

# The Price of Protection: Explaining Success and Failure of U.S. Alliance Burden-Sharing Pressure<sup>1</sup>

Brian Blankenship<sup>2</sup>

University of Miami

## Abstract

*Existing scholarship on alliance burden-sharing focuses on explaining why smaller allies often under-contribute relative to their larger partners. However, the literature largely neglects the role played by great power pressure in shaping burden-sharing outcomes. I argue that rather than being a product of rational free-riding, allies' defense efforts are often a response to their patron's threat of abandonment. When a patron can more credibly threaten to reduce its protection, and when doing so would impose serious costs on allies, it is better positioned to elicit burden-sharing. I test the theory using data on allied burden-sharing in U.S. alliances from 1950-2010. The results show that allies exhibit higher levels of burden-sharing efforts when they are geographically vulnerable to attack, while allies exhibit lower levels of burden-sharing when they are in geostrategically valuable locations to the United States.*

Article accepted for publication at *Security Studies*.

---

<sup>1</sup> I am very grateful for feedback I received from Richard Betts, Allison Carnegie, Cali Curley, Louise Davidson-Schmich, Xue Gao, Laura Gomez-Mera, George Gonzalez, Nicole Humphrey, Robert Jervis, Renanah Joyce, Koji Kagotani, Namhoon Ki, Tongfi Kim, Erik Lin-Greenberg, Shawn Lonergan, Costa Pischedda, Daryl Press, Jack Snyder, Mike Touchton, and Keren Yarhi-Milo, as well as participants at the ISA 2018 and ISA 2019 conferences and two anonymous referees. Additionally, I am grateful for funding I received from the Smith Richardson Foundation (SRF grant #2016-1050), the Weatherhead East Asian Institute, and the Columbia University Political Science Department.

<sup>2</sup> Assistant Professor, Department of Political Science, University of Miami. bxb731@miami.edu.

## Introduction

In the wake of the 2016 presidential election, burden-sharing rose near the top of the U.S. foreign policy agenda. Both as a candidate and as President, Donald Trump repeatedly called for U.S. allies to pay more for their own defense. Trump argued that only allies paying their “fair share” should benefit from U.S. protection, and that the United States should be prepared “to walk” away from its commitments.<sup>3</sup> Defense Secretary James Mattis similarly warned the North Atlantic Treaty Organization (NATO) that “If your nations do not want to see America moderate its commitment to this alliance, each of your capitals needs to show support for our common defense.”<sup>4</sup>

Such efforts at coercive burden-sharing are not new, however. John F. Kennedy, for example, put enormous pressure on the Federal Republic of Germany to increase its defense efforts and compensate the United States for the costs of stationing American troops in the country.<sup>5</sup> He remarked in early 1963 that “We cannot continue to pay for the military protection of Europe while the NATO states are not paying their fair share and living off the ‘fat of the land.’”<sup>6</sup> Jimmy Carter similarly threatened to withdraw U.S. troops from South Korea, and the South Koreans agreed to increase their defense spending to 6% of gross national product.<sup>7</sup> In other cases, U.S.

---

<sup>3</sup> Ben Jacobs, “Donald Trump Reiterates He Will Only Help NATO Countries that Pay ‘Fair Share,’” *The Guardian*, July 27, 2016, <https://www.theguardian.com/us-news/2016/jul/27/donald-trump-nato-isolationist>; Esme Cribb, “Trump Doubles Down On NATO Comments: ‘We Have To Walk,’” *Talking Points Memo*, July 25, 2016, <http://talkingpointsmemo.com/livewire/trump-nato-we-have-to-walk>.

<sup>4</sup> Helene Cooper, “Defense Secretary Mattis Tells NATO Allies to Spend More, or Else,” *New York Times*, February 15, 2017, <https://www.nytimes.com/2017/02/15/world/europe/jim-mattis-nato-trump.html>.

<sup>5</sup> Francis J. Gavin, *Gold, Dollars, and Power: The Politics of International Monetary Relations, 1958-1971* (Chapel Hill, NC: The University of North Carolina Press, 2004), 103–11.

<sup>6</sup> U.S. Department of State, *Foreign Relations of the United States (FRUS)*, 1961-1963, Vol. 13 (Washington, DC: United States Government Printing Office, 1994), p. 486.

<sup>7</sup> Jong-Sup Lee and Uk Heo, *The U.S.-South Korean Alliance, 1961-1988 : Free-Riding or Bargaining?* (Lewiston, NY: Edwin Mellen Press, 2002), 111–52.

persuasion has not been as successful. The United Kingdom repeatedly proved resistant to U.S. pressure to retain its military presence in Asia during the 1960s.<sup>8</sup>

What explains variation in the success or failure of U.S. burden-sharing pressure? Since the pioneering work of Olson and Zeckhauser in the 1960s, the dominant research program on burden-sharing has treated security in asymmetric alliances between great powers and smaller countries as a public good.<sup>9</sup> The primary claim this literature advances is that larger members of an alliance will over-contribute to collective defense, since its success by-and-large depends on their efforts. Smaller members, by contrast, will under-contribute, or “free-ride.”<sup>10</sup> This argument has generated considerable insights into the distribution of burdens in U.S. alliances, especially NATO.<sup>11</sup> However, there is much variation that it has difficulty accounting for. It cannot explain why France withdrew from NATO’s military command in 1966, despite being among NATO’s largest members; why Germany since the end of the Cold War has been among NATO’s lowest spenders on defense as a percentage of its GDP; or why smaller NATO members in the 2010s – including Estonia, Latvia, and Lithuania – punched above their weight.

In this article, I argue that a substantial amount of variation in allied burden-sharing can be explained by great power patrons’ ability to exploit their allies’ fears of being abandoned. The more credible a patron’s threat of abandonment and the worse-off an ally would be if abandoned, the more effectively it can encourage burden-sharing. This threat need not be explicit or public; a

---

<sup>8</sup> John Dumbrell, “The Johnson Administration and the British Labour Government: Vietnam, the Pound and East of Suez,” *Journal of American Studies* 30, no. 2 (1996): 227–30.

<sup>9</sup> Mancur Olson Jr. and Richard Zeckhauser, “An Economic Theory of Alliances,” *The Review of Economics and Statistics* 48, no. 3 (1966): 266–79.

<sup>10</sup> John R. Oneal, “The Theory of Collective Action and Burden Sharing in NATO,” *International Organization* 44, no. 3 (1990): 379–402; Thomas Plümper and Eric Neumayer, “Free-Riding in Alliances: Testing an Old Theory with a New Method,” *Conflict Management and Peace Science* 32, no. 3 (2015): 247–68.

<sup>11</sup> Todd Sandler, “The Economic Theory of Alliances: A Survey,” *The Journal of Conflict Resolution* 37, no. 3 (1993): 446–83; Todd Sandler and Hirofumi Shimizu, “NATO Burden Sharing 1999-2010: An Altered Alliance,” *Foreign Policy Analysis* 10 (2014): 43–60.

patron may use threats implicitly or privately, and allies may anticipate the possibility of abandonment and preempt patron threats.<sup>12</sup> In this way, the article identifies structural conditions under which allies are more vulnerable to patron coercion and more likely to burden-share; questions of *when* the United States wants burden-sharing and what *types* of pressure it employs (public vs. private; tacit pressure vs. overt threats) is beyond this article's scope. Additionally, I focus on burden-sharing in the form of allies' efforts to provide for their own defense and enhance the alliance's collective military capabilities, as opposed to burden-sharing in the form of, for example, participating in the patron's military interventions or hosting its bases.<sup>13</sup>

A patron can most credibly threaten to abandon allies when they are of limited strategic value and when its local alternatives for partners are more plentiful. The consequences of abandonment, in turn, are more severe for allies vulnerable to attack. These two factors often have cross-cutting effects, however; a shared threat environment, for example, both renders allies more dependent on their patron's protection but also makes them more valuable for deterring and projecting power near their shared adversaries. Thus, I derive testable hypotheses to parse these competing mechanisms by focusing on factors that activate one more strongly than the other.

To test the theory, I conduct statistical tests using data on military spending in U.S. alliances from 1950-2010. Three key findings emerge. First, allies sharing a land border with shared adversaries spend more on defense, as they are the most exposed and vulnerable to attack. Second, allies in geostrategically valuable locations near maritime chokepoints spend less on defense, as they are more intrinsically important to the United States. Finally, when there are

---

<sup>12</sup> For a similar argument about the effectiveness of economic sanctions for nonproliferation see Nicholas Miller, "The Secret Success of Nonproliferation Sanctions," *International Organization* 68, no. 4 (2014): 913–44.

<sup>13</sup> On multilateral military coalition-building, see: Atsushi Tago, "Why Do States Join US-Led Military Coalitions?: The Compulsion of the Coalition's Missions and Legitimacy," *International Relations of the Asia-Pacific* 7, no. 2 (2007): 179–202; Sarah E. Kreps, *Coalitions of Convenience: United States Military Interventions after the Cold War* (New York: Oxford University Press, 2010); Marina E. Henke, *Constructing Allied Cooperation: Diplomacy, Payments, and Power in Multilateral Military Coalitions* (Ithaca: Cornell University Press, 2019).

fewer alternative U.S. allies nearby, allies spend less on defense, as the United States can less easily afford to abandon them.

This article makes a number of contributions. For one, I directly draw attention to the bargaining process that shapes alliance burden-sharing. With few exceptions, the literature on free-riding and burden-sharing in asymmetric alliances has not emphasized the conditions under which great powers can pressure their allies to pick up the burden. Instead, the literature almost exclusively focuses on three questions: first, whether smaller allies free-ride more than larger allies<sup>14</sup>; second, whether alliance benefits such as deterrence and defense are truly “public” goods<sup>15</sup>; and third, how factors outside the context of the alliance itself may influence allies’ defense efforts.<sup>16</sup> In existing studies, the extent of a patron’s influence is generally limited to the effects that changes in its military spending have on allies.<sup>17</sup> This article explicitly focuses on why and when patrons have leverage to encourage burden-sharing.

Second, the theory has implications for understanding how great powers manage their partnerships, deter adversaries, and maintain influence in the international system. Classic works

---

<sup>14</sup> Olson and Zeckhauser, “An Economic Theory of Alliances”; Glenn Palmer, “Corralling the Free Rider: Deterrence and the Western Alliance,” *International Studies Quarterly* 34, no. 2 (1990): 147–64; Sandler, “The Economic Theory of Alliances: A Survey”; Plümper and Neumayer, “Free-Riding in Alliances: Testing an Old Theory with a New Method.”

<sup>15</sup> Todd Sandler, “Impurity of Defense: An Application to the Economics of Alliances,” *Kyklos* 30, no. 3 (1977): 443–60; James C. Murdoch and Todd Sandler, “Complementarity, Free Riding, and the Military Expenditures of NATO Allies,” *Journal of Public Economics* 25, no. 1 (1984): 83–101; John R. Oneal and Mark A. Elrod, “NATO Burden Sharing and the Forces of Change,” *International Studies Quarterly* 33, no. 4 (1989): 435–56; Glenn Palmer, “Alliance Politics and Issue Areas: Determinants of Defense Spending,” *American Journal of Political Science* 34, no. 1 (1990): 190–211; Avery Goldstein, “Discounting the Free Ride: Alliances and Security in the Postwar World,” *International Organization* 49, no. 1 (1995): 39–71.

<sup>16</sup> Bruce Russett, *What Price Vigilance?: Burdens of National Defence* (New Haven, CT: Yale University Press, 1970); Oneal, “The Theory of Collective Action and Burden Sharing in NATO”; Palmer, “Alliance Politics and Issue Areas”; Palmer, “Corralling the Free Rider”; Benjamin Zyla, *Sharing the Burden? NATO and Its Second-Tier Powers* (Toronto: University of Toronto Press, 2015).

<sup>17</sup> Palmer, “Alliance Politics and Issue Areas”; Palmer, “Corralling the Free Rider”; exceptions include Lee and Heo, *The U.S.-South Korean Alliance*, who focus on American burden-sharing pressure on South Korea; and Alexander Lanoszka, “Do Allies Really Free-Ride?,” *Survival* 57, no. 3 (2015): 133–52, who argues that patrons may refrain from burden-sharing pressure to maintain allies’ loyalty.

in the international relations literature argue that free-riding is inherent in great powers' alliances with weaker partners, and that the costs of maintaining these asymmetric partnerships can contribute to overextension and long-term economic decline.<sup>18</sup> Moreover, a lack of allied burden-sharing may make it more difficult for great powers to compete with their rivals.<sup>19</sup> Understanding how great powers encourage burden-sharing in their alliances thus has implications for understanding their ability to avoid "imperial overstretch" and navigate power transitions.<sup>20</sup>

The rest of this article proceeds as follows. In the next two sections, I discuss the literature on burden-sharing and present my theory. I then proceed to a discussion of the research design and econometric results. Finally, I conclude with a discussion of theoretical and policy implications and avenues for future research.

