Is European NATO really free-riding?

Patterns of material and non-material burden-

sharing after the Cold War

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Abstract

Does European NATO free-ride on America? This article uses a mixed-methods approach to explore developments after the Cold War. I investigate both "material" measures, such as military expenditure and troop numbers, and a "non-material" indicator that draws on survey data of the public's willingness to fight for their country. Results and conclusions are not univocal. On the one hand, European NATO members have generally reduced their military spending (relative to GDP), abolished conscription and downsized their military forces. Their citizens' self-reported willingness to fight has also been quite low after the Cold War, in particular in states that host US military bases. On the other hand, some of these developments can surely be explained by a decrease in threat perceptions in Europe. Trends changed markedly after Russia's 2014 annexation of Crimea, which moved many allies — in particular new NATO member states — to increase their defence efforts.

<u>Keywords</u>: free-riding; burden-sharing; NATO; military expenditure; willingness to fight; US troops

Introduction

Does European NATO free-ride on the United States? That is the question explored herein. Whether or not allies free-ride – that is to say, whether they rely "on the efforts of others to provide security" (Walt 1987, p. 30) – is also a question arguably much less asked than answered by incumbent US President Donald Trump. He has repeatedly lambasted Washington's allies for their alleged lack of defence efforts, even threatening to withdraw US support of the all-important Article 5 of the North Atlantic Treaty (Birnbaum and Rucker 2018, New York Times 2017). Such admonitions, to be sure, are nothing new: allegations of freeriding have been a relatively consistent feature of intra-NATO discussions at least since the 1960s (Ringsmose 2010, p. 319, Sandler and Hartley 2001, pp. 871-2, Tonelson 2000). This is not surprising as the traditional perspective on alliance burden-sharing – the public-goods or collective-action theory of alliances – informed us long ago that free-riding or burden-shifting incentives are a natural ingredient in alliance politics (Olson and Zeckhauser 1966). Empirical tests of that theory, which overwhelmingly used defence budgets as a share of gross domestic product (GDP) as a proxy for burden-sharing, produced mixed results, though, indicating that NATO burden-sharing during the Cold War had varied over time as well as among countries (Khanna and Sandler 1997, Olson and Zeckhauser 1966, Oneal 1990, Sandler and Shimizu 2014).

Analyses of burden-sharing in the post-Cold War period has also pointed to such variation in the defence efforts undertaken by NATO allies. However, this recent literature has applied additional dimensions in its approach, arguing that the post-Cold War evolution and expansion of NATO concepts, missions and membership have substantially increased the complexity of the burden-sharing phenomenon (Becker 2017, Becker and Malesky 2017, Cimbala and Forster 2005, Hallams and Scheer 2012, Ivanov 2011, Kunertova 2017, Massie 2016a, Ringsmose 2010, Sperling and Webber 2009, 2012, Zyla 2015, 2016ab). These studies

emphasise that alliance policies and operations involve the sharing of a broad range of different risks and responsibilities that cannot be captured solely by the traditional pecuniary proxies of burden-sharing. They underline instead the need for scholars to provide "a synthesis of the tangible and intangible expenses of collective defense and collective intervention" (Cimbala and Forster 2005, p. 6) and "to take account of the many disparate factors that determine the level of a nation's defence effort and ability to contribute" (Zyla 2015, p. 17).

This article draws on both traditional (i.e. the collective-action model) and new (i.e. the risk- and responsibility-sharing school) perspectives and uses an eclectic or "mixed-methods" approach to investigate the matters of NATO burden-sharing and free-riding for the Cold War period (Zyla 2017, 2016b, p. 418). The study explores the question: *Does European NATO free-ride on the United States?* In order to provide useful answers, moreover, the study examines empirically whether any eventual free-riding is of a material (i.e. defence spending and number of troops) or a non-material (i.e. public norms on defence and war) nature – or both. Furthermore, I also investigate whether any burden-sharing variance depends on the presence of US troops, by way of the deterrent mechanism they offer. These issues are examined through a number of sub-analyses of temporal trends and bivariate relationships.

My study shows that judgements on whether or not free-riding is prevalent must be made with caution. Conclusions depend upon what measure one uses; they depend upon the benchmark employed when one makes assessments; and they depend upon the weight one places on threat perceptions, which vary among countries. On the one hand, European NATO members gradually reduced their military spending (relative to GDP) and decreased troop numbers from the end of the Cold War until 2014; the vast majority also abolished mandatory conscription in that period; and the citizens of these states – in particular those that host US military bases – express a relatively low willingness to fight for their country. On the other hand, this picture isn't univocal. First, this seeming "free-riding", both in its material and non-

material version, may also be explained by the sharp decrease in threat perceptions in Europe after the Cold War (Fettweis 2011). Second, Russia's 2014 invasion and annexation of the Crimean Peninsula, and its intervention into the civil war in eastern Ukraine, moved many allies to increase their military budgets substantially. This has particularly been the case for NATO's more recent members, which are generally more concerned about upholding NATO's traditional focus on territorial defence. This pattern largely corresponds with studies of NATO's out-of-area operations, where "Old" (or generally more "Europeanist") NATO countries have been less risk-acceptant than "New" (or generally more "Atlanticist") ones (Ivanov 2011, Ringsmose 2010, Sperling and Webber 2009). Considering these contingent conclusions, and the complexity of the burden-sharing phenomenon, we can surely expect, therefore, that the contentious debate about NATO burden-sharing and free-riding will continue.

Alliance burden-sharing and free-riding

The debate about burden-sharing and free-riding in NATO figured prominently in the 2016 US presidential election campaign. The Republican frontrunner and later President Donald Trump was particularly adamant in his assertion that "NATO is costing us a fortune and (...) we're not treated fair" (Kessler 2016). The message was consistently repeated: "our allies are not paying their fair share"; they "must contribute toward their financial, political, and human costs (...) of our tremendous security burden"; if they do not do so, "the U.S. must be prepared to let these countries defend themselves" (New York Times 2016). Startling to the US's partners, in a meeting with NATO allies in Brussels in May 2017, Trump, by now President of the United States, refused to lend his unequivocal endorsement to the North Altantic Treaty's fundamental Article 5 (New York Times 2017), a veiled threat that, according to some sources, was repeated at the July 2018 NATO Summit (Birnbaum and Rucker 2018).

Complaints about free-riding or burden-shifting are not in any way unprecedented: The US's alliance relationships, of which NATO is the linchpin, have for decades been affected by such debates. "Free riders aggravate me", declared former President Barack Obama, who also warned the United Kingdom that their "special relationship" with the US would end unless they upped their defence spending (Goldberg 2016). A generation and a half earlier, whether intended or not by the president at the time, the principle of burden-sharing even constituted the core content of the 1969 "Nixon Doctrine" (Kimball 2006).

The public-goods model of alliances

Richard Nixon's admonitions were preceded four years earlier by Mancur Olson's (1965) celebrated book on collective action. He claimed that public goods, of which the provision of security in alliances is one prominent example, are often under-supplied courtesy of prevailing incentives to free-ride. This is especially true for larger groups where members are of roughly equal size (Olson 1965, p. 34). Effective public-goods provision is more likely in small-*N* groups, in particular if a group is asymmetric with respect to the size of members.

