Presidential Risk Orientation and Force Employment Decisions: The Case of Unmanned Weaponry

Julia Macdonald¹ and Jacquelyn Schneider¹

Abstract
In this article, we explore how presidential risk orientations affect force employment decisions through an analysis of the use of unmanned weaponry during the Bush and Obama administrations. We hypothesize that the conception of risk plays an integral part in this choice of weaponry. In order to examine our hypothesis, we utilize the verbs-in-context system of operational code analysis to quantify the risk propensities of President Bush and President Obama during the Afghanistan War from 2001 to 2013. At the aggregate level, we find that the two presidents exhibit unique interpretations of risk with respect to manned versus unmanned weaponry. We further disaggregate our data to examine whether these preferences are fixed or fluctuate with situational changes. We find that President Bush’s risk calculations are influenced by a number of situational variables, highlighting the importance of changing decision contexts in explaining risk behaviors. President Obama’s risk calculations, on the other hand, remain constant over time lending credence to the importance of overall risk propensity in determining risk-taking behaviors. Our findings indicate that risk is an important variable in explaining the means of force employed during conflict, and that the source of this behavior can vary by leader.

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Keywords

international security, military power, use of force, psychology

Recent research within international relations has demonstrated the importance of individual risk behavior in understanding the conduct of war. Whether determined by changing situational context or leadership style, scholars have used variation in leaders’ risk orientations to explain US and Soviet decision making during the Cuban Missile Crisis (Haas 2001), Carter’s willingness to take military risks during the Iranian Hostage Crisis of 1979 (McDermott 1992), and the Truman administration’s changing policy during the Korean War (Taliaferro 2004). Yet despite the demonstrated importance of risk variables in explaining use of force decisions, there has been little research on the role that risk might play in understanding the means by which leaders choose to wage these wars once underway. This omission in the literature is surprising. For if risk matters in explaining leadership decisions to intervene in or escalate conflicts, then there is no theoretical reason why it should not also be incorporated into explanations for the way in which wars are fought. Can risk help explain why certain leaders consistently prefer some types of weapons over others—even sometimes to the detriment of achieving battlefield objectives?

Building on existing research on risk behavior and use of force decisions,1 this article focuses on the importance of leaders’ individual risk perceptions in shaping the means by which wars are fought. To do this, we draw on theories of risk behavior to help explain a contemporary case of interest: the rise of unmanned weaponry as part of US military policy. Used for both surveillance and for deploying lethal force, unmanned aerial vehicles (UAVs) have become the tool of choice for US foreign policy elites. UAVs are used to monitor military and nuclear installations in Iran, to patrol the Pacific, and to wage counterterrorism campaigns in Afghanistan, Pakistan, Yemen, and Somalia. From 2008 to 2012, the United States launched 1,015 armed strikes from UAVs—18 percent of the total air strikes conducted in Afghanistan (Woods and Ross 2012), and armed UAVs have also played a vital role in the recent air campaign against the Islamic State of Iraq and Syria (ISIS). Moreover, the increased use of unmanned weaponry by the United States is often explained in terms of the reduced risks to US leaders, both financially and in terms of lives saved. Commentators claim that the popularity of UAV technology is owed to the fact that it eliminates all risk to American military personnel (Deri 2012), and government officials frequently refer to the UAV attacks as “costless” (Singer 2012). Yet despite being consistently touted as a key motivation driving the popularity of the UAV program, there is little systematic analysis of how risk perceptions actually shape these US military force decisions, and how differences in such perceptions might lead to significant changes in policy outcomes.

In order to understand how leaders’ risk behaviors impact force employment decisions—and the decisions leaders make between manned and unmanned weapons specifically—we derive a series of hypotheses from three different “camps”
within the political psychology literature: (1) the risk propensity camp that grounds risk behaviors in fixed personality traits; (2) prospect theorists who view risk behavior as a product of the decision-making context; and (3) scholars who view risk behavior as a product of both situational context and individual characteristics. To test these hypotheses, we engage in the content analysis of speeches made by President Bush and President Obama on the use of manned and unmanned weaponry in Afghanistan and Pakistan (2001–2013) utilizing the verbs-in-context system (VICS). While there has been some criticism within political science literature regarding the operationalization of risk variables, the VICS coding methodology provides a clear and well-tested methodological framework for our study. Through the course of our analysis, we find that variation in the risk orientations of these two US leaders has important consequences for the means by which war is waged by the Bush and Obama administrations, and specifically the more frequent use of unmanned weaponry by President Obama. Further, we find that President Bush’s preference for manned over unmanned weaponry is driven by risk calculations based on changes in the situational context, while President Obama’s risk calculations are better explained by his overall risk propensity and personality traits.

This article proceeds as follows. The next section reviews existing theories of risk behavior in international relations as it applies to use of force decisions, and highlights the lack of attention in current literature on leadership decisions about means of force employment. The third section introduces the case study of unmanned weaponry and lays out our key hypotheses, building on existing theories of leadership risk behavior. In section four we discuss the methodology of this article, followed by an analysis of the comparative case study results in section five. The sixth section considers a number of reasons for the variation that we find in the two leaders’ risk-taking behaviors, before concluding with some notes for further research.

**Theories of Risk Behavior**

Scholarship in the field of international relations has long noted the importance of individuals in explaining variation in foreign policy outcomes, though there has been a resurgence of interest in this level of analysis over recent years. This focus on individual agency has been accompanied by a turn toward insights from psychology to explain instances of foreign policy decision making that appear to depart from standard rationalist assumptions. A large part of this work has looked at the role of individual attitudes toward risk to understand otherwise puzzling patterns of behavior. The focus on individual risk orientations to explain foreign policy decisions is born out of the widespread acknowledgment that most political decisions are made under conditions of high uncertainty “when the stakes are high and the prize is big” (McDermott 1998, 3). Indeed, for Kowert and Hermann risk is necessarily part of all political choices “because national leaders cannot know in advance every consequence of their decisions” (1997, 612).
Warfare is an inherently risky business. This is not only because the probability of victory or defeat is uncertain at the outset of conflict, but also because the situation is often highly ambiguous and can lead to significant adverse consequences for decision makers in achieving their goals. Indeed, the ambiguity surrounding situations of conflict and the potential for significant policy failure can serve to elevate the importance of individual risk behaviors in understanding leaders’ decisions both to initiate conflict and to further escalate crises (Bueno de Mesquita 1985; Levi and Whyte 1997; Keller and Foster 2012). Risk has been employed as a key variable to explain German leaders’ decision making during the Munich Crisis (Taliaferro 2004), Japan’s decision to attack Pearl Harbor (Taliaferro 1998, 2004), Kennedy and Khrushchev’s policies during the Cuban Missile Crisis (Whyte and Levi 1994; Haas 2001), and more.