## **Burden-Sharing in Asymmetric Alliances**

There are two dominant strands of academic literature on burden-sharing in asymmetric alliances, both of which predict minimal burden-sharing. First, scholars argue that alliances between great powers and weaker states feature an asymmetric exchange of goods: great powers provide security for the alliance, while weaker powers give up "autonomy," ranging from hosting the patron's military bases to providing general support for its foreign policy initiatives.<sup>21</sup> Here, burden-sharing is limited almost by definition; the great power tacitly agrees to accept the costs of providing security in exchange for weaker states' loyalty.<sup>22</sup>

---

<sup>18</sup> Olson and Zeckhauser, "An Economic Theory of Alliances"; Robert Gilpin, *War and Change in World Politics* (Cambridge, MA: Cambridge University Press, 1981).

<sup>19</sup> Gilpin, *War and Change in World Politics*.

<sup>20</sup> Paul M. Kennedy, *The Rise and Fall of the Great Powers: Economic Change and Military Conflict from 1500 to 2000* (New York: Random House, 1987).

<sup>21</sup> James D. Morrow, "Alliances and Asymmetry," *American Journal of Political Science* 35, no. 4 (1991): 904–33.

<sup>22</sup> David A. Lake, *Hierarchy in International Relations* (Ithaca, NY: Cornell University Press, 2009);

The second strand of literature more directly focuses on explaining burden-sharing outcomes, and draws on the logic of collective goods. Olson and Zeckhauser's seminal article argues that smaller countries tend to under-contribute to collective defense because their contributions are unlikely to be pivotal.<sup>23</sup> Other scholars build upon this observation to explore conditions under which the logic of collective goods is more or less applicable to alliances, whether because collective defense is not a pure public good or because allies pursue their own "private" goods from which their partners do not benefit – such as maintaining colonial empires or competing with non-shared rivals.<sup>24</sup>

There is an alternative explanation, however, which has been largely understudied in the existing literature: great power pressure. Patrons need not simply accept the level of effort their allies provide, but can attempt to persuade them to do more. Scholars have long suggested that powerful states can coerce their weaker allies into greater burden-sharing.<sup>25</sup> But the conditions under which pressure is effective remain under-theorized and have not been the subject of much empirical testing. Perhaps the most notable exception is the study by Fang and Ramsay, who argue that a patron can drive a harder bargain with its partners when it can more easily find alternative partners.<sup>26</sup> Similarly, Lee and Heo study bargaining leverage over burden-sharing in the U.S.-South Korea alliance, but they focus only on this one case and do not offer a general theory of burden-sharing.<sup>27</sup>

---

Lanoszka, "Do Allies Really Free-Ride?"

<sup>23</sup> Olson and Zeckhauser, "An Economic Theory of Alliances."

<sup>24</sup> Murdoch and Sandler, "Complementarity, Free Riding, and the Military Expenditures of NATO Allies"; ONeal and Elrod, "NATO Burden Sharing and the Forces of Change"; ONeal, "The Theory of Collective Action and Burden Sharing in NATO."

<sup>25</sup> Duncan Snidal, "The Limits of Hegemonic Stability Theory," *International Organization* 39, no. 4 (1985): 579–614.

<sup>26</sup> Songying Fang and Kristopher W. Ramsay, "Outside Options and Burden Sharing in Nonbinding Alliances," *Political Research Quarterly* 63, no. 1 (2010): 188–202.

<sup>27</sup> Lee and Heo, *The U.S.-South Korean Alliance*.

## A Theory of Effective Burden-Sharing Pressure

Burden-sharing is a key component of alliance management, as an alliance is unlikely to succeed in deterring and defeating adversaries unless its members possess adequate collective capabilities, and patrons risk over-extension if forced to provide these capabilities alone. Yet allies have incentives to free-ride, as they can devote those resources toward domestic consumption.<sup>28</sup> Moreover, in asymmetric alliances the contributions of the weaker partner(s) are less likely to decisively shift the balance of power between the alliance and the alliance's adversaries.<sup>29</sup>

Patrons can reduce allies' incentives to free-ride by exploiting their fears of abandonment. Bargaining in alliances occurs in the shadow of the threat of exit.<sup>30</sup> A patron can use other means to persuade its allies to increase their burden-sharing efforts – including “naming and shaming” free-riders or economic inducements – but the possibility of leaving or otherwise reducing its commitment to the alliance is its most potent leverage.

Nevertheless, the patron faces obstacles in persuading its allies to burden-share, as its threat to exit the alliance over burden-sharing disputes may not be taken seriously. For one, the patron may have an inherent interest in defending and supporting allies to deter expansion by neighboring states, mitigate regional security dilemmas that might otherwise lead to arms racing and war, and preserve its ability to project power from their territory while denying that same privilege to adversaries.<sup>31</sup> In the case of the United States in particular, its alliances are bolstered

---

<sup>28</sup> James D. Morrow, “Arms Versus Allies: Trade-Offs in the Search for Security,” *International Organization* 47, no. 2 (1993): 207–33; Anessa L. Kimball, “Political Survival, Policy Distribution, and Alliance Formation,” *Journal of Peace Research* 47, no. 4 (2010): 407–19.

<sup>29</sup> Olson and Zeckhauser, “An Economic Theory of Alliances.”

<sup>30</sup> Glenn H. Snyder, *Alliance Politics* (Ithaca, NY: Cornell University Press, 1997); Timothy W. Crawford, *Pivotal Deterrence: Third-Party Statecraft and the Pursuit of Peace* (Ithaca, NY: Cornell University Press, 2003); John M. Schuessler and Joshua R. Shiffrinson, “The Shadow of Exit from NATO,” *Strategic Studies Quarterly* 13, no. 3 (2019): 38–51.

<sup>31</sup> Robert J. Art, *A Grand Strategy for America* (Ithaca, NY: Cornell University Press, 2003); Nuno P. Monteiro, *Theory of Unipolar Politics* (New York: Cambridge University Press, 2014).

by its many troops stationed abroad, which act as costly signals of the United States' ability and willingness to defend its allies.<sup>32</sup> Indeed, many proponents of withdrawing U.S. troops from abroad do so on the grounds that their presence encourages allied free-riding.<sup>33</sup>

There are reasons to suspect, however, that the United States need not go to such lengths to encourage allied burden-sharing. First, existing evidence on the effects of U.S. troop presence on allied burden-sharing is mixed and incomplete. Some scholars find that states which host U.S. troops have lower defense contributions.<sup>34</sup> But others show that NATO allies' defense efforts are positively related to U.S. military presence.<sup>35</sup> Indeed, there are significant methodological hurdles to testing the relationship between U.S. presence and allied burden-sharing. For one, any relationship that exists between patron support and allied burden-sharing may be spurious. U.S. troop presence is likely to be correlated with threat, for example, which likely affects allied military spending itself.

Second, the relationship between reassurance and burden-sharing may be endogenous; patrons may withhold reassurance from allies which are under-contributing or reward those that contribute enough. Third, it is unclear what signal is even sent by U.S. troop presence. Some scholars view U.S. signals of support as signals of American interest in an ally's survival and commitment to its defense, thus predicting a negative effect on allied burden-sharing.<sup>36</sup> However,

---

<sup>32</sup> Thomas Schelling, *Arms and Influence* (New Haven, CT: Yale University Press, 1966); James D. Fearon, "Signaling Foreign Policy Interests: Tying Hands versus Sinking Costs," *Journal of Conflict Resolution* 41, no. 1 (1997): 68–90.

<sup>33</sup> Barry R. Posen, *Restraint: A New Foundation for U.S. Grand Strategy* (Ithaca, NY: Cornell University Press, 2014).

<sup>34</sup> Lake, *Hierarchy in International Relations*; Carla Martinez Machain and T. Clifton Morgan, "The Effect of US Troop Deployment on Host States' Foreign Policy," *Armed Forces & Society* 39, no. 1 (2013): 102–23.

<sup>35</sup> Michael A. Allen, Julie VanDusky-Allen, and Michael E. Flynn, "The Localized and Spatial Effects of US Troop Deployments on Host-State Defense Spending," *Foreign Policy Analysis* 12, no. 4 (2016): 674–94; Andrew Bennett, Joseph Leggold, and Danny Unger, "Burden-Sharing in the Persian Gulf War," *International Organization* 48, no. 1 (1994): 39–75.

<sup>36</sup> Martinez Machain and Morgan, "The Effect of US Troop Deployment on Host States' Foreign Policy"; Jo Jakobsen and Tor G. Jakobsen, "Tripwires and Free-Riders: Do Forward-Deployed US Troops Reduce the

other authors treat U.S. troop deployments as proxies for *allies'* dependence on the United States, and expect a positive effect on allied burden-sharing.<sup>37</sup>

More broadly, focusing on a patron's signals of commitment ignores its *ex ante* bargaining leverage and threat of abandonment. Even if troops are present, allies may fear (and the patron may threaten) that they will be withdrawn. What matters is not only the presence of the patron's troops at time *t*, but rather how and whether allies expect the situation could change at time *t+n*. Indeed, evidence suggests that the United States reassures allies *because* of perceptions about U.S. unreliability.<sup>38</sup>

The solution to these methodological and theoretical challenges is to look first at more *ex ante*, exogenous conditions under which a patron's threat of abandonment is more credible. Indeed, reassurance and threats are not opposite ends of a spectrum, but rather can be used in tandem. Successful coercion requires the combination of threats and assurances; without reassurance, allies may lose faith in their patron's protection and conclude that even if they comply with its demands it will simply abandon them anyway.<sup>39</sup> Thus, the question is not "does being assured of protection lead allies to free-ride," but rather: under what conditions can a patron more credibly make its protection conditional on allied burden-sharing?

In the rest of this section I describe the conditions under which patrons have leverage to seek greater burden-sharing. This leverage can shape allied burden-sharing in a number of ways. First, patrons can actively exploit allies' fears of abandonment by threatening it directly, whether

---

Willingness of Host-Country Citizens to Fight for Their Country?," *Contemporary Security Policy* 40, no. 2 (2019): 135–64.

<sup>37</sup> Bennett, Leggold, and Unger, "Burden-Sharing in the Persian Gulf War."

<sup>38</sup> Brian Blankenship, "Promises under Pressure: Statements of Reassurance in U.S. Alliances," *International Studies Quarterly* 64, no. 4 (2020): 1017–30.

<sup>39</sup> Schelling, *Arms and Influence*; James W. Davis, *Threats and Promises : The Pursuit of International Influence* (Baltimore, MD: Johns Hopkins University Press, 2000).

publicly or privately. Second, they can do so indirectly, with the allies' fears of abandonment being latent and acting in the background as patrons encourage allied burden-sharing. Third, allies can burden-share proactively to preempt, hedge against, and ward off the threat of abandonment; one of the main strategies that states have to avoid abandonment is to make themselves more valuable.<sup>40</sup> All three causal pathways are possible, and I am ultimately agnostic as to which operates in any given case. For the purposes of my analysis, all three point to the same empirical predictions: allies burden-share more when the U.S. threat of abandonment is more *credible* – whether because they believe it can reasonably claim that its alliances no longer serve its interests or because a particular ally is of limited strategic value – and *salient* because they are vulnerable to attack.<sup>41</sup>

### **Fears of Abandonment and the Effectiveness of Burden-Sharing Pressure**

A patron's ability to pressure its allies to increase their burden-sharing efforts depends on the extent to which they fear that it might exit the alliance. As an alternative to its alliances, a patron has two options. First, it can unilaterally shed commitments or reduce the amount of protection it provides, whether by pursuing a more self-sufficient or even isolationist foreign policy or by pursuing rapprochement with its adversaries. These are not mutually exclusive, and indeed are reinforcing; *détente* with an adversary can facilitate efforts toward retrenchment by reducing the *raison d'être* of having alliances. Second, the patron can find other allies to rely upon.

---

<sup>40</sup> Snyder, *Alliance Politics*; J. Andrés Gannon and Daniel Kent, "Keeping Your Friends Close, but Acquaintances Closer: Why Weakly Allied States Make Committed Coalition Partners," *Journal of Conflict Resolution* 65, no. 5 (2021): 889–918.

<sup>41</sup> In this article I do not explicitly theorize variation across patrons since my empirical evidence from the United States. Cross-patron comparisons would need to take into account the unique characteristics of each patron, such as its geographic position in relation to allies and adversaries. John J. Mearsheimer, *The Tragedy of Great Power Politics* (New York: W.W. Norton, 2001); Paul van Hooff, "All-In or All-Out: Why Insularity Pushes and Pulls American Grand Strategy to Extremes," *Security Studies* 29, no. 4 (2020): 701–29.