Military alliances are always of a (relatively) small-*N* size, and they are often asymmetric. Free-riding proclivities might therefore be dampened, but they are still an issue. In a subsequent, co-authored article focusing on NATO, Olson, together with Richard Zeckhauser, laid out the economic theory of alliances or collective-action model (Olson and Zeckhauser 1966). This spurred numerous other studies discussing and testing the prevalence of burden-sharing within NATO. The main concept itself – burden-sharing – was overwhelmingly taken to mean the shouldering of defence costs, with military budgets as a share of gross domestic product (GDP) representing the most commonly-employed proxy (Gates and Terasawa 2003, Olson and Zeckhauser 1966, Oneal 1990).

The overall empirical evidence did point to the existence of a somewhat unequal burden-sharing (Olson and Zeckhauser 1966, Oneal 1990). Still, many investigations highlighted the *periodicity* of this trait; they concluded that the introduction in 1967 of NATO's "flexible-response" doctrine – under which a more tailored mix of deterrence and war-fighting capabilities substituted for a more starkly nuclear weapons-focused policy – gave rise to less free-riding (Khanna and Sandler 1997, Sandler and Forbes 1980, Sandler and Shimizu 2014). This was explained by the joint product model of alliances, which contended that the new strategy transformed the security goods provided into less public and more private and therefore excludable ones.

NATO's reorientation after the Cold War and its impact on the burden-sharing debate

The end of the Cold War and, from 2001, the "War on Terror" provided new burden-sharing challenges for the alliance. At the July 1990 London Summit, the traditional, fundamental mission of collective defence of member states' territories was de-emphasised (Zyla 2015, p. 32). In its stead came crisis management, conflict prevention, "out-of-area" operations and a broader conception of security. The Strategic Concept agreed upon in November 1991, though somewhat lacking in specifics, confirmed the redirection of the organisation's focus in the post-Cold War era (Sperling and Webber 2009, pp. 492-3).

These developments signalled that the alliance would henceforth highlight the production of goods – such as out-of-area peace and stability operations – that, from NATO members' perspective, were more proper *public* ones (Lepgold 1998, Ringsmose 2010, pp. 319-20); that is, non-rivalrous and nonexcludable goods that tend to be under-supplied due to the free-riding incentives they bring (Ringsmose 2010, p. 329). This coincided with the enlargement of NATO. In successive waves of admissions, the organisation was expanded when membership was formally granted, first, to the Czech Republic, Hungary and Poland

(1999); then to Estonia, Latvia, Lithuania, Bulgaria, Romania, Slovakia and Slovenia (2004); and subsequently to Albania and Croatia (2009) (with Montenegro joining in 2017).

New members, new strategic concepts and a new direction for NATO also coincided with new ideas of what alliance burden-sharing entailed. Starting in the mid-1990s, the relative weight given to *output* measures, as compared to *input* measures such as defence spending as a share of GDP, increased in NATO's burden-sharing debates (Ringsmose 2010, p. 321). This meant that purely pecuniary measures – of a "one-size-fits-all" nature – were, in relative terms, downplayed, as they did "not indicate the actual improvement of collective defence or qualitative differences between allies' shares, e.g. effectiveness of spending, risk sharing, superiorly trained and equipped forces" (Kunertova 2017, p. 554). The NATO Summits in Istanbul in 2004 and Riga in 2006 formalised this new addition to burden-sharing measurement, which was, of course, especially welcomed by several of NATO's low-spending members (Ringsmose 2010, p. 328).

This did not imply that input measures were wholly discarded. In particular, the decadeold guideline urging all NATO members to devote at least 2% of their GDP to defence purposes was made into a centerpiece of the September 2014 Wales Summit. There, the few allies that had already met this pecuniary target pledged to continue doing so; whereas those that had yet to reach it committed to "halt any decline in defence expenditure" and "aim to move towards the 2% guideline within a decade" (NATO 2014).

Recent scholarship on alliance burden-sharing and free-riding

In other words, post-Cold War burden-sharing in NATO involved a more complex mix of input and output measures, in large part based on an underlying logic of national specialisation and comparative advantage (Ivanov 2011, pp. 24-5). The resulting complexity was duly reflected by a new wave of literature that centered on the *sharing of risks and responsibilities* in alliance

policies and operations (Becker 2017, Becker and Malesky 2017, Cimbala and Forster 2005, Hallams and Scheer 2012, Ivanov 2011, Kunertova 2017, Massie 2016a, Ringsmose 2010, Sperling and Webber 2009, 2012, Zyla 2015, 2016ab). These studies proceeded to move beyond the established public-goods or economic theories of burden-sharing and to expand the variables under scrutiny.

From both an alliance perspective and in terms of empirical research, the International Security Assistance Force (ISAF) operation in Afghanistan, which commenced in December 2001, constituted the prime illustration of this new era – and of the new, more complex burdensharing perceptions. More than 20 states participated in that mission (Cimbala and Forster 2017, p. 128), contributing variously with financial reconstruction, aid and budgetary support for the Afghan government and with troops for peacekeeping and combat missions (Sperling and Webber 2009, 2012, Zyla 2015). These contributions, as well as those given by allies to NATO operations in Kosovo, Albania and Macedonia and elsewhere, often signify the absence of free-riding (Sperling and Webber 2009). Some of these commitments, moreover, entail significant hazards for the contributing state – hazards that are also hard to quantify. Most obviously, soldiers face the risk of death, which in turn can influence public opinion; troops sent into "harm's way" thereby pose a political risk for the home government (Cimbala and Forster 2005, p. 1). In the case of Afghanistan, risk acceptance (and casualty rates) has varied among NATO member states. When measured relative to the number of national troops deployed, for example, "the Canadian and Danish armed forces have experienced the highest level of casualties, while American, British, Estonian and Hungarian armed forces meet or exceed the NATO average" (Sperling and Webber 2009, pp. 508-9). Other states, such as Germany, France, Italy and Spain, have proven less willing to commit their troops to high-risk areas of Afghanistan (Ivanov 2011, p. 33, Ringsmose 2010, p. 328).

Troop casualties represent one of a handful of intangible or non-material burdensharing measures upon which recent literature has focused. Another, related such measure of the level of risk acceptance are national caveats on the use of forces abroad (Fermann 2018, Sperling and Webber 2009, p. 507-9). These caveats, or "national reservations on the use of force for contingents assigned to a coalition force" (Frost-Nielsen 2017, p. 373), commonly place restrictions on the movement of forces and their level of engagement with the enemy (Ringsmose 2010, p. 328). The variation in the number and scope of caveats among allies naturally resembles the distribution of combat casualties in Afghanistan. The Afghan mission has thus, on the one hand, shown that some NATO allies – in particular some of the older, "Europeanist" member states (such as France, Belgium, Spain and Portugal) – do "free-ride" both in material and non-material terms (Ivanov 2011, p. 29, Siegel 2009). On the other hand, a significant portion of alliance members have proven to be far more perseverant and willing to contribute their "fair share" than the collective-goods theory would have predicted (Ringsmose 2010, p. 320). This is generally the case for the so-called "Atlanticist" member states (such as the Netherlands, the United Kingdom, Denmark and many of the new member states in Central and Eastern Europe) and "Article 5ers" (such as Poland, the Baltic states and Norway) (Becker and Malesky 2017, Ringsmose 2010, p. 333).

It is the fairly widespread *absence* of free-riding that the older economic or collective-goods theory of alliances cannot adequately explain. Some scholars have recently outlined a supplemental club-goods framework that, *inter alia*, highlights how out-of-area operations, which produces eminently pure public goods that should encourage extensive free-riding, are intimately linked to concerns about more traditional, excludable alliance goods, notably territorial defence (Ivanov 2011, Ringsmose 2010). It is the concern, among many member states, that credible collective defence at home partly hinges on member states' willingness to participate in out-of-area operations that counteracts much of the free-riding incentives

associated with the latter. This is particularly so for those allies whose perceived dependence on the alliance leader is the greatest, which helps account for some of the intra-alliance differences in burden-sharing.

