Ongoing financial challenges affecting both sides of the Atlantic have brought defense expenditures into sharp focus and have elevated the issue of burden sharing to the top of the NATO agenda. Americans have expressed concern regarding the European allies’ ability to contribute robustly to the Alliance’s challenging missions. What explains the unequal burden sharing in NATO, and why does the alliance persist in spite of it? This paper analyzes the relationship between strategic culture and burden sharing among NATO allies and argues that Alliance members should not conflate equality in burden sharing with alliance cohesion or effectiveness.

Burden sharing is once again atop the NATO agenda. With austerity beginning to bite into defense budgets, the European Union has initiated a policy of “pooling and sharing” in defense matters, while NATO has developed a program for “Smart Defense.” As NATO’s war in Afghanistan drags on, Americans at the highest levels are concerned about their European allies’ ability to contribute robustly to the Alliance’s challenging missions. Much was made of former Secretary of Defense Robert Gates’ final address in Brussels, in June of 2011, in which Secretary Gates referenced growing impatience in America with dwindling defense expenditures in Europe, using the phrase “dim and dismal.” However nuanced Secretary Gates’ address may have been, and however committed an Atlanticist Gates himself might be, his words attracted significant attention.

At the writing of this paper, at least two member states (Turkey and France) were under significant domestic political pressure to intervene in Syria. But, as Operation Unified Protector over Libya in 2011 demonstrated and as defense ministries in those same countries confirm, the limited capabilities of most NATO allies make mounting the type of operation required impossible without direct US involvement. In spite of initially optimistic reports, Operation Unified Protector is likely not to be a template for burden sharing in future NATO interventions, and the Alliance is extremely reluctant to repeat the experience. Today, as has been the case for most of NATO’s history, the military burden of collective security is borne unequally among allies.

The ongoing financial crisis affecting both sides of the Atlantic has put defense expenditures and burden sharing into sharp focus. In 2009, Keith Hartley and Binyam Solomon predicted that, independent of the financial crisis, evolutions in NATO strategy toward force projection would exacerbate burden sharing difficulties among NATO allies, arguing that the systems required to conduct such operations...
tend to belong to larger member states that have already made the significant capital investment in such systems. Specialization, they argue, can mitigate the tendency toward unequal burden sharing generated by the emphasis on such public goods, but possibly at the expense of a strategic vision focused on force projection and active defense.

Specialization has underlain the Alliance’s efforts to manage the effects of the financial crisis, epitomized by the Smart Defense agenda. But specialization raises a crucial dilemma for member states in that it involves ceding some sovereignty by pooling resources in a fundamental area of state identity: security. How can states assure access to assets when they are pooled at the Alliance level? Smart Defense also risks being a rhetorical fig-leaf for diminished investment in capabilities among most member states.

At the same time, the United States has announced a “Pacific Pivot,” focusing its security energies toward Asia, while counting on Europe as a producer, rather than a consumer of security. Much like former Secretary Gates’ address, perhaps too much has been made of this “pivot.” The US has always been a “Pacific Power,” and the fact that the territorial integrity of European states is no longer a matter of immediate risk suggests that transatlantic security cooperation since the Second World War has been quite successful. But perceptions matter. Even the staunchest of Atlanticists are concerned: In “The First Review of the National Security Strategy 2010,” published on 8 March 2012, the UK Parliament’s Joint Committee on the National Security Strategy concluded that “geographical and functional shifts in US policy… [raise] fundamental questions if our pre-eminent defence and security relationship is with an ally who has interests which are increasingly divergent from our own.” Other NATO allies are contemplating adjustments as well: Atlanticist stalwart Poland has begun to warm to stronger EU defense ties in an attempt to “diversify its security guarantees.”

This is not the first time that burden sharing has been an issue for the transatlantic security community. History suggests, however, that while unequal burden sharing may be a source of discord within the alliance, it does not pose a mortal threat to NATO as an institution. In spite of its flaws, NATO members continue to value the alliance as an aggregator of capabilities, interests, and values. What then, explains unequal burden sharing in NATO, and why does the alliance persist in spite of it?

