

The Price of Protection: Understanding Coercive Alliance Burden-Sharing*

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Abstract

Existing scholarship on alliance burden-sharing focuses on explaining why smaller allies under-contribute relative to their larger partners. However, the literature largely neglects the role played by coercive bargaining. 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 the patron can more credibly threaten to reduce its protection, and when doing so would impose serious costs on allies, it is better positioned to extract burden-sharing. I test the theory using data on allied burden-sharing in U.S. alliances from 1950-2012.

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1 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 has repeatedly called for U.S. allies to pay 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.¹ 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.”² On other occasions, Trump even implied that he would seek direct cash payments from allies.³

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 hundreds of thousands of American troops in the country (Gavin, 2004: 103-111), remarking 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.’”⁴ Jimmy Carter similarly threatened to withdraw U.S. troops from South Korea, and as a result the South Koreans agreed to increase their defense spending to 6% of their gross national product (Lee and Heo, 2002: 111-152). In other cases, U.S. persuasion has not been as successful. The United Kingdom repeatedly proved resistant to U.S. pressure during the 1960s, when the United States wanted it to retain its military presence in Asia (Dumbrell, 1996:

¹Ben 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> (accessed May 18, 2017); 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> (accessed May 18, 2017).

²Helene 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> (accessed May 18, 2017).

³Jeremy Lott, “Trump Reminds Merkel What Germany Owes NATO,” *Forbes*, April 7, 2017, <https://www.forbes.com/sites/realspin/2017/04/07/trump-reminds-merkel-what-germany-owes-nato> (accessed May 18, 2017).

⁴Summary Record of NSC Executive Committee Meeting, No. 38 (Part II), January 25, 1963, *Foreign Relations of the United States (FRUS)*, 1961-1963, Vol. 13 (Washington, DC: United States Government Printing Office, 1994), p. 486.

222-223, 227-230; O'Hara, 2003: 275).

Since the work of Olson and Zeckhauser (1966), the dominant research program on burden-sharing has treated security in alliances as a public good. The primary claim advanced by this literature is that the larger members of an alliance will tend to over-contribute to the costs of the alliance, since its success by-and-large depends on their efforts. Smaller members, by contrast, will under-contribute or “free-ride” (Oneal, 1990; Plümper and Neumayer, 2015). This argument has generated considerable insights into the distribution of burdens in U.S. alliances – specifically in NATO – both during and after the Cold War (Sandler, 1993; Sandler and Shimizu, 2014). However, there is variation that the “economic theory of alliances” 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, by contrast, smaller NATO members in the 2010s – namely Estonia, Latvia, and Lithuania – have punched above their weight. Likewise, the economic theory of alliances cannot account for the rise in allied burden-sharing in 1970s and subsequent fall in much of 1980s (Fang and Ramsay, 2010).

In this article, I present a theory which focuses explicitly on a great power’s (or “patron’s”) ability to influence burden-sharing contributions of its junior allies (which I refer to as “allies,” for short). In particular, the theory explains the conditions under which a patron’s burden-sharing pressure is more or less likely to be effective. Specifically, I argue that a patron’s burden-sharing leverage is greatest when its threat to abandon the alliance is both *credible* and *salient* to its partners. In particular, I argue that a patron can most credibly threaten to abandon allies when it faces constraints on the resources it can devote to its foreign commitments, and when allies are of limited strategic value. The consequences of abandonment, in turn, are most severe for allies that are highly vulnerable to attack.

In order to test the theory, I conduct statistical tests on U.S. alliances from 1950-2012, using data on allied military spending. Three key findings emerge from the results. First, I find that allies

are more likely to increase their military spending when the United States faces resource constraints and pressure to retrench in the aftermath of costly foreign wars. Second, allies which are geographically vulnerable spend more on defense than allies with a large margin of security. Third, allies in geostrategically valuable locations near maritime chokepoints spend less on defense.

This article makes a number of contributions. For one, I directly draw attention to the bargaining process that produces alliance burden-sharing outcomes. With few exceptions, the literature on free-riding and burden-sharing in asymmetric alliances has not emphasized the conditions under which great power patrons pressure their allies to pick up the burden. Instead, the literature has almost exclusively focused on three questions: first, whether smaller allies free-ride more than larger allies (Olson and Zeckhauser, 1966; Palmer, 1990*a*; Sandler, 1993; Plümper and Neumayer, 2015); second, whether alliance benefits such as deterrence and defense are truly “public” goods (Sandler, 1977; Murdoch and Sandler, 1984; Oneal and Elrod, 1989; Palmer, 1990*b*; Goldstein, 1995; Lanoszka, 2015); and third, how factors outside the context of the alliance itself may influence allies’ defense efforts (Russett, 1970; Oneal, 1990; Palmer, 1990*a,b*). Studies generally adopt at most a tacit bargaining framework in which allies’ military expenditures are assumed to be responsive to changes in the military expenditures of the largest member (e.g., Olson and Zeckhauser, 1966; Palmer, 1990*a,b*; Sandler, 1993; Plümper and Neumayer, 2015).⁵ This article, by contrast, explicitly focuses on why and when patrons have bargaining leverage for extracting burden-sharing.

Second and more generally, the theory has implications for understanding how great powers – and especially hegemonic powers – manage their partnerships, deter adversaries, and maintain influence in the international system. Classic works 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 even contribute to overextension and long-term

⁵Exceptions are Lee and Heo (2002), who focus on American burden-sharing pressure on South Korea, and Lanoszka (2015), who argues that patrons may refrain from burden-sharing pressure in order to maintain allies’ loyalty.

economic decline (Olson and Zeckhauser, 1966; Gilpin, 1981). Moreover, a lack of allied burden-sharing may make it more difficult for hegemonic states to compete with rising powers, and for great powers to deter their rivals more generally (Gilpin, 1981). 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 (Kennedy, 1987).

2 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. In such partnerships, the great power provides security for the alliance, while the weaker power gives up “autonomy” to the great power. This autonomy can take a number of forms, from hosting the great power’s military bases to providing general support for its foreign policy initiatives (Morrow, 1991). In this perspective, 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 (Lake, 2009). Lanoszka (2015), for his part, similarly argues that allied “free-riding” may in some cases be the result of a “nuclear bargain,” in which the patron acquiesces to low levels of allied contributions in exchange for allies’ willingness to not pursue nuclear weapons.

The second strand of literature more directly focuses on explaining burden-sharing outcomes, and draws on the logic of collective goods (e.g., Olson, 1965). In a seminal article, Olson and Zeckhauser (1966) argued that smaller countries tend to under-contribute to public goods – such as collective defense in an alliance – because their contributions are unlikely to be pivotal for the good to be provided (cf. Plümper and Neumayer, 2015). In other words, smaller allies do not contribute as much because their contributions are less likely to matter. Other scholars have built upon this observation to discuss conditions under which the logic of collective goods is more or less applicable to alliances. Some authors, for example, argue that collective defense is not always

a public good but instead can be a good from which some countries benefit more than others, or from which some can be excluded altogether. In particular, some scholars argued that NATO's shift toward a strategy of "Flexible Response" during the 1960s and 1970s, in which the alliance relied more on conventional defenses against an attack by the Warsaw Pact, and away from a "Massive Retaliation" approach that relied heavily on the threat of nuclear attack, meant that the strength of each ally's military forces would be more important as a deterrent since members could not count on an overwhelming nuclear response from the United States (Murdoch and Sandler, 1984). Additionally, allies may spend more on defense than the logic of collective goods would predict because they are pursuing their own "private" goods from which their other partners do not benefit – such as maintaining colonial empires or competing with rivals that they do not share with their allies (Oneal and Elrod, 1989; Oneal, 1990).

There is an alternative explanation, however, which has been largely understudied in the existing literature: bargaining. Patrons need not simply accept the level of effort their allies provide; rather, they may attempt to coerce or persuade them to do more. Indeed, Snidal (1985: 587) noted that powerful states can coerce their weaker allies such that the latter do not free-ride. But the conditions under which such coercion is used and is more or less effective remain under-theorized and have not been the subject of much empirical testing. Perhaps the most notable exception to this is the study by Fang and Ramsay (2010), who argue that a patron can drive a harder bargain with its partners when it can more easily find alternative partners. They claim that such circumstances are most likely during periods of *détente* with adversaries, as here it is easier to cooperate with states outside of its existing allies. Similarly, Lee and Heo (2002) focus on factors that have shaped bargaining leverage in the U.S.-South Korea alliance, such as the threat environment and domestic politics, but they focus only on this one case. In the following section, I lay out a unified theory of coercive burden-sharing, which I argue can explore variation in allied contributions both over time and across allies.

3 A Theory of Coercive Burden-Sharing

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. As such, a patron will seek to ensure that its allies invest in their own defense, as well as in the alliance's collective goals. Failing this, the patron runs the risk of having to over-invest in the alliance in order to maintain the alliance's capability for adequate deterrence and defense – and if it fails to invest enough, it risks predation by competitors. Yet allies have incentives to free-ride, as they can devote those resources toward domestic consumption (Barnett and Levy, 1991; Morrow, 1993; Kimball, 2010). 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 (Olson and Zeckhauser, 1966).

