Successful Military Coalitions – Command and Control

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Abstract: Recent empirical work has found that coalitions increase the chances of victory in war (Morey 2016). This work has treated coalitions as a uniform group, overlooking important differences among coalitions. Specifically, coalitions vary in regards to how much control a state must transfer to the coalition. Some coalitions form weak command structures with states maintaining primary control, while other coalitions centralize command and remove direct command of the military from the state. The construction of the command structure plays an important role in coalition efficiency and ultimately success on the battlefield. Centralized command structures allow coalitions to overcome the problems associated with collective action. Empirical tests on all wars since 1816 find that coalitions are more successful as member states surrender a higher degree of control to the coalition. Thus, coalitions present a security paradox–states can gain greater security through victory in a coalition war but only if they are willing to surrender control of their primary means of security.

In the spring of 1918, Germany launched a major offensive on the Western Front. Germany’s goal was to defeat the allies before the United States could fully deploy, tipping the balance of power, and to reassure their own coalition partners that Germany could still win the war. To this point in the war, the western allies had kept their forces under national control, as neither France nor England was willing to cede control over its own forces to the other state. When Germany attacked, this division within the coalition almost became lethal as each army took actions designed to preserve and maintain the separate armies, not maximize the chances of stemming the German advance. In the face of this serious German advance, the allies realized the weakness of their command structure and moved to create a unified command with one commander responsible for the strategic direction of the entire coalition. After stemming the attack, the new allied command, French Marshal Foch, organized what became known as the Hundred Days Offensive. Foch created a unified plan to employ all allied forces to attack Germany. Aided by large numbers of reinforcements, namely the American Army and British Divisions, the coordinated allied offensive pushed the Germany army back and ended the war with the armistice in November.

The story of the allies in World War I highlights two important issues regarding international military coalitions. First, even states that fight together against a common threat do not always fully trust each other. The desire to maintain full control over one’s military has been repeated in many coalitions. States may feel they need to work together but they are often unwilling to cede control over forces in order to ensure the can implement their own preferred policies and not have their troops employed to help another state reach its own goals. Usually states only take the step of surrendering even limited control over their forces when they have no other choice. In World War I it took the extreme danger of the Spring Offensive to finally move
the allies to form a unified command structure. Second, while the arrival of American forces in Europe cannot be discounted, the benefits of the unified command rapidly demonstrated themselves. The allies were able to employ their forces better and were swiftly able to end the war. The increased coordination and integration of the separate national armies increased the fighting ability of the allies, giving them the best chance to defeat Germany (and quickly).

This paper proposes and tests a general theory of coalition success. While past research demonstrates that coalitions do win the majority of the wars they fight (see Morey 2016), the question of why some coalitions are successful while others fail remains largely unanswered. While there are many facets to coalitions that play a role in success or failure, this paper focuses on the coalition command structure. In short, the more states surrender control over national forces to a coalition wide command structure the greater the chances the coalition will emerge successful. Given the growing emphasis in United States defense policy on working with partner states and a global emphasis on working multinationally (Rice 1997, Showalter and Astore 2002), the question of coalition success is pertinent and answering it places scholars in a better position to offer important policy advice on how to construct future coalitions.

Coalitions

In order to better understand the role of coalitions in interstate conflict it is necessary to define what is meant by the term coalition. One of the main problems with defining the term coalition is that often the terms alliance and coalition are used interchangeably, which makes distinguishing between the two ideas difficult (see Holsti, et al. 1973, Ward 1982). In this research I follow past practice and define a coalition as a group of states fighting on the same side during a war and allies as states who enter into a formal alliance prior to a war (Gartner and Siverson 1996, Morey 2016). Alliances represent a promise to provide aid or to take certain
actions in the case of a war; the promise itself is made prior to a war (Leeds, et al. 2002). The purposes of an alliance can be very broad and the states forming the alliance often have long-term common interests (Showalter and Astore 2002, 1). Coalitions, on the other hand, represent active military cooperation during a war. This can take the form of simple joint planning of military operations or higher levels of integration including combined operations and unified command structures. Coalitions are temporary arrangements by which states work together to achieve a common goal, the defeat of an enemy (Lambert 2002, 29). There can be some relationship between alliances and coalitions as states in an alliance can become members of the same coalition once a war begins. However, coalitions and alliances are distinct, not all alliances require states to work together during a war (neutrality pacts) and coalitions can form between states with no prior commitments. Further, alliance partners can fight on the same side (i.e., against the same enemy) and still not form a coalition if they do not coordinate their activities.

**Challenges**

The idea of combining forces to defeat a common foe has strong logical appeal. However, states wishing to fight together face a number of challenges. If states cannot overcome these obstacles, the coalition will be ineffective and most likely fail to achieve its goals. While coalitions are good in theory, they are difficult in practice.

One theme repeated by historians and generals alike is the inability of coalitions to make decisions effectively. Social Choice Theory highlights many of the problems associated with group decision making. As a collection of states working together, coalitions suffer the same problems as any other group in regards to making decisions. The coalition fighting against Russia in the Crimean War is a good example of the problems possible with group decision making. During the Crimean War both England and France desired to have ultimate control over
coalition forces to ensure their favored policy was followed and for the glory associated with having led the effort to defeat Russia (Lambert 2002). The problem with command in the Crimea was settled by forming a shared command between the four leading powers; however, this forced the coalition to constantly engage in internal negotiations and compromise in order to take any action. This often led to delay and no clear plan of action (Lambert 2002, 35-36). The need for internal deliberations slow coalition actions and can keep coalitions from taking advantage of opportunities that appear quickly. Further, the need to form a consensus leads to the adoption of the least objectionable policy, instead of selecting the most effective option. Last, coalitions can quickly change directions as members change their demands instead of staying the course to reach prior objectives. The need for collective decision-making can greatly slow the response time of a coalition and lead to sub-optimal choices made to create a compromise agreement.

The second problem is divergent political goals between members. While each state seeks to defeat the enemy, there is no guarantee that each member is committed to defeating the enemy as its primary objective or that coalition members share a common goal for the post war world. Divisions such as these can lead to intra-coalition fighting and a diversion of effort away from the main goal of the coalition (victory). During the Second World War the British repeatedly argued for an invasion of the Balkans under the pretext that it would weaken Axis war making capability; however, leaders in the United States felt an invasion of the Balkans would not significantly harm Germany and was directed at controlling the region post war (Stoler 2005). The United States argued for staying on target to defeat Germany while England was already looking ahead to the post war world. England also diverted forces for the invasion at Gallipoli despite French objections that those same troops would be better used on the western
front during the First World War. Finally, France went so far as to end the war of Italian Unification before Piedmont could achieve all of its goals, fearing a strong Italy would be a threat to future French interests (King 1899, 81).

