The End of Inhibition? Why US Nonproliferation Policy Is Becoming Less Effective

For over seven decades, preventing the spread of nuclear weapons has been central to US foreign policy. The United States has wielded its power to persuade and coerce adversaries as well as allies out of acquiring them. It has built and sustained international institutions which make it harder for states to acquire nuclear weapons and has sought to encourage norms of nuclear restraint and nonproliferation. And when the United States failed to prevent countries from acquiring nuclear weapons, it worked to inhibit the growth of their arsenals or keep them opaque. These policies have contributed to a slow rate of proliferation since 1945.

But the foundations of this policy and its effectiveness—international, domestic, and normative—are eroding. A worsening international balance of power, domestic political polarization, and reduced US legitimacy mean that US nonproliferation policy is becoming less effective over time. US policymakers may continue to dedicate resources to preventing proliferation, but US nonproliferation policies will be less potent in influencing the nuclear calculations of

Kelso R. Anderson is a senior at the University of Minnesota majoring in political science and global studies. He can be reached at and08975@umn.edu. Mark S. Bell is an Associate Professor of Political Science at the University of Minnesota. He can be reached at msbell@umn.edu. Cheyenne Tretter is a Ph.D. candidate in the Department of Political Science at Columbia University. She can be reached at cheyenne.tretter@columbia.edu. The authors thank Paul Avey, Rebecca Davis Gibbons, and Nicholas Miller for suggestions and comments, as well as participants in seminars and presentations at the University of Minnesota, Harvard Kennedy School's Belfer Center for Science and International Affairs, and the Alva Myrdal Centre for Nuclear Disarmament at Uppsala University.

© 2023 The Elliott School of International Affairs The Washington Quarterly • 46:3 pp. 127–147 https://doi.org/10.1080/0163660X.2023.2259255

other states. The United States will be less able to make and uphold nonproliferation deals with potential proliferants—and will have to "pay more" when it does—and the US-led nuclear order, and the institutions and norms embedded within

The foundations of US nonproliferation policy are eroding

it, will be less attractive for both allies and adversaries of the United States.

We make this argument in three parts. First, we outline the contours of US nonproliferation policy and its historical successes. Second, we lay out the factors that have underpinned the effectiveness of US nonproliferation policy. We show that each of these

factors is declining and that these declines have contributed to recent nonproliferation struggles. Third, we lay out the implications of our argument.

The Importance of US Nonproliferation Policy

Nonproliferation has been at the heart of US grand strategy since the dawning of the nuclear era. Even in the immediate aftermath of World War II, the United States moved to cut off the United Kingdom, its Manhattan Project ally, from promised nuclear cooperation. The importance of nonproliferation within US grand strategy was long underemphasized by scholars. However, while historians and political scientists continue to identify variation in the enthusiasm with which different presidents pursued nonproliferation and approached different nonproliferation policy tools, there is increasing consensus that nonproliferation has been a core feature of US postwar grand strategy. The dawning of the enthusiasm with the properties of the properties

The United States has used a variety of policy tools to prevent adversaries and allies from acquiring nuclear weapons, many of which had little or no precedent in the history of American foreign policy. These policies include a globe-spanning array of alliances and defense commitments, along with associated arms transfers and the deployment of US conventional and nuclear forces; the threat and implementation of economic sanctions; cooperation on civilian nuclear energy and the export of civilian nuclear technologies; the cultivation and propagation of norms of nuclear restraint; building international institutions and legal regimes; sabotage, counterproliferation, and threats of preventive war; coercion and *quid pro quo* deals; and the United States' own nuclear arsenal and counterforce-oriented nuclear posture. The United States does not pursue all of these policy options in all cases, and there are some inevitable tensions among these policy tools. For example, US alliances may reduce allies' incentives to acquire nuclear weapons, but may also threaten adversaries of the United States, stimulating those states' incentives to acquire nuclear weapons. ³ Civilian

nuclear cooperation may "spread temptation" and technical knowledge which countries can use to acquire nuclear weapons even as it gives the United States leverage over those countries' nuclear programs.⁴ And tensions exist between US advocacy of norms of nuclear restraint and its own large, diverse, and counterforce-oriented nuclear arsenal which it uses to bolster the credibility of its alliance commitments and thus reduce the need for its alliance partners to acquire their own nuclear weapons.⁵

Nonetheless, the US "strategies of inhibition" have proven collectively successful. Political scientists and historians have used a range of methods to demonstrate the significance of US nonproliferation policy in contributing to a world in which the pace of proliferation has remained slow. Quantitative scholars have shown the importance of US policies and US-led regimes in influencing the broad historical patterns of nuclear proliferation. And qualitative scholars have demonstrated the significance of US policies in specific nonproliferation successes: in coercing or persuading allies such as West Germany, South Korea, Sweden, and Taiwan out of their nuclear programs; striking deals to keep Israel, South Africa, and Pakistan's nuclear arsenals opaque and to constrain Iran and North Korea's nuclear programs; implementing sanctions policies that deterred states from beginning nuclear programs and imposing significant costs on those that did; gaining leverage over states' civilian nuclear energy programs to pursue nonproliferation goals; collaborating with the Soviet Union to build the nonproliferation regime; persuading recalcitrant states to sign on to the NPT; persuading Ukraine, Belarus, and Kazakhstan to give up their nuclear weapons in the aftermath of the Cold War; as well as engaging in a range of actions more broadly to build, sustain, and generate support for international institutions and norms to restrain proliferation.⁷

The Foundations of Effective Nonproliferation Policy

What are the factors underpinning the success of US nonproliferation policies? First, US material power—military, economic, and within the civilian nuclear energy sector—has allowed the United States to shift the incentives of states contemplating a decision to pursue or acquire nuclear weapons, enabled the United States to build an international order that supports nonproliferation goals, and reinforced the US motivation to prevent proliferation. Second, domestic political consensus within the United States has provided long-term credibility to the deals and commitments the United States makes, allowed policymakers to use the full set of nonproliferation tools in tandem, and ensured that nonproliferation policies endure across administrations of varying political stripes. Third, US

normative legitimacy has helped the United States achieve nonproliferation successes at lower costs, created an international order that states sought to enter even at the cost of eschewing their ability to acquire nuclear weapons, and allowed the United States to paper over some of the tensions within its portfolio of nonproliferation policies.

We discuss each of these factors and the role they have played in supporting US nonproliferation policy successes. We then show that each of these factors is weakening and hence that the foundations of effective US nonproliferation policy are eroding.

