# Diversionary Incentives and Disputes Initiated By Rivals*

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**Abstract**

I develop a bargaining model to demonstrate that when leaders face diversionary incentives, they are more likely to have low-level disputes initiated against them, but are no more likely to initiate disputes themselves. Even if the public does not reward leaders for seeking out conflict for political reasons, other states anticipate diversionary incentives, and each side holds private information regarding their resolve, vulnerable leaders may succeed in exploiting the rally effect when they need it most. Empirical analysis of US dispute behavior from 1949-2000 provides support for the implications of the model.

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Scholars have long debated the possibility that domestically vulnerable leaders might seek out international conflict in pursuit of the well-known "rally-round-the-flag" effect. Despite the intuitive nature of this argument, the empirical record is mixed at best. This is perhaps unsurprising, as three important factors should constrain leaders from engaging in diversionary conflicts. First, the public may not reward behavior that is obviously politically motivated, instead rallying only in times of crises that were not deliberately caused by the leader. Second, the intended target may seek to avoid being used to help the vulnerable leader retain office. Third, the target may welcome the crisis, and even escalate it to armed conflict. No existing diversionary argument simultaneously accounts for all of these points, which collectively provide a strong critique of traditional diversionary arguments.

I develop a bargaining model to evaluate the possibility of leaders exploiting the rally effect despite these three constraints. The results indicate that when leaders are sufficiently sensitive to changes in their popularity, challenger states may initiate crises against them, but allow these crises to end in stalemate. Domestic vulnerability is therefore associated with disputes being initiated against, rather than by, vulnerable leaders. The public is thus unlikely to perceive the leader's actions as politically motivated. The model affords challengers the option of avoiding conflict, but they strategically choose not to do so. Notably, similar results emerge even under incomplete information.

The conditions under which leaders can expect to benefit from having low-level crises initiated against them appear to be relatively restrictive, however. I therefore evaluate the primary empirical implications of this model using data from the United States for the period from 1949-2000. The results indicate that weak rivals of the US are more likely to initiate militarized disputes against the US when the president faces diversionary incentives, as expected.[1] These results, while no "smoking gun", provide clear evidence of the "footprint" we would expect to be left by the diversionary behavior described by the formal model.[2]

[1] I discuss the operationalization of "diversionary incentives", as well as the focus on weak rivals, below.
[2] I thank an anonymous reviewer for suggesting this language.

## Constraints on Diversionary Behavior

The diversionary argument has many variants, with debates over what form of domestic turmoil is sufficient to motivate diversion[3], which states are most likely to divert[4], who the likely targets are[5], and what type of behavior constitutes diversion.[6] No previous study of diversion has simultaneously addressed the possibility that the public will not rally if they suspect the use of force is politically motivated, the possibility that foreign states will not allow themselves to become entangled in diversionary conflicts, and the possibility that leaders might underestimate their would-be scapegoats.

With regard to the first constraint, Colaresi (2007) develops a signaling model where leaders seek not to signal their competence, as in most diversionary formal models, but their motivations. His informational theory of the rally effect holds that as public confidence that the leader doesn't have an incentive to engage in a crisis for their own private benefit increases, the public is more likely to rally.[7] He then conducts a series of statistical tests using presidential approval data from the U.S. that demonstrate robust support for the informational theory of the rally effect. This approach further explains why the average rally effect is very modest, but under specific conditions, can be quite substantial.[8]

The strategic conflict avoidance perspective presents a second constraint on diversionary behavior. Potential targets of diversion may anticipate the conditions that encourage

[3]See Fordham (1998) on the state of the economy, Brule (2006) on policy availability, Miller (1999) and Enterline & Gleditsch (2000) on protests and rebellion. The discussion of presidential approval in particular has been very muddied, with one study (Leeds & Davis, 1997) claiming that the landmark study on the topic, Ostrom & Job (1986), found the precise opposite effect of what they report.

[4]Miller (1999), Enterline & Gleditsch (2000) and Pickering and Kisangani (2005) all question the assumption that democracies are more prone to diverting.

[5]Mitchell & Prins (2004) emphasize rivals, while Foster (2006) argues that only minor powers are more likely to target rivals.

[6]Several scholars have noted that diversionary theory need not pertain to war (Levy, 1989). Pickering & Kisangani (2007) discuss the use of benevolent force in socioeconomic interventions versus more traditional military force for politico-strategic reasons. Empirical approaches rarely focus specifically on war, while formal approaches almost exclusively do so.