Conflicting international goals are not the only source of political problems for coalitions. Divergent domestic political environments and goals can also weaken a coalition effort. Rational leaders have to be concerned with their own domestic power and security. During the War in the Pacific, President Daza of Bolivia withdrew his best forces out of fear that if these troops were destroyed he would become vulnerable to a coup (Farcau 2000, 99-100). Louis Napoleon personally went to the Crimea and sought to engage and defeat the Russian Army in a decisive battle in an effort to raise his international prestige and strengthen himself domestically (Lambert 2002, 39). Napoleon’s plan was based more on how to restore French stature (and his) rather than actually breaking Russian resistance.

Divergent goals among members in a coalition can weaken the overall ability to win. States can divide their forces to achieve their own goals (foreign or domestic), advocate for joint missions that are not directly aimed at winning the war, or even stop a war short of total victory. In the presence of these divergent goals it can be very difficult to coordinate military actions effectively. As in most cases where states seek to cooperate, while there may be one overarching goal that all states desire, the needs of the separate states may make effective cooperation impossible, rendering a coalition ineffectual.

Along with the political in-fighting that can weaken a coalition, there are also a host of problems associated with combining forces from different nations. The military doctrine and
weapons of states are apt to vary and language barriers can make combined operation difficult.\textsuperscript{1} The French and British were constantly hampered by a lack of personnel able to speak both languages, making liaison between the two armies a time consuming process (Greenhalgh 2005). Even simple items like uniforms can cause trouble for coalition troops. The uniforms of cavalry troops in Hesse-Cassel were similar to the uniforms worn by Prussian cavalry. When returning from patrols the Hesse-Cassel troopers were fired upon by members of their own coalition mistakenly thinking they were under attack (Hozier 1997 [1867], 253). Even when a coalition has significant military power, it might not be possible to combine it effectively due to the differences between the armies themselves.

Finally, coalitions also suffer from the collective action problem. Defeating a would-be hegemon is a collective good all states enjoy regardless of whether they contribute to the effort. This leads to free riding in the form of states not joining a coalition effort or by not providing optimal amounts of national military resources. Both of these weaken a coalition and should reduce the probability of victory. Selective incentives, such as post war territorial gains, should help reduce the free rider problem, but most likely cannot eliminate it.\textsuperscript{2} Like all efforts at international cooperation, coalitions suffer from an inability to force states to contribute to the effort despite the benefits they might receive, leading to a suboptimal coalition effort.

The problems facing states wishing to form an effective coalition are daunting, ranging from practical issues of integrating separate armies to overcoming the political jealousies of the

\textsuperscript{1} The opposite can also hold true, one reason German and Austrian forces worked so well together in multiple wars was their shared language (DiNardo 2005, 11)

\textsuperscript{2} The security provided by a coalition resembles a pure public good. However, some benefits of membership, such as territorial gains, are excludable and take the form of a club good.
states involved. Any of the issues discussed above can make a functioning coalition impossible
to form or maintain. Certainly these concerns can lead to the conclusion that coalitions may be
ineffective in fighting, justifying World War I French General Maurice Sarrail’s succinct review
of coalitions, “since I have seen alliances at work, I have lost something of my admiration for
Napoleon.”

**Command Structure**

The discussion above paints a rather bleak picture of coalitions. However, not all coalitions are
created equal and the differences between coalitions play an important role in determining war
outcomes. Besides differences in membership, the important difference between coalitions is the
command relationship. Some coalitions are very weak in design with members surrendering
little, or no, sovereignty over military forces. Other coalitions form strong centralized command
structures and states yield a large degree of control of their own forces to the coalition. The issue
of how much control to yield to a coalition is one of the hardest political decisions that states
make when forming a military coalition (see Durrell-Young (1997) and Rosenfarb (1944)).³

The structure of the command relationship is vital in the effort to conduct military
operations effectively. Durell-Young (1997, 23) states that in western militaries it is widely
believed that unity of command is critical in achieving effective command and “effective
command is a *sine qua non* for the successful prosecution of military operations.” In the case of
coalitions, which attempt to coordinate the efforts of multiple states, the strength of the command
structure can be a critical element in determining if the coalition will be successful.

³ In future research I plan to study why coalitions form the specific command structures they do, with special
attention on why some coalitions form stronger relationships than others.
What is Command?

The first step in understanding the role that the command structure plays in coalition success is to understand what is meant by command. When most people think of the military they think of strict and clear hierarchies of authority. The person with the higher rank has authority to issue binding orders on those of lower rank. In truth, the issue of command is much more complex and within multinational coalitions the complexities multiple. The central issue is just how far a commander has authority to issues orders. Can they only give commands regarding overall objectives units should achieve or can they micromanage by issuing orders regarding the strategies and tactics to be employed to reach the objectives. There are also issues regarding how much authority a commander has to subdivide national units and how much power a commander has to replace personnel holding command positions (this can be thought of administrative command). Solving these politically dicey, but militarily necessary, issues are the first step towards coalition success.

States rarely, if ever, hand over complete control over their armed forces to a commander from another state, this includes within coalition operations ("Multinational Operations" 2013, II-1). The military represents the physical manifestation of a state’s ability to protect itself from aggression and handing over complete control would leave a state in a potentially vulnerable position. Beyond the basic need for defense, political leaders are unlikely to surrender control over the military even under dire conditions. State leaders do not want to be in a position of being held accountable for the actions of their forces and for any battlefield losses without some ability to guide the actions of the military. Political leaders want to maintain some level of control over what missions national forces conduct, the timing of those missions, and, above all else, keep their forces from being divided (Durrell-Young 30). This means that in any coalition
there will be at least two different chains of command for forces in the field, one national and one coalitional ("Multinational Operations" 2013, II-1).