This paper explores a particular set of hypotheses attempting to explain persistent unequal burden sharing in a persistent alliance like NATO, privileging the testing of the notion that convergence (or divergence) in strategic culture can explain variations in burden sharing among US and European NATO allies over the history of the alliance. A paradox of current thinking on NATO’s future is the dual notion that 1) the alliance would be stronger if allies would spend more on defense and 2) the alliance would be stronger if allies’ perceptions of risks, threats and opportunities (all components of strategic culture) were more similar. This paper argues that variations in strategic culture do not necessarily cause
variations in defense expenditures. Because of this observation, it seems likely that NATO’s persistence does rely on both the alliance’s ability to adapt to retain utility and on shared values among allies, but that adaptability is paramount. As a matter of policy, then, the notions of strategic culture and equal burden sharing should be decoupled in terms of alliance goals, particularly from the perspective of the United States. This argument is based on the following findings:

1) Burden sharing among allies has varied widely over the course of NATO’s history, and current burden sharing ratios, although they suggest significant decline in equality since 1990, are in line with historical averages.

2) There is no theoretical reason to assume that shared strategic visions will yield more equal burden sharing.

3) There does not appear to be a convincing causal relationship between convergence in language used in strategic documents of the United States and NATO, taken as a measure for the extent to which US strategic culture determined the strategic culture of the alliance as a whole, and convergence in burden sharing.

From the perspective of the United States, the policy implications of this assessment are that if the objective is more solidarity in terms of strategic culture, then emphasis on defense expenditures should be set aside. On the other hand, if the objective is increased defense expenditures by European allies, then emphasis on converging strategic cultures should be set aside, at least temporarily. At a minimum, if the United States seeks to achieve both a convergence in strategic culture and increased defense expenditures on the part of its European allies, the two notions should be decoupled to the greatest extent possible. The simple logic underlying this argument is that, generally speaking, policy makers make decisions on defense expenditures based on assessments of risks, threats, and opportunities facing their states. If European policy makers perceive their states’ situations to be nearly identical to that of the United States, they are likely to assume that the United States will bear most of the burden associated with maximizing the attainment of their common goals, not out of generosity but as a byproduct of the United States pursuing its own agenda. On the other hand, if European policy makers perceive their situation differs from that of the United States, then they are likely to bear more of the burden associated with maximizing the attainment of their security goals. In so doing, they are likely to generate more capabilities that can be used by NATO when needed.

Now is far from the first time in NATO’s history that burden sharing has been an issue. This paper argues that Alliance members should not conflate equality in burden sharing with Alliance cohesion or effectiveness. Empirically, the “burden gap,” a crude measurement of the gap between the military burden of NATO Allies and the largest contributor to NATO defense spending, the United States, has experienced a long-term narrowing trend from the mid-1950s until present, in spite of a slight widening since the late 1990s. This paper argues that periods of particularly unequal burden sharing among Allies coincide not with periods of a lack of internal cohesion or effectiveness of the Alliance itself, but with
periods in which the United States was pursuing “private goods” in the field of security – the Korean War, the Vietnam War, the Reagan-era Strategic Defense Initiative, and the “Global War on Terror.”

WHY IS BURDEN SHARING UNEQUAL IN NATO?

There are two primary approaches to the economics of Alliance burden sharing. The first, developed by Mancur Olson and Richard Zeckhauser in 1966, describes security of Alliance members as a public good, and therefore defines Alliance burden sharing as a collective action problem. Olson and Zeckhauser therefore hypothesize that NATO members with higher GDPs would contribute more (relative to GDP) to Alliance security than smaller members, because they benefitted more. Smaller members could, therefore, free ride.

