

**CHOOSING NEW ALLIES: AMERICA'S INDIFFERENCE TO THE ACADEMY'S  
EXPECTATIONS**

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## *Abstract*

Historically, the US has developed new partnerships to confront new challenges. With a growing China, the US may foster new partnerships to maintain a dominate position in East Asia. To understand how new partnerships may benefit the US, the study examined what benefits previous allies have provided and the timing of that benefit exchange. The study borrowed the literature's Asymmetric Benefit Exchange Model and used four proxy measures to detect the provision of economic or political benefits to the US in the years surrounding an alliance declaration. I hypothesize that small states deliver political and economic benefits upfront to increase their chances of being selected as an ally but then pull back the delivery of these benefits following an alliance declaration to reduce their costs.

The study identified one case, Argentina, in which the state delivered benefits prior to the alliance only to withdraw them once it was declared. The majority of cases, however, appear to have been selected without delivering economic or political benefits to the US, calling into question the applicability of the Asymmetric Benefit Exchange Model to the US alliance selection process. Indeed, the majority of allies appear to deliver their benefits in other ways, mostly through security provision or tailored political and economic benefits. The lessons learned in the study are then used to evaluate India as a potential future ally. It finds a credible basis for a potential partnership due to a shared

security threat and India's increasingly cooperative with the US at the UN, deepening trade relationship with the US, and increased purchases of US weapons.

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## ***Introduction***

The United States faces growing challenges around the world, particularly given the rise of China. In the past when faced with a challenger, the US has developed alliances with local partners in order to boost partner military capabilities. For US policymakers considering candidate allies, the academic literature on alliances is of limited value. The bulk of the literature focuses on alliances between major powers as, in the realist-conceptualization, major powers are the only true actors. However, given the power of the United States in the international system, US partners are significantly weaker.

The narrow segment of literature focusing on asymmetric alliances theorizes that an asymmetry of power results in an asymmetric exchange of benefits. As a weak state has a relative deficit of security it will seek to capture the relative surplus of security which large states have. In exchange, a weak state's relative surplus of political or economic freedom is provided to the larger power.

This paper seeks to understand if this benefit exchange takes place in existing US alliances, the form and timing of these benefits, and whether lessons learned from this analysis can provide insight into prospective US alliances. To do so, I first I conduct a review of the existing literature on state behavior and the nature of alliances. Second, I identify the gaps present in the literature and explain how this paper will help address



these issues. Third, I identify cases for the study. Ultimately, I select the fourteen partners designated as Major Non-NATO Allies by the US Government. These cases help control the nature of the security benefits provided by the US as each MNNA is provided access to the same potential benefits due to the designation.

With the cases selected, I then lay out the development of four proxy measures to represent the behavior of MNNA's. The first two proxies - US-MNNA UN voting affinity and trade relations between the MNNA and states under unilateral US sanctions - represent avenues through which political benefits can be delivered to the US by the MNNA. The latter two proxies, US-MNNA trade and US-MNNA arms trade, represent avenues through which economic benefits can be delivered to the US by the MNNA.

With these proxies, I study the relationship between the US and each MNNA temporally relative to the year the partner was designated an MNNA. I do this by studying each MNNA's behavior in three separate time periods. The first time period covers the five to ten years prior to the MNNA declaration. This time period acts as a baseline from which later behavior can be compared to. The second time period covers the five years prior to the designation. As five years is approximately the average length of a US Presidency, the second time period captures if the MNNA was starting to provide benefits to the US in the run up to its designation. The final time period is the five years after the designation. This third time period captured if the MNNA delivered benefits after the designation.

Insights developed by the study are then applied in an examination of India, a prospective partner. In this section, I argue that China is a shared concern for the US and India by conducting a geospatial analysis of Chinese installations in the South China Sea. Through an analysis of Google search trends, I find that there is a growing interest in the topic, providing a catalyst for sustained US focus on the South China Sea. Shared concerns and sustained US policymaker interest provides the basis for studying this potential alliance. Finally, I review India's behavior over the past decade as captured by the four proxies.

## *Chapter One: Addressing the Literature's Shortcomings*

### *Previous Research*

Alliance formation between polities has been a constant in international relations. In *The History of the Peloponnesian Wars*, for instance, Thucydides writes of the centrality of alliance networks amongst the Greek city-states in the course of the conflict. Despite this ancient evidence, robust study of alliances did not come to the fore until after WWII. Developed in the post-war environment, the foundational thinking on alliances was heavily influenced by the conflict which was characterized by a clash of two Great Power alliance networks. As a result, the initial literature – dominated by the Realist School – concentrates on the interaction of Great Powers.

For Realist thinkers, alliance formation is driven by a state's overwhelming desire for security. The lack of a supreme authority in the international system creates an anarchic environment. Within this setting, states face pervasive security challenges as no external power exists to guarantee safety. As a result, alliances are created to enhance state security against immediate threats.<sup>1</sup> Realists expect alliances to be short lived, however, as after the threat has passed, states will avoid assisting a potential future enemy: their current alliance partner.<sup>2</sup>

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1. Stephen Walt, "Alliance Formation and the Balance of World Power," *International Security*, 9, No. 4 (Spring 1985): 33

2. Kenneth Waltz, "The Emerging Structure of International Politics," *International Security*, 18, No. 2 (Autumn, 1993): 45.

Theorists from the Liberal School, by contrast, argue that states are typically confronted by competing priorities for government resources. The provision of security is just one of many state functions requiring attention. As security is a less dominate concern, states tend to be less suspicious of partnerships. As a result, Liberal thinkers generally believe that states seek to bolster trust within international relations by creating avenues for cooperation, including alliances. By doing so, states reduce the level of anarchy within their environment.<sup>3</sup> Furthermore, while alliances may be created to confront a specific threat, they often outlive their original purposes. Liberals argue that this phenomenon is due to the stickiness of institutions: with substantial gains derived from cooperation, relationships are cheaper to maintain than dissolve.<sup>4</sup>

### *The Nature of Alliances*

For Realists such as Snyder and Walt, the anarchic nature of the international system creates a security dilemma for states. Unlike domestic systems, the international realm lacks a supreme authority to enforce rules. Therefore, states are left to fend for their own security. To bolster their prospects of survival, states band together against common threats. A state's perception of these threats is strongly shaped by the distribution of

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3. Robert Axelrod and Robert Keohane, "Achieving Cooperation under Anarchy," *World Politics*, 38, No. 1 (Oct., 1985): 253.

4. G. John Ikenberry, "Institutions, Strategic Restraint, and the Persistence of American Postwar Order," *International Security*, 23, No. 3 (Winter, 1998-1999): 53.

power within the international system with multipolar, bipolar, and unipolar systems expanding or limiting the number of viable partners.<sup>5</sup>

However, no matter the distribution of power, states' actions will be in reaction to their primary threats. For Walt, balancing is the most likely course of action as bandwagoning leaves a state at the mercy of their greatest threat. Bandwagoning is mostly seen as a choice for weak states on the periphery of major powers. As only major powers are relevant in the international system, minor powers that have a tendency to bandwagon simply "don't matter".<sup>6</sup> Snyder's work further reinforces this Realist worldview as he argues that threat perceptions drive alliance creation while ideological considerations play a secondary role.<sup>7</sup>

Realism's emphasis on the centrality of major powers in the international system led to the development of the Capability Aggregation Model to explain symmetric alliances between two major powers. This model assumes that security is the primary concern of states and that states use alliances to enhance their security by aggregating their capabilities with select partners against common threats. The resulting relationships are directed against the common threat and will quickly dissolve when the threat diminishes. The model examines symmetric alliances as only other major powers have sufficient capabilities to adequately contribute to common security. As a result, minor

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5. Stephen Walt, "Alliances in a Unipolar World," *World Politics*, 61, No. 1 (Jan., 2009): 86-120.

6. Stephen Walt, "Alliance Formation and the Balance of World Power," *International Security*, 9, No. 4 (Spring 1985): 3-43.

7. Glenn Snyder, "The Security Dilemma in Alliance Politics," *World Politics*, 36, No. 4 (Jul., 1985): 461-495.

powers are essentially locked out of forming a relationship with a major power because the minor power has little capability to enhance an alliance's overall security.<sup>8</sup>

Realism's focus on major powers undermines its ability to address why major powers still choose to ally with minor powers despite the latter's weak security capabilities. This shortfall reduces the model's utility for US policymakers as America's power and size ensures that all potential allies will be relatively small. In addition, empirical research indicates that the majority of alliances since the 15<sup>th</sup> Century included at least one minor power.<sup>9</sup> This presents a quandary: if Realism is correct in its assessment that minor powers have little strategic importance, why are the majority of alliances formed with them?

To address this theoretical shortcoming, the literature expanded beyond Realist orthodoxy. Liberalism, for instance, argues that these relationships exist because policymakers successfully linked security and other concerns. While Realism views state survival as an overwhelming concern of states in an anarchic system, Liberalism argues that states also have economic and political concerns. Morrow, for instance, argues that states simultaneously pursue both security and autonomy. Autonomy, or in other words freedom of action, is desirable as it allows states to effectively pursue their foreign policy interests. To reach an optimum outcome, states balance their security and autonomy

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8. James Morrow, "Alliances and Asymmetry: An Alternative to the Capability Aggregation Model of Alliances," *American Journal of Political Science*, 35, No. 4 (Nov., 1991): 904-933.

9. Jack S. Levy, "Alliance Formation and War Behavior," *The Journal of Conflict Resolution*, 25, No. 4 (Dec., 1981): 581-613.

needs. For instance, states with relatively more security than autonomy will seek more autonomy while states with relatively more autonomy than security will enhance their security by sacrificing autonomy. Asymmetric interests can lead to the development of asymmetric alliances in which a major power pursuing more autonomy exchanges security with a minor power seeking security.<sup>10</sup> Provision of autonomy is generally thought to take the form of political or economic concessions such as increased trade access.<sup>11</sup>

### *Alliance Durability*

Another focus area for the literature has been the causes of alliance termination. For Realists, such as Walt, the downfall of alliances is linked directly to the core justifications of the alliance. When these underlying factors shift and change overtime, the underpinnings of an alliance can weaken. A decrease in the threat facing alliance partners or a reduction in perceived reliability of a partner diminishes the expected return of an alliance and can drive alliance collapse.<sup>12</sup>

For the 25% of alliances that fail during times of need rather than dissolving beforehand, institutional 'stickiness' is often a factor. Once institutions are set in place, the inertia of

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10. James Morrow, "Alliances and Asymmetry: An Alternative to the Capability Aggregation Model of Alliances," *American Journal of Political Science*, 35, No. 4 (Nov., 1991): 904-933.

11. Benjamin Fordham, "Trade and Asymmetric Alliances," *Journal of Peace Research*, 47, No. 6 (2010): 685-696.

12. Stephen Walt, "Why alliances endure or collapse," *Survival*, 39, No. 1 (Spring, 1997): 156-179.

the system creates a 'stickiness' by which the institution resists change or dissolution.<sup>13</sup>

For alliances, maintaining the relationship often involves lower costs than dissolving it.

Yet this property can mask substantial changes in the underlying justification of an alliance. When circumstances finally require the fulfillment of costly alliance obligations, institutional stickiness alone is not sufficient to overcome the rot in the relationship.<sup>14</sup>

Empirical findings that relationships with high degrees of institutionalization do not feature increased likelihood of follow through tend to support this argument.<sup>15</sup>

Besides institutional stickiness, empirical research has identified other factors which influence the longevity of an alliance. Gaubatz finds that democratic states tend to have particularly strong alliances with one another.<sup>16</sup> Meanwhile, several researchers have found that asymmetric alliances tend to be strong as issue linkage allows for a better exchange of benefits.<sup>17,18,19</sup>

### ***Asymmetric Alliances***

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13. Paul Pierson, "Limits of Design: Explaining Institutional Origins and Change," *Governance: An International Journal of Policy and Administration*, 13, No. 4 (Oct., 2000) 475-499.

14. Brett A. Leeds, Andrew G. Long, and Sara M. Mitchell, "Reevaluating Alliance Reliability," *The Journal of Conflict Resolution*, 44, No. 5 (Oct., 2000): 686-699.

15. Brett A. Leeds and Sezi Anac, "Alliance Institutionalization and Alliance Performance," *International Interactions*, 31 (2005): 182-202.

16. Kurt Gaubatz, "Democratic States and Commitment in International Relations," *International Organization*, 50, No. 1 (Winter 1996): 109-139.

17. Simon Collard-Wexler, "Strength in Number? Testing the Effects of Alliance Size on Alliance Duration," Working paper, Columbia University, New York, 2009.

18. Brett A. Leeds and Burcu Savun, "Alliance Termination: Explaining Decisions to Abrogate or Renegotiate Existing Alliances," Paper presented at the conference of the Annual Meeting of the Midwest Political Science Association, Chicago, April 2004.

19. Scott D. Bennett, "Testing Alternative Models of Alliance Duration," *American Journal of Political Science*, 41, No. 3 (Jul., 1997): 846-878.



One area the literature explores is the relationship between states of vastly different power potential. The theoretical side of the literature, especially from the Realist School, concentrates on Great Power relations. For Realists, the Great Powers are the key units of action in the international scene and deserve the most attention. From the Congress of Vienna to the end of WWII, for instance, the international political realm was dominated by shifting alliances amongst Great Powers who sought to maintain a balance of power. The drive by states for relative gains and enhanced security lends itself to a multipolar norm. Yet, the bipolarity and unipolarity of the Cold War and post-Cold War eras, respectively, featured security capabilities concentrated in hands of only one or two states. As such, most countries were relatively smaller than the dominate powers, heightening the importance of asymmetric alliances.

These asymmetric relationships not only feature a divergence in the assets available to the two partners but also a divergence in the benefits gained by each state. For Realists, states form alliances to enhance their security. Yet, small states offer relatively little additional security to a larger state. At the same time, such a relationship increases the security commitments of the larger partner. Under the Capabilities Aggregation Model, this situation should have little appeal for the larger state.

However, relationships between large states and small states do exist. To address this short coming, the Autonomy-Security Exchange Model was developed. The model

supposes that states are not only concerned with security but also autonomy on the international scene.<sup>20</sup> This two factor model, in some ways, is similar to Riccardo's principal of comparative advantage in economics. For Riccardo, states are better off producing goods which they are relatively more efficient at producing and trading these in exchange for goods that they are relatively less efficient at producing. By trading, both states are better off than if they attempted to produce these goods independently.

Similarly, in the two factor Autonomy-Security Model, larger states are relatively rich in security compared to their autonomy. Small states are security poor and relatively autonomy rich. By trading security and autonomy via an alliance, each state is better off. As small states provide only meagre security benefits, the provision of autonomy to the large state provides the main incentive for alliance formation, highlighting the limits of the Capabilities Aggregation Model.<sup>2122</sup>

Large states can provide security through several actions such as military guarantees or weapon sales. Small states, in turn, can deliver autonomy benefits by, for instance, aligning their foreign policy with the goals of a larger state. A small state can also provide enhanced trade benefits to reward a large state. Cooperation in trade can help states build mutual trust, enabling a deeper level of interaction on the security front.

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20. James Morrow, "Alliances and Asymmetry: An Alternative to the Capability Aggregation Model of Alliances," *American Journal of Political Science*, 35, No. 4 (Nov., 1991): 904.

21. James Morrow, "Alliances and Asymmetry: An Alternative to the Capability Aggregation Model of Alliances," *American Journal of Political Science*, 35, No. 4 (Nov., 1991): 904.

22. Gerald Sorokin, "Arms, Alliances, and Security Tradeoffs in Enduring Rivalries," *International Studies Quarterly*, 38, No. 3 (Sep., 1994): 424.

Long and Leeds find that allies often increase their level of trade.<sup>23</sup> This behavior is particularly seen within asymmetric relationships. For larger states with an important economic relationship, the provision of security guarantees to a junior partner may be the most efficient way to ensure that the economic relationship is uninterrupted.<sup>24</sup>

The existence of asymmetric benefit exchanges and viability of the Autonomy-Security Model is further reinforced through the alliance literature's discussion of free ridership. With little security to contribute, small states tend to decrease their security expenditures, in some cases to zero, once they are protected by a larger ally.<sup>25</sup> This behavior tends to decrease joint security and calls into question the viability of the aggregate capabilities model. For the small partner, the security provided by the larger partner can more than offset the decrease in domestically provided security, providing a strong incentive to continue the relationship but a strong disincentive for the large state. The Autonomy-Security Model helps explain why large states remain in an alliance with falling aggregate capabilities by arguing that large states are incentivized through non-security benefits. For instance, despite the failure of many NATO countries to meet the long standing 2% of GDP military expenditure target, the US continues to participate in the alliance.<sup>26</sup>

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23. Andrew Long and Brett Leeds, "Trading for Security: Military Alliances and Economic Agreements," *Journal of Peace Research*, 43, No. 3 (2006): 445.

24. Benjamin Fordham, "Trade and Asymmetric Alliances," *Journal of Peace Research*, 47, No. 6 (2010): 694.

25. Jonathan Borck, David King, and Richard Zeckhauser, "Contribution Shares in Alliances," Proceedings of the IASTED International Conference, Albert, Canada, (July 2003): 32.

26. Naftali Bendavid. "Just Five of 28 NATO Members Meet Defense Spending Goal, Report Says," *The Wall Street Journal*, 22 June 2015, Web.

The attractiveness of autonomy benefits is demonstrated by the various military coalitions the US has formed even when the US is the overwhelming capabilities provider. By conducting otherwise unilateral operations through multilateral coalitions, the US receives autonomy benefits through the enhanced legitimacy of its actions. From an international legal perspective, unilateral military actions are illegal and illegitimate without a UN authorization. However, as Russia and China have the opportunity to veto a resolution, UN backing may not be available to support proposed US actions. However, as the International Commission on Intervention and State Sovereignty laid out in its report “Responsibility to Protect,” if the UN fails to act to resolve a crisis, states can take action under Chapter VIII of the UN Charter by working through regional organizations. During the intervention in Kosovo, for instance, the US was able to enhance the legitimacy of its operations by working through NATO.<sup>27</sup>

### *Alliance Selection*

For parties receiving security benefits, the refusal of an ally to honor their commitments during a dire hour of need can threaten the very existence of a state. Given the stakes, states seek partners that will follow through on their commitments when needed. Therefore, the perception of state reliability is a key variable when selecting an ally

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27. The International Commission on Intervention and State Sovereignty, *The Responsibility To Protect*, Ottawa: International Development Research Centre, 2001, Print.

because the expected value of the relationship is a function of the perceived reliability of a partner.

Empirical research supports this view as states tend to form alliances with partners expected to follow through on their commitments, with some 75% functioning as planned.<sup>28</sup> Given reputation's role in alliance selection, reputable states often find more willing and more reliable partners.<sup>29,30</sup> Democracies, in particular, have been found reliable despite frequent turn over in administration as the process of ratifying an alliance often requires buy in from across the political spectrum. Dictatorial regimes, meanwhile, only represent the interests of a small constituency. When replaced by a new regime, policies are likely to undergo a shift.<sup>31</sup>

The literature has also addressed ways in which states can enhance their reputation. Fearson, for instance, argues that states can enhance their reputation for reliability by incurring costs when sending political messages in order to demonstrate the seriousness of their actions. Furthermore, these costs lock leaders into their decisions and thus make follow through more likely.<sup>32</sup>

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28. Brett A. Leeds, Andrew G. Long, and Sara M. Mitchell, "Reevaluating Alliance Reliability," *The Journal of Conflict Resolution*, 44, No. 5 (Oct., 2000): 686-699.

29. Douglas Gibler, "The Cost of Reneging, Reputation and Alliance Formation," *Journal of Conflict Resolution*, 52, No. 3 (June 2008): 426-454.

30. Gregory D. Miller, "Hypotheses on Reputation: Alliance Choices and the Shadow of the Past," *Security Studies*, 12, No. 3: 40-78.

31. Brett A. Leeds, Michaela Mattes, and Jeremy S. Vogel, "Interest, Institutions, and the Reliability of International Commitments," *American Journal of Political Science*, 53, No. 2 (Apr. 2009): 461-476.

32. James D. Fearon, "Signal Foreign Policy Interests," *The Journal of Conflict Resolution*, 41, No. 1 (1998): 68-90.

The substantial benefits derived from an alliance would seem to provide a powerful incentive for small states to seek out larger partners. However, while many small state-large state combinations theoretically exist, only relatively few partnerships form.

The literature finds that the selection process is dominated by the perceived reliability of a potential partner. If a partner is not expected to be reliable, the alliance will have little value. Yet, how is reliability measured? The literature argues that reliability is based on long-term past behavior of a state in its dealings with others.<sup>333435</sup> As such, a reputation for reliability increases the willingness of partners to invest in a relationship as a strong return on investment can be expected.<sup>36</sup>

### Figure 1. Expected Returns

$$\text{Expected Returns} = (\text{Partner Provided Benefits} \times \text{Perceived Reliability}) - \text{Alliance Costs}$$

The above figure, adapted from Anthony Downs' rational choice theory, highlights the central role that perceived reliability in alliance selection choices plays.<sup>37</sup>

For a rational actor, the decision to form an alliance is based on expected returns. If these returns are positive, an alliance would be a rational choice. Of the three variables -

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33. Andrew Guzman, "A Compliance-Based Theory of International Law," *California Law Review*, 90, No. 6 (Dec., 2002): 1849.

34. Mark Crescenzi, Jacob Kathman, Katja Kleinberg, and Reed Wood, "Reliability, Reputation, and Alliance Formation," *International Studies Quarterly*, 56, (2012): 262.

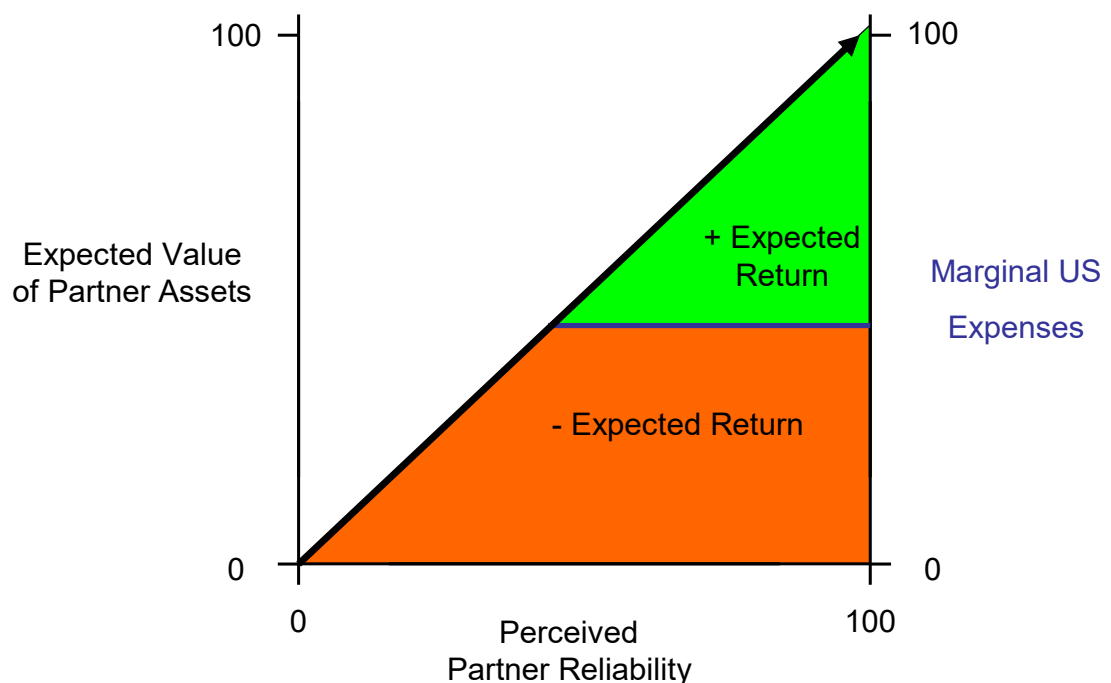
35. Douglas Gibler, "The Cost of Reneging, Reputation and Alliance Formation," *Journal of Conflict Resolution*, 52, No. 3 (June 2008): 450.

36. John Cony, "The Portfolio Benefits of Free Riding in Military Alliances," *International Studies Quarterly*, 38, No. 3 (Sep., 1994): 408.

37. Anthony Downs, *An Economic Theory of Democracy*, New York: Harper, 1957.

partner provided benefits, alliance costs, and perceived reliability - the first two can be assessed with a high degree of confidence. Perceived reliability, however, is difficult to estimate despite its importance to the equation. A partner with tremendous capabilities and who is perceived to be reliable, for instance, would be an attractive ally. However, if the partner, in reality, only follows through on its commitments 50% of the time, the value of the partnership is greatly diminished. This is illustrated in the below figure.