Interestingly, however, while scholarship exists on the role of risk in conflict initiation and escalation, there has been much less focus on the way in which risk shapes leaders’ decisions regarding the means by which those wars are waged once underway. This omission in the literature is somewhat surprising given the hugely influential role that leaders play in shaping the means by which wars are fought and the implications of those decisions for the future trajectory of conflict. For example, President Lincoln’s preference for breech loading and repeating rifles during the US Civil War against advice from his Chief of Ordnance eventually led to important improvements in the Union Army’s military effectiveness (Bruce 1956; Hallahan 1994; see also Jungdahl and Macdonald 2015). More recently, President George H. W. Bush’s decision to call up reserves early in the Gulf War crisis, to deploy troops with dispatch, and to employ massive and continuous airpower against the Iraqi forces proved decisive during the Persian Gulf War. By contrast, President Lyndon Johnson’s decision in 1965 not to call up reserves, to dispatch troops slowly and reluctantly, and to place important restrictions and controls on the US air campaign had disastrous effects in Vietnam (Khong 1992).

Since all of these decisions rested in important ways on the presidents in charge and their unique risk calculations, it is important to understand the processes through which these leaders construct their risk behaviors. What drives perceptions of risk in terms of force employment? And how do those perceptions affect leaders’ propensity to utilize different means of force in times of war? In order to understand how and why risk might impact force employment decisions in war, we turn to a number of existing explanations for differences in individual risk behaviors. These explanations tend to fall into three “camps” or schools of thought.

Scholars in the first camp argue that individuals vary substantially in their risk-taking behavior and claim that the root of this variation is grounded in overall risk propensities—that is, in individuals’ overall risk orientations. These risk propensities are in turn a function of people’s personality traits and genetic characteristics that remain stable and relatively fixed over time (Kowert and Hermann 1997; Zuckerman and Kuhlman 2000; Rosier et al. 2009). According to this school of thought, some people are simply more comfortable with facing uncertain gains or
losses than others, and thus are more risk acceptant in their approach toward life. These differing predispositions for taking or avoiding risk can lead individuals to perceive similar structural environments in very different ways (Vertzberger 1998; Boettcher 2005; Keller 2005), with potentially important implications for decisions around force employment. Keller and Foster (2012), for example, argue that leaders’ willingness to undertake diversionary wars rests on their locus of control. Leaders with an internal locus believe that outcomes are determined by their own skill, have confidence in their ability to control escalation, and believe that they can manipulate external environments to their will. As a result of these personality traits, such leaders are more risk acceptant than those with external loci of control, with important implications for their willingness to engage in diversionary uses of force.

The second camp accepts that individuals vary in their risk-taking behavior but argues that risk behaviors are based on individual risk orientations that stem from perceptions of changing situational variables rather than on fixed personality traits and overall predispositions. In this sense, risky behaviors are an outcome of the dynamic and changing characteristics of a given decision context. One of the most interesting insights from the risk perceptions school comes from prospect theory’s finding that the framing of choices matters to the ways in which individuals make decisions, where framing is defined as “the decision-maker’s conception of the acts, outcomes, and contingencies associated with a particular choice” (Tversky and Kahneman 1981, 453). A frame of reference thus comprises three key elements: an individual’s perception of the range of actions available, situational assessments of the outcomes of those actions in terms of loss and gain, and predictions of the probability of success (Boettcher 2004, 333).

Thus far, scholarship within political science has tended to focus on “outcome framing” and has shown that individuals are risk averse and more cautious when they believe that they are “winning” and prospects are framed as gains, and risk acceptant when they are framed as losses (Kahneman and Tversky 1979, 2000). These insights have been incorporated into political science to explain how different perceptions of risk can impact decision-making behavior in international politics. Indeed, a series of scholars have argued persuasively that when actors find their political positions deteriorating, they begin to view themselves in the domain of losses and assume risk-seeking behavior (Levi and Whyte 1997; McDermott 1998; Davis 2000; Haas 2001; Taliaferro 2004). Farnham (1997), for example, employs prospect theory to explain Roosevelt’s shift in attitude toward Europe during the Munich crisis, Taliaferro (2004) applies the framework to explain why great powers become embroiled in peripheral wars, and He and Feng (2012) use prospect theory to explain China’s foreign policy toward Taiwan. Interestingly, less scholarship has focused on the “means” framing approach and how the framing of alternative options and courses of action impact the ways in which individuals try to achieve their goals (Boettcher 2004).
Finally, scholars in a third camp argue that risk-taking behaviors are a function of some combination of both risk perception and risk propensity. Risk propensity can interact with situational variables by directing an individual’s attention to certain types of information and magnifying the importance of a given decision’s risks or rewards (Ehrlich and Maestas 2010). Kowert and Hermann (1997), for example, have found that personality traits can work both independently of, and in combination with, contextual framing to alter individuals’ preferences for risky policies. For this third group, then, life is more complicated. Risk propensities and risk perceptions are both necessary to provide a full explanation for variations in individuals’ risk orientations and risk-taking behaviors.

Risk and Unmanned Weaponry

In order to understand how risk behavior impacts force employment decisions, we turn to the case of unmanned weaponry. This case is interesting for a number of reasons. First, UAVs have become increasingly popular tools of US military power over the past decade (Bergen and Tiedemann 2011; McCrisken 2013). Since 2004, the United States has launched more than 400 covert UAV strikes in Pakistan, Yemen, and Somalia, 90 percent of which have been authorized by the Obama administration (Bureau of Investigative Journalism 2013. See Tables 1 and 2). Armed UAVs have also played a vital role in Afghanistan and in the recent air campaign against ISIS. From October 8 to November 7, 2014, UAVs were used to conduct air strikes during twenty-five of the thirty-one days (Operation Inherent Resolve 2014). This surge in unmanned strike activity has been accompanied by rapid budget increases, with the allocation for UAVs increasing from US$667 million in 2001 to US$3.9 billion in 2013 (Andrews 2013). Nor is the growing affinity for UAVs confined to the White House. Recent surveys show that the US public is also highly supportive of the government’s investment in unmanned weaponry, with nearly three-quarters of those polled in favor of the use of UAVs to target suspected terrorists overseas (New York Times/CBS Opinion Poll, June 6, 2013).