In other words, more dependent member states need to factor in the long-term costs of reneging on their own current commitments to the alliance, in particular the risk of abandonment (Palmer 1990, Snyder 1984). Dynamics of reciprocity and mutuality are also explicitly spelled out in the North Atlantic Treaty, especially in Articles 3 and 5 (NATO 1949). Correspondingly, the Treaty remains somewhat vague on required commitments. This grants the United States some formal latitude with respect to its obligations, thereby accentuating the risk of future abandonment (Beckley 2015, p. 18). In theory, this should act as a powerful disincentive to free-ride, even in out-of-area operations. The fear of abandonment, moreover, might be especially relevant under conditions of unipolarity; for, as "the unipole has less need for allies, its partners have more reasons to doubt any pledges it does make" (Walt 2009, p. 90). On the other hand, the opposite case can also be made: that is, the disappearance of the Soviet threat, and of bipolarity, reduced threat levels all around in Europe. As Fettweis (2011) reasons, reduced defence-spending among European countries in the post-Cold War period does not necessarily imply that they are free-riding on US hegemony; instead, they are pursuing strategic restraint by and large as "a conscious response to declining threat" (Fettweis 2011, p. 316).

Forward-deployed US troops and their effects on burden-sharing and free-riding

Alliance decisions often involve a trade-off between autonomy and security, where the weaker state is able to choose from a bundle or portfolio of available policies in order to reciprocate the larger state's offer of protection (Lake 2009, Morgan and Palmer 2003, Morrow 1991). US overseas military bases and forward-deployed troops provide one prominent such example. On

the one hand, these add a further level of deterrence and security credibility that an alliance or defence pact in itself cannot offer. The long-term presence of US troops serves, in many cases, as a "tripwire" – or a "plate-glass window" (Schelling 1960[1980], p. 119) – powerfully signalling to any adversaries of the ally in question that the latter's security is intimately linked to the security interests of the United States (Calder 2007, p. 2019, Machain and Morgan 2013, p. 104, Schelling 1960[1980], Ch. 8, 1966[2008], p. 99). A significant military attack on a major host would inevitably also harm the United States and its troops directly. It will thereby more or less automatically draw Washington into the conflict. This should boost the *ex ante* credibility of US alliance commitments considerably. But it also strengthens the host's confidence that the United States cannot easily abandon it. The scope for free-riding therefore increases with the physical presence of US soldiers (Jakobsen and Jakobsen 2018, Machain and Morgan 2013).

On the other hand, the forward-deployment of troops is normally not a unilateral concession by the United States; the host state does reciprocate, often in both tangible and intangible ways. As for tangible reciprocation, and although many base hosts have historically demanded substantial "rents" for allowing a US military presence on their soil (Cooley 2008, p. 46, Cooley and Nexon 2013, p. 1040), most richer allies make significant financial contributions to basing costs (Calder 2007, pp. 188ff.). By one estimate, for example, Japan has been paying over three-quarters of these; Italy 60%; and Spain 45% (Cooley 2008, pp. 48-9). Intangible concessions can be even more important. By giving the United States basing rights, the host state inevitably surrenders part of its own sovereignty and freedom of action. Moreover, to the extent that a host state is judged to be vital to the United States's geostrategic goals, playing host should in itself be considered a vital concession (Morrow 1991, p. 905, 916).

The role of the public in national and collective defence

Burden-sharing involves the sharing of a variety of responsibilities and risks, including intangible ones. Furthermore, several recent studies have analysed and explained this complexity of burden-sharing outcomes using non-material *independent* variables (Becker and Malesky 2017, Massie 2016ab, Ringsmose and Børgesen 2011, Zyla 2015). Specifically, the role and interplay of the preferences of elites and the public are highlighted as a major determinant of allies' willingness to share in the burden of transforming NATO and conduct out-of-area operations. And although elites can certainly help shape the preferences of the public, the reverse is also often the case (Ringsmose and Børgesen 2011, Zyla 2015).

A nation's and a public's perceptions of matters of strategy and defence are thus potentially vital for burden-sharing. Such perceptions are not static, though, as the strategic narratives underpinning them sometimes change (Massie 2016a, Ringsmose and Børgesen 2011). These narratives also impact the public's interpretation of the link between alliance operations and national defence. For example, in a multi-country study of people's willingness to fight for their own nation, Puranen (2014) argues that the high and enduring such willingness exhibited by citizens of the Nordic countries is likely due to them having "traversed a profound transformation in the meaning of fighting for one's country along with a changing role of the military over recent decades", with military service now being "considered as a commitment to international aid, democracy promotion, and peacekeeping" (Puranen 2014, p. 271).

Hence, burden-sharing also rests on intangible factors, one important example of which is the public's opinion on war and self-defence – whether what one is defending is one's own country, an ally or the alliance as such. The role of the public in matters of defence and war has been highlighted by the International Relations literature for decades and even centuries. The importance of intangibles – of a people's morale or *will* – in armed conflicts is, for example, a consistent element in Carl von Clausewitz's (2007 [1832]) *On war*. In another

classic, *Politics among nations*, Hans J. Morgenthau (2006 [1948], pp. 140-52) was equally insistent that "national character and "national morale" are key factors supporting national power and hence deterrence and prospects of succeeding in war.

National morale, or willingness to fight for one's group, will no doubt vary among nations. It may also vary over time. For example, many hold that recent times have witnessed the spread and institutionalisation of a "culture of peace" in at least some of the world's regions (De Rivera 2004). Stand-out examples are, ostensibly, rich, liberal, Western democracies in the "post-heroic era" (Luttwak 2001, pp. 68-80). Yet, not everyone is willing to celebrate such developments unconditionally. Zbigniew Brzezinski (2012, pp. 126-7), for example, writes, with a sceptic tint, that all states in Europe

are opting out of any serious commitments to their own, or even to NATO-based, collective security. In different ways, its rapidly aging population as well as its youth care far more for their social security than for their national security. Basically, the United States is increasingly left with the ultimate responsibility for Europe's security, in the reassuring hope that America will remain committed to preserving the frontiers of "Europe whole and free".

Brzezinski (2012, p. 59) argues that this asymmetrical dependence "is not a healthy condition, either for America or for the European nations". Others are more sanguine about the security side of the purported peace culture. Benjamin Goldsmith (2007) essentially contends that national morale or defence efforts among democracies tend to come to the fore for real only in times of war; that is, when such traits are most needed. He thereby follows the basic thrust of the democratic peace theory, which generally emphasises the "peacefulness" of democracies while sometimes asserting that such regimes are apt to mobilise and to fight hard when attacked (Bueno de Mesquita *et al.* 1999, Lake 1992).

Non-material free-riding by the United States's European NATO allies is thus a plausible, yet not self-evident, phenomenon – as is material free-riding. In the next main section I provide some empirical clues with respect to both these dimensions. Following the recommendation of recent scholarship (e.g. Becker 2017, Zyla 2016c), I pursue what Zyla (2016b, p. 418, 2017) calls a mixed-method or eclectic approach, investigating several different (yet interrelated) empirical indicators for the post-Cold War period.