[7]See Foster and Palmer (2006) for a discussion of the role of approval within partisan groups rather than the electorate as a whole.

[8]See, inter alia, Lian and Oneal (1993), Oneal and Bryan (1995), James and Rioux (1998), and Groeling and Baum (2008).

such aggression and deny opportunities to leaders in need of a victim (Smith, 1996). Several authors report empirical evidence in support of this claim, demonstrating that domestic conditions (typically the state of the economy) condition the level of hostility targeted towards not only the US, but its allies as well.[9] However, it is worth noting that the target state was not represented as a strategic actor in Smith (1996). Tarar (2006) extended that model, adding a crisis bargaining game and thereby introducing the target as a strategic actor. He finds that traditional diversionary results may still obtain. In short, strategically avoiding conflict is not very strategic if the only means by which a would-be target can persuade the leader not to attack is to concede to demands that were designed to be unacceptable. Claims about strategic conflict avoidance appear to hinge upon the implicit assumption that states can placate one another without making any substantive concessions.

However, Tarar's study, while valuable in that it explicitly addresses the motivations of the target state, cannot speak to the informal arguments typically made in empirical studies. Empirical approaches focus on the rally effect as a motivation for diversionary behavior, while formal models of diversion exclusively focus on foreign policy outcomes as a signal of the leader's competence. The rally effect obtains at the onset of a crisis, whereas leaders can only signal their competence by producing foreign policy successes.[10] To his credit, Tarar acknowledges that his results depend upon the assumption that leaders seek to signal competence. The implications of rally effects obtained through outcomes short of war have yet to be evaluated formally.

Finally, leaders may worry that in seeking out conflict for political gain, they might bite off more than they can chew. After all, for the very reasons that such leaders are seeking conflict in the first place, they are more sensitive than usual to policy failure. Gaubatz (1999) has demonstrated that democratic states are less likely to be involved in conflict as elections loom nearer.[11] This is precisely when diversionary incentives ought to be greatest.

[9] See Leeds & Davis (1997), Clark (2003) and Fordham (2005).
[10] See also Downs & Rocke 1994, Richards et al 1993 and Smith 1996.
[11] See also Stoll (1994).

# Modeling Diversionary Crisis Bargaining

I now seek to demonstrate that a limited form of diversionary behavior can emerge even after accounting for these three claims. The extensive form of the bargaining model is presented in Figure 1. The game models the interaction between the Leader of one state and that of a potential Challenger state. I assume there is some issue in contention between the two, such that the international status quo can either move in the direction preferred by the Leader or in the one preferred by the Challenger. The model makes no assumptions about the nature of the issue. I assume the current status quo lies at (0, 0), between the ideal points of each.[12]

[Figure 1 about here]

The game begins with the Challenger deciding whether or not to make a demand of the Leader. I express the division of the good implied by their demand in terms of the Leader's share of the pie, $\pi_1 \in [-1, 1]$. This leaves $-\pi_1$ for the Challenger.[13] If the Challenger does not make a demand, the Leader makes one of their own, $\pi_2 \in [-1, 1]$.[14] Whichever player did not make a demand must then decide whether to concede or not. If they resist, they must further decide whether to escalate the dispute or to wait. If they wait, they allow their opponent to decide whether to escalate the dispute or have it end in stalemate.[15]

The payoffs for the Leader at each node reflect both an international component and a domestic component. Unlike previous models of diversionary behavior, I also incorporate a domestic component for the Challenger. The value of retaining office for each is normalized to 1. The domestic component represents the probability of reelection for the Leader ($r_i$)

[12]The Leader's preferred division is $(1, -1)$, while the Challenger's is $(-1, 1)$.

[13]In this sense, $-\pi_1$ may be thought of as the actual demand. For simplicity, I express all strategies in terms of the proposed division for the Leader, regardless of which player is making a demand. Note that since $\pi_i$ can take on negative values, players can propose that the distribution of benefits shift either in their favor or the other side's favor.

[14]The results do not depend upon the assumption that the Challenger has the unique ability to decide which player will initiate the crisis. A proof of this claim is available from the author upon request.