The extent to which the patron is capable of pursuing either of these alternative options thus determines the credibility of its threat to abandon allies. In particular, these outside options become more credible when the the benefits an ally provides are less essential. Extending guarantees of protection allows the patron to deter expansion by adversaries and thus prevent them from projecting power beyond their borders and becoming more powerful and threatening in the future, all while allowing the patron itself to project power from allies' territory. The credibility of the patron's threat to abandon any particular ally depends on the extent to which it is strategically valuable for these purposes.

The salience of the patron's threat of abandonment also depends on each ally's threat environment. The greater the level of threat an ally faces, the more costly being abandoned by the patron would be. In the rest of this section I discuss in greater detail each of these factors – allies' strategic value and the threat environment – and derive testable hypotheses.

#### *Allies' Strategic Value and External Threat*

The patron can more easily abandon an ally when that partner is less strategically valuable.<sup>42</sup> The more strategically valuable an ally is, the more intrinsic interest the patron has in ensuring that it remains within its camp and out of those of adversaries, and thus the more likely it is to come to their defense.<sup>43</sup> In asymmetric alliances, where allies are by definition much weaker than their patron and give up some foreign policy autonomy in exchange for the patron's protection, the primary source of an ally's strategic value is its ability to offer the patron the ability to project power while denying adversaries the ability to do the same via its geostrategic position. The

---

<sup>42</sup> Alexander Cooley and Hendrik Spruyt, *Contracting States: Sovereign Transfers in International Relations* (Princeton, NJ: Princeton University Press, 2009); Chad Rector, *Federations: The Political Dynamics of Cooperation* (Ithaca, NY: Cornell University Press, 2009).

<sup>43</sup> Vesna Danilovic, *When the Stakes Are High: Deterrence and Conflict Among Major Powers* (Ann Arbor, MI: University of Michigan Press, 2002).

greater the patron's interest in projecting power in a given area – and the more interest it has in containing an adversary's own ability to project power – the more strategically valuable allies in that area become.<sup>44</sup> Allies' fears of abandonment are also likely to be more salient to the extent that they would be worse-off if left without the patron's protection. In particular, allies will have greater fear of abandonment and thus be vulnerable to patron pressure when they have a higher perception of external threat. The more vulnerable an ally is to attack from a shared rival, the costlier it would be to fight without the patron's assistance.

The patron's ability to exploit allies fears' of abandonment, then, depends on both whether allies see its threat of exit as credible and how dependent they are on its protection. However, these two forces often run at cross-purposes; many of the same factors that make allies vulnerable to abandonment also reduce the credibility of the patron's threats. External threat posed by shared rivals not only renders allies dependent on the patron's protection but also makes allies valuable for containing and deterring its expansion. The patron is by definition the most disproportionately powerful member of the alliance and its ability to pass the buck to its allies is limited.<sup>45</sup> As a result, allies can effectively exploit the patron's reluctance to abandon them. During the Cold War, as Michael Handel put it: “the readiness on the part of the super powers to pay almost any price to keep their primacy and alliance systems intact create[d] a situation in which weak states could enjoy defense and protection while at the same time reducing their own defense expenditures.”<sup>46</sup>

---

<sup>44</sup> David A. Lake, *Entangling Relations : American Foreign Policy in Its Century* (Princeton, NJ: Princeton University Press, 1999).

<sup>45</sup> Kenneth N. Waltz, *Theory of International Politics* (Boston: McGraw-Hill, 1979); Mearsheimer, *The Tragedy of Great Power Politics*.

<sup>46</sup> Michael I. Handel, *Weak States in the International System* (Totowa, NJ: Frank Cass, 1981), 149.

Moreover, allies in proximity to shared rivals are useful bulwarks for containing these' rivals' expansion.<sup>47</sup> During the Cold War, for example, U.S. policymakers viewed allies such as Japan and Taiwan as “unsinkable aircraft carriers” from which the United States could project power to contain the expansion of the Soviet Union and its partners. At the same time, though, proximity to shared rivals directly exposes allies to attack, as projecting power across long distances is more difficult owing to what Boulding calls the “loss-of-strength gradient,” the result of the costs and time required to transport troops, equipment, and supplies.<sup>48</sup>

The challenge to making empirical predictions, then, is that an alliance's shared threat environment and allies' strategic value to their patron are closely related. Distinguishing these two mechanisms and predicting their net effect on allied burden-sharing requires identifying factors that either activate one mechanism but not the other or activate one more strongly than the other. In doing so, it is useful to separate out the components of threat perception: adversary capabilities, adversary behavior, perceptions of adversary intentions, and geographic vulnerability.<sup>49</sup> An adversary's capabilities and behavior are likely to shape allies' and the patron's threat perceptions simultaneously since they do not vary across the two parties, producing a net effect that is theoretically indeterminate. Perceptions of intentions and geography, by contrast, vary across allies. One can expect the patron's burden-sharing pressure to be more successful among allies that share its perception of threat than among those that do not. Of course, in reality, whether a threat assessment is shared is a matter of degree; the greater the

---

<sup>47</sup> Stephen M. Walt, *The Origins of Alliances* (Ithaca, NY: Cornell University Press, 1987); Evan Braden Montgomery, *In the Hegemon's Shadow: Leading States and the Rise of Regional Powers* (Ithaca, NY: Cornell University Press, 2016); on the role of forward defense in U.S. alliances in particular, see Mira Rapp-Hooper, *Shields of the Republic: The Triumph and Peril of America's Alliances* (Cambridge, MA: Harvard University Press, 2020), 49–53.

<sup>48</sup> Kenneth Ewart Boulding, *Conflict And Defense: A General Theory* (New York: Harper & Row, 1962).

<sup>49</sup> Walt, *The Origins of Alliances*.

patron's perception of adversary hostility, the less successful its pressure will be, while the greater the ally's perception, the more successful.

Differences in patron and ally assessments of adversary intentions are difficult to measure and predict *a priori*, however, since “objective” indicators of intentions — namely behavior — are observable to both parties. Threat assessments are likely to depend on a variety of contingent, idiosyncratic factors including leaders' personal assessments and ideology.<sup>50</sup> For the purposes of this article, I am agnostic as to the factors that drive differences in perceptions of adversary intentions; I simply expect allies that share the patron's adversaries and perceive a higher level of threat from them to be more likely to burden-share, on average, than those that do not share the patron's adversaries and perceive a lower level of threat.

This, in turn, points to the importance of geography as a driver of variation in allied burden-sharing, as it is both easily measurable and varies across allies. Proximity to shared adversaries is a source of both vulnerability and strategic value. For the patron, allies in proximity to its rivals are useful bulwarks for containing their expansion, lest they become even more of a threat in the future, as these allies can both physically block adversaries' expansion while also offering the patron territory from which it can project power to that same end.<sup>51</sup> For allies, though, proximity to rivals directly exposes them to attack. The effect of an ally's proximity to shared adversaries, then, depends on whether it is so vulnerable to attack that its vulnerability outweighs the value that its proximity offers to the United States.

---

<sup>50</sup> Keren Yarhi-Milo, *Knowing the Adversary: Leaders, Intelligence, and Assessment of Intentions in International Relations* (Princeton, NJ: Princeton University Press, 2014).

<sup>51</sup> Walt, *The Origins of Alliances*; Montgomery, *In the Hegemon's Shadow*; on the role of forward defense in U.S. alliances in particular, see Rapp-Hooper, *Shields of the Republic*, 49–53.

## *Hypotheses*

The preceding discussion suggests several predictions. First, allies that do not share adversaries with the patron are less likely to burden-share. Second, among countries that do share the patron's adversaries, variation in burden-sharing is determined by their proximity to those adversaries. Parsing the effect of geography is difficult because each additional kilometer of proximity to shared adversaries increases allies' geostrategic value and geographic vulnerability simultaneously. However, the effect of proximity is not linear. In particular, allies that share a land border with adversaries are uniquely vulnerable, and are likely to be susceptible to their patron's burden-sharing pressure despite their strategic value. Those sharing a sea border with a shared adversary, by contrast, will not spend any more or less on defense than allies further away. Projecting power across bodies of water via amphibious or airborne assault is notoriously difficult, as doing so requires both constructing and packing forces into a smaller number of ships or planes that are vulnerable to being destroyed en route and investing in sufficient air and naval power to protect them. Land invasions, by contrast, involve forces that can more easily disperse and move on foot.<sup>52</sup> A land border with shared adversaries thus makes allies uniquely vulnerable; even if the likelihood of patron abandonment is low, the costs of being abandoned are extremely high. Indeed, a great deal of research shows that contiguity is one of the strongest determinants of rivalry and conflict.<sup>53</sup> Mearsheimer similarly argues that geographic proximity—especially by

---

<sup>52</sup> Stephen Biddle, *Military Power: Explaining Victory and Defeat in Modern Battle* (Princeton, NJ: Princeton University Press, 2001); Jack S. Levy and William R. Thompson, "Balancing on Land and at Sea: Do States Ally against the Leading Global Power?," *International Security* 35, no. 1 (2010): 7–43.

<sup>53</sup> Paul Senese, "Territory, Contiguity, and International Conflict: Assessing a New Joint Explanation," *American Journal of Political Science* 49, no. 4 (2005): 769–79; Harvey Starr, "Territory, Proximity, and Spatiality: The Geography of International Conflict," *International Studies Review* 7, no. 3 (2005): 387–406; William Reed and Daina Chiba, "Decomposing the Relationship Between Contiguity and Militarized Conflict," *American Journal of Political Science* 54, no. 1 (2010): 61–73.

land—makes it difficult for states to buckpass.<sup>54</sup> Figures 1 and 2 illustrate the logic behind these predictions.

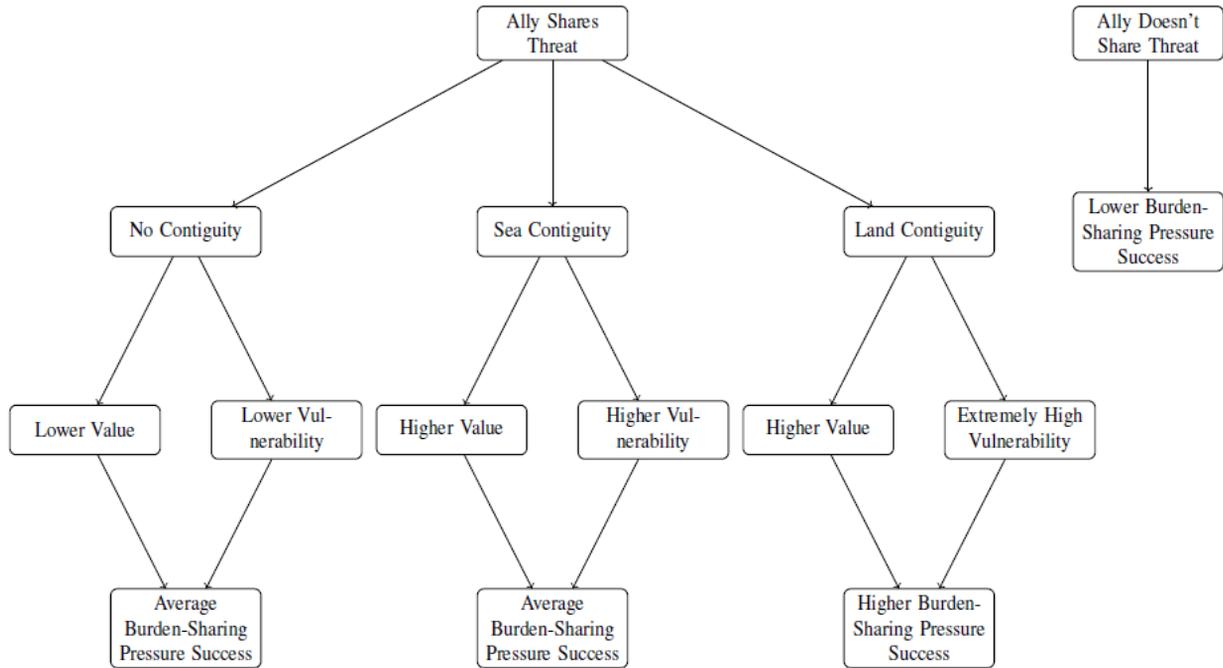


Figure 1: Causal mechanisms by which external threat shapes allied burden-sharing.

<sup>54</sup> Mearsheimer, *The Tragedy of Great Power Politics*.