Second, and perhaps more interestingly, discussions around the increased use of UAVs often invokes—both implicitly and explicitly—the language of risk. Indeed, the increased use of UAVs over recent years is often associated with the perception of unmanned platforms as low-risk weapons when compared to other means of force available to decision makers. The rapid increase in the popularity of unmanned weaponry is frequently attributed to its ability to save US soldiers’ lives (Deri 2012; Walsh 2013). In his 2012 speech on the administration’s UAV policy, John Brennan explicitly stated that unmanned weaponry can be a wise choice “because they dramatically reduce the danger to US personnel, even eliminating the danger altogether.”

Unmanned weaponry is also perceived to lower strategic costs when compared to its manned counterpart. First, by mitigating the risk of a downed pilot in enemy territory, UAVs make it possible to conduct air strikes in locations that would otherwise
entail too much political risk (i.e., the case of downed U-2 pilot Gary Powers). Additionally, conventional manned weaponry may be more likely to lock the United States into long-term protracted conflict (Rose 1998). Deploying conventional manned weaponry overseas, with its necessary contingent of personnel to operate the machinery, can lead to a large footprint within host nations and risk alienating local populations and stirring resentment toward the United States (Kilcullen 2009). To the extent that the US presence not only extends the conflict but also negatively impacts the reputation of the United States overseas, the use of manned weaponry can be strategically much more risky than unmanned weaponry which arguably minimizes these concerns. In addition to increasing the human and strategic costs, manned weaponry is believed to be more expensive to deploy. An analysis by the American Security Project asserts that all things considered, UAVs are more cost effective than conventional manned aircraft (Boyle 2012).

Finally, and building on a number of these points, unmanned weaponry can lower the perceived risks to society of waging war. This has the effect of insulating leaders

<table>
<thead>
<tr>
<th>Year</th>
<th>UAV strikes</th>
</tr>
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<tbody>
<tr>
<td>2001</td>
<td>0</td>
</tr>
<tr>
<td>2002</td>
<td>0</td>
</tr>
<tr>
<td>2003</td>
<td>0</td>
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<tr>
<td>2004</td>
<td>1</td>
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<tr>
<td>2005</td>
<td>3</td>
</tr>
<tr>
<td>2006</td>
<td>2</td>
</tr>
<tr>
<td>2007</td>
<td>4</td>
</tr>
<tr>
<td>2008</td>
<td>36</td>
</tr>
<tr>
<td>2009</td>
<td>2</td>
</tr>
<tr>
<td>Total</td>
<td>48</td>
</tr>
</tbody>
</table>

Source: Data published by the New America Foundation (2013).
Note: UAV = unmanned aerial vehicle.

<table>
<thead>
<tr>
<th>Year</th>
<th>UAV strikes</th>
</tr>
</thead>
<tbody>
<tr>
<td>2009</td>
<td>52</td>
</tr>
<tr>
<td>2010</td>
<td>122</td>
</tr>
<tr>
<td>2011</td>
<td>73</td>
</tr>
<tr>
<td>2012</td>
<td>48</td>
</tr>
<tr>
<td>2013</td>
<td>26</td>
</tr>
<tr>
<td>Total</td>
<td>321</td>
</tr>
</tbody>
</table>

Source: Data published by the New America Foundation (2013).
Note: UAV = unmanned aerial vehicle.
from dwindling public support for continued conflict and potential political costs at election time. Research indicates that while the populace might experience a “rally around the flag” effect at the onset of war (Mueller 1970), that this feeling soon passes. The increasing human and financial costs of war over time serve to reduce the population’s resolve for combat and generate risks for regimes that rely on continued public support (Mueller 1973; Gartner and Segura 1998; Bueno de Mesquita et al. 2003). Since manned weaponry is believed to increase both the human and financial costs of war, this means of force also increases the risk of suffering domestic political costs should conflict outlast the initial window of public approval. Unmanned weaponry, on the other hand, lowers these costs and therefore lessens the risk of political punishment.

The increased popularity of UAVs across the Bush and Obama administrations combined with the perceived low-risk nature of unmanned weaponry provides a perfect opportunity to explore how variation in presidential risk behaviors impacts force employment decisions, and to understand in more detail what drives these choices. Building on our theoretical discussion, we posit the following hypotheses and subhypotheses regarding presidential preferences for manned and unmanned weaponry.

**Hypothesis 1:** The more overall risk acceptant (and therefore less risk averse) a leader is, the more likely he or she is to employ manned over unmanned weaponry.

**Hypothesis 1a:** Leaders’ risk propensities will determine their overall risk orientation toward manned versus unmanned weaponry. Therefore, the risk orientations of leaders toward manned and unmanned weaponry will remain constant over time.

**Hypothesis 1b:** Leaders’ situational risk perceptions will determine their overall risk orientation toward manned versus unmanned weaponry. Therefore, the risk orientations of leaders toward manned and unmanned weaponry will fluctuate over time based on changes in situational context.

**Hypothesis 1c:** Leaders’ risk propensities and situational risk perceptions will interact to produce an overall risk orientation toward manned and unmanned weaponry. Therefore, the risk orientations of leaders toward manned and unmanned weaponry will not remain constant but will also demonstrate greater stickiness than a strict situational perception of risk.

We test these hypotheses through the content analysis of speeches made by President Bush and President Obama on unmanned and manned weaponry usage in Afghanistan and Pakistan between 2001 and 2013. We choose to examine these variables in the context of the war on terror in Afghanistan and Pakistan because they are the primary domains in which unmanned weapons have been utilized to implement strategic objectives. Also, as opposed to places like Yemen where unmanned weaponry is used exclusively, both manned and unmanned options have been used in both
Afghanistan and Pakistan. This serves as a useful comparison to test our general hypothesis that the risk associated with unmanned weaponry differs from manned. The following section outlines the methodology we employ, before presenting the results of our analysis.

**Methodology**

According to our hypotheses, risk orientation—whether based on an overall propensity or a situational perception—plays a significant role in explaining why Bush and Obama utilize unmanned weaponry. Our key causal variable is therefore risk orientation and the effect is risk-taking behavior as expressed through the selection of military means used to implement foreign policy, whether that be manned or unmanned. In order to test our hypothesis and properly measure the risk orientation mechanism as an independent variable, we therefore seek to measure the risk orientations of Bush and Obama. The dependent variable in our analysis is the relative use of UAVs by the Bush and Obama administrations (see Tables 1 and 2). It is clear from the frequency distributions in these tables that the use of UAVs was much more common during the Obama administration. The Obama administration used UAV strikes 6.7 times more frequently (321 vs. 48) in a five-year period (2009–2013) than did the Bush administration in the previous five-years (2004–2009).