Material Power

US material power—military, economic, and within the civilian nuclear energy sector—has underpinned the effectiveness of US nonproliferation policy. First, the more dominant the US power position, the more the United States can shift other states' incentives regarding nuclear acquisition. Many nonproliferation policies—including security guarantees, sanctions, and the threat of preventive war—rely on bringing economic or security pressures and incentives to bear on states to affect their calculations about acquiring nuclear weapons. In each case, states that are weaker relative to the US have more to gain or lose if the United States were to impose sanctions, threaten or pursue preventive war, or offer or withdraw political support.⁸ Shifting states' calculations in this way requires the United States not just to be powerful relative to the targeted state, but also to be powerful relative to other powerful states so that the targeted state cannot turn to other great powers to make up the benefits of lost cooperation with the United States or protect them from US threats. It is far harder for the United States to coerce a state if it has a powerful patron and can engage in what political scientist Vipin Narang terms the "sheltered pursuit" of nuclear weapons. Similarly, power within the civilian nuclear energy sector gives the United States leverage to insist on attaching stringent nonproliferation standards to sales of nuclear technology, reducing the proliferation risks associated with the spread of civilian nuclear energy.

Second, the power of the United States allows it to build and sustain international institutions and a broader international nonproliferation order whose policies the US can bend toward its own preferences. Most major components of the nonproliferation regime—including the International Atomic Energy Agency (IAEA), the Nuclear Nonproliferation Treaty (NPT), the Comprehensive Safeguards Agreement, the Nuclear Suppliers Group (NSG), the Model Additional Protocol, and tools to reduce the risk of nuclear terrorism such as UN Security Council Resolution 1540—were created and supported in large part by the United States. ¹⁰ And US power within the civilian nuclear energy

sector gave the United States additional leverage within these institutions, many of which set key standards for the global civilian nuclear industry.¹¹

Third, in addition to reinforcing the United States' ability to prevent proliferation, US material power increases the US *interest* in dedicating resources to prevent proliferation. Generally, the most powerful states in the international system are most inclined to invest resources in providing global public goods like nonproliferation (which other states also benefit from) because their interests most closely approximate the interests of the international system as a whole. The most militarily powerful states are also most inclined to take on the task of nonproliferation for more basic reasons of power politics. The most powerful states—which otherwise enjoy the ability to project military power around the world—are relatively more constrained by nuclear weapons in the hands of other states and are thus more motivated to prevent proliferation.¹²

Today, however, US power is declining on a range of dimensions which harm the United States' ability to achieve nonproliferation goals. First, the United States' ability to project power into key regions is in decline. This is not because of a decline in absolute US military capabilities, but because other actors are increasing their abilities to thwart US action within their own regions. These dynamics are most evident in Asia, where China increasingly possesses the ability to undermine US freedom of action in the Western Pacific. Similarly, North Korea's acquisition of high-yield nuclear weapons and missiles capable of reaching the United States increases the risks of US military operations and crises in the region. In the Middle East, Iran's Islamic Revolutionary Guard Corps and regional proxies have built an impressive arsenal of rockets, missiles, drones, and speed boats capable of deterring and punishing outside intervention.

The trend of gradually diminishing US power is likewise evident in broader measures of relative US military and economic power. As Figure 1 shows, a range of different measures of US relative power all suggest roughly the same picture: the United States is stagnant or in shallow decline relative to the world as a whole, and in steep decline relative to China. For example, the Composite Index of National Capability (CINC), which measures power according to the resources states need to fight and win a conventional war, shows that China's share of global power has more than doubled from 11 percent in 1989 to 23 percent in 2016, while the United States has fallen from 15 percent to 13 percent. To take another widely used measure of power, China's share of global gross domestic product according to purchasing power parity (GDP PPP) has grown from 3.2 percent in 1990 to 19 percent in 2021, while the US has fallen from 20 percent to 16 percent. Even measures typically cited as evidence of enduring US primacy—including political scientist Michael Beckley's measure of "net resources," which considers GDP alongside GDP per capita, as

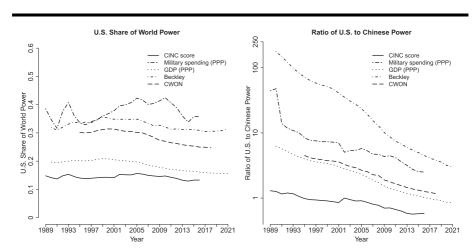


Figure I: US Share of World Power and the Ratio of US to Chinese Power over Time

well as measurements of national wealth—do not offer evidence against US relative decline. ¹⁸

The picture is even starker when comparing US power to its level during the Cold War, when the United States achieved some of its most significant nonproliferation successes. For example, during the 1960s when the United States persuaded West Germany out of its interest in nuclear weapons, the US CINC score was consistently over 0.2, suggesting the United States then had a share of world power around 50 percent higher than its recent levels.

Finally, the US position in the civilian nuclear energy market has weakened. During the Cold War, the United States and Soviet Union dominated the nuclear energy industry. This allowed the superpowers to set and enforce standards to achieve their common interest in reducing the proliferation risks associated with the spread of civilian nuclear technology and make good on commitments such as Article IV of the NPT to enable other states to benefit from the peaceful uses of nuclear technologies. 19 Before the end of the Cold War, however, the United States fell behind the Soviet Union and has since increasingly ceded the civilian nuclear market to Russia and China. 20 As political scientists Nicholas Miller and Tristan Volpe observe, the United States has supplied only four of the 33 foreign-built nuclear power reactors whose construction has begun since 2000, while China and Russia supplied nineteen. The United States also left the uranium enrichment sector in 2013, and the American nuclear power company Westinghouse filed for bankruptcy in 2017. Meanwhile, the Russian state-owned Rosatom "has an order book worth \$134 billion and contracts to build 22 nuclear reactors in nine countries over the next decade."21

These shifts in material power are already undermining the effectiveness of US nonproliferation efforts. In the civil nuclear market, the United States now has limited leverage to insist on stringent nonproliferation standards as a condition of civilian nuclear cooperation. In negotiations with Vietnam over a nuclear cooperation agreement in 2014, for example, the United States was forced to accept only a non-binding statement of intent by Vietnam to forgo uranium enrichment rather than a legally binding commitment, as Japan and Russia were both willing to sell Vietnam nuclear power reactors with fewer conditions attached. Today, the United States faces a similar dilemma with respect to Saudi Arabia's ambitions to acquire nuclear technologies.²²

Along the dimension of military power, North Korean nuclear capabilities

complicate the credibility of US extended deterrence to South Korea and have stimulated recent South Korean flirtations with the possibility of acquiring nuclear weapons.²³ The April 2023 Washington Declaration, in which the United States agreed to expand consultation and coordination on nuclear issues and "enhance the regular visibility of strategic assets to the Korean peninsula," in exchange for a reaffirmation of South Korea's extant nonproliferation commitments, is

The US has had to "pay more" to maintain South Korea's nonnuclear status

most straightforwardly understood as an example of the United States having to "pay more" to maintain South Korea's non-nuclear status, or less charitably, as an "insufficient stopgap measure to the expanding deterrence problem of North Korea."²⁴