[15]For simplicity, I have assumed that the costs involved in engaging in low-level crises are trivial. Provided any such costs are sufficiently small relative to the domestic components, the results would be identical to those discussed here.

and the probability of survival ($s_i$) for the Challenger – who may or may not also be the leader of an electoral democracy.

If the dispute is resolved immediately through negotiation, the distributive character of the agreement determines the ability of each to remain in office. The net payoff for the Leader if the dispute is resolved immediately is $r_1(\pi_i) + \pi_i$, where $r_1(\pi_i) \in [\underline{r}, \overline{r}]$ is an increasing function of $\pi$ such that $\frac{\partial r_1(\pi_i)}{\partial \pi_i} \geq 0 \ \forall \ \pi_i$. Similarly, $s_1(\pi_i) \in [\underline{s}, \overline{s}]$ is a generic function. However, the more of the good the Leader receives, and thus the less is allocated to the Challenger, the less likely the Challenger remains in office, and thus $\frac{\partial s_1(\pi_i)}{\partial \pi_i} \leq 0 \ \forall \ \pi_i$.

If the crisis escalates, the Leader's payoff ($e_l$) is a lottery over the outcomes 1 and $-1$. If the Leader prevails, her probability of retaining office rises to $\overline{r}$. If she is defeated, her probability of retaining office drops to $\underline{r}$. Finally, regardless of the outcome of the conflict, the Leader incurs some costs of fighting ($c_l$). Thus:

$$e_l = p(\overline{r} + 1) + (1 - p)(\underline{r} - 1) - c_l$$

$$= 2p - 1 + p(\overline{r} - \underline{r}) - c_l$$

where $p$ is the probability the Leader prevails. The Challenger's payoff ($e_c$), derived similarly, is $1 - 2p - p(\overline{s} - \underline{s}) - c_c$. Note that I assume that the escalation payoffs for both players are independent of which player initiated the crisis. While this simplifying assumption may not hold empirically, it ensures that any results pertaining to which player initiates a crisis can safely be attributed to the domestic political ramifications of crises short of armed conflict, which have previously been neglected by formal models of diversion, rather than first-strike advantages that are either military or political in nature.

If the crisis ends in stalemate, each player receives a payoff equivalent simply to their probability of retaining office.[16] The probabilities of retaining office depend upon which side made the demand, as that side will be perceived as the initiator. If the Challenger made

[16] A richer model would allow for a wider range of outcomes besides escalation and stalemates that do not alter the international status quo. Such a model is beyond the scope of this article.

a demand of the Leader, the Challenger is seen as the aggressor. Should stalemate result after the Leader resisted this demand, the Leader's probability of being reelected increases to $r_2$. The Challenger, having publicly backed away from their demand, will see their chance of survival decrease to $s_3$. This reflects the notion of audience costs (Fearon 1994). If the Leader made a demand of the Challenger, the Leader is seen as the aggressor. If the Leader waits, publicly backing away from their demand, their probability of retaining office in the event of a stalemate will drop to $r_3$, where $\underline{r} \leq r_3 < r_2 \leq \overline{r}$. The Challenger's probability of survival would increase to $s_2$, where $\underline{s} \leq s_3 < s_2 \leq \overline{s}$. These orderings ensure that retaining office is weakly less likely after obtaining a rally effect than after obtaining the best outcome available from negotiated settlements or after prevailing in armed conflict, since $\overline{r} \geq r_2$ and $\overline{s} \geq s_2$. Similarly, incurring an audience cost for backing down nonetheless leaves each player weakly more likely to remain in office than does the worst negotiated agreement or defeat in armed conflict, since $r_3 \geq \underline{r}$ and $s_3 \geq \underline{s}$. While the relative importance of rally effects and audience costs can vary, the model places important boundaries on their potential impact.

Under certain conditions, the Leader's probability of retaining office is unlikely to depend upon the outcome of the game, either because voters have already made up their minds, or perhaps simply because the next election is very distant.[17] I will therefore discuss the solution to the game under two scenarios. In the first, the payoffs are as they appear in Figure 1. In the second, $r_2$ and $r_3$ collapse to $r_1(0)$, while the Challenger's probabilities remain as they appear in Figure 1. This removes any incentive to pursue (avoid) stalemates.[18]

Comparison of the solution to the game under these two cases will allow me to draw inferences about the impact of diversionary incentives, which may be present in the former case but cannot, by construction, drive behavior in the latter.