Material and non-material burden-sharing and free-riding in European NATO – some empirical indications

The analysis seeks to shed light on one overriding question: *Does European NATO free-ride* on the United States? In order to provide useful answers, moreover, the study examines empirically whether any eventual free-riding is of a material (i.e. defence spending and number of troops) or a non-material (i.e. public norms on defence and war) nature — or both. Furthermore, I also investigate whether any burden-sharing variance depends on the presence of US troops, by way of the deterrent mechanism they offer.

To explore these issues, I draw on different sources and make use of a handful of both standard and rarely-used indicators. The period under study is 1989-2016. Partly this is due to data constraints; data on armed-forces personnel are not available before 1989, and that year also corresponds with the second, more comprehensive wave of the World Values Survey, upon which I draw for my non-material measure. More substantially, though, the revolutions in Central and Eastern Europe in late 1989 stands as both the main symbol and the triggering cause of the end of the Cold War. The end of the superpower conflict, in turn, immediately gave rise to a new-found optimism with regard to international security (Fukuyama 1989, Mueller 1989), to a new direction in scholarly debates about the future of European security

(Hoffmann *et al.* 1990, Russett *et al.* 1990) and to a re-evaluation by NATO of the relevance of collective defence (Zyla 2015, p. 32).

Empirical indications of material burden-sharing and free-riding in NATO

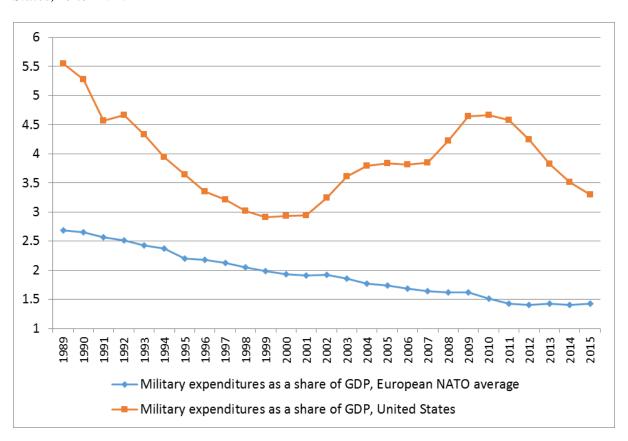
Starting with the material dimension, which encompasses defence-input factors, *Figure 1* takes a basic look at developments since the Cold War's end. The measure I use here is *military expenditure as a share of GDP* (Gates and Terasawa 2003, Olson and Zeckhauser 1966, Oneal 1990). Data are from Stockholm International Peace Research Institute (SIPRI) and run to 2016.1 SIPRI mainly relies on primary sources (such as national-budget documents). Military expenditures are defined by SIPRI as current and capital spending on armed forces (including peacekeeping forces), defence and defence-related agencies, paramilitary forces and military space activities.2

As the figure shows, the trend for European NATO is consistently downward (the lower trend line in *Figure 1* depicts a simple average across NATO member states; that is, one which is not weighted by population size). At the close of the superpower conflict, European NATO allies spent on average 2.68% of their gross domestic products on defence, with Greece (3.77), the United Kingdom (3.61) and France (3.50) leading the way. In fact, every NATO country (except for tiny Luxembourg and Iceland)3 contributed more than 2%, the benchmark around which much of the recent discussion of burden-sharing has revolved. Fast forward 27 years and the picture changes considerably: in 2016, the average was a modest 1.46. Only three European NATO countries met the 2% threshold, again with Greece (2.57) and France (2.27) in the front (along with Estonia (2.12)).

Greece is surely an outlier with respect to the issue of how well this input measure is able to reflect spending for *collective* defence. Along with Turkey (which just falls short of the 2% benchmark in 2016), Greece "have received a private rather than a collective benefit from

their large conventional forces" (Zyla 2015, p. 80). These two countries have been adversaries for the better part of over a century, and Greece's military spending, in particular, is primarily driven by just this conflict (Kollias and Makrydakis 2000, pp. 174-5). And despite their relatively substantial defence spending, both Greece and Turkey have been among the most modest contributors to NATO peacekeeping missions (Zyla 2016b, p. 434). This also works to indicate that one should be quite cautious in relying on single proxies when estimating the degree of NATO burden-sharing (Kunertova 2017, p. 554).

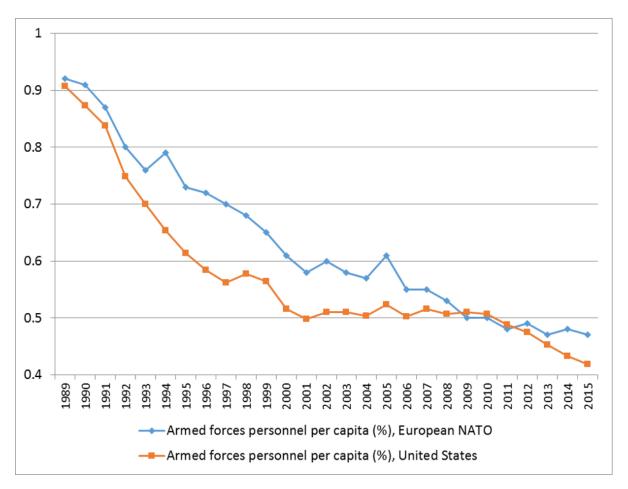
Figure 1. Military expenditures as a share of GDP: European NATO average and the United States, 1989-2016



Notes: Data are from Stockholm International Peace Research Institute's (SIPRI) Military Expenditure Database (https://www.sipri.org/databases/milex); numbers for European NATO are unweighted averages across member states.

The steady decrease in military spending by European NATO members is not unnatural, and it need not necessarily be related to free-riding motives. The end of the Cold War was soon followed by the unravelling of the Soviet Union, NATO's main adversary. Without an external enemy against which to balance, the allure of reaping the peace dividend was surely strong. But this was also, to some degree, the case for the United States in the 1990s. That is indicated by the upper line, although US numbers obviously declined from a much higher original level. As for European NATO, some have raised the question of whether one should really call the 1990s and 2000s a period of free-riding at all. In a Europe at least temporarily devoid of any major, "classic" threat of great-power aggression, restraint – or demilitarisation – may instead be seen as "a rational response to a low-threat international security environment" (Fettweis 2011, p. 319).

Figure 2: Armed-forces personnel per capita (%): United States and European NATO average, 1989-2015



Notes: Data are from the World Bank (https://data.worldbank.org/); numbers for European NATO are unweighted averages across member states.

Figure 2 shows a second input measure of material burden-sharing – namely, armed forces personnel in per cent of total population. Data are from the World Bank, which in turn draws on data from national governments assembled by the International Institute for Strategic Studies (IISS).4 (The trend line for European NATO represents simple, unweighted averages across member states.) To some degree complementing Figure 1, the number of armed personnel per capita also portrays a steady decline over the whole post-Cold War period. Military men and women made up on average 0.92% of European NATO members' populations in 1989, compared to only 0.47% in 2015 (the last year for which data are available). On the other hand, the US military, which is highly capital-intensive, started out this period close to these NATO numbers (0.91%); but thereafter, US numbers dropped even

faster than European ones. Based on these statistics, therefore, it is not altogether clear that European NATO as a whole has been free-riding on the US. However, we should not put much emphasis on a comparison between the United States and Europe on this score; after all, in terms of military hardware and technology, the US has long reigned supreme and has been able to "command the commons" without having to commit an abundance of troops to this overarching mission (Posen 2003).

