "Why a No-Fly Zone Risks Escalating the Ukraine Conflict," Chatham House, March 14, 2022.

³⁸⁾ White House, "Remarks by President Biden on the United Efforts of the Free World to Support the People of Ukraine," March 26, 2022.

³⁹⁾ Benjamin Jensen and Adrian Bogart, The Coming Storm: Insights from Ukraine about Escalation in Modern War (Washington, DC: Center for Strategic and International Studies, 2022); Bryan Frederick, Mark Cozad, and Alexandra Stark, Understanding the Risk of Escalation in the War in Ukraine (Santa Monica: RAND Corporation, 2023); Daan Sanders, Tim Sweijs, and Paul van Hooft, Preventing the (Un)thinkable: Escalation Scenarios and Risk Reduction Measures for Russia and NATO following the War in Ukraine (The Hague: The Hague Centre for Strategic Studies, 2022).

hinting at the possibility of nuclear use. ⁴⁰ That being said, it is unclear to what extent Russia's nuclear threats have influenced U.S. policy decisions, since the United States had made clear even before Russia's invasion of Ukraine that it would not deploy combat troops to the region. But senior U.S. officials, including President Biden, have not necessarily viewed the Putin regime's nuclear threats as bluffs. ⁴¹ Therefore, if the United States were to expand its support for Ukraine, concerns about Russian nuclear use would likely impact U.S. options.

The problem with these two goals is that they are in a trade-off relationship. ⁴² In other words, if the United States' emphasis on the defense of Ukraine leads it to become more directly involved and willing to deploy U.S. troops, the risk of escalation—including Russia's use of nuclear weapons—will increase. Conversely, if the United States emphasizes the risk of escalation and reduces the extent of its involvement in Ukraine, achieving its goal of impeding Russian aggression in Ukraine will be more difficult. Indirect intervention is one way of balancing these two contradictory goals (Figure 5.1).

Reduced support

• Weakens defense of Ukraine
• Avoids escalation

Indirect intervention

Direct intervention

Figure 5.1. Ideal types of indirect intervention in Ukraine

Source: Prepared by the author.

⁴⁰⁾ Guy Faulconbridge and Lidia Kelly, "Putin Warns the West: Russia Is Ready for Nuclear War," Reuters, March 14, 2024.

⁴¹⁾ David E. Sanger, "Biden's Armageddon Moment: When Nuclear Detonation Seemed Possible in Ukraine," New York Times, March 9, 2024.

⁴²⁾ Stein, "The Ukraine Dilemma,"

Means of U.S. Military Support for Ukraine

As of December 31, 2024, the United States has committed a total of \$61.4 billion in military assistance to the Russo-Ukrainian War since February 2022, when Russia's full-scale invasion of Ukraine began, and \$64.1 billion in military assistance if counting back to Russia's 2014 invasion of Crimea. This amount includes defense-related items such as weapons systems and ammunition, as well as other costs, such as training provided by the United States and financial assistance to strengthen the defense capabilities of Ukraine's neighbors. As seen between 2023 and 2024, when delays in congressional approval of the Ukraine aid budget led to a shortage of military supplies in Ukraine, it is evident that military support funded by the United States' budget allocation is crucial to Ukraine's ability to continue fighting.

In the context of capacity-building support for the Ukrainian military and managing the escalation of the war, the provision of training, intelligence, and weapons have been the three primary forms of U.S. assistance in Ukraine. While all of these forms of assistance are capacity-building in nature, the latter two have also functioned as a means of escalation management.

One specific type of assistance that the United States can provide through funding is training programs. Since 1993, the United States has provided training assistance to Ukraine's armed forces through the State Partnership Program, which assigns a specific National Guard unit to support the capabilities of a particular country. While post-Cold War training has long focused on disaster relief, Russia's invasion of Crimea in 2014 triggered a shift towards practical combat training, such as training in field tactics, decision making, and battlefield medicine. This program was implemented in Ukraine until February 2022, just prior to Russia's full-scale invasion of

Department of State, "Fact Sheet: U.S. Security Cooperation with Ukraine," December 12, 2024.

⁴⁴⁾ Karoun Demirjian and Lara Jakes, "White House Warns Ukraine Aid Is Running Out, Pressing Congress for More," New York Times, December 4, 2023; Tom Balmforth and Charlotte Bruneau, "US Aid to Ukraine: What Difference Will It Make in War with Russia?," Reuters, April 23, 2024.

⁴⁵⁾ Dan Frosch, "California's National Guard Trained Ukraine's Military for Decadesand Now It Helps from Afar," *Wall Street Journal*, March 11, 2022.

Ukraine. Since the outbreak of war, the program has reportedly continued with training sites relocated to Eastern European countries. ⁴⁶ Such U.S. training assistance has been credited not only with helping to make up for manpower shortages in the Ukrainian military, but also with contributing significantly to its operational success in fighting in small, dispersed units. ⁴⁷

It is clear that the United States has sought purely to strengthen Ukraine's combat capabilities and ability to sustain the war through training assistance. That said, if Ukraine's actions were to deviate significantly from U.S. strategic objectives, this assistance could also be used as a punitive measure, for example, by deliberately suspending training. However, as long as the United States and Ukraine share the goal of repelling Russian aggression, such a punitive approach would also come with risks, such as reducing Ukraine's ability to engage with Russia.

Unlike training assistance, the provision of intelligence and weapons has not only strengthened the Ukrainian military's capabilities, but also controlled the escalation of the conflict. For example, the United States has supported Ukrainian operations by providing real-time intelligence on the ground, including targeting information,⁴⁸ but as a rule, it has not allowed the provision of intelligence on targets in Russia.⁴⁹ This is believed to be one of the United States' self-restraint measures based on concerns that attacking Russian soil could escalate the conflict.

The same can be said for the provision of weapons. For some time after the outbreak of the war, the Biden administration was cautious about providing relatively long-range missiles that could strike inside Russia, such as the Army Tactical Missile System (ATACMS).⁵⁰ These long-range

⁴⁶⁾ Whitney Hughes, "National Guard Supports Armed Forces of Ukraine," National Guard, News, June 8, 2022.

⁴⁷⁾ Doug G. Ware, "California Guard Troops Have Helped Ukraine Beat Russia on Battlefield, Army Official Says," Stars and Stripes, July 13, 2023.

⁴⁸⁾ Isabelle Khurshudyan, et al., "Ukraine's Rocket Campaign Reliant on U.S. Precision Targeting, Officials Say," Washington Post, February 9, 2023; Julian E. Barnes, Helene Cooper, and Eric Schmitt, "U.S. Intelligence Is Helping Ukraine Kill Russian Generals, Officials Say," New York Times, May 4, 2022.

⁴⁹⁾ Helene Cooper, et al., "Ukraine Asks U.S. to Provide More Intelligence on Targets in Russia," New York Times, May 17, 2024.

⁵⁰⁾ Mike Stone, "Exclusive: Ukraine Could Get Long-Range Missiles Armed with US Cluster Bombs," Reuters, September 12, 2023.

weapons were reportedly supplied to Ukraine gradually,⁵¹ but even after the weapons were received, the United States remained cautious by removing all conditions that would allow Ukraine to use them.⁵²

Such escalation management by the United States has the following characteristics. The first is incrementalism, where options are expanded gradually. This approach involves making small policy changes gradually through trial and error over time. The advantage of this approach is that it allows the United States to explore the range of acceptable policies while gauging the reactions of both its adversaries and allies, even in the face of extremely high uncertainty.⁵³ To take precision-guided munitions as an example, at the outset of the war, the United States considered Ukraine's attacks on Russian territory to be crossing a "red line" from Russia's point of view. As the war situation progressed, however, the United States gradually expanded the range of weapons provided, from shortrange guided weapons, such as the Javelin missile, to longer-range strike systems, such as the High Mobility Artillery Rocket System (HIMARS) and ATACMS, thereby expanding the original "red line" little by little. The same approach also applies to the provision of equipment such as F-16 fighter jets, Abrams battle tanks, and PAC-3 missiles that were not approved for provision in the early stages of the war but were later approved.⁵⁴ However, such "learning by doing" methods take time to implement, and while they may be appropriate for a long-term war of attrition, such as the Russo-Ukrainian War, careful consideration must be given to their effectiveness in a short-term, high-intensity conflict.

Another characteristic is control of Ukraine's options on the battlefield. This does not refer to using punitive measures to compel a change in actions that are undesirable to the United States, but rather to restricting access to capabilities that would enable those actions in the first place. To take

⁵¹⁾ Steve Holland and Idrees Ali, "The US Quietly Shipped Long-Range ATACMS Missiles to Ukraine," Reuters, April 25, 2024.

⁵²⁾ Siobhán O'Grady, et al., "U.S. Restrictions Put Key Russian Air Bases Out of Firing Range, Officials Say," Washington Post, June 21, 2024.

⁵³⁾ Austin Carson, "The Missing Escalation in Ukraine in Defense of the West's Go-Slow Approach," Foreign Affairs, September 14, 2023; Janice Gross Stein, "Escalation Management in Ukraine: 'Learning by Doing' in Response to the 'Threat That Leaves Something to Chance," Texas National Security Review 6, no. 3 (2023): 29–50.

⁵⁴⁾ Natasha Bertrand, Kylie Atwood, and Oren Liebermann, "US Signals to Allies It Won't Block Their Export of F-16 Jets to Ukraine," CNN, May 19, 2023.

intelligence support as an example, while the United States has essentially given Ukraine the green light to attack Russian soil if it decides to do so, it has also reportedly refused to provide the targeting information necessary for such strikes.⁵⁵ Thus, even if Ukraine possesses long-range precision-guided weapons, their effectiveness is extremely limited without the ability to determine the exact location of the target. In other words, this reduces the relative effects of a Ukrainian attack on Russian territory. This method of control can also minimize the negative psychological reaction on the Ukrainian side, since the decision is whether to provide additional capacity assistance rather than reduce or suspend existing assistance.

⁵⁵⁾ Cooper, "Ukraine Asks U.S."

Column

Biden vs. Trump: Comparing Ukraine Strategies

With the start of the second Trump administration, U.S. military support for Ukraine has reached a crossroads. One of the most significant differences between the Biden administration and the new Trump administration regarding their approach to the Russo-Ukrainian War is whether or not they have stated a goal of U.S. involvement in the war. The Biden administration's position was to entrust Ukraine to decision-making on the Russo-Ukrainian War and support those decisions, which made it unclear how the United States would bring an end to the war. In contrast, the new Trump administration has announced that its goal is to swiftly end the war by bringing Ukraine and Russia to the negotiating table first.

Although the new Trump administration has not disclosed its specific negotiation process, it is highly likely that it will exploit aid to Ukraine as leverage to force both Ukraine and Russia to participate in negotiations. For example, Keith Kellogg, President Trump's special envoy for Ukraine, has repeatedly suggested that the United States will withhold support for Ukraine if it refuses to negotiate, but accelerate support for Ukraine if Russia refuses to negotiate. In other words, the Trump administration considers negotiations as a precondition for providing military assistance to Ukraine, and it will decide the extent of that assistance depending on how the negotiations turn out. In reality, however, there could be a situation in which both countries come to the negotiating table but then struggle to reach an agreement. In this case, the willingness of either side to compromise on key agenda items, such as Ukraine ceding territory to Russia or joining NATO, is likely to become a major talking point.

If the second Trump administration were to adopt this approach, it would contrast with the Biden administration in two ways. First, the Trump administration's approach is not necessarily to overturn the Biden administration's model of indirect intervention in Ukraine, but to make U.S. priorities more flexible within that framework. The Biden administration

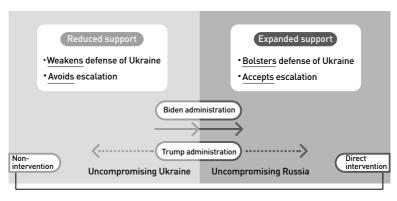
identified interests in two conflicting goals—defending Ukraine and avoiding escalation—and searched for the range of policy acceptability using an incremental approach to gradually expand the scope of military assistance to Ukraine. On the other hand, the Trump administration would not see the two goals as given but determine its level of support only after assessing how far Ukraine and Russia are willing to negotiate and compromise. In other words, whether the United States chooses to prioritize defending Ukraine or avoiding escalation depends on the balance of willingness to compromise between the two countries. If Ukraine refuses to compromise, the United States would then accept the risk of cutting support that would decrease Ukraine's defensibility. If Russia refuses that, the United States would accept the risk of increasing support for Ukraine that would escalate the fighting.