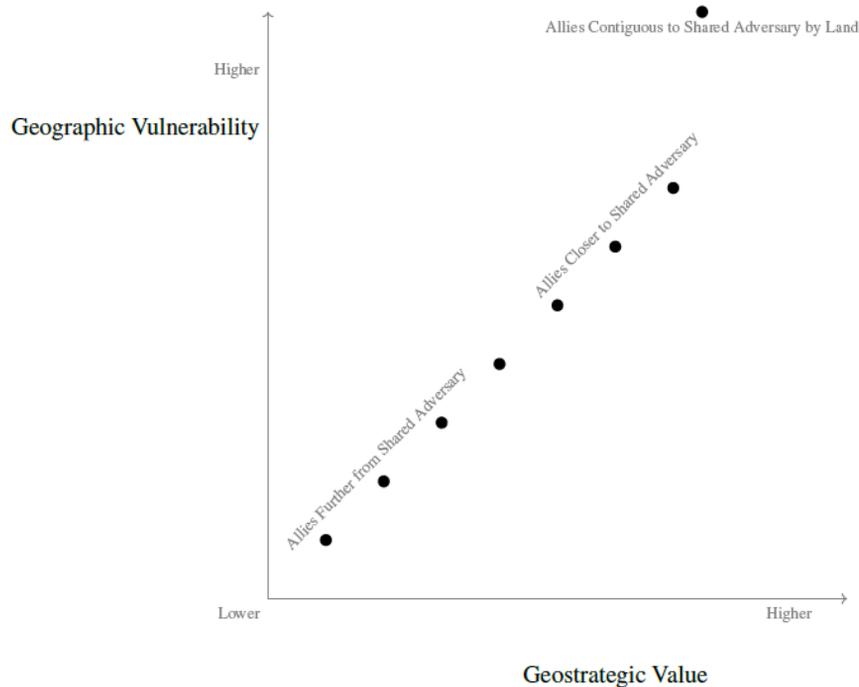


Figure 2: Relationship between proximity to shared adversaries, geographic vulnerability, and geostrategic value.

During the Cold War, vulnerable allies such as South Korea, Turkey, and West Germany tended to be quite susceptible to U.S. burden-sharing pressure. Turkey, for one, hosted a substantial number of U.S. forces, but was nevertheless among the largest contributors to NATO.<sup>55</sup> By contrast, states that are not immediately vulnerable to attack are less likely to burden-share. U.S. allies not directly proximate to the Communist bloc often found it easier to resist U.S. pressure. Portugal, for example, contributed little to NATO for much of the 1950s through the 1970s, and was more concerned with maintaining its overseas empire.<sup>56</sup>

**Hypothesis 1a:** *Allies are more likely to burden-share when they share their patron's adversaries.*

**Hypothesis 1b:** *Allies are more likely to burden-share when they border a shared adversary by land.*

<sup>55</sup> Nasuh Uslu, *The Turkish-American Relationship Between 1947 and 2003: The History of a Distinctive Alliance* (Hauppauge, NY: Nova Science Publishers, 2003), chap. 4.

<sup>56</sup> Alvaro Vasconcelos, "Portuguese Defence Policy: Internal Politics and Defense Commitments," in *NATO's Southern Allies: Internal and External Challenges*, ed. John Chipman (New York: Routledge, 1988).

Additionally, allies are less likely burden-share when they are near key maritime chokepoints around an adversary. These allies play a key role in cutting the adversary off from projecting power by creating opportunities to block and harass forces that might otherwise move from the adversary's territory to the high seas, but need not necessarily be near the adversary itself.<sup>57</sup> Japan, for example, sat astride three key naval chokepoints that surrounded the port of Vladivostok which hosted the Soviet Pacific Fleet during the Cold War – the Korea, Tsugaru, and Soya Straits. Similarly, Iceland sat in the middle of the “Greenland-Iceland-United Kingdom (GIUK) Gap,” which formed an important waterway for blocking Soviet movement between the Arctic and Atlantic Oceans.<sup>58</sup> All else being equal, allies positioned near chokepoints are more valuable without being more vulnerable, and thus are less susceptible to fear abandonment.

**Hypothesis 2:** *Allies are more likely to burden-share when they are positioned near maritime chokepoints surrounding their patron's adversaries.*

A final element of an ally's strategic value is how plentiful the patron's alternatives are. All else being equal, the patron can less afford to abandon an ally which stands alone than one that is surrounded by neighboring state with which the patron is also allied. I would thus expect that allies which have fewer U.S. allies nearby will spend less on defense.

**Hypothesis 3:** *Allies are more likely to burden-share when they have fewer neighbors that are also U.S. allies.*

---

<sup>57</sup> James R. Holmes, “Defend the First Island Chain,” *Proceedings* 140, no. 4 (2014): 32–37; Andrew Stravers, “Pork, Parties, and Priorities: Partisan Politics and Overseas Military Deployments,” *Conflict Management and Peace Science* 38, no. 2 (2021): 156–77.

<sup>58</sup> Michael Mazarr et al., *What Deters and Why: Exploring Requirements for Effective Deterrence of Interstate Aggression* (Santa Monica, CA: RAND Corporation, 2018), 146–47.

## Alternative Explanations

My theory's predictions can be contrasted with those of several alternative explanations. The first of these is the "economic theory of alliances" originally described by Olson and Zeckhauser, which would predict larger allies to contribute more of their GDP to defense.<sup>59</sup> The second is regime type. Democratic states are more accountable to their populations than are autocratic states, and some studies suggest that democracies spend less on defense.<sup>60</sup> Third, some existing scholarship suggests that a U.S. troop presence should be associated with lower allied defense spending.<sup>61</sup> My theory, however, suggests that U.S. troop levels are often endogenous to other factors – such as the shared threat environment or allies' strategic value – that themselves shape burden-sharing. Moreover, U.S. policymakers can leverage the threat of reducing troop levels to encourage burden-sharing.

Finally, traditional balance-of-power theory would expect allies' defense efforts to be an internal balancing response to their threat environments.<sup>62</sup> My hypotheses do not discount this, but rather suggest another mechanism by which external threat can shape allied burden-sharing: by causing them to fear abandonment and be vulnerable to patron coercion. Moreover, my theory makes a novel empirical prediction: that external threat affects burden-sharing only to the extent that it is not outweighed by the strategic value that allies provide – namely, when allies border a shared adversary by land. Indicators of shared threat that affect patrons' and allies' threat

---

<sup>59</sup> Olson and Zeckhauser, "An Economic Theory of Alliances."

<sup>60</sup> Michelle R. Garfinkel, "Domestic Politics and International Conflict," *American Economic Review* 84, no. 5 (1994): 1294–1309; Benjamin Fordham and Thomas Walker, "Kantian Liberalism, Regime Type, and Military Resource Allocation: Do Democracies Spend Less?," *International Studies Quarterly* 49, no. 1 (2005): 141–57; Jeff Carter and Glenn Palmer, "Keeping the Schools Open While the Troops Are Away: Regime Type, Interstate War, and Government Spending," *International Studies Quarterly* 59, no. 1 (2015): 145–57.

<sup>61</sup> Lake, *Hierarchy in International Relations*; Martinez Machain and Morgan, "The Effect of US Troop Deployment on Host States' Foreign Policy"; Posen, *Restraint*.

<sup>62</sup> Joseph M. Parent and Sebastian Rosato, "Balancing in Neorealism," *International Security* 40, no. 2 (2015): 51–86.

perceptions equally, by contrast – such as adversary capabilities and behavior, or proximity to shared adversaries short of land contiguity – may have no net effect on burden-sharing, since they both make allies more vulnerable to abandonment but also make allies more valuable to their patron, undercutting its threat of abandonment. Balance-of-power theory, conversely, would predict all indicators of threat to have a uniformly positive effect on allied military spending.

## Research Design

I test the hypotheses using a cross-national dataset of burden-sharing among American allies. The unit of analysis is the U.S. ally-year. My sample runs from 1950-2010 and includes all states defined as having defense pacts with the United States by the Correlates of War.<sup>63</sup> However, I do not include U.S. allies in the Americas – both Canada, to which the United States is allied through NATO, and the Latin American countries, many of which it is allied to through the Rio Treaty. I do so for four reasons: (1) the threat environment; (2) the nature of the Rio Treaty; (3) the nature of the U.S. relationship with the region; and (4) lack of variation on my independent variables.

First, during the study period, these countries were far from U.S. adversaries (shared or unshared), and were thus generally not subject to the threat of external, interstate attack from shared U.S. adversaries. Instead, internal threats loomed much larger, so conventional defense burden-sharing was less useful.<sup>64</sup> Second, the Rio Treaty was aimed not at providing regional defense against external threats, but rather conflict management among the members. U.S.

---

<sup>63</sup> Douglas M. Gibler, *International Military Alliances, 1648-2008* (Washington, DC: CQ Press, 2009).

<sup>64</sup> Michelle Getchell, “Cuba, the USSR, and the Non-Aligned Movement: Negotiating Non-Alignment,” in *Latin America and the Global Cold War*, ed. Thomas C. Field Jr., Stella Krepp, and Vanni Pettina (Chapel Hill, NC: University of North Carolina Press, 2020), 148–73; Hal Brands, *Latin America’s Cold War* (Harvard University Press, 2010), 42–43, 195–98.

policymakers downplayed the need for defense burden-sharing and the alliance had little military coordination or joint planning.<sup>65</sup> Bargaining over defense burden-sharing thus did not play a significant role, and my theory is of questionable applicability.<sup>66</sup> Third, U.S. policymakers viewed allies in the Americas as being within the United States' Monroe Doctrine sphere of influence, so the threat of abandonment did not feature prominently in these alliances.<sup>67</sup> Indeed, the leaders of many Latin American countries viewed the Rio Treaty as a way to constrain the United States itself and preclude it from intervening on its whim.<sup>68</sup> Finally, there is little-to-no variation for many of my independent variables – strategic value and contiguity to shared adversaries – among allies in the Americas, so including them mostly adds noise.

Ideally, I would include Soviet alliances in addition to American alliances, as the Soviet Union is the other post-1945 great power with a network of asymmetric alliances. Yet there are at least two differences between their blocs that render comparisons difficult. First, participation in the American alliance system was voluntary rather than coerced. Second, Soviet allies were comparatively more concerned with internal threats than external ones.<sup>69</sup> The threat of abandonment in the face of external threats thus did not loom as large.

---

<sup>65</sup> Tom Long, "Historical Antecedents and Post-World War II Regionalism in the Americas," *World Politics* 72, no. 2 (2020): 219–22, 239, 245–46.

<sup>66</sup> As Domínguez put it: "formal security burden sharing in the hemisphere is virtually nonexistent, because Latin American countries and the United States agree that there are no external threats that require it and no regional capability that could make a difference in the unlikely event of an attack." Jorge I. Domínguez, "The United States and Its Regional Security Interests: The Caribbean, Central, and South America," *Daedalus* 109, no. 4 (1980): 118–19.

<sup>67</sup> Tom Long, *Latin America Confronts the United States: Asymmetry and Influence* (New York: Cambridge University Press, 2015).

<sup>68</sup> Long, "Historical Antecedents and Post-World War II Regionalism in the Americas," 228–29, 231–33, 235–38.

<sup>69</sup> Hope M. Harrison, *Driving the Soviets up the Wall: Soviet-East German Relations, 1953-1961* (Princeton, NJ: Princeton University Press, 2005).

## Dependent Variable

My primary dependent variable is allies' military expenditures as a percentage of gross domestic product (GDP). Data on expenditures come from version 5.0 of the Correlates of War's National Material Capabilities (NMC) dataset.<sup>70</sup> Following the convention in the literature, I use allies' military expenditures as a percentage of GDP to measure burden-sharing, as this captures which countries devote more or less of their resources toward defense, while also normalizing military spending by accounting for market size.<sup>71</sup>

While military spending is a somewhat coarse measure of burden-sharing, given that it does not separate independent allied arming from explicit alliance contributions, it is appropriate for this article both because I am interested in allies' efforts to provide for their own defense and because it is the most widely available measure for cross-national analysis. Measuring threats of abandonment directly is difficult because these threats are rarely public and often indirect; allies are likely to be reluctant to conflict publicly, lest they give adversaries the impression that the alliance is disunited or foment domestic resentment to the alliance.<sup>72</sup> Public, overt threats are thus neither exhaustive nor random, as they are likely to occur in instances where allies did not already take the patron's threat of abandonment seriously or where more implicit and private pressure have already failed.<sup>73</sup> Nevertheless, if the hypotheses I presented in the previous section

---

<sup>70</sup> J. David Singer, "Reconstructing the Correlates of War Dataset on Material Capabilities of States, 1816-1985," *International Interactions* 14 (1987): 115-32.

<sup>71</sup> Olson and Zeckhauser, "An Economic Theory of Alliances"; Garfinkel, "Domestic Politics and International Conflict"; Carter and Palmer, "Keeping the Schools Open."