Figure 2 should, however, be seen in conjunction with military-recruitment policies. Table 1, which draws on data from multiple sources, categorises European NATO member states according to such policies in the post-Cold War period.5 What is particularly noticeable is the vast number of states that changed from mandatory to voluntary military service in the period under study. This concerns 17 out of 26 European NATO countries (not including the most recent member, Montenegro, which does not have conscription). Four of the nine remaining states have not had conscription at all, while five others have upheld their mandatory military service (Denmark, Norway, Greece, Turkey and Estonia). Almost all of the rest abolished mandatory conscription between 2002 and 2010 (Belgium and Netherlands did so in the 1990s). This is also the case for almost all states that joined NATO in the post-Cold War period (Estonia is the exception, whereas Croatia ended conscription only a year before its admission to the alliance).

Table 1. Military recruitment policies for NATO countries, 1989-2016

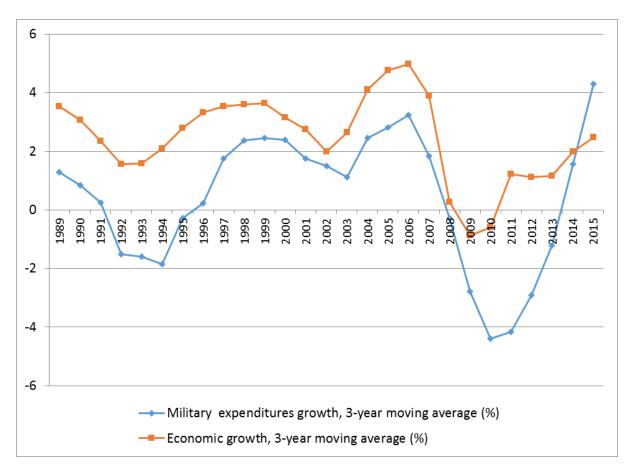
Mandatory conscription in whole period	Denmark, Estonia, Greece, Norway, Turkey			
No conscription in whole period	United Kingdom, Croatia, Iceland, Luxembourg			
Conscription abolished in period (years in parentheses)	Albania (2010), Belgium (1995), Bulgaria (2008), Czech Republic (2005), Germany (2012), Spain (2003), France (2002), Hungary (2005), Italy (2005), Latvia (2007),			

	Netherlands (1997), Poland (2010), Portugal (2005), Romania (2007), Slovakia (2006), Slovenia (2004)				
Conscription abolished, then reintroduced, in period (years in parentheses)	Lithuania (2009, 2015)				

Notes: Main data sources: for 1989-2004/2005: Military Recruitment Dataset (Nathan Toronto, Military Recruitment Data Set, version 2005.1, http://nathantoronto.com/research); for 2004/2005-2011: Chartsbin (http://chartsbin.com/view/1887); for 2012-2016: CIA World Factbook (https://www.cia.gov/library/publications/the-world-factbook/fields/2024.html).

This helps provide context to *Figure 2*: Some of the decline in troop levels can no doubt be ascribed to this change in military-recruitment policies, which is obviously linked to a widespread eagerness to substitute butter for guns following the demise of the Soviet threat. On the other hand, such across-the-board dismantlement of military institutions is very hard to reverse. This means that any reasonably rapid change in the security environment risks being left unanswered for a long time. Hence it is only in the last few years – maybe from 2008 (the Russo-Georgian War), or, more certainly, from 2014 (Russia's invasion and annexation of Crimea and the war in and over eastern Ukraine) – that we can more unambiguously disentangle free-riding from what can rather be called current underestimation of potential medium- or long-term threats. I will return to this issue shortly. For now, Lithuania can serve as a highly useful example. Having become an official NATO member state in March 2004, this former Soviet republic, which borders the Russian exclave of Kaliningrad, made military service optional three years later. In 2015, however, Lithuania reintroduced mandatory conscription. This was a direct response to Moscow's conduct in Eastern Europe, which sparked "fear that 'we could be next' if tensions with Russia continued to deepen" (BBC 2015).

Figure 3. Military-expenditures growth and economic growth, three-year moving averages (%): European NATO, 1989-2015



Note: Calculations of military expenditures growth are made based on data on inflation-adjusted military spending from Stockholm International Peace Research Institute's (SIPRI) Military Expenditure Database (https://www.sipri.org/databases/milex); data on economic growth are from the World Bank (https://data.worldbank.org/); numbers for European NATO are unweighted averages across member states; values for each year represent the average of the current, previous and next year.

Figure 3 is in part an adjunct to the previous figures and the table above. Here, I depict developments in European NATO members' military expenditure growth; that is, year-on-year percentage increases or decreases in military budgets (based on constant US dollars). To smooth out the data so as better to represent the mechanisms under study, I re-calculated the variable into a three-year moving average (that is, the average of the current, previous and following year) of changes in military expenditures, a procedure that is common in the specialised arms-race literature (Gibler et al. 2005, p. 137). Changes in arms spending should, furthermore, be assessed relative to growth rates in the economy at large. Numbers on the

growth rate of GDP (based on constant 2010 US dollars), also measured as three-year moving averages, are from the World Bank.6

Two things can be noted from *Figure 3*. First, military-spending growth tends to follow the same basic pattern as economic-growth rates. Also, the figure usefully illustrates the post-Cold War "peace dividend" that was discernible in *Figures 1-2* as well: the lines do not cross until we reach the rightmost end of the figure. Two gaps are especially large. The first one coincides with the immediate post-Cold War, which is hardly surprising. The second substantial gap coincides with the 2007-2008 financial crisis. As the effects of the crisis spread, military budgets evidently bore the brunt of the downturn. Considering that average military-expenditure growth (in its three-year moving-average version) was still negative in 2013, even as economic-growth rates picked up somewhat, this points to one or a mix of two things: either the United States's NATO allies did engage in indisputable free-riding as Russia asserted itself politically and militarily in its backyard, or they underestimated the relevance of the security threat represented by Moscow.

The second thing to note about *Figure 3* is the marked shift that occurs in the most recent years. To be precise, and using single-year growth figures instead of the three-year moving average, from 2015 European NATO member states, on average, increased their military budgets considerably (relative to generally decent economic-growth rates). This process was led by some of the new NATO members. Four of these border Russia; most of the rest belonged in the Communist camp during the Cold War. Albeit starting from a low initial level, Lithuania increased its military budgets by 33% from 2014 to 2015, a rate of growth that continued the year after. Poland boosted its military spending by 19% in 2015, although its growth rate turned negative the next year (which, whether by chance or not, coincided with the Washington's announcement that US troops would soon be deployed to Poland (Deutsche Welle 2016)). Latvia increased its military spending by 14% and 43%, respectively, in these

two years; Estonia by 10% and 5% (from a relatively high base level). The Czech Republic, Slovakia, Hungary and Romania also augmented their budgets considerably. These developments stood in sharp contrast to most of the rest of European NATO, which generally did not come close to reaching such figures.

In terms of military-expenditure growth, then, two temporary conclusions can be made. First, a partial bifurcation is visible in the most recent years: "Old" European NATO, which (Norway apart) is geographically separated from Russia, seems overall unwilling to prioritise guns over butter. In particular this is so for the "Europeanists" among this group – such as France, Belgium, Spain and Portugal – which corresponds with studies indicating that these members were more reluctant than others to take on a "fair" share of the alliance's burdens in Afghanistan (Ivanov 2011, p. 29; Siegel 2009). "New" European NATO members, which are generally more "Atlanticist" and more concerned with the credibility of the NATO Treaty's Article 5, have generally acknowledged the need to bolster their military capacities in light of a changed and changing regional security situation. These countries' relative contributions in Afghanistan were also fairly substantial, which indicates a correlation between input and output metrics in allies' burden-sharing behaviour (Becker 2017, p.135).