Similarly, the credibility of US military action against Iran has declined as Iran has developed its asymmetric warfare and area denial capabilities. During the Trump administration, Iran felt sufficiently capable relative to the United States to conduct the largest ever ballistic missile attack against Americans, stationed on bases in Iraq, in retaliation for the assassination of Iranian General Qasem Soleimani, resulting in 110 service members suffering traumatic brain injury. Iran's assessment that it could deter additional escalation by the United States proved correct, with Trump opting against military action and downplaying the injuries as "headaches." Indeed, on multiple occasions during Trump's term in office, the United States backed away from escalation with Iran due to the potential cost of Iranian retaliation. ²⁶

The worsening balance of power also means that Iran can increasingly turn to alternative economic partners to make up any costs imposed on it by the United States, reducing the potency of US sanctions. Throughout the Trump administration, Iran continued to sell oil to China, and by 2022 its oil sales to China were higher than in 2017 when they were not subject to US sanctions. In

March 2021, Iran and China concluded a long-awaited economic cooperation agreement in which China committed to make \$400 billion in foreign direct investments in Iran over 25 years, while Iran committed to provide China with a discounted supply of oil. The changing balance of power, in short, means that US threats are less potent, US sanctions impose fewer costs on Iran, and Iran has more leverage in its dealings with the United States.

As former government official Colin Kahl, who was deeply involved in negotiating the 2015 Joint Comprehensive Plan of Action (JCPOA) with Iran, wrote in 2018, achieving a stronger deal would prove impossible on the grounds that "produc[ing] 150 percent of the current deal with 50, 70, or even 99 percent of the leverage the United States possessed in 2015 [would] ignore the laws of diplomatic physics."²⁷ The same logic applies to the Biden administration's (thus far) unsuccessful efforts to revive the agreement.

Overall, therefore, the picture is consistent. The material power underpinning US nonproliferation policy is in decline. This is true across a range of different measures and aspects of US material power and its effects can already be seen in a range of nonproliferation efforts.

Domestic Political Consensus

In addition to material power, the success of US nonproliferation policy has relied on domestic political consensus in three key ways.²⁸ First, many US non-proliferation successes have rested on deals the United States makes with potential proliferants, including *quid pro quo* deals in which countries restrain their

Each of three key factors underpinning US historical nonproliferation success is weakening nuclear efforts in exchange for material benefits or alliance arrangements in which the United States offers protection to reduce the protégé's need for nuclear weapons. For states making these deals, the expectation that the United States will honor their terms over the long term is crucial in determining whether they are willing to abandon the pursuit of nuclear weapons, which could enhance their power indefinitely. Such expectations are easier to sustain if US foreign policy is characterized by a stable political consensus,

rather than oscillation between presidential administrations with radically different views about nonproliferation and how to pursue it.

Second, domestic political consensus makes it easier to secure and sustain funding for nonproliferation initiatives and to support international institutions. For example, US efforts to secure nuclear materials in the former Soviet Union

after the Cold War relied on bipartisan Congressional support led by Senators Richard Lugar (R-IN) and Sam Nunn (D-GA).

Third, as discussed above, tensions exist between many of the nonproliferation tools the United States has deployed. The specific "liberal internationalist" consensus that underpinned most bipartisan US foreign policy initiatives since 1945 offered a way to temper some of those tensions by exhibiting what political scientists Charles Kupchan and Peter Trubowitz describe as a "commitment to both power and cooperation: the United States would project its military strength to preserve stability, but it would seek to exercise its leadership through multilateral partnership rather than unilateral initiative." By offering this "compact," which drew broad bipartisan support and built on varied intellectual traditions, liberal internationalism provided an intellectual architecture within which a broad range of nonproliferation policies that might otherwise sit uneasily with each other could be pursued simultaneously and justified to domestic and external audiences.³⁰

By a variety of measures, political polarization within the United States has increased since the end of the Cold War. The once-substantial ideological overlap between Republicans and Democrats in Congress has largely disappeared; at the state level, the divergence in policies between liberal and conservative states is wider today than at any point in the last 90 years; and the public has increasingly "sorted" around partisan identities. 31 Foreign policy has not been insulated from such dynamics. As Kenneth Schultz observes, "[t]he idea that 'politics stops at the water's edge' has always been more of an aspiration than a reality, but it is also true that there was considerable bipartisanship in US foreign policy in the decades after World War II."32 Enduring bipartisan support existed for a range of core pillars of liberal internationalism: containing the Soviet Union, building international institutions, maintaining alliances; promoting open economic markets, and preventing the spread of nuclear weapons.³³ In the aftermath of the Cold War, however, this consensus has eroded. On matters including the legitimacy of multilateral institutions, the desirability of using military force, the importance of taking action against climate change, and the importance of American alliances, partisan divisions have increasingly emerged.³⁴ This process reached an apex with the election of Donald Trump in 2016, a president "actively hostile to liberal internationalism." 35

Foreign policy, therefore, is not immune from increasing polarization—and neither are nuclear issues, where the two parties have largely diverged in their approaches.³⁶ Democratic administrations have generally made modest moves to reduce the role of nuclear weapons in US strategy and used multilateral pressure as well as economic sanctions to pursue negotiated settlements with nuclear aspirants. Republicans have generally been dismissive of such efforts (the Bush administration's 2003 deal with Libya being a partial exception),

instead emphasizing the threat of preventive war, "maximum pressure" strategies, and bolstering US nuclear capabilities as well as missile defenses to deter challenges.

Similarly, the two parties now have fundamentally different views on the merits of arms control. Historically, arms control agreements with the Soviet Union or Russia received significant bipartisan support: The Test Ban Treaty in 1963 received 80 votes in the US Senate, the ABM Treaty in 1972 received 93, the INF in 1988 received 98, the START treaty in 1992 received 93, and START II in 1996 received 87. By contrast, the New START treaty in 2010 was barely ratified, garnering only 71 votes. ³⁷ Recent Republican administrations have also accelerated the demise of existing arms control agreements. The George W. Bush administration withdrew from the ABM Treaty in 2001 and

Domestic political consensus on non-proliferation has been eroded by polarization

the Agreed Framework with North Korea in 2002, and the Trump administration withdrew from the JCPOA with Iran in 2018, the INF Treaty in 2019, and the Open Skies Treaty in 2020. Thus, whether one looks at polarization specifically on nuclear issues, or more broadly at polarization among political elites or mass publics, the domestic political consensus which has underpinned effective US non-proliferation efforts has largely collapsed.