**Figure 2. Investment Payoff**



In the above figure, as the perceived reliability of a US partner increases the expected value of that partner's contribution (i.e. assets) increases. If these first two variables are known, then the level of marginal US expenses required to support the partnership will determine whether the alliance is expected to have a positive or negative net return. By improving America's perception of its reliability, a small state

**increases the likelihood that the partnership will be viewed by the US as having a positive expected return.**

### *Network Effects*

While reputation is an important factor in determining the potential value of an alliance, it also can encourage compliance by the parties. This influence, however, is variable due to network effects - the influence of third party relationships on a bilateral relationship - as the size of an entity's partnership network is variable. The business literature has found that network effects are important in ensuring "community enforcement" of bilateral strategic alliances.<sup>38</sup> Robinson and Stuart, furthermore, find that, "Within the framework of an alliance network, a firm must weigh the benefits of taking actions that are beneficial to itself at the expense of its counterparty not only against the lost opportunities with that firm but also against the lost opportunities with other firms that can be reached within the network."<sup>39</sup>

In the International Relations context, when states with large networks fail to comply with the benefit exchange in one bilateral relationship, they may degrade their standing with their other partners. States with only a single partnership do not face this issue. With dozens of allies, network effects could impose large negative externalities on the US if it fell short in its bilateral commitments. With fewer partnerships, America's

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38. The lack of an absolute authority in international relations makes a business environment where transactions are enforced through community approbation rather than the courts a comparable situation.

39. David Robinson and Toby Stuart, "Network Effects in the Governance of Strategic Alliances," *Journal of Law, Economics, & Organization* 23.1 (2007): 270. Web. 1 Dec. 2015.



asymmetric partners have relatively more freedom to reduce their benefit provision once an alliance is declared.

### *Areas for Future Research*

The literature provides valuable insights into the nature of alliances such as the widespread existence of alliance between countries with varying degrees of power and that these alliances may be rooted in an asymmetric exchange of benefits. The literature also calls to attention the importance of reputation in alliance selection and its variable influence on enforcement. However, the literature fails to explore whether network effects and the potentially short-term nature of reliability perceptions allow small states to cast themselves as reputable only to gain an alliance only to pull back these benefits once one is secure.

Currently, the evaluation of asymmetric alliances rests upon the foundation that small-state reputation is a long-term aspect of small-state identity. The literature argues that a reputation for reliability drives the selection process wherein reliable small states that deliver political or economic benefits are chosen over unreliable small states.

However, transitions between administrations are opportunities for a new first impression. First, as some alliances are designated as such by the President, a transition between administrations provides a new individual the opportunity to select partners

for this designation. Second, at the institutional level, transitions between administrations can degrade collective knowledge. As Kumar details through her extensive interviews with past National Security Council staff, transitions between administrations led to large changes in key NSC personnel. The transition from the Ford to Carter administration saw only three NSC staff members retained. The Bush to Obama transition, by contrast, was a first in that a sizeable number of staff remained on. Even in that instance, however, directors and deputy directors of the NSC's directorates were replaced.<sup>40</sup> NSC staff members who were nonpartisan also struggled to connect with political appointees and the new president in the politicized environment of the White House.<sup>41</sup> This suggests that even if transitioning NCS staff members can provide some institutional knowledge, their ability to encourage policy continuity will be challenged as new staff members bring in new ideas and a sense of tribalism formed during the presidential campaign.

Besides outgoing staff, transitions can degrade institutional knowledge through the removal of key records from NSC work spaces. These records and working papers are typically moved to the National Archives or a presidential library. Without these records, incoming staff lack readily accessible documentation of previous agreements, findings, or justification for past policy. Again the Bush-Obama transition tried to prevent this degradation by leaving a set of presidential memos on all major foreign

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40. Martha Kumar, "The 2008 National Security Council Transition: Providing Continuity in a Bipartisan Environment," *Presidential Studies Quarterly* 43.3 (2013): 490-521, Web, 3 Dec. 2014, p 502,504.

41. Kumar, p 514.

policy issues to provide a justification for the Bush administration's policy decisions and highlight the challenges which remained. These efforts, however, appeared to have no impact on Obama administration policy choices as the memos were viewed as a legacy-oriented effort by the Bush administration.<sup>42</sup>

Given the impactful nature of these transitions, small states have a window to create a new first impression. Small states face a strong incentive to gain access to the resources of a larger partner because they are seeking security benefits to ensure their survival. To do so, if the Autonomy-Security Model is applicable, they must convince a US administration that they can deliver political and economic benefits reliably. As transitions between administrations create turn over in personnel and degradation in institutional knowledge, small states may be able to drive perceptions of reliability through short term actions.

### **Hypotheses**

Alliance formation has played a pivotal role in the history of human relations. Facing a common threat, states can enhance their mutual security by collaborating. Alliances also can be asymmetric wherein only one state is a provider of security rather than both parties. In these situations, the literature points to a large state's desire to secure enhanced trade or gain political acquiesce. Despite these incentives for a partnership, a

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42. Kumar, p 504-508.

key variable in alliance formation is the perception of state reliability. An alliance is an investment wherein states commit resources based on an expected return. A state viewed as unreliable would provide zero return on investment. As such, only states that are viewed as reliable are likely chosen for partnerships.

Yet what drives *perceptions* of reliability? The literature argues that reliability is a core aspect of a state's identity, one that is built over an extended period of time. Thus, if perceptions are a long term factor, states can do little to alter this perception in the short run. The US, however, appears to operate on a short-run basis as transitions between administrations bring new policymakers to the fore.

To determine whether states exploit reliability calculations formulated through short-term impressions, my research examines changes in state behavior during the years prior to the formation of an alliance from a baseline time period. I hypothesize that small states seeking an asymmetric partnership can shift perceptions of reliability through short term changes in behavior. To do so, they will likely increase the delivery of expected returns –enhanced trade or political acquiescence – to their larger partner.

Following the formation of an alliance, I hypothesis that both partners will seek to maximize their returns from the alliance by minimizing the costs associated with the partnership while retaining the benefits provided by their partner. A small state seeking to minimize costs could withdrawal political and economic benefits while a large state

seeking to minimize costs could withdrawal security benefits. The literature's exploration of network effects, however, suggests that large states could suffer costs in their other relationships as their reputation degrades. These external costs may be greater than the cost savings gained by cutting back security provision in a single bilateral relationship. With small states generally maintaining fewer partnerships than their larger partner, smaller states suffer less from network effects and therefore face fewer external costs when withdrawing the delivery of political and economic benefits as they seek to maximize their returns from the alliance.

The intellectual basis for the above hypothesis rests of several assumptions on the nature of state behavior. The first assumption is that alliances between states with asymmetric power levels feature exchanges of asymmetric benefits. This is shared by Morrow's Autonomy-Security Exchange Model. An additional assumption I share with Morrow's model is that states are rational actors seeking to maximize state power by reaching an autonomy and security equilibrium.

My third assumption differs from the alliance literature's expectations on the development of state reliability perceptions. I share the view that partner reputation is key variable in a state's evaluation of an alliance's expected benefits. Indeed, if a partner has significant capabilities but is not expected to follow through on their obligations based on a poor reputation, these assets are of greatly diminished utility in the eyes of

others. Unlike the literature, my hypothesis assumes that a reputation for reliability can be constructed in the short term through a consistent demonstration of aligned policy.

The final assumption is that small states and large states face different costs in not delivering the expected benefits of the alliance, incorporating the literature's insights into network effects. The US has a large number of alliances while each MNNA has relatively few. With the declaration of a new alliance, the US engages its prestige and reputation for reliability in the endeavor. Failing to provide security benefits to one partner can damage America's reputation for reliability in the eyes of its other partners. These secondary effects probably inform US decisions and acts to dampen any willingness to reduce security benefits to an individual partner. By contrast, small states suffer from network effects to a lesser degree and so they face relatively lower network costs for curtailing benefit delivery. With lowered networked costs, smaller states have relatively more freedom of action in reducing the costs it incurs as part of the partnership by curtail the delivery of benefits.

These assumptions and the resulting hypotheses inform the data selected and the method of analysis. As I assume that states act for the overall benefit of the state, the data selected are broad metrics which capture behavior at a macro level. As such, these metrics may not be appropriate for different levels of analysis. For instance, if the issue was examined at the leadership level, economic or political benefits could be provide that are valuable to individual national leaders but not for the state overall. Another

limitation of my assumptions is that I only examine the delivery of political and economic benefits by the small states. As such, the proxies are inappropriate to capture benefits delivered in the security realm by small states. In addition, the proxies do not account for other, factors such as prestige or ideological concerns.

### *Designing a Test*

#### *Case Selection*

To explore the behavior of small partners before and after an alliance was formed, I sought cases which could control for several variables. First, I wanted to control for the larger partner. The US is an ideal large partner to study as there are many alliances to examine. Next, I wanted to control for the benefits provided by the US as these could influence the behavior of a US ally. NATO allies were an option as the US provides security benefits as specified by the NATO Treaty equally to all members. The multilateral nature of NATO, however, complicates the picture as the US is not the only provider of security benefits. In NATO's Baltic Air Policing mission, for instance, a variety of NATO allies provide security benefits to Latvia, Lithuania, and Estonia. As these countries are allies with the US via their participation in NATO, the direct exchange of benefits between the US and the Baltic States is not clear.

With this concern excluding NATO allies, I focused on the cases of Major Non-NATO Allies. The MNNA designation was initiated in 1989 with the selection of Australia, Egypt, Israel, Japan, and South Korea.<sup>43</sup> Since then, additional countries have been designated by the US President and between 1989 and 2013, 15 states have been selected.<sup>44,45</sup> The designation provides access to a variety of benefits including access to training, joint research & development, and eligibility for arms export. While the designation does not guarantee that the US will provide all available benefits, the designation opens the door to the same suite of opportunities for the US partners.

As I will be testing the behavior of the cases under a modified Security-Autonomy Exchange Model, it is important that the selected cases be asymmetric. Borrowing Morrow's definition, I define an asymmetric relationship as one that occurs between states of different power categories. These categories are superpower, major power, and minor power. Alliances between a major power and minor power would be asymmetric with the larger state being the major power and the smaller state being the minor power. Alliances between similar types, for instance, a minor power and a minor power would be symmetric.

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43. Daniel Hamilton. *The American Way of Partnership*, Madrid: European Strategic Partnerships Observatory, 2014, Print.

44. Stephanie Neuman, "Power Influence and Hierarchy: Defense Industries in a Unipolar World," *The Modern Defense Industry: Political, Economic, and Technological Issues*, Ed. Richard Bitzinger. 1st ed. Praeger Security International, 2009. Print.

45. As of July 2012 the number of MNNAs increased to 15 with the inclusion of Afghanistan. However, trade data between Afghanistan and other states in the international system is frequently unavailable for the years examined, degrading our ability to accurately produce metrics for the delivery of political and economic benefits to the US.



With MNNA varying in capabilities and size, to ensure that the relationship between the US and each MNNA is indeed asymmetric I compared the relative strengths of the partners by using the Composite Index of National Capability, Version 4.0, a measure of state power incorporating several factors including population size, economic measures, and military power. The CINC's focus on hard power capability is suitable for an examination of security relationships even though it ignores soft power factors that may be important in some international issues.<sup>46</sup>

While the CINC provides useful data on relative power, it alone does not provide clarity on when the power differences are great enough for a relationship to be asymmetric rather than symmetric in nature. The CINC database tracks state power between the early 1800s to the present day and allows for an examination of historic cases to lend insight to this question.

To determine when the gap between states in CINC score reflects an asymmetric or symmetric relationship, I examined instances of peer competitors when on the brink of conflict. These relationships can provide the basis for understanding when a relationship is symmetrical and by contrast, asymmetric.

In the first case, I examined the power disparity between the United Kingdom and Germany in 1914. The two had engaged in a Great Power competition for influence in

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46. J. David Singer, "Reconstructing the Correlates of War Dataset on Material Capabilities of States, 1816-1985," *International Interactions*, 1987, 14: 115-32.

Europe and Africa while participating in a naval arms race for over two decades. By 1914, Germany was rated at 0.1582045 in the CINC while the UK was rated at 0.1379118. As the weaker power, the UK's strength was approximately 87% of Germany's strength.

The second case I examined was the power disparity between the United States and the Soviet Union in 1963, the year of the Cuban Missile Crisis. At that time, the US and Soviet Union were engaged in a long term, worldwide, ideological competition. In 1963, the US was rated at 0.2079665 while the Soviet Union was rated at 0.17128. The Soviet Union was approximately 82% as strong as the US at this point in the Cold War.

The assessment that the dyads were symmetric is reflected in the nature of the conflicts which followed. In the UK-Germany case, the two engaged in a multiyear war of attrition which consumed millions of lives and engaged the entirety of each nation. A war between asymmetric powers would have probably been resolved quickly and decisively. In the US-Soviet case, while the Cuban Missile Crisis did not result in an armed conflict, the durability of the Cold War over the next several decades suggests that the Cold War competition was another example of a symmetric dyad. Both of these cases of a durable, symmetric relationship feature less than a 20% power gap between the two states. As such, for the purposes of this study, I classify a relationship with less than a 20% power gap as symmetric and greater than 20% as asymmetric.

To determine if the MNNA cases met the criteria, I examined the CINC database and compared the power difference for each dyad during the year the MNNA designation was declared. In 1989, for instance, Japan had 38% of the power the US did while South Korea and Australia possessed 13% and 5% respectively. Overall, each MNNA case was confirmed to be asymmetric with no state approaching the 80% threshold.

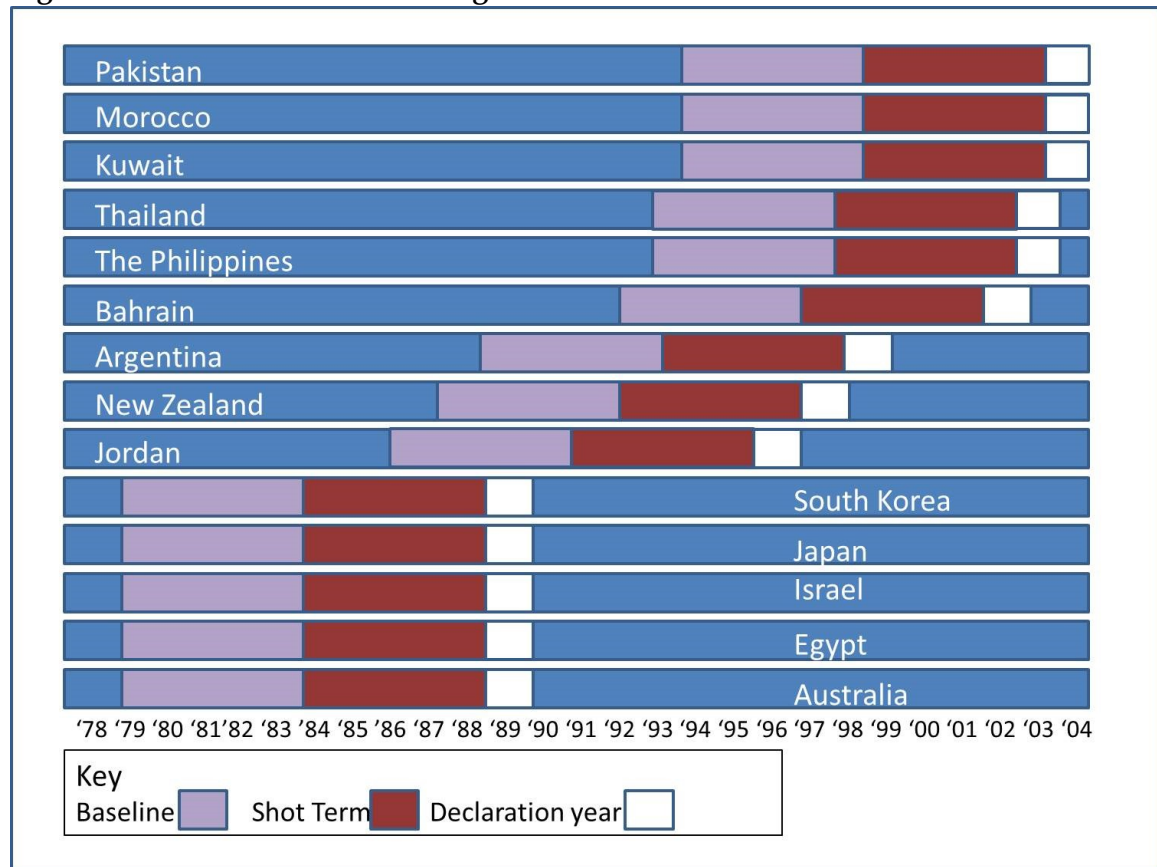
### *Data Selection*

To test for the provision of political or economic benefits by MNNA, I utilize four different measures. For the first proxy, I use UN voting data as a proxy for political acquiescence. The data originates from a project undertaken by Harvard and Georgetown to catalog each roll call vote within the UN General Assembly. From this data, I determine the voting congruence between the US and each member of the general assembly.<sup>47</sup> To create a baseline measure, I average the behavior of each MNNA in the ten to six years prior to the declaration year. I then compare this measure to the average behavior in the five years immediately preceding the declaration year. To examine the behavior of states after alliance formation, I compare the five years prior to the alliance formation to five years after. This is illustrated below.

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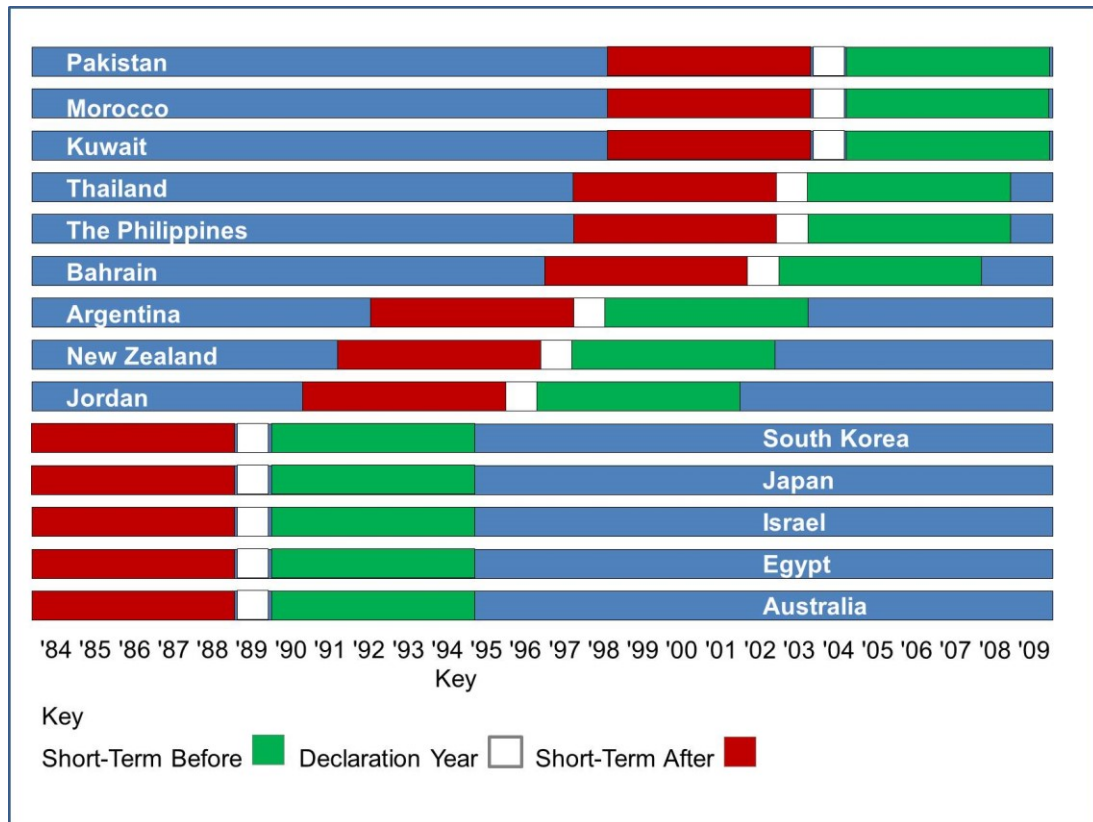
47. Erik Voeten and Adis Merdzanovic, "United Nations General Assembly Voting Data"

**Figure 3. Years Examined Preceding Alliance Formation**



The figure above demonstrates the years used to construct baseline and short-term averages for each MNNA.

**Figure 4. Years Examined Following Alliance Formation**



The figure above demonstrates the years used to construct the two five year averages for each MNNA.

The second proxy uses sanctions compliance to see if MNNA's deliver political benefits in a more costly manner. I compare the level of trade between future MNNA partners and countries under unilateral-US sanctions as these sanctions target numerous countries over a long period of time. As they are unilateral, compliance with the sanctions by third parties is voluntary. The widely respected and analyzed Correlates of War Project compiles international trade data and is the basis for this proxy.<sup>48</sup>

48. Katherine Barbieri, Omar Keshk, and Brian Pollins, *Correlates of War Project Trade Data Set Codebook*, (Correlates of War Project, 2008), 2-4.

The third proxy examines the trade relationship between the US and MNNA by using the Correlates of War Project's trade data. A MNNA could use their trade relationship to reward the US with economic benefits by, for instance, expanding US market access.

The final proxy examines changes in the market share of US arms exports to MNNA to examine an alternative method of delivering economic benefits. Unlike the third proxy, the narrow nature of the arms market allows an MNNA a much greater degree of control over the benefits potentially directed at the United States. By using the third and fourth proxies, my research will cover both broad and narrow economic benefits.

### **UN Voting**

As the literature highlights, one of the prime benefits that small states can deliver to their larger partners is political acquiesce. A prime forum in which to deliver political benefits is in the United Nations General Assembly. The General Assembly is a low risk method for a state to demonstrate policy alignment with the United States as the votes are typically little consequence. To examine whether small states leverage the UN General Assembly within the context of enhance their reputation for reliability, I used the data set entitled United Nations General Assembly Voting Data. The data set includes the results of each roll call vote from 1946 through 2011 and was compiled and

produced by Erik Voeten and Anton Strezhnev of Georgetown and Harvard University respectively.<sup>49</sup>

For the purposes of this research, I developed a political benefits proxy by first extracting the “affinity scores” for the years 1979-2011. Affinity scores show the level of policy agreement between two states through calculating the percentage of votes which resulted in the same position. In other words, a dyad of two states with a high affinity score will have very similar voting records while a dyad with a low affinity score will have very dissimilar voting records. The time frame of 1979 to 2011 was chosen in order to encompass the behavior of all states before each MNNA declaration took place.

For each US-MNNA dyad, I first identified the year in which the declaration took place. From this point, the voting affinity scores for the five years prior to the declaration year were extracted from the larger data set. By way of example, in the case of Japan an MNNA declaration took place in 1989 and so the voting affinity scores for the years 1984 through 1988 were compiled and averaged to produce a short term behavior affinity level.

This was compared with the average behavior in year 1979-1984 to see if there was a significant shift in the years leading up to the alliance declaration. Finally to determine if

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49. Anton Strezhnev and Erik Voeten, "United Nations General Assembly Voting Data," last modified August 2012.

Japan's behavior changed after the alliance, I averaged Japan's scores between 1990-1994 and compared this to the average found for the years 1984-1988.

A second measure derived from the UN voting data is a weighted measure. While the previous measure examines isolated state behavior, one weakness is that the MNNA declarations took place in different years. For the Japanese declaration in 1989, the baseline is composed of votes from 1979 through 1983. This baseline is compared to the average affinity of the US and Japan from 1984 through 1988. These years lie in the heart of heightened Cold War tensions. By contrast, data from 1988 to 1997 is used to examine the Argentinean declaration in 1998.

The differences in time periods examined introduce the possibility that an external factor may be driving dissimilar trends amongst dyads. In an effort to control this possibility, each year of affinity information is weighted and then averaged. The weighted figure is constructed separately for each year by averaging the affinity scores for all dyads that include the United States. These figures are in essence the average agreement of the world to US positions in the UN General Assembly. By incorporating this weight, any change in dyad affinity will be due to factors outside of general global trends. For instance, affinity scores from 1979-1983 were used to construct the Israel medium term baseline and scores from 1984-1988 were used to construct the Israel short term behavior score. In 1979, I subtracted the world average from the Israeli behavior to create a weighted figure. This was repeated for each year. The weighted scores for 1979-1983



were averaged to create the baseline figure. The same was done for the weighted scores for 1984-1988 to create the weighted short-term behavior affinity level. The percentage change between the baseline figure and the short-term behavior affinity level was calculated to detect any change in average behavior external to global trends.

### **Sanctions Compliance**

The second metric, focusing on sanctions compliance, was also used to detect the delivery of political benefits. While the UN voting discussed above is useful to explore general political alignment, the sanctions metric used brings its own value. The UN metric is an easy way for a state to demonstrate policy agreement to the United States. This ease, however, undermines the value of any alignment. From the US perspective, selecting a state for an MNNA declaration involves certain monetary and prestige costs. Yet alignment in UN voting provides limited value. Moreover, the UN General Assembly votes that covers a broad spectrum of issues which may not hold equal weight for the United States.