There is some consternation within the literature about how to operationalize a leader’s risk orientation as risk acceptant or risk averse (Kowert and Hermann 1997). Based on the extensive empirical work done by operational code researchers using the VICS coding methodology (Walker, Schafer, and Young 1998; Walker 2000; Walker and Schafer 2000; Marfleet 2000; Renshon 2008; Walker, Malici, and Schafer 2011), and the in-depth discussion of risk and operational codes by Vertzberger (1998), we choose to utilize operational code analysis as our methodological framework for measuring risk orientation.

The operational code framework has long grappled with questions of risk. In fact, the primary question posed by both Leites (1951, 1953) and George (1969) regarding operational code analysis was how Bolshevik and Soviet belief systems affected their calculations of risk. George posits that the primary purpose of operational code analysis is to understand how “political leaders in varying political cultures and institutional structures approach the task of making calculations, of deciding what objectives to select, and how to deal with uncertainty and risk” (George 1969, 198). To that end, George summarizes Leites’ framework into a set of philosophical questions about the way the world works and instrumental questions about the ends and means of political action (see Table 3). The answers to these questions serve as measures to understand the role that strategic beliefs play in an actor’s instrumental risk decisions.

Our focus on risk within the operational code construct centers on the answer to the operational code analysis instrumental question (I3): “How are the risks of political action calculated, controlled, and accepted?” (George 1969). The measure of I3
provides an overall assessment of the risk orientation of means used toward “the other.” In our case, I3 answers how Obama and Bush perceive the risks of using unmanned and manned means in Afghanistan and Pakistan. Schafer and Walker (2006, 36) explain their VICS measurement of I3 in the following way: “risk levels can be related to the distribution of choices the actor makes: higher levels of diversity in action mean that the risk associated with any one action is diminished. Lower

### Table 3. Verbs-in-Context System Methodology.

<table>
<thead>
<tr>
<th>Philosophical Beliefs</th>
<th>Index</th>
<th>Interpretation</th>
</tr>
</thead>
<tbody>
<tr>
<td>P1 NATURE OF THE POLITICAL UNIVERSE</td>
<td>Percentage Pos – Percentage Neg Transitive Other Attributions</td>
<td>+1 friendly to -1 hostile</td>
</tr>
<tr>
<td>P2 REALIZATION OF POLITICAL VALUES</td>
<td>Mean Intensity of Transitive Other Attributions divided by 3</td>
<td>+1 optimistic to -1 pessimistic</td>
</tr>
<tr>
<td>P3 POLITICAL FUTURE</td>
<td>1 minus Index of Qualitative Variation for Other Attributions</td>
<td>I predictable to 0 uncertain</td>
</tr>
<tr>
<td>P4 HISTORICAL DEVELOPMENT</td>
<td>Self or Other Attributions divided by (Self plus Other Attributions)</td>
<td>0 low control to 1 high control</td>
</tr>
<tr>
<td>P5 ROLE OF CHANCE</td>
<td>1 minus Political Future x Self Attributions/(Self + Other Attributions)</td>
<td>1 high role to 0 low role</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Instrumental Beliefs</th>
<th>Index</th>
<th>Interpretation</th>
</tr>
</thead>
<tbody>
<tr>
<td>I1 APPROACH TO GOALS</td>
<td>Percentage Pos – Percentage Neg Self Attributions</td>
<td>+1 high cooperation to -1 high conflict</td>
</tr>
<tr>
<td>I2 PURSUIT OF GOALS</td>
<td>Mean Intensity of Transitive Self Attributions divided by 3</td>
<td>+1 high cooperation to -1 high conflict</td>
</tr>
<tr>
<td>I3 RISK ORIENTATION</td>
<td>1 minus Index of Qualitative Variation for Self Attributions</td>
<td>I risk acceptant to 0 risk averse</td>
</tr>
<tr>
<td>I4 TIMING OF ACTION</td>
<td>1 minus Abs. Value (Perc. X- Perc. Y Self Attributions)</td>
<td>1 high to 0 low shift propensity</td>
</tr>
<tr>
<td>a. Coop. vs. Conflict Tactics</td>
<td>Where X=Coop and Y=Conflict</td>
<td></td>
</tr>
<tr>
<td>b. Word vs. Deed Tactics</td>
<td>Where X=Word and Y=Deed</td>
<td></td>
</tr>
<tr>
<td>I5 UTILITY OF MEANS</td>
<td>Percentage for Exercise of Power Categories A through F</td>
<td>I very frequent to 0 infrequent</td>
</tr>
<tr>
<td>a. Reward</td>
<td>a’s frequency divided by total</td>
<td></td>
</tr>
<tr>
<td>b. Promise</td>
<td>b’s frequency divided by total</td>
<td></td>
</tr>
<tr>
<td>c. Appeal/Support</td>
<td>c’s frequency divided by total</td>
<td></td>
</tr>
<tr>
<td>d. Oppose/Resist</td>
<td>d’s frequency divided by total</td>
<td></td>
</tr>
<tr>
<td>e. Threaten</td>
<td>e’s frequency divided by total</td>
<td></td>
</tr>
<tr>
<td>f. Punish</td>
<td>f’s frequency divided by total</td>
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</tbody>
</table>
levels of diversity result in exposure to a higher level of risk if that type of action fails.” In other words, a pure I3 measure captures a leader’s overall assignment of risk toward the use of one type of means versus a combination of all others.

A leader with an overall risk-averse measure would have an even dispersion of means verbs in their rhetoric (i.e., one appeal/support verb, one promise verb, one reward verb, one oppose/resist verb, one threaten verb, and one punish verb). This pattern demonstrates their desire to “hedge” against uncertainty and limits the overall risk of focusing on one strategy over another. Conversely, a leader with an overall risk-acceptant measure would demonstrate a means distribution with spikes in one or more actions; for example, six punishment verbs and zero other verbs. This type of leader would be willing to “double down” and risk that the punishment strategy is the best means for achieving their objective.