But allies will also be sensitive to patron coercion – and, in particular, to the possibility of abandonment. Bargaining in alliances occurs in the shadow of the threat of exit (Snyder, 1997; Jervis, 1997; Crawford, 2003).⁶ A patron can use other means to persuade its allies to increase their burden-sharing efforts – including efforts to “name and shame” free-riders or economic inducements – but the threat to leave or otherwise reduce one's commitment to the alliance is the ultimate and most potent bargaining chip.

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 a number of reasons. For one, the patron may have an inherent interest in defending and supporting its allies. Doing so allows it to deter expansion by neighboring states, mitigate regional security dilemmas that might otherwise lead to arms racing and wars, and preserve its ability to project power from their territory while denying that same privilege to adversaries (Art, 2003; Monteiro, 2014). Moreover, in the case of the United States in particular, the U.S. commitment to its allies is bolstered by its

⁶The seminal work on exit in the marketplace is Hirschman (1970).

many troops stationed abroad, which act as cost-sinking and hands-tying devices and send costly signals of the United States' ability and willingness to defend its allies (Schelling, 1966; Fearon, 1997). Indeed, many proponents of U.S. retrenchment favor withdrawing U.S. troops from abroad on the grounds that their presence encourages allied free-riding (e.g., Posen, 2014).

There are reasons to suspect, however, that the United States need not go to such great lengths as withdrawing its foreign-deployed forces. First, existing evidence on the effects of U.S. troop presence on allied burden-sharing is both mixed and incomplete. On the one hand, Lake (2007, 2009) and Martinez Machain and Morgan (2013) find that states which host U.S. troops have lower defense contributions. On the other hand, Allen, VanDusky-Allen, and Flynn (2016) show that NATO allies' defense efforts are positively related to U.S. military presence, while Bennett, Leibold, and Unger (1994) find that states with a large U.S. military presence – which they treat as a proxy for partners' dependence on the United States – were more likely to contribute to the 1990-91 Persian Gulf War. 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 reassurance and allied burden-sharing may be spurious. For example, U.S. troop presence is likely to be correlated with threat, which may have an independent effect on allied military spending. Second, the relationship between reassurance and burden-sharing may be endogenous; patrons may withhold reassurance from allies which are under-contributing and then reward them with assurances of protection once they have increased their efforts.

Second, focusing purely on a patron's signals of commitment ignores the patron's *ex ante* bargaining leverage and threat of abandonment. Even if troops are present, allies may fear (and, indeed, 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 deliberately stations U.S. troops abroad and uses other forms of reassurance *because* of perceptions about U.S. unreliability, thus implying that U.S. signals of support are endogenous to the ally's perception of U.S. reliability

(Blankenship, 2018).

The solution to these methodological and theoretical challenges in studying the effects of endogenous signals of patron commitment, then, is to look first at more *ex ante*, exogenous conditions under which a patron's threat of abandonment is most effective. 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 (Schelling, 1966; Davis, 2000). Thus, the question is not only "does being assured of protection lead allies to free-ride," but rather: under what conditions can a patron most credibly make its protection conditional on allied burden-sharing?

In the following parts of this section I describe the conditions under which patrons' threats of abandonment are more credible and salient to allies. In particular, these threats will be most believable when the patron can reasonably claim that its alliances no longer serve its interests or are unnecessary, whether because its perception of threat has declined, because a particular ally is of limited strategic value, or because it faces constraints on the resources it can devote to its foreign commitments. Additionally, abandonment will be more salient to allies to the extent that they face severe threat environments.

3.1 Threats of Abandonment and the Effectiveness of Burden-Sharing Pressure

A patron's ability to successfully pressure its allies to increase their burden-sharing efforts depends on the credibility of its threat to abandon them and how salient that threat is to them. As an alternative to its alliances, a patron has two options for meeting its security and autonomy needs. First, it can unilaterally shed its commitments or reduce the amount of protection it provides. This can take the form of pursuing a more self-sufficient or even isolationist foreign policy. Alternatively, a patron can pursue rapprochement with its adversaries. These are far from mutually exclusive, and indeed are mutually reinforcing; *détente* with an adversary can facilitate efforts toward isolation-

ism or retrenchment by reducing the *raison d'être* of having alliances. Second, the patron can find other allies to rely upon.

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 costs of maintaining its alliances become untenable for the patron, or when an alliance's benefits are less salient. Extending guarantees of protection allows the patron to deter expansion by adversaries, which might otherwise seek to gain influence over the patron's allies and encroach upon their territory, in order to prevent them from becoming more powerful and threatening in the future. However, these entanglements become less attractive when the patron faces constraints on its resources that render its foreign commitments less sustainable. Additionally, the patron's threat to abandon any particular ally depends on the extent to which it is strategically valuable.

The salience of the patron's threat of abandonment, in turn, 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 – the patron's resource constraints, allies' strategic value, and the threat environment – and derive testable hypotheses.

3.1.1 Resource Constraints

The patron's threat of abandonment will be more credible to the extent that it faces constraints on the resources it can devote to its foreign commitments. Whether it is due to economic hardship, costly wars, or fiscal strain, resource constraints put pressure on the patron to retrench – both by cutting defense spending and by reducing its overseas military footprint (Kennedy, 1987; Friedberg, 1988; MacDonald and Parent, 2011). Additionally, domestic populaces that are war-weary or faced with painful fiscal trade-offs are likely to have less appetite for foreign commitments (Chapman, MacDonald, and Moser, 2015). As a result, allies are likely to doubt both the patron's

capability to protect them and its *willingness* to do so, as in such circumstances retrenchment is likely to become more attractive for the patron.

When policymakers have intrinsic incentives to retrench, they can use those incentives to put burden-sharing pressure on allies. Leaders can claim that their country's commitment is not entirely in their hands, and that allies must contribute more to the common defense in order to both appease U.S. domestic audiences, and to offset the patron's reduced ability to provide security (Haynes, 2015). In the late 1960s and early 1970s, for example, U.S. officials faced great pressure from Congress to reduce the United States' overseas footprint in the wake of the costly Vietnam War. This most notably took the form of the Mansfield Amendments and Resolutions, sponsored by the Senate Majority Leader, which called for withdrawing significant numbers of U.S. troops from Europe. Officials in the Johnson and Nixon administration were able to exploit allies' concerns about U.S. reliability in order to persuade them to assume great defense burdens (Williams, 1985). Similarly, during the 1950s, Dwight Eisenhower's administration put pressure on allies to increase their burden-sharing efforts as part of his post-Korean War "New Look" policy, in which the United States would cut its own efforts. Secretary of State John Foster Dulles, for example, threatened an "agonizing reappraisal" of NATO commitment if the European allies did not take sufficient measures to pursue their own self-defense (Sloan, 2016: 38-44, quote at p. 44).

Moreover, resource constraints give the patron an incentive to pursue accommodation with its adversaries. When it faces strain on its capabilities or pressure to retrench from its domestic audiences, the patron becomes vulnerable to challenges from other states and may face budgetary or manpower constraints (Gilpin, 1981). As such, rapprochement with competitors may become an attractive way of biding time and reducing costs until it is better able to compete (Treisman, 2004; MacDonald and Parent, 2018).

The pursuit of *détente* with adversaries, in turn, makes the patron's threat to abandon allies more credible by reducing its deterrence needs – and thus its need for allies. Fang and Ramsay (2010), for one, argue that allies' value to the United States diminishes when relations between it

and its adversaries are less tense, and that as a result allies increase their burden-sharing in response to the possibility of U.S. abandonment. Allies are likely to fear being “sold out” as part of a deal between the patron and the adversary (Yarhi-Milo, Lanoszka, and Cooper, 2016). Indeed, West Germany and other NATO allies feared the possibility of a “grand bargain” between the United States and the Soviet Union during the 1970s, in which the United States would withdraw troops from Europe and allow the Soviet Union to have a larger sphere of influence in exchange for Soviet pledges not to attack the United States with nuclear weapons.⁷

Hypothesis 1 (Patron Resource Constraints). When the patron experiences constraints on its resources, allies will increase their burden-sharing efforts.

3.1.2 Ally Strategic Value

The patron can more easily threaten to abandon an ally when that partner is less strategically valuable (Cooley and Spruyt, 2009; Rector, 2009). When a patron has few alternative options for local partners, its threat to abandon allies is less credible, and therefore its ability to pressure allies for burden-sharing is diminished. In particular, I would expect that the patron will have a less credible threat to abandon allies in geostrategically valuable locations.⁸ Having access to such locations – and denying them to adversaries – allows the patron to project power while restricting its adversary’s ability to do so. Turkey, for example, controls the Bosphorus strait, which serves to connect the Black Sea and Mediterranean Sea. As a result, Russian and Soviet attempts to project naval power from the Black Sea faced potential interdiction, thus serving to make Turkey strategically valuable for not only Russia (and the Soviet Union), but also any adversary seeking to deny it access to the Mediterranean such as the United States (Chamberlain, 2014). Likewise, U.S. bases in the Western Pacific allowed it to contest Soviet attempts to project power using its Pacific

⁷Clift to Kissinger, “Reported Reactions in FRG Cabinet to US-USSR Agreement on the Prevention of Nuclear War,” June 30, 1973, Folder “Germany, Vol. XIII [2 of 3],” NSC Files, Country Files, Box 687, Richard M. Nixon Library, Yorba Linda, California [hereafter RMNL]; Telegram from U.S. embassy (Bonn) to Rogers and Hillenbrand, “Recent FRG Views on MBFR,” June 1971, Folder “Germany, Vol. IX [3 of 3],” NSC Files, Country Files, Box 685, RMNL.