The sanctions compliance metric, however, helps to fill these gaps in our observation of state behavior. First, to alter a state's score in the metric requires specific costs to the state. Second, sanctions compliance provides the US with tangible benefits. Finally, the sanctions compliance metric focuses on specific cases, all of which are substantially important to the US. By utilizing both measures, our research is able to examine the full

spectrum of potential political benefits ranging from the broad to the narrow and from the tangible to the abstract.

The sanctions metric was constructed through comparing the trade relationship between MNNAs and states under unilateral-US sanctions in the medium term using the same time periods identified for the first proxy.

To identify states that were under unilateral US-sanctions, I used data generated by the Peterson Institute for International Economics. The data compiles all episodes of economic sanctions imposed from 1916 to 2006. The data lists the year the sanctions were imposed, when they were lifted, the primary sender of sanctions, primary target and the primary cause. The cases extracted were those where the primary sender was the United States and that were ongoing from 1983 to 2006. Cases which targeted an international organization were excluded as they are non-state specific. As the data is measured at the state-to-state level,

The cases were further refined by selecting the cases in which sanctions were in effect for a dyad's entire short-term window. By way of example, with Egypt's short term window running from 1983-1988, cases which began in 1984 were excluded while those

that were active on or before 1983 and concluded on or after 1988 were included. In total, 162 dyads of MNNA and sanctioned states were examined.<sup>50</sup>

With the cases selected, I utilized the dyad trade data developed by the Correlates of War data to examine the trade relationship between MNNA and states under US sanctions. The Correlates of War data includes a comprehensive list of dyads for all states within the international system and provides import data for each country in the dyad. The data figures are measured in 1990 US Dollars. In the case of Japan, states under US unilateral sanctions in the period of 1983-1988 include North Korea, Cuba, Chile, the USSR, Vietnam, Ethiopia, Guatemala, Libya, Pakistan, Iraq, Nicaragua, Zimbabwe, and Romania. In each instance, I extracted from the data Japan's imports from and exports to each country. From these figures I calculated a total trade figure by summing both.<sup>51</sup>

Information was extracted from the dyad trade data set for each year in both the baseline time period and short term window. These figures are in the years ten to five years prior to the declaration year and time five years prior to the declaration respectively. The figures in both the medium-term and short-term windows were averaged to produce a baseline level of trade and a short-term trade level. With these two scores, the percentage change between the baseline and short-term trade level was

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50. "Summary of Economic Sanctions Episodes, 1916-2006," Peterson Institute for International Economics, accessed December 1, 2012.

51. Katherine Barbieri and Omar Keshk, "Correlates of War Project Trade Data Set Codebook," Version 3.0. 2012.

calculated. These figures were then categorized as either having an increasing or decreasing economic relationship. Finally, the percentage of cases that had positive growth was calculated for each MNNA partner. Those MNNA partners that decreased trade in over 50% of the cases were assessed to be delivering net benefits to the US.

### **General Trade**

For the third proxy, I examine the trade relationships between MNNA partners and the United States. With the UN voting and sanctions compliance metrics, our research sought to detect demonstrations of political acquiescence theorized by the literature. The literature, however, also discusses the potential for economic relations to play an important role in a small state's contribution to an asymmetric alliance. This third metric will help to address this possibility.

The data set I used was provided by the Correlates of War Project. The data set is composed of a series of dyads that tracks the imports each country in the dyad receives from the other. For each MNNA partner, I extracted the import and export data in order to calculate several figures that would represent the state of the dyad relationship. I then identified the change in average behavior between the three time periods used in the first and second proxy.

Analysis was conducted on both the total trade relationship and the net exports of the US. Growth in total trade would reflect an increasingly interconnected relationship. The second figure, US Net Exports, by contrast, focuses on the benefits accrued to the US from the relationship if we assume that exports are viewed more favorably than imports by the US Government.

### **Military Trade**

While the previous metric addressed the overall trade relationship of specific dyads, the final metric is much more narrowly focused on military trade. The area of military sales is one that is typically solely under government control. Though overall trade could be shifted in favor of the US through the adoption of specific import regulations, for instance, governments can do only so much to increase US exports by the economy as a whole. By contrast, governments are typically the sole purchasers of military arms and services within a country and so, the government can channel a country's arms imports towards specific partners. The complexity and service life of military products can promote a long term relationship between the producer and purchaser as new weapon systems, such as new fighter jets, require training for the pilots and aircrew, purchases of specific ammunition suited for the weapons platform, and future purchases of intricate and proprietary replacement parts for maintenance and repair purposes.

The data used to examine this issue was produced by the Stockholm International Peace Research Institute. Entitled the SIPRI Arms Transfer Database, the information provided by SIPRI comprehensively covers all major sales of conventional arms between countries from 1950 to present.<sup>52</sup>

From this database, I extracted information on the value and supplier of imported arms for each MNNA in both the medium term and short term prior to the declaration year. Data from ten to six years prior the declaration year was used to construct a baseline to which data five years prior was compared to. Finally, to see if benefits start flowing after the alliance, I compared data for the five years after an alliance declaration to the five years prior.

For each year being examined, I extracted the value of American sales to the MNNA and then calculated the total value of an MNNA's imports for the year. I then summed the total import figures and the US sales figures to produce a value representing the complete value of military sales during all three time periods. The percentage of US sales from the total value of imports was then calculated. The result was two figures: the US market share during the baseline period, in the five years prior to the alliance, and in the five years after the alliance declaration.

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52. Stockholm International Peace Research Institute, "SIPRI Arms Transfer Database," accessed December 1, 2012.

## *Chapter Two: Testing Results and Results Interpretation*

### *Benefit Delivery Preceding Alliance Formation*

#### *UN Voting Data*

After following each step as outlined in the methodology section, I produced two main results for each MNNA, one weighted by average global behavior, and one raw figure. Each figure showed the change in behavior of each MNNA from the medium term baseline to the short term as a percentage. In the unweighted instance, I examined 14 MNNA partners as South Korea was only admitted to the United Nations in 1991 and therefore lacks a voting record to examine. Of the 14 cases, only four demonstrate an increased affinity to American voting positions from the baseline figure to the US figure. These cases are Jordan, New Zealand, Argentina, and Afghanistan. Argentina, in particular, featured the largest shift in affinity moving from an average affinity of approximately 22% during the baseline to nearly 55% affinity during the short term. Of note, the number of countries that agreed with the United States on at least 50% of General Assembly votes increased from only 3/14 in the baseline to 4/14 in the short term. Despite this improvement, a majority of MNNA's disagreed with the US position a majority of the time. Overall, MNNA's on average saw approximately a 2% increase in voting affinity with the US from the baseline to the short term window prior to the declaration year. See Appendix A for full results.

The weighted figures showed a greater affinity for US positions. These figures were also calculated for 14 MNNA partners. Of the cases, six showed positive increases in affinity for US positions. These included Israel, Argentina, Bahrain, the Philippines, Thailand, and Pakistan. Again, Argentina was the stand out of the group as it was the only MNNA partner that transition from a below average affinity score to an above average score. Of note, only four MNNA voted with the US more than the global average in the baseline and only five MNNA voted with the US more than the global average in the short term. See Appendix B for full results.

Overall, MNNA's on average saw a 91% increase in voting affinity with the US from the baseline to the short term window prior to the declaration year. This was mostly driven by the 15 times increase in Argentina's affinity relative to the global average. Excluding Argentina, the MNNA's exhibited a 24% decline in affinity to the US position relative to the global average.

### *Sanctions Compliance*

When examining the prospect of MNNAs decreasing their economic interactions with states under US unilateral sanctions, I utilized three interacted measures in order to explore the range of possible state action: imports from states under sanction, export to states under sanction, and total trade levels. For each we created a baseline level to compare the short term relationship of an MNNA and a country under sanctions with.



In my examination of exports by MNNAs to countries under US sanction, there was a mixed record with each MNNA decreasing exports to select sanctioned states while increasing their relationships with others. Of the 14 MNNAs examined, only three decreased their exports to a majority of the sanctioned states. Even Israel, which did not increase exports to eight of 11 states under sanction, still had sharp increases with Guatemala with a 208% increase in exports. In total, of the 146 trade relationships examined, 81, some 55%, experienced increased growth. See Appendix C for full results.

In examining net imports, I discovered that in a vast majority of cases, MNNAs increased their imports from countries under US sanction. In total, of the 153 trade dyads examined, 103 had increasing levels of trade from the baseline to the short term window, or approximately 67%. When broken down to the MNNA-by-MNNA level, only three MNNAs out of 14 cases decreased imports in the majority of their relationships with states under unilateral US sanctions. This includes Israel, South Korea, and the Philippines. With the Philippines case, for instance, there was an approximately 97% drop in trade with North Korea and a 72% drop in imports from Burma. Yet, the Philippines had a huge increase of imports from Iraq with a 155 times surge in imports from the baseline to the period measuring the five years prior to the MNNA designation. See Appendix E for full results.

The final measure I used to examine sanctions compliance was total trade between MNNAs and countries under sanctioned. In the 162 dyads examined, 96 (59%) saw

growth. Of the 14 MNNA states examined, only two experienced a decline in their total trade relationship with a majority of states under US sanction. These were Israel and the Philippines. See Appendix G for full results.

### *General Trade*

The third proxy measured the role of economic incentives in alliance formation is the level of trade between MNNAAs and the United States. For the total trade relationship, I found that of the 14 MNNAAs examined, 13 saw growth in their trade relationship with the United States. Only Egypt and Bahrain saw a decrease with an approximately 13% and 8% drop respectively. By contrast, the average increase in trade between the US and the MNNA partners was over 80%. The largest trade increase was between the US and Argentina with the trade in the short term some 1.3 times greater than during the baseline period. See Appendix I for full results.

The second measure I used to examine the trade relationship between the US and MNNAAs was the net exports of the United States to MNNA partners. A growing net export would represent the realization of real gains for the US and a tangible benefit to its trade relationship with MNNAAs if exports are perceived as being more beneficial than imports. Of the 14 cases examined, only four showed an increase in Net US exports. These cases were Australia, Jordan, New Zealand, and Argentina. Furthermore, only six

of the 14 cases during both the short-term and baseline periods featured a trade surplus for the US. See Appendix J for full results.

### *Military Trade*

The last proxy explored military trade between the US and MNNAAs prior to their designation. The first measure compared the average yearly sales in the baseline period to the period in the five years prior to the MNNA designation. The second measure addressed the change in US market share of MNNA arms imports from the baseline period to the short term period. Of the 14 cases examined, I found that only five demonstrated a positive increase in the value of US sales. The second measure was the change in US market share compared to other arms producers. Of the 14 states examined, seven featured increasing US market share. Of these, Argentina was a true stand out with an eleven times increase in market share with the US holding nearly 49% of the market during the short term compared to only approximately 4% during the baseline. See Appendix K for full results.

While governments often have the ability to direct weapon purchases to favored partners, there can be other factors at play. Favorable conditions supporting financing, joint production, or technical competitiveness can make other producers more competitive. To account for changes in the competitive of US suppliers compared to international competitors, I weighted the changes in MNNA market share with global

figures. A rise in market share globally and MNNAs in the same time period would suggest that US suppliers were becoming more competitive overall rather than MNNAs purposefully directing their purchases for political advantage. Of the 15 MNNAs examined, eight cases demonstrated increases in market share compared to the US market share globally. These cases include Australia, Egypt, Israel, Jordan, Argentina, Bahrain, Thailand, and Afghanistan. See Appendix L for full results.

### *Interpreting the Results*

For each assessment area used to evaluate the change in behavior from a baseline figure to a short-term average there were mixed results. In UN voting affinity, I hypothesized that states that sought to improve their image with the United States would align their UN voting more closely with the US. However, only half of the states improved their UN voting affinity. In the examination of sanctions compliance, I expected to see decreased trade relations between MNNAs and countries under unilateral US economic sanctions. To do so would also increase a MNNAs perceived reliability in delivering political benefits. Yet the short-term average was a decrease from the baseline in only 45% of the export dyads and 41% of the total-trade dyads. With the general trade figures, all states, bar Egypt and Bahrain, increased their trade relationship with the US though increases in Net Exports for the US only occurred in four of 15 cases. Finally, in the case of military trade, the majority of MNNAs failed to display an increase in the value of sales or unweighted market share from the baseline period.

Out of the MNNAs, two cases emerge of states providing substantial benefits prior to the provision of security benefits by the US: Israel and Argentina. Each of these saw improvements in at least three of the four areas explored. Israel and Argentina both showed positive increases in their UN voting affinity while having above average levels of agreement. In trade, both increased trade with the US with Argentina increasing imports of US goods by nearly seven times. In supporting unilateral US sanctions, Israel did not increase its trade with 80% of states under sanction. While Argentina was less supportive by not increasing economic links with only 37% of sanctioned states. Even those relations that saw increases, only Argentina's trade with Iran and China topped \$100 million in value. The rest were relatively small relationships.

Finally, both Israel and Argentina saw large increases in the value of US weapons sales and in US market share. These are the only two 14 cases which met my hypothesis. Their identification provides an avenue for future research in to what drove these increases in cooperative behavior and whether the delivery of political and economic benefits to the US was coincidental or purposeful.

A prime explanation of why many of the states behaved counter to my hypothesis is the potential role of small state security provision. The literature argues that as small states possess such feeble amounts of military power, they must provide economic or political benefits. Yet, for the US, small security gains in a critical geopolitical area may be

enticing. A potential MNNA in this position could still undertake a campaign to bolster perceptions of reliability by increasing the deliverance of benefits but only in the security realm. Such a campaign would not be detected by the metrics used in the study.

This possibility exists in at least two cases: Bahrain and Kuwait. Both failed to improve UN voting cooperation, sanctions compliance, US Net Exports or increase the value of US military sales. However, both are located in the geopolitically important Persian Gulf region. Bahrain was declared an MNNA in 2002 during a time when US basing in the country allowed the US military to operate more easily in Afghanistan. Kuwait was declared an MNNA in 2004 following the use of Kuwait as a staging ground for the 2003 invasion of Iraq by US Forces.<sup>53</sup>

A second possibility is that for a select group of states, no shift in behavior is necessary to secure a US declaration as they already possess reputations for reliability. Therefore, for these states, altering perceptions of reliability is unnecessary. Such states include partners with separate alliance treaties including South Korea, Australia, Japan, Thailand, and the Philippines.

Overall, I detected two cases, Israel and Argentina, which increased their delivery of economic and political benefits in the years leading up to an alliance declaration. These efforts may have increased their reputations for reliability and in turn, make the alliance

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53. Kenneth Katzman, "The Persian Gulf States: Post-War Issues for U.S. Policy, 2003," Congressional Research Service, 2003.

declaration more likely to occur. At the same time, the results also suggest that small states may deliver benefits through other means such as security provision. This result calls into question the validity of literature's argument that small states must provide either economic or political benefits to demonstrate reliability. With behavior prior to an alliance declaration examined, I now turn to examining a state's behavior following an alliance declaration.

### **Benefit Delivery Following Alliance Formation**

As discussed above, the behavior of MNNA's in the years prior to the declaration is varied with some states starting to deliver benefits to the US while others did not appear to take discernible action. Below I proceed to expand this study by examining the behavior of states following the MNNA declaration in several sections.

### ***UN Voting Data***

In examining the UN voting patterns of MNNA's, I produced two main measures for each MNNA: a raw voting affinity figure and one weighted by average global behavior. Each figure showed the change in behavior of each MNNA from the years prior to the declaration to the years following the declaration. For both measures, South Korea was excluded as it was only admitted to the United Nations in 1991 and therefore lacks a voting record to examine.

For the raw measure, of the 13 cases, only four demonstrated an increased affinity to American voting positions. These cases were Australia, Egypt, Israel and Japan. Large drops in affinity scores were seen in several cases with six cases falling more than 40%. Argentina's dropped 46%, moving from 56% affinity before the declaration to only 30% average affinity in the five years following the declaration. Of note, the number of countries that agreed with the United States on at least 50% of General Assembly votes decreased from four to three in the years following the agreement. See Appendix A for full results.

For the weighted figure, MNNAs showed a greater affinity for US positions. Of the 13 cases, five showed positive increases in affinity for US positions compared with the rest of the world. These included Egypt, New Zealand, Kuwait, Bahrain, and Jordan. Argentina was notable as its affinity level fell 96% compared to the global average. The number of countries with affinity scores above the global average remained steady at five. See Appendix B for full results.

### *Trade with Sanctioned States*

In examining the trade relationships between MNNAs and states under unilateral US sanctions, I produced three measures for each MNNA: exports to states under sanction, imports from states under sanction, and total trade levels. Each figure showed the



change in behavior of each MNNA from the years prior to the declaration to the years following the declaration as a percentage. With these measures, I examined the 14 states designated as an MNNA between 1989 and 2004.

For the exports figure, there was a mixed record with each MNNA decreasing exports to select sanctioned states while increasing their relationships with others. Of the 14 MNNA's examined, only three decreased their exports to a majority of the sanctioned states. Even Israel, the top performer with decreasing or nonexistent exports to seven of 10 states under sanction, still had sharp increases to states such as the Soviet Union. In total, 90 of the 136 trade relationships examined, some 66%, experienced increased growth. See Appendix D for full results.

For the imports figure, I discovered that, in a majority of cases, MNNA's increased their imports from countries under US sanction. In total, of the 136 trade dyads examined, 86 had increasing levels of trade in the years following alliance declaration. Four MNNA's out of 14 cases decreased imports in the majority of their relationships with states under unilateral US sanctions. These included Israel, New Zealand, Argentina, and the Philippines. With the Argentinean case, for instance, there was an approximately 50% drop in trade with Cuba and an 87% drop in trade with Libya. (See Appendix E for full results)

For the total trade figure, there was also a mixed record. In the 136 dyads examined, 94 (69%) saw growth. Of the 14 MNNA states examined, only four experienced a decline in their total trade relationship with a majority of states under US sanction. These were Australia, Israel, Japan, and Jordan. See Appendix H for full results.

### *General Trade*

In examining the trade relationships between MNNAs and the US, I produced two measures for each MNNA: the total trade relationship and US exports to the MNNA. While the total trade relationship served as a proxy for the degree of economic interconnectivity of a dyad, growing US exports were used as a proxy for the direct benefits received by the US.

For the total trade figure, I found that of the 14 MNNAs examined, 13 saw growth in their trade relationship with the US. Only the Philippines saw a decrease with an approximate 6% drop. By contrast, the average dyad saw a nearly 63% growth in trade. The largest trade increase was between the US and Kuwait with trade some 1.4 times greater following the declaration than before. (See Appendix I for full results)

For the US net exports figure, of the 14 cases examined, seven showed an increase in US net exports. The largest percentage fall in US net exports was for Bahrain where the US ran a trade average trade surplus during the prior to the designation on average of \$146

million. The time period after the designation, however, saw the surplus turn into an average deficit of \$2.5 million. (See Appendix J for full results)

### *Military Trade*

In examining the trade relationships between MNNAs and the US, I produced two measures for each MNNA: changes in the total value of US arms sales and the change in US market share within a particular country. The first shows the monetary value of the trade to the US while the second captures how an MNNA may shift its limited budget from one supplier to or away from the US as a result of the declaration.

For the total value figure, nine countries increased the total value of the arms imported from the US. Some countries increased their purchases greatly with New Zealand doubling their arms purchases, Kuwait purchasing over six times as many, Jordan purchasing eight times as many, and Pakistan purchasing 13 times as many. The most significant drop was Australia decreasing its purchases of US arms by approximately 53%. (See Appendix K for full results)

For the market share figure, the US also saw gains in ten of the MNNA. Kuwait and Pakistan again were exceptional cases. In Kuwait, the US market share grew from 4% to approximately 91%. In the Pakistani market, meanwhile, the US increased its market share from less than 2% to approximately 34%. The South Korea case was a perplexing

case in that the MNNA provides access to additional arms yet US market share dropped from 91% to 75% as South Korea diversified to other suppliers. (See Appendix L for full results)

### *Interpreting the Results*

Each proxy saw mixed results. In UN voting affinity, the literature expected that states seeking to deliver political benefits would increase their affinity scores. I hypothesized, however, that following an alliance declaration, states would return to the baseline level of affinity to lower the cost of their alliance with the US. In the raw measure the states that increased their cooperation with the US were all selected for MNNA status in 1989. The lack of increased cooperation in the weighted measure, however, suggests that these shifts were due more to the changing political environment as global opinion, on average, came more in line with US views.

For the rest of the cases, the drop in affinity for US positions following the declaration is not tempered by the weighted data. In raw terms, nine states decreased their cooperation following the designation. In weighted terms, cooperation of eight states fell after taking into account the global response to US positions. Clearly states did not deliver political benefits to the US as the literature expected via UN voting.

In the examination of trade with sanctioned states, the literature expected states delivering political benefits to the US to decrease their trade relations with countries under unilateral US economic sanctions. I hypothesized, however, that states seeking to maximize their return from the alliance would fail to do so. The majority of MNNA seemed to follow this latter impulse as they increased their trade with relationships with sanctioned states across the exports, imports, and total trade measures. In fact, Israel was the only MNNA that did not increase trade relationships with a majority of the states under US sanctions across all three measures. In addition, only Australia and Japan were able to accomplish the same result in two of these categories. The increasing trade relationships with a majority of sanctioned states and MNNA suggests that most MNNA failed to deliver political benefits to the US through this tool.

The measures used to estimate delivery of political benefits revealed that very few MNNA delivered political benefits to the US using these tools. In the UN, a majority of MNNA decreased their affinity with US positions. At the same time, a majority of MNNA increased their trade relationships with states under US unilateral sanctions. This aligns with this study's hypothesis that MNNA would seek to maximize the value of an asymmetric alliance with the US by reducing their delivery of political benefits following the US declaration.

The measures used as proxies for delivery of economic benefits to the US, however, showed the opposite. In the total trade measure, the US-MNNA trade relationships grew

in 13 of 14 cases. Meanwhile, US net exports to MNNAs also increased in 7 of the 14 cases. With the fourth proxy, the US grew its arms exports value in 9 of the 14 cases. US market share, meanwhile, increased in 10 of the 14 cases. These increases suggest that these tools are one way small states may deliver benefits to their larger partner. At the same time, it could be indicative of the mutually beneficial nature of these measures. For instance, while increasing purchases of US arms benefits the US, it also is beneficial to the MNNA who can now access technology that was export controlled prior to the declaration.

To determine which MNNAs, overall, delivered benefits to the US, I constructed a matrix of the nine total measures. In the five political measures, states that increased their UN voting affinity or increased their trade with less than a majority of sanctioned states were determined to have delivered benefits to the US. These cases received a score of one while cases that failed meet this criteria received a zero. In the four economic measures, states that increased trade with the US received a one while those that did not received a zero. States that score positively in a majority of the measures in either the political or economic fields were judged to have overall delivered benefits to the US in those fields.

**Figure 5. Benefits Delivery Matrix**

	Political Benefits					Economic Benefits			
	UN Vote Raw	UN Vote Weighted	Sanction Exports	Sanction Imports	Sanction Total Trade	Total US- MNNA Trade	US Exports to MNNA	Mil Trade Raw	Mil Trade Market Share
Australia	1	0	1	0	1	1	1	0	0
Egypt	1	0	0	0	0	1	1	1	0
Israel	1	0	1	1	1	1	1	1	1
Japan	1	0	1	0	1	1	1	1	1
South Korea			0	0	0	1	1	0	0
Jordan	0	0	0	0	1	1	1	1	1
New Zealand	0	1	0	1	0	1	1	1	1
Argentina	0	0	0	1	0	1	0	1	1
Bahrain	0	0	1	0	0	1	1	0	0
Philippines	0	1	0	1	0	0	1	0	1
Thailand	0	1	0	0	0	1	1	0	0
Kuwait	0	0	0	0	0	1	1	1	1
Morocco	0	1	0	0	0	1	1	1	1
Pakistan	0	1	0	0	0	1	1	1	1

#### Key

Delivered benefits in a majority of measures in either the political or economic categories

Failed to delivered benefits in a majority of measures in either the political or economic categories

The figure above demonstrates the overall improvement in benefit delivery to the US by MNNA's following the US declaration.

### Emergent Case Types

By the nature of the study's design, there are four case types which emerged. These cases cover whether a state increased or did not increase its benefit delivery either before or after the alliance declaration. A country's behavior was classified as increasing when a majority of the variables showed increases in benefit delivery.

The first case type occurs when a small partner starts increasing its benefit delivery in the years prior to the alliance and continues to increase benefit delivery following the

alliance declaration. One example of where this may occur would be in the development of a patron-client relationship where the small state's dependence on the large state's security provision is critical to the regime's survival. In this situation, a small state may be willing to continually take on greater economic and political costs to ensure its survival. While the study had limited data on Afghanistan, the government's dependence on US security assistance suggests it could be a potential case. With immediate security challenges, economics and international politics become secondary concerns. In such a patron-client relationship where the survival of the client is at stake, the government may be willing to incur increasing autonomy costs to discourage abandonment by its patron.