[17]Smith (1996) similarly concludes that the incentive to engage in diversion only occurs when the public's prior belief about the leader's competence is neither sufficiently large nor sufficiently small. Canes-Wrone et al (2001) describe similar conditions for pandering.

[18]Note that I assume that $r_2 > r_1(0) > r_3$ and $s_2 > s_1(0) > s_3$, implying that receiving a rally effect (audience costs) is better (worse) than agreeing to the status quo.

## Solution to the Model

Consistent with extant formal models of diversion, I initially assume complete information between the two states, and thus solve for subgame perfect equilibria.[19] I focus discussion on equilibria under the two scenarios described above.

Each player's behavior depends upon their costs of escalation relative to two thresholds, $\underline{c}_j$ and $\overline{c}_j$.[20] These thresholds define the players' willingness to escalate a crisis at each of the branches. The players differ regarding which branch yields the higher threshold. The Leader is most willing to escalate crises that began with the Leader making a demand, as the payoff for a stalemate ($r_3$) is relatively unattractive. In contrast, the Challenger would receive a rally effect if the Leader were to back down after making a public demand, so the cost of escalation need not be very high before the Challenger prefers to accept a stalemate. Thus, when the Leader makes a demand, the relevant thresholds are $\overline{c}_l$ and $\underline{c}_c$. The opposite logic holds for crises that began with a demand from the Challenger. The relevant thresholds for this branch then are $\underline{c}_l$ and $\overline{c}_c$.

An understanding of these thresholds is sufficient to grasp the basic logic of the argument. Table 1 summarizes the outcomes that occur as a result of the players adopting the strategies that comprise the Diversionary Equilibria. I assume that $r_2 - r_1(\pi_1^s) > s_1(\pi_1^s) - s_3$ and $r_1(\pi_2^s) - r_3 \geq s_2 - s_1(\pi_2^s)$, indicating that the Leader is more sensitive to any change in her probability of retaining office than is the Challenger. The diversionary behavior I focus on here would not occur otherwise.[21] Of course, it should be quite intuitive that the Leader is more likely to be involved in diversionary disputes under such conditions. In the appendix, I fully characterize all possible pure strategy equilibria to this game, including those when these conditions are not satisfied.

[19] Previous models have included incomplete information on behalf of the public regarding the leader's competence, but not on behalf of the leader regarding the target state or vice versa.

[20] Where $\underline{c}_j < \overline{c}_j \ \forall \ j \in \{l, c\}$.

[21] The first assumption is sufficient to produce the key results. I include the second to simplify presentation of the results, and because it is not intuitively obvious what conditions would satisfy the first inequality but not the second.

[Table 1 about here]

When $c_l \geq \bar{c}_l$ and $c_c \geq \bar{c}_c$, the Challenger will allow the Leader to make a demand. The Leader will set $\pi_2 = \pi_2^s$, which by construction ensures that the Challenger will concede. As neither player has a credible threat to escalate, the stalemate payoffs drive the Challenger's initial decision. When the Leader makes a demand, the Challenger's outside option is $s_2$, giving the Challenger leverage to extract concessions. When the Leader sets $\pi_2 = s_1(\pi_2^s) - s_2 \equiv \pi_2^s$, the Challenger's payoff for conceding is $s_1(\pi_2^s) - s_1(\pi_2^s) + s_2$, or $s_2$. Should the Challenger make a demand, they will only be able to convince the Leader to concede by offering concessions of their own, as the Leader's outside option will then be $r_2$.

Next, consider the case where $c_l \geq \bar{c}_l$ and $\underline{c}_c \leq c_c < \bar{c}_c$, indicating that the Leader is unresolved while the Challenger is moderately resolved. There are two possible outcomes here. Either the Challenger will demand $\pi_1^e$, which by construction ensures that the Leader will concede, or the Leader will demand $\pi_2^s$, as above.

Under all the other combinations of $c_l$ and $c_c$ save one, escalation is possible. This is true despite complete information because office-seeking considerations complicate the bargaining problem such that it is no longer strictly true that conflict is inefficient.[22] If escalation does not occur, either the Challenger sets $\pi_1 = \pi_1^e$ and the Leader concedes, as above, or the Leader sets $\pi_2 = \pi_2^e$, which by construction ensures that the Challenger concedes. The difference between these cases and those above, where escalation could not occur, is that the costs of escalation are lower for at least one player.