At a minimum states maintain control over the general administration of the army regardless of the coalition command structure. Issues such as regulations, staffing decisions, and discipline are not transferred out of national hands, even under the worst of conditions. As an example, during the Second World War the United Kingdom and the United States created a single command structure and possibly the closest coalition relationship in history. However, through the entire war there were two distinct armies, one British and one American. Each army had its own regulations and systems for advancing personal to new ranks and command positions. At the area of theater or area commanders, there was certainly a great deal of coordination but each army maintained control over most aspects of their own personnel.

Strategic command of the coalition is primarily the area of politics between the coalition members. The objectives and goals, even large parts of the means employed, are determined by talks and negotiations between the member nations. Big picture issues of the coalitions goals always remain with the body of members in the coalition. As with the general administration of forces, strategic control usually remains an issue between the member nations and is not surrendered when joining a coalition.

In a coalition, command refers to control over the employment of troops in combat. Once the goals are set and the troops committed, how is the military mission controlled? The issue of command is plagued by multiple meanings across militaries and international bodies. In an effort to clarify command ambiguity and confusion, NATO divides command authority into two major categories with four total levels. Operational and tactical authority comprise the major categories. Operational authority concerns the overall mission and deals with assigning
specific objectives to units within the coalition. Operational authority is more big picture, long-term authority to issues orders to subordinate forces to achieve coalition objectives. Operational authority is further subdivided between Operational Command (OPCOM) and Operational Control (OPCON). While there are several nuances between OPCOM and OPCON, the important difference here is the ability to ‘task organize’ (Durrell-Young 23). The authority to task organize means a commander can divide (or fragment) subordinate units to meet mission needs. In other words, national units do not need to be grouped together within the coalition or in battle. The coalition commander has greater flexibility to employ forces in the manner seen most efficient. Tactical command covers control over forces within an assigned mission or task. It is usually for a shorter duration, such as until a battle ends or an objective is reached. Then command authority reverts back.

The focus here will be on operational command. Tactical command is certainly important, especially when looking at success within a single engagement; however, when looking at trends in overall victory or defeat the focus starts with operational command. The level of authority granted to a coalition to guide and fuse military actions is a key component in the overall operation of the coalition.

While military leaders universally recognize the need for a strict hierarchy of command, the theoretical goal of unified command is often difficult to carry out in practice. The establishment of the chain of command is often a highly political and divisive process when constructing a coalition. The command structure is normally created through a series of negotiations between coalition members. Ideally, an agreement would be formed before the coalition takes military action or very early in the war. However, as discussed above in the case of the Western Allies in the First World War, this process can continue with coalition states
returning often to the issue of the coalition’s command structure. The negotiations over the level of operational control a coalition will have generally has two important and politically tricky issues to resolve: the nationality of a coalition commander and the ability to divide national forces.

Exactly who will command a coalition, or from which state a commander will come, is the first major hurdle for forming a coalition command structure. State leaders often push to have the overall commander come from their own nation. This provides prestige upon the nation and, more importantly, ensures that national policy objectives will have a privileged positioned. This creates conflict between member nations even before the formal creation of the coalition, many times this type of conflict cannot be overcome and members do not agree upon a single chain of command. Further, state leaders are often reluctant to hand power over their military forces to an officer from another state. Prestige aside, the military is the key to the defense of the state. Literally, without the military a state would be unprotected and susceptible to unrest both domestic and foreign. Handing over control of the military exposes a state to great risk. For both of these reasons, coalitions have historically created many different command arrangements. While there may be an optimal command relationship from the military perspective, the political needs of the member states often take priority.

Keeping units together is the second major strain within coalitions. Nations fear that their troops will be divided and merged with units with other nations, leaving no true national force in operation. When the United States first deployed troops to Europe during the First World War one of the major flash points between allied commanders was over the issue of troop fragmentation. The British and French wanted to get American units into the field as quickly as possible to relieve the burden on their own national armies. As American divisions arrived and
completed training in France the British and French wanted to move the American divisions into the lines. The American divisions would be placed where they were most needed and there was no guarantee they would be located near other American divisions (in fact, it seems very unlikely). American General Pershing, Commander of the American Expeditionary Force, following order from Washington, fought this plan bitterly. The reason being that scattered American Divisions would be unable to support themselves in isolation and would need support from nearby British and French units. This would require placing the American divisions under the control of either a French or British Corps Commander. American troops would not be under effective American control. General Pershing and President Wilson desired to build-up sufficient American forces in France, seen as Corps, before moving them into the front lines. This would allow for an American zone along the front to be created and allow American troops to remain under American control. While there were worries that the allies did not trust American combat leadership, the real issue came down to military need versus political desires. The allies on the Western Front were desperate for replacement troops and needed the American reinforcements as soon as possible. Military leaders feared that waiting for American forces to build to the Corps level would produce a long delay that could endanger the whole coalition. On the other side the Americans did not want to place troops under foreign command on geographically separate parts of the front for fear that this would harm morale both in France and on the home front. Further, there was fear that American troops would not receive proper credit for combat actions taken under a foreign commander. Combined this created a politically tricky issue for the American leadership. In the end, the standoff was broken by the German Spring Offensive that made the need for American reinforcements acute. Even General Pershing could see the clear need for quickly moving American forces into the fight, regardless of any other
considerations. However, Pershing did secure strong assurances that American divisions would be reassigned to American Corps under American commanders as soon as militarily feasible.

While the nationality of the commander and dividing troops have been historically been major issues for coalitions, more recently differing rules of engagement has gained increasing prominent within coalition operations. Rules of engagement broadly define the conditions under which soldiers can legal use force and the level of force they are allowed to employ. Nations define the rules of engagement differently and the rules remain in effect even when national forces are fighting as part of a coalition. This causes increasing strain on coalitions as certain national forces are unable to conduct certain missions because of the national rules of engagement. In a literal sense, the national commanders cannot carry out orders from a coalition commander as they would violate national rules of engagement. Wesley Clark, Commander of the coalition against Serbia, describes this tension many times as national forces could not conduct certain operations because of restrictive rules of engagement. Often pilots from one state would not engage targets within urban areas because of fear of collateral damage while pilots from other nations would engage. This lead to the need to assign forces to areas that would allow them the maximum ability to actively engage the enemy. There were also cases were national commanders refused orders because they were outside their rules of engagement (see Clark 2002). The varying rules of engagement is a newer complication for command structures, but one that appears to be taking on greater importance.