The second case type occurs when a small state does not increase the delivery of benefits to the larger partner in either time period. In this scenario, the small partner does not take steps to increase its reputation for cooperating with the larger partner in the lead up to an alliance declaration and fails to start delivering economic or political benefits even after it receives military benefits from the larger partner. This suggests that the small state is delivering benefits in ways not captured by the metrics. Delivering security benefits despite the asymmetry in power between the partners could be a possibility.

This factor appears to be at play with several of the cases including the Philippines, Thailand, Bahrain, and partially Kuwait, Morocco, and Pakistan. The first three deliver little benefits to the US on both the economic and political fronts. The latter three cases,



while expanding purchases of US weapons and deepening their trade with the US, show little improvement in political cooperation as measured by the proxies. The selection of these partners came in quick succession with Bahrain selected on 14 Mar 2002, the Philippines on 6 October 2003, Thailand on 30 December 2003, Kuwait on 15 January 2004, Morocco on 3 June 2004, and Pakistan on 16 June 2004 according to the Federal Register.

These cases share a common thread of being selected following the terrorist attacks of September 11, 2001. In the climate following the attacks, the US developed new partnerships to address the threat of Islamist-inspired militancy. Bahrain at the time was host to key US Naval installations and along with Kuwait, was a key staging ground for the invasion and occupation of Iraq. The Philippines were supported by the US in fighting Abu Sayaff while the US also supported Thailand in their fight against the Barisan Revolusi Nasional-Koordinasi.<sup>54</sup> Morocco and Pakistan both provided counterterrorism cooperation to the US and the latter case provided key transit routes for supplies supporting US Forces in Afghanistan.

During this time, the US started to implement a policy of developing partner capability so partners could engage in counter-terrorism operations for the benefit of the US.<sup>55</sup>

Instead of seeking economic concessions or cooperation at the UN, the US selected these

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54. Zachary Abuza, "Borderlands, Terrorism, and Insurgency in Southeast Asia," *The Border Lands of Southeast Asia*, Washington, DC: National Defense UP, 2011. 89-106. Web.

55. Robert M. Gates, "A Balanced Strategy: Reprogramming the Pentagon for a New Age," *Foreign Affairs*, January/February 2009.

partners based on their willingness to assist. The large number of these cases calls into question the Capability Aggregation Model's assumption that a small state's lack of robust capabilities makes it an inconsequential security partner. For most of these cases, internal security forces acting against local militant groups probably provides sufficient security benefits to the US, given the global reach of some terrorist organizations. The cases also call into question the Autonomy-Security Exchange Model's assumption that smaller partners can only sacrifice autonomy to gain security benefits. Besides addressing militancy, small states can also provide valuable, if narrow, security benefits such as basing and logistic support due to their geographic locations.

The rapid selection of these cases supports my hypothesis's assumption that reputation can be shaped through short term actions. The Pakistan case, in particular, highlights this phenomenon. If reputation was a perception formed over the long term, Pakistan probably would not have been selected given the extensive sanctions against Pakistan starting in the 1970s and the strong US response to Pakistan's 1998 nuclear test.

However, with Pakistan's immediate cooperation with the US in the days following the September 11, 2001 attacks, the Bush administration lifted sanctions against Pakistan on 22 September.<sup>56</sup> In other words, 11 days of cooperative behavior at a key time was sufficient to overturn over twenty years of US policy sanctioning Pakistan. Continued

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56. Alex Wagner, "Bush Waives Nuclear-Related Sanctions on India, Pakistan," *Arms Control Today* 31.8 (2001): 20-21, Web.

cooperation in the subsequent years further shaped impressions of Pakistan and was sufficient to gain an alliance with the US.

The third case type occurs when a state does not increase its benefit delivery in the years prior to alliance selection but does start to deliver benefits in the years after an alliance is formed. This case type is consistent with the Autonomy-Security Exchange Model.

Under this model, reputation is a long term variable and so incurring the autonomy costs associated with delivering economic and political benefits prior to an alliance has little value. As such, the exchange of these benefits only starts flowing to the larger partner once the larger partner has started providing security benefits. The closest case to this case type is Israel. In UN Voting for instance, Israel decreased alignment with the US by 5% in the years prior to the alliance but increased its alignment by 7% in the years following. Meanwhile the value of US arm sales to Israel dipped 30% between the baseline period and the years prior to the alliance only to rise by 20% in the years after.

The Israeli case is not a perfect match, however, and is tempered by other elements of the data. For instance, even though UN cooperation fell and rose percentage wise, Israel still maintained a high degree of alignment, voting with the US 90%, 86%, and 92% of the time during the baseline time frame, the years before the alliance, and the years after the alliance. This contrasts with the behavior of other close US allies such as Australia whose votes aligned with US positions only 73%, 48%, 51% of the time during these same years. For arm sales, even though the value shrunk, the dominance of US suppliers

in the Israel market grew from 75.7% to 99.2% to 99.7%. Meanwhile, Israel's economic relationships with states under sanction were close to steady state between each period. At the same time, US net exports fell some 25% after the alliance declaration.

The mixed nature of the measures combined with the high degree of policy alignment leads the Israel case to share more characteristics with Type Three or Type One cases, depending on the emphasis place on either indicator. If a continually high level of alignment is the defining characteristic of the relationship, then the Israeli case is most like Type One cases where small states deliver benefits throughout the time period and the small state is highly dependent on its larger partner for security provision. If Israel's continued relations with states under US economic sanctions and falling US net exports are the defining elements of the relationship in the eyes of the US, the Israel case would seem to more closely resemble Type Three cases in which countries provide other benefits to the US not captured in the metrics, such as security benefits. In general, the US-Israeli alliance seems to embody elements of both cases. Israel's growing isolation from European partners and America's willingness to guarantee Israel's existence makes Israel dependent on US security benefits similar to a Patron-Client relationship. At the same time, despite Israel's small size, it possesses robust capabilities. The reported US-Israeli cooperation on the STUXNET virus designed to attack Iranian enrichment

facilities is one such example where Israel was able to provide the US with narrow yet valuable security benefits.<sup>57</sup>

The final case type occurs when the smaller partner increases benefit delivery in the years prior to an alliance declaration and then reduces this benefit delivery in the years afterwards. This case fits my hypothesis expectations of a state increasing benefit delivery to help develop a reputation of reliability in the eyes of a larger partner and subsequently reducing the cost of the relationship by reducing its benefit delivery due to the higher cost borne by the larger partner when reducing its provision of security benefits as its reputation will suffer across its multiple relationships.

Of the cases examined, Argentina appears to most closely resemble this case type.

Argentina was selected for MNNA status on 6 January 1998.<sup>58</sup> The years studied range from 1988-1992, 1993-1997, and 1999-2003, the five years before and after 1998 and a baseline period. This time period coincided with a rapid transformation in Argentine policy with the election of President Carlos Menem in 1989. During his time in office, Menem pursued economic liberalization, an accommodating foreign policy including reestablishing diplomatic relations with the UK after they were broken during the Falkland Islands War, and pursued military reforms in reaction to the campaign of state terrorism during the "Dirty War". This changing political environment is certainly

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57. Ellen Nakashima and Joby Warrick, "Stuxnet Was Work of U.S. and Israeli Experts, Officials Say," *The Washington Post* 2 June 2012, National Security sec. Web.

58. "Presidential Determination No. 98-9 of January 6, 1998," *Federal Register* 63.1 (1998): 3635, Web.

reflected in a growing alignment of US and Argentine views at the UN and deepening economic links. Yet what role did these have in America's selection of Argentina for MNNA status?

An examination of public statements and internal administration documents revealed that these shifts in Argentine policy were central to America's decision to use the MNNA designation to reward Argentina and to encourage other countries to look at Argentina as a model for reform. The selection for MNNA status was announced during President Clinton's visit to Argentina in October 1997. An internal talking points memo specifically mentions shifts in Argentine foreign policy as demonstrated by leading international peacekeeping missions as drivers of the selection.<sup>59</sup> Public statements during the trip by President Clinton demonstrate his perception that the Alliance was a multifaceted endeavor featuring cooperative security, foreign, and economic policies. Indeed, the main focus on the trip appeared not to be the announcement of an MNNA but on securing Argentine support for a free trade agreement to be discussed at the 1998 Summit of the Americas in Chile.<sup>60</sup> The timing of the announcement suggests that the US hoped to link increased security provision by the US to increased alignment of Argentine economic policies at the upcoming summit.

The public statements also help provide insights into how perceptions of reliability are formed. Overall, the Argentine case supports my assumption that reputation is not an

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59. The Clinton Administration, "Town Hall Questions and Answers," Clinton Presidential Library, 1997.

60. William Clinton, "Remarks to Business Breakfast," Buenos Aires, Argentina, 17 Oct. 1997, Lecture.

inflexible long term measure but can be changed rapidly in the short term through consistent cooperative actions. First, the fact that Argentina's reforms took place starting in 1989 and Argentina was selected for an alliance in 1998 demonstrates that the nine years of concerted changes in behavior created positive perceptions of reliability. This short term formation of reputation was also demonstrated in President Clinton's address to the Argentine armed forces in which he noted the transformation of the military's reputation in a short period of time due to their participation in peacekeeping missions around the world.<sup>61</sup> This renewed reputation as a humane force for good stands in stark contrast with the Argentine military's campaign of murder and state terror during the "Dirty War" which ended only 15 years prior.<sup>62</sup>

Of note, in the period after the agreement Argentina reduced its support for US policies significant. This was primarily driven by 2001 debt crisis and the abandonment of neoliberal policies in favor of nationalistic ones.<sup>63</sup> Despite this dramatic shift in Argentine policy, the US has not rescinded MNNA status for Argentina. This fact, suggests that larger powers face constraints in retaliating against smaller partners, possible due to the potential costs incurred due to network effects. Overall, the case follows my hypothesis closely: by increasing benefit delivery prior to receiving security benefits, Argentina's reputation was viewed more positively by the US which led to

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61. William Clinton, "Remarks by President Clinton and President Menem at Wreath Laying Ceremony," Plaza San Martin, Buenos Aires, 16 Oct. 1997, Lecture.

62. Jerry Knudson, "Veil of Silence: The Argentine Press and the Dirty War, 1976-1983," *Latin American Perspectives* 24.6 (1997): 93-112, Web.

63. Jean Grugel and Maria Pia Riggirozzi, "The Return of the State in Argentina," *International Affairs* 83.1 (2007): 87-107, Web.

alliance formation. Following the alliance, Argentina withdrew its provision of economic and political benefits so it could pursue its own policies while the US still maintains Argentina's status as an MNNA.

### *Driving Variables outside the Study's Level of Analysis*

The study examined state behavior at a macro level in which proxies measured aggregate state behavior averaged over several years. As such, this study is ill suited to detected delivery of narrow economic or political benefits that are valuable to individual political leaders. The Jordanian case appears to closely resemble this scenario. During the time studied, Jordan consistently displayed low levels of cooperation with the US at the UN and enhanced its economic relations with many states under US unilateral sanctions.

However, public statements by the State Department at the time of the selection indicate that Jordan's selection was directly linked to Jordan's 1994 peace agreement with Israel.<sup>64</sup> Securing the peace agreement was a big win for the administration as Jordan was only the second Arab country to recognize Israel. The selection of Jordan as an MNNA and the transfer of high-tech weapon systems to the country were used to reward Jordan for the agreement. In the Jordanian case the broader proxies used did not capture the narrow but very valuable political cooperation that did take place. However, the timing

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64. Glyn Davies, "Jordan Designated Major Non-NATO Ally," State Department, Washington, DC. 14 Nov. 1996, Lecture.



of events suggest that Jordan was able to demonstrate its value as a potential ally in a short amount of time and the delivery of political benefits to the US was necessary for an alliance to form.

Dynamic internal factors can also become dominate driving factors in state behavior unrelated to the pursuit of security benefits. Increasing cooperation during both time periods, for instance, may occur when a fundamental shift takes place in the national interests of the small state such as during a transition from an autocratic system to a democratic one. These changes in regime type could drive changes in political and economic behavior that are unrelated to the security benefits provided by the larger partner. During central Europe's transition from Communism to Democracy, for instance, national governments generally promoted greater economic openness, purchased more Western arms, curbed relationships with bad actors in the international system, and more closely aligned with the Western positions at the UN. As democracy further consolidated, national interests may have further promoted advancement in these areas.

Similar to the constant increase, a constant decrease or steady state could also take place as a result of fundamental change in the domestic political environment. Unlike the first case type where increases build on a lower base, the second case type sees decreases in cooperation from a higher base. This would be consistent with a political transition from a friendly autocratic regime to a less friendly democratic one.

The South Korean experience is one possible example of this phenomenon. During the baseline period in the late 1970s and early 1980s, the military dictatorship was closely aligned with the US. With US control over South Korean Armed Forces, the regime's survival depended on US security support. However, the time period examined from 1979-1994 was one of turbulent change in South Korea during its transition to democracy. In 1980, the US Government allowed the military dictatorship to use military force against civilian protestors resulting in the Gwangju Massacre. Following the massacre, South Korea saw a sharp rise in anti-Americanism and growing pressure on the military dictatorship. By 1987, South Korea held its first free election for the Presidency resulting in a more accountable government which reflected the public's negative views of the US.<sup>65</sup> By the end of the time period, the US transferred peacetime operational control of South Korea military forces from the US to the South Korean Government.<sup>66</sup> These changes coincided with decreasing cooperation with the US as captured by the proxies. Most notably was the falling market share of US arms throughout the time period and increasing economic interaction China and with states under unilateral US sanction.

South Korean academics note that along with changes in the political situation, growing economic and military strength allowed Korea's autonomy to grow even while the US-

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65. Jin Wung Kim, "Recent Anti-Americanism in South Korea: The Causes," *Asian Survey* 29.8 (1989): 749-63, Web.

66. Bruce Bechtol and Richard Bush, "Change of U.S.-ROK Wartime Operational Command," *Brookings*, Brookings Institute, 14 Sept. 2006, Web.

Korea military relationship continued. This has been driven by South Korea's economic transformation into a modern, developed economy. With growing economic health, South Korea did not have to sacrifice autonomy for security. Instead, by increasing its own capabilities, South Korea essentially pushed out its autonomy-security trade off curve, allowing it to obtain both more autonomy and more security. The academics capture this concept in their "Autonomy-Security Simultaneous Promotion Model".<sup>67</sup>

The authors, however, fail to discuss why the larger state does not retaliate. One possibility is that as the smaller state develops greater capability, the alliance moves along a spectrum from a very asymmetric partnership to less asymmetric one. This move allows the relationship to take on characteristics more associated with an alliance among equals where states focus on enhancing their joint military capabilities rather than trading autonomy for security. Again, these fundamental shifts in national interest can drive change in state behavior at any time before or after an alliance declaration and can result in changes in behavior divorced from the mandates of a new alliance.

### **Lessons Learned**

Asymmetric alliances are critical to understanding our world today as the US confronts a series of challenges such as China, Russia, and terrorism. To confront these and other

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67. Min-hyuong Park and Kwang Ho Chun, "An Alternative to the Autonomy-Security Trade-off Model: The Case of the ROK-US Alliance," *The Korean Journal of Defense Analysis* 27.1 (2015): 41-56. Web.

challenges, US policymakers are likely to leverage and expand its network of global alliances. Yet, in a resource constrained environment, understanding the benefits derived from these relationships will be important when selecting future partners. To address this need, the study sought to examine how states deliver benefits following the formation of an alliance and whether these cases conformed to the literature's theoretical expectations of state behavior. In examining MNNA political and economic benefit delivery, I found that only one MNNA appeared to fit my initial hypothesis while none closely fit the Autonomy – Security Exchange model's expectations. Indeed, a further examination of the context surrounding each alliance found that the security arena was the main avenue for small states to provide benefits to a larger state. The little demonstrated support for both my hypothesis and the literature's expectations appears to be driven by the fact that both assume an asymmetric exchange of benefits. However, the cases do tend to support a key difference between my hypothesis and the literatures expectations: the short term nature of reputation building. In several cases, such as Argentina, Jordan, and Pakistan, states were able to enhance their reputation by shifting their behavior to align with the US in the years prior to the alliance declaration. Looking forward when evaluating future potential partners, it is important for analysts to understand that state behavior can change quickly, providing the basis for a closer partnership. In addition, economic or political benefits may be delivered in narrow ways which are not captured by macro metrics. Finally, symmetric exchange of benefits may take place between asymmetric partners when smaller partners possess key capabilities or geographic access.

### *Chapter Three: Lessons Learned Applied*

In the last third of this study, I seek to provide a forward looking analysis regarding the suitability of India as a future MNNA partner. The US utilizes MNNA designations to support partners facing common security challenges. The rise of China is certainly one challenge the US and neighboring states will face moving forward. To understand India's suitability, I will first explore the nature of China's rise and how its growing capabilities could threaten the national interests of neighboring states. I will then leverage the findings of the first two chapters to examine India's behavior and whether it fit any of the models of state behavior identified earlier.

The United States has long used asymmetric alliances in order to bolster its defense needs. During the Cold War, these alliances spread across the globe in order to counter the perceived threat of the Soviet Union and Communism in general. In Europe, the United States built upon its wartime alliances with the foundation of the North Atlantic Treaty Organization. NATO cemented US primacy in European defense and allowed for the incorporation of a reformed, democratic Germany into the Western effort against the Soviet Union. In Asia, the United States concluded alliance treaties with Japan, South Korea, Australia, New Zealand, and its former colonial possession, the Philippines.

Meanwhile, the United States pursued informal alliances with other partners in Southeast Asia and in the Middle East. While the end of the 1970s saw the collapse of

several of these partners, including South Vietnam, Cambodia, Laos, and Iran to ideological foes, the United States continued to pursue partnerships, particularly in the Middle East, as the United Kingdom's drawdown created opportunities for US support amongst the Gulf States against Iranian, Iraqi, and Soviet interference.

The end of the Cold War saw the end of the Soviet threat with the splintering of the Soviet Union into its constituent Republics, including a significantly weakened Russia. This diminished threat perception led to a decline in defense spending as a result of the "peace dividend" of the 1990s. With a lowered threat environment, the original purpose of many of these alliances was removed. However, the American alliance network remained. These alliances played a role in stabilizing the situation in the former Yugoslavia and supported containment efforts against Saddam Hussein's Iraq. Alliance designation was also a tool to reward friends abroad, including Argentina and New Zealand for their renewed alignment with US policies.

The September 11, 2001 terrorist attacks on the United States quickly brought an end to this era of limited threats. Al Qaeda and other violent nonstate actors (VNSAs) quickly rose in prominence in the US security dialogue. The alliance network formed during the Cold War proved a useful tool for the US response during the invasion of Afghanistan. For the first time, Article V of the NATO treaty was invoked with NATO contributing troops to US efforts to stabilize Afghanistan. With the subsequent invasion of Iraq, the US worked with allied nations to support its efforts. US efforts in Iraq and Afghanistan,

however, failed to quell the threat posed by VNSAs espousing Islamist views. As a result, the US continues its military efforts across the region.

The threat posed by VNSAs was and remains a threat that not only endangers the US but many partners around the globe. This is particular true for US partners in the Muslim world who are threatened not simply by the violence used by these groups but by the ideas they espouse. To respond to this threat, the United States sought to further bolster its partners engaged with VNSAs.

Since 2001, the US has supported key partners through the MNNA designation. In 2002, Bahrain was designated as a Major non-NATO Ally. Bahrain's strategic location and home of US Navy's Fifth Fleet heightened its importance to the US as US military operations increased in the Middle East after 2001. In 2003, the Philippines and Thailand, both engaged in counterinsurgency operations against Islamist groups received the designation. Since then, only partners in the Muslim world have received the designation including Morocco, Pakistan, Kuwait, Afghanistan, and Tunisia.

Yet VNSAs are not the only security threat to the United States. Indeed, the challenge posed by the People's Republic of China is in many ways a far greater challenge for the US. While VNSAs have the capability to conduct limited attacks against soft targets in Europe and the United States, the growing power of the Chinese poses a challenge to US

dominance in the western Pacific. Moreover, as its capabilities continue to grow, China may be able to threaten the structure of the US-constructed international system.

With its “Pivot to Asia,” the Obama administration has recognized the centrality of Asia to future global growth, that the US is a Pacific power with deep national interests in the region, and that growing Chinese capabilities endanger the ability of the US to promote rule-of-law governance and freedom of navigation.

As the war on terror has demonstrated, the US has readily used the MNNA designation to cultivate partners to work against common security threats. In addressing the challenge posed by a rising China, the US may again use this tool to cultivate partners in the region. Indeed, many states in Asia are already designated US partners. In Northeast Asia, Japan and South Korea are both MNNAs and treaty partners. In the South China Sea basin, the Philippines and Thailand are MNNA partners. Finally, on the periphery of the region, Australia and New Zealand are also designees.

Moving forward, the US will probably pursue future partnerships in the region, including the use of the MNNA designation, to bolster counter-China capabilities. To understand which partners the US may choose it is critical to first explore the ways in which China’s development threatens US interests in the region and whether states in the region share similar perceptions of the threat.



## *China's Energy Dilemma*

To understand the drivers of Chinese activities I first conducted a review of the available literature. A signature piece of this body of work is *China's Energy Strategy: The Impact on Beijing's Maritime Policies*, an edited volume authored primarily by researchers in the US government or at US-based think tanks. The outcome of a Naval War College-sponsored conference, the volume is a joint publication of the China Maritime Studies Institute and the Naval Institute Press. It provides readers with a good primer and is valuable as a proxy for understanding the perception of China's actions by the United States Government.<sup>68</sup>

For the authors and much of the literature, the core goal of Beijing's domestic and foreign policy is to foster the survival of the Chinese Communist Party. Since the reforms of Deng Xiaoping in the late 1970s and into the 1980s, the CCP's legitimacy no longer rests on Communist ideology but on developing China's economy. As China has grown, it has also grown an enormous appetite for raw resources, most of which cannot be sourced domestically. As a result, securing economic growth requires securing access to overseas resources.

As the volume address, China is heavily dependent on foreign oil and liquid natural gas (LNG) supplies. While domestic production has increased, most of its oil needs are met

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68. Gabriel Collins, ed. *China's Energy Strategy: The Impact on Beijing's Maritime Policies*, Naval Institute, 2012. Web.

through supplies from the Middle East and Africa. Compared to US suppliers such as Canada and Mexico, the regions China depends upon for supplies feature greater instability. This instability increases risks for China at the point of production.

Geography also plays a key role. As China's key oil partners lie to its west, most of China's oil imports must transit the Indian Ocean and the Strait of Malacca. This far flung supply train creates vulnerabilities for China. In particular, the Chinese suspect the US could use its navy to cut off China's oil supplies by creating a blockade at the Strait of Malacca.

China has sought to reduce this vulnerability in several ways. Creating a national tanker fleet to carry its petroleum reduces the ability of other nations to set up an embargo short of war since Chinese flagged tankers would be less likely to comply with an embargo.

Other efforts to reduce the risk of supply disruption have been more provocative. To bypass the Strait of Malacca, the Chinese have strengthened their relationship with Burma and Pakistan. These efforts include developing port facilities and planning pipelines to feed oil supplies into China. India, however, perceives these efforts and an increased Chinese naval presence in the Indian Ocean as a Chinese attempt to encircle it.

The Chinese have also step up its military capabilities in order to start protecting its critical sea lines of communication (SLOC). As observers have noted, the newly acquired capabilities outstrip what is need to secure Taiwan during a crisis. A RAND study of Chinese air force publications and materials suggest that Chinese force modernization in intended for to develop capabilities to project power far beyond Taiwan including the capability to strike targets in Japan and even out to Guam.<sup>69</sup>

However, further naval modernization is necessary to defend its SLOC and so Chinese naval operations in the Indian Ocean suggest that the Chinese are developing their experience conducting blue water missions. Ultimately, to fully defend its energy supplies, China would need to develop a much larger blue water navy capable of convoying fuel supplies across the Indian Ocean while engaging the United States in the western Pacific during a potential conflict.

Most observers contend that the Chinese currently lack the capability to defend the entire SLOC from the Middle East to East Asia. However, efforts to secure Chinese control of the South China Sea is a good place to start in this venture as it would allow them to secure the part of the SLOC closest to home.

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69. Roger Cliff, John Fei, Jeff Hagen, Elizabeth Hague, Eric Heginbotham, and John Stillion, *Shaking the Heavens and Splitting the Earth*, Santa Monica: RAND Corporation, 2011, Print.

Control of the South China Sea would also allow access to natural resources to the east of the Strait of Malacca. The US Geological Survey, as part of a 2010 study of Southeast Asia, estimated undiscovered oil reserves in roughly the bottom half of the South China Sea range between 5 and 22 billion barrels of oil while undiscovered natural gas reserves could range between 70 and 290 trillion cubic feet of gas. Meanwhile, other estimates are even larger with the Chinese National Offshore Oil Company (CNOOC) revealing in 2012 that it estimates the South China Sea to contain 124 billion barrels of oil and 498 trillion cubic feet of gas.<sup>70</sup>

If these estimates prove correct and economically viable, these could be a tremendous resource with which to meet Chinese energy needs. In the oil field, when combined with China's current estimated reserves, China would move up from the 14th largest reserve holder to 5th, leapfrogging energy giants like the US, Russia, UAE, and Iraq. In the gas field, China would move up from 11th to 4th with more reserves than the US, Saudi Arabia, or UAE.