Mathematically, this measure is computed as $I3 = \frac{1}{C0} (\text{mode/total verbs})$. Therefore, if there are ten verbs and the mode is eight (e.g., eight punish verbs), then the overall I3 measure of diversity is $1 – (8/10) = .2$. Measures from 0 to 0.5 indicate an overall risk-acceptant orientation; measures greater than 0.5 to 1 indicate an overall risk-averse orientation. In the previous example, our actor with an I3 measure of .2 has a risk-acceptant orientation—he does not have a propensity to diversify his means in order to mitigate his overall risk.

I4, the timing of action, measures two dynamics: (I4a) the timing of cooperation versus conflict and (I4b) the timing of word versus deed. Risk is measured in a similar way as I3. In order to calculate the risk of conflict, we calculate $1 – (\text{number of conflict verbs/number of verbs})$. For example, if there are ten possible verbs, with eight conflict verbs and two cooperation verbs, then we calculate the I4a measure as $1 – (8/10) = .2$. The same logic applies to I4b, which captures risk orientation toward doing too much, or $1 – (\text{number of deed verbs/number of verbs})$.

For I4a measures, an actor is classified overall as risk acceptant to conflict with measures from 0 to 0.5 and risk averse with measures greater than 0.5 to 1. As measures move closer to the mean (0.5), they demonstrate an individual who is overall more risk balanced toward conflict. For instance, an individual with a 0.5 I4a measure may be considered overall slightly risk averse, but in general is more risk-balanced than an individual with a measure closer to the poles (0 or 1). Using the same logic, I4b measures a scale of risk acceptance toward doing too much. Therefore, the closer the measure is to zero, the more overall risk acceptant, and the closer to 1, the more risk averse. A summary of these computations is included in Table 4.

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**Table 4. Interpretation of Risk Measures.**

<table>
<thead>
<tr>
<th>Risk averse</th>
<th>Risk acceptant</th>
</tr>
</thead>
<tbody>
<tr>
<td>$0.5–1$</td>
<td>$0–0.5$</td>
</tr>
<tr>
<td>To conflict $0.5–1$</td>
<td>To conflict $0–0.5$</td>
</tr>
<tr>
<td>To doing too much $0.5–1$</td>
<td>To doing too much $0–0.5$</td>
</tr>
</tbody>
</table>

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To reference back to our original empirical hypothesis, we make the following Bush and Obama VICS hypotheses about risk and manned versus unmanned weaponry.

**Hypothesis 1 VICS:** The lower the I3 measure, the more likely the leader is to employ manned over unmanned weaponry. Similarly, the lower the I4a measure, the more likely the leader is to employ manned over unmanned weaponry. Finally, the lower the I4b measure, the more likely the leader is to employ manned over unmanned weaponry.

**Hypothesis 1a VICS:** I3 and I4 measures will remain constant over time.

**Hypothesis 1b VICS:** I3 and I4 measures will fluctuate over time based on changes in situational context.

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### Table 5. Bush and Obama Aggregated Risk Measures vis-à-vis the War on Terror.

<table>
<thead>
<tr>
<th></th>
<th>Bush (315 verbs), n = 8 years</th>
<th>Obama (164 verbs), n = 5 years</th>
</tr>
</thead>
<tbody>
<tr>
<td>I3: Risk orientation</td>
<td>.39** Risk acceptant</td>
<td>.66** Risk averse</td>
</tr>
<tr>
<td>I4a: Timing of action</td>
<td>cooperation or conflict</td>
<td>Risk acceptant to conflict</td>
</tr>
<tr>
<td>I4b: Timing of action</td>
<td>words or deeds</td>
<td>Risk acceptant to doing too much</td>
</tr>
</tbody>
</table>

*Unpaired t-test significant at .05.

**Unpaired t-test significant at .01.

### Table 6. Bush and Obama Aggregated Operational Code Measures vis-à-vis the War on Terror.

<table>
<thead>
<tr>
<th></th>
<th>Bush</th>
<th>Obama</th>
</tr>
</thead>
<tbody>
<tr>
<td>P1: Nature of the political universe</td>
<td>-1</td>
<td>-1</td>
</tr>
<tr>
<td>P2: Realization of political values</td>
<td>-.73</td>
<td>-.83</td>
</tr>
<tr>
<td>P3: Predictability of the political universe</td>
<td>.6</td>
<td>.42</td>
</tr>
<tr>
<td>P4: Control over historical development (self)</td>
<td>.86</td>
<td>.85</td>
</tr>
<tr>
<td>P5: Role of chance</td>
<td>.48</td>
<td>.64</td>
</tr>
<tr>
<td>I1: Strategic approach to goals</td>
<td>-.90</td>
<td>-.21</td>
</tr>
<tr>
<td>I2: Tactical pursuit of goals</td>
<td>-.78</td>
<td>-.26</td>
</tr>
<tr>
<td>Reward</td>
<td>.03</td>
<td>.06</td>
</tr>
<tr>
<td>Promise</td>
<td>.03</td>
<td>.26</td>
</tr>
<tr>
<td>Appeal/support</td>
<td>0</td>
<td>.07</td>
</tr>
<tr>
<td>Oppose/resist</td>
<td>.05</td>
<td>.01</td>
</tr>
<tr>
<td>Threaten</td>
<td>.28</td>
<td>.26</td>
</tr>
<tr>
<td>Punish</td>
<td>.61</td>
<td>.34</td>
</tr>
</tbody>
</table>

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To reference back to our original empirical hypothesis, we make the following Bush and Obama VICS hypotheses about risk and manned versus unmanned weaponry.
Hypothesis 1c VICS: I3 and I4 measures will change in accordance with salient events and demonstrate “stickiness” as they solidify risk propensities.

To generate our samples for the VICS coding, we used The Public Papers of the Presidents and included all oral statements from the Bush and Obama administrations about military means utilized in Afghanistan and Pakistan from 2001 to 2013. We retained both off-the-cuff responses and prepared speeches in order to answer two major critiques: (1) the potential lack of decision-making ownership in prepared speeches; and (2) the possibility that off-the-cuff interview responses do not accurately capture belief systems (Hermann and Milburn 1997). Finally, though the sample includes only public interactions, previous empirical work has demonstrated that public documents provide accurate samples of leaders’ beliefs (Marfleet 2000; Renshon 2008, 2009). The samples were hand coded separately by both of the authors, with a 93 percent inter-coder reliability. When discrepancies were noted, authors discussed reasoning and reconciled to standardized coding, using the Schafer and Walker guidelines as a rule book (Schafer and Walker 2006).