⁸A similar logic may hold for allies rich in natural resources such as oil; however, this does not apply to most formal U.S. allies (Chamberlain, 2014).

Fleet (Desch, 1989; Lake, 1999).

Hypothesis 2. Geostrategically valuable allies will contribute less for burden-sharing.

3.1.3 External Threat

Threat creates need for the alliance, but its effect on bargaining within the alliance is indeterminate. Instead, what matters is which party perceives the threat more acutely. While threat raises the consequences of abandonment for allies, it may also undermine the credibility of abandonment for the patron.

On the one hand, my theory would expect that a patron's leverage for burden-sharing will be shaped by the level of damage it can impose by abandoning an ally. This, in turn, is a function of how much worse-off an ally would be if it were suddenly left without the patron's protection. In particular, allies will be vulnerable to coercive burden-sharing pressure to the extent that they have a high perception of external threat.

On the other hand, however, it is important to distinguish between patron and ally threat perception, as the two are likely to have counterbalancing effects on burden-sharing. When the patron perceives a high level of threat from an adversary, it has less incentive to remain aloof from its allies, or else risk tempting the adversary to take its chances and attack a seemingly disunited alliance that does not have the patron's full commitment. This in turn reduces the patron's ability to threaten its allies with abandonment in order to demand burden-sharing efforts. Indeed, Christensen (2011) argues that alliance disunity – including over issues of burden-sharing – can tempt adversaries into attacking, presenting evidence from competition between the U.S. and Communist alliance systems in East Asia. Running such a risk is more dangerous when the threat environment is more dangerous. As a result, allies can effectively exploit the patron's reluctance to drive a hard bargain with them during such periods (Holsti, Hopmann, and Sullivan, 1973: chs. 3-4; Fang and Ramsay, 2010).

The patron is by definition the most disproportionately powerful member of the alliance, and

as such its ability to pass the buck to its allies is limited (Waltz, 1979; Mearsheimer, 2001). This is especially the case when an adversary poses a high level of threat to its neighbors, as allies may lack the capability to manage the threat themselves. Moreover, the patron has incentive to contain the expansion of hostile regional powers, lest they become even more of a threat in the future (Walt, 1987; Montgomery, 2016). As Handel (1981: 149) put it, during the Cold War “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.”

Making empirical predictions about the effects of threat on burden-sharing thus requires disentangling patron and ally threat perceptions, as factors that elevate both are likely to have a mixed and ultimately indeterminate effect on allies’ burden-sharing efforts. Walt (1987) famously argued that threat is a function of capabilities, intentions, and geography. Of these, I argue that *geography* is the best-suited to making empirical predictions for its effect on burden-sharing, as it is a constant for the patron but varies significantly across allies.

Geographic proximity directly exposes allies to the costs of abandonment. As a result, the patron will be able to more effectively wield the threat of abandonment against geographically vulnerable allies – and thus to more effectively demand burden-sharing. By contrast, allies which are far from danger may be able to free-ride on the protection the patron provides to allies on the front-lines. 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 example, hosted a substantial number of U.S. forces, but was nevertheless among the largest contributors to NATO – including its “second largest land force” (Uslu, 2003: ch. 4; quote at p. 101). Indeed, it is telling that many smaller U.S. allies that have faced comparatively higher levels of threat, such as South Korea and the “new NATO allies” in Eastern Europe, have often punched above their weight in assisting U.S. military interventions in, for example, Vietnam and Iraq (Bennett, Leggold, and Unger, 1994; Yong Lee, 2011).

By contrast, states that are not immediately proximate to a major source of threat are less susceptible to the patron's pressure. Portugal, for example, contributed little to NATO for much of the 1950s through the 1970s, as it was far more concerned with protecting its overseas empire – and indeed even threatened to hold its bases in the Azores hostage from the United States on a number of occasions (Vasconcelos, 1988).⁹ Similarly, Japan was generally more resistant to U.S. burden-sharing pressure during the Cold War than was South Korea or West Germany, in no small part because Japan's margin of security was much greater due to its being separated from the Asian mainland by water, and because South Korea provided a buffer for it. To the frustration of U.S. officials, the Japanese have historically spent relatively little of their GDP on their self-defense (Swenson-Wright, 2005: ch. 6).

Hypothesis 3. Geographically vulnerable allies will contribute more for burden-sharing.

This hypothesis is only partially consistent with the expectations of threat-based explanations for burden-sharing such as balance of power theory and deterrence theory, which would predict that higher levels of threat should be universally associated with greater levels of burden-sharing. My theory, by contrast, expects that threat will only lead to more burden-sharing to the extent that it shapes allies' security environments more profoundly than that of their patron.

4 Research Design

I test the hypotheses using a cross-national dataset of burden-sharing among American allies. The unit of analysis in this paper is the U.S. ally-year. My sample runs from 1950-2012 and includes all states that are defined as having defense pacts or ententes with the United States by the *Correlates of War* (Gibler, 2009).¹⁰ Ideally, I would include Soviet alliances in addition to American alliances,

⁹Intelligence Memorandum Prepared in the Central Intelligence Agency, "Current Problems in NATO," January 21, 1969, *FRUS*, 1969-1976, Vol. 41, p. 9.

¹⁰I exclude U.S. allies in the Americas – both Canada, to which the United States is allied through the North Atlantic Treaty Organization (NATO), and the Latin American countries, many of which it is allied to through the Organization of American States (OAS). This is because these countries were largely insulated from the Cold War contest with the Soviet Union, and were not subject to direct threat of attack from the Communist bloc – only to internal subversion, which is not this paper's focus. Moreover, they were within the United States' Monroe Doctrine sphere

as the Soviet Union is the other post-1945 great power which has had a network of asymmetric alliances. Yet there are arguably 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 (Harrison, 2005). (This is to say nothing of data availability issues, which are more prominent for the Soviet Union and its allies.) However, although I do not explicitly study Soviet alliances, Nelson (1986) shows that burden-sharing in the Warsaw Pact was driven largely by members' perceptions of the likelihood of Soviet abandonment.

4.1 Dependent Variable

My primary dependent variable is allies' level of burden-sharing effort, measured using their military expenditures in constant 2005 dollars. Data on expenditures come from version 5.0 of the Correlates of War's National Material Capabilities (NMC) dataset and are used from 1950-2012 (Singer, 1987). Hypotheses 1, on the one hand, and Hypotheses 2 and 3, on the other, make predictions for slightly different outcomes, however, and thus I use two different operationalizations of allied military spending. In order to assess variation in military spending over time for H1, I use annual variation in allies' expenditures, measured as a percentage of the previous year's spending. For cross-national variation (H2 and H3), I instead use allies' amount of spending in each year. I then take the natural logarithm, as the distribution of military spending is somewhat skewed.¹¹

While military spending is a somewhat coarse measure of allied burden-sharing, given that it does not separate independent allied arming from efforts which are explicit alliance contributions, it is the most widely available measures for cross-national analysis. Moreover, while some military

of influence, and did not share many adversaries with the United States aside from (in some cases) the Soviet Union, from which they were quite far.

¹¹Much of the literature uses military expenditures as a percentage of GDP to measure burden-sharing, as it generally focuses on trying to explain why countries devote more or less of their resources toward defense, with a particular emphasis on testing whether countries with larger GDP tend to over-contribute relative to their resources (e.g., Olson and Zeckhauser, 1966). As Plümper and Neumayer (2015) note, however, for other purposes, it makes more sense to focus on absolute expenditures, since this is what governments have control over. Nevertheless, in Table A8 in the appendix I use military expenditures as a percentage of GDP as the dependent variable, and the results are consistent.

spending may be purely internal balancing for allies' own purposes rather than direct alliance contributions, this is in many cases exactly what the United States seeks: for allies to do more for themselves.

4.2 Independent Variable

4.2.1 U.S. Resource Constraints

Next, I measure U.S. resource constraints by using a proxy which captures the course and aftermath of protracted, costly foreign wars – namely, the U.S. wars in Korea (1950-1953), Vietnam (1965-1973), and Iraq (2003-2011). Wars can divert resources from the economy, increase the deficit and debt, contribute to inflation, and lead to shortages in military manpower (Rockoff, 2012: esp. 27-42; Krebs, 2018). I would expect allies' doubts about U.S. reliability to gradually increase over the course of a protracted war, and then to gradually decrease as the United States recovers. The course of the war is likely to create pressure to divert resources from other commitments, especially as it drags on (Krebs and Spindel, 2018), while the patron's appetite for foreign entanglements is likely to be diminished in the aftermath of a protracted war (Hopf, 1994; Jervis, 2002; Press, 2005). Indeed, a long line of research suggests that protracted, costly wars sap American domestic political support for foreign entanglements (e.g., Mueller, 1973; Gelpi, Feaver, and Reifler, 2009).