The Trump administration's fluctuating military support is another difference from the Biden administration's approach. Although during the Biden era the United States and the Ukrainian government broadly shared their interests in defending Ukraine, they seemed to diverge somewhat in their views on the acceptability of escalation, including attacks on Russian soil. For this reason, the Biden administration tried to control the behavior of Ukrainian forces on the battlefield by taking a cautious approach to providing certain weapons, restricting Ukraine's military options rather than using punitive aid cuts that could affect Ukraine's combat power. Under the Trump administration, however, if Ukraine refuses to compromise in negotiations with Russia, there could be a greater gap between the United States and Ukraine over the fundamental interest of Ukraine's defense. If this happens, the United States would deprioritize the support for Ukrainian military capabilities, forcing Ukraine to make more concessions. On the other hand, if Russia shows its reluctance to negotiate or compromise, the new administration would accept the risk of escalation by providing stronger support for Ukraine.

It is worth noting, however, that the above reasoning is based on ideal conditions, under which one can observe the extent to which Ukraine and Russia have compromised and the difference relative to each other. While these conditions may emerge, in reality, the competing interests of both Ukraine and Russia will make it difficult to see which party has made a concession and to what extent, especially from the outside.

Although predicting the Trump administration's response is even more challenging if such ambiguous circumstances persist, one may expect it to put more pressure on Ukraine than on Russia. For example, policymakers wary of spending military resources in Europe could have a greater influence in the new administration. If the power balance within the government leans in favor of those who are skeptical of intervening in Ukraine, the United States would focus more on deterring China in the Pacific, while leaving NATO states to provide military assistance to Ukraine and ensure European security, as Under Secretary of Defense Elbridge Colby has repeatedly claimed. In this case, the United States is unlikely to pressure Russia by increasing military support for Ukraine and more likely to put pressure on Ukraine to compromise by threatening the reduction of the military aid.

Even if the new Trump administration sees Ukraine and Russia as equally willing to negotiate from a neutral perspective, it would still target Ukraine because of the validity of coercion. Indeed, given that the United States has already provided Ukraine with an enormous amount of material military support that has not been able to defeat the Russian military, scaling up military assistance to Ukraine cannot guarantee the expulsion of Russian troops from Ukrainian territory. On the other hand, reducing support for Ukraine would critically undermine the Ukrainian military's ability to



Column Figure: The two administrations' approaches to the Russo-Ukrainian War

Source: Prepared by the author.

continue fighting, as evidenced by Ukraine's reliance on the United States for the majority of its combat supplies. This can be gleaned from the fact that a delay in the U.S. Congress passing a Ukraine aid package from 2023 to 2024 nearly depleted Ukraine's supply of military weapons and ammunition needed on the front lines. Therefore, even if both Ukraine and Russia made comparable compromises, the Trump administration has incentives to put pressure on Ukraine rather than on Russia.

If the Trump administration uses U.S. indirect intervention as a means of persuading Ukraine and Russia to negotiate, military assistance to Ukraine could expand or shrink depending on their willingness to talk and compromise. This differs from the approach taken by the Biden administration, which made clear its support for Ukraine and incrementally expanded its assistance. The Trump administration's policy on Ukraine more directly reflects the political dynamics of these countries. Therefore, the Russo-Ukrainian War should attract attention not only on purely military developments, but also on the political maneuvering by Ukraine and Russia.

How Ukraine Aid Affects Deterrence in the Pacific

Hypothetical Costs and Risks of Direct Intervention in Ukraine

To what extent does this type of indirect intervention in Europe actually contribute to preserving strategic resources, especially in the Pacific? To answer this question, we must first sort out the comparative costs and risks of direct intervention and its potential impact on the United States' military posture. However, since there are virtually no studies or simulations that examine the costs of a hypothetical direct U.S. intervention in the Russo-Ukrainian War, an analogy must be drawn from historical cases of direct intervention. The following part compares the costs of past direct intervention cases and then considers the potential risks of such interventions.

(1) Direct Intervention Costs

The Gulf War is a relatively recent case and a particularly useful example of third-party intervention in an interstate conflict. Although the Operation Desert Storm phase of the Gulf War has been highlighted as a historical success story for its efficiency and low cost, ⁵⁶ not all aspects of the operation were low cost or low risk when it was executed. In particular, nearly 70,000 U.S. troops were deployed at the start of the land-based offensive operation against Iraq, ⁵⁷ and the budget for this operation was estimated at \$102 billion in FY2011 dollars (October 2010 to September 2011). These facts illustrate that this was a massive operation requiring significant mobilization of resources. ⁵⁸ By the time the offensive operation began in January 1991, the United States had transported most of its deployed forces and 460,000 tons of ammunition to the Middle East, mainly from the continental United

⁵⁶⁾ William J. Perry, "Desert Storm and Deterrence," Foreign Affairs 70, no. 4 (1991): 66–82.

⁵⁷⁾ Robert H. Scales, Jr., et al., Certain Victory: The US Army in the Gulf War (Washington, DC: Office of the Chief of Staff United States Army, 1993); Lyla M. Hernandez, et al., eds., Gulf War Veterans: Measuring Health (Washington, DC: National Academies Press, 1999); Michael Andrew Knights, Cradle of Conflict: Iraq and the Birth of Modern U.S. Military Power (Annapolis: United States Naval Institute, 2005).

⁵⁸⁾ Stephen Daggett, Costs of Major U.S. Wars, Congressional Research Service Report (RS22926), (Washington, DC: Congressional Research Service, June 29, 2010).

States and Europe, and this had no small impact on the global posture of the U.S. military.⁵⁹

Prewar estimates of the Gulf War also suggested that the damage, particularly in terms of human casualties, could be far greater than the actual outcome. For example, while the actual number of U.S. military deaths in combat was fewer than 150,60 prewar internal U.S. military estimates suggested that the toll could reach as high as nearly 30,000.61 In fact, as Table 5.1 shows, other cases of direct intervention have also involved significant mobilization costs, both in financial and human terms, with average annual war costs of at least \$40 billion and more than 100,000 troops deployed.

Table 5.1. Comparison of the costs of major U.S. wars (as of December 2024)

Type of intervention	War (period)	Deployed forces	Deaths	Related expenditures (approximate annual average)
Direct intervention	Korean War (1950–1953)	1,789,000	33,739	\$341 billion (about \$85 billion)
	Vietnam War (1964–1975)	3,403,000	47,434	\$738 billion (about \$65 billion)
	Gulf War (1990–1991)	694,550	148	\$102 billion (about \$130 billion)
	Iraq War (2003–2013)	171,000	3,490	\$731 billion (about \$75 billion)
	War in Afghanistan (2001–2022)	100,000	1,847	\$864 billion (about \$41 billion)
Indirect intervention	Russo-Ukrainian War (2022–present)	Small number	0	\$61.4 billion (about \$22 billion)

Source: Prepared by the author based on Department of Veterans Affairs, America's Wars (November 2023); Daggett, "Costs of Major U.S. Wars"; Kathleen J. McInnis and Andrew Feickert, "Additional Troops for Afghanistan? Considerations for Congress," Congressional Research Service, R44853 (May 19, 2017); Michael E. O' Hanlon and Ian Livingston, Iraq Index: Tracking Variables of Reconstruction & Security in Post-Saddam Iraq (Brookings Institute, January 31, 2011).

Note 1: All war costs for the full-scale intervention category are based on estimates of prices in FY2011 U.S. dollars from Daggett, "Costs of Major U.S. Wars."

Note 2: War periods are based on Barbara Salazar Torreon, "U.S. Periods of War and Dates of Recent Conflicts," Congressional Research Service, RS21405 (December 14, 2018), and various media reports.

⁵⁹⁾ Association of the United States Army, Special Report: The U.S. Army in Operation Desert Storm (Arlington: Association of the United States Army, 1991), 7-9. As for the U.S. military presence in East Asia, however, there was no noticeable impact except for the fact that some naval ships and aircraft were sent to the Middle East.

⁶⁰⁾ Defense Casualty Analysis System, "U.S. Military Casualties: Persian Gulf War Casualty Summary, Desert Storm," as of August 20, 2024, https://dcas.dmdc.osd.mil/dcas/app/ conflictCasualties/gulf/stormsum.

^{61) &}quot;Potential War Casualties Put at 100,000: Gulf Crisis: Fewer U.S. Troops Would Be Killed or Wounded than Iraq Soldiers, Military Experts Predict," Los Angeles Times Archives, September 5, 1990.

Indirect intervention, in comparison, makes it possible to keep these costs low. With assistance-related costs to Ukraine totaling about \$60 billion, the financial cost of indirect intervention is not necessarily low, but the annual expenditure is still about one-half to one-fifth of that of direct intervention. Moreover, if we look at this spending in real terms—adjusted to the FY2011 consumer price index, as in the direct intervention cases—we can estimate that assistance-related spending in Ukraine is even lower, at about \$43 billion 62

What sets indirect intervention apart, however, is the low human cost in terms of the number of troops deployed to the war zone and the number of deaths. Not only has the indirect intervention in Ukraine not resulted in any U.S. military deaths, but it is also worth noting that no U.S. combat troops have even been deployed to Ukrainian territory for operational activities.

(2) Risks of Participation in Combat

The fact that indirect intervention does not require the United States to deploy troops to a war zone has important implications for national defense planning. Direct intervention involving the deployment of troops to a war zone could affect the United States' strategic priorities. This is because participating in the war would make those responsible for policy and operations more preoccupied with the current war than with future wars. For example, in the 2001 Quadrennial Defense Review (QDR), the U.S. DOD, under Secretary of Defense Donald Rumsfeld, sought to shift away from the "threat-based" defense planning of the past and toward "capabilities-based" U.S. forces that would respond to highly uncertain potential future threats.⁶³ However, the subsequent 9/11 terrorist attacks and the U.S. invasions of Afghanistan and Iraq led the country to focus instead on counterinsurgency operations in the Middle East from the 2000s through the mid-2010s.⁶⁴

The United States' strategic focus on the Middle East ultimately continued even after the Obama administration's rebalance to the Asia-

⁶²⁾ Estimates are based on the consumer price index for FY2025. For differences between FY2025 and FY2011 consumer price indexes, see DOD, "National Defense Budget Estimates for FY2025: Office of the Under Secretary of Defense (Comptroller)," April 2024

⁶³⁾ Raphael S. Cohen, The History and Politics of Defense Review (Santa Monica: RAND Corporation, 2018), 22–30.

⁶⁴⁾ Ibid., 25–30.

Pacific region. This is said to have caused a "lost decade," during which the DOD's resources and attention were diverted away from China, even after 2010.⁶⁵ Since the United States' defense plans to date have prioritized whatever war it was fighting at the time, ⁶⁶ if it were to decide to intervene directly in the Russo-Ukrainian War, we cannot rule out the possibility that its priorities would pivot from future-oriented competition with China to the immediate war against Russia.

Changes in defense planning priorities could affect military thinking and concepts or even the country's perception of its issues. To take another example from the Middle East, when dealing with insurgents in Afghanistan and Iraq, the United States emphasized protecting its troops from improvised explosive devices (IEDs) and winning the hearts and minds of the local population.⁶⁷ These challenges in counterinsurgency operations are fundamentally different from the types of threats the United States can expect to face in conflicts with military powers like China, which use precision-guided weapons and cyberattacks, for example.⁶⁸

The necessary force structure also changes according to the challenges faced. For example, in the Middle East, where counterinsurgency operations and urban warfare have been the primary forms of combat, U.S. forces have emphasized the size of their forces over their modern capabilities. ⁶⁹ This tendency is based on the mission requirements in the Middle East, which are not necessarily consistent with the force structure required in the Pacific. In other words, when the U.S. military is engaged in actual combat, the DOD increases the resources and time devoted to that conflict. In the process of thinking through its challenges and solutions, it may form a specialized force

⁶⁵⁾ Robert D. Blackwill and Richard Fontaine, Lost Decade: The US Pivot to Asia and the Rise of Chinese Power (Oxford: Oxford University Press, 2024).

⁶⁶⁾ Cohen, The History and Politics of Defense Review, 22–47.