Second, it is still worth emphasising that "New" European NATO did not react similarly following Russia's August 2008 war with Georgia. It was rather the 2014 Ukraine conflict that provided the "tipping point" that spurred this group of countries into accelerating their armaments spending. This is suggested by developments in Latvia, which in very recent years have both aligned much more closely with NATO and substantially increased its military spending. While political realist theory, in its structural variant (Mearsheimer 2001), argues that states generally make inferences about others' intentions based on estimates of capabilities, this alone cannot explain Latvia's arms-spending increase; Russia's year-on-year increase in military expenditures has been consistently high since 2000, whereas Latvia's military budgets

actually *decreased* between 2008 and 2011. It was rather Russia's rearmament drive and military modernisation efforts *coupled with* both its internal political developments and its recent foreign-policy behaviour that effectuated a change in threat perceptions among Latvian elites and public opinion; in turn, this has caused the country to re-evaluate much of its military and security policies (Rostoks 2018; see also Bambals 2018). This interpretation dovetails with Stephen Walt's (1987) balance-of-threat theory, which emphasises capabilities *and* intentions. His theory also underlines the importance of geographic proximity to threat perceptions and balancing behaviour (Walt 1987, pp. 23-4). This also helps account for (some of) the difference between "New" and much of "Old" NATO in how seriously they have hitherto interpreted Russia's actions along NATO's eastern flank (Veebel 2018, p. 239).

Again, the overall picture does not unequivocally imply that "New" European NATO has been free-riding in a material sense; and if it has, it certainly seems to be in the process of making substantial corrections. As for "Old" European NATO, if we base our judgements on the material input measures analysed in this section, the free-rider label is somewhat more appropriate.

Empirical indications of non-material burden-sharing and free-riding in NATO

Recent literature on NATO burden-sharing has argued that "the once universally accepted measures for determining Atlantic burdens have lost explanatory value" (Zyla 2016a, p. 307); that "there is more to burden sharing than quantifiable inputs" (Becker 2017, p. 132); and that traditional collective-action models are overly focused on costs that "are exclusively economic rather than political – or social, for that matter" (Zyla 2015, p. 34). What is required instead, some point out, is a "mixed methods" approach (Zyla 2016b, p. 418) that acknowledges that "non-material factors are in many cases of war, deterrence, and security challenges as or even more important than material ones" (Hallams and Schreer 2012, p. 315).

This section complements recent studies that have focused on the role of public opinion for burden-sharing effectiveness (Massie 2016a, Ringsmose and Børgesen 2011, Zyla 2015). Specifically, I use a variable measuring the extent to which citizens are willing to fight for their country. Data are from the World Values Survey (WVS) (Inglehart *et al.* 2014).7 This is a global data and research project that collects survey data, based on face-to-face interviews of a representative sample of (adult) citizens. I draw here on waves 2-6 of the survey, which encompass the period 1989-2014 (a seventh wave commences in 2018). The number of relevant data points (for European NATO members) is a respectable 73, a tally that also includes scores for new NATO members in the pre-accession period.

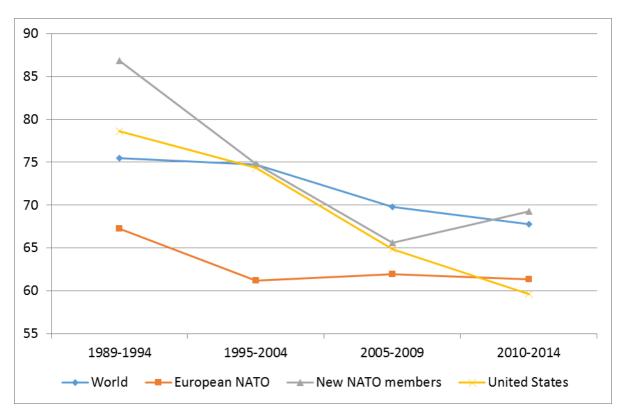
The WVS measure of importance here – willingness to fight – is a dichotomous survey question that reads as follows: Of course, we all hope that there will not be another war, but if it were to come to that, would you be willing to fight for your country? (yes=1; no=0). I aggregated the individual-level data into average scores for each country-year. These averages represent the percentage of citizens of a country answering "yes". (Non-valid observations, including those who were unwilling to state their opinion, were treated as missing, so the sum of "yes" and "no" percentages for each country-year is 100.)

The *willingness to fight* measure comes with some significant advantages. First, its temporal and geographic reach makes it quite unique. Other surveys, such as those undertaken by Pew Research Center, sometimes ask respondents more directly about their opinions on NATO and collective defence, but their samples of countries are limited (Stokes 2017). Although the inclusion of states in WVS is in the main based on funding availability, it has, for several decades, represented the world's most comprehensive global survey of values. Second, *willingness to fight* is a fairly direct indication of (the public's) balance of resolve, a defence-output factor which has traditionally been heavily emphasised by both classical (Morgenthau 1948[2006], Niebuhr 1932[2005], von Clausewitz 1832[2007]) and strategic realism

(Schelling 1966[2008], Snyder 1971) as vital to war and deterrence efforts. Indeed, the NATO alliance itself rests as heavily on the commitment, resolve or will to repel any external attack as it does on the material capability to do so.

Third, willingness to fight should be a highly valid proxy non-material defence effort. Granted, a self-reported willingness to fight for one's own country does not directly say anything about whether one is ready to come to the defence of other alliance partners, or of the alliance as a whole. However, in particular in the post-Cold War world, what is perceived as self-defence is not straightforward; the concept can also encompass offensive operations, and it can include contributions to peacekeeping missions and democracy promotion abroad (Puranen 2014, p. 271). In fact, in the context of NATO, the line separating pure self-defence from collective defence and military intervention by allies has been and is blurred, and these two dimensions are interrelated. During the Cold War, for example, Norway's strategic doctrine specified that national forces would hold against any Soviet invasion until its NATO allies could come to its assistance, which would take weeks (Graeger and Leira 2005, pp. 49-50). Alliance success, therefore, critically hinged on the capabilities and willingness of Norway's armed forces to fight the invading army.

Figure 4. Willingness to fight: Averages world, USA, European NATO and new NATO member states across waves, 1989-2014



Notes: Data are from the World Values Survey (http://www.worldvaluessurvey.org/wvs.jsp); numbers for World, European NATO and New NATO members are unweighted averages across states depicting the percentage of respondents expressing a willingness to fight for their country in case of war.

Figure 4 shows the average scores on willingness to fight for four groups of countries over five WVS waves (waves 3 and 4 (1995-2004) are collapsed due to a relatively low n for each). At first glance, and with the important caveat that the sample size is limited, numbers for European NATO seem to commensurate with tendencies for material burden-sharing identified earlier: The end of the Cold War was reflected in an immediate drop in the average self-reported willingness to fight: from 67.3% in wave 2 to 61.2% in waves 3 and 4. Numbers stabilised thereafter. In absolute terms, however, the decline is not overly dramatic; and neither is it so in comparative terms. Values for European NATO dropped by 5.9 percentage points from the first to the last period depicted in Figure 4. Numbers for the United States declined by 19 percentage points, eventually falling below the European NATO average, whereas the world average dropped by 7.6 percentage points in the period. In fact, numbers for the US and

the world have, contra what is the case for European NATO, steadily declined from wave 2 until wave 6. Of course, changes in world averages have taken place from a significantly higher base level, but that could be down to the relative "pacifism" of full democracies (which most NATO members are) (Jakobsen *et al.* 2016). The (initial) decline for European NATO, one should note, is enveloped in a very *general* trend that has purportedly seen "people's readiness to sacrifice their lives [giving] way to an increasing insistence on actually living it" (Puranen 2014, p. 263). Decreasing rates for European NATO, thus, is not so much an effect of regional socio-psychological free-riding as it is a reflection of a global phenomenon.