*What role does Command play in Victory?*

While a strong command structure cannot solve all of the problems associated with coalition warfare, centralizing power can mitigate many of the problems associated with fighting as a
coalition. While there is no magic formula to ensure victory, it will become clear that we should expect coalitions to perform better, all else equal, the stronger its command structure.

The major hurdle for coalition forces is to coordinate military actions to such a degree that the force brought to bear against the enemy is maximized. The previous chapter detailed the inability (and later unwillingness) of the Arab Armies to operate together in a coordinated attack on Israeli forces. The strength of the Arab blow was lost as there was a series of individual attacks instead of one overwhelming assault. As the war continued the Arab states did not work together to defend against Israeli attacks, in essence each was facing Israel alone, something that would not have happened with proper coordination.

The ability to harmonize and coordinate efforts across different coalition members (or even different branches of the military within the same state) is known as unity of effort ("Multinational Operations" 2013, "Command and Control for Joint Land Operations" 2014). Unity of effort means that separate parts of the same force (national or multinational) are working towards the same objectives. This means the same overall strategic objectives are driving operations for all units. Beyond the basic concept of working together, unity of effort also implies task specialization. Disparate units are not seeking the same objective at the same time, which would lead to confusion as units crowd each other on the battlefield or even worse different units working at cross-purposes to each other. Instead, unity of effort divides the tasks among the various members and ensures proper timing and coordination of operations in order to bring about the maximum effect and the greatest probability of success.

Going back to the Arab Coalition example, the initial coalition plan of attack had strong unity of effort. The multi-pronged attack would have divided Israeli forces and left units isolated as they came under attack. The coalition’s blow would be maximized as Israel would be unable
to shift reinforcement to every sector simultaneously. Once unity of effort was lost, the Arab states became the isolated targets of unified Israeli attacks and the coalition crumbled.

While the biggest advantage of stronger command is synergistic use of coalition forces, strengthening the chain of command also has other benefits. First, one of the major criticisms of coalitions is that decisions are made by committee. As previously discussed, this approach to warfare can lead to delays in decision making as member states negotiate with one another and muddled plans of action form from compromises between members to reach an agreement. However, this process of constant negotiation and compromise is eliminated, or at least greatly reduced, as a coalition forms a clear centralized command structure. The political goals of the coalitions may still be the product of intra-coalition debate, but the military policy to reach those goals becomes more rationalized as power is increasingly centralized. To achieve the maximum benefit, command would ideally be concentrated into one overall commander who has the power to guide all military forces within the coalition, regardless of nationality. Centralizing command increases the speed of military decisions and the coordination of the military effort of all coalition members. Thus, the full weight of the coalition is more effectively concentrated to achieve maximum advantage. This is especially important when attempting to fight on multiple fronts.

Second, while transferring power to a single commander will not bridge the political differences between members within a coalition, a strong central command can help mitigate some political infighting. As mentioned earlier, during the Second World War the United Kingdom wanted to invade the Balkans, with the goal of denying Soviet control over the area post war. The United States objected to the plan arguing it was not directly aimed at harming Axis war making capabilities. A large part of what ended the debate between Churchill and
Roosevelt was Eisenhower’s refusal to allow any landing craft to be diverted from the invasion of Europe (Operational Overlord) (Stoler 2005). While Churchill never let go of the idea of invading the Balkans, he did drop the issue because of Eisenhower’s strong stance which was made possible from his position as supreme allied commander.4

If missions are not sufficiently coordinated, the target of coalition attacks will not feel the full weight of the coalition all at once and will stand a better chance of shifting forces to deal with each separate attack, essentially defeating a coalition piecemeal. In essence, without effective command a coalition begins to function much more like a group of states fighting a war in parallel, with the advantages of the coalition under-utilized or even wasted. However, as coalitions form stronger centralized command structures the coalition should become more effective in wielding its power and achieve greater military success by concentrated and coordinated efforts against a target. While not a fix-all, stronger command structures to mitigate, in full or in part, many of the most pressing weaknesses associated with coalition warfare. If states wish to be effective in waging joint war they must be willing to sacrifice some degree of control over their forces to a central coalition commander.

**H1:** *The stronger the command relationship within a coalition, the greater the chance of victory in war.*

None of the above should be taken to imply that centralizing command will be easy. As Mearsheimer (2001, 156-157) points out, there is often friction between states regarding who should be in command of forces and thus set the military policy of the coalition. While it may be difficult for states to form strong centralized commands, since centralized command requires states to surrender some sovereignty, the strength of the command structure can be vital in

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4 The fact that the landing craft were owned by the American military certainly did not hurt in this case.
determining if the coalition will be successful. Coalitions with weak command and control surrender most of the advantages of fighting as a coalition; however, if states form a centralized command coalitions can be a very effective tool of warfare.

**Methods and Data**

The population of cases for this analysis is all interstate wars as defined by the Correlates of War Project (Sarkees 2000). Instead of focusing on dyads or individual states, the unit of analysis is the warring side; in multilateral wars all states fighting on the same side are aggregated together to form one observation. Thus, each war has two observations, warring side A and warring side B. There are two main reasons for this design. The first is that using a dyadic or state base unit of analysis would exaggerate the influence of coalitions because each coalition would be represented multiple times in the dataset. If a coalition composed of three states were to win a war there would be three observations in the data showing a coalition victory, when in fact there was only one coalition victory; the same would happen for every coalition loss. This would magnify the impact of any coalition beyond its true importance and this bias would increase as coalition size grew. The design adopted here avoids this by scoring only one victory (or defeat) for each war, meaning a coalition can only win or lose once per war. Second, Poast (2010) provides strong evidence that breaking multilateral events, such as coalition wars, into a series of dyadic observations leads to biased estimates. The biased estimates come from measurement error in the explanatory variables since they represent the relationship between state A and state B instead of the relationship between the coalition and state B (or two coalitions). In the case of measuring the effect of power on war outcome the dyadic design would test the ratio of state A’s power to that of state B; however, in the coalition context the correct measure should be the ratio of the coalition to state B. Using warring side as
the unit of analysis allows both of these problems to be avoided and the estimation of unbiased coefficients.