⁶⁷⁾ Department of the Army, FM 3-24 MCWP 3-33.5: Insurgencies and Countering Insurgencies, May 2014; DOD, Investigation of a Hotline Allegation for a Questionable Intelligence Activity Concerning the Joint IED Defeat Organization (JIEDDO) Counter-IED Operations/Intelligence Integration Center (COIC), April 4, 2014.

⁶⁸⁾ Mark Gunzinger and Bryan Clark, Winning the Salvo Competition: Rebalancing America's Air and Missile Defenses (Washington, DC: Center for Strategic and Budgetary Assessments, 2016).

⁶⁹⁾ Dave Baiocchi, Measuring Army Deployments to Iraq and Afghanistan (Santa Monica: RAND Corporation, 2013); Benjamin S. Lambeth, Air Power against Terror: America's Conduct of Operation Enduring Freedom (Santa Monica: RAND Corporation, 2005); Jake Yeager, "Expeditionary Advanced Maritime Operations: How the Marine Corps Can Avoid Becoming a Second Land Army in the Pacific," War on the Rocks, December 26, 2019.

to tackle the problems at hand. Thus, engagement in actual combat makes it difficult to plan a force for potential future conflicts. In contrast, indirect intervention, which does not require troops to be deployed to the war zone, would make it possible to avoid such spillover effects.

(3) The Problem of Weapons Supply

Meanwhile, regardless of the form of intervention, the pressure to supply weapons is always present. In the Russo-Ukrainian War, the United States provides Ukraine with existing weapons from its inventory through the Presidential Drawdown Authority (PDA). However, despite funding being allocated to replenish stocks depleted in this process, 70 the United States does not have the supply capacity to immediately replenish weapons to meet demand. Particular emphasis has been placed on the supply shortage of 155 mm shells, which are being consumed at a rapid pace in the Russo-Ukrainian War, 71 but the same generally applies to other major weapons such as Javelin anti-tank missiles, Stinger missiles, and HIMARS. 72

Interestingly, these issues are not new. The risk of depleting ammunition stockpiles in wartime has always existed behind the scenes in conflicts prior to February 2022, including the Gulf War, the Kosovo conflict, and the wars in Afghanistan, Libya, and, more recently, Iraq and Syria. ⁷³ During the Gulf War, for instance, the U.S. defense industry did not establish a coherent system for increasing production, and much of its supply came from existing

⁷⁰⁾ Mark F. Cancian and Chris H. Park, "What Is in the Ukraine Aid Package, and What Does It Mean for the Future of the War?," Center for Strategic and International Studies, May 2024.

⁷¹⁾ DOD, National Defense Industrial Strategy, November 16, 2023, 15; U.S. Army, Army Fiscal Budget Overview 2025, March 11, 2024, 9, 14.

⁷²⁾ Mark F. Cancian, "Rebuilding U.S. Inventories: Six Critical Systems," Center for Strategic and International Studies, January 9, 2023; Lee Hudson and Paul McLeary, "U.S. Industry Cranks Up HIMARS Production as Ukraine War Intensifies," *Politico*, October 18, 2022.

Tayler Hacker, "Money Isn't Enough: Getting Serious about Precision Munitions," War on the Rocks, April 24, 2023.

stockpiles. Had the fighting continued much longer, U.S. forces would have faced severe shortages of fuel, ammunition, and other supplies.⁷⁴

The reason why the issue of weapons production has not received much attention in these conflicts is that they were either low-intensity conflicts, such as counterinsurgency operations, or high-intensity conflicts in which the intensity declined quickly.⁷⁵ Because the Russo-Ukrainian War is a highend, years-long conflict between nations, it has likely brought to the surface problems that were overlooked in the past.

Impacts on the Deterrence Posture in the Pacific

From the above, we can conclude that the indirect intervention approach in Ukraine has helped reduce consumption of U.S. strategic resources, especially human costs. However, has it actually helped to limit the negative impact on the U.S. deterrence posture in the Pacific? To understand this "impact," a useful approach would be to conduct a counterfactual analysis to assess changes in U.S. military programs since the outbreak of the Russo-Ukrainian War, as well as to infer how the situation would have developed if the Russo-Ukrainian War had not occurred. Therefore, the following analysis will also take into account trends prior to the Russo-Ukrainian War. The conclusion is that there is insufficient evidence to argue that U.S. support for Ukraine has negatively impacted its deterrence posture in the Indo-Pacific region.

⁷⁴⁾ James A. Blackwell Jr., "The Defense Industrial Base," The Washington Quarterly 15, no. 4 (1992): 187–206; John T. Correll and Colleen A. Nash, "The Industrial Base at War," Air and Space Forces Magazine, December 1, 1991; Donald D. Whitfield II, The Ammunition Production Base: Past, Present, and Future (Washington, DC: National Defense University, 1993).

⁷⁵⁾ Alex Vershinin, "The Return of Industrial Warfare," Royal United Services Institute, June 17, 2022; Matthew Olay, "Ukraine War Illustrates Need for Robust Defense Industry, Eucom Commander Says," DOD News, August 9, 2024.

⁷⁶⁾ Daniel W. Drezner, "The Song Remains the Same: International Relations after COVID-19," International Organization 74 (2020): E20; Jack S. Levy, "Counterfactuals and Case Studies," The Oxford Handbook of Political Methodology, ed. Janet M. Box-Steffensmeier, Henry E. Brady, and David Collier (Oxford: Oxford University Press, 2010), 627–644.

(1) Strategy and Budget of the Department of Defense

First of all, the direction of U.S. strategy since the 2010s has been almost consistently focused on competition with China, even following Russia's invasion of Ukraine in February 2022. In retrospect, the groundwork for U.S. competition with China was laid in the early 2010s, beginning with the Obama administration's rebalance to the Asia-Pacific. This became more overt under the Trump administration, which declared the reemergence of great power competition. The Biden administration's National Security Strategy and National Defense Strategy (NDS), released in October 2022 after Russia's invasion of Ukraine, further reinforced the U.S. priority of countering China in the Indo-Pacific region, even as it recognized Russia as an immediate threat.⁷⁷ Notably, the 2022 NDS explicitly states that the DOD should not over-exert, reallocate, or redesign U.S. forces in a way that affects the defense plan's highest priorities, namely, competition with China.⁷⁸ At least on paper, the strategic priorities of the United States have not changed despite the Russo-Ukrainian War.

So, what is the actual situation? While still less costly than direct intervention, the defense budget is one area where the deterrence posture toward China could be affected, considering that aid to Ukraine has exceeded \$60 billion as of December 2024.Unfortunately, the U.S. DOD budget documents do not provide comprehensive details on spending items for each region, making it difficult to get a full picture of the budget for a particular region. On this point, the Pacific Deterrence Initiative (PDI), established by the National Defense Authorization Act for Fiscal Year 2021, visualizes the budget allocated to each type of defense-related program and activity in the Indo-Pacific region, providing a useful indicator for examining budget trends before and after Russia's invasion of Ukraine. It is particularly useful because it was included in FY2022 budget requests (submitted in May 2021) that predate the conflict.

Figure 5.2 summarizes the PDI budget in recent years, and, for comparison, the budget for the European Deterrence Initiative (EDI). This figure shows that the DOD's PDI budget request has steadily increased each fiscal year, including before and after Russia's invasion of Ukraine.

⁷⁷⁾ White House, National Security Strategy, October 2022, 11, 23–26; DOD, 2022 National Defense Strategy, 7, 10.

⁷⁸⁾ DOD, 2022 National Defense Strategy, 22.

(Billions of dollars)

10

9

8

7

6

5

4

3

2

1

0

FY2019

FY2020

FY2021

FY2022

FY2023

FY2024

FY2025

□ European Deterrence Initiative □ Pacific Deterrence Initiative

Figure 5.2. Changes in budget requests for the Pacific Deterrence Initiative and the European Deterrence Initiative

Source: Prepared by the author based on DOD summary budget documents for each fiscal year.

This contrasts with the EDI budget request, which peaked in FY2019 and has been trending downward since the Russo-Ukrainian War. Of course, we cannot rule out the possibility that the Department is cutting some personnel, operations, procurement, research and development, facilities, and other items from the defense budget in order to manage the budget for assistance to Ukraine, and that this is having an impact on the deterrence posture toward China. However, as far as we can tell from examining the PDI, there is no evidence that the budget for the Indo-Pacific region has been negatively affected by the Russo-Ukrainian War.

(2) Capability-oriented Programs

As with its defense budget, there are no signs that the trend in the United States' capability-enhancing programs prior to 2022 has changed significantly since the outbreak of the Russo-Ukrainian War. While there appears to be no consensus on the ideal force structure for competition with China, the U.S. military has at least been placing greater emphasis on

capability rather than capacity since the great power competition began to accelerate in the late 2010s.⁷⁹

One typical initiative that helps strengthen U.S. military capabilities is the development of operational concepts. For example, since the 2010s, the U.S. military has presented an operational concept that allows it to penetrate into and maneuver within threat zones, and constant validation of this concept has been ongoing into the 2020s, continuing even beyond February 2022 (see Chapter 6).

In particular, the U.S. Army's Multi-Domain Operations concept is perhaps one of the most fleshed-out concepts in the U.S. military. This concept is based on the idea that even if superiority is lost in one domain of operations, that inferiority can be made up for in other domains. To validate this concept, since the late 2010s, the U.S. Army has focused on launching Multi-Domain Task Forces (MDTFs) that can operate independently and include capabilities such as long-range fires and information warfare. It plans to have five MDTFs operationally ready by FY2028, including the first MDTF, which became fully operational in FY2024.⁸⁰ Of particular note is the fact that the number of MDTFs assigned to missions in the Indo-Pacific region increased from the previously planned two to three in 2024.⁸¹ This indicates that one of the most important programs for deterrence against China has accelerated in the Pacific despite the crisis in Europe.

Precision-guided missiles are another specific capability that is being highlighted as a way to increase the U.S. military's destructive power in the Pacific region. Anti-ship, air defense, and long-range missiles are particularly important due to China's growing missile capabilities and its geographic characteristics as a country flanked by the ocean.⁸² Figure 5.3 summarizes

⁷⁹⁾ Mackenzie Eaglen, "The Bias for Capability over Capacity Has Created a Brittle Force," War on the Rocks, November 17, 2022; Mark F. Cancian, "Force Structure in the National Defense Strategy: Highly Capable but Smaller and Less Global," Center for Strategic and International Studies, October 31, 2022.

Andrew Feickert, The Army's Multi-Domain Task Force (MDTF), In Focus, Congressional Research Service IF11797 (Washington, DC: Congressional Research Service, July 10, 2024).

⁸¹⁾ U.S. Army, Army White Paper: Army Force Structure Transformation, February 27, 2024, 1–2.

⁸²⁾ Austin J. Dahmer, "Resourcing the Strategy of Denial: Optimizing the Defense Budget in Three Alternative Futures," Marathon Initiative, February 1, 2023; Stacie Pettyjohn and Hannah Dennis, "Production Is Deterrence": Investing in Precision-Guided Weapons to Meet Peer Challengers (Washington, DC: Center for New American Security, 2023).

changes in the amounts requested to procure similar weapons, while Figure 5.4 summarizes the number of planned procurements of the same items to account for U.S. economic inflation. Although there appears to be a relatively large spike in requested amounts for many items from FY2022 to FY2024, controlling for inflation reveals a gradual, moderate increase in the number of procurements. In any case, these figures show that demand for long-range anti-ship and air defense missiles has been relatively stable in the years spanning Russia's invasion of Ukraine. From this standpoint, it would be difficult to argue that U.S. support for Ukraine has negatively impacted the country's deterrence posture toward China.

In the first place, these weapons do not overlap with many of the weapons that the United States provides to Ukraine. According to an excellent study by the Center for a New American Security (CNAS), the precision-guided munitions frequently used in the Russo-Ukrainian War are short-range or anti-surface missiles such as the Javelin, Stinger, Excalibur, and Advanced Precision Kill Weapon System (APKWS), and the value of such weapons is dramatically lower for U.S. forces in the Pacific. In the event of a Taiwan contingency, for example, if the U.S. military were to attempt military intervention from outside Taiwan, it would primarily rely on seaor air-launched strike capabilities, while ground-launched weapons would require a range equivalent to several thousand kilometers. Considering that the Guided Multiple Launch Rocket System (GMLRS), which is classified as a long-range weapon in Ukraine, has a maximum range of about 70 kilometers, it is obvious that there is a significant discrepancy between the weapons in high demand in Ukraine and those that would be effective in the Pacific theater.83 These structural factors may partially explain why no significant impact has been seen in the procurement of weapons prioritized by the United States for deterrence against China.