Results: Afghanistan and Pakistan

In our time-aggregated sample, we find that, as hypothesized, Bush and Obama demonstrate different conceptions of risk vis-à-vis conflict in Afghanistan and Pakistan (see Tables 5 and 6). Bush is overall risk acceptant with an I3 measure of .39 and is resoundingly acceptant toward conflict with an I4a measure of .05. Bush is also risk acceptant toward doing too much, with an I4b measure of .36. Conversely, Obama has an overall risk-averse orientation with a .66 I3 measure. Also, his I4a measure (.39) demonstrates a statistically significant less risk-acceptant orientation to conflict than Bush, while his I4b measure indicates he is risk averse toward doing too much. These findings indicate that the two leaders demonstrate fundamentally different strategic risk orientations; a divergence that also coincides with an increased usage of unmanned assets during the Obama administration.

This leads us to ask why Bush and Obama view risk and unmanned weaponry in such different ways. The additional operational code indices shed some light into the fundamental similarities and differences between these two leaders. Not surprisingly, both leaders view the overall war on terror as hostile (P1) and are pessimistic about their ability to realize political values (P2). They also exhibit belief in a high level of control over the self in historical development, as opposed to the other (P4). These similar indices illustrate that the two presidents expect the relationship with the “other” to be conflictual (though Obama still has lower levels of conflict within his instrumental means, I1 and I2). This is not a surprise because this sample is taken from discussions about a war that has already begun.

However, where the two leaders diverge is in their perceptions of certainty within the conflict. Overall, Bush is certain about the predictability of the future (.6, P3) while Obama is more uncertain (.42, P3). In addition, Bush’s view of the role of
chance (P5) is on the low side of the index spectrum (.48), indicating that he believes that chance plays less of a role in this conflict than purposive actions. On the other hand, Obama’s measure (.64) illustrates a belief that chance plays a high probability of affecting the conflict. These operational code indices provide evidence that Bush and Obama view certainty in quantitatively different ways. This divergent perception of certainty versus uncertainty provides evidence of core cognitive differences in how they construct perceptions of risk regarding force employment. In particular, the divergence in measures of certainty between Bush and Obama indicate that Obama is more uncertain about his ability to control the outcome of the conflict. Therefore, Obama is more likely to hedge against uncertainty with risk behaviors that distribute strategies so that one option does not dominate all others. Bush, on the other hand, is far more certain about his ability to influence the conflict. Therefore, he is also more willing to go all in on one type of strategy instead of distributing options in a more balanced way.

Discussion

Our aggregate results for Bush and Obama demonstrate clearly divergent perceptions of risk in the war on terror. These divergent perceptions of risk also seem to correspond with each president’s choice of military means to accomplish similar strategic goals. Bush, who is more risk acceptant, made UAV strikes a much less prominent part of his strategy in Afghanistan and Pakistan and instead focused on manned options. Obama, on the other hand, is risk averse and therefore more likely to prefer unmanned options. Our content analysis reveals that he is more willing to risk doing too little than doing too much. In conjunction, we see that under Obama, UAVs become a linchpin tactical mean to accomplish strategic objectives. These aggregate results provide compelling evidence that risk orientation plays a major role in how these decision makers view the trade-offs between manned and unmanned weaponry.

But what does the data tell us about existing theories of risk? Are Bush and Obama’s decisions about manned versus unmanned weaponry tied to their core personalities? Perhaps the decisive, intuitive Bush is more likely to choose risk-acceptant means over a more cautious, circumspect, and analytical Obama. Or, as posited by prospect theory, are these leaders’ risk behaviors driven by changes in situational variables? We test these theories by performing three disaggregations of the presidents’ samples designed to examine whether core situational variables—the changing nature of war, domestic advisors, and domestic politics—affect changes in risk behavior. The point here is not to determine the pivotal situational variables in each president’s decision making, but instead to examine whether these risk behaviors are fixed across disaggregations or fluctuate according to different situational contexts. Further, by disaggregating across themes instead of across time, we more precisely capture fluctuations based on thematic perceptions instead of general patterns of temporal change.
The first disaggregation focuses on Operation Enduring Freedom (OEF) contextual variables and divides the sample according to comments made during the initial campaign versus surge or drawdown periods. This allows us to examine the effect of both battlefield gains and losses and the rise of UAV technological availability over time. The second disaggregation examines the sample based on election cycles to explore the potential effect of domestic politics on leaders’ risk perceptions. Finally, the third disaggregation looks at the role of advisors in risk perceptions and divides the sample based on the tenure of Secretary of Defense Rumsfeld and then Gates (see Figure 1). If risk propensity is the dominant consideration in determining these leaders’ risk behaviors, then we would expect to see no significant changes across time in any of these disaggregations. If, however, we do see significant changes over time, then this lends more credence to the importance of situational risk perceptions in determining risk behaviors. And finally, if we find patterns of change in risk behaviors within these three disaggregations, then this might provide insight into situations in which a combination of risk propensity and situational risk perceptions produce overall risk behaviors.

The results from the Bush OEF sample disaggregation demonstrate a shift from an overall I3 measure of risk acceptance converging on risk neutrality in the initial stages of the Afghanistan campaign to more pronounced risk acceptance in March 2002. This risk behavior remains constant until 2008 at which point we see a shift toward greater risk neutrality in the I3 measure. We also see that Bush becomes more risk acceptant toward doing too much after Operation Anaconda, and makes a dramatic shift post-January 2008 to becoming risk averse to doing too much. This I4b measure shift also corresponds with an increase in Bush administration UAV strikes. Clearly, then, Bush’s risk behaviors are not consistent over time within the disaggregation, providing support for theories of situationally determined risk behavior.

We also disaggregated Obama’s OEF sample so that T1 = inauguration until surge, T2 = surge until withdrawal announcement, and T3 = withdrawal announcement until June 2013. If Obama’s risk perceptions were based on situational changes in the Afghanistan campaign, then we would expect to see changes in perceptions of risk across time. Interestingly, Obama, as opposed to Bush, remains risk averse throughout the three time periods, almost risk neutral toward conflict and risk averse to doing too much, demonstrating remarkable consistency in his risk behavior.