Thus, I create a variable that increases by 1 each year that a war has been ongoing, reaches a maximum value in the year the war ends, and then gradually decreases by 1 each year after the war has ended. For example, in the case of the Vietnam War, the variable has a value of 1 in 1966 (the year after the start of the war), 8 in 1973 (the year the war ended), 7 in 1974, and 1 in 1980. This is an attractive proxy because I expect resource constraints and concerns about U.S. reliability to be high both during the later stages of a costly foreign war, after years of fighting have inflicted losses in blood and treasure, and for a time thereafter, while policymakers and the public recover from the war and the armed forces rebuild their strength. Indeed, Krebs and Spindel (2018) argue that allies are most likely to doubt their patron's commitment once the war has taken a toll on its resources

and political will. As I discuss in Section 5.1 (Robustness Checks), the results are also robust to separating this variable into two components – one which captures war duration, and other which captures postwar recovery.¹²

One might also expect that economic hardship would constrain U.S. resources. However, for the period under study – with perhaps the exception of the aftermath of the 2008 global financial crisis – most periods of economic hardship are too brief and insufficiently deep to cause substantial doubt as to the U.S. commitment to allies or trigger internal debate about the U.S. role in the world. Similarly, until the mid-2000s levels of U.S. government debt were relatively constant. As a result, assessing the effects of economic hardship is difficult, as they are likely to be somewhat underpowered (not to mention that they also correspond with the heights of the U.S. wars in Iraq and Afghanistan in the late 2000s and early 2010s), and I do not make it a focus of the empirical analysis. However, as I discuss below, the results are largely robust to using measures of economic hardship as a measure of U.S. resource constraints.

4.2.2 Ally Strategic Value

In order to measure allies' strategic value, I create a dummy variable which takes a value of 1 if an ally is positioned near a key maritime chokepoint. In particular, I include the following countries: Japan; Turkey; United Kingdom; Spain; South Korea; Denmark; Norway; Iceland.¹³ In the post-Cold War I also include Estonia, Latvia, and Lithuania, due to their position between St. Petersburg and the Baltic Sea, as well as the Philippines, as it lies between China and the straits of Southeast Asia. Access to these countries facilitated U.S. efforts to project power near adversary (Soviet/Russian and Chinese) shores, while simultaneously allowing it to create a bottleneck through which adversary ships traveling from its territory to the open seas would need to pass.

¹²See Table A5 in the appendix.

¹³On Japan and South Korea's role in access through the Sea of Okhotsk and the Sea of Japan, see Ranft and Till (1989: 117). On Denmark and Norway's role in access through the Baltic and North Sea, see Ranft and Till (1989: 117, 216-217, 234). On the UK and Spain's role in access between the Atlantic Ocean and Mediterranean Sea, see Ranft and Till (1989: 206-209, 218, 222-224). On Turkey's role in access from the Black Sea to the Mediterranean Sea, see Ranft and Till (1989: 206-209, 224) and Chamberlain (2014). On Iceland's position in the "Greenland-Iceland-UK" gap between the Arctic and Atlantic Oceans, see Mazarr et al. (2018: 146-147).

Thus, having access to countries at key maritime chokepoints allowed the United States to both project power itself and secure its own maritime trade while simultaneously hindering adversaries' ability to project power and exposing adversaries' maritime trade to interdiction.

4.2.3 Ally Vulnerability

Next, I measure vulnerability to threat by using a composite measure indicating the ally's proximity to the Communist bloc. The first component is a dummy variable indicating whether the ally shares a land border with a member of the Soviet bloc.¹⁴ Data come from version 3.1 of the Correlates of War's Direct Contiguity dataset (Stinnett et al., 2002).¹⁵ The second component is the ally's proximity to adversaries – which for the Cold War is the Soviet Union, and in the post-Cold War is Russia and China. In particular, I measure allies' proximity to Beijing for those in East Asia because of its proximity to the center of Soviet military power in the Far East, and for allies everywhere else I treat as Warsaw, owing to its proximity to the center of Soviet military power in the European theater. In 1990 I use Moscow instead of Warsaw, as the Russian frontier moved eastward following the collapse of the Communist bloc. This second component is measured as the inverse of the distance between the ally's capital city to either Beijing or Warsaw (in kilometers), normalized to be between 0 and 1. Capital city data come from Gleditsch and Ward (2001). The composite measure thus varies between 0 (New Zealand; Liberia) and 2 (South Korea; West Germany).

4.3 Control Variables

4.3.1 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. Data

¹⁴Communist countries include all members of the Warsaw Pact, as well as China, North Korea, North Vietnam, and (starting in 1976) Laos and Cambodia.

¹⁵Correlates of War Project. Direct Contiguity Data, 1816-2006. Version 3.1.

come from version 8.0 of the Penn World Table (Feenstra, Inklaar, and Timmer, 2015), with data extended to include more countries and years by Gleditsch (2002).

Second, I control for allies' economic size, using their GDP, and their economic development, using GDP per capita. Allies which have greater resources at their disposal might be expected to spend more on defense (Goldsmith, 2003), and the literature on alliance burden-sharing has long focused on the effects of GDP on military spending (Olson and Zeckhauser, 1966). Alternatively, economically developed countries may instead prefer to focus their spending on domestic welfare. Both variables are logarithmized and in constant 2005 U.S. dollars, and come from Gleditsch (2002).

Next, I control for allies' regime type. Democratic states are more accountable to their populations than are autocratic states, and a large body of literature finds that democracies on average spend less on their militaries than non-democracies (Garfinkel, 1994; Goldsmith, 2003; Fordham and Walker, 2005; Carter and Palmer, 2015). To measure regime type I use the Polity score, with data from the Polity IV version (Marshall and Jaggers, 2011; Marshall, Gurr, and Jaggers, 2014).

4.3.2 Security Environment

Additionally, because allies may tailor their defense efforts based on their perceptions of threat, I also control for numerous factors that shape allies' security environments. The first of these are the adversary's capabilities, which I measure using two variables – one which captures its overall latent military capabilities, and the other which captures changes in its actual military capabilities. For the former I use the adversary's its Composite Indicator of National Capabilities (CINC) score, which captures each state's overall share of global resources. For the latter, I use the annual change in the adversary's military expenditures, measured as a percentage of the previous year's military spending. Here, I define the primary adversary of the alliance as the Soviet Union during the bipolar Cold War period (1950-1989), and then China (for U.S. allies in East Asia) and Russia (for allies elsewhere) during the post-Cold War period. Data come from version 5.0 of the Correlates

of War's National Material Capabilities (NMC) dataset (Singer, 1987).

Second, I control for the degree to which the adversary is likely to be seen as hostile by the United States and its allies. Specifically, I include a dummy indicator for instances in which the adversary invaded and occupied a non-U.S. ally. During the Cold War, there were three such instances: Hungary (1956), Czechoslovakia (1968) and Afghanistan (1979). Additionally, during the post-Cold War I also include the Russian invasion of Georgia in 2008. These events are likely to have influenced U.S. and allied threat perception because they represented instances of clear aggression. Moreover, focusing on non-U.S. allies gets around the issue of endogeneity, as an adversary's willingness to behave aggressively toward U.S. allies is likely to be affected by perceptions of allied capabilities. I create a dummy variable in which I code the three years after each of these instances as 1 for the allies in the same region as the country that was attacked, as I would expect that allied military expenditures would change in response to the initial shock.¹⁶

Third, I account for each ally's conflict environment by controlling for the number of MIDs it was involved in with non-adversary countries, weighted by the MIDs' hostility level. MID data come from version 4.1 of the Correlates of War's Militarized Interstate Dispute dataset (Palmer et al., 2015).

Fourth, I control for whether an ally had colonial possessions in a given year. 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 exert control over their colonial possessions were one such good, as doing so was extraneous to defending against the threats allies shared in common with the United States (Oneal and Elrod, 1989; Oneal, 1990). I code this variable as a dummy which takes the value of 1 for the following country-years: Belgium (through 1962); France (through 1977); Portugal (through 1975); Spain (through 1968); and United King-

¹⁶For the Soviet invasion of Afghanistan, however, I code all country-years during 1980-1982 as 1, as aside from Pakistan there were no U.S. allies in the immediate region as Afghanistan. Note that I exclude North Korea's invasion of South Korea in 1950, as well as North Vietnam's conquest of South Vietnam in 1975, as these were undertaken by third parties rather than the Soviet Union itself. However, the results are robust to including them.

dom (through 1984). Data on colonial possessions come from version 1.0 of the Issue Correlates of War's Colonial History Data Set (Hensel, 2014).

Finally, I also control for alliance type by including a dummy variable for whether the country is allied to the United States via a defense pact, which carries an explicit guarantee of assistance, or via an entente, which does not.

4.3.3 Unobserved Heterogeneity

Finally, consistent with existing literature (e.g., Carter and Palmer (2015) and Plümper and Neumayer (2015)), in the models focusing on change in military spending over time, I include a lagged dependent variable in order to account for the slow-moving, dynamic nature of military spending and to correct for serial correlation. However, because including a lagged dependent variable turns the models into dynamic models, it makes estimating the effects of time-invariant variables (e.g., geography) difficult, and so I exclude them. I also include a dummy variable to capture differences between the Cold War and post-Cold War environments, which takes a value of 0 for all country-years during 1950-1989 and 1 for all country-years during 1990-2012.

In the models focusing on cross-country variation in military spending, in turn, instead of a lagged dependent variable and post-Cold War dummy variable I include region fixed effects and year fixed effects in order to account for unobserved temporal and spatial heterogeneity.¹⁷

4.4 Model Specification

Because I use two variations of the dependent variable – one capturing change in military spending over time, the other capturing variation across countries – I include different control variables depending on the dependent variable. In the models which analyze change in military spending over time and include a lagged dependent variable, I exclude those controls which are slow-moving or time-invariant, such as geography, regime type, and colonial holdings. Similarly, in the models which assess cross-national variation in military spending and include region and year fixed effects

¹⁷See Section A3 for the regional classifications.

exclude those controls which are country-invariant. Nevertheless, the results are robust to including these additional controls.