⁸³⁾ Pettyjohn and Dennis, 'Production Is Deterrence', 16–21.

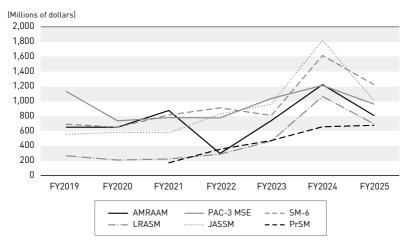


Figure 5.3. Procurement trends of major missiles (based on requested budget)

Source: Prepared by the author based on DOD budget request summaries for each fiscal year.

Note: The names of each missile are as follows: AMRAAM (Advanced Medium-Range Air-to-Air Missile), PAC-3 MSE (Patriot Advanced Capability-3 Missile Segment Enhancement), SM-6 (Standard Missile-6), LRASM (Long Range Anti-Ship Missile), JASSM (Joint Air-to-Surface Stand-off Missile), PrSM (Precision Strike Missile).

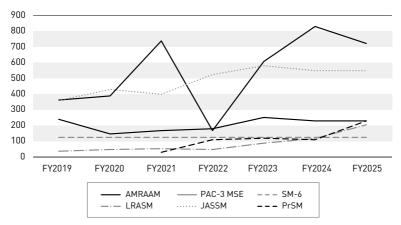


Figure 5.4. Procurement trends of major missiles (based on planned numbers)

Source: Same as Figure 5.3.

(3) Backlog of Arms Exports to Taiwan

However, even if the weapons provided to Ukraine do not overlap with those requested by U.S. forces in the Pacific, the same capabilities that have yielded results in land warfare in Ukraine could be important defensive tools for frontline regions like Taiwan.⁸⁴ The Taiwanese military must consider not only how to maintain its forward defense to prevent invading forces from landing on Taiwan at sea or on the shoreline, but also how to deploy defense in-depth within Taiwanese territory for use after a landing. In other words, one of the scenarios Taiwan could face is a form of warfare similar to the land warfare in Ukraine. And of course, in that case, the weapons that have been supplied to Ukraine would be highly valuable in Taiwan.

Taiwan is already purchasing many of these weapons from the United States, but there are some problems that cannot be ignored. Of particular concern is the fact that Taiwan has not received the weapons it ordered from the United States in a long time. According to one estimate, there have been delays in the delivery of \$19.2 billion worth of weapons that have been approved by Congress for sale to Taiwan since the late 2010s.⁸⁵

There is also a recognition that these delays in deliveries to Taiwan are caused by the impact of support for Ukraine. For example, a report submitted to Congress by the U.S.-China Economic and Security Review Commission in November 2022 found that many of the items experiencing delays, including F-16 fighter jets, Stinger missiles, and self-propelled artillery, overlap with the weapons in demand in Ukraine. The report concludes that the surge in demand associated with the Russo-Ukrainian War, along with global supply chain disruptions caused by COVID-19, are major factors in these delays. Indeed, given the United States' track record of supplying Ukraine with large quantities of weapons in a short time frame, the postponement of arms deliveries to Taiwan, which has become the norm, is also believed to be highly related to U.S. assistance to Ukraine.

⁸⁴⁾ Ibid., 16; Alexander Velez-Green and Robert Peters, "The Prioritization Imperative: A Strategy to Defend America's Interests in a More Dangerous World," Heritage Foundation, August 1, 2024, 11.

⁸⁵⁾ John Grady, "U.S. Needs to Clear \$19B in Arms Sale Backlog to Taiwan, Says HASC Member," USM News, December 14, 2022.

⁸⁶⁾ Wong and Glas, 2022 Report to Congress, 618-619.

⁸⁷⁾ Chang and Wang, "Delayed US Arms Transfers to Taiwan."

On the other hand, attributing the delay in arms deliveries to Taiwan to U.S. support of Ukraine requires some caution. There is an overlap of about 30% of the total demand for weapons between Ukraine and Taiwan, but the procurement channels for these competing weapons are different. Most of the equipment destined for Ukraine comes from the U.S. military's existing inventory and is facilitated by the Presidential Drawdown Authority (PDA), while Taiwan receives new weapons through the Foreign Military Sales (FMS) program.⁸⁸

In the first place, delays in U.S. arms deliveries to Taiwan predate Russia's invasion of Ukraine. The United States approved a major arms sale to Taiwan in 2019, before Russia's invasion of Ukraine, but by the spring of 2022, the delivery of \$14.2 billion worth of equipment had already been delayed. ⁸⁹ These factors suggest that the delay in arms deliveries to Taiwan cannot be attributed solely to the Russo-Ukrainian War.

Rather, the core of the problem may lie in the prolongation and inefficiencies of the FMS procurement process, which have long been pointed out. 90 That being said, as one measure to improve the FMS process, the U.S. Congress also authorized PDA assistance to Taiwan in the National Defense Authorization Act for Fiscal Year 2023. Thus, there will be more room than in the past for weapons slated for delivery to Taiwan to compete with those provided to Ukraine. On the other hand, the annual limit for PDA provisions to Taiwan is only \$1 billion, while the total limit for PDA provisions to Ukraine from February 2022 to the summer of 2024 has been raised to over \$33 billion. Considering this, there is not necessarily significant friction between the two sides at the moment. 91

To briefly recap the analysis so far, many of the weapons consumed in the Russo-Ukrainian War differ from those sought by U.S. forces in the Pacific. While there is some overlap in the demand for certain items, the procurement channels for defense equipment often differ between Ukraine

⁸⁸⁾ Jennifer Kavanagh and Jordan Cohen, "The Real Reasons for Taiwan's Arms Backlog: And How to Help Fill It," War on the Rocks, January 13, 2023.

⁸⁹⁾ Bryant Harris, "Document Reveals \$14 Billion Backlog of US Defense Transfers to Taiwan," *Defense News*, April 14, 2022.

⁹⁰⁾ Thomas Spoehr and Maiya Clark, "How the United States Can Support Ukraine without Compromising Deterrence in the Indo-Pacific," Heritage Foundation, May 17, 2023, 7–10.

Office of Inspector General, DOD, Evaluation of the DoD's Tracking and Accountability of Presidential Drawdown Equipment Provided to Taiwan, DODIG-2024-130, September 11, 2024.

and Taiwan. Therefore, the negative impact of the United States' indirect intervention in Ukraine on its deterrence posture toward China may be smaller than is generally believed.

The "Mock Wartime" Effect of Indirect Intervention

On the other hand, one sector has a clear impact from indirect intervention in Ukraine. One of the most obvious shifts that has occurred since February 2022 is the strengthening of the U.S. defense industrial base. The Russo-Ukrainian War, which has dragged on for several years into an apparent war of attrition, has revealed problems in the weapons production line that did not surface in shorter wars such as the Gulf War. Providing military assistance to Ukraine to fight a full-scale interstate conflict with Russia, a military power, has practically forced the U.S. defense industry, stagnant since the end of the Cold War, to expand its production capacity.

(1) From Reducing to Expanding Weapons Production

This is not to say that the defense industry was free of production capacity issues prior to February 2022. There had been a call to improve production of 155 mm artillery shells, one of the most in-demand equipment in Ukraine, both in the United States and abroad, as many production lines had been closed since the early 2010s due to fraud and safety violations, resulting in a lack of facilities to increase production. Despite this, no substantial efforts were made to increase capacity until the Russian invasion of Ukraine in 2022.⁹²

Such weaknesses in the artillery shell production system were indicative of broader problems in the defense industry. For example, according to a 2023 report published by the National Defense Industrial Association (a U.S. non-profit organization), U.S. federal defense spending as a percentage of GDP fell from 5.8% in 1985 to 3.2% in 2021, its defense industry workforce decreased from 3 million to 1.1 million over the same period, and the number of small- and medium-sized businesses involved in the defense

⁹²⁾ Stephen Grey, John Shiffman, and Allison Martell, "A Reuters Investigation: Years of Miscalculations by U.S., NATO Led to Dire Shell Shortage in Ukraine," Reuters, July 19, 2024

industry shrank by more than 40% over the past decade.⁹³ According to these indicators, the defense industry as a whole was in decline before the Russo-Ukrainian War.

After February 2022, however, this trend took a definite turn toward expansion. The first thing we can point out is the growth of investment in weapons production systems. The budgetary framework that allows the United States to provide arms to Ukraine includes (1) the PDA, which authorizes the U.S. military to supply existing weapons to Ukraine and replenish stocks, and (2) the Ukraine Security Assistance Initiative (USAI), which enables the Ukrainian government to contract directly with U.S. companies, among other things. Under this framework, spending through either mechanism allows funds to flow to the U.S. defense industry. For example, when the U.S. government delivers equipment from its inventory to Ukraine through the PDA, U.S. companies receive orders to replenish the depleted stocks, and the same is true when the Ukrainian government orders military equipment directly from U.S. companies under the USAI.

Efforts such as these have helped boost production in the U.S. defense industry. For example, in the two-year period from February 2022 to February 2024, industrial production in the U.S. defense and space sectors grew by 17.5%. The percentage of increase in arms production is even more striking when considering individual weapons. From 2022 to 2024, production of major weapons increased across the board, led by a 178% increase in the production of 155 mm artillery shells, a major focus of the DOD, followed by PAC-3 at 100%, HIMARS at 60%, and GMLRS at 40%. Thus, in the two years since the start of Russia's invasion of Ukraine, production capacity for weapons in high demand in Ukraine has expanded significantly. 96

In addition, to meet the growing demand for weapons since the start of the Russo-Ukrainian War, the United States has been pushing for cooperation

⁹³⁾ National Defense Industrial Association, Vital Signs 2023: Posturing the U.S. Defense Industrial Base for Great Power Competition (Arlington: National Defense Industrial Association, February 2023), 5.

⁹⁴⁾ Elizabeth Hoffman, et al., "How Supporting Ukraine Is Revitalizing the U.S. Defense Industrial Base," Center for Strategic and International Studies, April 2024.

Tom Fairless, "How War in Europe Boosts the U.S. Economy," Wall Street Journal, February 18, 2024.

⁹⁶⁾ Luke A. Nicastro, et al., Defense Production for Ukraine: Background and Issues for Congress, Congressional Research Service Report (R48182), September 16, 2024, 8.

with Europe in arms production. Following the Cold War and at least until the mid-2010s, European countries, like the United States, continued to slash their defense spending and underestimated the likelihood of a full-scale war in Europe until Russia's intentions to invade Ukraine became clear in 2022. This weakened the production bases for basic equipment such as artillery shells, rockets, and surface-to-air missiles in Europe. 97

Against this backdrop, the United States and European countries launched the Ukraine Defense Contact Group (UDCG) in April 2022 to coordinate defense production efforts among some 50 member countries. The UDCG established working-level meetings to address issues in specific areas. As Table 5.2 shows, the UDCG has already facilitated European countries' efforts to enhance their defense production capacity in several specific areas. Needless to say, strengthening Europe's production capacity and production infrastructure in the United States raises the level of the Western defense industrial base as a whole.

Table 5.2. Major efforts of countries participating in the Ukraine Defense Contact Group

Countries	Efforts	Scale	Time frame
France, Sweden	Loading of ammunition and explosives	Double capacity	By 2025
	Modular charges	Double capacity	By 2026
	Powder production	Ten-fold increase	
Germany, Spain, Hungary, South Africa, Australia	Artillery shell production	700,000 shells	By 2025
	Gunpowder production	10,000 tons	
Germany, the Netherlands, Romania, Spain	PAC-3 GEM-T missile production	1,000 missiles	Unknown
Consortium of 15 countries led by the Czech Republic	Investment of funds for shell production	€1.7 billion (equivalent to 500,000 artillery rounds)	By the end of 2024
European defense industry	Ammunition production	2 million rounds per year	By the end of 2025

Source: Prepared by the author based on DOD, "Fact Sheet on Efforts of Ukraine Defense Contact Group: National Armaments Directors," September 6, 2024.