This polarization has directly contributed to recent US nonproliferation struggles with Iran. US policy now oscillates between imposing maximum pressure and seeking to offer inducements for a negotiated settlement. During the Obama administration's negotiation of the JCPOA, Republicans in Congress sought to undermine negotiations by reducing the likelihood that any deal would survive a future Republican administration. Senator Tom Cotton and other Republican senators penned an "open letter" to Iran's leadership noting that, absent the approval of Congress, a future Republican president could revoke any agreement "with the stroke of a pen and future Congresses could modify the terms of the agreement at any time." Republican presidential candidates Ted Cruz and Donald Trump subsequently participated in a demonstration in front of the US Capitol calling on Congress to block the agreement, with Cruz promising that an incoming Republican administration would "rip [the deal] to shreds" on its first day in office. ³⁹

On the other side of the aisle, Obama, understanding that Republican opposition to any deal would be close to unanimous, never sought to secure the Congressional support that would have placed the agreement on firmer footing, instead pursuing an executive agreement. ⁴⁰ It was thus predictable that the Trump administration would leave the JCPOA once in office. And the United

States' inability to credibly commit to remaining in any deal is now a major obstacle to reviving the JCPOA or achieving another deal—Iranian demands to be compensated if a future president pulls out of the deal remain a major sticking point in negotiations even as some other points of contention have been resolved.⁴¹ It is unsurprising that in the aftermath of the Trump administration's withdrawal from the JCPOA, 72 percent of surveyed Iranians agreed that Iran's experience with the deal "shows that it is not worthwhile for Iran to make concessions," because it cannot be assured that world powers will uphold their end of an agreement.⁴²

Normative Dynamics

In addition to material power and domestic political consensus, normative dynamics have also underpinned American nonproliferation successes. Effective nonproliferation policy ultimately involves *persuading* a sovereign state not to do something—pursue nuclear weapons—that it otherwise might see advantage in doing. Even when that persuasive process is accompanied by coercive threats or material inducements, it is also influenced by normative dynamics and thus enhanced by the legitimacy of the United States within the global nuclear order and more broadly. Widespread normative appeal allows the United States to articulate and advance norms of nuclear restraint, to do so before receptive audiences, and to avoid serious hypocrisy costs for the tensions in its own nuclear policies.

First, many US nonproliferation policies are explicitly normative or have significant normative dimensions. As historian Francis Gavin observes, "the United States has often employed legal/normative measures—lofty rhetoric, treaties, and regimes—to highlight the dangers of nuclear weapons and to encourage a norm against their possession and a taboo against their use." Similarly, political scientist Nina Tannenwald traces how the United States played an important role in the development, sustenance, and evolution of the "nuclear taboo." And many nonproliferation agreements—including the NPT—are bargains that states voluntarily agree to, at least partly on the normative belief that they represent a fair distribution of benefits and burdens across parties. The ability of the United States to promote such policies should thus be expected to rest partly on US normative capital.

Second, the ability of the United States to persuade other countries to eschew nuclear weapons hinges on the receptivity of other countries' political decision-makers to the persuasive appeals of the United States and the president making those appeals. This is particularly true in the nuclear realm given that nuclear weapons and technologies are often understood as powerful symbols of technological progress and status by those who seek them, and are often tightly entwined

with national narratives. They may thus be powerful vehicles for political elites to achieve domestic political benefits and generate "rally around the flag" effects by resisting the pressures of the United States.⁴⁶

Third, normative appeal makes it easier for the United States to temper (or paper over) the inevitable tensions and hypocrisies in its own nonproliferation policies. Powerful states often engage in hypocrisy as they promote adherence to rules while simultaneously violating them. The United States, for example, condemns other states for not living up to their NPT obligations while arguably failing to abide by its Article VI obligation to pursue disarmament negotiations in "good faith." Avoiding paying significant hypocrisy costs for these inconsistencies relies on the willingness of others to accept the legitimacy of US behavior. Generating and sustaining that legitimacy, a fundamentally normative exercise, is thus central to US nonproliferation efforts.

The United States' legitimacy has declined both in the global nuclear order and generally

Unfortunately, the United States normative legitimacy has declined over time, both in general terms and within the global nuclear order. Across a range of countries, views of the United States reached record lows in 2020 in the midst of the Trump administration and the US response to the COVID-19 pandemic. Indeed, the Trump administration was so loathed by international mass publics that across a range of democracies surveyed by Pew Research in 2020, Donald

Trump was viewed more negatively than both Vladimir Putin and Xi Jinping.⁴⁹ While perceptions of the United States rebounded with the inauguration of Joe Biden as president, the international view of Biden in his first year was less positive than that of Obama in his final year, which itself was less positive than at the start of the Obama administration.⁵⁰ In short, while Democratic presidents have been better regarded internationally than Republicans, the downward trend in views of the United States and its presidents goes beyond any single administration.

This loss of normative appeal can also be seen within the global nuclear order, where the United States is increasingly regarded as an obstacle to progress by non-nuclear weapon states. In the early 1990s, the United States was intimately involved in a string of arms control and nonproliferation successes: the signing of the START treaty; the negotiation of the Comprehensive Nuclear-Test-Ban Treaty (CTBT); South Africa's nuclear disarmament; the indefinite extension of the NPT; and the removal of Soviet nuclear weapons from Kazakhstan, Belarus, and Ukraine. These successes and optimism about future progress began to erode in the late 1990s with India and Pakistan's nuclear tests and

further dissipated in the 2000s with the Bush administration's rejection of prior disarmament commitments, abandonment of existing arms control agreements, the use of military force (ostensibly to pursue nonproliferation goals) against Iraq, the failure of the 2005 NPT Review Conference to achieve a consensus document, and North Korea's 2003 withdrawal from the NPT and 2006 nuclear test.⁵¹

In this context, the United States increasingly became viewed as an obstacle to progress. Even the Obama administration's focus on nuclear issues did not ameliorate these trends and may have exacerbated them by demonstrating the limits of what even a nominally sympathetic and engaged president could achieve. As political scientist Rebecca Davis Gibbons argues, "the general attitude [of disarmament and arms control advocates]... was that, if Obama could not upend 'business as usual,' then it could not be changed and thus a new approach ... was necessary."⁵² As a result, the early-2010s saw an increasingly broad coalition of middle-power governments, activists, and civil society organizations begin exploring ways to make progress on arms control and disarmament by circumventing rather than enlisting US influence.⁵³ The ongoing effort to recast nuclear weapons as a humanitarian issue and bring the Treaty on the Prohibition of Nuclear Weapons (TPNW) into force is best understood as an effort to resist a perceived illegitimate nuclear order led by the United States.⁵⁴ Meanwhile, USled initiatives, such as the Trump administration's 2018 initiative on Creating an Environment for Nuclear Disarmament (CEND), have been treated with considerable skepticism.⁵⁵