The ordinary least squares regression equation I use to test change over time is as follows:

$$\Delta \text{Milex}_{i,t} = \beta_1 \text{War Costs}_{i,t} + \beta_2 \Delta \text{Milex}_{i,t-1} + \gamma \mathbf{X}_{i,t-1} + \epsilon_{i,t}$$

where i indexes countries, t indexes years, *War Costs* is a variable capturing the course and aftermath of U.S. foreign wars, ΔMilex represents the percentage annual change in allies' military expenditures, $\mathbf{X}_{i,t-1}$ is a vector of control variables, and $\epsilon_{i,t}$ is a stochastic error term. I employ standard errors clustered by country throughout.¹⁸

Additionally, the ordinary least squares model specification I use to test H2 and H3 is the following:

$$\text{Milex}_{i,t} = \beta_1 \text{Vulnerability}_{i,t} + \beta_2 \text{Geostrategic}_{i,t} + \gamma \mathbf{X}_{i,t-1} + \zeta_t + \mu_i + \epsilon_{i,t}$$

where i indexes countries, t indexes years, *Vulnerability* is a composite variable of allies' proximity to the adversary, *Geostrategic* is a dummy variable indicating an ally which is in a geostrategically valuable area for the United States, *Milex* represents allies' logarithmized military expenditures, $\mathbf{X}_{i,t-1}$ is a vector of control variables, ζ_t is a vector of year fixed effects, μ_i is a vector of region fixed effects, and $\epsilon_{i,t}$ is a stochastic error term. I employ standard errors clustered by country throughout.

5 Results

The results provide strong support for my hypotheses. First, they suggest that allies increase their military spending in the wake of U.S. foreign wars. Similarly, geographically vulnerable allies spend considerably more on their defense, while geostrategically valuable allies spend less.

Table 1 focuses on explaining change in military spending over time to test H1 and uses percent

¹⁸A summary of the independent and dependent variables can be found in Table A1. Summary statistics can be found in Table A2.

	Full Sample	Cold War	Post-CW
	(1)	(2)	(3)
	Δ Milex (%)	Δ Milex (%)	Δ Milex (%)
Δ Milex (% lag)	0.026 (0.047)	0.068 (0.045)	-0.114 (0.072)
US war costs	0.008*** (0.002)	0.009** (0.003)	0.016** (0.004)
GDP growth	0.001 (0.001)	0.002 (0.001)	0.000 (0.001)
Adversary aggression	-0.086*** (0.018)	-0.053* (0.022)	-0.218*** (0.036)
Adversary CINC	0.006 (0.106)	-8.115*** (1.496)	-0.146 (0.130)
Adversary milex growth	0.008 (0.017)	0.473*** (0.085)	-0.007 (0.016)
MIDs	-0.002* (0.001)	-0.002 (0.001)	-0.004** (0.001)
Region FE	No	No	No
Year FE	No	No	No
N	1329	818	511
R ²	0.049	0.067	0.103

Country-clustered standard errors in parentheses.

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

Table 1: Results for change in military expenditures.

annual change in expenditures as the dependent variable. Model 1 includes the full sample, while Models 2 and 3 include only Cold War observations (1950-1989) and post-Cold War observations (1990-2012), respectively. The results show that mounting costs of U.S. foreign wars are associated with higher annual changes in allied military spending. Specifically, with a coefficient of .008 in Model 1, this implies that when compared to years in which the War Costs variable takes a value of 0, years where the War Costs variable reaches its maximum value of 8 (the end of the Vietnam War in 1973) the model predicts about a 6.4% increase in allied military spending. The results are similar when the sample is limited to the Cold War or post-Cold War periods as well.

As for the control variables, threat does not have a uniform effect on burden-sharing, let alone a uniformly positive one. On the contrary, the results show that in the aftermath of the Soviet invasions of Hungary, Czechoslovakia, and Afghanistan, as well as the Russian invasion of Georgia, allies reduced their military spending by around eight percent. As for adversary capabilities, the results are inconclusive. During the Cold War, allies spent more when the Soviet Union had a lower share of world power (measured in terms of its CINC score), but also spent more in the wake of

increases in the Soviet military budget. The post-Cold War period shows no significant relationship between adversary capabilities and allied military spending, however. Taken together, these results suggest that the possibility of U.S. abandonment is a better predictor of allied burden-sharing than the overall threat environment.

Table 2, in turn, shows that geographically vulnerable allies spend substantially more on defense than more remote allies, and that geostrategically valuable allies spend less. In terms of substantive effects, the most vulnerable allies (those scoring a two on the index) spends about 43% more on defense more than the least vulnerable allies in Model 1. Similarly, strategically valuable allies spend about 21% less than allies which are not in a geostrategic location. These findings are stronger during the Cold War period, but the coefficients remain in the expected direction during the post-Cold War.

5.1 Robustness Checks

Next, I subject the initial results to a variety of additional robustness tests. First, I use alternative proxies to capture U.S. resource constraints in Table A5. In the first of these, I separate the War Costs variable into two separate variables – one of which (War Duration) captures the number of years since the war (Korea, Vietnam, Iraq) started and increases up to the year the war ends, the other of which (Postwar) captures the second half of the War Costs variable, and is defined as the number of years the war lasted minus the number of years since the war has ended. In the second two proxies, I use measures of U.S. economic hardship: (1) the economic “misery index,” which is the sum of the unemployment rate and inflation (i.e., changes in the consumer price index) rate; and (2) U.S. annual GDP growth, as a percentage of the previous year’s GDP.¹⁹ Second, in Table A7 I replicates Table 1 while clustering the standard errors by year instead of by country, as the independent variables for H1 vary at the year level. The results are largely robust to both of these

¹⁹The misery index is commonly used to study the effect of economic conditions on U.S. foreign policy outcomes (e.g., Ostrom and Job, 1986; Foster, 2006). The misery index is moderately, negatively correlated (-0.324) with GDP growth during the period under study. GDP growth changes far more from year-to-year, whereas the misery index is much more slow-moving. Data on U.S. GDP are from Gleditsch (2002), while unemployment and inflation data are from the U.S. Bureau of Labor Statistics (Bureau of Labor Statistics, 2019a,b).

	Full Sample	Cold War	Post-CW
	(1)	(2)	(3)
	Milex (log)	Milex (log)	Milex (log)
Geostrategic location	-0.240*	-0.307**	-0.083
	(0.117)	(0.109)	(0.148)
Vulnerability	0.196*	0.286**	0.076
	(0.086)	(0.092)	(0.107)
MIDs	0.036**	0.039*	0.021
	(0.011)	(0.014)	(0.017)
GDP growth	0.012**	0.006	0.014***
	(0.004)	(0.006)	(0.002)
Entente	0.016	-0.029	1.509***
	(0.374)	(0.334)	(0.343)
GDP (log)	1.087***	1.078***	1.114***
	(0.074)	(0.099)	(0.066)
GDPpc (log)	0.147	0.127	0.308*
	(0.124)	(0.117)	(0.130)
Polity	-0.004	-0.001	-0.044
	(0.017)	(0.018)	(0.033)
Colonial power	0.535**	0.589**	
	(0.160)	(0.167)	
Region FE	Yes	Yes	Yes
Year FE	Yes	Yes	Yes
N	1336	821	515
R ²	0.934	0.933	0.947

Country-clustered standard errors in parentheses.

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

Table 2: Results for logarithmized military expenditures.

tests. The misery index has a positive and significant relationship with allied military spending, while GDP growth has no clear effect.

Third, in Table A6 I add additional control variables to the models from Table 1. For one, I add a linear, squared, and cubic time trend, which allows me to control for secular changes over time that might have shaped allied military expenditures in ways not captured by my control variables. Additionally, I control for the U.S.-adversary nuclear balance. I capture this using a dummy variable for “U.S. Nuclear Superiority,” which takes a value of 1 for years in which the state with the next-largest nuclear arsenal had an arsenal that was less than 25% the size of the United States’.²⁰ In practice, this dummy variable takes a value of 1 for the years 1950-1966, and 0 otherwise. A number of scholars have argued that the condition of nuclear parity undermined the credibility of the United States’ commitment to defend its allies by making a disarming counterforce strike less feasible, thus rendering the use of nuclear weapons less believable by increasing the risk of retaliation against U.S. cities (e.g., Howard, 1982). Thus one might expect that nuclear parity would also be conducive to allied burden-sharing. Indeed, it was around the end of U.S. nuclear dominance during the 1960s that U.S. policymakers began moving away from a heavy reliance on nuclear weapons for deterring the Soviet Union (“Massive Retaliation”) and toward a doctrine of “Flexible Response,” in which the United States would have a variety of options, including conventional defense and the use of tactical nuclear weapons (Freedman, 2003: chs. 6, 19).²¹ U.S. allies effectively feared that the emergence of nuclear parity, to which Flexible Response was in no small part a response, would decouple the fates of the United States and its allies, encouraging the Americans to abandon their allies if a Soviet invasion was not repelled using conventional forces and tactical nuclear weapons rather than face the destruction of its own cities (Sandler and Forbes, 1980). The results show that the original findings hold after including these additional control variables.