<sup>72</sup> Snyder, *Alliance Politics*; Timothy W. Crawford, "Preventing Enemy Coalitions: How Wedge Strategies Shape Power Politics," *International Security* 35, no. 4 (2011): 155-89; Matthew Baum, "Going Private: Public Opinion, Presidential Rhetoric, and the Domestic Politics of Audience Costs in U.S. Foreign Policy Crises," *The Journal of Conflict Resolution* 48, no. 5 (2004): 603-31; David Stasavage, "Open-Door or Closed-Door? Transparency in Domestic and International Bargaining," *International Organization* 58, no. 4 (October 2004): 667-703.

<sup>73</sup> The study of deterrence faces similar challenges in terms of selection effects and nonrandom samples, since direct efforts to deter a specific provocation in a particular crisis ("immediate deterrence") imply that a state's

are correct, one would still expect to see systematic differences in allied military spending based on how they score on my independent variables, whether as the result of direct or indirect patron pressure or because allies proactively spend more on defense due to fear of abandonment.

### **Independent Variables**

My first set of independent variables captures the presence and proximity of shared adversaries using two dummy variables, one which takes a value of 1 if an ally shares a land border with a shared adversary country and 0 otherwise, and another that takes a value of 1 if an ally shares an adversary with the United States but does not border it by land and 0 otherwise. I would expect both to have a positive effect on allies' military spending, and that the effect of the former will be larger, as allies bordering shared adversaries by land are more vulnerable to attack and thus are especially susceptible to U.S. burden-sharing pressure. In some models I include separate dummy variables for whether an ally was separated from a shared adversary by 400 miles or less of water and for whether an ally shared an adversary with the United States but was not near it.<sup>74</sup> My expectation is that both will have a roughly equivalent effect on allied burden-sharing.

I define shared adversaries in several ways, the first of which is any country that the United States and a given ally share as foreign policy rivals, as defined by Thompson and Dreyer.<sup>75</sup> This serves as a useful baseline, but excludes a large number of countries that could be considered shared adversaries – the United States' only rivals during the period are Russia (1950-

---

previous efforts to deter challenges from arising in the first place (“general deterrence”) have failed. See Patrick M. Morgan, *Deterrence: A Conceptual Analysis*, 1977; James D. Fearon, “Signaling Versus the Balance of Power and Interests: An Empirical Test of a Crisis Bargaining Model,” *Journal of Conflict Resolution* 38, no. 2 (1994): 236–69.

<sup>74</sup> Douglas M. Stinnett et al., “The Correlates of War Project Direct Contiguity Data, Version 3,” *Conflict Management and Peace Science* 19, no. 2 (2002): 58–66.

<sup>75</sup> William R. Thompson and David R. Dreyer, *The Handbook of International Rivalries: 1494-2010* (Washington, DC: CQ Press, 2012).

1989, 2007-2010), China (1950-1972, 1996-2010), and Cuba (1959-2010), for example, while most U.S. allies have few if any rivals.<sup>76</sup> Thus, I also code as a shared adversary any member of the Soviet bloc during the Cold War.<sup>77</sup> The United States established its alliances with containing the Soviet Union in mind, while most allies joined them out of fear of Moscow. After the Cold War, when due to the lack of an overarching threat allied threat perceptions were much more variable, I include as a U.S. adversary, following Lai, the three “rogue states” identified as being members of the “axis of evil”: Iraq, Iran, and North Korea.<sup>78</sup>

<b>U.S.-only adversaries</b>	<b>Shared adversaries</b>
Iran, 1990-2010	Communist bloc (all U.S. allies), 1950-1989
Iraq, 1990-2003	North Korea (South Korea), 1990-2010
Russia, 2007-2010	China (Japan), 1996-2010

Table 1: Countries coded for shared and U.S.-only adversaries, 1950-2010.

Third, I create a dummy variable which takes a value of 1 if an ally is positioned within 400 miles of a key maritime chokepoint near a major U.S. adversary such that ships traveling

---

<sup>76</sup> Other measures perform even more poorly. Leeds and Savun’s reliance on Signorino and Ritter’s S-score for alliance portfolio similarity, for example, implies that South Korea was one of the least threatened U.S. allies, and does not even pick up its rivalry with North Korea. Moreover, relying on United Nations voting similarity does not allow for including West Germany and South Korea – two of the most important of the United States’ “frontline” allies that shared a land border with U.S. adversaries – since they were not admitted to the United Nations until much later in the sample; see Brett Ashley Leeds and Burcu Savun, “Terminating Alliances: Why Do States Abrogate Agreements?,” *Journal of Politics* 69, no. 4 (2007): 1118–32; Curtis Signorino and Jeffrey Ritter, “Tau-b or Not Tau-b: Measuring the Similarity of Foreign Policy Positions,” *International Studies Quarterly* 43, no. 1 (1999): 115–44.

<sup>77</sup> The members of the Soviet bloc include all members of the Warsaw Pact, as well as China, North Korea, North Vietnam, and (starting in 1976) Laos and Cambodia; Sam R. Bell, K. Chad Clay, and Carla Martinez Machain, “The Effect of US Troop Deployments on Human Rights,” *Journal of Conflict Resolution* 61, no. 10 (2017): 2020–42.

<sup>78</sup> Brian Lai, “Examining the Goals of US Foreign Assistance in the Post-Cold War Period, 1991-96,” *Journal of Peace Research* 40, no. 1 (2003): 103–28; Ultimately, the following countries are coded as sharing a land border with a shared adversary: Greece (1950-1989); Norway (1950-1989); Pakistan (1950-1989); South Korea (1950-2010); Turkey (1950-1989); West Germany (1950-1989).

through the chokepoint would need to pass by them to reach open waters.<sup>79</sup> In practice, I focus on chokepoints encircling the Soviet Navy during the Cold War and the Russian and Chinese navies after the Cold War, as during the period under study they were unique among U.S. rivals in their ability to project power by sea.<sup>80</sup> Having allies situated near these chokepoints facilitated U.S. efforts to create a bottleneck through which Soviet, Russian, and Chinese ships would need to travel, rendering its threat to abandon them less credible. Figure 3 shows the chokepoints and countries coded as being contiguous to them; for more details on the coding rules see Section A3 in the online appendix.

This way of measuring strategic value is not to deny the value offered by allies near other chokepoints – such as the Strait of Gibraltar linking the Atlantic Ocean and Mediterranean Sea or the English Channel linking the Atlantic Ocean and North Sea – or by those that lie en route from U.S. territory to those of American adversaries that act as “stepping stones.”<sup>81</sup> However, what makes “frontline” chokepoints so valuable is that they can prevent an adversary from being able to project power to more distant chokepoints to begin with.<sup>82</sup> Moreover, if one defines geostrategic value widely, then almost all U.S. allies – save those that are landlocked like Luxembourg or remote like Australia and New Zealand – would be classified as equally valuable, thus diminishing the concept’s ability to explain variation in allied burden-sharing.

---

<sup>79</sup> The 400mi threshold is intended to mirror the Correlates of War’s definition of contiguity. I use a dummy variable rather than distance because the difference between allies that are moderately close and those further away are less meaningful than the difference between allies that are moderately close and those that border it.

<sup>80</sup> In the post-Cold War period, China had the third largest navy at 4.4% of global naval tonnage. (Russia had the second at 15.9%, with the United States at 44.0%). In the Cold War period, by contrast, China had the ninth largest navy, at 0.7%. The United States had 57.1%, while Soviet Union had 19.8%. See Brian Benjamin Crisher and Mark Souva, “Power at Sea: A Naval Power Dataset, 1865–2011,” *International Interactions* 40, no. 4 (2014): 602–29.

<sup>81</sup> Christopher T. Sandars, *America’s Overseas Garrisons: The Leasehold Empire* (New York: Oxford University Press, 2000), chap. 3.

<sup>82</sup> Holmes, “Defend the First Island Chain.”

Finally, I measure the number of other nearby allies using the number of allies that are contiguous to each ally, whether by land or by 400 miles of water or less.

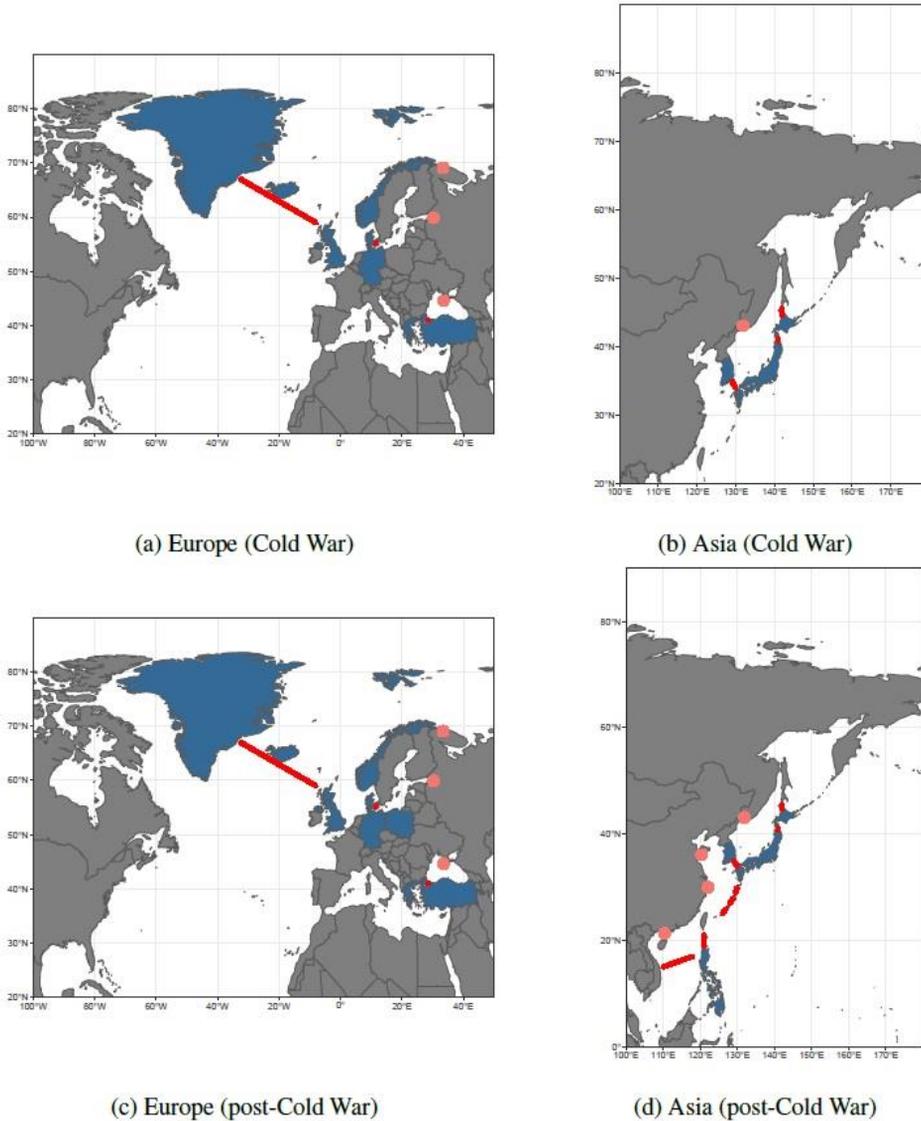


Figure 3: Maps showing strategic chokepoints in Europe and East Asia during and after the Cold War. The red lines represent chokepoints, the red dots represent the Soviet Union's, Russia's, or China's main naval ports, and the countries shaded in blue represent those coded as being contiguous to these chokepoints.

## Control Variables

### *Economic and Political Characteristics*

I first control for allies' annual GDP growth, measured as a percentage of the previous year's GDP, as one can expect that growing economies will collect more revenue which they can spend on defense, while economies strained by recession will suffer declines in government revenue. Second, I control for allies' economic size, using their GDP in constant 2005 U.S. dollars, which existing literature expects to have a positive effect on allies' defense burdens.<sup>83</sup> Data come from Gleditsch's Expanded GDP and Trade Dataset.<sup>84</sup> Third, I control for allies' regime type using the binary democracy indicator created by Cheibub, Gandhi, and Vreeland.<sup>85</sup>

### *Security Environment*

I also control for other factors that might shape allies' security environments beyond the presence and proximity of shared adversaries. First, I account for each ally's unique conflict environment by controlling for the number of militarized interstate disputes (MIDs) it was involved in, weighted by the MIDs' hostility level, as well as the number of foreign policy rivals it had that were not shared with the United States. MID data come from version 4.1 of the Correlates of War's Militarized Interstate Dispute dataset.<sup>86</sup> Rivalry data are from Thompson and Dreyer.<sup>87</sup>

---

<sup>83</sup> Olson and Zeckhauser, "An Economic Theory of Alliances."

<sup>84</sup> Kristian S. Gleditsch, "Expanded Trade and GDP Data," *Journal of Conflict Resolution* 46, no. 5 (2002): 712–24.