The decline in US legitimacy has been a major influence in US nonproliferation struggles with Iran. Even international goodwill toward the Obama administration did not prevent the United States from needing to carefully manage a coalition of negotiating partners with significant disagreements about negotiating goals. For example, as Colin Kahl put it, "there was simply no appetite among the other members of the P5 + 1 for insisting on ... permanent dismantlement of Iran's civilian nuclear infrastructure, nor international support for imposing even harsher economic sanctions" or binding restrictions on Iran's ballistic missile program.⁵⁶ While the Obama administration was able to hold this coalition together and successfully negotiate the JCPOA, the coalition split apart during the Trump administration as Trump withdrew from the deal and Western leaders grew increasingly dissatisfied with the United States.⁵⁷ Within a different normative context, the political elites of even US allies faced little domestic political cost for defying the United States and its widely-reviled president, including exploring options to provide Iran with ways to bypass US sanctions.⁵⁸

On the Iranian side, low US normative appeal meant that Trump's withdrawal from the JCPOA resulted in a "rally around the flag" effect for the Iranian regime,

strengthening the position of Iran's pro-nuclear and anti-American hardliners. In the aftermath of the Trump administration's withdrawal from the JCPOA, most Iranians were persuaded of the futility of dealing with the US again if it meant curtailing nuclear and missile programs which to many serve as a national status symbol. A poll conducted by scholars at the University of Maryland in October 2019 thus found that negative attitudes toward the US just over a year after US withdrawal from the JCPOA were at their highest point in 13 years (including during the Iraq War) and that the most respected figure in Iran was General Soleimani. The US subsequently assassinated Soleimani in January 2020 and Trump threatened to destroy Iranian cultural sites if Iran retaliated (a potential war crime under international law), resulting in a predictable backlash from Iran's people and leadership. In short, worsening US legitimacy has weakened the US ability to act cohesively with allies with respect to Iran and reinforced opposition within Iran to negotiations with the United States.

The Implications of Erosion

US nonproliferation policy—a historically central feature of US grand strategy—rests on increasingly shaky foundations. The factors that have supported effective US nonproliferation policy—international, domestic, and normative—are eroding. What are the implications of these trends?

First, our argument does not imply that a wave of proliferation is imminent. Nuclear acquisition is a historically rare event driven by a broad range of factors, of which US nonproliferation policy is only one. Nonetheless, the political benefits that nuclear weapons continue to offer the states that possess them, along with the broader geopolitical dynamics that may increase some states' incentives to acquire nuclear weapons, are likely to ensure that proliferation remains plausible. Our argument suggests that the United States will likely become less central to the choices that states make about whether to seek and acquire nuclear weapons. While US leaders may at the margins be able to reduce domestic polarization, take actions to stem the decline in US relative power, or revive US legitimacy, the broad trends we identify are beyond the power of any one president or administration to reverse.

Second, and as a result, US policymakers need to think creatively about ways to pursue nonproliferation goals in an increasingly constrained environment. The United States may still be able to achieve nonproliferation goals, but may sometimes have to give more and accept less in doing so. For example, a range of possible deals with North Korea might be viable which would constrain the growth of North Korea's nuclear arsenal, establish avenues for high-level communication within crises, or reduce the risk of North Korean nuclear exports. However,

such deals might also need to involve accepting North Korea's *de facto* status as a nuclear-armed state and acknowledging that "denuclearization" is no longer feasible. ⁶³ Limited deals that meaningfully improve American security, however, may be preferable to demanding maximalist goals and failing to achieve them. Similarly, US policymakers will have to consider the circumstances in which they are willing to "pay more" to achieve nonproliferation goals. The recent Washington Declaration with South Korea discussed above may represent an example of a smart decision to achieve nonproliferation goals by offering modest additional concessions which reflect the shifting balance of power and South Korea's corresponding need for additional reassurance from the United States.

Third, the United States may want to judiciously adjust the emphasis it places across different nonproliferation policies within its toolkit to focus on policies where it retains greater potency. For example, as political scientists Henry Farrell and Abraham Newman observe, the structure of today's economic networks means that while "market size and bilateral economic interactions are

important ... they are far from exhaustive" in determining the coercive influence of a leading state that is uniquely positioned to monitor exchanges and deny network access to smaller states. 64 US control over and influence within financial systems, networks and institutions may therefore be more durable to declines in US material power, meaning economic leverage may remain a more potent non-proliferation tool than other sources of US power. 65

Economic leverage may remain a more potent nonproliferation tool than other US sources

This does not offer the United States a silver bullet. Ultimately, the structure of economic net-

works are subject to the same dynamics we identify: as US power or legitimacy declines, states may be more tempted to build rival networks or move to undermine US-dominated ones. Even the key advocates of the "weaponized interdependence" argument acknowledge that "[s]tates are locked into existing network structures only up to that point where the costs of remaining in them are lower than the benefits," and once the benefits to key actors no longer exceed the costs, rival orders may begin to emerge. ⁶⁶

There are already signs that these dynamics are emerging: as political scientist Daniel Drezner observes, the unprecedented use of economic coercion by the Trump administration for a wide range of goals including nonproliferation led to sufficient discontent with US leadership that "the U.S. dollar's share of global foreign exchange reserves fell to a 25-year low at the end of 2020." States subject to US sanctions—like Russia, Venezuela, and Turkey—increased their holdings of gold, largely de-dollarized their foreign exchange reserves, and made moves to conduct trade and international payments in local currencies. 68

Though it remains to be seen how unprecedented US sanctions against Russia following the 2022 invasion of Ukraine will affect US centrality in global financial networks, some states including China, Russia, and India already appear to have moved toward curtailing use of the US dollar in their intra-bloc trade. Ultimately, moves of this sort may begin to erode US dominance even in financial and economic networks, with concomitant effects for US nonproliferation policies that derive their potency from the US position in those networks.

Fourth, American policymakers may also want to consider engaging in institutions and investing in norms which may continue to restrain proliferation in a world in which US nonproliferation policy is less potent. In many cases, this will involve uncomfortable trade-offs which US policymakers will have to navigate. For example, former Defense Secretary William Perry has argued that the United States should abandon its hostility to the TPNW and seek to engage with it more productively. Such engagement has the potential to bolster an institution and associated norms which might plausibly restrain proliferation, but would also subject the United States to uncomfortable scrutiny about the legitimacy of its own nuclear arsenal. Similarly, moderating US foreign policy ambitions and the scope of US grand strategy—reducing US commitments abroad, for example—would potentially reduce the costs to the United States that emerge from proliferation, but might risk spurring allied proliferation.

Such trade-offs, however, are inevitable in a world in which the United States must seek to secure its interests while dealing with a worsening balance of power, weakened domestic foundations for ambitious foreign policies, and reduced normative legitimacy. US policymakers cannot wish these trade-offs away, and US nonproliferation policies will ultimately have to confront them moving forward.