Averages for "New" European NATO are always above scores for the alliance as a whole. Still, the former group's values drop precipitously (21.3 percentage points) from wave 2 to waves 3-4. Of course, the former wave coincided with the end of the Cold War. These were incredibly special times for the states in Central and Eastern Europe; and it is tempting to say that if people weren't ready to fight for their states and nations then, they probably never would be. This is duly reflected in average scores for individual states. In Latvia, for example, 97.4% of respondents indicated a willingness to fight for their country in 1990; in Poland, numbers reached 92.3 (1989) and 90.6 (1990); in Estonia 92.11 (1990); in Lithuania 83.7 (1990); in Bulgaria 91.4 (1991); in the Czech Republic 84.2 (1991). The need for such expressions of a willingness to make sacrifices for the sake of national unity and sovereignty were certainly felt to be less pressing as the 1990s progressed. Numbers for the "New" NATO group soon started converging with the rest – but they were still above both "Old" European NATO and the United States. Indeed, they even countered the world cycle by *increasing* in wave 6 – that is, after Russia's war with Georgia – although the number of data points here is too small to make any firm conclusions (Estonia and Slovenia were surveyed in 2011, Poland and Romania in 2012).

The last dimension to consider is the effect of US forward-deployed troops in Europe. Such forces both strengthen deterrence *and*, as a recent, globally-focused study finds, provide a stimulus for the host to reduce its own defence efforts (Jakobsen and Jakobsen 2018). Data on US troops are taken from three different sources.8 They provide snapshots of the number of forward-deployed (active-military duty) US troops in a given country on September 1st each year, what is referred to as troop-years or "billets".

The number of US soldiers stationed in European NATO member states has decreased greatly since the end of the Cold War, from over 300,000 in 1989 to around 60,000 in 2017. Nonetheless, for some of these host states numbers are still major, in particular considering that the presence of limited forces have traditionally been considered sufficient for purposes of deterrence (Schelling 1960[1980], Ch. 8).9 Table 2 exhibits US troop levels and scores on willingness to fight for all European NATO country-years that are included in the World Values Survey. Countries are ranked from highest to lowest according their values on willingness to fight. Major hosts of US troops – operationally defined as those harbouring at least 1,000 US soldiers – are in bold. What we immediately note from the table is that *all* of the lowest-scoring countries on willingness to fight are also major hosts of US military bases (the bivariate correlation between US troops and willingness to fight for European NATO is -0.29). This concerns, for various years, Italy, Spain, Germany and Belgium. Some studies argue that effects of US troops on other variables, including free-riding incentives, become discernible when troop numbers approaches the size of an independently-functioning military unit – that is, a battalion (Allen and Flynn 2013, p. 276, Jakobsen and Jakobsen 2018, p. 21). If we lower the threshold denoting major hosts correspondingly, we may then also include the Netherlands, in which case the 13 lowest-scoring country-years all have a substantial US military presence. (The bivariate correlation between willingness to fight and a dummy for US troops with a 250troops threshold is -0.50.)

Table 2. Number of forward-deployed US troops and values (country averages) on willingness to fight for NATO member states, 1989-2014

Country	Year	US	Willingness	Country	Year	US	Willingness
		troops	to fight (%)			troops	to fight (%)
Turkey	2007	1,594	97.07	Estonia	2011	3	61.70
Turkey	1996	0	96.27	France	2006	60	60.49
Turkey	1990	0	92.52	Italy	1999	11,530	60.13
Norway	1990	215	91.35	Bulgaria	2005	13	59.46
Denmark	1990	69	89.35	Spain	1995	2,799	58.82
Norway	1996	104	88.57	France	1999	73	58.64
Norway	2007	81	87.60	Luxembourg	1999	8	54.43
Turkey	2011	1,651	86.06	Hungary	2009	54	52.07
Poland	2012	40	78.12	Germany	1997	60,053	49.54
Iceland	1990	3,196	77.16	Netherlands	2012	398	49.48
Slovenia	2005	8	74.46	Netherlands	2006	591	48.08
United Kingdom	1990	25,111	74.48	Germany	1990	227,586	46.23
Romania	2012	76	74.24	Germany	2013	35,850	45.76
Poland	2005	21	74.17	Spain	2007	1,286	44.67
Netherlands	1990	2,745	69.30	Italy	2005	11,841	43.36
Portugal	1990	1,669	67.99	Spain	2000	2,007	43.01
Romania	2005	18	67.74	Germany	1999	65,538	41.40
France	1990	85	66.01	Belgium	1990	2,300	39.31
Slovenia	2011	3	63.1	Germany	2006	64,319	34.03
Spain	1990	6,986	62.50	Spain	2011	1,591	32.43
United Kingdom	2005	10,752	62.08	Italy	1990	14,204	31.27

Notes: Countries hosting over 1,000 US troops are in bold; values on *willingness to fight* depicts the percentage of respondents expressing a willingness to fight for their country in case of war.

One should still interpret these figures with caution, for four reasons. First, the sample size is too small to make any definitive conclusions. Second, the columns to the left contain a relatively high number of countries from "New" NATO. This might suggest that *Table 2* really indicates a West-East divide rather than any tripwire effects. Third, if we briefly return to the material burden-sharing dimension, the free-riding argument is actually contradicted by the data: NATO members hosting over 1,000 US troops spent, on average, *more* on defence (relative to GDP) than the rest in the period 1989-2016 – 1.91% versus 1.75% (see also Allen,

VanDusky-Allen and Flynn 2016). The fourth reason for caution when drawing conclusions has to do with legacies of the Second World War. Among the country-years exhibiting the lowest willingness to fight, and the highest number of US troops, we find both Germany and Italy. Germany, in particular, was the main aggressor state – and in the end the main loser – of World War II. It is often claimed that the anti-militarism of Germany (and Japan) is widespread among elites and the public alike, and that it is deeply rooted in culture, values and institutions (Berger 1996). A recent survey of the largest NATO countries have also shown that German citizens express reluctance to help defend their allies in case of a Russian attack (Stokes 2017). This means that the presence or non-presence of US soldiers might matter only a little, if at all. And that could also be the case for Italy, another prominently defeated party in World War II.

On the other hand, it is also a fact that the number of US troops for these two states are always above 10,000. This means that US extended-deterrence credibility is fully automated. We cannot therefore rule out that (non-material) free-riding mechanisms form at least part of the complex of causes here. Consider also that the Netherlands, Belgium and Spain (and, to a somewhat lesser extent, the United Kingdom and Portugal) exhibit the same combination of high US troop numbers and low willingness to fight – and this without carrying the burden of blame for the atrocities of World War II. We should also consider that the "stickiness" of US basing patterns can possibly contribute to *entrenching* any free-riding effects. All of the seven large hosts of US bases in Western Europe have had substantial numbers of US troops on their soil since at least the 1960s. The basing pattern thus shows a strong status-quo bias, which should work to boost the credibility of US security and defence guarantees toward this group of countries *and* to enhance free-riding incentives for the host.