We then disaggregated the Bush and Obama samples according to electoral cycles. In the Bush sample we had four electoral periods: T1 = inauguration in 2001 to midterm elections in 2002; T2 = November 2002 to presidential elections in 2004; T3 = November 2004 to midterm elections 2006; and T4 = November 2006 to presidential elections in 2008. We find once again that, like our OEF disaggregation, Bush’s risk behaviors change over time. By the last period, Bush has become almost risk neutral overall (I3) and also has become more risk neutral in his I4b index. We also see an increase in overall risk acceptance and risk acceptance toward doing too much in the 2004 to 2006 time period. These vacillations in risk behavior correlate roughly with the same patterns of risk behavior in the OEF.
Figure 1. Bush and Obama disaggregated risk measures.
disaggregated sample. In all three disaggregations, we see a pattern of increased risk acceptance from 2002 to 2006. We also see that Bush becomes less risk acceptant, leaning toward risk neutral between November 2006 and 2008, with a dramatic shift occurring late in his term.

For Obama, we disaggregated three time periods: T1 = inauguration to midterm elections in 2010; T2 = November 2010 to presidential elections in 2012; and T3 = November 2012 to June 2013. Similar to the OEF context disaggregation, we see no significant change in Obama’s I3, I4a, or I4b risk measures.

Finally, we disaggregated the Bush and Obama samples by Secretary of Defense. Our disaggregated results of Bush’s sample during this time frame demonstrates the largest shift for Bush in overall I3 measure, with a move from an I3 measure of .32 (risk acceptant) to .56 (risk averse). In contrast, Obama continues to demonstrate remarkably consistent I3 risk measures despite the removal of Robert Gates and appointment of Leon Panetta as Secretary of Defense in 2011. Interestingly, though, we do see a move toward greater risk neutrality in both his risk orientation toward conflict and his risk orientation toward doing too much.

Our disaggregated results indicate that situational perceptions of risk are more instrumental in explaining Bush’s risk behaviors than those of Obama. In contrast to the risk propensity camp’s expectations of consistent risk behavior based on fixed and unchanging personality traits, Bush’s risk behaviors vary significantly over time and in reaction to shifts in situational context. Most notably, we see that while Bush is overall risk acceptant and UAV strikes are less common during his tenure as president than that of Obama, Bush does become more risk averse over time and more risk acceptant to doing too little. Our findings for the Bush case clearly demonstrate the malleability of risk behaviors and suggest that risk orientations may be most malleable when there exists a confluence of dynamic situational variables that make leaders more susceptible to changes in their risk perception. Therefore, while situational perceptions matter, they may matter more or less based on the initial strength of baseline risk propensities.

In contrast to Bush, however, Obama’s results reveal stronger support for the risk propensity camp and indicate that his risk behavior is more driven by fixed personality traits and predispositions than any change in situational contexts. Throughout all disaggregated samples, Obama’s risk behavior and tendency toward risk aversion remains remarkably consistent and unwavering. This finding cuts against standard portrayals of Bush as a confident and dogmatic leader, and Obama as the more deliberate, thoughtful, and therefore more adaptive to situational changes.

We need to be cautious in drawing strong conclusions from the Obama case, however. While the Obama results look like an easy case for the risk propensity advocates at first blush, it is also possible that a number of our key situational variables remained constant during his time in office thus making their effects difficult to detect in our analysis. UAV technology was more consistently available to Obama than to Bush, for example. In addition, while we tested for the important role of the Secretary of Defense, it might be the case that other key figures played an important
and constant role during Obama’s tenure. Vice President Joe Biden is known to be a UAV advocate, and he has remained a consistent presence in Obama’s advisory team throughout our time period of interest. It might be the case that if we removed Biden from our analysis, that Obama’s risk behavior would also be swayed by changes on the battlefield.

These disaggregations help us understand how each leader constructed risk in terms of manned versus unmanned weaponry in Afghanistan and Pakistan. Unfortunately, for the existing theories of risk, our results indicate that none of the three prominent hypotheses about risk generation are definitive victors in this analysis. Most interesting, perhaps, is the credence the results lend to the third hypothesis: that both core propensities and situational preferences matter. Perhaps core risk propensities generate a “stickiness” within the prospect theory domains. Thus, a leader with a sticky or less malleable risk-averse propensity may require greater situational cues to change his or her overall orientation than a similar leader with a risk propensity that is more fluid. Personality traits may therefore set an initial baseline toward risk, and it is that baseline which determines the threshold at which situational variables matter.

Conclusions and Future Research Agenda

What is the significance of this analysis for our understandings about the means by which wars are fought? First, our findings indicate that a leader’s risk orientation can be an important explanatory variable in understanding the conduct of war. Most of the literature on the conduct of war focuses on organizational, domestic, or structural determinants to the detriment of individual-level analysis. This is despite the fact that presidents are often credited with major choices about the means by which wars are fought. Lyndon Johnson was famously implicated for his influence over the strategic bombing campaigns against the North Vietnamese. Eisenhower made pivotal decisions about the types of nuclear delivery options the United States chose to develop. And, while many decisions about battlefield employment are made from the depths of defense organizations or at the unit level in the heat of war, decision makers at the highest level drive the parameters by which operations are developed. Heads of state are responsible for providing guidance and determining the general characteristics of the way countries fight wars, and this decision making requires careful calculations of risk.

Importantly, this article demonstrates not only that risk matters to leadership decisions about the means by which wars are fought but also shows how it does so through a case study analysis of manned and unmanned weaponry. The findings of this analysis show that some weapon systems and operations appear inherently more risky to leaders and thus are less likely to be utilized by leaders with overall risk-averse orientations. Similarly, high-risk weapons—those that put lives on the line or present significant political and strategic costs—will be more likely to be utilized by leaders with overall risk-acceptant orientations. In our case, risk helps to
explain why, despite the lack of consensus about the overall efficacy of UAV air strikes, we see dramatic and consistent increases in usage during the Obama term.

Further, by linking this analysis back to theoretical hypotheses about risk construction, our findings provide interesting evidence to improve our theoretical understanding of the role of risk in force employment decisions. In particular, the evidence demonstrates that risk orientations are likely a product of both overall risk propensity and situational perceptions. Therefore, leaders with sticky risk propensities will be much more difficult to influence than those with more malleable traits. This could help explain why we see some leaders consistently choosing inefficient means for achieving strategic objectives, despite evidence that their preferred means are suboptimal. It also implies that individuals with less sticky risk propensities are more likely to be influenced by situational changes, suggesting that manipulating frames of reference can generate changes in the way states conduct war.

In terms of methodology, in addition to finding that risk orientations matter to the means by which leaders choose to engage in conflicts, this article contributes to a growing body of literature that utilizes operational code analysis to measure risk perceptions. While previous scholarship on UAVs has focused on public opinion and survey experiments, little work has measured how leaders, as opposed to citizens, think about these new technologies. Our methodology suggests that the operational code framework can provide nuanced and informative findings about the way risk affects elites’ overall beliefs about foreign policy.