Notes

- Mark S. Bell, Nuclear Reactions: How Nuclear-Armed States Behave (Ithaca, NY: Cornell University Press, 2021), 44-45.
- 2. Francis J. Gavin, "Strategies of Inhibition: US Grand Strategy, the Nuclear Revolution, and Nonproliferation," *International Security* 40, no. 1 (2015): 9-46; Matthew Kroenig, "Force or Friendship? Explaining Great Power Nonproliferation Policy," *Security Studies* 23, no. 1 (2014): 1–32; Nicholas L. Miller, *Stopping the Bomb: The Sources and Effectiveness of U.S. Nonproliferation Policy* (Ithaca, NY: Cornell University Press, 2018); Rebecca Davis Gibbons, *The Hegemon's Tool Kit: U.S. Leadership and the Politics of the Nuclear Nonproliferation Regime* (Ithaca, NY: Cornell University Press, 2022); On variation in the pursuit of nonproliferation or different nonproliferation tools, see, for example, Miller, *Stopping the Bomb*; James Cameron and Or Rabinowitz, "Eight Lost Years? Nixon, Ford, Kissinger and the Non-Proliferation Regime, 1969–1977," *Journal of Strategic Studies* 40, no. 6 (2017): 839-866; Rachel Elizabeth Whitlark, *All Options on the*

- Table: Leaders, Preventive War, and Nonproliferation (Ithaca, NY: Cornell University Press, 2021).
- 3. This claim is often made by advocates of a more restrained U.S. grand strategy. See, for example, John J. Mearsheimer and Stephen M. Walt, "The Case for Offshore Balancing: A Superior U.S. Grand Strategy," *Foreign Affairs* 95, no. 4 (2016): 79.
- 4. Matthew Fuhrmann, "Spreading Temptation: Proliferation and Peaceful Nuclear Cooperation Agreements," *International Security* 34, no. 1 (2009): 7-41.
- Earl C. Ravenal, "Counterforce and Alliance: The Ultimate Connection," International Security 6, no. 4 (1982): 26-43; Brendan Rittenhouse Green, The Revolution That Failed: Nuclear Competition, Arms Control, and the Cold War (Cambridge: Cambridge University Press, 2020), 100-103, 138-139, 173-174, 228-231.
- 6. For example, Philipp C. Bleek and Eric B. Lorber, "Security Guarantees and Allied Nuclear Proliferation," Journal of Conflict Resolution 58, no. 3 (2014): 429-454; Nicholas L. Miller, "The Secret Success of Nonproliferation Sanctions," International Organization 68, no. 4 (2014): 913–944; Matthew Fuhrmann and Yonatan Lupu, "Do Arms Control Treaties Work? Assessing the Effectiveness of the Nuclear Nonproliferation Treaty," International Studies Quarterly 60, no. 3 (2016): 530-539; Jeffrey M. Kaplow, Signing Away the Bomb: The Surprising Success of the Nuclear Nonproliferation Regime (Cambridge: Cambridge University Press, 2023).
- 7. For example, Nicholas L. Miller, "Nuclear Dominoes: A Self-Defeating Prophecy?," Security Studies 23, no. 1 (2014): 33-73; Gene Gerzhoy, "Alliance Coercion and Nuclear Restraint: How the United States Thwarted West Germany's Nuclear Ambitions," International Security 39, no. 4 (2015): 91-129; Or Rabinowitz, Bargaining on Nuclear Tests: Washington and Its Cold War Deals (Oxford University Press, 2014); Andrew Coe and Jane Vaynman, "Superpower Collusion and the Nuclear Nonproliferation Treaty," Journal of Politics 77, no. 4 (2015): 983–997; Mariana Budjeryn, "The Power of the NPT: International Norms and Ukraine's Nuclear Disarmament," The Nonproliferation Review 22, no. 2 (2015): 203-237; Rupal N. Mehta, Delaying Doomsday: The Politics of Nuclear Reversal (Oxford University Press, 2020); Rebecca Davis Gibbons, "Supply to Deny: The Benefits of Nuclear Assistance for Nuclear Nonproliferation," Journal of Global Security Studies 5, no. 2 (2020); Gibbons, The Hegemon's Tool Kit; Michal Onderco, Networked Nonproliferation: Making the NPT Permanent (Stanford University Press, 2021); Jonathan R. Hunt, The Nuclear Club: How America and the World Policed the Atom from Hiroshima to Vietnam (Stanford University Press, 2022); Maria Rost Rublee, Nonproliferation Norms: Why States Choose Nuclear Restraint (University of Georgia Press, 2009).
- 8. Miller, "The Secret Success of Nonproliferation Sanctions"; Gerzhoy, "Alliance Coercion and Nuclear Restraint."
- 9. Vipin Narang, Seeking the Bomb: Strategies of Nuclear Proliferation (Princeton University Press, 2022); see also Alexandre Debs and Nuno P. Monteiro, Nuclear Politics: The Strategic Causes of Proliferation (Cambridge University Press, 2017).
- 10. Gibbons, The Hegemon's Tool Kit, 69.
- 11. Laura S. H. Holgate and Sagatom Saha, "America Must Lead on Nuclear Energy to Maintain National Security," Washington Quarterly 41, no. 2 (2018): 11.
- 12. Gavin, "Strategies of Inhibition," 22; Matthew Kroenig, "Exporting the Bomb: Why States Provide Sensitive Nuclear Assistance," American Political Science Review 103, no. 1 (2009): 113-133.