Todd Sandler and John Forbes theorized that changes in strategy and technology that took place in the late 1960s and persisted throughout the 1970s caused Alliance security to cease being a public good and to become a joint product. Security within the Alliance was no longer a pure public good, because “rivalry in consumption, multiple outputs, benefit exclusion, and private benefits [were] increasingly characterizing modern Alliances.” The operational reason for this, according to Sandler and Forbes, was the shift in emphasis from strategic nuclear weapons to conventional and tactical nuclear weapons. As Alliance strategy shifted from deterrence to protection, the benefits of membership became more and more “excludable” – NATO was something different than just a nuclear umbrella covering its members. The increased “excludability” (in the sense that benefits could accrue “privately” to individual states within the Alliance) should, according to Sandler and Forbes, lead to more equal burden sharing by encouraging European Allies to contribute more equally to Europe’s defense. The empirical data largely aligned with Sandler and Forbes’ theorizing.

While differing from an economic perspective, both the Collective Action and the Joint Product models of Alliance burden sharing clearly suggest one thing: that a less integrated Alliance will yield more equal burden sharing. An Alliance that defines security as indivisible is an Alliance that, from an economic perspective, is likely to see its leading member or members bear a disproportionate share of the security burden. If NATO members want more equal burden sharing, then, they should focus less on cohesion and common values; if they want more cohesion and common values, they should focus less on burden sharing.

ASSESSING BURDEN SHARING AND STRATEGIC CULTURE

The research for this paper was conducted in two major parts: first, burden sharing was assessed as a phenomenon and second, strategic culture was measured and assessed against evolutions in burden sharing.
Burden Sharing: Much Ado About Nothing?

Disagreements about burden sharing have figured in NATO member relations since the inception of the Alliance – but have had little real impact on the Alliance’s ability to fulfill its mission. The historic “transatlantic bargain” has been renegotiated a number of times based on evolving requirements, but the underlying Alliance has remained surprisingly stable. Much has been made recently of the precipitous decline in percentage of NATO’s overall expenditure (cost share) undertaken by European Allies since 1990 – from 40% to 25% by 2011. A quick glance at this metric over the course of NATO’s history reveals a somewhat different story, however. 1990 was a bit of an outlier – one of the highest years in history for European NATO cost share, and well above the historical average of around 27%. For the majority of NATO’s history, European Allies’ cost share has hovered between 20% and 30%, and it has been between 25% and 30% for most of the last 20 years (see graphic below).

Cost share is by no means the only way of measuring burden sharing in NATO – but it is a generally accepted one in the present discourse surrounding the issue, as Howorth’s and Gates’ remarks indicate. The graphic above suggests that current intra-Alliance burden sharing is by no means out of line with historic trends – concern over burden sharing (insofar as it focuses narrowly on defense expenditures) is excessive. However, the gap is widening, and it likely will widen further, given somewhat differing approaches to the financial crisis exhibited on each side of the Atlantic. Why has the
gap widened since the late 1990s, and why does it look poised to continue widening? And what does this trend mean for the Alliance?

Not much, if we keep things in historical and theoretical perspective. First, as Olson and Zeckhauser articulated nearly 50 years ago, an alliance that includes a member that is distinctly larger and more powerful than other members, unequal burden sharing is to be expected. Second, as Sandler et al. postulated, increasingly public security benefits (such as a nuclear umbrella) can also be expected to contribute to unequal burden sharing ratios. What is somewhat surprising is the gap in burden sharing that opened in NATO after the end of the Cold War. Could it be that Mearsheimer’s prediction was coming to pass, and the alliance was falling apart in the absence of the Soviet Union? The political economy theorizing referenced above would suggest perhaps not. Theorizing on the particular security dilemma faced by a potential or perceived hegemon – or at least a unipolar powersheds some light on this question. Because of the far-flung nature of US interests and the unipolar nature of the post-Cold War security environment, the United States defined its national security interests in an extremely broad way – and attempted to convince its allies to do likewise. As the security and stability of the planet came to be defined as a US national interest, security of NATO member states, mutually assured destruction or not, came to function like a public good. As such, the more broadly the United States defined its core security interests, the more likely its allies (and others) were to free ride.