<sup>85</sup> José A. Cheibub, Jennifer Gandhi, and James R. Vreeland, "Democracy and Dictatorship Revisited," *Public Choice* 143 (2010): 67–101.

<sup>86</sup> Glenn Palmer et al., "The MID4 Data Set, 2002-2010: Procedures, Coding Rules and Description," *Conflict Management and Peace Science* 32, no. 2 (2015): 222–42.

<sup>87</sup> Thompson and Dreyer, *The Handbook of International Rivalries*.

Second, I include a dummy variable for whether an ally had a colonial empire. The literature on burden-sharing notes that states which pursue “private goods” – those unrelated to the purpose of the alliance – are likely to spend more on defense. Allies’ efforts to maintain control over colonial possessions were one such good, as doing so was extraneous to defending against the threats allies shared in common with the United States.<sup>88</sup> Data on colonial possessions come from version 1.0 of the Issue Correlates of War’s Colonial History Data Set.<sup>89</sup>

Third, I control for the number of U.S. troops present on each ally’s territory.<sup>90</sup> Finally, in some models I include allies’ minimum distance from the United States.<sup>91</sup> Allies further from the United States may be more doubtful of its ability to project power quickly on their behalf, while allies closer to the United States might expect to be regarded as more strategically valuable.<sup>92</sup> I do not include it in all models, as the geographic nature of U.S. alliances is such that allies which tend to be closer to U.S. adversaries are also those further from the United States, making it correlated by construction with my independent variables.

## **Model Specification**

The models I use are estimated using ordinary least squares regression, and I cluster standard errors by country throughout. Additionally, I include region and in some cases year fixed effects to account for unobserved regional and temporal variation. The nature of the threat environment,

---

<sup>88</sup> ONeal and Elrod, “NATO Burden Sharing and the Forces of Change”; ONeal, “The Theory of Collective Action and Burden Sharing in NATO.”

<sup>89</sup> Paul Hensel, “ICOW Colonial History Data Set” (2014), <http://www.paulhensel.org/icowcol.html>.

<sup>90</sup> Tim Kane, “Global U.S. Troop Deployment, 1950-2005” (The Heritage Foundation, 2006), <https://www.heritage.org/defense/report/global-us-troop-deployment-1950-2005>.

<sup>91</sup> Minimum distance data are from Kristian S. Gleditsch and Michael D. Ward, “Measuring Space: A Minimum-Distance Database and Applications to International Studies,” *Journal of Peace Research* 38, no. 6 (2001): 739–58.

<sup>92</sup> Daehee Bak, “Alliance Proximity and Effectiveness of Extended Deterrence,” *International Interactions* 44, no. 1 (2018): 107–31.

for example, is likely to vary both across regions and over time. U.S. allies in East Asia and the Middle East have historically faced a more diverse array of threats, which for the former have included the Soviet Union, China, and North Korea and for the latter have included the Soviet Union, Iran, and Iraq, while the threat to U.S. allies in Europe has primarily stemmed from the Soviet Union and now Russia. Similarly, U.S. allies in East Asia are more geographically dispersed than those in other regions and are tied to Washington through bilateral alliance treaties, while those in Europe are more tightly packed and are all linked via the multilateral North Atlantic Treaty.<sup>93</sup>

## Results

The results presented in Table 2 provide strong support for my hypotheses: geographically vulnerable allies spend considerably more on their defense, while geostrategically valuable allies spend less. Model 1 includes the full slate of covariates, while Model 2 breaks apart the indicator for the presence of a shared adversary not contiguous by land into two separate dummy variables – one capturing contiguity to shared adversaries by sea, the other capturing no contiguity at all. The coefficients on both variables (0.320 and 0.367) are nearly identical, though only the latter reaches statistical at conventional levels ( $p < 0.1$ ).

Overall, the results strongly support H1b (land contiguity with shared adversaries), H2 (contiguity to maritime chokepoints), and H3 (alternative U.S. allies). The results consistently show that allies which are contiguous to adversary countries by land spend more of their GDP on defense than those that share an adversary but are not contiguous to it by land, or which do not share the patron's adversaries at all. Additionally, allies near a strategically valuable maritime

---

<sup>93</sup> A summary of the independent and dependent variables can be found in Table A1. Summary statistics can be found in Table A2. See Section A2 for the regional classifications.

chokepoint and those with fewer other U.S. allies around them spend less. H1a (shared adversary without land contiguity) receives weaker support, having a positive effect that is significant at the 0.1 level only in some models.

Model 3, in turn, limits the sample to allies that share the patron's adversaries. This model includes two additional controls: the capabilities and hostile behavior of shared adversaries. Including these in the other models would be inappropriate because they are correlated by construction with the other indicators for the presence and proximity of shared adversaries; if there is not a shared adversary, then all of these variables equal 0. Specifically, I include the previous three-year average for the number of MIDs shared adversaries were involved in where they were on the initiator side, weighted by MID hostility level. To account for shared adversaries' capabilities, I control for the combined Composite Indicator of National Capability (CINC) scores of all shared adversaries in a given year. Data come from version 5.0 of the Correlates of War's National Material Capabilities dataset.<sup>94</sup> I expect each of these to have a theoretically indeterminate effect on allied burden-sharing, as they are likely to simultaneously affect U.S. threat perceptions and allies' own threat perceptions. The results are consistent with this indeterminate prediction; adversary capabilities have moderate, positive effects on allied military spending, while adversary hostile behavior has a negative effect.

Model 4 replicates Model 3 but limits the sample to allies that do not border shared adversaries by land, and instead includes the minimum distance between each ally and the nearest shared adversary. This allows me to establish separation with the "pure threat" alternative explanation by capturing the effect of proximity to shared adversaries *outside of* land contiguity.

---

<sup>94</sup> Singer, "Reconstructing the Correlates of War Dataset on Material Capabilities."

The results indicate proximity to shared adversaries without land contiguity has no statistically significant effect on allies' defense spending.

Model 5 includes year fixed effects. Doing so weakens the effects of shared adversary proximity, but this is to be expected; for many years, one or more of the three categories of allies (contiguous to shared adversary by land / shared adversary but not contiguous by land / no shared adversary) is an empty set. During 1950-1989, for example, all allies are coded as sharing a U.S. adversary. Model 6, in turn, includes two additional control variables – allies' GDP per capita and their distance from the United States – which does not substantively change the results.

Turning to the substantive effects of the independent variables, Table 3 shows the predicted values of military spending at various levels of the independent variables. Allies bordering mutual adversaries by land that are not close to a strategic chokepoint are predicted to spend 2.95% of their GDP on defense, on the highest end of the spectrum, compared to 1.25% for allies that are contiguous to a strategic chokepoint and do not share an adversary with the United States, on the other end of the spectrum.

	(1)	(2)	(3)	(4)	(5)	(6)
	Shared Adversaries Only			Year FE	More Controls	
Shared adversary, contiguous by land	1.034**	1.023***	1.107**		0.696+	0.980***
	(0.300)	(0.269)	(0.370)		(0.381)	(0.266)
Shared adversary, not contiguous by land	0.235+				-0.155	0.384+
	(0.136)				(0.408)	(0.190)
Near maritime chokepoint	-0.657*	-0.648*	-0.800**	-0.544+	-0.667*	-0.431*
	(0.257)	(0.265)	(0.281)	(0.286)	(0.263)	(0.198)
Bordering US allies	1.595**	1.614**	1.746**	2.482**	1.612**	1.506**
	(0.539)	(0.463)	(0.459)	(0.764)	(0.558)	(0.468)
GDP (millions USD)	0.000	0.000	0.000	0.000	0.000	0.000
	(0.000)	(0.000)	(0.000)	(0.000)	(0.000)	(0.000)
Troops	0.000	0.000	0.000	-0.000	0.000	0.000
	(0.000)	(0.000)	(0.000)	(0.000)	(0.000)	(0.000)
MIDs	0.036	0.036+	0.051	0.093**	0.063*	0.047*
	(0.022)	(0.021)	(0.035)	(0.026)	(0.024)	(0.019)
GDP growth	-0.014*	-0.014*	-0.010	-0.007	-0.006	-0.008
	(0.006)	(0.006)	(0.007)	(0.014)	(0.007)	(0.006)
Democracy	-0.250	-0.268	-0.200	-0.652	-0.195	-0.447
	(0.442)	(0.390)	(0.428)	(0.816)	(0.488)	(0.437)
Colonial power	1.376***	1.345***	1.356**	1.073*	1.427***	1.522***
	(0.343)	(0.339)	(0.366)	(0.401)	(0.329)	(0.325)
Non-shared rivalries	0.761***	0.762***	0.577**	0.403	0.682***	0.623***
	(0.147)	(0.146)	(0.186)	(0.348)	(0.148)	(0.104)
Shared adversary, contiguous by sea		0.197	-0.031			
		(0.291)	(0.406)			
Shared adversary, not contiguous		0.261				
		(0.192)				
Shared adversary initiated MIDs			-0.011	-0.002		
			(0.007)	(0.008)		
Shared adversary CINC			0.000*	0.001+		
			(0.000)	(0.000)		
Distance to shared adversary (thousands km)				0.126		
				(0.118)		
Distance to US (thousands km)						0.219*
						(0.092)
GDPpc (thousands USD)						0.012
						(0.013)
Constant	1.087**	1.089**	0.361	-0.753	1.265*	-0.166
	(0.362)	(0.357)	(0.727)	(1.246)	(0.510)	(0.608)
Region FE	✓	✓	✓	✓	✓	✓
Year FE					✓	
N	1227	1227	793	552	1227	1227
R <sup>2</sup>	0.484	0.485	0.495	0.573	0.562	0.515

Standard errors clustered by country in parentheses.

+ p < 0.10, \* p < 0.05, \*\* p < 0.01, \*\*\* p < 0.001

Table 2: Main results. Dependent variable is each ally's military spending (% of GDP).

	Predicted Military Spending
Land contiguity w/ shared adversary, contiguity to chokepoint	2.29% [1.99-2.59]
Land contiguity w/ shared adversary, no contiguity to chokepoint	2.95% [2.39-3.50]
No land contiguity w/ shared adversary, contiguity w/ chokepoint	1.49% [0.95-2.03]
No land contiguity w/ shared adversary, no contiguity w/ chokepoint	2.15% [1.77-2.52]
No shared adversary, contiguity to chokepoint	1.25% [0.75-1.76]
No shared adversary, no contiguity to chokepoint	1.91% [1.59-2.23]

Table 3: Predicted military expenditures (% of GDP) at various levels of the key independent variables for H1-H2, with 95% confidence intervals. Calculations based on Model 1 in Table 2.

My hypotheses' predictions fare better than those of alternative explanations. First, whereas a pure internal balancing explanation would have predicted all indicators of shared threat to be positively associated with allied military spending, my theory suggests that shared external threat has cross-cutting effects; while higher allied perception of threat increases the chances of successful burden-sharing pressure by making allies more vulnerable to threats of abandonment, higher patron perception of threat has the opposite effect by making allies more valuable and thus undercutting the credibility of the patron's abandonment threats. Shared threat is only likely to produce greater burden-sharing to the extent that the former effect outweighs the latter. Thus, I predicted that land contiguity should have a positive effect on allied military spending, but that the effects of other indicators of shared threat are theoretically indeterminate and likely null. (See Table 4.) The evidence provides some support for the internal balancing proposition, but on balance more strongly supports my expectations. Consistent with both explanations, land contiguity with shared adversaries predicts higher allied military spending. However, while shared adversary capabilities are positively associated with allied military spending, which is

consistent with internal balancing, the rest of the indicators of shared threat have no clear effect, which is more consistent with my theory. The effect of shared adversary hostile behavior is negative and does not reach statistical significance at conventional levels, while allies contiguous to shared adversaries by sea spend no more than allies that are not contiguous to a shared adversary. Allied proximity to shared adversaries in general has no significant effect; only contiguity to land does (per Hypothesis 1b). This is consistent with my expectation that allies' proximity to shared adversaries can actually undercut the United States' ability to pressure them to spend more on defense by making them more strategically valuable to it, but is not consistent with a purely threat-based, internal balancing explanation. Moreover, it is consistent with arguments about the "stopping power of water"; separation from shared adversaries by water insulates allies from attack and thus from the patron's threats of abandonment.<sup>95</sup>

Additionally, there is no evidence that democracies spend substantially less on defense than non-democracies, while GDP does not have the positive effect on defense burdens that Olson and Zeckhauser's economic theory of asymmetric alliances would predict. Finally, there is no evidence that the size of U.S. troop presence reduces allied military spending. Taken together, these results suggest that the *ex ante* possibility of U.S. abandonment is a better predictor of allied burden-sharing than alternative explanations.