- 13. See for example, Evan Braden Montgomery, "Contested Primacy in the Western Pacific: China's Rise and the Future of U.S. Power Projection," International Security 38, no. 4 (2014): 124-125; Stephen Biddle and Ivan Oelrich, "Future Warfare in the Western Pacific: Chinese Antiaccess/Area Denial, U.S. AirSea Battle, and Command of the Commons in East Asia," International Security 41, no. 1 (2016): 7-48; Terrence K. Kelly, David C. Gompert, and Duncan Long, Smarter Power, Stronger Partners, Volume I: Exploiting U.S. Advantages to Prevent Aggression (RAND Corporation, 2016).
- 14. Mark S. Bell and Julia Macdonald, "Toward Deterrence: The Upside of the Trump-Kim Summit," War on the Rocks, June 15, 2018, https://warontherocks.com/2018/06/toward-deterrence-the-upside-of-the-trump-kim-summit/.
- Iranian Naval Forces: A Tale of Two Navies (Office of Naval Intelligence, 2017), 11;
 Caitlin Talmadge, "Closing Time: Assessing the Iranian Threat to the Strait of Hormuz," International Security 33, no. 1 (2008): 82-117
- David J. Singer, Stuart Bremer, and John Stuckey, "Capability Distribution, Uncertainty, and Major Power War, 1820-1965," in Bruce M. Russett, ed., Peace, War, and Numbers (Thousand Oaks, CA: Sage, 1972), 19-48.
- 17. Data are taken from the World Bank, https://data.worldbank.org.
- 18. Michael Beckley, "The Power of Nations: Measuring What Matters," International Security 43, no. 2 (2018): 7-44.
- Jeff D. Colgan and Nicholas L. Miller, "Rival Hierarchies and the Origins of Nuclear Technology Sharing," *International Studies Quarterly* 63, no. 2 (2019): 310–321; Coe and Vaynman, "Superpower Collusion and the Nuclear Nonproliferation Treaty."
- 20. Nicholas L. Miller and Tristan A. Volpe, "The Rise of the Autocratic Nuclear Marketplace," *Journal of Strategic Studies*, forthcoming.
- 21. Miller and Volpe, "Rise of the Autocratic Nuclear Marketplace," 3.
- 22. Nicholas L. Miller and Tristan A. Volpe, "Abstinence or Tolerance: Managing Nuclear Ambitions in Saudi Arabia," *Washington Quarterly* 41, no. 2 (2018): 27-46.
- 23. Jennifer Lind and Daryl G. Press, "South Korea's Nuclear Options," Foreign Affairs, April 19, 2023, https://www.foreignaffairs.com/united-states/south-koreas-nuclear-options-north-korea-deterrence; Min-hyung Kim, "Is Non-Nuclearization Sustainable? Explaining South Korea's Strategic Choices," Washington Quarterly 46, no. 2 (2023): 127-140; Andrew Yeo, "Can South Korea Trust the United States," Washington Quarterly 46, no. 2 (2023): 109-125.
- 24. The White House, "Washington Declaration," April 26, 2023, https://www.whitehouse.gov/briefing-room/statements-releases/2023/04/26/washington-declaration-2/; Kim, "Is Non-Nuclearization Sustainable?," 137.
- Alex Horton and Dan Lamothe, "Army awards more Purple Hearts for Troops hurt in Iranian attack that Trump downplayed," Washington Post, December 8, 2021, https:// www.washingtonpost.com/national-security/2021/12/08/purple-heart-iran-missile-attack/.
- 26. Michael D. Shear, Eric Schmitt, Michael Crowley and Maggie Haberman, "Strikes on Iran Approved by Trump, Then Abruptly Pulled Back," *New York Times*, June 20, 2019, https://www.nytimes.com/2019/06/20/world/middleeast/iran-us-drone.html.
- 27. Colin Kahl, "The Myth of a Better Iran Deal," Foreign Policy, September 26, 2017, https://foreignpolicy.com/2017/09/26/the-myth-of-a-better-iran-deal/.
- For broader arguments about the domestic foundations of US foreign policy, see, for example, Fareed Zakaria, From Wealth to Power: The Unusual Origins of America's World Role (Princeton, NJ: Princeton University Press, 1999); Kenneth A. Schultz,

- "Perils of Polarization for US Foreign Policy," Washington Quarterly 40, no. 4 (2017): 7-28; Paul Musgrave, "International Hegemony Meets Domestic Politics: Why Liberals can be Pessimists," Security Studies 28, no. 3 (2019), 452-454; Peter Trubowitz and Peter Harris, "The End of the American Century? Slow Erosion of the Domestic Sources of Usable Power," International Affairs 95, no. 3 (2019): 619-639; Rachel Myrick, "America is Back—but for How Long? Political Polarization and the End of U.S. Credibility," Foreign Affairs, June 14, 2021, https://www.foreignaffairs.com/articles/world/2021-06-14/america-back-how-long.
- 29. Charles Kupchan and Peter Trubowitz, "Dead Center: The Demise of Liberal Internationalism in the United States," *International Security* 32, no. 1 (2007): 8.
- 30. On the importance of legitimation within foreign policy, see Stacie E. Goddard and Ronald R. Krebs, "Rhetoric, Legitimation, and Grand Strategy," *Security Studies* 24, no. 1 (2015): 5-36.
- 31. Schultz, "Perils of Polarization," 8; Jacob M. Grumbach, "From Backwaters to Major Policymakers: Policy Polarization in the States, 1970-2014," Perspectives of Politics 16, no. 2 (2018): 416-435; Matthew Levendusky, The Partisan Sort: How Liberals Became Democrats and Conservatives Became Republicans (Chicago, IL: University of Chicago Press, 2010); Lilliana Mason, Uncivil Agreement: How Politics Became our Identity (Chicago, IL: University of Chicago Press, 2018).
- 32. Schultz, "Perils of Polarization," 10.
- 33. Kupchan and Trubowitz, "Dead Center."
- 34. Ibid; Schultz, "Perils of Polarization," Charles A. Kupchan and Peter L. Trubowitz. "The Illusion of Liberal Internationalism's Revival," *International Security* 35, no. 1 (2010): 95-109.
- 35. G. John Ikenberry, "The End of Liberal International Order," *International Affairs* 94, no. 1 (2018), 7; See also Barry R. Posen, "The Rise of Illiberal Hegemony: Trump's Surprising Grand Strategy," *Foreign Affairs* 97, no. 2 (2018): 20-27.
- 36. Wade Boese, "Republicans, Democrats Square Off on Approaches to Proliferation," Arms Control Today 33, no. 3 (2003): 37.
- 37. Carrie A. Lee, "Electoral Politics, Party Polarization, and Arms Control: New START in Historical Perspective," *Orbis* 63, no. 4 (2019): 545-564.
- 38. David A. Graham, "Undercutting Obama's Plans for Iran," Atlantic, March 9, 2015, https://www.theatlantic.com/international/archive/2015/03/senate-republicans-pen-letter-to-iran-supreme-leader/387223/.
- 39. Steve Peoples and Julie Bykowitz, "Trump, Cruz team up against Iran deal at Capitol Hill rally," PBS, September 9, 2015, https://www.pbs.org/newshour/politics/trump-cruz-team-iran-deal-capitol-hill-rally.
- 40. Jack Goldsmith, "Some Implications of President Obama's Plans to Sidestep Congress on Iranian Sanctions," *Lawfare*, October 21, 2014, https://www.lawfareblog.com/some-implications-president-obamas-plans-sidestep-congress-iranian-sanctions.
- 41. Natasha Bertrand and Kylie Atwood, "Iran drops key 'red line' demand as progress on a revived nuclear deal edges forward," CNN, August 19, 2022, https://www.cnn.com/2022/08/19/politics/iran-nuclear-deal-progress/index.html.
- 42. Nancy Gallagher, Ebrahim Mohseni, and Clay Ramsay, "Iranian Public Opinion under "Maximum Pressure," University of Maryland School of Public Policy, October 2019.
- 43. Gavin, "Strategies of Inhibition," 25.