⁹⁷⁾ Hannah Aries, Bastian Giegerich, and Tim Lawrenson, "The Guns of Europe: Defenceindustrial Challenges in a Time of War," Survival Online, June 19, 2023.

⁹⁸⁾ Nicastro, et al., "Defense Production for Ukraine."

DOD, Fact Sheet on Efforts of Ukraine Defense Contact Group: National Armaments Directors, September 6, 2024.

Another important development is the growing awareness, both inside and outside the U.S. government, of problems with the production system. In the past, Under Secretary of Defense for Acquisition and Sustainment William LaPlante has repeatedly stressed the importance of weapons production in wartime, as well as the equally important link between production systems and deterrence in peacetime. 100 The fact that documents such as the 2022 NDS and the 2023 National Defense Industrial Strategy also emphasize the importance of building a modern defense industrial ecosystem to maintain U.S. integrated deterrence and superiority indicates that this awareness is spreading throughout the DOD.¹⁰¹ Similarly, major U.S. think tanks with close ties to the DOD are sounding the alarm about the current defense production system from the perspectives of deterrence and defense. 102 The growing awareness inside and outside the government of the problems with the defense industrial base, and the declaration of medium- to long-term commitments to address this issue through strategic documents, should raise expectations that the DOD will focus on strengthening the industrial base over the long term and provide convincing incentives for the defense industry to invest in weapons production facilities over the long haul.

(2) Implications for Taiwan's Security

The fact that the United States, along with its allies, has begun to seriously strengthen its weapons production capabilities has important implications for the security situation around Taiwan. Most notably, many of the weapons that have been delivered to Ukraine are expected to recover to pre-2022 inventory levels when viewed over a medium- to long-term time horizon of five to ten years. ¹⁰³ In addition, the enhanced production system established as a result of the weapons supply challenges experienced during the Russo-Ukrainian War is expected to remain functional for at least several years after the war. This suggests that U.S. and foreign arms industries,

¹⁰⁰⁾ David Vergun, "Officials Say Manufacturing Arms at Scale a Deterrent to Adversaries," DOD News, April 24, 2024; William A. LaPlante, "Strengthening the U.S. Industrial Base with Hon. Dr. William A. LaPlante," Center for Strategic and International Studies, September 2023.

¹⁰¹⁾ DOD, 2022 National Defense Strategy, 20; DOD, National Defense Industrial Strategy, 7–10.

¹⁰²⁾ Examples include Seth G. Jons, Empty Bins in a War-time Environment: The Challenge to the U.S. Defense Industrial Base (Washington, DC: Center for Strategic and International Studies, 2023); Pettyjohn and Dennis, 'Production Is Deterrence,' among others.

¹⁰³⁾ Cancian, "Rebuilding U.S. Inventories."

having dramatically improved their supply capacity, may be able to meet high demand for weapons when tensions rise across the Taiwan Strait in the future.

Furthermore, establishing such mechanisms as PDA and an equivalent of USAI adopted in Ukraine, which would allow orders to be made directly between Taiwan and U.S. firms, would enable more efficient assistance to Taiwan. In this case, assuming that U.S. and European countries have defense production bases that have been improved by the Russo-Ukrainian War, they can be expected to operate even more effectively. To put it another way, the Russo-Ukrainian War is creating the international infrastructure necessary to supply at least some equipment that will be critical to Taiwan's survival, including ammunition such as artillery shells, more quickly and on a greater scale.

In fact, the United States is also taking steps to improve the operational aspects of its military assistance to Taiwan. The Taiwan Enhanced Resilience Act (TERA), enacted as part of the National Defense Authorization Act for Fiscal Year 2023, authorized weapons to be provided to Taiwan under the PDA. It also, in response to delays in the delivery of equipment, required the DOD and Department of State to develop a multi-year plan to meet Taiwan's defense needs, to shorten the process for FMS to Taiwan, and to prepare an annual report on delayed items for delivery to Taiwan and their alternatives, as well as countries scheduled to receive the deliveries before Taiwan. At the moment, these efforts to improve procedural efficiency have not yet had a particularly significant impact. However, as arms stockpiles recover in the medium to long term, it should transfer or deliver weapons more efficiently than in the past.

However, it is important to note that, at this point in time, U.S. and international production capabilities are being enhanced primarily for weapons and ammunition items that are heavily used in Ukraine. As mentioned above, such weapons and ammunition are expected to be particularly important in the defense in-depth of Taiwan, deployed after an invading force lands. On the other hand, the Russo-Ukrainian War

¹⁰⁴⁾ Spoehr and Clark, "How the United States," 6.

¹⁰⁵⁾ Caitlin Campbell, Taiwan: Defense and Military Issues, Congressional Research Service Report (IF12481), August 15, 2024; Eric Gomez, "The Taiwan Aid Bill Won't Fix the Arms Backlog," Foreign Policy, June 13, 2024.

has not necessarily led to a significant increase in the production capacity of, for example, long-range precision-guided munitions, which are highly demanded by the U.S. and its allies in the Pacific. As will be discussed in detail in the next section, direct military intervention is a more probable option for the United States in the event of a Taiwan contingency than indirect intervention, so it is also critical for the U.S. military to increase its own stockpile of weapons and ammunition. One challenge going forward will be whether the United States can leverage the heightened opportunity to review its industrial base as a result of the Russo-Ukrainian War to create a system that not only meets existing demand, but also takes into account potential future demand.¹⁰⁶

In summary, the Russo-Ukrainian War has created a sort of "mock wartime" situation in the United States and its allies supporting Ukraine. One of the main axes of support under the indirect intervention approach is the provision of arms. As a result of the Russo-Ukrainian War, which is consuming weapons and ammunition at a rate far exceeding its supply capacity, the United States has begun to review its arms industry infrastructure, including expanding production capabilities and streamlining production processes. Although the need for such improvements had been pointed out for some time, improvements to the arms production system were not made until Russia's invasion of Ukraine in February 2022 and the United States' subsequent adoption of an indirect intervention approach through military assistance. Essentially, U.S. indirect intervention in Ukraine has not only allowed the United States to help Ukraine to resist aggression from a logistical standpoint at relatively low cost and risk while minimizing the negative impact on the Indo-Pacific region, but it has also highlighted and forced the United States and its allies to address a vital problem that they can expect to face in a potential future major conflict.

¹⁰⁶⁾ Jons, Empty Bins, 21-22.

Applying the Indirect Intervention Model to Taiwan Defense

Costs and Risks of Direct Intervention in Taiwan

The indirect intervention approach used in Ukraine can be credited with minimizing the investment of U.S. defense resources in Europe, thereby also limiting the impact on the U.S. force posture in the Pacific. This in itself aligns with the U.S. National Defense Strategy's policy of focusing the necessary strategic resources on competition with China, its top priority. However, one cannot rule out the possibility that the convenience of the indirect intervention approach, which allows a country to pursue its strategic objectives while preserving strategic resources at a low cost, may also attract decision makers as a viable option in the event of a Taiwan contingency. As will be shown below, direct intervention in a Taiwan contingency carries high costs and risks, which may well lead some inside and outside the U.S. government to favor indirect intervention.

Many simulations of a hypothetical U.S.-China conflict over Taiwan have been conducted, most of which assume direct intervention by the United States. In particular, the wargaming report published by the Center for Strategic and International Studies (CSIS) in 2023 is distinctive in that it focuses on the consequences of a head-to-head war between the United States and China in the area around Taiwan. This wargame was run 24 times, simulating various iterations of a Taiwan contingency to derive different outcomes under multiple scenarios. These scenarios included a "base scenario" rooted in the most likely assumptions about the effectiveness of the weapons and China's military capabilities, "optimistic scenarios" based on a more favorable view, and "pessimistic scenarios" based on less favorable assumptions.

The report concluded that if the United States intervened directly under any iteration of these scenarios, whether optimistic, base, or pessimistic, China would struggle to conduct operations favorable to itself, much less win the war. At the same time, the simulations also showed that the cost to the United States would be extremely high. For example, the report estimated

¹⁰⁷⁾ Mark F. Cancian, Matthew Cancian, and Heginbotham, The First Battle of the Next War.

that the U.S. military would lose 200 fighter aircraft in one week of combat in the optimistic scenario, 270 in two weeks in the realistic base scenario, and 484 in three weeks in the pessimistic scenario, of which very few would be damaged by air-to-air combat and over 90% would be destroyed on land by Chinese missiles. Significant losses of U.S. naval warships were also expected in each scenario. For example, in the base scenario, which assumes a realistic force posture, the U.S. Navy would lose a number of surface warships, including two forward-deployed aircraft carriers. 109

In addition to the loss of equipment, there would be enormous human casualties. Although the CSIS simulations do not directly calculate casualties, based on damage to equipment, they estimate 6,960 casualties in three weeks of fighting, of which 3,200 are people killed in action. Despite the fact that the wargame simulates fighting over a period of less than one month, this figure is about 60% of the total deaths in the Afghanistan and Iraq wars combined, the former of which lasted more than 20 years. In terms of the daily death rate on the U.S. side, the fatalities in a Taiwan contingency (about 140 people) are the equivalent of as much as nearly five times the deaths in the Vietnam War at its peak (30 people). 110

Another concern, besides the heavy toll on military forces, is the risk of nuclear escalation. China has not abandoned its traditional No First Use (NFU) policy and has instead adopted a policy of deterring nuclear attacks by building a second strike capability that is able to withstand and reliably retaliate against preemptive enemy strikes. Some argue that China's rapid nuclear buildup in recent years does not necessarily represent a revision of its basic nuclear doctrine, but rather an attempt to reduce the vulnerability and enhance the survivability of its nuclear forces. Size

On the other hand, others argue that the relative vulnerability of China's nuclear forces and the sensitivity of Chinese decision makers to this

¹⁰⁸⁾ Ibid., 85-95, 141.

¹⁰⁹⁾ Ibid., 88.

¹¹⁰⁾ Ibid., 119–120.

¹¹¹⁾ Oriana Skylar Mastro, "China's Nuclear Enterprise: Trends, Developments, and Implications for the United States and Its Allies," in *Project Atom 2023: A Competitive Strategies Approach for U.S. Nuclear Posture through 2035*, ed. Heather Williams et al., Center for Strategic and International Studies, September 2023.

¹¹²⁾ M. Taylor Fravel, Henrik Stålhane Hiim, and Magnus Langset Trøan, "China's Misunderstood Nuclear Expansion: How U.S. Strategy Is Fueling Beijing's Growing Arsenal," Foreign Affairs, November 10, 2023.

vulnerability increase the risk of unintentional escalation. When looking at equipment such as China's command and control systems, missile silos, transporter erector launchers (TELs), and radar stations, it is difficult to distinguish the assets needed to operate nuclear forces from those used in conventional warfare. This suggests that there is a risk that China may face a use-it-or-lose-it dilemma regarding its nuclear forces in the event of a potential conventional attack by the United States. If Chinese decision makers are subjected to the pressures of intense conventional warfare and situational uncertainty, also known as the "fog of war," they are more likely to misinterpret such an attack as targeting China's nuclear forces. 114

Nevertheless, as Chapter 4 persuasively argues, the assertion that China would rather use nuclear weapons than lose them requires a slight leap of logic and is not necessarily realistic from the standpoint of military rationality. However, there is still room for debate on how the U.S. side gauges the probability of China's nuclear use and its response to this dilemma. Regardless of whether China actually decides to use nuclear weapons, given that the use-it-or-lose-it dilemma is a widely recognized concept among U.S. experts and policymakers in the field of nuclear strategy, it may also be difficult for U.S. leaders to make decisions that completely rule out that risk. Moreover, the growing concern in the United States in recent years about the risk of nuclear war triggered by armed conflict between nuclear powers is another factor that could raise the threshold for direct U.S. intervention in a potential Taiwan contingency.¹¹⁵

The American public is in fact cautious about direct intervention in Taiwan. For example, in 2023, the Pew Research Center conducted a public opinion survey in the United States about what the country should do in the event of three scenarios: (1) a conflict between China and Taiwan, (2) a Chinese invasion of Taiwan, and (3) a Chinese invasion of Taiwan

¹¹³⁾ Wu Riqiang, "Assessing China-U.S. Inadvertent Nuclear Escalation," *International Security* 46, no. 3 (2022): 128–162; Michael S. Chase, Andrew S. Erickson and Christopher Yeaw, "Chinese Theater and Strategic Missile Force Modernization and Its Implications for the United States," *Journal of Strategic Studies* 32, no. 1 (2009): 67–114.