---

<sup>95</sup> Mearsheimer, *The Tragedy of Great Power Politics*.

Variable	Predicted effect on burden-sharing					Results
	My theory	Internal balancing	Economic theory of alliances	Regime type	Free-riding	
Shared adversary	Positive	Positive				Positive
Land contiguity with shared adversary	Positive	Positive				Positive
Sea contiguity with shared adversary (Model 3 in Table 2)	Indeterminate, likely null	Positive				Null
Distance to nearest shared adversary (Model 4 in Table 2)	Indeterminate, likely null	Negative				Null
Shared adversary capabilities (Models 3-4 in Table 2)	Indeterminate, likely null	Positive				Positive
Shared adversary hostile behavior (Models 3-4 in Table 2)	Indeterminate, likely null	Positive				Null
Contiguity with strategically valuable maritime chokepoint	Negative					Negative
Number of nearby U.S. allies	Positive					Positive
Ally GDP			Positive			Null
Democratic ally				Negative		Null
U.S. troop levels					Negative	Null

Table 4: Comparison of my theory’s predictions to those of alternative explanations.

## Robustness Checks

Next, in Table A4 I test the robustness of the findings by using broader and narrower codings of my main independent variables – proximity to maritime chokepoints and shared U.S. adversaries.

First, I use alternative proxies for allies’ vulnerability to threat and their geostrategic value that include fewer allies in the coding. For chokepoints, in some models I exclude those near China and Russia in the post-Cold War years, as neither had the power projection capabilities of a peer competitor like the Soviet Union, and China’s capability for power projection by sea significantly grew only in the later years of the sample. In another model I expand the coding to include as a key maritime chokepoint the Strait of Hormuz, as Iran may have had the ability to at least disrupt

access through the Strait – though its ability to substantially project conventional power outside of the region was quite limited.<sup>96</sup> For shared adversaries, in some models I shrink the coding to include as shared adversaries in the Cold War only those countries that had a defense pact with the Soviet Union; this excludes countries like China after the 1970s, as well as Albania after the late 1960s. In other models, I expand the coding to include during the post-Cold War period Libya, Serbia, and Syria, as the United States periodically considered them “rogue states.”<sup>97</sup> The results are consistent with the original findings; allies contiguous by land to shared adversaries spend more on defense, while those contiguous to maritime chokepoints spend less.

### **Exploring Causal Mechanisms: Fear of Abandonment vs. Internal Balancing**

One challenge in evaluating my theory is that the predictions of Hypotheses 1a and 1b (the presence of and land contiguity with shared adversaries) are identical to those one might make purely on the basis of allies’ perceptions of external threat. To distinguish my findings from this alternative explanation, my approach is twofold. First, I use an alternative dependent variable: allies’ host-nation support (HNS) for U.S. military presence in their countries. Because HNS is compensation to the United States, it is both likely to be the result of American pressure and unlikely to be an internal balancing response. I use U.S. Department of Defense data on allies’ HNS between 1995 and 2002.<sup>98</sup> The findings (shown in Tables A5-A6 in the online appendix) suggest that countries that share a U.S. adversary and border it by land provide more HNS.

---

<sup>96</sup> Caitlin Talmadge, “Closing Time: Assessing the Iranian Threat to the Strait of Hormuz,” *International Security* 33, no. 1 (2008): 82–117. Moreover, the only formal U.S. ally close to the Strait of Hormuz -- Pakistan -- was not a major host of U.S. forces suitable for power projection into the Persian Gulf. Instead, to project power into the Persian Gulf the United States relied on non-treaty allies, particularly Bahrain, which hosts the U.S. Seventh Fleet.

<sup>97</sup> Lai, “Examining the Goals of US Foreign Assistance.”

<sup>98</sup> Department of Defense, Allied Contributions to the Common Defense, <http://archive.defense.gov/pubs/allied.aspx> (accessed April 2, 2020).

Second, I present qualitative evidence from West Germany and Japan during the 1960s and early 1970s. I selected these cases to concentrate on variation in the threat environment by holding other factors as constant as possible; both countries were large, democratic, close to strategic chokepoints, hosted the most U.S. troops of any allies, and had post-World War II legacies that contributed to U.S. fears about a return to militarism. However, West Germany bordered the Communist bloc by land, while Japan was separated by water. I chose the time period because it was a period of intense burden-sharing interest; the economies of U.S. allies had recovered, meanwhile U.S. dominance was eroding, its resources constrained by the Vietnam War, and U.S. officials faced Congressional pressure for greater burden-sharing.<sup>99</sup> In these cases, I look for evidence that West Germany feared abandonment more than Japan, that this fear motivated its defense efforts, and that it responded more to U.S. burden-sharing pressure.

### *West Germany*

Like their predecessors, President John F. Kennedy and his successor Lyndon Johnson favored a strong West German contribution to NATO, and throughout the 1960s the Federal Republic of Germany (FRG) spent upwards of 1% more of GDP on defense than the rest of European NATO, on average. Kennedy and Johnson put particular emphasis on the FRG's purchase of U.S. arms and military equipment, which was dual-purpose: (1) bolstering West German military capability while also making it more dependent on U.S. arms; and (2) reducing the U.S. balance of payments deficit, which produced a large supply of foreign-held U.S. dollars and put pressure on American gold stocks due to the dollar's convertibility to gold at

---

<sup>99</sup> Phil Williams, *The Senate and U.S. Troops in Europe* (London: Macmillan, 1985).

\$35/ounce.<sup>100</sup> U.S. and West German policymakers negotiated a series of biannual “offset” agreements wherein the FRG would purchase around \$1 billion in U.S. military equipment.

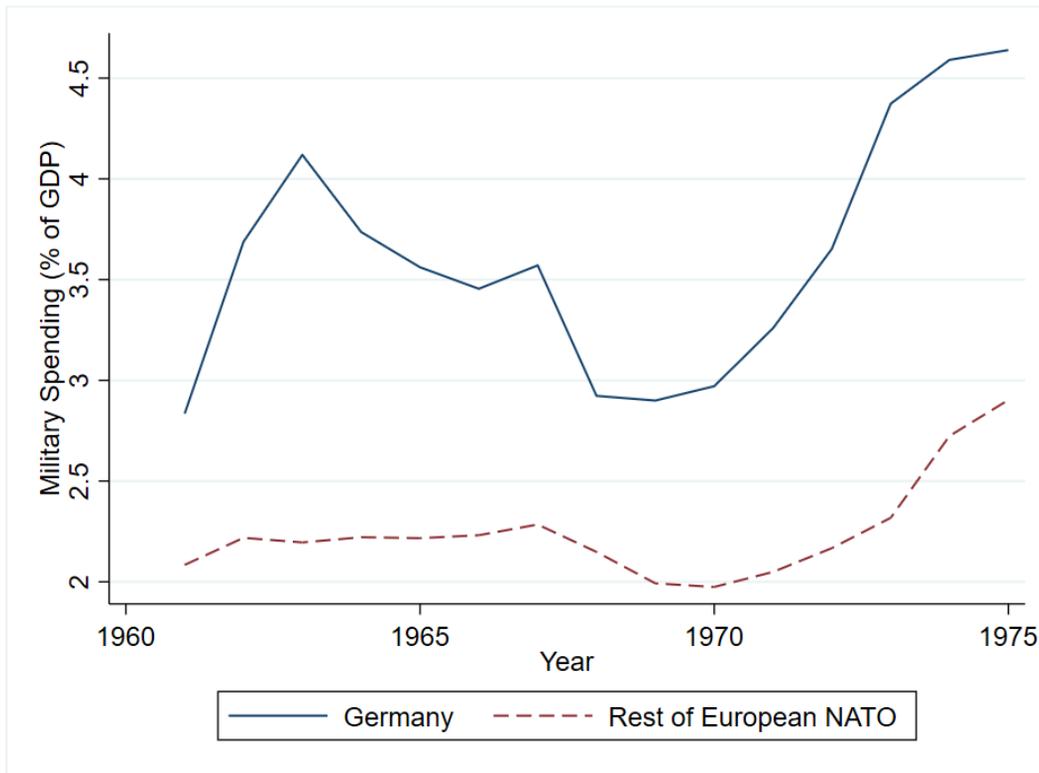


Figure 2: West German military spending, 1961-1975.

Kennedy and Johnson frequently threatened to withdraw U.S. forces from West Germany to pressure it into greater cost-sharing. West German officials repeatedly indicated that they faced budgetary pressure that would constrain the FRG’s military budget and its offset purchases. However, U.S. officials made it clear to them that the continued presence of U.S. forces would be contingent on the size of the FRG defense budget and its offset purchases.<sup>101</sup> In late 1962, for

<sup>100</sup> Hubert Zimmermann, *Money and Security: Troops, Monetary Policy and West Germany’s Relations with the United States and Britain, 1950-1971* (Cambridge: Cambridge University Press, 2002), 134–36, 147–51; Gavin, *Gold, Dollars, and Power*.

<sup>101</sup> Gavin, *Gold, Dollars, and Power*, 63–67.

example, Kennedy warned Chancellor Konrad Adenauer of “disastrous consequences” if the FRG did not upwardly revise its budget and follow through on its purchases.<sup>102</sup> Likewise, the following year Kennedy and his advisers pursued a sustained pressure campaign that included threats of withdrawal in response to lower-than-expected FRG defense spending plans.<sup>103</sup> Johnson continued wielding the threat of withdrawal when he took office following Kennedy’s assassination, culminating in 1966 when his insistence on a larger FRG defense budget with the agreed-upon offset purchases, combined with recession and budget deficits in the FRG, contributed to the collapse of West German Chancellor Ludwig Erhard’s government and his removal as Chancellor.<sup>104</sup>

Johnson’s successor Richard Nixon was if anything even more committed to seeking greater West German burden-sharing contributions. During Nixon’s presidency, FRG military spending rose sharply, from 3% of GDP in 1970 to 4.6% of GDP in 1975. Like his predecessors, Nixon leaned on the threat of troop withdrawals. He instructed NATO officials in 1970 that U.S. contributions to NATO would be partly dependent on their own contributions, and he and others made similar warnings to FRG Chancellor Willy Brandt directly. The following year, all NATO capitals were informed that their burden-sharing contributions would influence U.S. force levels in Europe. This pressure yielded commitments from the FRG and other NATO members to increase their defense spending and improve their forces.<sup>105</sup>

---

<sup>102</sup> Zimmermann, *Money and Security*, 148–50.

<sup>103</sup> Zimmermann, 152–60; Gavin, *Gold, Dollars, and Power*, 94–95, 103, 107–12; *FRUS*, 1961-1963, Vol. 13, pp. 486, 489.

<sup>104</sup> Zimmermann, *Money and Security*, 161–72, 190–207, 215–16; Gavin, *Gold, Dollars, and Power*, 135–41.

<sup>105</sup> *FRUS*, 1969-1976, Vol. 40 (United States Government Printing Office: Washington, DC, 2008), p. 110; *FRUS*, 1969-1976, Vol. 41 (United States Government Printing Office: Washington, DC, 2012) pp. pp. 192-193, 287, 306, 329-330, 335; Rogers to U.S. Embassy in Bonn, “Offset,” May 1971, Folder “4. Germany, Chancellor Brandt (1971),” NSC Files, Presidential Correspondence, 1969-1974, Box 753, Richard Nixon Library (RMNL); Nixon to Brandt, January 18, 1974, Folder “1. Germany, Willy Brandt 1972,” NSC Files, Presidential Correspondence, 1969-1974, Box 754, RMNL.

The evidence suggests that FRG policymakers took the U.S. threat of abandonment seriously and tailored their defense contributions to assuage American pressure. One U.S. official noted in 1969 that the Europeans saw “their defense requirements primarily in terms of what they need to provide to keep the Americans committed,” and in 1970 the West Germans requested “an indication...of the minimum European defense contribution” necessary “to constrain [U.S.] budgetary and congressional pressures.”<sup>106</sup> Indeed, dating to the 1950s, Chancellor Konrad Adenauer and his successors pursued burden-sharing not only to hedge against the possibility of abandonment but also to explicitly curry favor with the United States.<sup>107</sup> Because of the country’s vulnerability, FRG officials found it difficult to turn down U.S. burden-sharing requests, and U.S. policymakers exploited this.<sup>108</sup> Secretary of State Dean Rusk, for example, cautioned the German ambassador in January 1963 that geography made it very dangerous for the FRG to risk defying the United States, while in 1968 National Security Adviser Walt Rostow stressed the “simple fact” of German vulnerability to coerce the FRG into signing the Nuclear Nonproliferation Treaty.<sup>109</sup> A State Department report similarly pointed to the FRG’s position as “an exposed country, with a contiguous border with the Soviet bloc.”<sup>110</sup>

---

<sup>106</sup> Richard A. Hunt, *Melvin Laird and the Foundation of the Post-Vietnam Military, 1969-1973* (Washington, DC: Historical Office, Office of the Secretary of Defense, 2015), 313; Telegram from U.S. Embassy (Bonn) to William Rogers, “Defense Burden Sharing,” June 1970, Folder “Germany, Vol. V [2 of 2],” NSC Files, Country Files, Box 683, RMNL.