Following past studies of war outcome (Reiter and Stam 1998, Reiter and Stam 2002) several large wars are divided into multiple wars. The division of these wars helps to more accurately reflect the nature of coalitions active in different theaters of fighting. In the First World War Germany fought alone on the western front, but in coalition with Austria on the eastern front. The same pattern is visible during the Second World War where Italian involvement was focused in the Balkans and in North Africa. Further, while Germany, Italy, and Japan were nominally allies, there was no integrated cooperation between Germany and Japan (in fact they often followed policies that harmed the interest of the other). So to code the Axis powers as a coalition during the Second World War is a gross generalization and misses a great deal of important variation. Along with dividing the world wars and the Vietnam War as done by Reiter and Stam (1998, 2002), I also divide the Korean War into two separate conflicts, pre- and post-intervention by China. This division captures the changing nature of the coalitions after the intervention by the Chinese; prior to China’s entry, North Korea fought alone against the coalition of UN forces headed by the United States. However, with the entry of China the war became a contest between two coalitions (coding of coalitions discussed below). Further, the UN forces expanded rapidly after the intervention, altering the basic nature of the UN coalition.5

In order to measure the outcome of each war I code two variables. Victory is a dichotomous variable coded one if a side wins the war and zero in all other cases. The second

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5 Prior to the Chinese intervention there were five states (including South Korea) with troops serving in the coalition. Post-intervention this number increased to 14 states. The coalition dynamics increased drastically for both sides once China entered the war.
variable is \textit{War Outcome}. \textit{War Outcome} is coded a zero if a side loses a war, a 1 if the war ends in a draw, and a 2 for victories. Data for these two variables are drawn from the Correlates of War Project Interstate War Datasets (Sarkees 2000) and Reiter and Stam (1998, 2002). In addition, the Korean War is coded as an allied victory prior to the Chinese intervention and a draw for the conflict post-intervention.

The first step in testing the effectiveness of coalition command structures is to determine the population of cases. Finding no pre-existing data on international coalitions, it was necessary to determine if a coalition existed on either side of all multilateral conflicts. Multiple states fighting against a single opponent does not signal a coalition, what must be determined is the degree of military coordination. In order to uncover the necessary detail for each conflict primary and/or secondary sources for each war were examined to establish if states fighting on the same side coordinate their actions. Often it was necessary to examine several sources before finding enough information to code cases. In many cases, autobiographies or histories written by individuals who participated in the conflict provided the best information. As an example, General H. Normal Schwarzkopf devotes a great deal of space to coalition issues in his autobiography and provides fascinating insights into coalition politics (Schwarzkopf 1992). States are considered to be in a coalition if they met the minimal condition of establishing joint military plans, even if they kept national forces under separate (state based) commands. Any cooperation or consultations (pre or post the start of the war) that did not result in a joint plan of battle was not deemed as the formation of a coalition. Table 1 provides the details for the coding of each side in every multilateral war. At the top of Table 1 are the cases where no evidence could be found of active coordination meeting the minimum threshold; these cases are coded as Wars in Parallel, as state fought against the same foe but they did so independently. In other
words, no coalition existed in these cases. In most wars, the evidence clearly indicates that states were not coordinating their actions. In the case of the Roman Republic, the evidence shows that the Catholic States fighting against the Roman Republic were actually in competition with each other; each state wanting to be the one to recapture Rome and return it to the Pope. In two cases, the Third and Fourth Central American Wars, the scant information available provided no evidence of a coalition, but it did not clearly rule out cooperation either. However, the weight of the current evidence points to the absence of any coalition in these two cases. In all cases of Wars in Parallel there are no coalitions despite multiple states fighting against the same opponent(s).

In order to test Hypothesis 1 it is necessary to distinguish between different types of coalitions, specifically the strength of coalition command. To achieve this each coalition was classified as one of three types based upon the command relationship. Independent Commands, or Parallel Commands (“Multinational Operations” 2013, II-6) in military writings, are the weakest form of coalition possible; under this structure states agree to a centralized plan of battle but all military forces remain under separate national commands. In other words, each state is given a mission to complete and then left to employ its own forces to reach that goal. Coordination is achieved, but the relationship between the coalition members is minimal during the actual fighting. Unity of effort is derived from the original plan of battle. If well designed and executed the coalition plan can generate the benefits of fighting as part of a coalition. The major problem comes when things do not go according to plan. As events occur and the coalitions encounters unexpected resistance or problems the coordination mechanisms between members are weak or absent, leaving the coalition unable to take advantage of its resources to
meet the new challenges. This is what happened to the Arab Coalition in the 1948 War, the plan broke down even before the fighting started and the coalition was never able to recover.

Joint Commands\textsuperscript{6} increase the coordination between member states by creating one command structure while maintaining national command over military forces. Instead of each state executing its own part of a plan, under a Joint Command there is one command structure at the top that includes representatives of all the member states (or at least the largest members). This joint command body determines policy and integrates actions of the separate forces involved in the war. Decision-making is done by a committee of commanders. There is increased coordination and communication, but command lines remain divided and each state gets a vote in how the coalition should proceed. Not all states need to have representation for a joint command. Often the decision regarding which states are included is a function of the overall standing of the state and the level of forces they contribute to the coalition. The coalition in the Boxer Rebellion did, however, create a committee of all members. At the other extreme coalitions will also form a joint command with only two commanders, each with authority over a portion of the coalition force. Despite the notoriety of General Norman Schwarzkopf Jr. from the 1991 coalition war against Iraq, he was not the single overall commander of the coalition. General Schwarzkopf shared command with a general from Saudi Arabia. For political reasons

\begin{footnote}
\textsuperscript{6} In military writings, a joint command is a command that brings together forces from two different branches within the same nation’s military forces. As an example, Army and Marine units deployed under a single command would form a joint command. A command structure that brings together forces from two or more states is called a combined command. Here I use the term joint command to designate a command structure with several co-equal, or close to co-equal, commanders. The emphasis is not on the nationality of the forces but the number of people with operational authority.
\end{footnote}
most Arab forces, along with forces from a few other states, refused to be under direct United States operational control. To resolve this political issue a joint command was created with two generals sharing overall command and splitting operational control of the coalition forces. While there is no designated single military commander under a joint command, unity of effort is achieved and enhanced by the creation of single command structure. The coalition creates the infrastructure for maintaining coordinated actions after a conflict begins instead of leaving national commanders to coordinate on an *ad hoc* basis.