The ability to tap these reserves, however, is challenging. As the EIA pointed out in 2013, in order to produce gas from the area "producers would have to construct expensive subsea pipelines to carry the gas to processing facilities. Submarine valleys and strong currents present formidable geologic problems to effective deep-water gas infrastructure. The region is also prone to typhoons and tropical storms, precluding

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70. Lesile Hook, "Gas Finds Give Impetus to China Sea Claims," *Financial Times* 9 Nov. 2012, Web. 11 Nov. 2015.

cheaper rigid drilling and production platforms.” Without cooperation from the coastal states, Chinese companies would also face the challenge of constructing pipelines over several hundred miles to connect platforms in the bottom half of the South China Sea to onshore facilities in southern China. The additional expenses may also challenge the economic viability of these projects.<sup>71</sup>

Emerging production technologies, however, mitigate many of these challenges that were identified in 2013. In particular, the development of Floating Liquid Natural Gas platforms could be revolutionary in this regard. The Shell Prelude, still under construction by Samsung Heavy Industries in Geoje, South Korea, will be the first of its kind. The Prelude has the ability to extract gas from the seafloor, compress it, store it, and transfer the gas to an LNG carrier. By using a floating platform, the Prelude can economically extract gas from smaller fields when compared to fixed platforms. The design forgoes the use of undersea pipes and on shore processing facilities. Finally, the Prelude is designed to withstand extreme environmental conditions, including tropical cyclones. When complete, it will be the largest floating facility ever constructed.<sup>72</sup>

While FLNG facilities could help overcome feasibility challenges, Chinese oil companies still remain dependent on international expertise for offshore production, according to EIA estimates. The Chinese interest in producing energy in its claimed area despite

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71. "South China Sea," *South China Sea*, US Energy Information Administration, 6 Feb. 2013, Web. 10 Nov. 2015.

72. "Prelude FLNG - an Overview," *Shell*, Shell, Web, 11 Nov. 2015.

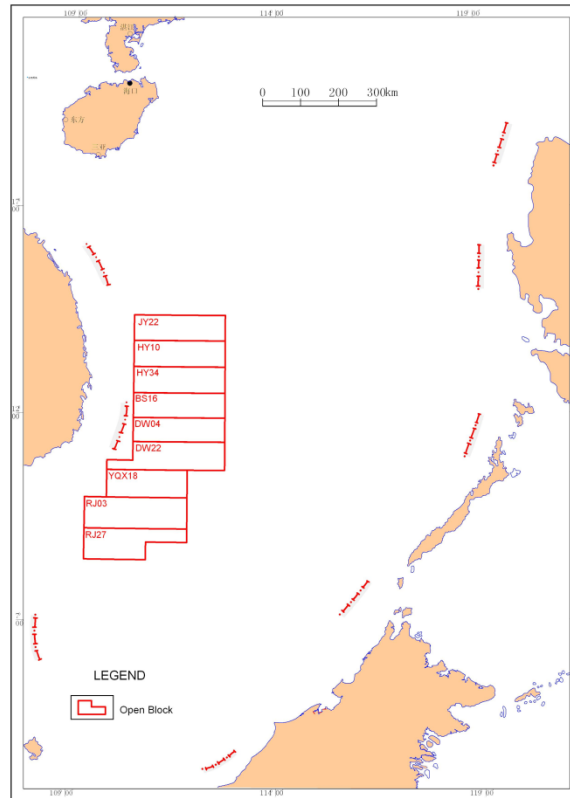
political disputes and a challenging environment was demonstrated in 2012 when China attempted to auction blocks for production within Vietnam's exclusive economic zone.<sup>73</sup>

These blocks were less than 100nm from the Vietnamese coast. While press reporting revealed that the major international oil companies didn't participate, the effort demonstrated that China will move forward in exploiting the area's energy in the exclusive economic zones of neighboring states despite their protests. This dependence on international support could have been a factor in CNOOC's decision to forgo FLNG use in the SCS while pushing ahead in the East China Sea. In doing so, they may find international partners more willing to produce in a less contested area. The ECS production would grow CNOOC's experience using FLNG while giving the technology more time to mature. As it does, the SCS will be a future CNOOC focus area.

**Figure 6. Map of Energy Blocks**

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73. "Notification of Part of Open Blocks in Waters under Jurisdiction of the People's Republic of China Available for Foreign Cooperation in the Year of 2012," China National Offshore Oil Corporation, 23 June 2012, Web, 10 Nov. 2015.



**The figure above demonstrates the areas CNOOC attempted to auction off within Vietnam exclusive economic zone.**

Meanwhile, China is looking to more than triple its use of natural gas to 10% of its energy mix by 2020, according to the EIA. Securing “domestic” resources in the South China Sea could help to meet growing demand. Production of energy east of the Strait of Malacca, meanwhile, would reduce its vulnerability until the Chinese Navy can defend the entire SLOC. The potential for secure energy access provides a strong incentive for assertive behavior when faced with conflict over its East China Sea and South China Sea claims.

### **A Provocative Shift: Chinese Escalation in SCS**

Capability alone is not the sole determinate of a threat. Indeed, intentions are also equally important. For the United States, a China which possesses robust capabilities but abides by international norms and seeks to strengthen the institutionalization of international relations is a reduced threat. Recent Chinese actions in the South China Sea, however, have been viewed by the United States as provocative and a threat to freedom of navigation.

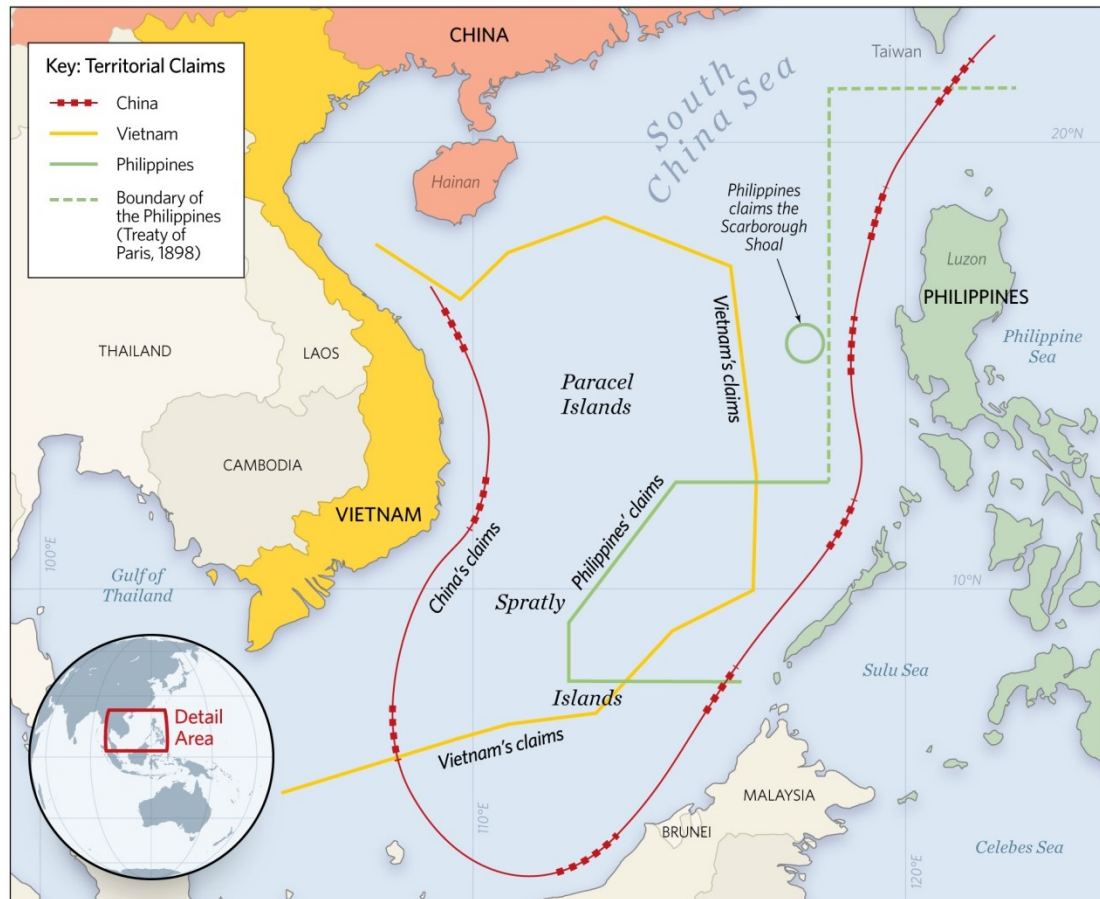
The South China Sea is a critical area of navigation for global commerce. It provides a route for Middle Eastern oil supplies to enter East Asia. China depends on this route for its oil imports while US allies Japan and South Korea also depend upon this crucial sea link for its energy needs. Exports from East Asia to key markets to the west including South Asia, the Middle East, Africa, and Europe also depend on the free transit of vessels through the South China Sea. India's burgeoning trade with Southeast Asia also depends upon this area.

Since the end of the Second World War, the US Navy has provided security for the area through regular patrols and cooperation with close partners. Economic control of the area, however, has been contested with many rival claimants including China, Vietnam, the Philippines, Malaysia, Indonesia, and Brunei. The latter three base their claims on interpretations of the Law of the Sea with some areas of overlap. The Chinese, however, base their claim on historic sovereignty of the area. Their nine-dashed line claims almost all of the South China Sea for their exclusive use. Controlling the South China Sea in



such a way would increase Chinese access to potential hydrocarbon resources in the area and allow them to regulate shipping for their benefit and to the detriment of rivals such as Japan.

**Figure 7. Areas of Dispute in the South China Sea**



The figure above demonstrates the conflict claims to waters in the South China Sea. <sup>74</sup>

Chinese efforts to enforce these claims by reclaiming land atop submerged reefs in the Spratly Islands appears to directly challenge US interests in the area. By attempting a de facto annexation of what the US has characterized as a global commons and presenting the US with a fait accompli, the Chinese have adopted a much more assertive approach.

<sup>74</sup>. "Assessing Threats to U.S. Vital Interests," 2015 Index of US Military Strength, Ed. Dakota Wood, Washington, DC: Heritage Foundation, 2015. Print.

With the issue developing rapidly over the past year, much of the literature is too old to provide insight on this shift in Chinese policy and what the impact is on regional states. As such, an observer is left to gauge the situation through contradictory statements by the US and Chinese governments. The Chinese claim that the islands are sovereign territory and that the installations, including lighthouses, are for civilian and public use. The US meanwhile claims that the islands are for military purposes and are artificially constructed and therefore do not support sovereignty claims.

### *Conflicting Claims*

To understand the nature of Chinese efforts to enforce its claims, below, I undertake a geospatial study of reefs in the South China Sea which reportedly have seen increased Chinese activity over the past several years. These include Mischief Reef, Fiery Cross Reef, Johnson Reef, Gaven Reef, Subi Reef, and Cuarteron Reef. The study relied on readily available multispectral commercial satellite imagery of the area collected between 2004 and 2015. By comparing a series of images to each other and identifying key equipment within the images, the study will characterize the nature of change at these reefs. Identification of vessels by their class or even hull number was based on Chinese order of battle information published by the Office of Naval Intelligence.<sup>75</sup>

Overall, the study reveals that the construction is being undertaken by the Chinese with

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75. "China People's Liberation Army Navy (PLA(N)) and Maritime Law Enforcement (MLE) 2015 Recognition and Identification Guide," China People's Liberation Army Navy (PLA(N)) and Maritime Law Enforcement (MLE) 2015 Recognition and Identification Guide, Office of Naval Intelligence, 1 Feb. 2015, Web. 10 Nov. 2015.

support from the Chinese military, the activity provides significant military capabilities to the Chinese, and enhances the military threat to US interests and regional states.

The reefs in question are located in the southern part of the South China Sea in the Spratly Islands group. They create a roughly rectangular area of influence proximately 160 nautical miles (nm) by 70 nm, covering some 9600 square nautical miles. The closest reef in this group to China, Subi Reef, is approximately 500nm from the southern tip of Hainan. Meanwhile the closest reef to the Philippines, Mischief Reef, is approximately 130nm from Palawan Island. Mischief Reef is also the closest in the group to Malaysia at 190nm. Cuarteron Reef is the closest in the group to Brunei at approximately 260nm. Finally, the closest reef in the group to mainland Vietnam, Fiery Cross Reef, is approximately 250nm away. At the very least, Chinese occupation of these reefs is occurring within the 200nm exclusive economic zones of the Philippines and Malaysia while the others could lie in the continental shelf claims of regional states.

### *Imagery Analysis of the Reefs*

#### **Mischief Reef**

Mischief Reef is a circular reef surrounding a lagoon approximately 4.0nm wide. It is located approximately 130nm from the Philippines and 590nm from Hainan, China. It is the easternmost island in the group of seven. The earliest image of the reef was collected on 23 October 2004 and revealed a 45m by 33m platform constructed atop the southern

part of the reef. The platform featured several structures and was possibly supported by an array of solar panels. In the lagoon, the Chinese had moored a probable HAIJIAN coast guard vessel and an unidentified vessel. Subsequent imagery from March 2005 and March 2012 revealed that the Chinese continued to place Coast Guard vessels including a HAIJIAN coast guard vessel in the lagoon with the accompanying support of a Chinese Navy FUJIAN oil transporter. By January 2015, Coast Guard vessels were no longer present in the area and were replaced by major Chinese Navy surface combatants. On imagery from 6 January 2015 a JIANGHU I-class frigate was located in the lagoon.

By last available imagery from 31 January 2015, a dredger had arrived near the platform and had reclaimed approximately one acre of land. In addition, the *Jinggang Shan* (Hull 999) arrived and was stationed approximately 1km southeast of a dredging operation. The inclusion of the *Jinggang Shan* in the station party is significant as the vessel is a YUZHAO-class amphibious warfare vessel capable of deploying one marine battalion and their amphibious assault vehicles. It is one of the largest vessels in the Chinese Navy and is central to China's capabilities to project force ashore. In addition, the JIANGHU I-class frigate previously moored in the lagoon was underway an additional .75nm to the southeast.

**Figure 8. Land reclamation at Mischief Reef**



The above image from 1 January 2015 revealed Chinese reclamation activity underway. Imagery provider: Google, Digital Globe.

**Figure 9. Jinggang Shan (Hull 999) on station at Mischief Reef**



The above image from 1 January 2015 revealed the Jinggang Shan, an amphibious assault ship on station at Mischief Reef. Imagery provider: Google, Digital Globe.

**Figure 10. Patroller Underway at Mischief Reef**





**The above image from 1 January 2015 revealed a JIANGHU I-class frigate, uploaded with antiship cruise missiles, on patrol near at Mischief Reef. Imagery provider: Google, Digital Globe.**

### **Fiery Cross Reef**

The rectangular Fiery Cross Reef is on the western edge of the Spratly Island group and is closest to mainland Vietnam some 250nm to the west. The earliest available imagery was collected on 15 March 2014 and revealed the existence of a small platform atop the reef. West of the reef was positioned one YUKAN-class tank landing ship along with one dredging vessel. No dredging operations were underway.

By imagery collected on 22 November 2014, a large dredging operation was underway with six dredgers operating in an artificially constructed harbor on the reef.

Approximately 320 square meters of land had been reclaimed. Approximately 3.5 nm

west of the reef, one JIANGKAI II class guided missile frigate was providing security for the operation.

By 4 March 2015, the Chinese were continuing their dredging operation with five dredgers operating in the manmade harbor. Construction was underway on buildings and infrastructure while enough land had been reclaimed to support the construction of a 3300-meter runway. A total of approximately 610 acres had been reclaimed.

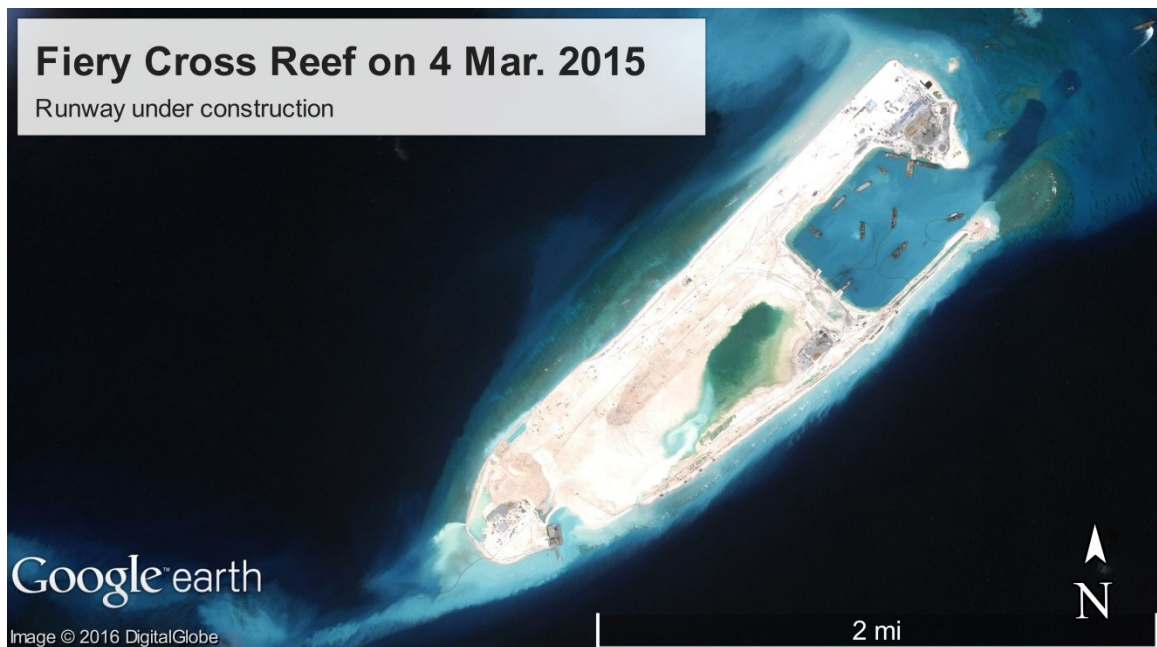
Meanwhile a JIANGKAI II class guided missile frigate was positioned approximately 1.0nm east of the Chinese outpost.

**Figure 11. Fiery Cross Reef Prior to Reclamation**



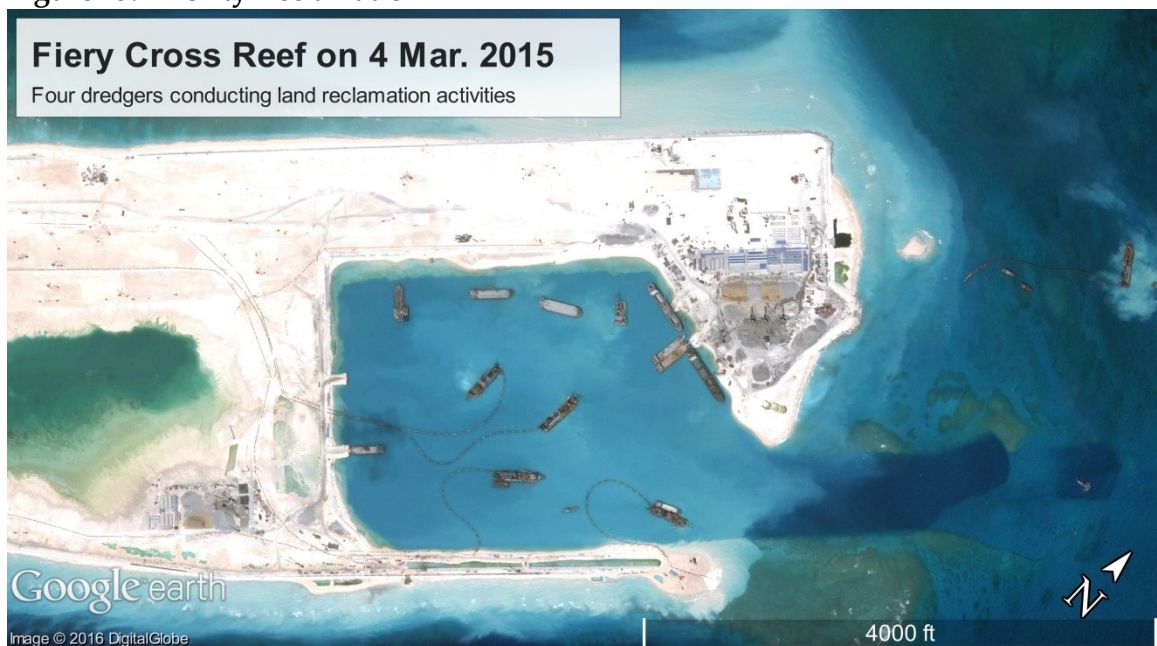
The above image from 30 May 2014 shows the reef prior to Chinese reclamation activity. Imagery provider: Google, Digital Globe.

**Figure 12. Runway under Construction**



The above image from 4 March 2015 revealed a runway under construction with extensive land reclamation completed. Imagery provider: Google, Digital Globe.

**Figure 13. Priority Reclamation**



The above image from 4 March 2015 reveals that by utilizing four dredgers at once, the Chinese were probably attempting to proceed quickly with land reclamation. Imagery provider: Google, Digital Globe.

**Johnson Reef**



Johnson Reef is a u-shaped reef located in the middle of the Spratly Island group approximately equidistant from the Philippines and Vietnam. In the center of the reef is a small lagoon of protected water. The earliest available image was collected on 16 February 2006 and revealed a 25 meter by 50 meter platform moored to the reef and supported by a 72-meter pier. One JIANGHU I-class frigate was located approximately two nm northeast of the installation.

By 16 December 2012, the pier had been removed and the platform remained. By 29 June 2014, 25 acres of land had been reclaimed. The reclamation effort was supported by the *Danxia Shan* (Hull 934), a YUTLING II-class landing ship. Additionally, a JIANGHU I-class frigate provided security. By 22 October 2014, the reclamation efforts had been completed and the construction of support infrastructure was underway. By 3 March 2015, several buildings were externally complete, a pier was installed and several other construction projects were underway. Meanwhile, a probable JIANGHU I UPGRADE-class frigate was stationed approximately .70nm northeast of the construction. A second Chinese warship, a JIANGWEI II-class frigate was located at the entrance to the lagoon approximately 1.6nm northeast of the construction.

### **Gaven Reef**

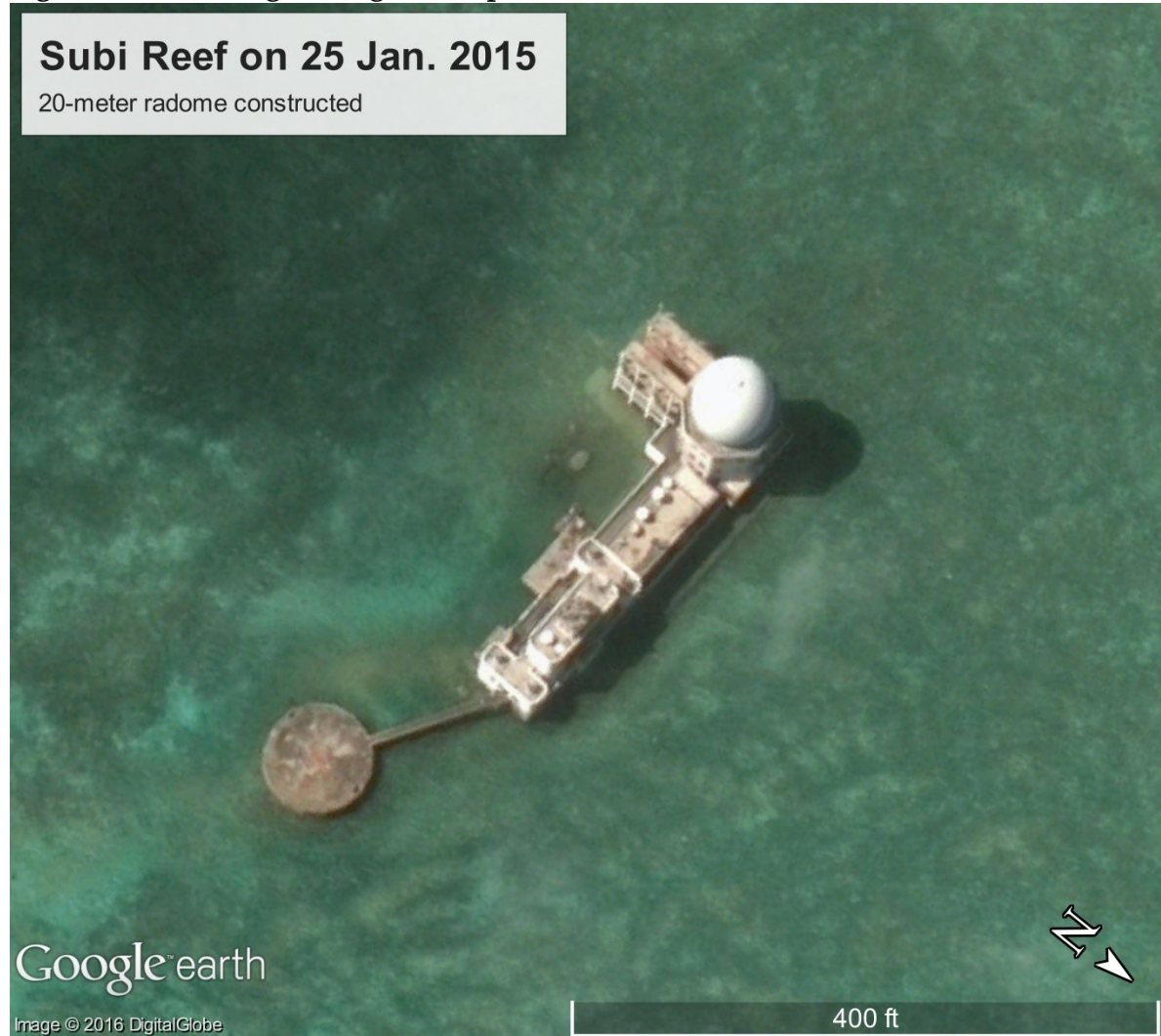
Gaven Reef is circular and approximately one kilometer across. It is closest to Philippines at just over 200nm to the west. The earliest available imagery was collected on 16 December 2012 and revealed that a small 22 x 55 meter platform had been constructed on the reef. The platform featured a small support building and a helicopter landing pad. By 22 October 2014, approximately 24 acres had been reclaimed and infrastructure constructed. This included several support buildings and the start of a 120 meter pier. The lack of dredgers in the area suggested that any land reclamation activity had already concluded. While no Chinese navy vessels were in the immediate vicinity, the JIANGHU I-class frigate positioned at Johnson Reef was 28nm to the south. By 9 March 2015, seawalls around the reclaimed land were nearly complete while construction of the pier continued with one crane. Again, no Chinese navy vessels were observed in the area.