It is useful to take a long view when assessing historical burden sharing in NATO. There are several ways of measuring burden sharing beyond the cost share metric that help clarify long-term trends. First among these is Military Burden, defined as a state’s military expenditures (MILEX) as a percentage of that state’s Gross Domestic Product (GDP). Military Burden is an important figure since it is what NATO has come to use as a benchmark for burden sharing – alliance leaders frequently allude to a 2% of GDP target for member state MILEX, although there is no official policy document outlining this aspiration. The chart below visually traces Military Burden over the course of NATO’s history:
The data used for this analysis actually offers a slightly high estimate of military burden for member states, because of a rather wide definition of what constitutes military spending. More important than the actual Military Burden percentage are the observable trends. First, in spite of a recent rise, US Military Burden has exhibited a clear long-term downward trend, which is less observable among European NATO members.

Second, periods of convergence of Military Burden appear to align broadly with periods of increased excludability of security benefits, in line with Sandler et al.’s postulate. Gaps were widest during the early Cold War period, during which the US doctrine of Massive Retaliation made security extremely non-excludable. The large increase in US military burden during the Korean Conflict period is also an indication that the excludability of the benefits of that conflict - the United States clearly had more at stake in Korea than did the European NATO allies.

Unlike the US/NATO doctrine of Massive Retaliation during the Mutually Assured Destruction period, Flexible Response allowed for the limited use of both nuclear and conventional forces in the event of a Soviet invasion of Western Europe. This approach leads to more excludability and should, therefore, lead to more equal burden sharing, which was in fact the case during the mid-Cold War period.

The immediate aftermath of the Cold War was characterized by a search for direction on the part of NATO. The alliance sought to redefine itself in the absence of the threat that had galvanized its creation and persistence during the Cold War. The period was also characterized by a series of conflicts at the periphery of Europe, as Yugoslavia disintegrated violently. It is during this period that the persistence of NATO came into theoretical question, but, perhaps paradoxically, burden sharing equalized during the
early years of this period, only becoming more unequal as US defense spending began to ramp up around 1996, a trend that intensified after September 11th, 2001.

So the broad outlines of trends in burden sharing appear to align fairly well with the theorizing on the political economy of alliances, and shed some light on the debate on NATO’s persistence as well. The alliance continued to have utility to most of its members, who continued to believe themselves to be a part of a transatlantic security community. But did the beliefs of member states have a significant impact on their willingness to devote resources to collective security, or to security at all? Did evolutions in strategic culture impact burden sharing among alliance members?

**ASSESSING THE IMPACT OF STRATEGIC CULTURE ON BURDEN SHARING**

At least three factors are important in assessing the impact of strategic culture on burden sharing. First, attitudes expressed by major political parties on strategic issues are important because they reflect popular attitudes as reflected in domestic political positioning. Second, attitudes expressed by professionals in the field of security are important because they should impact strategic choices more directly. Third, and perhaps most important, actual strategies as articulated by member states and the institution itself provide insight into elites’ perceptions of an institution and its relationship with their own states’ interests.

So, how do party manifestoes affect burden sharing? Not a great deal, it appears. A preliminary experiment based on Comparative Party Manifesto Project data found little evidence of strategic culture within domestic political parties having any impact on military expenditure among member states. Impact was limited to change in the number of mentions of “Freedom and Human Rights” within a country increasing the contribution to military spending by .07%, and change in the number of mentions of “Internationalism” in a positive manner, decreasing contribution to military spending by 0.14% (see graph below).
In terms of perceptions of strategy elites, the relationship between strategic culture and military expenditures is equally unclear. In order to test the hypothesis that convergence in strategic culture should lead to convergence in burden sharing, five seminal US national security documents were compared against NATO’s six historical Strategic Concepts using Yoshikoder content analysis software. The documents were compared in the pairs identified below:

<table>
<thead>
<tr>
<th>NATO Strategic Concept</th>
<th>US National Security Document</th>
</tr>
</thead>
<tbody>
<tr>
<td>1949 NATO Strategic Concept</td>
<td>NSC-68</td>
</tr>
<tr>
<td>1957 NATO Strategic Concept</td>
<td>NSS 162-2</td>
</tr>
<tr>
<td>1968 NATO Strategic Concept</td>
<td>NSS 162-2</td>
</tr>
<tr>
<td>1991 NATO Strategic Concept</td>
<td>1995 National Security Strategy</td>
</tr>
<tr>
<td>1999 NATO Strategic Concept</td>
<td>2002 National Security Strategy</td>
</tr>
<tr>
<td>2010 NATO Strategic Concept</td>
<td>2010 National Security Strategy</td>
</tr>
</tbody>
</table>

The comparison assessed the documents for overall convergence, as well as convergence in five specific categories: “Adversary” – the use of words associated with a common adversary shared by the member states; “Capabilities” – the use of words associated with the capabilities of the member states and the alliance as a whole; “Economy” – the use of words associated with the economic importance of the alliance as an institution, or its connection to transatlantic economic ties; “Ideas” – the use of words...
associated with a shared conception of what the transatlantic security community was or is; and “Structure” – words associated with the particular structure of the international system.

Below are graphs of trends in the frequencies of each category of words in NATO and US documents, respectively. There is a noticeable downward trend in the use of words fitting into the “Adversary” category in NATO Strategic Concepts, but particularly in US National Security Strategy documents. Across other categories, word use was surprisingly consistent in both US and NATO documents.
After measuring the frequency of word use in each of these categories, a “percent difference” was calculated between each pair of key strategic documents. The degree to which documents converged in these areas was then set against the overall NATO cost share borne by the United States. If strategic culture, as measured by language used in fundamental strategic documents, indeed impacts burden sharing, then more differentiation between seminal US and NATO documents should be associated with a higher cost share borne by the United States (more unequal burden sharing). The opposite should also be true – less differentiation between the documents should be associated with a lower share borne by the United States, (more equal burden sharing).

The data used for this project do not suggest that this is the case. There appears at first glance to be a positive correlation between US Cost Share and overall language differentiation in the NATO and US documents, which would provide some confirmation for the hypothesis that greater convergence in language used in strategic documents is associated with more equal burden sharing. However, there also appears to be a negative correlation between cost share and differentiation in the use of terms associated with a common adversary. These initial results cast doubt on the notion that there is any systematic relationship between strategic culture as expressed in key strategic documents and burden sharing.

After correcting for serial correlation caused by both spending decisions and strategic documents being strongly influenced by those same variables in preceding years using a Prais-Winsten regression, which regresses not the total cost share but the change in cost share from year to year, the conclusions become slightly clearer. There appears to be no systematic relationship between convergence in language in strategic documents and burden sharing.22

A series of interviews conducted with officials at the European Union Military Staff, NATO Headquarters, NATO Special Operations Forces Headquarters, and the European Defence Agency generally support this conclusion. While the total number of interviewees was relatively small (17), some general trends were noticeable: first, there was a wide variety of attitudes on key questions of strategic culture. Second, this variation did not appear to correlate with nationality, or with organizational membership. Finally, discussion was open and personal – in each organization (with the exception of EDA, where there was only one interviewee), the variation of attitudes suggests that there is a culture of relatively open discussion and there does not appear to be a systematic “homogenization” within institutions of attitudes toward the use of force. A variety of strategic cultures within European and transatlantic security organizations does not appear to preclude effective cooperation.23
CONCLUSIONS

It is not easy to draw definitive conclusions given the relative paucity of data available for this experiment. However, it is possible to draw some theoretical implications, some ideas for future research and data collection to deal with the paucity of data, and some possible policy implications of the research.

Theoretical Implications

This research can shed some light onto a few questions of importance to NATO and the study of alliance behavior. First, have NATO member states attempted to manage the perception of threats, or adversaries in order to maintain alliance cohesion? Based on the data used for this research, it appears not. Percentage difference in use of terms related to adversaries in NATO and US strategic documents has varied widely, but has demonstrated an upward trend – NATO Strategic Concepts look less like US National Security Strategies in terms of adversaries now than they did in 1949.