Conclusions

Does European NATO free-ride on the United States? While this study has attempted to provide some empirical answers by applying a "mixed-methods" approach, the main conclusion is that it largely depends. Burden-sharing is essentially a complex, multidimensional concept, which also means that "states can perform impeccably in some issue areas while failing miserably in others" (Ringsmose 2010, p. 326). This demands a holistic scholarly approach that takes into account several measures, and it also means that any conclusions made should be appropriately nuanced.

To start the summary with the standard input measure traditionally employed by both the literature and policymakers, it is certainly true that European NATO – old and new alike – gradually reduced its armaments spending (relative to GDP) from the end of the Cold War until the 2014 Ukrainian debacle. It is also clear that the number of armed-forces personnel has decreased substantially in the period, in tandem with the demise of military conscription. Furthermore, economic-growth rates in European NATO have, on average, been consistently higher than military-spending growth – again before Ukraine. This materially- or input-focused picture has, moreover, been complemented by a decrease in European citizens' self-reported willingness to fight for their country. In particular this is so in states playing host to large US military bases.

This still needs some nuancing. For example, one thing to note is that citizens of European NATO countries do not particularly stand out when it comes to developments over time in their expressed willingness to fight; in fact, in the latest World Values Survey wave, values for the United States drop below their allies', which hardly testifies to any *non-material* free-riding by European NATO on the US. The world trend is also gradually decreasing in the period 1989-2014, suggesting that other, more general forces are in play (Inglehart *et al.* 2015). On the other hand, one also discerns somewhat of a bifurcation process here: Allies with a large US military presence are markedly less willing to fight for their country than are the rest, as

others have shown is the case globally as well (Jakobsen and Jakobsen 2018). The deterrent mechanism offered by the United States when it commits boots on the ground might therefore cause non-material free-riding for that particular group of states. But we need to be reserved when making conclusions: The sample size is not large enough to rule out the possibility that the dividing line runs between East and West instead – that is, more or less between "Old" (generally more "Europeanist") and "New" (generally more "Atlanticist") NATO. Such a dividing line has been identified by those who have studied burden-sharing in out-of-area operations (Ivanov 2011; Ringsmose 2010; Sperling and Webber 2009).

Returning to military spending as a share of GDP, it is obviously true that the United States far outspends its allies. However, Washington's global interests and commitments far exceed those of its much smaller allies, which certainly calls for a higher defence burden for the US than for others. Consider also that NATO, according to many International Relations realists, is "a means of maintaining and lengthening America's grip on the foreign and military policies of European states" (Waltz 2000, p. 20; see also Layne 2006). In the burden-sharing balance sheet, and in particular with respect to the alliance leader, gains as well as costs should really be taken into account. The accounting procedure is further clouded by a difference in threat perceptions, both between the United States and European NATO as a whole and within European NATO. As for the former discord, and as Fettweis (2011, p. 324) argues, "other members of NATO just do not share the US perception of threat". With regard to the latter schism, military-spending growth rates vary considerably among sub-groups of states. Most pronounced is the difference between Southern and Eastern Europe (including the Baltics) – in particular after Russia's annexation of Crimea. Whereas the former group of countries on average decreased their absolute level of arms spending between 2014-2016, NATO members that used to be either part of the Soviet Union or members of the Warsaw Pact increased their yearly military spending on average by nearly 10% in the same period.

Another question is how much defence efforts can be lowered before it becomes reasonable to apply the free-rider label. It is noteworthy that 2014 constituted the absolute arms-spending nadir for European NATO. The Ukraine debacle led NATO, at the September 2014 Wales Summit, explicitly to single out Russia and its actions as "a major challenge to Euro-Atlantic security" (NATO 2014). It also duly marked the beginning of an increase in NATO military budgets. As noted above, this increase was especially pronounced in much of "New" NATO, which for reasons of history and geography is, overall, much more concerned about Russian behaviour than are most of their allies in Western or Southern Europe. A significant boosting of defence efforts is now unquestionably afoot among the easternmost NATO allies. That change resulted from the Ukraine conflict and *not* from the 2008 Russo-Georgian War (even if it perhaps should have). On the other hand, the United States also reacted somewhat diffidently to the Georgian conflict; the subsequent "rebalance toward the Asia-Pacific region" (Obama 2012, p. 2, emphasis in the original), coinciding as it did with reductions in US military budgets, meant that Washington intended to pivot away from Europe.

In other words, neither the United States nor its European allies saw 2008 as a turning point. Post-Georgia, European arms budgets were steadily decreasing relative to GDP, as were numbers of armed-forces personnel. Furthermore, no country chose to reintroduce mandatory conscription as a result of the Russo-Georgian War. In fact, Bulgaria (2008), Albania (2010) and Germany (2012) proceeded to do what the vast majority of European NATO allies had already done in the preceding years, namely abolish conscription. At the same time, willingness-to-fight rates stayed put at a level far below the world average.

Things have turned post-Ukraine. This is so at least among NATO's easternmost members, as the most recent defence-spending numbers tell us. Note as well that a total of 19 allied countries (Canada, the United States and the hosts included) contribute to the battlegroups that were recently deployed to new NATO bases in the Baltic nations and Poland

(NATO 2017). And while one may justifiably criticise European NATO for seeking for too long to reap the continued benefits of the peace dividend, the free-rider epithet, at least as it is conveyed by President Trump in his usual rather boisterous language, does seem to represent an exaggeration of reality.

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5 I used, as a base, data from the Military recruitment dataset (Nathan Toronto, Military recruitment data set, codebook, version 2005.1), which provides information up until 2004/2005 (http://nathantoronto.com/research). I used *Chartsbin* for 2010 and 2011 (see: http://chartsbin.com/view/1887), and normally also for the 5-6 previous years. *CIA World Factbook* was generally drawn on for the years 2012-2016, see: https://www.cia.gov/library/publications/the-world-factbook/fields/2024.html.

⁷ For more information on the World Values Survey (WVS) and its methods and sampling strategy, see http://www.wolrdvaluessurvey.org/wvs.jsp.

- 8 For the period 1989-2003, data are organized and provided by Tim Kane (2004); see https://www.heritage.org/defense/report/global-us-troop-deployment-1950-2003. Data for 2004-2007 are from Vetfriends, at: https://www.vetfriends.com/US-deployments-overseas/. Data for 2008-2016 are extracted from the US Defense Manpower Data Center, at: https://dmdc.osdc.mil/appj/dwp/dwp_reports.jsp#.
- 9 According to the US Defense Manpower Data Center, major NATO hosts of US troops include, for 2017, Germany (34,399); Italy (11,806); the United Kigdom (8,126); Spain (3,178); Turkey (1,350); Belgium (884); Netherlands (413); Romania (413); and Greece (392).

¹ See http://www.sipri.org/research/armaments/milex.

² For a description of the sources and methods used by SIPRI, see https://www.sipri.org/databases/milex/sources-and-methods.

³ For Iceland, a country that had a substantial US military presence from NATO's inception until 2006-2007, military-spending numbers are generally missing. SIPRI does offer data for 2009-2012, however, which shows that Iceland's military budgets constituted less than 0.2% of its GDP.

⁴ See https://data.worldbank.org/.

⁶ See https://data.worldbank.org/.