### **Subi Reef**

The first available image from 8 March 2005 revealed a 15 x 35 meter platform and building were constructed on top of the reef. The outpost featured a circular helipad. By 2 July 2014, the platform was nearly doubled in size to accommodate the construction of a 20-meter radome. The images do not reveal the system housed in the radome. A DAYUN-class general stores issue ship was located outside the lagoon approximately .7 nautical miles north of the station while a YUKAN-class tank landing ship (LST) was moored in the lagoon. Last available imagery from 25 Jan 2015 showed that reclamation

efforts continued with two dredgers operating in the lagoon. A YUKAN-class LST was again stationed in the area.

**Figure 14. Increasing Intelligence Capabilities**



**The above image highlights the newly constructed probable maritime surveillance station. Imagery provider: Google, Digital Globe.**

### **Cuarteron Reef**

The oval reef covers an area approximately 5.25 km long by 1.25 km wide and is approximately equidistant from mainland Vietnam, Malaysia, and the Philippines at a

bit over 250nm away for each. First available imagery of the reef was collected by Digital Globe on 7 March 2014. A 50 meter x 20 meter platform was installed on the reef with a small building installed similar in design to other Chinese constructed buildings in the Spratly Island group. A 22-meter shelter appeared to cover the platform's pier. Approximately 380 meters north of the platform, one dredger was in operation and had already reclaimed nearly an acre of land.

By 26 February 2015, 56 acres had been reclaimed, seawalls constructed around the reclaimed land, and an artificial harbor built. The main pier in the artificial harbor can accommodate vessels approaching 100 meters. Chinese naval vessels were not observed on either image.

### ***Capabilities Gained by the Reef Development***

As demonstrated by the above discussion, the Chinese increasingly militarized its claims in the South China Sea. The earliest images from these reefs reveal that the Chinese were already occupying the reefs with small platforms. The small size of the installations provided little capability besides as a tool to assert China's sovereignty over the area. From these early images collected in 2004, Chinese interests were defended by isolated coast guard vessels.

However, there was a shift with the introduction of Chinese Navy vessels. The first noted deployment was at Mischief reef in 2005 when a Navy oilier was seen near the coast guard vessel. The addition of the oiler probably allowed the Chinese to increase the length of deployments to the area. By 2006, the first Chinese naval surface combatant was observed, a JIANGHU I-class frigate at Johnson reef. However, it was not until 2014 that a large influx of Chinese combatants was introduced to the area to protect the start of dredging operations. These included the JIANGWEI II frigate, a vessel equipped with advanced antiship cruise missiles and surface to air missiles. China also deployed the *Jinggang Shan*, one of China's largest amphibious assault ships capable of quickly deploying its contingent of marines and their armored vehicles ashore.

Besides the increased presence of Chinese naval vessels, the facilities themselves provide a strong increase in Chinese capabilities to the area. With Chinese control of other reefs in the area, the Chinese selection of these particular reefs is probably to maximize their capabilities. The probable maritime surveillance station on Subi Reef guards the northern approach to this group, the most direct route for approaching US Navy assets mustering out of Japan. The construction of berthing locations and support structures on the other reefs provide a partial defensive ring around the airstrip at Fiery Cross. From these locations, patrol vessels could be dispatched to intercept approaching enemies. If coastal defense cruise missiles or surface to air missiles were installed, the Chinese would gain an additional defensive option.

The size of the landing strip at Fiery Cross is impressive, allowing the Chinese to support Il-78 tanker operations if need be.<sup>76</sup> By staging tanker aircraft and a multirole fighter, the Chinese Air Force or the naval aviation wing of the Chinese Navy could perform a wide range of missions including maritime targeting in the area. As Fisher notes, one of the newer multirole fighters in the Chinese inventory, the SU-30MKK has “an impressive reach due to its aerial refueling capability. Its advertised unrefueled radius of 1,600km extends to 2,600km with one aerial refueling and to 3,495km with another.”<sup>77</sup> When launched from Fiery Cross without tanker support, an SU-30 could target any ship operating in the Strait of Malacca, freeing tankers for other missions during a conflict. If tanker support was available, SU-30s from Fiery Cross could target the Indian vessels and aircraft attached to the Andaman and Nicobar Command. The Command is located on a small chain of islands close to Indonesia and is responsible for controlling the entrance to the Strait of Malacca.<sup>78</sup> These aircraft could also target distant US military installations in the area including US facilities at Guam and Darwin, Australia if supported by refueling on the way to and from the target.

In addition, intelligence surveillance and reconnaissance missions could also operate out of Fiery Cross. For instance, a CH-4 UAV – similar to the US Reaper UAV – has a reported range of 3,500km and 40 hour flight time. This would allow the UAV to reach

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76. "Il-78 Performance Data," Il-78, Ilyushin Aviation Complex, Web, 11 Nov. 2015.

77. Richard Fisher, "PLA Air Force Equipment Trends," *The People's Liberation Army and China in Transition*, Ed. Stephen Flanagan and Michael Marti, Washington, DC: NATIONAL DEFENSE UP, 2003.

78. Suman Sharma, "Navy Ready To Flex Muscles in South China Sea," *The Sunday Guardian*, 4 Dec. 2011, Web, 10 Nov. 2015.

the Strait of Malacca, the Java Sea, and waters east of the Philippines, loiter, and return to base. The drone could also perform kinetic missions with its four to six missiles.<sup>79</sup> During peacetime, UAV missions from Fiery Cross could conduct surveillance of US or regional naval activity or could be used in counter piracy operations in the Strait of Malacca. During war, UAV missions would help China find, fix, and track enemy forces in order to vector combat aircraft or naval vessels towards the target. Monitoring developments in neighboring states would also be increased.

### *Public Interest in the South China Sea*

While these military threats are certainly concerning to states in the region, the South China Sea is distant from the US. As the US lacks claims in the area, the US willingness to act on these developments and pursue additional allies must be based on sustained interest in countering Chinese actions there. Public statements by the US Government certainly given the impression of US interest in countering Chinese actions. Yet, how can researchers tell whether the issue will generate a long term US response? Private conversations with key US policymakers could provide insights into US willingness to act. Securing these conversations and then publishing them for attribution, however, is a more challenging matter.

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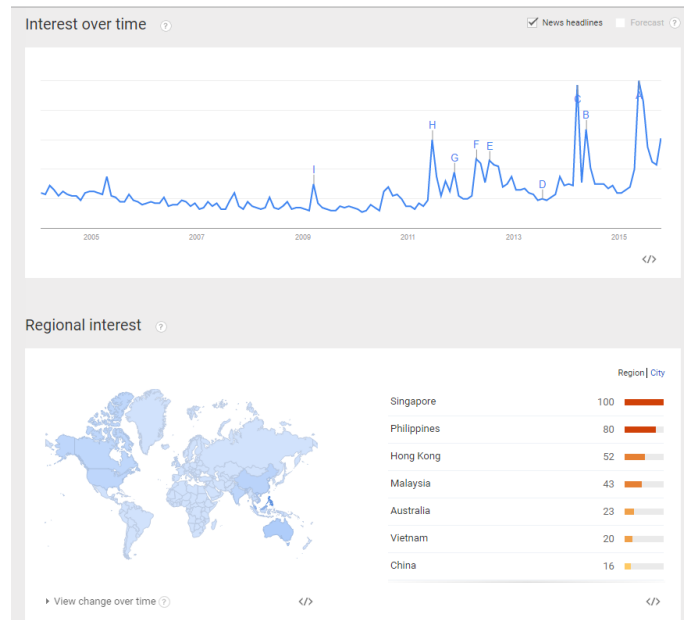
79. Nanae Kurashige, "China Shows off Drone Technology in Bid to Compete with U.S.," *The Asahi Shimbun* 28 Sept. 2013, Web, 10 Nov. 2015.

Another method to gauge whether a long term commitment is likely is if there is a sustained public interest in the topic helping maintain US action across administrations. Pursuing alliances with regional states would be more likely with continued interest than without. To gauge interest in the topic, I conducted an analysis of Google search data to determine the extent to which the public is engaged on the topic.

An analysis of worldwide Google search trends from 2004-present revealed a significant spike in interest on the subject over the past four years, reflecting the rising tension in the area. The search term “South China Sea” ebbed between 11-35 percent of the maximum interest during this time period from January 2004 and April 2011. Since May 2011, with the Vietnamese-Chinese clash over an oil rig, the interest spiked. Between May 2011 and present, the issue has remained at a higher plateau of 19% and reached its highest level of interest in May 2015. The trends suggest the global public is increasingly focused on the issue. Meanwhile, besides regional states, the top ten interested countries on the subject included Australia, India, and the United States. A breakdown of interest by city is also revealing with regional cities and Washington, Sydney, and Beijing in the top ten.



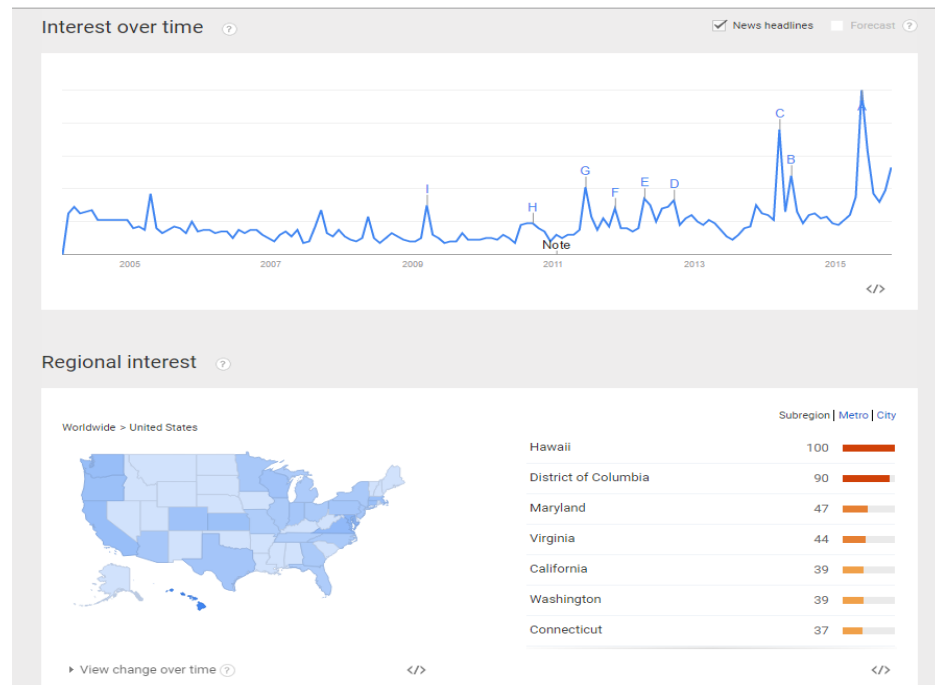
**Figure 15. Google Trends Analysis, “South China Sea”**



The above figure shows increasing interest in the search term “South China Sea” over time.

Meanwhile, data on users in the United States revealed that there was a smaller spike in interest during May 2011 and a smaller plateau in interest levels until spikes in March 2014 and May 2015 due to heightened tension in the region. A breakdown of this data by region is also revealing with Hawaii, home of US Pacific Command, showing the highest interest in the subject. The District of Columbia was a close second while Maryland and Virginia were the next highest yet only with half as much interest.

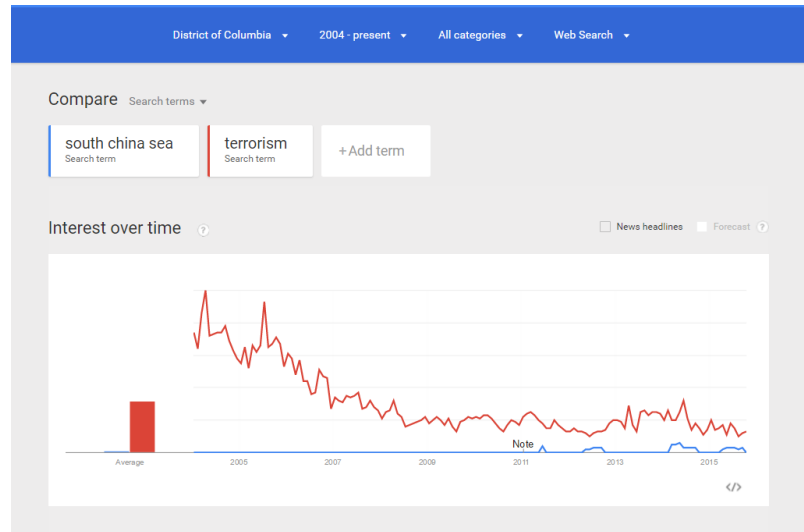
**Figure 16. Google Trends Analysis, “South China Sea” by US Region**



**The above figure shows increasing interest in the search term “South China Sea” over time with interest concentrated in Hawaii and the Washington, DC metropolitan area.**

Analysis of trend data comparing the relative interest of “south china sea” and “terrorism” for users in the District of Columbia also revealed an increasing focus on the issue. While “terrorism” is consistently of higher interest since 2004, it has undergone a precipitous decline since its peak in April 2004. Meanwhile, relative interest in the “south china sea” has emerged from negligible interest to low but sustained interest during the summer of 2014 and 2015.

**Figure 17. Google Trends Analysis, “South China Sea” and “Terrorism”**



**The above figure shows that interest in the search term “terrorism” dramatically fell while relative interest in “South China Sea” achieved sustained levels as of late.**

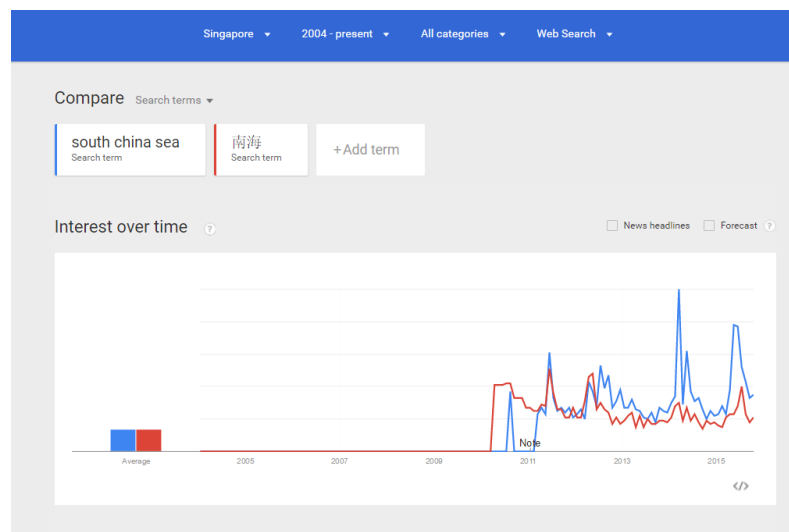
As individual perceptions are to some degree shaped by broader society, our perception of reality is certainly influenced by our interactions with others. In its simplest form, the search trends show a growing use of Google searches to discover information about the South China Sea relative to terrorism by users in a geographic area over time. However, as key policymakers live and work in the Washington metropolitan area, their perceptions of the growing relative importance of South China Sea issues is probably shaped by these trends through their interaction with other Washingtonians and media content. As policymaker awareness and interest in South China Sea topics grow, sustained US Government action on the issue is more likely to occur.

I also tried to understand if these issues are becoming increasingly important in China. To do so, I analyzed Google trends in China for 南海 or “South Sea”. The search trends featured a slow decline from 2004 to present with interest in the term most intense in

provinces bordering the South China Sea. This suggests that the searches were unrelated to disputes in the South China Sea but rather for other reasons such as economic interests, weather forecasts, etc.

As a proxy, I used trend data for bilingual Singapore to compare English and Chinese language interest in the topic. Singapore's data is also helpful as their use of the search term is probably for less varied reasons than users living near the actual body of water. The data revealed that while English language interest was relatively more intense, Chinese language searches followed the general trend of English language interest, spiking together during periods of heightened tension in the South China Sea. This mirrored relationship suggests that Chinese and English speakers are both following the issue at key moments and that Chinese language sources on the issue are available and accessed during heightened tensions.

**Figure 18. Google Trends Analysis, "South China Sea" in English and Chinese**



**The above figure shows that Singaporean interest in the Chinese and English search terms for the South China Sea tracked closely with one another, suggesting Chinese language sources are covering the issue similarly.**

Overall, these trends suggest that there has been an increased shift in global awareness in South China Sea issues since 2011 and that this interest probably is increasing amongst policymakers in Washington and at US Pacific Command. Furthermore, the Chinese-language trends suggest that the tensions are covered to a similar by degree in Chinese-language sources as English sources. This coverage probably influences perceptions in the PRC regarding the importance of South China Sea issues. Increasing engagement on the topic by the public and policymakers on both sides of the tension certainly could drive US efforts to cultivate regional partners to support its positions.

### **Thoughts on the US Response**

As the above discussion has indicated, Chinese development in the South China Sea has increased the threat to US forces operating in the area. The airstrip on Fiery Cross could support robust ISR missions designed to find and fix US naval assets operating in the area. During wartime, this same installation could be used to target US assets in Guam, Australia, and naval assets operating in the Indian Ocean. With the geographic reality of the western Pacific, US forces have few fall back positions if these facilities are targeted.

A strong Chinese presence would help isolate Taiwan during a crisis. The Chinese could also use their position to conduct a distant blockade of Japan or South Korea by interdicting oil tankers heading from the Middle East to the US partners. In addition, if the Chinese are able to exploit energy in contested South China Sea areas the Chinese would threaten key international norms such as respect for the exclusive economic zones of others and freedom of navigation. These actions would undermine the basis of the international system the US has developed since World War II. Finally, the ability of the Chinese to source their energy needs from locations west of the Strait of Malacca would remove the leverage gained by the US through a blockade of Chinese energy imports during a crisis.

Given the stakes at hand and the increased interest by global and US audiences in the South China Sea issue, the US is likely to respond by increasing its capabilities in the area, defying Chinese assertion of authority, and developing partnerships in the area to resist Chinese moves. On the first two measures, the US has made concrete progress. The first deployments of the US Navy's new littoral combat ship, designed to operate in coastal areas, was to the region. The US Navy has also declared publicly its intention to restart freedom of navigation patrols in the South China Sea in order to demonstrate that the US does not recognize the legitimacy of China's actions.

On the third measure, some progress has been made in renewing existing partnerships. For instance, in September 2015, the New York Times reported about an increased

Philippine interest in inviting the United States back to Subic Bay, once the largest overseas US military base until its closure in the early 1990s. Access to Subic Bay would provide the United States a large naval base directly on the South China Sea. However, as the Times noted, a preliminary agreement to expand base access in other areas of the country has been bogged down by opposition legal cases. The Philippines' continued military weakness may necessitate the need for additional partnerships.

### **The Indian Case**

#### ***Perception of Chinese Threat***

India and China, the two great civilizational powers in Asia, with over a billion people each, will be key players in Asia during the 21st Century. With such large populations, both have a growing need for energy imports and the ability to export products to overseas markets. As such, the strength of these two giants will depend upon their access to the sea. With the growing economic strength of East Asia, India's focus east through the Strait of Malacca has led it to develop regional ties in Southeast Asia. Meanwhile, China's growing energy dependence has led to a growing focus on its energy suppliers west of the Strait of Malacca. These geographic realities foster an environment in which an economic competition over Southeast Asia and a security competition over key shipping routes in the South China Sea and Indian Ocean increasingly are coming to the fore.

The potential for an adversarial relationship is not a recent development but one based in history. During the British Raj, the predecessor of the contemporary Indian state, the colonial government sustained a string of buffer states in the Himalayas in order to separate the two powers. With the fall of Tibet to the Chinese in the early 1950s, however, post-independence India would share a long boundary in the west. This border would spark the Chinese-Indian border war in 1962. The defeat of Indian forces during the conflict is still deeply embedded in the psyche of the Indian Armed Forces, according to the literature.<sup>8081</sup>

The rejection of the West by India after independence led to a growing relationship with the Soviet Union. The Chinese sought to counter this relationship by strengthening ties to India's arch-rival Pakistan. As Singh highlights, continued ties between Pakistan and China, including assistance in the aerospace and nuclear fields, do little to challenge India's perception of a "China Threat".<sup>82</sup>

Chinese actions in the Indian Ocean have also been of growing concern to the Indian military establishment. The development of Gwadar, Pakistan as a major port is perceived in India as an attempt to create a naval base in waiting. Increasing Chinese development assistance to Burma, Bangladesh, and Sri Lanka has taken on similar fears.

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80. Tien-sze Fang, "The Sino-Indian Border Problem," *Asymmetrical Threat Perceptions in India-China Relations*, Oxford: Oxford Scholarship Online, 2013. 2. Print.

81. David Malon and Rohan Mukherjee, "India and China: Conflict and Cooperation," *Survival* 52.1 (2010), Print.

82. Swaran Singh, "India-China Relations: Perception, Problems, and Potential," *South Asian Survey* 15.1 (2008): 83-98, Print.



Press reporting in mid-2015 that China was negotiating with Djibouti to establish a naval base, is surely interpreted in a similar manner. A base in Djibouti, in particular, would provide the basis for a continuous Chinese naval Indian-ocean presence at a key geographic location.<sup>83</sup>

Chinese activity at the European entrance to the Indian Ocean strikes directly at India's own Great Power ambitions. During the time of the Raj, India was the central hub of a vast economic system connecting far flung markets from South Africa, to the Persian Gulf, to Singapore. Meanwhile, the Indian Navy, under command of British officers, provided security to this maritime region.

India's weakness and socialist leanings following independence led to an inward focus until the early 1990s. As India's economy has grown, so has its yearning for great power status. There has been an increased focus of leaving the subcontinent behind as India's strength relative to Pakistan continues to expand. For elements of the Indian naval community, there has been a drive to develop maritime capabilities to project Indian power deep into the Indian Ocean. These capabilities would allow India to protect its interests and ultimately such a Navy would be able to control each of the entrances to

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83. Christian Bedford, "The View from the West: String of Pearls: China's Maritime Strategy in India's Backyard," *Canadian Naval Review* 4.4 (2009), Web, 11 Nov. 2015.

the Indian Ocean: the Strait of Malacca, the Mandeb Strait between Yemen and Djibouti, and Mozambique Channel.<sup>84</sup>

To support these ambitions, there has been a large increase in naval spending. Indeed, the shift from Pakistan to Indian Ocean security concerns demonstrated with the large increase in the Navy's percentage of overall defense spending. This spending is ultimately aimed at developing a three fleet navy, each equipped with a carrier strike group. Its drive to control the entrances to the Indian Ocean is also underway. On the remote Andaman and Nicobar Islands, India has been building its military presence. The islands are only 50 miles from Indonesia and provide a forward basing option that allows India to quickly drive into the Strait of Malacca.