Crucially, though, strategic cultural convergence between the alliance’s most powerful member (the United States) and the alliance as a whole, as reflected in seminal strategic documents, does not appear to have affected burden sharing among alliance members. Therefore, there does not seem to be a strong case for the idea that the recent trend toward increased inequality in burden sharing indicates decreasing alliance solidarity. It may, in fact, reflect a decrease in balancing tendencies among European allies, or, perhaps more likely, an increasing perception among allies that security goods produced within the alliance are, in fact, public, and therefore increasing free riding.

If NATO has persisted for the 22 years since John Mearsheimer predicted its demise (which it appears to have), it is either because it is able to adapt in a way that causes its members to continue to find it to be useful, or because the members share a common culture when it comes to the nature of security and the use of force. The data analyzed in this research suggest that the former is more likely than the latter.

The effectiveness of NATO as an alliance may, then, not truly depend on the persistence of a shared strategic culture. This provisory conclusion suggests that some US and alliance-wide policy approaches might merit some revisiting.

Policy Implications

This research has five major policy implications, each of which is explored in some detail below:

1. First, the burden sharing issue is not as acute as many seem to think – in historical context the gap in defense expenditures among Allies is rather small.
2. Even if the gap continues to grow, which is likely as European NATO members slash defense budgets at a faster rate than the United States from an already lower basis, a large gap in burden sharing need not be taken as an indication of a flailing Alliance.
3. NATO’s current emphasis on a 2% of GDP target for defense spending might be misguided – it measures gross investment rather than the return on that investment, the precise opposite of the intent behind NATO’s “Smart Defense” initiative; and only three
members (the United States, the United Kingdom and Greece) currently meet it. There are potential benefits to setting a target like this – it raises member state awareness, it provides a benchmark against which members can “name and shame” other members, and it can generally encourage more spending on defense. But none of these possibilities seem to be coming to fruition in this case – it is worth considering a different approach.

4. NATO members should update their common method of measuring Alliance contributions. In so doing, they should agree upon a single format under which further to disaggregate defense budgets uniformly to reveal data publicly and accessibly that would be useful in calculating members’ true contributions to Alliance priorities. This paper proposes such a method on pages 15 and 16.

5. NATO needs to develop a new “currency” for burden sharing that looks beyond defense expenditures. The focus should be on capabilities rather than spending – conceptually in line with both the Smart Defense and the Pooling and Sharing initiatives. This “currency” would be ideational and strategic in nature. It would include first and foremost the acknowledgement by European member states that global security is in Europe’s interests – in exchange for continuing to provide the traditional security guarantees associated with the Alliance, the US would not face the “Hegemon’s Dilemma” alone. Flowing from such an acknowledgement, European member states should enhance their capacities to provide security in their extended neighborhood, from the South Caucasus and Central Asia to the Mediterranean Sea and even the Indian Ocean. As a European commitment to this kind of capability would provide the Alliance “strategic depth” and allow the US to focus its efforts in areas outside of the European neighborhood, the US could continue to extend traditional security guarantees at a lower cost.

REVAMPING NATO’S METERICS: WHY 2%?

NATO and some national officials are fond of reminding member states of the target of 2% of GDP for defense expenditures. This target is not helpful, either in encouraging increased equality in burden sharing or especially in encouraging cohesion among Allies. It is also an ill-adapted metric as it relates to the Alliance’s objectives for spending and capabilities.

In terms of increasing equality in burden sharing, in their seminal work on the topic, Olson and Zeckhauser pointed out the inutility of attempts at “moral suasion,” since “different levels of contribution are not due to different moral attitudes… the less than proportionate contributions of the smaller nations are securely grounded in their national interests (just as the disproportionately large contributions of the larger countries are solidly grounded in their national interests). Thus, American attempts to persuade other nations to bear ‘fair’ shares of the burdens of common ventures are likely to be divisive and harmful even to American interests in the long run.”