¹¹⁴⁾ Fiona S. Cunningham and M. Taylor Fravel, "Dangerous Confidence? Chinese Views on Nuclear Escalation," *International Security* 44, no. 2 (2019): 61–109; Caitlin Talmadge, "Would China Go Nuclear? Assessing the Risk of Chinese Nuclear Escalation in a Conventional War with the United States," *International Security* 41, no. 4 (2017): 50–92.

¹¹⁵⁾ Daniel De Vise, "Americans' Nuclear Fears Surge to Highest Levels since Cold War," Hill, October 14, 2022.

after Taiwan declares independence. The percentage of respondents who answered "support Taiwan" were 45%, 49%, and 40%, respectively, none of which exceeded the combined percentages of respondents who chose not to intervene by answering "remain neutral" and "support China" (55%, 51%, and 60%, respectively). ¹¹⁶ In addition, according to a separate survey by the Chicago Council on Global Affairs, the percentage of respondents with a favorable view of Taiwan has remained between 50% and 60%, indicating that U.S. public sentiment toward Taiwan is somewhat favorable. On the other hand, support for the deployment of U.S. forces in the event of a Chinese invasion of Taiwan exceeded 40% only in the three years from 2020 to 2022 and 50% only in 2021, with support basically hovering in the 20–30% range (Figure 5.5).

The results of the Chicago Council on Global Affairs study conducted in 2023 are of particular interest. This survey examined the U.S. response to a Chinese invasion of Taiwan and found that 78% of respondents support airlifting food and medical supplies, 75% support imposing economic and diplomatic sanctions on China, 62% support sending arms and military

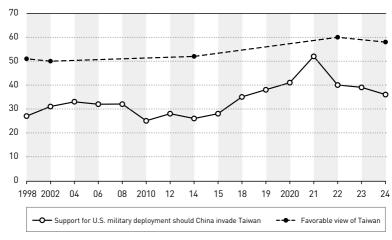


Figure 5.5. Changes in U.S. public opinion on Taiwan

Source: Prepared by the author based on various reports from the Chicago Council on Global Affairs.

¹¹⁶⁾ Laura Silver, "Testing Survey Questions about a Hypothetical Military Conflict between China and Taiwan," Pew Research Center, March 2023.

supplies to the Taiwanese government, and 50% support using the U.S. Navy to break China's blockade of Taiwan, but only 39% favor sending troops to Taiwan, while 56% oppose such a move. 117 These results clearly indicate that the U.S. public perceives indirect intervention as a more preferable option than direct intervention in a Taiwan contingency. Of course, as will be shown below, there is a strong possibility that certain combinations of options, such as breaking a blockade of Taiwan while avoiding direct intervention, are incompatible in practice. Nevertheless, the survey results indicate that U.S. public opinion tends to favor more indirect methods of intervention. It is also quite conceivable that the U.S. government would take such public opinion into account and consider indirect intervention for political reasons.

Effectiveness of Indirect Intervention

As discussed above, it is also difficult to deny the political preference for the option of indirect intervention in a Taiwan contingency. However, whether an indirect intervention model such as the one the United States has implemented in Ukraine would technically be feasible in this crisis is another question altogether. Assuming that China would primarily use its naval and air forces to blockade the air and sea approaches to Taiwan in a contingency, three factors would make it difficult to apply the model of indirect intervention in Ukraine to the crisis in Taiwan: (1) Taiwan's geographic vulnerability, (2) the complex escalation dynamics, and (3) the feasibility of resupplying operations.

(1) Taiwan's Geographic Vulnerability

First, Taiwan's geographical characteristics are not favorable to the United States when it comes to providing indirect assistance. One crucial difference between Ukraine and Taiwan is that the former mainly faces its neighbors across land borders, while the latter is an island surrounded by the ocean. Although Ukraine also has 2,782 kilometers of coastline along the Black Sea, much of the country is surrounded by a 5,581-kilometer land border, which it shares not only with hostile neighbors Russia (1,944 km) and Belarus (1,111 km), but also with Poland (498 km), Slovakia (97 km), Hungary (128

¹¹⁷⁾ Craig Kafura, "Two-Thirds of Americans Think US-Taiwan Relations Bolster US Security," Chicago Council on Global Affairs, November 2023.

km), Romania (601 km), and Moldova (1,202 km).¹¹⁸ In contrast, Taiwan shares no land borders with other countries, and its total coastline is only 1,566 kilometers, which is not much longer than that of Ukraine.¹¹⁹

Because Taiwan is surrounded by the sea on all sides, it is more vulnerable to naval and air blockades than Ukraine, which has a long land border. In general, if a continental power such as China or Russia maintains a certain level of naval strength, it can use that strength to enforce a localized "close blockade" of the sea and airspace surrounding the coast, cutting off the target island from lines of communication with the outside world. ¹²⁰ In fact, Russia has imposed a naval blockade on Ukraine and bombed major port facilities in the Black Sea, which has severely limited Ukraine's ability to trade via sea routes. ¹²¹ Considering the size of China's navy and Taiwan's relatively short coastline, if China were to attempt to invade Taiwan, it would likely do the same while enforcing a naval blockade. ¹²²

The question, then, is whether there are alternative approaches to maintaining lines of communication with the outside world in the event of a hostile blockade. In the case of Ukraine, the effects of Russia's naval blockade have been offset to some extent by having cargo ships and other vessels sail along the coastlines of neighboring friendly countries and transporting imports and exports over land. Taiwan, however, does not have the same options as Ukraine and could be subjected to a blockade for the duration of the conflict.

Of particular concern is Taiwan's terrain conditions, which could be advantageous to the side enforcing the blockade. Most of Taiwan's major ports are located in western Taiwan along the Taiwan Strait, which would make it difficult for freighters and other cargo ships to enter or leave during a contingency. For this reason, Taiwan's Pacific Ocean-facing ports are of key importance. There are four small and medium-sized ports on Taiwan's Pacific coast that are capable of handling cargo, including military supplies.

¹¹⁸⁾ Central Intelligence Agency, The World Factbook, last updated October 8, 2024.

¹¹⁹⁾ Ibid.

¹²⁰⁾ Julian S. Corbett, Some Principles of Maritime Strategy (Annapolis: Naval Institute Press, 1988).

¹²¹⁾ Marc Santora, Matthew Mpoke Bigg, and Joe Rennison, "Russia Hits Grain Ports and Threatens Ships Headed to Ukraine," New York Times, July 19, 2023.

¹²²⁾ Niharika Mandhana, "China Is Capable of Blockading Taiwan, U.S. Navy Commander Says," Wall Street Journal, September 20, 2022.

¹²³⁾ Noah Berman, Mariel Ferragamo, and Sabine Baumgartner, "How Ukraine Overcame Russia's Grain Blockade," Council on Foreign Relations, February 2024.

However, even if maritime transport to these ports were possible, China could easily destroy and disable the relatively simple transportation networks used to move the cargo inland after unloading.¹²⁴ In addition, taking advantage of Taiwan's geographic proximity to China, the Chinese Air Force can be expected to scramble aircraft from China's coastal areas and use surface-to-air missiles with a range of 300 to 400 kilometers, capable of striking most of Taiwan's territory, to interfere with the air transport of relief supplies to Taiwan.¹²⁵ Thus, unless the blockade is forcibly broken, the lines of communication between Taiwan and foreign countries, including the United States, will likely be cut off.

(2) Escalation Dynamics of a Taiwan Contingency

Second, a potential Taiwan contingency is likely to give rise to complex escalation dynamics. In order for the United States to apply the same indirect intervention approach to a Taiwan contingency as it has in Ukraine, it must support Taiwan from the outside and avoid becoming a directly involved party in the conflict. However, there are structural problems that would lead to rapid escalation in a Taiwan contingency, making it extremely difficult for the United States to stop at providing indirect support to Taiwan without engaging in direct combat.

These escalation-related structural problems stem from dilemmas faced by both the United States and China. One of the most critical dilemmas is time pressure. According to the CSIS simulation discussed earlier, any delay in the timing of direct intervention by the United States will allow that much more time for Chinese landing operations to proceed, resulting in increased U.S. military losses and the destruction of much of its infrastructure in neighboring countries, including military bases. ¹²⁶ This severely limits the time available to U.S. decision makers to consider other alternatives to direct military intervention, such as indirect assistance and diplomacy. If indirect intervention fails and direct intervention becomes the next choice, the time it takes to reach this decision will give China the time to execute its operations

¹²⁴⁾ Lonnie D. Henley, "China Maritime Report No. 26: Beyond the First Battle: Overcoming a Protracted Blockade of Taiwan," China Maritime Studies Institute, March 2023, 3–4.

¹²⁵⁾ DOD, Military and Security Developments Involving the People's Republic of China: 2023 Annual Report to Congress, October 2023, 140–144.

¹²⁶⁾ Mark F. Cancian, Matthew Cancian, and Heginbotham, *The First Battle of the Next War*, 119.

vigorously. This makes it more difficult to turn back the tide of war, thus increasing the cost of intervention. ¹²⁷ In other words, incrementalism—adjusting the method and degree of U.S. intervention as the situation unfolds and in response to the adversary's reactions—would be a high-risk approach in a Taiwan contingency where, unlike the Russo-Ukrainian War, decision must be made under the condition of severe time pressure.

China is likely to face a similar dilemma. If China were to consider invading Taiwan, an extremely important variable would be whether or not the United States will intervene directly. Of course, China cannot predict the United States' decision in advance. Therefore, China must decide whether to concentrate on invading Taiwan and avoid striking U.S. military facilities and assets in the region, hoping that the United States will not intervene militarily, or to take the lead by preemptively striking U.S. military forces in the surrounding area at the same time as launching an invasion to Taiwan, expecting direct U.S. military intervention from the beginning. 128 If the United States intends to intervene directly from the outset, the former choice would make it difficult for China to neutralize the first wave of attacks by U.S. forces, while the latter choice would ensure that the United States intervenes directly but would dampen its initial military response. While an analysis of China's decision-making in a crisis will be left to other studies, as was noted in Chapter 1, there are statements in Chinese People's Liberation Army (PLA) manuals suggesting preemptive strikes against U.S. military facilities and assets, and it would not be far off the mark to point out the risk of Chinese decision makers opting to attack U.S. forces when faced with the above dilemma.

At least from the United States' perspective, it would not be beyond expectations that, if China were to launch a full-scale invasion of Taiwan, U.S. military facilities in the region could be vulnerable to attack as well. According to classical offense-defense theory, a preemptive strike becomes a more attractive option when there is a preexisting perception that strikes by both sides would be effective, or that both sides are vulnerable to each other's attacks. ¹²⁹ A wargame conducted by CNAS in 2022 underscored

¹²⁷⁾ Ibid., 56.

¹²⁸⁾ Pettyjohn, Wasser, and Dougherty, Dangerous Straits, 4.

¹²⁹⁾ Robert Jervis, "Cooperation under the Security Dilemma," World Politics 30, no. 2 (1978): 167–214.

this exact point. In this game, the player in the role of China was tempted to gain an operational advantage by damaging U.S. military facilities and assets around Taiwan in the early stages of the conflict, when such attacks would be relatively easy. ¹³⁰ As for whether China would launch this sort of offensive in reality, the fact that U.S. experts recognize a preemptive strike on U.S. forces as one of the rational options available to China illustrates the complex escalation structure that exists between the two countries.

Thus, in a Taiwan contingency, both the United States and China are seen as having an incentive to attack the other, and it would be structurally difficult for the United States to stay out of the conflict. To put it another way, the incrementalist approach to escalation management that the United States has used in the Russo-Ukrainian War would not be effective in a Taiwan contingency, where both countries are likely to move up the escalation ladder at an extremely rapid pace as soon as conflict breaks out.

(3) Feasibility of Transportation Operations

Third, U.S. transportation operations have operational vulnerabilities. It is believed that before and after invading Taiwan, China will implement a joint blockade campaign using its naval surface and submarine fleets, air forces, rocket forces, air defense forces, and support forces to restrict shipments to and from Taiwan.¹³¹ This would make it extremely difficult from an operational standpoint for the United States to provide military assistance to Taiwan during the conflict, regardless of whether the United States is directly or indirectly involved in Taiwan's defense.