- 44. Nina Tannenwald, The Nuclear Taboo: The United States and the Non-Use of Nuclear Weapons Since 1945 (New York: Cambridge University Press, 2007); See also Nina Tannenwald, "How Strong is the Nuclear Taboo Today?," Washington Quarterly 41, no. 3 (2018): 89-109.
- 45. Cecilia Albin, Justice and Fairness in International Negotiation (Cambridge: Cambridge University Press, 2001), ch. 6; Nina Tannenwald, "Justice and Fairness in the Nuclear Nonproliferation Regime," Ethics and International Affairs 27, no. 3 (2013): 299-317; Leonard Weiss, "Nuclear-Weapon States and the Grand Bargain," Arms Control Today 33, no. 10 (2012): 21-25.
- 46. For example, see Jacques E. C. Hymans, "Of Gauchos and Gringos: Why Argentina Never Wanted the Bomb, and why the United States Thought it Did," *Security Studies* 10, no. 3 (2001): 153-185.
- 47. Martha Finnemore, "Legitimacy, Hypocrisy, and the Social Structure of Unipolarity: Why Being a Unipole isn't all it's Cracked up to be," *World Politics* 61, no. 1 (2009): 58-85.
- 48. "Global Perception of US falls to two-decade low," BBC News, September 15, 2020, https://www.bbc.com/news/world-us-canada-54169732; For broader arguments about the decline in U.S. policy competence and its consequences, see Philip Zelikow, "To Regain Policy Competence: The Software of American Public Problem-Solving," Texas National Security Review 2, no. 4 (2019): 110-127; Stephen M. Walt, "The Death of American Competence," Foreign Policy, March 23, 2020, https://foreignpolicy.com/2020/03/23/death-american-competence-reputation-coronavirus/.
- Pew Research Center, "U.S. Image Plummets Internationally as most say country has handled Coronavirus Badly," September 2020, https://www.pewresearch.org/global/2020/ 09/15/us-image-plummets-internationally-as-most-say-country-has-handled-coronavirusbadly/.
- 50. Pew Research Center, "America's Image Abroad Rebounds with transition from Trump to Biden," June 2021, https://www.pewresearch.org/global/2021/06/10/americas-image-abroad-rebounds-with-transition-from-trump-to-biden/.
- 51. Rebecca Davis Gibbons, "The Humanitarian Turn in Nuclear Disarmament and the Treaty on the Prohibition of Nuclear Weapons," *Nonproliferation Review* 25, no. 1-2 (2018): 11-36.
- 52. Ibid, 35.
- 53. Ibid, 19-28.
- 54. Nick Ritchie, "A Hegemonic Nuclear Order: Understanding the Ban Treaty and the Power Politics of Nuclear Weapons," Contemporary Security Policy 40, no. 4 (2019): 409-434; Naomi Egel and Steven Ward, "Hierarchy, Revisionism, and Subordinate Actors: The TPNW and the Subversion of the Nuclear Order," European Journal of International Relations 28, no. 4 (2022): 751–776; Gibbons, "The Humanitarian Turn in Nuclear Disarmament."
- 55. Joelien Pretorius and Tom Sauer, "Ditch the NPT," Survival 63, no. 4 (2021): 107.
- 56. Kahl, "Myth of a Better Iran Deal."
- Tessa Berenson, "President Trump Pulls U.S. Out of 'Defective' Iran Nuclear Deal, Time Magazine, May 8, 2018, https://time.com/5269746/donald-trump-iran-nuclear-deal-macron/.
- 58. Edward Luce, "The rise of a new generation of anti-Americans," *Financial Times*, June 21, 2018, https://www.ft.com/content/ae6d2aca-7530-11e8-b6ad-3823e4384287.

- 59. Gallagher et al, "Iranian Public Opinion."
- 60. Dennis Romero and Yuliya Talmazan, "Trump threatens attacks on 52 sites if Iran retaliates for Soleimani killing," ABC News, January 4, 2018, https://www.nbcnews.com/news/world/trump-threatens-iran-attacks-52-sites-n1110511.
- 61. Mark S. Bell, "Examining Explanations for Nuclear Proliferation," *International Studies Quarterly* 60, no. 3 (2016): 520-529.
- 62. Bell, Nuclear Reactions; Eric Brewer, Towards A More Proliferated World: The Geopolitical Forces that will Shape the Spread of Nuclear Weapons (Washington, DC: Center for a New American Security, 2020); The states that may be interested in nuclear weapons moving forward may be quite different to more recent proliferation concerns, see Eric Brewer, "The Nuclear Proliferation Landscape: Is Past Prologue?," Washington Quarterly 44, no. 2 (2021): 181-197.
- 63. James M. Acton, "Some Nuclear Ground Rules for Kim Jong Un," Foreign Policy, August 16, 2017, https://foreignpolicy.com/2017/08/16/some-nuclear-ground-rules-for-kim-jong-un/; Mark S. Bell, "North Korea Won't Give up its Nuclear Weapons. The U.S. has Three Good Reasons to Talk Anyway," Washington Post, March 9, 2018, https://www.washingtonpost.com/news/monkey-cage/wp/2018/03/09/north-korea-wont-give-up-its-nuclear-weapons-the-u-s-has-3-good-reasons-to-talk-anyway/; Jeffrey Lewis, "It's Time to Accept That North Korea Has Nuclear Weapons," New York Times, October 13, 2022, https://www.nytimes.com/2022/10/13/opinion/international-world/north-korea-us-nuclear.html.
- 64. Henry Farrell and Abraham L. Newman, "Weaponized Interdependence: How Global Economic Networks Shape State Coercion," *International Security* 44, no. 1 (2019): 54.
- 65. Daniel W. Drezner, "Counter-Hegemonic Strategies in the Global Economy," Security Studies 28, no. 3 (2019): 505–531.
- 66. Farrell and Newman, "Weaponized Interdependence," 77; See also Daniel Drezner, "Targeted Sanctions in a World of Global Finance," International Interactions 41, no. 4 (2015): 760-761; Agathe Demarais, Backfire: How Sanctions Reshape the World Against U.S. Interests (New York: Columbia University Press, 2022); Daniel McDowell, Bucking the Buck: US Financial Sanctions and the International Backlash against the Dollar (Oxford: Oxford University Press, 2023).
- 67. Daniel W. Drezner, "The United States of Sanctions: The Use and Abuse of Economic Coercion," *Foreign Affairs* 100, no. 5 (2021): 149; See also Demarais, *Backfire*, ch. 9; Daniel W. Drezner, "Economic Statecraft in the Age of Trump," *Washington Quarterly* 42, no. 3 (2019): 18.
- 68. Daniel McDowell, "Financial Sanctions and Political Risk in the International Currency System," *Review of International Political Economy* 28, no. 3 (2021): 635–661.
- 69. Zongyuan Zoe Liu, "China Is Quietly Trying to Dethrone the Dollar," *Foreign Policy*, September 21, 2022, https://foreignpolicy.com/2022/09/21/china-yuan-us-dollar-sco-currency.
- William J. Perry, "Why the United States Should Support the Treaty on the Prohibition of Nuclear Weapons," Bulletin of the Atomic Scientists, January 22, 2021, https://thebulletin. org/2021/01/why-the-united-states-should-join-the-treaty-on-the-prohibition-of-nuclear-weapons/.