Finally, the strongest coalitions, as far as coordination is concerned, are Unified Commands. This is the Eisenhower model of command with all military power flowing to a single individual who is responsible for determining and coordinating the overall military plan of the coalition. To be a true unified command each member state must surrender a great deal of authority to the coalition commander. The commander must be able to send orders directly to all coalition units and have them executed. States do not have to surrender full control of their forces, but they must come under operational command of the overall commander. This means that national governments still maintains control over personnel decisions, such as who will serve as the commander of the national forces, but operational decisions fall to the commander. In some cases states can limit the types of missions their forces can participate in. This was common in the Kosovo War. United States General Clark was the overall NATO commander and the overall United States commander in Europe. Large numbers of NATO troops and fighter planes were placed under his operational command for the campaign against Serbia. However, many European states placed limits on the types of missions their planes would fly. A major concern was avoiding civil casualties; many leaders would not allow their air forces to conduct missions that had a high risk of this sort of collateral damage. There were also deep political
concerns that limited national mission profiles. Many states had long-standing relations with ethnic groups that occupied parts of Serbia but were not part of the Serbian majority. In order to avoid harming these relationship states would not allow their forces to operate in certain parts of Serbia. Outside of these limitations, General Clark and his staff were free to manage the forces under their control.

Often times unified commands will form an integrated command structure where members of the command staff come different states within the coalition (“Multinational Operations” 2013, II-4). The integrated command structure provides the commander with direct insight and knowledge into the capabilities and organization of the various national contingents within the coalition. Within a unified command structure, the individual serving as supreme commander can vary over time; however, the key to a unified command is that power must flow to one person with ultimate responsibility. The decision regarding how to rotate command is often the process of long negotiations between member states. The most common form of rotational agreements deal with the geographic location of the fighting, with the commander coming from the state within which the coalition is current fighting. Unity of effort is guaranteed as the coalition is guided by a single commander. Decision speed also greatly increases as there is no committee that needs to meet in order to make decisions. While many coalitions have created a unified command structure, the most well known example is the western allies during the Second World War. Shortly after the Untied States entered the war General Dwight D. Eisenhower was named the Supreme Allied Commander in Europe. General Eisenhower commanded distinct armies and there were limitations to his authority over allied forces. However, operationally, he was solely in charge of coalition.
From this discussion it becomes clear that as we move up the structural hierarchy of coalitions the level of centralization increases. Independent commands have very low levels of integration once the planning phase is complete. The states work together but there is no central force ensuring a focused effort during the campaign. Some of this problem is mitigated by a shift to a joint command. One central body determines policy and works to coordinate all coalition activities. While higher centralization is achieved it does come at the cost of greater deliberation and slower reaction times. At the top of the hierarchy the unified command provides the greatest level of coordination. One commander with operational control over the entire coalition force provides a high degree of coordination and the maximum amount of focused effort. While higher levels of centralization do not guarantee victory, they should greatly increase the odds of a successful outcome. As state before, the level of force brought to bear can only have an impact if it is properly focused. The command structure can provide this focus and push the coalition to victory, or it can cause a clear military advantage to end in defeat.

In order to measure the effect of command structure on coalition victory I create the variable *Coalition Type*. This variable takes the value of zero if there is no coalition for a warring side, a one for Independent Commands, a two for Joint Commands, and a three for Unified Commands. In order to code this variable I consulted historical works on each coalition. In most cases the command relationship was clear and easily coded. However, in a few wars it many sources were necessary to adequately understand the command structure. Most of these wars are small relatively unknown conflicts with a great deal of historical documentation. Table 1 provides information regarding the type of each coalition.\(^7\)

\(^7\) The command structure of coalitions often varies over the life of a coalition. The coding decisions reported here reflect the high water point for integration of forces over the life of the coalition. The one exception to this rule is
In order to control for other important factors in war outcomes several variables are included in the model. First, initiating a war can provide an advantage to one side (Wang and Ray 1994). Besides arguments that initiators carefully select targets, states that initiate a conflict have the advantage in selecting when and where the fighting will occur. The initiating side is then able to attack on ground that is favorable to their forces and to strike before the other side has completed military preparations. To control for these advantages, the variable \( \text{Initiate} \) is coded 1 if the party to a conflict is the one that first begins hostilities according to the Correlates of War Inter State War dataset. In cases of multilateral wars the side with the initiating state is considered the initiator.

To ensure that \( \text{Coalition} \) is not just capturing the influence of enhanced military strength, especially in cases where a group of states combine to fight a weak opponent, I measure the ratio of power between each side in a war. \( \text{Capability Ratio} \) equals the power of side A divided by the power of its opponent.\(^8\) To measure power I use the Correlates of War Composite Indicator of National Capabilities (CINC) score from the last year prior to the war. In the case of multilateral

\(^8\) Tests were also conducted using the raw sum of capabilities and the average level of capabilities between states fighting together. The results for these measures had larger ratios between the coefficient and the standard error, indicating a worse fit.
wars I sum the CINC scores for each side. Higher values of Capability Ratio should increase the probability of victory.

Finally, given the war fighting abilities of democratic states, it is important to control for the number of democracies on each side (Reiter and Stam 1998, Reiter and Stam 2002). To capture this influence the variable Democracy is a count of the number of democracies on one side of a conflict. I also control for the number of states on each side of a conflict (see Gartner and Siverson 1996); States is a count of the number of countries fighting on one side.

Methods

The two dependent variables in this study have different structures and require the use of different statistical tests. In all tests of the dichotomous variable Victory I employ Logit regression. When using the ordered variable War Outcome I estimate all models using Ordered Logistic regression. All estimates are reported using robust standard errors with the errors clustered by war.

Results

The results for four separate regressions are presented in Tables 2. Table 2 divides coalition by type to see if the probability of a favorable conclusion to a war increases as coalition command structures grow stronger. Table 2 presents results for the dependent variables Victory and War Outcome.

<Table 2 here>

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9 Aggregating CINC scores does assume that forces can be perfectly combined and that all members contribute all of their force to the fight, both of which are questionable. However, this procedure seems better than arbitrarily discounting a certain level of power for each state.
Columns 1 and 2 in Table 2 report the results of a Logit regression on Victory. In each model, Coalition Type is positive and significant, meaning that as states form stronger coalitions they are more likely to win. Figure 1 plots the changes in the probability of winning based on changes in Coalition Type (using model 2). As the strength of a coalition increases, moving left to right in Figure 1, there is a clear trend towards a greater chance of victory. The predicted probability of victory increases by .125 between no coalition and forming a coalition with Independent Commands, increases by .155 between Independent Commands and Joint Commands, and finally increases by .148 between Joint and Unified Commands. Most impressive is the fact that the predicted probability of victory for a coalition with a Unified Command structure is .634.\(^1\) In fact, while coalitions improve the chances of victory, only forming a Unified Command raises the probability of victory above .5, ceteris paribus. Forming a Unified Command requires states to surrender the most control to the coalition, making them difficult to form; however, they also provide the greatest chance of success.