²⁰The results are not sensitive to the size of the threshold, and are robust to using a 10% or 50% threshold as well.

²¹Flexible Response became official codified NATO doctrine in December 1967. See “1967: Summary,” NATO Update, November 6, 2001, <https://www.nato.int/docu/update/60-69/1967e.htm>.

6 Case Studies

While the quantitative analysis allows me to provide macro-level evidence that supports my theory's expectations – namely, that patterns of alliance burden-sharing in American alliances are related to variation in the credibility and salience of U.S. threats of abandonment – they can only provide limited evidence of the theory's causal mechanisms. As such, I also present qualitative evidence from two cases of burden-sharing by U.S. allies: South Korea and the United Kingdom, both during the presidencies of Lyndon Johnson and Richard Nixon (1963-1974). I chose these cases because they allow me to exploit both variation across the two countries in terms of their geographic vulnerability to attack (H3), and because they offer within-case variation in the degree of U.S. resource constraints (H1), owing to the costs of the Vietnam War during the late 1960s and early 1970s.

In these cases, I would expect to see evidence that the United States put pressure on these allies to increase their burden-sharing contributions, and that the success of this pressure was related to the perceived credibility and salience of U.S. threats of abandonment (whether made explicitly or not). I would expect to see evidence that the credibility of U.S. threats of abandonment were taken more seriously during the later periods – especially from around 1970-1974 – owing to the rising costs of the Vietnam War. Additionally, I would expect U.S. burden-sharing leverage to have been greatest in the South Korean case, owing to its geographic vulnerability to attack. Britain, by contrast, was separated from the Communist bloc by both considerable distance and bodies of water.

6.1 South Korea

The U.S. alliance with the Republic of Korea (ROK) dated to 1953, when the two countries signed a Mutual Defense Treaty (MDT). Due to its land border with North Korea and its proximity both to China and to the Soviet Far East, South Korea was highly vulnerable to U.S. threats of abandonment. This rendered it susceptible to U.S. burden-sharing pressure.

During the Vietnam War, South Korea was the second largest contributor of foreign forces fighting on behalf of South Vietnam (after the United States). At the United States' request, South Korea first sent about two thousand noncombat troops in 1964, followed by a combat division in 1965. As the situation in Vietnam deteriorated in 1966, the United States requested and secured an additional division of South Korean forces for combat in Vietnam, in exchange for more economic and military assistance (Yong Lee, 2011: 416-419).

South Korea's motivation for participating was in large part to remain in the good graces of the United States and gain a bargaining chip with which it could extract U.S. concessions such as aid and the continued presence of U.S. troops on the Korean Peninsula. South Korean President Park Chung Hee saw involvement in Vietnam as a way of ingratiating SK with the United States, and indeed he gained a number of concessions. The United States defrayed the costs of stationing the South Korean forces in Vietnam and transporting them there, increased its military aid to South Korea, and promised not to withdraw troops from South Korea without prior consultation (Yong Lee, 2011: 409-413).

Indeed, American officials often threatened to withdraw U.S. troops from Korea in the absence of ROK participation in South Vietnam (Yong Lee, 2011: 410). In April 1968, for example, Johnson's Special Assistant Walt Rostow noted in a letter to Johnson that "We have told them many times that we have no plan to reduce the general level of our ground forces [in South Korea]—by implication as long as they have forces in Viet-Nam. Suggest you repeat that we have no plan to reduce our ground forces under present circumstances, but avoid going further than promising full consultation...on any later plan concerning ground forces."²² U.S. envoy Cyrus Vance similarly told Park during his early 1968 trip "that were they even to consider removing troops from South Vietnam we would pull ours out of Korea."²³

²²Telegram From the President's Special Assistant (Rostow) to President Johnson in Texas, April 13, 1968, *FRUS*, 1964-1968, Vol. 29 (Part 1), p. 412.

²³Notes of the President's Meeting With Cyrus R. Vance, February 15, 1968, *FRUS*, 1964-1968, Vol. 29 (Part 1), p. 378.

U.S. burden-sharing leverage only increased in the late 1960s and early 1970s. The costs of the Vietnam War, in tandem with the advent of nuclear parity with the Soviet Union and recognition of animosity between the Soviets and the Chinese, contributed to a shift in U.S. foreign policy that dramatically affected South Korea's calculations of U.S. credibility. This first of all took the form of a reduced U.S. overseas footprint, particularly in Asia. Second, the United States pursued détente with both the Soviet Union and China.

In the 1960s, U.S. domestic pressure had been largely a non-factor, with the U.S.-ROK alliance largely flying under the radar of domestic audiences (Lee and Heo, 2002: 82-83). As the costs of Vietnam mounted, however, the Nixon administration faced obstacles to maintaining U.S. commitments, both from the U.S. Congress and public and from a constrained pool of resources and manpower. Public opinion increasingly favored reduced U.S. involvement in international affairs and lower defense spending, while there were a series of Congressional resolutions and amendments during the late 1960s and early 1970s – most notably those of Senate Majority Leader Mike Mansfield – proposing reductions in the U.S. footprint abroad. The focus of these proposals was on burden-sharing and U.S. troop deployments in Europe, given the larger U.S. peacetime presence there, but they reflected an increasing preoccupation with burden-sharing and the costs of the United States' foreign commitments more generally. Indeed, many in Congress favored troop withdrawals from Korea.²⁴ Moreover, Congress forced the largest defense cuts since the 1950s, and in 1973 passed the War Powers Act that limited the President's ability to wage war without congressional approval (Lee and Heo, 2002: 87-89, 102-104).

In July 1969, Nixon articulated what became known as the Guam Doctrine, in which allies would be expected to carry more of the burden for their own defense. The goal of such an approach was two-fold: to rein in the costs of U.S. commitments and to reduce the probability of entanglement in future conflicts (Nam, 1986: 83). The hallmark of the Guam Doctrine was a re-

²⁴Study Prepared by the Office of International Security Affairs in the Department of Defense, "Policy Problems in Korea," undated, *FRUS*, 1969-1976, Vol. E-12, Doc. 274.

duced U.S. footprint. Nixon promised that the United States would assist its allies if they were attacked, but reserved the right to decide how much assistance would be forthcoming, as well as whether that assistance would take the form of direct involvement or simply financial and military assistance.

As part of the Guam Doctrine, Nixon announced in March 1970 that one of the American divisions deployed in South Korea would be withdrawn, without any prior consultation with ROK officials and despite his having told Park in August 1969 that he opposed troop withdrawals.²⁵ By 1972, the U.S. presence on the peninsula had fallen from around 60,000 personnel to around 40,000. Moreover, U.S. forces by-and-large pulled away from the Demilitarized Zone, thus allowing the United States to avoid immediate engagement if North Korea attacked (Kim, 2001: 55). Administration officials made frequent reference, both internally and to the South Koreans, to the Congressional retrenchment pressure they faced.²⁶ Secretary of Defense Melvin Laird similarly told Congress in 1971 that U.S. ground forces should not fight in another war in Asia, and internally pushed for further withdrawals (Hayes, 1991: 55-56; Cha, 1999: 111). Laird's successor James Schlesinger similarly pushed to make U.S. forces in South Korea a "mobile reserve" based outside of Korea that could be used elsewhere in the region (Nam, 1986: 83). As compensation for the reduced U.S. presence, the Nixon Administration agreed to give \$1.5 billion to assist South Korea's Five-Year Military Modernization Plan over 1971-1975 (Nam, 1986: 101).

In tandem with a reduced U.S. presence, the Nixon administration encouraged South Korean burden-sharing. Allied self-reliance was a hallmark of the Nixon Doctrine, with Nixon and other officials emphasizing that allies would be responsible for taking care of their own defense (Nam, 1986: 67, 78, 97). In a letter to President Park, Nixon wrote in May 1970 that "it is reasonable

²⁵Memorandum of Conversation, "Talks Between President Nixon and President Pak," August 21, 1969, *FRUS*, 1969-1976, Vol. 19 (Part 1), pp. 96-102.

²⁶See, for example: Telegram From the Department of State to the Embassy in Korea, "MAP and U.S. Force Levels," January 29, 1970, *FRUS*, 1969-1976, Vol. 19 (Part 1), pp. 121-122; Draft Minutes of a National Security Council Meeting, March 4, 1970, *FRUS*, 1969-1976, Vol. 19 (Part 1), pp. 142-147; Telegram From the Department of State to the Embassy in Korea, April 23, 1970, *FRUS*, 1969-1976, Vol. 19 (Part 1), pp. 150-152; Laird to Nixon, "Trip to Republic of Korea," July 19, 1971, *FRUS*, 1969-1976, Vol. 19 (Part 1), pp. 254-263.

to expect [allies] to assume more of the responsibility for their own defense and specifically to provide the bulk of the manpower required for that purpose.”²⁷ Similarly, in a marked and much-criticized semantic change from previous statements, the joint U.S.-ROK communique from the annual Security Consultative Conference (SCC) in July 1970 recommended that “the forces defending the Republic of Korea must remain alert and strong,” whereas previous SCC statements had emphasized that “Republic of Korea and American forces stationed in Korea must remain strong and alert” (Cha, 1999: 66). Nixon stressed that the United States would “place a greater defense burden on the Koreans” as the United States reduced its footprint, and used \$1.5 billion in aid between 1971-77 to assist South Korean military modernization (Lee and Heo, 2002: 99).