For example, in order to deliver relief supplies, including munitions, U.S. Navy ships must convoy the transport ships to Taiwan. Such convoy operations, however, leave them vulnerable to China's anti-surface warfare capabilities. To begin with, over the past three decades, China has modernized its submarine designs and dramatically improved their capabilities, including their quietness, while the United States has not made significant investments in its anti-submarine warfare capabilities, which has tipped the military

¹³⁰⁾ Pettyjohn, Wasser, and Dougherty, Dangerous Straits, 4.

¹³¹⁾ David A. Ochmanek, et al., Inflection Point: How to Reverse the Erosion of U.S. and Allied Military Power and Influence (Santa Monica: RAND Corporation, 2023), 13. For an overview of independent joint blockade campaigns and their component forces, see Bonny Lin, et al., "How China Could Blockade Taiwan: Part Two of a China Power Series," Center for Strategic and International Studies, August 2024.

balance in China's favor. *The U.S.-China Military Scorecard*, published by RAND Corporation in 2015, analyzes the military balance between the two countries, focusing on the quietness of Chinese submarines and the sonar capabilities of U.S. aircraft carrier strike groups. The study concludes that, based on projected 2017 capabilities, the number of expected engagement opportunities by Chinese Navy submarines against U.S. aircraft carriers has already increased twenty-fold compared to their capabilities in the late 1990s, and that the U.S. Navy's surface force, including its carrier strike groups, is increasingly vulnerable. This study validates the threat posed by Chinese submarines to U.S. aircraft carrier strike groups, which have superior anti-submarine capabilities. The Chinese submarine threat should be considered to be even greater when two or three ships are used to escort several relatively slow transport ships or cargo ships.

Not only is China improving the quietness of its submarines, but it is also increasing the number of submarines with anti-ship cruise missile capabilities in its submarine fleet. Considering that anti-ship cruise missiles have nearly 10 times the range of torpedoes, which have a range of about 50 kilometers, this increases the survivability of Chinese submarines while complicating U.S. anti-submarine warfare. Indeed, operating anti-ship cruise missiles from a submarine requires advanced command, control, communication, computers, intelligence, surveillance, and reconnaissance (C4ISR) capabilities. However, one analysis has shown that if China's C4ISR systems were to remain functional throughout the conflict, the U.S. Navy's surface force would suffer near-catastrophic damage during a convoy escort operation.

In addition to the balance between Chinese submarine capabilities and U.S. anti-submarine warfare capabilities, the United States must also consider that China will deploy its anti-surface capabilities more broadly against U.S. military transport operations. This would put U.S. transport

¹³²⁾ Eric Heginbotham, et al., The U.S.-China Military Scorecard: Forces, Geography, and the Evolving Balance of Power, 1996–2017 (Santa Monica: RAND Corporation, 2015), 184–197.

¹³³⁾ DOD, Military and Security Developments Involving the People's Republic of China, 55–56.

¹³⁴⁾ For example, China's YJ-18 cruise missile, which can be mounted on submarines, is subsonic but has a range of 220–540 kilometers. Missile Defense Project, "YJ-18," *Missile Threat*, Center for Strategic and International Studies, Last Updated April 23, 2024.

¹³⁵⁾ Michael E. O'Hanlon, Can China Take Taiwan? Why No One Really Knows (Washington, DC: Brookings, August 2022), 10–19.

units in an even more difficult situation. The aforementioned 2015 RAND Corporation report observes that along with the modernization of China's submarine capabilities, the balance between the defensive capabilities of U.S. surface forces and China's offensive capabilities has been shifting in favor of the latter, as China has significantly diversified and refined its means of attacking surface forces by expanding the reach of its ISR capabilities to identify and capture surface ships, enhancing its advanced, long-range antiship cruise missile and anti-ship ballistic missile capabilities, and acquiring modernized aircraft and surface ships capable of striking surface forces from a distance. ¹³⁶ In other words, maritime transport operations to Taiwan will expose the U.S. military to threats from modernized Chinese submarines as well as a variety of precision strike threats that have been enhanced both in quality and quantity.

Like maritime transport, air transport will also be a high-risk approach. As noted earlier, China's surface-to-air missiles and fighter aircraft cover almost all of Taiwan within range, making it extremely risky for airlift anywhere near Taiwan's airspace. Relatively slow transport aircraft, even under the protection of fighter aircraft, would almost certainly face serious threats inside the Chinese air defense zone. Taking these operational risks into consideration, air transport, with its limited carrying capacity for relief supplies compared to sea transport, would not be the best option.

Ultimately, the feasibility of indirect intervention in a Taiwan contingency will depend on China's willingness to avoid engaging in direct combat with the United States. As mentioned above, however, an approach based on such wishful thinking is fraught with risk. It is entirely possible that China may attack U.S. military bases and other facilities in the surrounding area in order to gain operational control. Moreover, simulations show that the longer the United States delays its initial response, the more unfavorable the war situation becomes, and the greater the U.S. military losses. Therefore, the "learning by doing" approach, in which the United States waits to see what China will do first and then switches to direct intervention once it confirms that indirect intervention will not work, and would not be suited for a Taiwan contingency. In other words, indirect intervention, which focuses

¹³⁶⁾ Heginbotham, et al., The U.S.-China Military Scorecard, 199-200.

¹³⁷⁾ Mark F. Cancian, Matthew Cancian, and Heginbotham, The First Battle of the Next War, 130.

primarily on avoiding combat and providing military assistance, will likely be ineffective with regard to the situation in Taiwan.

Peacetime Military Assistance to Taiwan

Nevertheless, the low effectiveness of indirect intervention by the United States in a potential Taiwan contingency in no way diminishes the value of U.S. military assistance to Taiwan. In fact, it highlights the importance of providing assistance in peacetime and implies that the urgency of strengthening Taiwan's military has increased rather than decreased. Bolstering Taiwan's ammunition stockpiles and enhancing training assistance in advance, both of which are expected to be difficult to provide in wartime, are particularly urgent needs for Taiwan's deterrence and defense capabilities.

(1) Ammunition Stockpile

First, Taiwan must pre-position a sufficient number of weapons, including ammunition, on its own territory. A key question that then arises is what type of, and how many, weapons are necessary. The first point has drawn controversy, with critics questioning the military rationale behind Taiwan's previous large budget allocations for conventional arms such as tanks, fighter aircraft, and naval ships. However, the United States and Taiwan generally agree on the importance of precision-guided weapons for Taiwan's defense. For example, the Overall Defense Concept (ODC) put forward by a former Chief of the General Staff of Taiwan's Armed Forces and the "porcupine strategy" proposed by some U.S. experts are both asymmetric warfare strategies that focus on mobile, short- and medium-range precision strike forces that can withstand preemptive strikes by China, with priority placed on having a large number of relatively low-cost drones, surface to

¹³⁸⁾ Michael A. Hunzeker, "Taiwan's Defense Plans Are Going Off the Rails," War on the Rocks, November 18, 2021; Tanner Greer, "Taiwan's Defense Strategy Doesn't Make Military Sense," Foreign Affairs, September 17, 2019; Eric Gomez, "Taiwan's Urgent Need for Asymmetric Defense," CATO Institute, November 14, 2023.

air missiles, anti-ship missiles, and anti-tank missiles. ¹³⁹ Therefore, Taiwan would benefit from prioritizing the stockpiling of these types of weapons.

The next point of debate regarding the stockpiling of such weapons is "how much is enough." A number of interrelated variables, such as the duration of the conflict, the adversary's military strategy, and the degree of U.S. intervention, must be considered to determine what amount would be desirable. However, there are simplified methods of calculation that still provide some of the necessary figures. One method considers the number of offensive military assets to be targeted along with Probability of Kill (P_k) of the opposing weapon system. ¹⁴⁰

As with many weapons, the P_k for missile defense has a range, and 0.60 to 0.80 is generally considered realistic. ¹⁴¹ For example, assuming a P_k of 0.60 for Taiwan's missile defense system, about 1,700 surface to air missiles would be required to counter the approximately 1,000 short-range (300 to 1,000 km) ballistic missiles that China is said to possess. This is only an estimate of the minimum number that would be needed for short-range ballistic missiles; if one needs to counter China's 300 ground-launched cruise missiles, 750 fighter aircraft, and 300 bomber aircraft, ¹⁴² nearly 4,000 missiles would theoretically be necessary.

How much anti-ship missile inventory is required can also be estimated in the same way. Assuming that China needs a total of 500 medium amphibious vessels and civilian ships to transport 100,000 troops and equipment to Taiwan, and taking into account China's naval air defense systems that would protect these ships, as well as a P_k of 0.25 for Taiwan's anti-ship missiles against Chinese transport ships and the fact that two hits

¹³⁹⁾ Ian Easton, "Able Archers: Taiwan Defense Strategy in an Age of Precision Strike" Project 2049 (September 2014); James Timbie and James O. Ellis Jr., "A Large Number of Small Things: A Porcupine Strategy for Taiwan," Texas National Security Review 5, no. 1, (2021): 83–93; Lee Hsimin and Eric Lee, "Taiwan's Overall Defense Concept, Explained," Diplomat, November 3, 2020; "Minister Confident in Ability to Detect Spies," Taipei Times, December 23, 2021.

¹⁴⁰⁾ Eric Cheung, "A Weapons Stockpile and Asymmetric Warfare: How Taiwan Could Thwart an Invasion by China with America's Help," CNN, April 16, 2023.

¹⁴¹⁾ Gunzinger and Clark, Winning the Salvo Competition, 52, 56; Mark F. Cancian, Matthew Cancian, and Heginbotham, The First Battle of the Next War, 79–80.

¹⁴²⁾ DOD, Military and Security Developments Involving the People's Republic of China, 185–186. Note that the figures for fighter and bomber aircraft are the sum of those belonging to the Eastern and Southern Theater Commands.

are required to disable each ship, ¹⁴³ the required number of anti-ship missiles would be about 4,000. However, if China were to invade Taiwan, thousands more civilian ships would be exploited as "missile sponges," serving as decoys to absorb the impact of missile attacks and making an effective attack more difficult. ¹⁴⁴ Therefore, 4,000 missiles can be seen as a minimum requirement, whereas in reality more missiles would be required.

However, it is not easy for Taiwan to build up stockpiles to this level in the short to medium term. Taiwan has purchased 400 Harpoon anti-ship missiles from the United States in 2020, but it will take time to fully obtain these as they will be delivered in stages until 2028. Taiwan is also focusing on increasing production of domestically produced anti-ship missiles, including Hsiung Feng II and III missiles, but the pace of production remains somewhat slow at 200 missiles per year. The Taiwanese government plans to produce 1,000 anti-ship missiles domestically by 2026, a number that, when combined with the Harpoon missiles awaiting delivery from the United States, will still be insufficient.

The same can be seen in the area of missile defense. The Taiwanese government reportedly planned to purchase 300 PAC-3 missiles in the early 2020s for delivery by 2027, bringing the total number of missiles to only 650. 148 As for the domestic production of surface to air missiles, Taiwan has indicated that it plans to increase production of air-to-air Tien Chien II (Sky Sword II) missiles from 40 to 150 per year and surface-to-air Tien Kung III (Sky Bow III) missiles from 48 to 96 per year. 149 But if the minimum requirement is 4,000 missiles, this would be too few and too slow.

¹⁴³⁾ O'Hanlon, Can China Take Taiwan, 22.

¹⁴⁴⁾ Ochmanek, et al., Inflection Point, 13–14; Mark F. Cancian, Matthew Cancian, and Heginbotham, The First Battle of the Next War, 21.

¹⁴⁵⁾ Matthew Strong, "Harpoon Land-based Anti-ship Missile Systems Arrive in Taiwan," Taiwan Times, September 28, 2024.

¹⁴⁶⁾ Matthew Strong, "Taiwan Speeds up Anti-ship Missile Production," Taiwan Times, July 1, 2023.

¹⁴⁷⁾ Lo Tien-pin and Jonathan Chin, "Official Outlines Plan to Make More than 1,000 Missiles," *Taipei Times*, August 14, 2022.

¹⁴⁸⁾ Keoni Everington, "Taiwan Reportedly Buying 300 More Patriot Missiles from US," *Taiwan News*, December 7, 2020.