Currently, only 3 of NATO’s 28 members meet the 2% of GDP target for defense spending: the United States, the United Kingdom, and Greece. The fact that as Greece’s GDP plummets, it apparently becomes more and more of a star pupil in the realm of burden sharing should be enough to give pause to those relying on this metric. More importantly, each of those countries (with the possible exception of the United Kingdom) devotes a significant proportion of its defense expenditures to “private goods” – to
procuring security goods whose benefits accrue uniquely or disproportionately to the state making the expenditures. John O’Neal hypothesized in 1990 that during the 1970s and part of the 1980s two factors led to the increased equality in burden sharing seen in the graphic above: increased European integration in security affairs, and the pursuit of private goods on the behalf of Portugal, Greece, and Turkey.

A similar trend can be observed in NATO in the last 15 years, relating to two major developments: increased European integration or interdependence in security affairs since the St-Malo Accords, leading to more equal distribution of public goods among European Allies; and increased pursuit of “private goods” by the United States since the September 11, 2001 attacks. The trend is evident in the graphic below:

Most analysis has focused on the decoupling of US military burden from that of the rest of the Alliance. This trend has actually been taking place since 1997, possibly due to the renewed emphasis on expeditionary capability and active defense in the United States’ 1996 Quarterly Defense Review after nearly a decade of capitalizing on the post Cold War “peace dividend,” but picked up a great deal of steam after September 11, 2001. At the same time, though, there has been a much closer alignment among European Allies, conforming to O’Neal’s concept of interdependence and burden sharing. It is unlikely that any of this took place as a result of prodding toward a 2% military burden target from NATO as an institution or from other member states.

Not only is a target for defense expenditures as a percentage of GDP ineffective in increasing equality in burden sharing, it is also poorly adapted to measure the effectiveness of the Alliance as an aggregator of capabilities. NATO’s Smart Defense initiative is built around cooperating in procurement and
The metrics for success of this initiative should be built around outputs (capabilities) and not inputs (dollars invested).

Finally, the 2% of GDP target for defense expenditures is detrimental to NATO’s cohesion as an Alliance. As both the Public Good/Collective Action and the Joint Product models demonstrate, enhanced integration and more equal burden sharing are incompatible in traditional Alliance political economy. The two become more compatible in situations of interdependence. An arbitrary target for expenditures encourages the pursuit of private goods in security. Such activity is not in itself harmful to the Alliance, but if the objective is to encourage interoperability, joint procurement, and a leaner, more efficient Alliance, then the institutional incentives should be managed accordingly. In the absence of an alternative metric, using the current target is understandable, but NATO should seek to better measure burden sharing.

**MEASURING BETTER – CREATING A “SECURITY INVESTMENT DATA SET”**

In the place of a target focused on top line spending, NATO should think harder about what member states ought actually to be doing with their defense budgets to support their mutual interests and values. Doing so requires a different conceptual approach to burden sharing, but it also requires a set of metrics more aligned with the Alliance’s stated goals.

Currently, NATO publicly offers relatively transparent data on member state defense expenditures. The data is categorized into six tables: total defense expenditures, GDP and defense expenditure annual volume change (%), Defense expenditures as a percentage of GDP, GDP and defense expenditures per capita, Distribution of defense expenditures by category, and armed forces. This is all to the good, but some adjustments in the “distribution of defense expenditures by category” table could lead to a more transparent and effective analysis of burden sharing within NATO.

The “categories” into which expenditures are currently classed are personnel expenditures, equipment expenditures, infrastructure expenditures, and other expenditures. None of these categories are of particular analytical use in the burden sharing conversation – they do not clarify whether a member state’s expenditures are in pursuit of private goods or directed at the public good that is Alliance security.