India has also worked to strengthen its military ties to Singapore. Wary of being seen as a Chinese outpost, the Singaporeans have focused on developing ties with both India and the United States. As a result of this close interaction, Singaporean forces now conduct ground and air training on Indian ranges. Research and development cooperation is underway and the two forces exchange intelligence. The Indians also have basing access which facilitates a continued presence at the eastern entrance to the Strait of Malacca. Annual military exercises between the two forces have grown in scope, with the 2011 iteration taking place in the South China Sea. Finally, both countries in

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84. David Scott, "India's "Grand Strategy," for the Indian Ocean: Mahanian Visions." *Asia-Pacific Review* 13.2 (2005), Web, 10 Nov. 2015.

winter 2015 released joint statements with the United States on the South China Sea issues, stating that the dispute should be handled peaceably through the Law of the Sea, positions directly in contradiction to China's stance.<sup>8586</sup>

Finally, India has worked to strengthen its cooperation with other US allies. Its relationship with Japan, in particular, has strengthened across several fronts. The Japanese have increased their direct investment and development assistance to India. The military forces of both countries have conducted training exercises together. Cooperation with the Japanese furthermore provides a potential mechanism for India to work constructively on US interests despite domestic hurdles.<sup>87</sup>

### *India's Behavior*

As India's relative power to the United States in the CINC score falls far below the threshold of a symmetric relationship, it's appropriate to evaluate India's actions through the lens of an asymmetric relationship. As such, I will examine what change has taken place in India's behavior in recent years by leveraging leverage the proxy measures previously used to evaluate the behavior of MNNA partners. For the proxy measures for political benefits, I examined India's UN voting affinity to US positions

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85. Sutirtho Patranobis, "China Reacts Sharply to India-US Statement on South China Sea Dispute," Hindustan Times, 26 Jan. 2015, Web, 10 Nov. 2015.

86. "Joint Statement on the Third United States-Singapore Strategic Partnership Dialogue," U.S. Department of State, U.S. Department of State, 13 Feb. 2015. Web, 11 Nov. 2015.

87. Titli Basu, "India-Japan Relations: An Enduring Partnership," Indian Foreign Affairs Journal 9.3 (2014): 266-79, Print.

and their economic relationships with States targeted by US unilateral sanctions. For the proxy measures for economic benefits, I examined India's trade relationship with US and its purchases of US military equipment.

For UN Voting, I first examined a constructed short term period consisting of the last five years of available data: 2010-2014. The affinity scores for each of these years were averaged with India having an affinity score of approximately 17%. While low, this score is similar to the scores for Afghanistan and Egypt in the run up to their designation as a MNNA.

Next, I constructed a baseline of behavior by using the five years prior to the above short term period. I averaged the affinity scores for 2005-2009. This showed that on average during this baseline period India had an affinity score of affinity score 11%. Again this is a low level of agreement. However, with this low baseline, India's 17% affinity during the short term composite is a 53% increase in India's affinity.

This increase in agreement, however, could be due to changes in US behavior rather than India's. For instance, if India's voting on certain issues remain static while US voting patterns change, this could also produce a position change in affinity to the US without revealing conscious Indian efforts. To further examine this, I constructed a second, weighted measure for UN voting affinity. To do this, I also created averages for a baseline and short term period. However, the Indian affinity levels were weighted for

each year by subtracting the global affinity score. For instance, in 2014, India agreed with the US approximately 20% of the time while the global average was approximately 35%. By weighting the scores, the measure better accounts for shifts in US positions as reflected by changes to average global agreement. Through this process, I found that in the baseline period India agreed with the US 8 points less than the global average. During the short term period, India's affinity levels fell to 15 points less than the global average. This suggests that while India's affinity for US positions increased in raw terms, it actually fell compared to the global average.

In my analysis of existing MNNAs, I created and examined a second political proxy measure which captured the trade relationships between allies and states under US sanction. Unfortunately, the Correlates of War project only contains trade data between states up until 2009. For the follow on economic proxy covering US-India trade, I was able to supplement the Correlates of War data with data from the US Census Department covering the relationship. However, similar data is not available for India's bilateral relationships with sanctioned states. The data which is available from the Indian government is based on an April-March fiscal year. As the data is not broken down by month, I was unable to reconstruct comparable figures to supplement the Correlates of War data.

In addition to political benefits, I also examined India's delivery of economic benefits. The first proxy measure I examined was the state of the overall US-India trade

relationship. This data utilized the Correlates of War data set and for the years 2009-2014, I used the Census Department's trade data information on the US-India relationship. For this measure, I again constructed a baseline measure and a short term measure by averaging the years 2005-2009 and 2010-2014, respectively. During the baseline period, the US-India trade relationship averaged roughly \$35 billion a year. By the short term period, trade had increased to \$54 billion, or approximately 54%. Yet, how directed was this increase?

One factor which impacts the nature of US and Indian products is the competitiveness of US and Indian products to potential customers. If US and Indian products increase their quality and competitiveness compared to other countries, then the trade relationship can thicken without government direction or support. To get a sense of this factor, I examined the combined trade relationship between the US and the world and India and the world. For the US during the baseline time period, the trade relationship with the world was \$3.8 trillion. By the second time period, the trade relationship increased to \$4.8 trillion, or approximately 26%. Indian figures for this time period could not be determined as the available data from the Indian treasure for this time period is measured on an April-March calendar year and lacks monthly data to construct a January-December accounting of trade activity. However, the US information suggests that increasing trade with India is partially due to the general trend of increasing US trade globally.

I examined the trade data again to determine which partner accumulated the most benefits from the relationship. Generally, exports are considered more desired than imports by political leaders and publics. As such, a growing positive balance of trade for the US would indicate that US was capturing the majority of the economic benefits. I again constructed a baseline time period by averaging the balance of trade for the year as 2005-2009. I also constructed a short term measure by averaging data for 2010-2014. My analysis revealed that during the baseline period, per year, the US imported \$10.4 billion more worth of Indian goods than it exported. By the short term period, the trade deficit had grown by approximately 68% to \$17.4 billion.

One explanation for this growing budget deficit is that the US increased its imports worldwide due to factors beyond the US-India relationship such as the strength of the US dollar relative to other currencies or the general growth in importing manufactured goods. My analysis of the data revealed that during the baseline period, the US had a trade deficit of \$654.8 billion per year, on average. During the 2<sup>nd</sup> time period, the average US trade deficit fell 22% to approximately \$513.4 billion. India's ability to increase its net exports to the US while the rest of the world's net exports to the US fell by more than a quarter suggests that India captured the bulk to the trade benefits during both time periods and was further increasing its share during the second time period.

I also examined military trade data between the US and India as the fourth proxy. Military sales can be an important part of the relationship between states as they can

increase interoperability between forces, open the door for military-to-military training opportunities, and create long term dependences for the purchaser. However, there are also economic benefits which make military sales an important consideration in the relationship. First, military items are purchased directly by the state. As such, the state can direct their purchases towards politically important partnerships if comparable equipment is being offered by multiple suppliers. This direct control and the often politicized nature of military equipment purchases contrasts with the more limited control a government has over the broader trade relationship with partners. These economic benefits are also deep in that the tail of military equipment is lengthy with maintenance support, spare parts, and upgrades typically needed over the multi decade life span of some advanced military equipment.

With rising military budgets, India has had an opportunity to reward the United States with military contracts for new equipment. To understand if this took place, I turned to the data compiled by the Stockholm International Peace Research Institute. I constructed a short term measure, averaging the sales amount in millions of 1990 US Dollars from 2010-2014. This was compared to a baseline measure constructed of an average sales figure for 2005-2009. My analysis found that in the baseline period, the US sales per year averaged approximately 44 million 1990 dollars. By the 2<sup>nd</sup> time period, however, the US sales per year averaged approximately 1.03 billion 1990 dollars. This is approximately a 23 times increase in average sales per year.



To discern whether the increase in sales reflected the development of a long term relationship, I examined what equipment was being purchased during this time period. Offensive equipment sales could suggest a deeper level of trust compared to defense equipment. During the baseline period, the main sales were of defensive equipment such as the P-8 POSEIDON, an aircraft designed to detect enemy submarines, and counter-battery radar systems. In the past five years, however, there was a switch to offensive equipment such as the AH-64 APACHE attack helicopter and advanced land attack cruise missiles.<sup>88</sup>

The expanding sales of military equipment from the US to India suggest that the Indian government is directing economic benefits to the United States. An alternative explanation for the increase is that the equipment offered by the US became unusually attractive to overseas buyers during this time period. To examine this possibility I developed an average global market share figure for both the baseline and short term periods. This was done by leveraging the SIPRI's data on exports from all countries. This found that during the baseline period the US global market share was approximately 30% and that by the short term period, the US had increased its market share to 31%.

The slow growth in global market shares suggests that the US only became slightly more competitive than other exporters. However, the expanding value of military sales could

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88. "India-US Trade Register 2003-2014," SIPRI Arms Transfers Database, Stockholm Peace Research Institute, accessed 10 Nov. 2015.

have occurred if India was simply purchasing more equipment from all its suppliers as part of a booming budget. To examine this factor, I examined US market share in the Indian military market. My analysis revealed that US market share increased from only approximately 2% during the baseline period to approximately 12% during the short term period or a 6 times increase.

These various measures revealed that India directed its military imports towards America, resulting in increased economic benefits for the US. This trend can be explained in some degree due to the slight increase in US global competitiveness and to a larger degree to increasing Indian budgets overall. However, the rapid increase in market share and the more advanced items sold by the US reflect an increasingly sophisticated partnership.

Overall, India's scores are suggestive of a deepening relationship. The arms trade data was particularly impressive given the rapid increase in US arms sales and market share. If India was designated a MNNA, India would be eligible for further sales of even more sophisticated equipment and training. The UN affinity levels were surprisingly low given that India has been characterized by US administrations as an important democratic partner and one which shares common values with the US.<sup>89</sup> However, the study of existing MNNA behavior suggests that this low level of cooperation at the UN is not a barrier to eventual selection given the case of Egypt and Kuwait.

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89. K.R. Gupta and Vatsala Shukla, *Foreign Policy of India*, Atlantic, 2009. 242. Print.

The ultimate decision to select India as an MNNA, however, will face greater hurdles on the Indian side rather than the US. As Karim points out, the US has sought to develop Indian strength into that of a great power with the Defense Department undertaking ever more complex exercises with their Indian counterparts.<sup>90</sup> Domestic opposition in India, however, is a likely stumbling block. Therefore, both sides may continue to deepen the relationship to the level of a defacto alliance if a formal declaration proves to be politically unfeasible.

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90. Mohd Karim, "Strategic Visions of China and the United States in South Asia and Beyond," *Korean Journal of Defense Analysis* (2012), Print.

## *Conclusion*

### *The Ground Covered*

This study examined the nature of asymmetric alliances. As conceptualized by the literature, these alliances feature both an asymmetry of power and interests. For powerful states in an asymmetric relationship, the literature expects that they will trade their security surplus to gain political or economic benefits from their smaller partner. The smaller partner, by contrast, has a security deficit and so must trade political or economic benefits to the larger state.

The literature's study of reputation as a factor suggests that a larger state is more likely to follow through on its delivery of security benefits. A larger state's behavior in one relationship impacts its reputation in the eyes of other partners. If it fails to follow through in one relationship, it will be viewed as less reliable by others. As the value of a partnership depends upon the expectation that allies will follow through on their commitments, a large state which fails to follow through in its relations with one partner can suffer costs in each of its other relations. Therefore, with its prestige engaged, a large state is likely to deliver its security benefits in order to avoid degrading its other relationships.

However, the smaller partner faces incentives to underperform. As a rational actor, a smaller state would want to maximize its benefits and reduce its costs. Assisting smaller

states in this pursuit is an asymmetric focus on the relationship. Smaller states generally contend with a smaller foreign policy portfolio than large states. As such, policymakers from smaller states can leverage this additional mental bandwidth to focus on maximizing its gains from the relationship. Policymakers from larger states, by contrast, are forced to address a variety of serious global issues rather than concentrate on a single partner.

The nature of asymmetric alliances has particular importance for US policymakers. Since WWII, the United States has built a network of alliances in order to counter the challenges it confronts on the global stage. Moving forward, the development of additional asymmetric alliances is a likely course of action as new challenges arise. Therefore, a deeper understanding of the benefits gained from current alliances can help ensure a more realistic assessment of the benefits provided by additional partners.

The literature's understanding of asymmetric alliances features key gaps, however. While the literature theorizes that asymmetric alliances exchange security for economic or political benefits, the concrete method by which these benefits are delivered is unexplored. In addition, the literature fails to explore that small states may deliver security benefits in narrow ways, such as base access or intelligence cooperation, that may provide benefits of greater value to the larger state than expected given the partner's relatively limited capabilities. Finally, the literature views reputation as an important factor in evaluating a partner but theorizes that perceptions of reputation are

shaped over the long run. However, the experience of the National Security Council during changes in administrations suggests that a fresh impression can be made by states in the short run.

To help address these gaps in the literature, the study first selected the 14 partnerships the US has with Major Non NATO Allies. While broad based studies on alliances exist, these typically fail to exclusively examine asymmetric alliances. Furthermore, these broad studies also complicate their examination by failing to control a range of variables including by examining the alliances formed by many security-providing states, examining alliances which were formed in centuries past, and examining alliances in which the depth of benefits exchanged varies tremendously. By contrast, all of the MNNAAs have all been selected since 1989, share the same large-state partner, and provides small states with access to the same suite of benefits. These attributes increases the study's potential utility for US policymakers examining future potential partners.

With the relationships under examination selected, I proceeded to select proxy measures by which to study potential avenues that a small state could deliver political or economic benefits. For both economic and political benefits, the literature failed to address this question. Therefore, I selected proxies that cover a range of benefits within each type including benefits which are broad to narrow tangible to abstract.

To gauge the delivery of political benefits, I examined both UN voting data and compliance with economic sanctions. The proxy measure using voting data provided insight into a broad and symbolic avenue for a state to provide the US with political benefits. The second proxy measure studied the economic relations with states under US unilateral sanctions. States under unilateral US sanctions are clearly a concern for the US. By reducing their economic interaction with these States, potential partners can provide political benefits to the US by voluntarily assisting the sanctions efforts. Unlike UN Voting, reducing one's interaction with a state facing unilateral US sanctions is a tangible cost incurred that assists US foreign policy efforts in a narrow, tailored way.

To gauge the delivery of economic benefits, I examined data on the trade relationship and arms sales between the US and its partners. The first proxy measure I used in this theme leveraged the trade data to analyze the state of the relationship overtime. The proxy provides insight into the broader economic links with increasing US exports a sign of increasing US benefit from the relationship. The second proxy, based on arms trade data, provides a narrower view of benefit deliver. Governments are often the exclusive purchasers of military equipment and have direct control over who they purchase arms from.

With these proxies selected, the paper proceeded to analyze the data temporally. This was done in order to address the gaps in the literature. First, if security benefits are indeed traded for political/economic benefits, what is the timing of the exchange? There

are several possible timing sequences including a large state first delivering security benefits, first a small state delivering political/economic benefits first or concurrent delivery. The second gap is in understanding whether small states, in seeking to maximize their gains from the relationship, take advantage of a large state's networked reputation risk and underperform on benefit delivery.

To examine how the MNNA's behaved in the real world, I constructed averages for three separate time periods surrounding an MNNA's designation year. The first time period examines the behavior of a state 6-10 years prior to the MNNA's designation. With the MNNA designation being an executive branch action and the average US presidency lasting just over 5 years, the first time period acts as a baseline for MNNA behavior. The second time period includes the five years prior to a designation and could be a time period in which an MNNA could start to deliver benefits to boost its chances of gaining security benefits. The paper examines if the behavior during the second time period keeps on the same course as the baseline or significantly changes. The third time period includes the five years after the designation. This time period can be compared to the second time period to see if there is a shift in behavior following the designation.

An increase in benefit delivery would follow the literature's expectations. A decrease in benefit delivery suggests that small states are leveraging the asymmetrical importance of the relationship and are seeking to minimize their costs. Finally, no significant change in



behavior would suggest that economic and political benefits are not the medium of exchange. This third outcome could take place in a scenario where a small state and large state exchange complimentary security benefits.

My analysis of the proxy measures revealed that MNNA's behave in a variety of ways. The Argentine case appears to be a model for a state seeking to gain security benefits by delivering political and economic benefits first before curtailing them. The UN Voting record was particularly revealing with a large increase in affinity levels for US positions from the 1<sup>st</sup> to the 2<sup>nd</sup> measure. However, once the designation took place, there was a large drop off in cooperation. The other cases, however, did not show the same drastic shifts as the Argentine case.

With this information, the paper proceeded to apply these insights into analyzing future potential partners. Through a geospatial analysis of commercial satellite imagery, the threat posed by China's activities in the South China Sea is discussed while an analysis of search trends suggests that the US Government is increasingly engaged on the topic. These two factors could form the basis for a long run interest in countering Chinese actions in the South China Sea and in turn open the possibility to new alliances.

A review of press reporting suggests that India is a sought after partner in the area by the US. Using the insights gained from the above review, I examined the most recently available data to discern if there had been a change in Indian behavior vis-à-vis the US. I

also reviewed press reporting, policy documents, and academic literature on India to provide context for its behavior.

My review of the literature suggested that India increasingly viewed Chinese naval activity in the region as troubling but that India has traditionally resisted becoming entangled in alliances. This position seems to have started to evolve given its deepening relationship with the US military and other US partners in the region including Singapore, Australia, and Japan. The data, meanwhile, showed that the most significant shift was in arms sales. In this category, there was a significant deepening of the relationship with the US now providing offensive weapon systems rather than defensive ones. Overall, however, the US pursuit of an Indian relationship seems to not be based on Indian provision of economic or political benefits. Indeed, given the strength of the Chinese challenge, symbolic gestures at the UN are of lesser interest. Instead, India's geographic location astride key Chinese energy supply routes, the size of its population, and its growing ability to project force in the region are more important factors.

### **Areas Not Addressed**

My research, while providing some new insights into asymmetric alliances, was not designed to address all the shortcomings on the literature. First, the study cannot provide insight into the role that internal foreign policy priorities have on alliance dynamics. A minor power that depends upon a major power for its security has a

relatively limited foreign policy portfolio which allows senior policymakers the freedom to concentrate on a few core issues. Such a state, therefore, has the opportunity to focus on maximizing the returns from an alliance. Major power policymakers, by contrast, have expansive foreign policy portfolios. As such, policymakers maintaining multiple partnerships have limited mental bandwidth to devote to maximizing the return from each partner. To date, the literature has yet to directly address if the greater return on investment accrues to the state which places the most importance on the relationship.

Second, my research was not designed to explore the relative leverage of states within asymmetric alliances overtime. A minor power seeking security from a major power has a stronger incentive to develop a relationship than the major power. This is because the survival of the state is at stake for the minor power while the major power only gains additional political or economic autonomy. As a result, the major power likely will have a high degree of leverage over the minor power when establishing a relationship. Yet after an agreement is formalized, does the relative leverage change?

The literature suggests that there could be an impact. The major state now has now put at risk its reputation upon which it's other relationships rest. The abandonment of one ally could degrade the major power's reputation in the eyes of other partners. Whether this creates space for the minor power to under deliver on its commitments has yet to be directly explored. Again, I made an explicit assumption in my hypothesis that a large state's reputational risks may provide room for smaller states to decrease their benefit

delivery. However, the design of the research was not intended to address this area directly.

Finally, the paper only examined alliances at the state level of analysis. At this level, the proxy measures did not generally capture the behavior expected by the literature. One explanation is that the proxy measures were unsuitable to capture the behavior which took place due to the level of analysis. Each proxy measure used was generated through large datasets which capture state behavior at a macro level.

Examining the issue from the individual leadership level would likely result in the construction of different proxy measures. In turn, it is possible that these proxy measures could reveal the behavior expected by the literature. At the national level of analysis, Japan failed to deliver economic benefits to the US as there was a huge growth in the trade deficit during the time period. However, if examined at the leadership level, narrow economic benefits which benefited the Administration's domestic standing could have been sufficient. In the Japanese case, the voluntary agreement to restrict exports of automobiles to the US allowed the Administration to appear supportive of American manufacturing even if overall trade indicators increasingly were not in favor of the US.

### *Areas for Future Research*

In addition to the aspects left undressed by this study, future areas of research should focus on clarifying the state behavior demonstrated in the study. First, one area for future research is whether the lessons learned from studying MNNA apply to asymmetric more broadly. The use of MNNA as a target for study was useful in that each dyad contains the same larger partner, MNNA are each provided access to the same benefits, and the cases are recent, potentially increasing the value of their examination to the identification of potential future partners for the United States. At the same time, however, the recentness of MNNA is also a limiting factor. The examination of historic cases of asymmetric alliance formation would allow for a review of internal policy documents following their declassification, providing a view inside the black box of policy rather than simply examining the products of the black box (i.e. UN Voting records, economic data, etc.).

A more detailed review of the Israeli and Argentine cases could provide additional insights. What were the primary motivations of the principal actors at the time of the alliance declaration? Did their behavior change purposefully to align with the United States or by coincidence? What was the nature of the negotiations prior to the declarations? Were the benefits of the MNNA declaration abnormally large for these select states compared to the other MNNA designees? The construction of a thorough case study involving these three MNNA would hopefully address these lingering questions on whether states deliberately attempt to enhance their reputations by delivering benefits prior to an alliance declaration.

The final area where additional research is required is to confirm whether security provision by small states can truly provide the basis for an alliance between a large state and a small state. One finding of my research is that a select group of states provided neither enhanced political nor trade benefits to the United States yet were still selected as partners. This suggests that alternative methods may have been used to illustrate a sufficient degree of reliability to the United States in the run up to the declaration. By exploring data focusing on the security spheres such military cooperation in the form of training and military exercises or intelligence cooperation in the form of extradition reform, joint integrations, and information sharing, future research can shed light on the role played by the security sphere in enhancing state reputations in the short run.

### *Closing thoughts*

This study has helped address some of the important gaps in the academic literature on asymmetric alliances. By examining the actual behavior of states in the real world, the study suggests that asymmetric benefit exchanges occur infrequently and are far from the default foundation of these alliances. Instead, it appears that other factors, such as narrow security benefits, provided the foundation for majority of MNNA's and, by implication, could provide the foundation for many other cases of asymmetric alliances. Finally, the results of this study suggests that as the United States confronts new challenges, the development of new partnerships will be driven less by symbolic

gestures such as cooperation at the UN but rather by tangible benefits such as arms sales and military-to-military cooperation.