¹⁴⁹⁾ Matthew Strong, "Taiwan Manufacturer to More than Double Annual Missile Production," *Taiwan Times*, August 13, 2022.

(2) Training Assistance

Another key element of Taiwan's defense, in addition to the peacetime stockpiling of ammunition, is the provision of advance training assistance. The United States can contribute to training from two different aspects. The first is the direct training of Taiwanese personnel by the U.S. military. There is a need for the U.S. military to train even more Taiwanese personnel in an even shorter period of time. In 2022, the Taiwanese government decided to extend the term of conscripted military service from four months to one year, potentially providing an opportunity for greater training assistance. The number of U.S. military personnel deployed to Taiwan has also reportedly increased from about 30 to somewhere between 100 and 200. The Moreover, U.S. training assistance is not limited to the basic training provided by these U.S. service members in Taiwan to Taiwanese military personnel, including conscripted soldiers; Taiwanese personnel are also invited to U.S. military training centers in the United States for more specialized training.

The issue is how many Taiwanese personnel this kind of peacetime training can cover. To use Ukraine as an example, since 2015, the United States has deployed around 200 service members to the region on a rotational basis to serve as training personnel for the Ukrainian military through the Joint Multinational Training Group-Ukraine (JMTG-U) program.¹⁵³ The U.S. military is thought to have trained about 23,000 Ukrainian troops through this process by February 2022.¹⁵⁴ At the risk of simplification, 200 service members is roughly the same as the number of personnel sent to Taiwan, so it can be expected that a similar number of troops (about 20,000) could be trained in Taiwan in about five years.

However, the case in Ukraine suggests that this number of troops is not necessarily sufficient for a high-intensity conflict. For example, the United States and like-minded countries have provided training to nearly 120,000

¹⁵⁰⁾ John Dotson, "Taiwan's 'Military Force Restructuring Plan' and the Extension of Conscripted Military Service," Global Taiwan Brief 8, no. 3 (2023).

¹⁵¹⁾ Nancy A. Youssef and Gordon Lubold, "U.S. to Expand Troop Presence in Taiwan for Training against China Threat," Wall Street Journal, February 23, 2023.

^{152) &}quot;Some Taiwanese Conscripts to Be Trained by U.S. Military Personnel: Minister," Focus Taiwan, July 3, 2024.

¹⁵³⁾ Eric Durr, "New York Army Guard Troops to Help Train Ukrainian Soldiers," New York National Guard, July 18, 2022.

¹⁵⁴⁾ John F. Kirby, et al., "Defense Officials Hold Media Brief on the Training of Ukrainian Military." DOD, May 4, 2022.

Ukrainian personnel in the first two years of the war, ¹⁵⁵ but Ukraine has still been struggling to secure military forces on the front lines, releasing some prisoners in exchange for military service, ¹⁵⁶ and stepping up recruitment of female military personnel. ¹⁵⁷ In light of this, if the Taiwan contingency turns into a protracted war, the Taiwanese government will almost certainly face the same shortages in the quantity and quality of its personnel as in Ukraine.

The second aspect of the United States potential contribution is to help Taiwan reform its military. Since there is a quantitative limit to the amount of training that can be provided by the U.S. military and others in peacetime, a system within the Taiwanese military capable of providing a certain level of training is necessary to maintain Taiwan's military strength in wartime. However, it is difficult to impart practical skills to soldiers solely within Taiwan's existing military training system. For example, analysts have pointed out that under Taiwan's conscription system, exercises follow highly scripted scenarios, and recruits spend more time on activities such as administrative briefings and marching than they do on learning basic tactical skills such as combat tactics, techniques, and procedures (TTP), first aid, or land navigation. In other words, structural reforms, including reform of the training system, are necessary to build Taiwan's military into a more effective force.

Ukraine's experience also offers important lessons in this regard. Despite the existence of domestic political barriers to military reform, mainly related to the budget and the Ukrainian constitution, the Russian invasion of Crimea in 2014 prompted Ukraine to embark on reforms to build a NATO-style military. The United States has played a key role in this transformation. For example, the Ukrainian military is thought to have

¹⁵⁵⁾ Government Accountability Office, Ukraine: DOD Could Strengthen International Military Training Coordination by Improving Data Quality, GAO-24-107776, September 26, 2024.

¹⁵⁶⁾ Constant Méheut, "Ukraine Is Conscripting Thousands More Troops. But Are They Ready?" New York Times, July 30, 2024.

¹⁵⁷⁾ Andrew E. Kramer and Maria Varenikova, "'If Not Me, Who?': As Ukraine Seeks Troops, Women Prepare for the Call," New York Times, November 8, 2023.

¹⁵⁸⁾ Michael A. Hunzeker, "Hearing on 'Deterring PRC Aggression toward Taiwan'," Panel on "The Cross-Strait Military Balance," U.S.-China Economic and Security Review Commission, February 18, 2021, 6; Paul Huang, "Taiwan's Military Is a Hollow Shell," Foreign Policy, February 15, 2020.

¹⁵⁹⁾ Deborah Sanders, "Ukraine's Third Wave of Military Reform 2016–2022: Building a Military Able to Defend Ukraine against the Russian Invasion," *Defense & Security Analysis* 39, no. 3 (2023): 312–328.

succeeded to some extent in gradually internalizing Western-style TTP by receiving tactical and combat training and gaining practical experience in command and control through programs with the U.S. military, such as the State Partnership Program, JMTG-U, and joint multilateral exercises. ¹⁶⁰ In addition, the United States is said to have also helped in reforming areas such as legislation, bureaucratic organization, and education for generals as more long-term and structural measures for reforming the Ukrainian military. ¹⁶¹

Of course, Ukraine and Taiwan cannot be treated exactly the same, but U.S. assistance in Ukrainian military training, exercises, and organizational reform will likely serve as a model for reforming Taiwan's military, whose conventional structure is often criticized. In fact, some analysts have even suggested that assistance to Taiwan should be implemented based on the Ukrainian model, such as allowing Taiwan to participate in the State Partnership Program and launching a multilateral training framework such as a Taiwanese version of JMTG. 162 Taiwan has already sent hundreds of its troops to Camp Grayling, a Michigan National Guard training compound in the United States. 163 In addition, reports note that Taiwanese troops participated in the annual multilateral live-fire exercise Northern Strike held in the camp in August 2023, and that they also joined an undisclosed multilateral maritime exercise in June 2024 that the U.S. Navy participated in. 164 These instances can be read as signs that the United States is bolstering training and exercises with Taiwan, but the depth of cooperation between the United States and Taiwan possible under Chinese scrutiny will continue to be a point of debate.

¹⁶⁰⁾ Jerad I. Harper and Michael A. Hunzeker, "Learning to Train: What Washington and Taipei Can Learn from Security Cooperation in Ukraine and the Baltic States," War on the Rocks, January 20, 2023.

¹⁶¹⁾ Ibid.

¹⁶²⁾ Brian C. Chao, Jahara Matisek, and William Reno, "Five Recommendations for Left of Boom Security Assistance to Taiwan," War on the Rocks, December 18, 2023; Jake Yeager and William Gerichten, "Reestablish the U.S. Military Assistance Advisory Group-Taiwan," War on the Rocks, January 7, 2022.

^{163) &}quot;Taiwanese Troops Training in US: Ex-envoy," Taipei Times, September 29, 2024.

¹⁶⁴⁾ Matthew Sperzel, et al., "The China-Taiwan Weekly Update," Institute for the Study of War, October 11, 2024, 3; Carter Johnston, "US Navy Conducts 'Unplanned' Exercises with Taiwan in the West Pacific," Naval News, June 6, 2024.

Conclusion

One of the most difficult challenges for the United States in the era of great power competition is how to balance current and future wars. The United States has attempted to address this challenge through the use of indirect intervention, and this attempt has had some success.

In the Russo-Ukrainian War, indirect intervention by the United States has contributed significantly to the defense of Ukraine through the provision of external military assistance to the country, while mitigating the depletion of U.S. strategic resources and the risk of escalation. Importantly, the indirect intervention approach in Europe has limited the impact on deterrence against China in the Western Pacific, the United States' top priority, more than is generally believed. Rather ironically, the problem of the arms supply that the United States has struggled with in providing assistance to Ukraine has provided an opportunity for the country to reassess its long-shrinking defense industrial base. This means that the Western arms production system, including the United States, and its supply capacity will be relatively stronger in the post-Ukraine era.

On the other hand, in the event of a Taiwan contingency, it is entirely conceivable that the indirect intervention approach will be considered by those both inside and outside the U.S. government because of its convenience in allowing the country to pursue its strategic interests while minimizing costs and risks. Although the intentions and preferences behind the choice of indirect intervention are beyond the scope of analysis here, we can conclude that, from the perspective of its effectiveness, it would be difficult to adopt this intervention approach in a Taiwan contingency. Assuming a blockade by China, Taiwan's geographical characteristics and U.S.-China escalation dynamics are not particularly conducive to indirect intervention. Even if the United States were to choose to provide military assistance to Taiwan, it would be operationally difficult to break the blockade to transport sufficient supplies. If the U.S. government is resolved to intervene in any capacity in a potential Taiwan contingency, the structural incentives to choose direct intervention will be extremely strong.

The implication of this is that it will be difficult for Taiwan to expect military assistance from the United States or other external sources in a conflict. In other words, Taiwan must continue to deliver its own forces on the front lines for the duration of the war using local Taiwanese assets, including weapons and training. In this sense, strengthening U.S. military assistance to Taiwan in peacetime, especially in terms of ammunition stockpiling and training assistance, is an urgent issue.

The discussion in this chapter has shown the characteristics and convenience of the indirect intervention approach in Ukraine and has drawn some implications for the situation in Taiwan. On the other hand, there remain challenges in both the academic and policy arenas.

One academic issue is generalizing the indirect intervention model. This chapter examined the effectiveness of the indirect intervention approach from two perspectives: the Ukraine model's impact on deterrence against China and its applicability to a Taiwan contingency. However, these scope conditions are extremely narrow, and more examples are needed to demonstrate the validity of the model more convincingly. For example, the effectiveness of the indirect intervention model examined here could be validated from a more multifaceted standpoint using historical cases to confirm the conditions for successful military assistance by sea and the impacts on other regions when indirect intervention is used. Examining more cases of indirect intervention in interstate conflicts would also contribute to broadening insights into this area of study, especially considering that the vast majority of existing case studies of indirect intervention or proxy wars focus on domestic conflicts.

Similarly, there are policy-related challenges. One unexpected consequence of indirect intervention was that indirect intervention in Europe created "mock wartime" conditions, primarily in the U.S. defense industrial base, which shifted the sector into a system of increased weapons production and led to a rapidly growing awareness, both inside and outside the government, of the arms production problem. Looking ahead to the post-Ukraine era, however, a key issue of debate will be how to maintain the expanded arms supply capacity of the Russo-Ukrainian War. Maintaining a wartime-level supply capacity in peacetime will inevitably compete with other DOD programs and will require cooperation from Congress and leadership from senior DOD officials. Whether the decision is made to establish an elastic production system to meet demand, maintain production capacity at its high level, or explore other avenues, an innovative approach will be needed to address this issue.

Another policy challenge is determining the level of peacetime assistance to Taiwan. As discussed above, the United States is gradually enhancing its military assistance to Taiwan, but this in itself poses a dilemma. That is, if the United States continues to "quietly" provide military assistance at a level that does not provoke China, it will be difficult to quickly achieve a level of assistance sufficient for Taiwan's defense. Conversely, if the United States rapidly expands its assistance, it will accelerate the strengthening of the Taiwanese military's defensive capabilities while further increasing the already elevated level of Chinese pressure on Taiwan, potentially destabilizing the Taiwan Strait. This is a delicate issue that forces a difficult choice to be made about which risk to take. And, in light of the gravity of the matter, it would be useful to deliberate the advantages and disadvantages of both and discuss how far the United States should or can go in providing assistance.

The aim of this chapter, however, is to stimulate discussion by returning our focus to indirect intervention in interstate conflicts, an approach that has not received sufficient attention since the end of the Cold War. In recent years, the security field has tended to focus on deterrence in the era of great power competition and the use of force when such deterrence fails. However, digging up the old but new concept of indirect intervention may allow for a more comprehensive understanding of U.S. global engagement under the great power competition and, more broadly, international political dynamics.