In response to both direct U.S. pressure and concerns about U.S. reliability South Korea took dramatic steps toward military self-reliance. Park built up a reserve force of 2.5 million soldiers, increased the South Korean defense budget from 3.9% of GDP in 1969 to over four percent of GDP during the first half of the 1970s, and pursued a five-year military modernization in 1971-75 (Nam, 1986: 101; Lee and Heo, 2002: 38-40, 100-101; Yong Lee, 2011: 421). Moreover, while the Nixon Administration used an injection of military assistance to help South Korea make up for the shortfall that would be left behind by a reduced U.S. presence, from the mid-1970s onward U.S. aid dramatically shrank as a percentage of South Korean military spending, down from to 99% in 1961, to 49.7% in 1971, to effectively zero percent in 1978 (Lee and Heo, 2002: 74, 100). Instead of grant military aid, the United States shifted more toward the use of foreign military sales (FMS), in which South Korea would receive credit for the purchase of American arms (McLaurin, 1988: 177-178).

6.2 United Kingdom

In the years following World War II, the United Kingdom was among the United States’ most powerful allies, with a large overseas military presence in Europe and Asia that the United States

²⁷Letter From President Nixon to Korean President Park, May 26, 1970, *FRUS*, 1969-1976, Vol. 19 (Part 1), pp. 152-154.

relied upon to deter Communist expansion – so much so that the alliance came to be described as a “special relationship.” Yet by the mid-1960s, Britain’s position had eroded considerably. While the United States initially responded by trying to prop up the British economy, ballooning British deficits soon made it clear that Britain’s ability to maintain its global role, specifically its military presence in the Middle East and East Asia, was rapidly diminishing. The United States tried to use its support for the British sterling pound as a lever to influence the UK’s continued presence abroad (Schwartz, 2003: 82).²⁸ These included a loan package of almost \$1 billion from the International Monetary Fund and United States in 1965, as well as a grant from the United States in 1966 (Schwartz, 2003: 82, 146).

Ultimately, these efforts were unsuccessful. Despite the protestations of U.S. officials in the Kennedy and Johnson administrations, the United Kingdom’s defense budget dropped precipitously in the 1960s, shrinking from 6.3% of GDP in 1960 to 4.6% in 1970.²⁹ As Britain prepared its Defence Review under the new Labour government led by Prime Minister Harold Wilson in 1965-66, it was in the midst of a prolonged economic crisis revolving around its balance of payments deficit.³⁰ As such, fiscal realities soon produced deep defense cuts and considerable debate within the United Kingdom over the merits of its foreign commitments (Priest, 2006: 123-126).³¹

²⁸Memorandum From the President’s Special Assistant for National Security Affairs (Bundy) to President Johnson, “Report from George Ball,” September 10, 1965, *FRUS*, 1964-1968, Vol. 12, pp. 507-509; Memorandum Prepared by the Executive Secretary of the Department of State (Read), “Visit of Prime Minister Wilson,” undated [December 1965], *FRUS*, 1964-1968, Vol. 12, pp. 510-512; Memorandum From the Counselor of the Department of State and Chairman of the Policy Planning Council (Rostow) to President Johnson, “UK East of Suez Proposals,” January 20, 1966, *FRUS*, 1964-1968, Vol. 12, pp. 512-514; Memorandum of Conversation, “British Defense Review,” January 22, 1966, *FRUS*, 1964-1968, Vol. 12, pp. 514-515; Memorandum of Conversation, “UK Defense Review–Principal UK Presentations and U.S. Responses,” January 27, 1966, *FRUS*, 1964-1968, Vol. 12, pp. 516-528; Memorandum From Francis M. Bator of the National Security Council Staff to President Johnson, “Harold Wilson’s Message of this Morning on the U.K. Defense Review,” February 16, 1966, *FRUS*, 1964-1968, Vol. 12, p. 529; Telegram From President Johnson to Prime Minister Wilson, February 25, 1966, *FRUS*, 1964-1968, Vol. 12, p. 530.

²⁹Kohler to Rusk, “U.K.’s Nuclear Role: A Program of Action,” May 24, 1962, *FRUS*, 1961-1963, Vol. 13, pp. 1073-1075. Source for military spending as a percentage of GDP is the Stockholm Institute for Peace Research Institute (SIPRI) Military Expenditures Database, http://www.sipri.org/research/armaments/milex/milex_database (accessed April 19, 2016).

³⁰A comprehensive account of the crises surrounding the balance of payments and price of sterling can be found in O’Hara (2003).

³¹Memorandum of Conversation, “Defense Problems,” December 7, 1964, *FRUS*, 1964-1968, Vol. 12, pp. 475-479; Memorandum of Conversation, “British Defense Review,” May 14, 1965, *FRUS*, 1964-1968, Vol. 12, pp. 488-489;

As a result, at the end of 1967 Britain devalued the pound and then in January 1968 announced that it would be accelerating the withdrawal of the 90,000 forces it had stationed “east of Suez” in the Middle East and Asia, essentially leaving the defense of these areas to the United States by March 1971 (Schwartz, 2003: 191-199; Priest, 2006: 141-142). This represented an acceleration of its previous timetable to withdraw from east of Suez by the mid-1970s. Despite U.S. urging, the decision was not reversed.

Indeed, U.S. pressure during the early and mid-1960s was strikingly light. The American response to reductions in British burden-sharing was not to threaten abandonment, but rather to bail Britain out, and U.S. officials refrained from making American support conditional upon the British presence in Asia or on British assistance in the Vietnam War (Dumbrell, 1996: 219-220, 222; Schwartz, 2003: 62-63, 82; Priest, 2006: 123-124; Hughes and Robb, 2013: 871).³² In spite of pressure from some officials – including Secretary of Defense Robert McNamara and National Security Adviser McGeorge Bundy – Johnson hesitated to explicitly make the massive multilateral bailout package Britain received a *quid pro quo* for Britain’s continued presence east of Suez (Gill, 2014: 123-124, 134-136, 156, 158). Again during 1967, as the British were leaning toward planning withdrawal from east of Suez by the mid-1970s, the Americans only asked Britain to “avoid taking, or in any event making public in any way, basic decisions at this point on withdrawal by the mid-1970’s,” without bringing any hard pressure to bear.³³ Even when Britain announced its devaluation of the pound in late 1967, followed by the January 1968 announcement that its retrenchment east of Suez would be accelerated, American officials expressed only disappointment with the British decision (Dumbrell, 1996: 222-223, 227-230).³⁴ Johnson wrote to Wilson that

Memorandum of Conversation, “U.K. Defense Review,” June 30, 1965, *FRUS*, 1964-1968, Vol. 12, pp. 493-496; Message From Prime Minister Wilson to President Johnson, July 29, 1965, *FRUS*, 1964-1968, Vol. 12, pp. 499-500.

³²Telegram From Prime Minister Wilson to President Johnson, July 13, 1967, *FRUS*, 1964-1968, Vol. 12, pp. 575-578; Memorandum of Conversation, “British Defense White Paper,” July 17, 1967, *FRUS*, 1964-1968, Vol. 12, p. 579; Briefing Memorandum From the President’s Deputy Special Assistant for National Security Affairs (Bator) to President Johnson, “Your Meeting This Afternoon at 6:30 on German Offset and U.S. and UK Forces in Germany,” August 23, 1966, *FRUS*, 1964-1968, Vol. 13, pp. 453-456.

³³Memorandum From Secretary of State Rusk to Foreign Secretary Brown, April 21, 1967, *FRUS*, 1964-1968, Vol. 12, p. 568.

³⁴Telegram From the Embassy in the United Kingdom to the Department of State, “Healey views on UK defense

“Although the decision must, of course, be your own, I can only wonder if you and all of your associates have taken fully into account the direct and indirect consequences....I urge you and your colleagues once more to review the alternatives before you take these irrevocable steps.”³⁵

U.S. policymakers recognized that there was little the United States could do, aside from further bailouts, to keep Britain from cutting spending and withdrawing from east of Suez. State Department officials acknowledged in 1967 that the British “will do what they will do” and that there was “no real prospect that the process [of retrenchment] can or will be halted” (O’Hara, 2003: 275). Treasury Secretary Henry Fowler came to a similar conclusion in June 1966, pointing out that the United States essentially faced the choice of leaving Britain to its own devices – which would almost certainly mean a devaluation of the pound and further cuts – and additional “bail money.”³⁶

However, these dynamics shifted in the late 1960s and early 1970s as the costs of fighting the war in Vietnam led many in the U.S. Congress and public to increasingly favor a reduced U.S. overseas presence in Europe. This most notably took the form of a series of resolutions and amendments during the years 1966-74 sponsored by Senator Mike Mansfield, proposing massive reductions in U.S. troops stationed in Europe (Williams, 1985: 142, 162, 170; Kaplan, 1999: 138; Zimmermann, 2009: 16). In a May 1970 memo to Kissinger, senior NSC staffer Helmut Sonnenfeldt pointed to British concerns about Vietnam, writing that Defence Minister Denis Healey “is deeply disturbed by what he feels has happened to our *elan*; he is quite persuaded...that we will be unable if not unwilling to maintain our force levels in Europe and he sees our commitments as eroding.” Sonnenfeldt added that Healey believed “the longer we stay and the more we bleed [in Vietnam] the stronger the impulse toward isolationism and the danger of domestic upheaval.”³⁷

policy,” January 9, 1968, *FRUS*, 1964-1968, Vol. 12, pp. 599-602; Memorandum of Conversation, “British Budget and Defense Cuts,” January 11, 1968, *FRUS*, 1964-1968, Vol. 12, pp. 603-608; Diary Entry by the Ambassador to the United Kingdom (Bruce), February 8, 1968, *FRUS*, 1964-1968, Vol. 12, pp. 615-616.