<sup>107</sup> Catherine A. Kelleher, *Germany and the Politics of Nuclear Weapons* (New York: Columbia University Press, 1975), 37, 44, 55, 75–78, 91–93.

<sup>108</sup> Gavin, *Gold, Dollars, and Power*, 112–13.

<sup>109</sup> Marc Trachtenberg, *A Constructed Peace: The Making of the European Settlement, 1945-1963* (Princeton, NJ: Princeton University Press, 1999), 374–75; *FRUS*, 1964-1968, Vol. 15 (United States Government Printing Office, Washington, DC, 1999), p. 637.

<sup>110</sup> Theodore S. Eliot to Henry Kissinger, “Political Consequences of SPD-FDP Coalition in the Federal Republic,” October 6, 1969, Folder “Germany, Vol. III [3 of 3],” NSC Files, Country Files, Box 682, RMNL.

## *Japan*

U.S. ambitions for Japanese burden-sharing were more modest than those it had for West Germany, yet it had difficulty securing even its limited aims. U.S. policymakers in the Kennedy and Johnson administrations sought “qualitative improvements” in Japanese military capabilities, but feared that any attempt to encourage large increases in Japan’s capabilities would cause a backlash and foster Japanese nationalism.<sup>111</sup> Thus, Japanese military spending remained under 1% of GDP throughout the 1960s and 1970s. Moreover, in contrast to West Germany, U.S. policymakers had little success encouraging Japan to purchase American military equipment, with Japanese purchases typically covering less than half of U.S. deficits.<sup>112</sup> The Nixon Administration continued the trend of seeking “moderate increases and qualitative improvements in Japan’s defense efforts, while avoiding any pressure on her to develop substantially larger forces or to play a larger national security role.”<sup>113</sup> As a result, despite Nixon’s erstwhile emphasis on encouraging allied burden-sharing as a hallmark of the “Nixon Doctrine,” the early 1970s did not see a dramatic expansion of Japan’s military role.<sup>114</sup>

---

<sup>111</sup> *FRUS*, 1964-1968, Vol. 29 (Part 2) (United States Government Printing Office: Washington, DC, 2006), pp. 19-22, 42, 58-62, 100-101, 120, 206, 282-283.

<sup>112</sup> *FRUS*, 1961-1963, Vol. 22 (United States Government Printing Office: Washington, DC, 1996), p. 769; *FRUS*, 1964-1968, Vol. 29 (Part 2), pp. 204-206.

<sup>113</sup> Yukinori Komine, “Whither a ‘Resurgent Japan’: The Nixon Doctrine and Japan’s Defense Buildup, 1969–1976,” *Journal of Cold War Studies* 16, no. 3 (2014): 96, 112.

<sup>114</sup> Robert S. Litwak, *Détente and the Nixon Doctrine: American Foreign Policy and the Pursuit of Stability, 1969-1976* (New York: Cambridge University Press, 1986), 134–35.

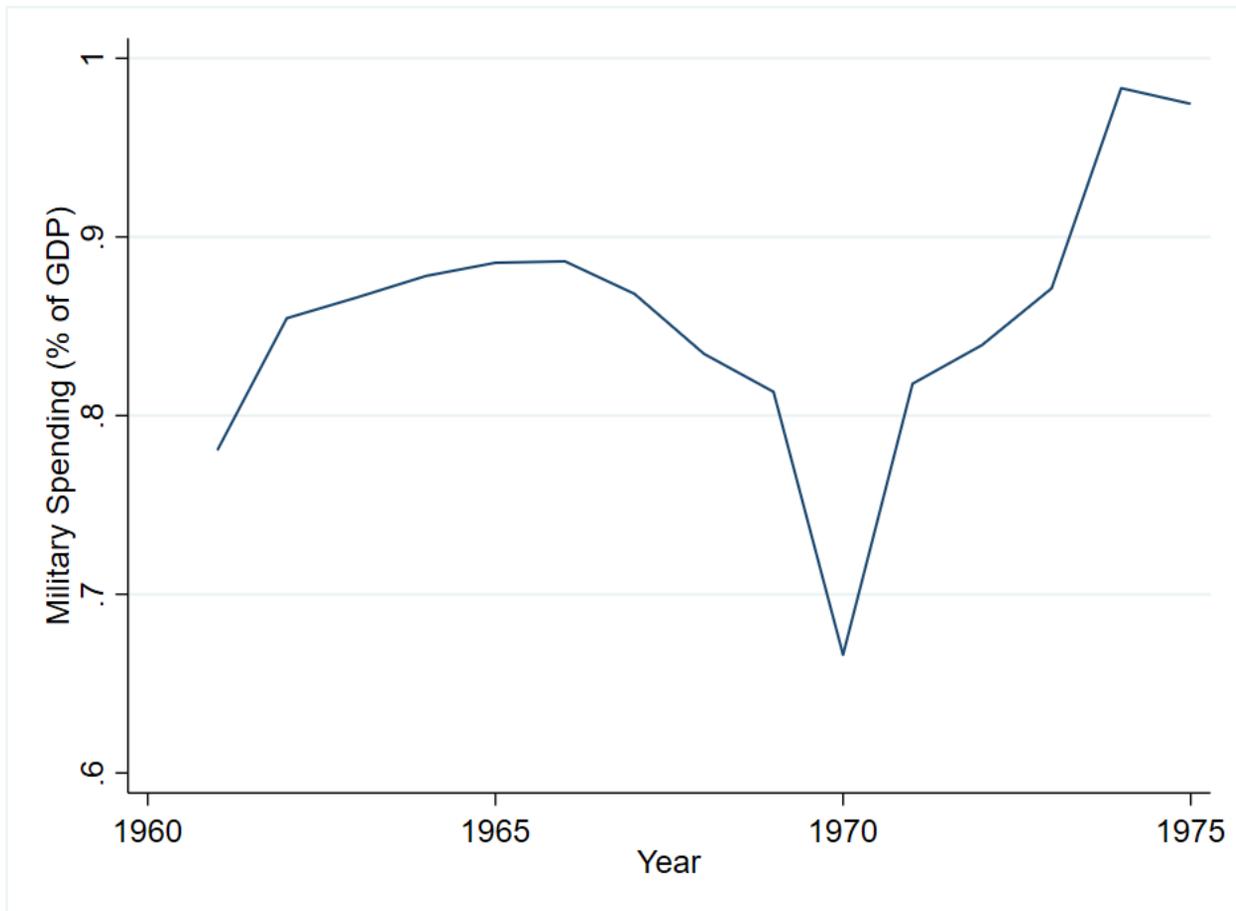


Figure 3: Japanese military spending, 1961-1975.

The evidence suggests that limited Japanese burden-sharing reflected its relatively muted fears of abandonment compared to West Germany. Nixon’s National Security Adviser Henry Kissinger lamented that “Our experience along this line with the Europeans indicates that they will only spend more on defense if they are convinced their own security is at stake and that we will not spend more to provide their security.”<sup>115</sup> The challenge was that because of their separation from the Asian mainland, many in Japanese politics saw little threat to their security

---

<sup>115</sup> *FRUS*, 1969-1976, Vol. 19 (Part 2) (United States Government Publishing Office, Washington DC: 2018), p. 266.

and were ambivalent about the need for a U.S. troop presence at all.<sup>116</sup> Indeed, one Johnson Administration official noted that Japan’s reluctance to ramp up military readiness was shaped by “doubt of the practical value of large Japanese forces—in view of the lack of any clear threat to Japanese territory, U.S. treaty commitments to Japan.”<sup>117</sup> Nixon’s Undersecretary of State similarly remarked that the Japanese “do not perceive the threat—unlike the Germans or the Koreans. They do not see a threat coming from the Soviet Union....They do not see for a generation at least a conventional threat coming from China.”<sup>118</sup>

## Conclusion

This article presented a theory of burden-sharing in asymmetric alliances. I argued that allies are more likely to burden-share when their patron can more credibly threaten to abandon them and when the consequences of abandonment would be more acute for them. Specifically, allies are less likely to burden-share when they are more strategically valuable to their patron and more likely when they have a higher perception of threat which renders them in greater need of protection. I tested these expectations using data on the military expenditures of U.S. allies between 1950 and 2010, and found that U.S. allies vulnerable to attack spend more on defense, while strategically valuable allies near key maritime chokepoints spend less.

My findings suggest numerous avenues for future research. For one, although this study focuses primarily on the effects of fears of abandonment as a source of variation in burden-

---

<sup>116</sup> John Welfield, *An Empire in Eclipse: Japan in the Post-War American Alliance System* (Atlantic Highlands, NJ: The Athlone Press, 1988), 143; Alexander Lanoszka, *Atomic Assurance: The Alliance Politics of Nuclear Proliferation* (Ithaca, NY: Cornell University Press, 2018), 87–88; Memorandum from Richard Finn to Winston Lord, “Study on Forces at Work in Japan,” April 23, 1974, Folder “Japan - NSSM 172 (5),” National Security Adviser’s Files, NSC East Asia and Pacific Affairs Staff Files, Box 4, Gerald Ford Library (GRFL), pp. 4-6.

<sup>117</sup> *FRUS*, 1964-1968, Vol. 29 (Part 2), p. 115.

<sup>118</sup> *FRUS*, 1969-1976, Vol. 19 (Part 2), p. 264.

sharing, further research could investigate the effectiveness of other instruments. These include but are not limited to economic coercion, inducements, and “naming and shaming” under-contributing states. A related line of research could focus on allies’ willingness to contribute to collective goods for reasons unrelated to bargaining or the contributions of other allies, such as normative considerations and values.<sup>119</sup> Additionally, more research could be done on when patrons actually want their allies to assume more responsibility for their own defense, as well as on explaining change over time since my independent variables are relatively static year-to-year.

Finally, my findings have implications for debates over U.S. grand strategy. Alliances are central in the debate between those favoring a grand strategy of “restraint,” who advocate reducing U.S. alliance commitments to encourage burden-sharing, and those favoring “deep engagement” who argue that reducing support for allies is likely to lead them to become less cooperative with U.S. preferences and enflame regional security dilemmas.<sup>120</sup> This article suggests that U.S. officials may need to lean into allies’ fears of abandonment if they hope to encourage allied burden-sharing. However, the United States is not helpless in shaping allied burden-sharing even when it goes to some length to reassure them by, for example, stationing troops on their territory. Many of the same conditions that make assurances of protection more necessary – doubts about U.S. credibility, concerns about external threat – are also favorable for burden-sharing. In these conditions, U.S. policymakers may be able to effectively combine assurances of protection with threats of abandonment – whether tacit or explicit. Thus, the trade-off between reassuring allies and encouraging burden-sharing is not absolute.

---

<sup>119</sup> Zyla, *Sharing the Burden?*

<sup>120</sup> Posen, *Restraint*; Stephen G. Brooks, G. John Ikenberry, and William C. Wohlforth, “Don’t Come Home, America: The Case against Retrenchment,” *International Security* 37, no. 3 (2012): 7–51.

Nevertheless, U.S. room for maneuver is often limited by factors largely out of its control. The United States cannot easily cause allies to have a higher perceptions of threat, for example. However, it might inadvertently undermine burden-sharing by expanding an alliance's frontiers if it insulates larger allies – whose contributions have disproportionate influence on the alliance's overall capabilities – from shared adversaries. In this way, expanding NATO after the Cold War may have reduced the incentives of allies like Germany, which during the Cold War had directly bordered the Warsaw Pact, to burden-share.

Moreover, the presence of a shared external threat is no guarantee of success; although allies with an elevated perception of threat are likely to be inclined toward greater burden-sharing, an elevated U.S. perception of threat may reduce allies' incentives for greater burden-sharing. American officials should thus not be surprised, then, when allies are less receptive to U.S. pressure than their own perception of threat might otherwise imply. Looking forward, this has implications for potential future trends in alliance burden-sharing in U.S. alliances. Among the defining trends of recent decades is the relative decline of U.S. power and the rise of competitors – most notably China.<sup>121</sup> If the United States has fewer resources to devote to its foreign commitments and partners fear a rising China, they may be willing pick up some of the slack. Nevertheless, the degree of U.S. success may be undercut by its own perception of threat, which reduces allies' incentive to burden-share.

---

<sup>121</sup> Alexander Cooley and Daniel Nexon, *Exit from Hegemony: The Unraveling of the American Global Order* (New York: Oxford University Press, 2020).