Finally, our work also raises a set of important questions about the role of risk in the use of weaponry. Do the same calculations of risk matter at the operational or tactical level? Do campaign or battlefield commanders perceive risk and weaponry in the same way as elites? It may be possible that the calculation of risks between manned and unmanned weaponry is unique not only to individuals at the strategic level but also at each level of war fighting. Thus, further analysis of these risk calculations could shed light on whether unmanned weaponry is perceived as comparatively more or less effective at the operational and tactical levels of analysis.

Declaration of Conflicting Interests
The authors declared no potential conflicts of interest with respect to the research, authorship, and/or publication of this article.

Funding
The authors received no financial support for the research, authorship, and/or publication of this article.

Notes
3. Our definition of risk, and the relationship we posit between risk and uncertainty, differs from common understandings in economics. Economists argue that risk is related to an individual’s certainty of all possible outcomes of a given decision and the probability distribution of their occurrence. It follows from this definition that all outcomes with similar probability distributions represent the same level of risk. By contrast, uncertainty exists when an individual has no knowledge of the outcomes of a given decision and has no knowledge of the objective probability distributions of those outcomes. As Vertzberger notes, however, these classical definitions overlook outcome values and the fact that in everyday discourse the idea of “risk” connotes a specific utility orientation—namely, undesirable or adverse outcomes. In reality, people associate risk first with outcome ambiguity—that is, whether the full range of outcomes is known or unknown—and outcome value—that is, whether the outcome is desirable or undesirable (Vertzberger 1995, 349-50). Given our own focus on the risks that certain policy choices entail to specific leaders based on both certainty of outcomes and also the potential costs attached to those decisions, we follow Vertzberger (1995, 350) in reserving the term “risk” for situations “where probabilities of outcomes are not only uncertain but the situation is ambiguous and adverse; that is, it poses a plausible possibility that at least some outcomes are unknown and will have adverse consequences for the decision maker’s interests and goals.”

4. For reviews of prospect theory in political science, see Levy (1992), McDermott (2001, 2004), and Mercer (2005).

5. Unmanned aerial vehicles (UAVs) are also known as remotely piloted aircraft (RPAs), unmanned aerial systems (UASs), and unmanned combat aerial vehicles (UCAVs). The US government has two UAV programs. The first is run by the military, is publicly acknowledged, and operates in recognized war zones targeting enemies of US troops stationed overseas. The second is run by the Central Intelligence Agency and is aimed at terror suspects around the world, including countries in which US troops are not based. This second program was initiated by the Bush administration, has been continued by Obama, and is classified as covert. See Mayer (2009).

6. The increased popularity of UAVs over the past decade is reflected in changes in the Department of Defense (DoD) inventory. In 2002, the DoD had only 169 UAVs in its inventory and a small number of unmanned systems in the air; by 2010, the United States had over 7,000 aerial units in operation worldwide. Since 2009, the US military has trained more unmanned aircraft pilots than traditional fighter pilots per year.

7. Not surprisingly, the increased popularity of UAVs has invited a large amount of public interest and debate. There has been significant discussion and speculation, for example, over the potential disconnect that remote warfare can create between the US public and the wars that it sanctions (Bumiller and Shanker 2011; Walzer 2013); around the secrecy surrounding the program and the implications this holds for democratic accountability (Alston 2011; Singer 2012; McCrisken 2013; Walzer 2013; Cronin 2013); and over the status of UAVs in international law (Anderson 2010; O’Connell 2010; Alston 2011; Aaronson and Johnson 2013). More recently, this debate has extended to the US context...
with concerns about the use of UAVs on US soil infringing on the privacy rights of US citizens (Banks and Fisher 2012; Cratty 2013). Finally, there is significant debate within academic circles over the effectiveness of UAV strikes as a counterterrorism strategy. Disagreement remains over the effectiveness of leadership targeting and “decapitation strikes” (Jordan 2009; Carvin 2012; Price 2012; Cronin 2013; Downes 2013), as well as over the role of UAV attacks in driving recruitment into militant organizations (Becker and Shane 2012; Mothana 2012; Swift 2012; Walsh 2013).

8. The VICS methodology uses two different equations to calculate risk: a hand-coding equation and a computer-based equation. Based on our decision to use hand versus computer coding, we utilized the hand-coding methodology. We tested a sample of our data with both measures and found similar results.

9. For the unmanned sample, we searched “unmanned” and “Afghanistan.” For the manned sample, we searched “strike” and “Afghanistan.” Any excerpts we found that did not directly apply to either manned or unmanned kinetic means were edited out of the sample—this includes references to intelligence, surveillance, and reconnaissance assets as well as weapons that could be used by either manned or unmanned platforms.

10. There are a number of situational variables that might affect an individual’s perceived risk when making this decision. The nature of the conflict may have an important affect on leaders’ perceived level of risk when considering which means of force to employ. Some types of warfare are better suited to some weapons over others (Schneider and MacDonald 2014), and thus events on the ground as well as the evolving nature of the threat might understandably impact these decisions. The changing nature of the battlefield, moreover, may shape leaders’ frames of reference with important implications for the means of force employed. The availability of technology might impact force employment decisions (Cohen 1996; Van Evera 1999; Deptula 2001). Not only is there the question of whether the technology is ready and in sufficient quantity to be deployed on the battlefield, but there is also the matter of training programs for troops in order to utilize the new systems effectively. The organizational environment in which the leader operates and the role that his or her advisors play in decision making might also result in leaders framing situations differently. These individuals are often central to political leaders’ decision making and can have an enormous impact on foreign policy outcomes (see, e.g., Immerman 1979; Greenstein 1982; Shapiro, Kumar, and Jacobs 2000; Preston 2001). Advisors in pivotal positions such as the Secretary of State or Defense can shape the risk perceptions of leaders through the information that they share and the opinions that they impart. Further, the choice of weaponry that a leader decides upon can be affected by the perceived political costs of its employment. Leaders, as a general rule, have a strong preference to remain in power. Decisions around war are risky, however, since these events often attract a large amount of media attention, absorb large quantities of national resources, are often protracted in nature, and risk the lives of US citizens (Bueno de Mesquita et al. 2003).

11. It is worth noting that we also conducted disaggregations by year and found similar results.
12. This is perhaps unsurprising, given that Gates was a strong supporter of the UAV program and that Bush was known to rely heavily on his advisors (Mann 2004; Woodward 2004).

References