While there appears to be a clear trend moving from No Coalition to Unified Commands, incorporating the errors of these estimates does indicate a need for caution when interpreting these findings. While the trend appears clear, the differences between many of the coalition

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\(^1\) Using the variable Coalition Type assumes that differences between the types of coalitions is equal (linear increase in strength), which is a strong assumption. In order to ensure that this was not biasing the results, I repeated the analyses in Table 2 using a string of indicator variables. The results from these tests support the findings in Table 2, especially regarding the clear advantage enjoyed by coalitions with Unified Commands. The predicted probabilities for Independent and Joint Commands both declined and estimated errors expand, but the basic pattern of an increasing probability of victory remains as the coalition grew stronger.
types do not reach standard levels of statistical significance, as is apparent anytime the error bars overlap.\textsuperscript{11} Thus, we cannot state with any certainty that there is a true improvement in the odds of victory for coalitions with Independent Commands over fighting without a coalition ($p \approx .28$), between Independent and Joint Commands ($p \approx .31$), and between Joint and Unified Commands ($p \approx .45$). However, even after incorporating the error of these estimates, we can say with confidence that differences do exist between some coalition types. First, there is a clear distinction in the probability of winning when comparing Joint Commands ($p \approx .052$) and Unified Commands ($p \approx .01$) to fighting without a coalition. Given that the probability of victory more than doubles for a Joint Command and more than triples for Unified Commands compared to No Coalition, these distinctions are important. Further, while the evidence is not as strong, there does appear to be a distinct difference between coalitions with Independent Commands and those that form Unified Commands ($p \approx .09$). Keeping the above caveats in mind, it appears that not only do coalitions help states win wars, but the type of coalition matters. The odds of victory increase the more states integrate command structures.

Looking at Columns 3 and 4 of Table 2 we find that \textit{Coalition Type} is significantly and positively related to \textit{War Outcome}. Even when we count draws as a separate category, instead of as a non-victory, we find that the type of coalition states form matters. The probability of a draw does not vary greatly as coalition strength increases. Coalitions appear to be an all or nothing effort.

\textsuperscript{11} When looking at error bars, any overlap is a clear indication that two estimates are not significantly distinct; however, the lack of overlap is not, on its own, evidence that a significant difference exists, the size of the gap determines the level of significance (Cumming and Finch 2005).
It is interesting to note that there are no cases where a coalition was defeated by another coalition with a weaker command structure. In North Africa and the Mediterranean area the allies fought under a unified command defeating a weak and conflict prone Italian and German joint command; while in the second half of the Korean War two unified commands fought to a draw. While we cannot draw strong conclusions from only two examples, these cases do appear to highlight the advantages of forming strong command structures. The need to form highly centralized command structures may become even more important when a coalition finds itself facing another coalition.\(^{12}\)

Most of the other variables in Table 2 behave as we would expect. The side that initiates a war is more likely to win, more democracies help, but more states in general hinder the war effort. Surprisingly, \textit{Capability Ratio} does not reach standard levels of significance (although it is close in many models). The measure of power assumes that states can bring all of their power to bear on any war. However, in many cases states are fighting far from home and cannot project all of their power. This is true for both coalition and non-coalition wars. In the War of the Pacific, Spain was fighting thousands of miles from home and could not employ its entire military. In these cases, the measure of national power greatly inflates the power of states compared to the actual power exercised within the theater of the war.

Overall, the results in Tables 2 are supportive of the idea that coalition effectiveness is tied to the command structure of the coalition. Coalitions can help states win war but they must be structured in the right way. Lose alignments without strong leadership do not appear to perform well and always underperform when compared to coalitions with strong centralized

\(^{12}\) Given the low number of cases involving two coalitions it will be necessary to explore coalition warfare outside the modern era to see if this finding holds as a general rule of coalition warfare.
command. States may not wish to surrender command of military forces to a coalition but it the way to make coalitions effective.

**Conclusion**

The findings from this paper have some important implications for international relations. First, it is possible for states to combine forces to defeat an attempt at hegemony. This central component of classic Balance of Power Theory does receive confirmation. However, the finding that working together might not be enough to ensure victory but that states must form a strong hierarchical command structure means that effective balancing coalitions may be even harder to form than current theory realizes. First, in order to achieve the security that comes from victory coalition members must surrender, at least partial, control over the primary instrument of security, their military forces. This produces a security paradox for states, especially if states seek to maintain sovereignty above all else (Mearsheimer 1994-5). In order to remain safe, states will have to become dependent upon coalition partners. However, this opens the state to potential risks, as the cost of forming the wrong partnership could be devastating.

The risk of defection adds another complication to the requirements for the successful operation of a balance of power system: trust. When looking at the proper function of a balancing system attention is focused upon two components, the number of actors and the ability to move between blocs. In fact, two of Kaplan’s (1957, 23) six rules for a balance of power system deal directly with maintaining essential actors. The focus on the number of powers is important as the greater the number of actors the greater the number of possible balancing coalitions (Morgenthau 1978, 348). This number of potential coalitions could be further reduced by binding alliances or commitment to a supranational ideology. The emphasis of these arguments is on coalition formation and assumes that partners will be able to work effectively
together. The theory and findings of this paper argue that coalitions should integrate at high levels to be effective, which means coalition partners must trust each other not to defect. A group of states might be willing to fight against a would-be hegemon; however, to be effective they must also be willing to work closely together. If states lack trust in each other the chances of balancing a rising power diminish and the system is likely to break down. Kaplan (1957, 34) comes close to reaching this same conclusion when he states that the Soviet Union could not have balanced Germany in Czechoslovakia, assuming it would have wanted to do so, because it could not directly access the area of conflict because Poland and Romania viewed the Soviet Union as a threat and would not allow Soviet forces into their territory. The lack of trust in the Soviet Union made any coalition unworkable.