NATO’s 2010 Strategic Concept is a good starting point to reorganize the way in which the Alliance categorizes defense expenditures – the Alliance ought to start systematically measuring members’ contributions to their shared strategic objectives. In line with the Strategic Concept, categories that would be of use are:

**Collective defense:** expenses by member states devoted to “deterring and defending against any threat of aggression, and against emerging security challenges where they threaten the fundamental security of individual Allies or the Alliance as a whole.” Such expenditures should include strategic nuclear forces, rapidly deployable expeditionary forces, and cyber defense.
**Crisis management:** expenses by member states aimed at generating an “appropriate mix of... political and military tools to help manage developing crises that have the potential to affect Alliance security, before they escalate into conflicts; to stop ongoing conflicts where they affect Alliance security; and to help consolidate stability in post-conflict situations where that contributes to Euro-Atlantic security.” Such expenditures should include contributions to peacekeeping missions, anti-piracy missions, diplomatic budgets, and foreign aid expenditures.

**Cooperative security:** expenses by member states aimed at “engage [ing] actively to enhance international security, through partnership with relevant countries and other international organizations; by contributing actively to arms control, non-proliferation and disarmament; and by keeping the door to membership in the Alliance open to all European democracies that meet NATO’s standards.” Such expenditures should include spending on bilateral and joint training missions with partners and other non-member states, arms control, counter-proliferation and disarmament budgets, and military and civil assistance to partners and aspiring NATO members.

Such granular disaggregation of member state expenditures certainly poses an administrative challenge, but should be well worth the effort. One of the key reasons that the burden sharing debate has persisted as long as it has without resolution is that member states select metrics according to their desire to appear to be bearing a heavier proportion of the burden of collective defense. Agreeing to a set of metrics expressly tied to NATO’s Strategic Concept would allow the Alliance to leverage internal analytical capabilities and external researchers to finally get a grip on the burden sharing conversation.

Making the data available in a format that is conducive to statistical analysis would also be an easy step that would have significant analytical benefits.

**Further Research**

Further research will help clarify some of the suggestions that this paper has made. First, the gathering and dissemination of member state defense expenditures, as discussed above, would allow for a more precise analysis of burden sharing. Second, improved content analysis could provide more precise hypothesis testing. Possible improvements include the acquisition, translation, and analysis of strategic documents from additional member states (currently underway for France, the UK, Spain and Italy); the use of more precise content analysis methodology; and the use of more advanced content analysis software. Third, cross-disciplinary and cross-institutional collaboration would assist in providing more precise and actionable results. Such collaboration with scholars in the fields of economics and comparative politics (with particular skills in quantitative content analysis) would help with the methodological improvements mentioned above.

The suggestion that the link between alliance cohesion, strategic culture and burden sharing may not be particularly strong is a potentially controversial one. It may also have some important implications for member state policy toward NATO, and for the future of the alliance. Improving the reliability of models to assess this link is a worthwhile endeavor.
WORKS CITED


Communauté européenne de défense: Suite de la discussion du projet de loi. (1954 (30.08)). Journal officiel de la République française, 4416-4429.


http://walt.foreignpolicy.com/posts/2012/06/29/european_defense_post_libya_towards_the_rubicon


ENDNOTES


16 When discussing costs this paper, and most others that discuss military expenditures among NATO members, use national military expenditures, rather than contributions to common NATO funds, because of the fact that common NATO funds represent a tiny fraction of overall expenditures. Almost by definition, members of NATO make their military forces available to other members in case of an armed attack, so contributions to common security are measured in terms of each state’s expenditures on defense. While all military expenditures are certainly not devoted to NATO-specific requirements, overall military expenditures are a suitable, if not ideal, proxy for contributions to the collective security of the member states.

All graphics based on author’s calculations. Data Sources: Correlates of War National Military Capabilities Dataset; “Statistics on World Population, GDP and Per Capita GDP, 1-2008 AD,” Angus Maddison; “The Military Balance,” IISS


For this statistical analysis I am grateful to Professor Edmund Malesky

For this statistical analysis I am grateful to Professor Edmund Malesky

Interviews were structured around survey questions used in Cristoph Meyer’s The Quest for a European Strategic Culture (2006)


A conversation with Professor Sten Rynning helped clarify this vision of measuring burden sharing.