³⁵Message From President Johnson to Prime Minister Wilson, January 11, 1968, *FRUS*, 1964-1968, Vol. 12, p. 609.

³⁶Memorandum From Secretary of the Treasury Fowler to President Johnson, “The Sterling Crisis and the U.S. Bargaining Position vis-a-vis the U.K.,” July 18, 1966, *FRUS*, 1964-1968, Vol. 12, p. 543.

³⁷Helmut Sonnenfeldt to Henry Kissinger, “Impressions of European Attitudes, May 1970,” May 22, 1970, Folder

During the final months of the Johnson presidency and throughout the Nixon presidency, American policymakers carefully leveraged the possibility of withdrawal in order to encourage increased defense effort by Britain (and NATO more generally). During a North Atlantic Council meeting in November 1968, Rusk used the threat of domestic “isolationism” as a means of pressuring allies to increase their efforts³⁸, while Kissinger similarly argued in a meeting of the Defense Program Review Committee Meeting in August 1971 that the Europeans needed “to believe that the situation is serious,” adding that “A Mansfield resolution will surely pass if they don’t make a bigger effort.”³⁹ In his February 1970 Foreign Policy Report to Congress, Nixon argued that Europe needed to make more of an effort for its own defense. Secretary of State Rogers told British Foreign Minister Alec Douglas-Home that because of Congress, “we have a serious problem and we can use all the help we can get in solving it.”⁴⁰ Nixon explicitly attempted to link the staying power of the U.S. commitment to allied burden-sharing efforts (Nichter, 2015: 11-12, 112-113, 138). Speaking with British Cabinet Secretary Burke Trend, Nixon emphasized that “we would not give up our defense of or our commitments to our allies,” but added that “The coming election period would not be good for the Alliance.”⁴¹

The British received the message, and recognized that the Nixon Administration faced constraints limiting its freedom of action due to its balance of payments deficits and the costs of Vietnam (Hynes, 2009: 31). In June 1970 Britain’s Under-Secretary at the Foreign and Commonwealth Office argued in favor of increasing European defense efforts in order to “reduc[e] US domestic pressure for withdrawals” and “mitigat[e] the impact of such withdrawals as occur” (Hynes, 2009:

“Europe General [1 of 2],” National Security Council Files, Country Files, Box 667, RMNL.

³⁸Memorandum of Conversation, “General Tour d’Horizon (1 of 2),” November 14, 1968, *FRUS*, 1964-1968, Vol. 13, p. 788.

³⁹Minutes of a Defense Program Review Committee Meeting, “NATO Force Improvements,” August 4, 1971, *FRUS*, 1969-1976, Vol. 41, p. 301

⁴⁰Telegram from U.S. embassy (London) to Secretary Rogers, “Sec Visit: Conversation with Foreign Secretary: NATO, US Troops and A.D. 70,” July 1970, Folder “United Kingdom, Vol. III [2 of 4],” National Security Council Files, Country Files, Box 727, RMNL.

⁴¹Memorandum for the President’s File by the President’s Assistant for National Security Affairs (Kissinger), “The President’s Meeting with Sir Burke Trend, British Ambassador Cromer, and Henry A. Kissinger,” July 28, 1972, *FRUS*, 1969-1976, Vol. 41, p. 1053.

14-15). Britain's new Prime Minister Edward Heath similarly argued in March 1971 that "we Europeans must do more for our own defence" in order to satiate the United States (Hynes, 2009: 27). The British realized that they needed to acquiesce to at least some U.S. demands in order to avoid an American withdrawal from Europe forced by Congress (Scott, 2011: 147, 153).⁴²

As a result, the downward trend in British defense spending during the late 1960s reversed in 1970-72.⁴³ Nevertheless, they focused their efforts on improving their own forces rather than making contributions to NATO infrastructure, much to the chagrin of the other NATO members (including the FRG) that sought to pool their resources.⁴⁴ More generally, European defense budgets increased during the early 1970s.⁴⁵

7 Conclusion

This article presented a theory of coercive burden-sharing in asymmetric alliances. I argued that allies are more likely to increase their defense spending when their patron can more credibly threaten to abandon them. Specifically, allies are likely to contribute to the alliance when their patron faces constraints on its resources that make it difficult to sustain its foreign commitments, while allies are less likely to burden-share when they are more strategically valuable to their patron, as this reduces its ability to threaten abandonment. Moreover, the patron's threats of abandonment are

⁴²Telegram From the Mission to the North Atlantic Treaty Organization to the Department of State, "Alliance Defense for the 70's," December 3, 1970, *FRUS*, 1969-1976, Vol. 41, pp. 236-240; Memorandum From Secretary of State Rogers to President Nixon, "NATO Ministerial Meeting," December 5, 1970, *FRUS*, 1969-1976, Vol. 41, pp. 240-241; Telegram From the Department of State to All North Atlantic Treaty Organization Capitals, "NATO Ministerial Meeting: An Overview," December 11, 1971, *FRUS*, 1969-1976, Vol. 41, pp. 334-337.

⁴³Odeen to Kissinger, "UK Defense Expenditures," December 18, 1971, Folder "United Kingdom, Vol. VII [2 of 4]," NSC Files, Country Files, Box 729, RMNL.

⁴⁴Telegram from U.S. mission to NATO to Secretary Rogers, "Eurogroup Defense Ministers Meeting," November 1970, Folder "United Kingdom, Vol. IV [1 of 3]," National Security Council Files, Country Files, Box 727, RMNL; Telegram from U.S. embassy (London) to Secretary Rogers, "UK and NATO Burden Sharing," November 1970, Folder "United Kingdom, Vol. IV [1 of 3]," National Security Council Files, Country Files, Box 727, RMNL; Telegram from U.S. embassy (Bonn) to Secretary Rogers, "Euro Group Defense Ministers Meeting/FRG Proposal," November 1970, Folder "United Kingdom, Vol. IV [1 of 3]," National Security Council Files, Country Files, Box 727, RMNL; Kissinger to Laird and Rogers, "My Talk with Lord Carrington, November 23, 1970," November 23, 1970, Folder "United Kingdom, Vol. IV [1 of 3]," National Security Council Files, Country Files, Box 727, RMNL.

⁴⁵State Department Briefing Paper, "President Nixon's Visit to Brussels," June 1974, Folder "NAC Summit - Brussels The President," NSC Files, HAK Office Files, Country Files, Box 54, RMNL.

more salient to the extent that allies have a high perception of threat, which renders them in greater need of protection.

I tested these these claims using data on the military expenditures of U.S. allies between 1950 and 2012. My findings show that U.S. allies vulnerable to attack spend more on defense, while strategically valuable allies near key maritime chokepoints spend less. Additionally, allies are more likely to increase their defense spending when the United States faces resource constraints and pressure to retrench in the wake of costly foreign wars.

My findings suggest numerous avenues for future research. For one, although this study focuses primarily on the effectiveness of negative inducements – and in particular threats of abandonment – as means of exerting burden-sharing pressure, further research could investigate the effectiveness of other forms of persuasion. These include but are not limited to economic coercion, promises of rewards and positive inducements, and efforts to “name and shame” states that under-contribute to their alliances. Additionally, more research could be done on the conditions under which burden-sharing is a salient political issue to domestic actors, as well as how much burden-sharing is “enough” to deter major calls for putting pressure on allies. Work on political psychology, for example, could provide micro-foundations to help understand demands for “fairness” (Kertzer and Rathbun, 2015).⁴⁶

Finally, my findings have implications for U.S. foreign policy. The Trump administration has made burden-sharing a major priority, and to this end U.S. officials – not least of all Trump himself – have pressed allies to contribute more to the common defense, using implicit and often explicit threats of abandonment. Indeed, there is some evidence that this has been effective, with NATO allies agreeing to increase their defense spending by an average of 4.3% in 2017.⁴⁷ Nevertheless, the findings presented here suggest that the effectiveness of U.S. pressure is likely to be shaped by both allies’ perception of threat and by the extent to which the United States faces resource

⁴⁶I thank Josh Kertzer for making this suggestion.

⁴⁷Michael Birnbaum and Thomas Gibbons-Neff, “NATO Allies Boost Defense Spending in the Wake of Trump Criticism,” *Washington Post*, June 28, 2017.

constraints.

Relatedly, this article suggests that expanding an alliance's geographic frontiers can undermine burden-sharing if it insulates larger allies – whose contributions are likely to be the most decisive in shaping the alliance's overall capabilities – by creating buffers between them and the alliance's rivals. In this way, the argument presented here suggests that expanding NATO after the Cold War may have reduced the incentives of larger allies such as Germany, which during the Cold War had directly bordered the Warsaw Pact, to invest in its military capabilities.

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