The issue of trust might also help explain why many coalitions have a single state that takes a central leadership position. A coalition may be able to coalesce around a single state that all can trust, even if individual members of the coalition do not trust one another. The Axis coalition that invaded Russia during the Second World War is an example. Romania and Hungary were bitter rivals and could not work together; in fact, Germany had to keep the armies of these two nations separated. At one point, a Romanian unit moved behind a Hungarian formation, the Hungarian commander threatened to reverse direction and form a line of battle against the Romanians if they did not move immediately (DiNardo 2005, 123-124). However, despite the serious issues between Hungary and Romania, both were able to work together because of the presence of the strong leadership of Germany. Along with providing military resources, one of the main ingredients of a coalition leader may be trust, without which the coalition would be ineffective.
Overall, the findings in this paper provide some rather nuanced policy advice for those seeking to prosecute coalition wars successfully. First, states should not avoid fighting in coalitions; coalitions are not the millstones people currently believe them to be. However, to enjoy the full advantage of fighting together states need to form strong integrated command structures. Just fighting against the same target or loosely coordinating military missions is not enough, states need to find a way integrate their efforts on the battlefield to achieve success. Second, leaders need to be selective in who they allow to join a coalition. In times of danger it may seem reasonable to add any state that is willing to fight against a common foe. However, the results in this paper show that adding more non-democratic states can weaken the war effort. A smaller coalition of democratic states may be more effective than a larger coalition that admits non-democratic nations.
### Table 1
Coalition Wars and Coalition Types

<table>
<thead>
<tr>
<th>Wars in Parallel</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Fourth Central American</td>
<td>Seven Weeks</td>
</tr>
<tr>
<td>Hungarian-Allies</td>
<td></td>
</tr>
<tr>
<td>Roman Republic</td>
<td>Six Day</td>
</tr>
<tr>
<td>Second Balkan</td>
<td>Third Central American</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>War</th>
<th>Coalition Type</th>
</tr>
</thead>
<tbody>
<tr>
<td>Austro-Sardinian</td>
<td>Unified Command</td>
</tr>
<tr>
<td>Boxer Rebellion</td>
<td>Unified Command</td>
</tr>
<tr>
<td>Crimean</td>
<td>Joint Command</td>
</tr>
<tr>
<td>Ethiopian-Somalian</td>
<td>Unified Command</td>
</tr>
<tr>
<td>First Balkan</td>
<td></td>
</tr>
<tr>
<td>Franco-Prussian</td>
<td>Unified Command</td>
</tr>
<tr>
<td>Gulf War</td>
<td>Joint Command</td>
</tr>
<tr>
<td>Italian Unification</td>
<td>Unified Command</td>
</tr>
<tr>
<td>Korean</td>
<td></td>
</tr>
<tr>
<td>China-North Korea</td>
<td>Unified Command</td>
</tr>
<tr>
<td>Lopez</td>
<td>Unified Command</td>
</tr>
<tr>
<td>Nomonhan</td>
<td>Unified Command</td>
</tr>
<tr>
<td>Pacific</td>
<td>Unified Command</td>
</tr>
<tr>
<td>Palestine</td>
<td>Independent Commands</td>
</tr>
<tr>
<td>Second Schleswig-Holstein</td>
<td>Unified Command</td>
</tr>
<tr>
<td>Seven Weeks</td>
<td></td>
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<td>Austria and Allies</td>
<td>Unified Command</td>
</tr>
<tr>
<td>Sinai</td>
<td>Joint Command</td>
</tr>
<tr>
<td>Spanish-Chilean</td>
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<tr>
<td>Ugandan-Tanzanian</td>
<td>Joint Command</td>
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<tr>
<td>Vietnamese</td>
<td>Joint Command</td>
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<tr>
<td>First World War</td>
<td></td>
</tr>
<tr>
<td>Allies Turkish Front</td>
<td>Joint Command</td>
</tr>
<tr>
<td>Allies Western Front</td>
<td>Unified Command</td>
</tr>
<tr>
<td>Axis Eastern Front</td>
<td>Joint Command</td>
</tr>
<tr>
<td>Second World War</td>
<td></td>
</tr>
<tr>
<td>Allies Africa/Med</td>
<td>Unified Command</td>
</tr>
<tr>
<td>Allies Western Europe</td>
<td>Unified Command</td>
</tr>
<tr>
<td>Allies Pacific</td>
<td>Unified Command</td>
</tr>
<tr>
<td>Germany and Italy</td>
<td>Joint Command</td>
</tr>
<tr>
<td>Africa/Med</td>
<td></td>
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<tr>
<td>Axis Eastern Front</td>
<td>Joint Command</td>
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<tr>
<td>Germany and Italy v. Greece</td>
<td>Joint Command</td>
</tr>
<tr>
<td>Yom Kippur</td>
<td>Independent Command</td>
</tr>
<tr>
<td></td>
<td>(1) Logit Victory</td>
</tr>
<tr>
<td>----------------------</td>
<td>-------------------</td>
</tr>
<tr>
<td>Coalition Type</td>
<td>0.403* (0.162)</td>
</tr>
<tr>
<td>Initiate</td>
<td>1.374** (0.374)</td>
</tr>
<tr>
<td>Capability Ratio</td>
<td>0.069 (0.040)</td>
</tr>
<tr>
<td>Democracy</td>
<td>0.784* (0.321)</td>
</tr>
<tr>
<td>States</td>
<td>-0.463* (0.209)</td>
</tr>
<tr>
<td>Constant</td>
<td>-0.332* (0.161)</td>
</tr>
<tr>
<td>Cut 1</td>
<td></td>
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<tr>
<td>Cut 2</td>
<td></td>
</tr>
<tr>
<td>Observations</td>
<td>188</td>
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<tr>
<td>Neg. log-likelihood</td>
<td>-126.3</td>
</tr>
</tbody>
</table>

Dependent Variable in models 1 and 2 is *Victory* in models 3 and 4 *War Outcome*

** p<0.01 * p<0.05 (two-tailed)

Robust Standard Errors reported
Figure 1
Coalition Type and Probability of Victory

No Coalition
Indep. Commands
Joint Command
Unified Command

P(Victory)

0.1
0.2
0.3
0.4
0.5
0.6
0.7
0.8

0.206
0.331
0.486
0.634
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