## *References*

### *Appendix A: UN Voting Data (Raw)*

<b>Country</b>	<b>Avg Baseline</b>	<b>Avg Prior</b>	<b>% change</b>	<b>Avg Post</b>	<b>% change</b>
Australia	0.725931919	0.4772993	- 0.3425013	0.5145599	0.0780655
Egypt	0.308544286	0.1464846	- 0.5252396	0.2373506	0.6203111
Israel	0.902919906	0.8574682	- 0.0503386	0.9212327	0.0743637
Japan	0.733447587	0.5542243	- 0.2443573	0.5700286	0.0285161
South Korea					#DIV/0!
Jordan	0.142710051	0.2348204	0.6454373	0.2107424	-0.102538
New Zealand	0.376147652	0.5214053	0.3861719	0.469037	- 0.1004368
Argentina	0.223606131	0.5492655	1.4563973	0.2980065	- 0.4574455
Bahrain	0.286900473	0.2361998	- 0.1767187	0.0868802	- 0.6321749
Philippines	0.288754202	0.2138076	- 0.2595516	0.1031543	- 0.5175367
Thailand	0.291244745	0.2274198	- 0.2191453	0.1072162	-0.528554
Kuwait	0.342655333	0.1992086	- 0.4186327	0.0877504	- 0.5595048
Morocco	0.321336809	0.1794674	- 0.4414976	0.1120925	- 0.3754157
Pakistan	0.266834638	0.1665737	- 0.3757417	0.0961318	- 0.4228875
Afghanistan	0.136057491	0.1670307	0.2276481		
India	0.111347559	0.1708333	0.5342351		

**Data derived from Anton Strezhnev and Erik Voeten, "United Nations General Assembly Voting Data," last modified August 2012.**



**Appendix B: UN Voting Data (Weighted)**

<b>Country</b>	<b>Weighted Avg Baseline</b>	<b>Weighted Avg Prior</b>	<b>% Change</b>	<b>Weighted Avg Post</b>	<b>% Change Pre to Post</b>
Australia	0.390084127	0.2707142	- 0.3060108	0.1838992	-0.3206885
Egypt	-0.027303506	-0.0601005	-1.201202	-0.09331	0.5525657
Israel	0.567072114	0.6508831	0.1477959	0.5905721	-0.0926603
Japan	0.397599795	0.3476392	- 0.1256555	0.239368	-0.3114471
South Korea					#DIV/0!
Jordan	-0.061064208	-0.1231588	- 1.0168741	-0.1303094	0.0580598
New Zealand	0.165899181	0.1266976	- 0.2362975	0.1556491	0.2285088
Argentina	-0.00953939	0.1425099	15.939102	0.0050351	-0.9646684
Bahrain	-0.107807223	-0.104852	0.0274118	-0.1169176	0.1150726
Philippines	-0.11800137	-0.0995803	0.156109	-0.0889345	-0.1069066
Thailand	-0.115510826	-0.085968	0.2557577	-0.0848727	-0.0127418
Kuwait	-0.063172243	-0.0937628	-0.48424	-0.1213464	0.2941852
Morocco	-0.084490767	-0.113504	- 0.3433893	-0.0970043	-0.1453666
Pakistan	-0.138992938	-0.1263977	0.0906181	-0.112965	-0.1062726
Afghanistan	-0.080146129	-0.0901575	- 0.1249137		
India	-0.097749265	-0.1529997	- 0.5652266		

**Data derived from Anton Strezhnev and Erik Voeten, "United Nations General Assembly Voting Data," last modified August 2012.**

**Appendix C: Sanctions Compliance Prior to the MNNA Designation (Exports)**

<b>Country</b>	<b>Number of Dyads with Increasing Trade</b>	<b>Number of Dyads with Decreasing Trade</b>
Australia	5/12=.58	42
Egypt	6/9=.67	0.33
Israel	1/5=.20	0.8
Japan	8/13=.62	0.38
South Korea	7/10=.7	0.3
Jordan	5/10=.5	0.5
New Zealand	8/15=.53	0.47
Argentina	11/17=.65	0.35
Bahrain	4/12=.33	0.67
Philippines	6/10=.6	0.4
Thailand	6/10=.6	0.4
Kuwait	4/5=.8	0.2
Morocco	4/9=.44	0.56
Pakistan	6/9=.67	0.33

**Total # of Dyads Examined: 146**

**Total # of Dyads With Increases: 81**

**Percentage of Dyads with Increases:  $106/153=55\%$**

**Data derived from Katherine Barbieri and Omar Keshk, "Correlates of War Project Trade Data Set Codebook, Version 3.0," 2012 and Peterson Institute for International Economics. "Summary of Economic Sanctions Episodes, 1916-2006." Accessed December 1, 2012.**

**Appendix D: Sanctions Compliance after the MNNA Designation (Exports)**

<b>Country</b>	<b>Number of Dyads with Increasing Trade</b>	<b>Number of Dyads with Decreasing Trade</b>
Australia	5 of 10=.5	0.5
Egypt	7 of 10=.7	0.3
Israel	3 of 10=.3	0.7
Japan	5 of 10=.5	0.5
South Korea	8 of 10=.8	0.2
Jordan	7 of 11=.64	0.36
New Zealand	08 of 11=.73	0.27
Argentina	6 of 10=.6	0.4
Bahrain	3 of 7=.86	0.14
Philippines	8 of 10=.8	0.2
Thailand	10 of 10=.1	0
Kuwait	6 of 9=.67	0.33
Morocco	6 of 9=.67	0.33
Pakistan	8 of 9=.89	0.11

**Total # of Dyads Examined: 136**

**Total # of Dyads With Increases: 94**

**Percentage of Dyads with Increases:  $94/136=69\%$**

**Data derived from Katherine Barbieri and Omar Keshk, "Correlates of War Project Trade Data Set Codebook, Version 3.0," 2012 and Peterson Institute for International Economics. "Summary of Economic Sanctions Episodes, 1916-2006." Accessed December 1, 2012.**

**Appendix E: Sanctions Compliance Prior to the MNNA Designation (Imports)**

<b>Country</b>	<b>Number of Dyads with Increasing Trade</b>	<b>Number of Dyads with Decreasing Trade</b>
Australia	8/12=.67	0.33
Egypt	6/11=.55	0.45
Israel	2/7=.29	0.71
Japan	9/13=0.69	0.31
South Korea	4/10=.4	0.6
Jordan	13/15=.87	0.13
New Zealand	11/14=.78	0.22
Argentina	13/17=.76	0.24
Bahrain	9/11=.82	0.18
Philippines	4/11=.36	0.64
Thailand	7/9=.77	0.23
Kuwait	6/8=.75	0.25
Morocco	5/9=.55	0.45
Pakistan	6/9=.66	0.34

**Total # of Dyads Examined: 153**

**Total # of Dyads With Increases: 106**

**Percentage of Dyads with Increases: 86/136=69%**

**Data derived from Katherine Barbieri and Omar Keshk, "Correlates of War Project Trade Data Set Codebook, Version 3.0," 2012 and Peterson Institute for International Economics. "Summary of Economic Sanctions Episodes, 1916-2006." Accessed December 1, 2012.**

**Appendix F: Sanctions Compliance after the MNNA Designation (Imports)**

<b>Country</b>	<b>Number of Dyads with Increasing Trade</b>	<b>Number of Dyads with Decreasing Trade</b>
Australia	6 of 10=.6	0.4
Egypt	7 of 10=.7	0.3
Israel	3 of 10=.3	0.7
Japan	7 of 10=.7	0.3
South Korea	8 of 10=.8	0.2
Jordan	7 of 11=.64	0.36
New Zealand	05 of 11=.45	0.55
Argentina	4 of 10=.4	0.6
Bahrain	6 of 7=.86	0.14
Philippines	4 of 10=.4	0.7
Thailand	7 of 10=.7	0.3
Kuwait	7 of 9=.78	0.22
Morocco	6 of 9=.67	0.33
Pakistan	9 of 9=1	0

**Total # of Dyads Examined: 136**

**Total # of Dyads With Increases: 86**

**Percentage of Dyads with Increases:  $86/136=63\%$**

**Data derived from Katherine Barbieri and Omar Keshk, "Correlates of War Project Trade Data Set Codebook, Version 3.0," 2012 and Peterson Institute for International Economics. "Summary of Economic Sanctions Episodes, 1916-2006." Accessed December 1, 2012.**

**Appendix G: Sanctions Compliance Prior to the MNNA Designation (Total Trade)**

Country	Number of Dyads with Increasing Trade	Number of Dyads with Decreasing Trade
Australia	6/12=.5	0.5
Egypt	8/13=.62	0.38
Israel	3/8=.375	0.625
Japan	7/13=.54	0.46
South Korea	6/11=.55	0.45
Jordan	14/15=.93	0.07
New Zealand	11/17=.65	0.35
Argentina	12/17=.71	0.29
Bahrain	9/12=.75	0.25
Philippines	7/11=.64	0.36
Thailand	7/11=.64	0.36
Kuwait	7/8=.875	0.125
Morocco	3/9=.33	0.67
Pakistan	6/10=.6	0.4

**Total # of Dyads Examined: 167**

**Total # of Dyads With Increases: 106**

**Percentage of Dyads with Increases:106/167: 63%**

**Data derived from Katherine Barbieri and Omar Keshk, "Correlates of War Project Trade Data Set Codebook, Version 3.0," 2012 and Peterson Institute for International Economics. "Summary of Economic Sanctions Episodes, 1916-2006." Accessed December 1, 2012.**

**Appendix H: Sanctions Compliance after the MNNA Designation (Total Trade)**

Country	Number of Dyads with Increasing Trade	Number of Dyads with Decreasing Trade
Australia	5 of 10 =.5	0.5
Egypt	7 of 10 =.7	0.3
Israel	3 of 10=.3	0.7
Japan	5 of 10 = .5	0.5
South Korea	8 of 10= .8	0.2
Jordan	5 of 11=.45	0.55
New Zealand	7 of 11=.64	0.36
Argentina	8 of 10=.8	0.2
Bahrain	7 of 7 =1	0
Philippines	6 of 10=.6	0.4
Thailand	10 of 10=1	0
Kuwait	8 of 9=.89	0.11
Morocco	6 of 9 = .67	0.33
Pakistan	9 of 9 =1	0

**Total # of Dyads Examined: 136**

**Total # of Dyads With Increases: 94**

**Percentage of Dyads with Increases:94/136: 69%**

**Data derived from Katherine Barbieri and Omar Keshk, "Correlates of War Project Trade Data Set Codebook, Version 3.0," 2012 and Peterson Institute for International Economics. "Summary of Economic Sanctions Episodes, 1916-2006." Accessed December 1, 2012.**

*Appendix I: General Trade (Total Trade)*

Country	Avg Baseline	Avg Pre	% Change from Baseline to Pre	Weighted % Change Baseline to Pre	Avg Post	% Change from Pre to Post	Weighted % Change Pre to Post
Australia	7317.356	8555. 794	0.169247	-8555.79	1466 6.72	0.714244172	-7349.364
Egypt	1653.09	1436. 862	-0.1308	-1436.86	1849. 716	0.287330307	-196.626
Israel	2469.232	3892. 56	0.576425	-3892.56	7551. 58	0.940003494	-5082.348
Japan	55344.08	97797 .4	0.76708	-97797.4	1597 25.44	0.633227877	- 104381.36
South Korea	9779.74	18980 .2	0.940767	-18980.2	3723 2.74	0.961662153	-27453
Jordan	302.298	389.2 62	0.287676	-389.262	471.6 52	0.21165693	-169.354
New Zealand	2557.044	3388. 514	0.325168	-3388.51	4437. 358	0.309529192	-1880.314
Argentina	2499.706	5853. 448	1.341655	-5853.45	6775. 596	0.157539283	-4275.89
Bahrain	621.864	571.9 54	-0.08026	-571.954	1012. 522	0.770285722	-390.658
Philippines	10694.26	19039 .22	0.780322	-19039.2	1793 7.92	-0.057843855	-7243.664
Thailand	17142.66	22086 .86	0.288416	-22086.9	3149 2.518	0.425848323	- 14349.862
Kuwait	2942.08	3104. 45	0.055189	-3104.45	7374. 212	1.375368262	-4432.132
Morocco	853.13	976.9 66	0.145155	-976.966	2028. 546	1.07637318	-1175.416
Pakistan	2329.254	2877. 474	0.235363	-2877.47	5685. 88	0.975997003	-3356.626
Afghanistan	156.65	1151. 968	6.35377	-1151.97			
India	34723.77	54280 .7	0.563214	-54280.7			



Data derived from Katherine Barbieri and Omar Keshk, "Correlates of War Project Trade Data Set Codebook, Version 3.0," 2012. Figures are in \$1,000,000 (2012) units.

*Appendix J: General Trade (US Net Exports)*

Country	Avg Baseline	Avg Pre	% Change Baseline to Pre	Weighted % change Baseline to Pre	Avg Post	% Change Pre to Post	Weighted % change Pre to Post
Australia	2537.094	3100.488	0.222063	3.696994	6596.8	1.127665064	0.63103909
Egypt	890.648	843.514	-0.05292	3.42201	897.036	0.063451229	-0.4331748
Israel	482.9	-599.04	-2.24051	1.234426	-749.14	0.250567575	-0.2460584
Japan	-13081.3	-48558.2	2.712042	6.186972	-48454.1	-0.002142996	-0.498769
South Korea	-29.12	-6389.34	218.4141	221.8891	255.74	-1.040026043	-1.536652
Jordan	303.87	328.378	0.080653	-0.33963	315.612	-0.03887593	2.73735606
New Zealand	84.1	693.046	7.240737	7.107251	135.758	-0.804114013	2.05849111
Argentina	-28.36	2686.37	-95.7239	-95.3934	292.676	-0.891051493	2.09928411
Bahrain	324.712	146.464	-0.54894	1.553057	-25.998	-1.17750437	0.41520173
Philippines	-2214.32	-5882.74	1.656677	3.960663	-1391.68	-0.763430127	0.45490003
Thailand	-3648.64	-8844.66	1.4241	3.728085	-13214.4	0.494050081	1.71238024
Kuwait	-447.676	-1131.93	1.528463	3.851864	-2417.35	1.135594718	1.85370277

Morocco	295.368	106.4 62	-0.63956	1.68384	761.306	6.150964 663	6.86907272
Pakistan	-303.738	- 1684. 02	4.544331	6.867733	- 1705.12	0.012527 137	0.73063519
India	-8804.89	- 8948. 82	0.016346	-0.19963			

**Data derived from Katherine Barbieri and Omar Keshk, "Correlates of War Project Trade Data Set Codebook, Version 3.0," 2012. Figures are in \$1,000,000 (2012) units.**

**Appendix K: Value of Military Trade**

Country	Avg Baseline	Avg Pre	% Change from Baseline to Pre	Avg Post	% Change from Pre to Post
Australia	271.8	608	1.236939	286.6	-0.52862
Egypt	822.2	675	-0.17903	1017	0.506667
Israel	973.2	686. 8	-0.29429	829.8	0.208212
Japan	1229.4	183 8.4	0.495364	2180.4	0.186031
South Korea	820.6	748. 8	-0.0875	723.6	-0.03365
Jordan	9.25	8.33 333 3	-0.0991	75.6	8.072
New Zealand	11.25	7.66 666 7	-0.31852	23.75	2.097826
Argentina	9.4	37.8	3.021277	57.4	0.518519
Bahrain	68.75	97.7 5	0.421818	23.5	-0.75959
Philippines	19	15	-0.21053	11.6	-0.22667
Thailand	266	54.4	-0.79549	24.333 33	-0.5527
Kuwait	351.4	13	-0.96301	96.666 67	6.435897
Morocco	93.33333	6	-0.93571	11.5	0.916667
Pakistan	79.2	14	-0.82323	202.4	13.45714
Afghanistan	19	231. 4	11.17895		
India	44.4	102 9	22.17568		

Data derived from Stockholm International Peace Research Institute, "SIPRI Arms Transfer Database," 2012. Figures are in \$1,000,000 (1990) units.

**Appendix L: Military Trade Market Share**

Country	Base Market Share	Pre Market Share	% change from Base to Pre	Post Market Share	% change from Pre to Post
Australia	0.738535	0.910998	0.233521	0.875382	-0.0391
Egypt	0.558106	0.551139	-0.01248	0.874012	0.585827
Israel	0.756677	0.992199	0.311259	0.997116	0.004956
Japan	0.953628	0.939013	-0.01533	0.959176	0.021473
South Korea	0.965702	0.908077	-0.05967	0.753907	-0.16978
Jordan	0.054572	0.531915	8.746981	0.55102	0.035918
New Zealand	0.276074	0.190083	-0.31148	0.251989	0.325683
Argentina	0.170909	0.455422	1.664701	0.558366	0.226041
Bahrain	0.887097	0.933174	0.051942	0.559524	-0.40041
Philippines	0.366795	0.56962	0.552965	0.597938	0.049714
Thailand	0.447661	0.458685	0.024626	0.292	-0.3634
Kuwait	0.733918	0.043624	-0.94056	0.90625	19.77404
Morocco	0.655914	0.031414	-0.95211	0.09434	2.003145
Pakistan	0.111707	0.019492	-0.8255	0.344864	16.69216
Afghanistan	0.228916	0.663798	1.899749		
India	0.020993	0.097136	3.627084		

**Data derived from Stockholm International Peace Research Institute, "SIPRI Arms Transfer Database," 2012.**

## *Bibliography*

Abuza, Zachary. "Borderlands, Terrorism, and Insurgency in Southeast Asia." *The Border Lands of Southeast Asia*. Washington, DC: National Defense UP, 2011. 89-106. Web.

"Assessing Threats to U.S. Vital Interests." *2015 Index of US Military Strength*. Ed. Dakota Wood. Washington, DC: Heritage Foundation, 2015. Web. 11 Nov. 2015.

Axelrod, Robert and Robert Keohane. "Achieving Cooperation under Anarchy." *World Politics*, 38, No. 1 (Oct., 1985): 226- 254.

Barbieri, Katherine and Omar Keshk. "Correlates of War Project Trade Data Set Codebook, Version 3.0". 2012.

Basu, Titli. "India-Japan Relations: An Enduring Partnership." *Indian Foreign Affairs Journal* 9.3 (2014): 266-79. Print.

Bechtol, Bruce, and Richard Bush. "Change of U.S.-ROK Wartime Operational Command." *Brookings*. Brookings Institute, 14 Sept. 2006. Web.

Bendavid, Naftali. "Just Five of 28 NATO Members Meet Defense Spending Goal, Report Says." *The Wall Street Journal* 22 June 2015. Web.

Borck, Jonathan, David King, and Richard Zeckhauser. "Contribution Shares in Alliances." Proceedings of the IASTED International Conference, Albert, Canada, (July 2003): 32-38.

"China People's Liberation Army Navy (PLA(N)) and Maritime Law Enforcement (MLE) 2015 Recognition and Identification Guide." China People's Liberation Army Navy (PLA(N)) and Maritime Law Enforcement (MLE) 2015 Recognition and Identification Guide. Office of Naval Intelligence. 1 Feb. 2015. Web. 10 Nov. 2015.

Cliff, Roger, John Fei, Jeff Hagen, Elizabeth Hague, Eric Heginbotham, and John Stillion. *Shaking the Heavens and Splitting the Earth*. Santa Monica: RAND Corporation, 2011. Web.

Clinton, William. "Remarks to Business Breakfast." Buenos Aires, Argentina. 17 Oct. 1997. Lecture.

Clinton, William. "Remarks by President Clinton and President Menem at Wreath Laying Ceremony." Plaza San Martin, Buenos Aires. 16 Oct. 1997. Lecture.

Collins, Gabriel, ed. *China's Energy Strategy: The Impact on Beijing's Maritime Policies*. Naval Institute, 2012. Web.

Cony, John. "The Portfolio Benefits of Free Riding in Military Alliances." *International Studies Quarterly*, 38, No. 3 (Sep., 1994): 405-419.

Crescenzi, Mark, Jacob Kathman, Katja Kleinberg, and Reed Wood. "Reliability, Reputation, and Alliance Formation." *International Studies Quarterly*, 56, (2012): 259-274.

Davies, Glyn. "Jordan Designated Major Non-NATO Ally." State Department, Washington, DC. 14 Nov. 1996. Lecture.

Downs, Anthony. *An Economic Theory of Democracy*. New York: Harper. 1957.

Fang, Tien-sze. "The Sino-Indian Border Problem." Asymmetrical Threat Perceptions in India-China Relations. Oxford: Oxford Scholarship Online, 2013. 2. Web.

Fisher, Richard. "PLA Air Force Equipment Trends." *The People's Liberation Army and China in Transition*. Ed. Stephen Flanagan and Michael Marti. Washington, DC: National Defense University Press, 2003. Web.

Fordham, Benjamin. "Trade and Asymmetric Alliances." *Journal of Peace Research*, 47, No. 6 (2010): 685-696.

Gates, Robert M.. "A Balanced Strategy: Reprogramming the Pentagon for a New Age." *Foreign Affairs*, January/February 2009.

Gibler, Douglas. "The Cost of Reneging, Reputation and Alliance Formation." *Journal of Conflict Resolution*, 52, No. 3 (June 2008): 426-454.

Grugel, Jean, and Maria Pia Riggirozzi. "The Return of the State in Argentina." *International Affairs*, 83.1 (2007): 87-107. Web.

Gupta, K.R., and Vatsala Shukla. *Foreign Policy of India*. Atlantic, 2009. 242. Print.

Guzman, Andrew. "A Compliance-Based Theory of International Law." *California Law Review*, 90, No. 6 (Dec., 2002): 1823-1887.

Hamilton, Daniel. *The American Way of Partnership*. Madrid: European Strategic Partnerships Observatory, 2014. Print.

Hook, Lesile. "Gas Finds Give Impetus to China Sea Claims." *Financial Times*, 9 Nov. 2012. Web. 11 Nov. 2015.



Ikenberry, G. John. "Institutions, Strategic Restraint, and the Persistence of American Postwar Order." *International Security*, 23, No. 3 (Winter, 1998-1999): 43-78.

"Il-78 Performance Data." Il-78. Ilyushin Aviation Complex. Web. 11 Nov. 2015.

"India-US Trade Register 2003-2014." SIPRI Arms Transfers Database. Stockholm Peace Research Institute. Web. 10 Nov. 2015.

"Joint Statement on the Third United States-Singapore Strategic Partnership Dialogue." U.S. Department of State. U.S. Department of State, 13 Feb. 2015. Web. 11 Nov. 2015.

Karim, Mohd. "Strategic Visions of China and the United States in South Asia and Beyond." *Korean Journal of Defense Analysis*, (2012). Web.

Katzman, Kenneth. "The Persian Gulf States: Post-War Issues for U.S. Policy, 2003." Congressional Research Service. 2003.

Kim, Jin Wung. "Recent Anti-Americanism in South Korea: The Causes." *Asian Survey* 29.8 (1989): 749-63. Web.

Knudson, Jerry. "Veil of Silence: The Argentine Press and the Dirty War, 1976-1983." *Latin American Perspectives* 24.6 (1997): 93-112. Web.

Kumar, Martha. "The 2008 National Security Council Transition: Providing Continuity in a Bipartisan Environment." *Presidential Studies Quarterly*, 43.3 (2013): 490-521. Web. 3 Dec. 2014.

Kurashige, Nanae. "China Shows off Drone Technology in Bid to Compete with U.S." *The Asahi Shimbun*, 28 Sept. 2013. Web. 10 Nov. 2015.

Long, Andrew, and Brett Leeds. "Trading for Security: Military Alliances and Economic Agreements." *Journal of Peace Research*, 43, No. 3 (2006): 433-451.

Malone, David, and Rohan Mukherjee. "India and China: Conflict and Cooperation." *Survival*, 52.1 (2010). Web.

Morrow, James. "Alliances and Asymmetry: An Alternative to the Capability Aggregation Model of Alliances." *American Journal of Political Science*, 35, No. 4 (Nov., 1991): 904-933.

Nakashima, Ellen, and Joby Warrick. "Stuxnet Was Work of U.S. and Israeli Experts, Officials Say." *The Washington Post*, 2 June 2012, National Security sec. Web.

"Notification of Part of Open Blocks in Waters under Jurisdiction of the People's Republic of China Available for Foreign Cooperation in the Year of 2012." China National Offshore Oil Corporation, 23 June 2012. Web. 10 Nov. 2015.

Park, Min-hyung, and Kwang Ho Chun. "An Alternative to the Autonomy-Security Trade-off Model: The Case of the ROK-US Alliance." *The Korean Journal of Defense Analysis* 27.1 (2015): 41-56. Web.

Patranobis, Sutirtho. "China Reacts Sharply to India-US Statement on South China Sea Dispute." *Hindustan Times*. 26 Jan. 2015. Web. 10 Nov. 2015.

Peterson Institute for International Economics. "Summary of Economic Sanctions Episodes, 1916-2006." Web. 1 Dec. 2012.

"Prelude FLNG - an Overview." Shell. Shell. Web. 11 Nov. 2015.

"Presidential Determination No. 98-9 of January 6, 1998." *Federal Register* 63.1 (1998): 3635. Web.

Robinson, David, and Toby Stuart. "Network Effects in the Governance of Strategic Alliances." *Journal of Law, Economics, & Organization* 23.1 (2007): 242-73. Web. 1 Dec. 2015.

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

Scott, David. "India's "Grand Strategy" for the Indian Ocean: Mahanian Visions." *Asia-Pacific Review*, 13.2 (2005). Web. 10 Nov. 2015.

Sharma, Suman. "Navy Ready To Flex Muscles in South China Sea." *The Sunday Guardian*, 4 Dec. 2011. Web. 10 Nov. 2015.

Sorokin, Gerald. "Arms, Alliances, and Security Tradeoffs in Enduring Rivalries." *International Studies Quarterly*, 38, No. 3 (Sep., 1994): 421-446.

Stockholm International Peace Research Institute. "SIPRI Arms Transfer Database." Web. 1 Dec. 2012.

Strezhnev, Anton and Erik Voeten. "United Nations General Assembly Voting Data." Aug. 2012. Web. 1 Dec 2012.

"South China Sea." South China Sea. US Energy Information Administration, 6 Feb. 2013. Web. 10 Nov. 2015.

The Clinton Administration. "Town Hall Questions and Answers." Clinton Presidential Library. 1997.

The International Commission on Intervention and State Sovereignty. *The Responsibility To Protect*. Ottawa: International Development Research Centre. 2001, Web.

Voeten, Erik, Anton Strezhnev, and Michael Bailey. "United Nations General Assembly Voting Data." Harvard Dataverse. V11 (2009).

Wagner, Alex. "Bush Waives Nuclear-Related Sanctions on India, Pakistan." *Arms Control Today*, 31.8 (2001): 20-21. Web.

Walt, Stephen. "Alliance Formation and the Balance of World Power." *International Security*, 9, No. 4 (Spring 1985): 3-43.

Waltz, Kenneth. "The Emerging Structure of International Politics." *International Security*, 18, No. 2 (Autumn, 1993): 44-79.

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### *Scholarly Life*

James R. Raas was born in Morristown, NJ on 5 May 1988. In 2006, he graduated from secondary school with an International Baccalaureate Diploma. He matriculated to the College of William & Mary in Virginia in Fall 2006 where he majored in International Relations. In 2008, he was selected to read at King's College of London within the War Studies and Geography Departments. His research as an undergraduate focused on the Soviet experience in Afghanistan and the use of architecture by totalitarian regimes to advance their political messaging. Mr. Raas was an editor with the *The Monitor: Journal of International Studies* from 2008 to 2010. He received his Bachelor of Arts from the College of William & Mary in Spring 2010. In 2011, he began his Masters in Global Security Studies at Johns Hopkins University.