Finally, when $\underline{c}_l \leq c_l < \bar{c}_l$ and $c_c \geq \bar{c}_c$, the Challenger initiates disputes that end in stalemate. The Challenger makes an extreme demand ($\pi_1 < \pi_1^s$), knowing the Leader will resist but won't escalate, and the Challenger lets the dispute end in stalemate. The Challenger thereby incurs an audience cost, receiving $s_3$, while the Leader enjoys a rally effect, receiving $r_2$. The Challenger does this, helping improve the Leader's prospects for reelec-

[22] If $r_i$ and $s_i$ were independent of the outcome of the game, escalation would never occur. A proof of this claim can be found in the appendix.

tion, for two reasons. First, the Leader has a credible threat to escalate rather than incur their own audience cost. As the Challenger lacks resolve, they will not allow the Leader to make a demand backed by a credible threat to escalate should the Challenger resist. Second, the Challenger will not seek to avoid incurring an audience cost by offering concessions to the Leader because setting $\pi_1 = \pi_1^s$, which by construction would ensure that the Leader would concede, leaves the Challenger even worse off than a stalemate would. Setting $\pi_1 = r_2 - r_1(\pi_1^s) \equiv \pi_1^s$ gives the Challenger $s_1(\pi_1^s) - r_2 + r_1(\pi_1^s)$. We have already assumed the Leader is more sensitive to changes in their probability of retaining office than is the Challenger, or $r_2 - r_1(\pi_1^s) > s_1(\pi_1^s) - s_3$. This can be rewritten as $s_3 > s_1(\pi_1^s) - r_2 + r_1(\pi_1^s)$. Therefore the Challenger prefers the payoff from a stalemate, $s_3$, to the payoff from getting the Leader to concede to $\pi_1^s$. If the Leader is moderately resolved and the Challenger unresolved, and if the Leader values a rally effect more than the Challenger suffers from an audience cost, then the Challenger will initiate a dispute against the Leader that neither will escalate, but will produce a rally effect for the Leader.

Note that the Leader will not have taken any overtly politically motivated actions. The Leader's implicit threat to escalate if she does not secure a rally effect may have influenced the Challenger's behavior, but that will likely not be well understood by the public. This addresses the first constraint discussed above.

The Challenger has options available to them that would allow them to prevent the Leader from attaining a rally, but nonetheless voluntarily provides precisely the outcome a vulnerable Leader most desires according to traditional diversionary arguments. This addresses the second constraint discussed above.

Given the assumption of complete information, these results cannot speak to the possibility of underestimating the Challenger's resolve. However, in the appendix, I demonstrate that even with uncertainty on behalf of *both* the Leader (regarding $c_c$) and the Challenger (regarding $c_l$), there must exist equilibria where the Challenger initiates a dispute that ends in stalemate. This addresses the third constraint discussed above.

The above results depend critically upon the Leader being more sensitive to rally effects and audience costs than the Target. I turn now to the results when the Leader is not sensitive to these fluctuations in approval, such that $r_2 = r_3 = r_1(0)$. Table 2 summarizes the outcomes that occur along the equilibrium path for these Non-Diversionary equilibria. Note there is now only one cost threshold for the Leader, $\hat{c}_l$, as the Leader's payoff for stalemate is the same regardless of which side is seen as the aggressor.

[Table 2 about here]

When $c_l \geq \hat{c}_l$ and $c_c \geq \underline{c}_c$, the Leader makes an extreme demand ($\pi_2 > \pi_2^s$). The Leader prefers a stalemate, which provides a payoff of $r_1(0)$, to proposing $\pi_2^s$, because $\pi_2^s = s_1(\pi_2^s) - s_2 < 0$.[23] Thus when the Leader is not sensitive to rally effects or audience costs but the Challenger is, a lack of resolve on both sides produces stalemated disputes initiated by the Leader, raising the Challenger's probability of political survival to $s_2$.

For all other combinations of $c_l$ and $c_c$, escalation is possible. When escalation does not occur, either the Challenger demands $\pi_1 = \pi_1^e$ or the Leader demands $\pi_2 = \pi_2^e$, as above.

Under the Non-Diversionary equilibria, there are no conditions under which disputes initiated by the Challenger and ending in stalemate occur. Note also that the range of values for $c_l$ and $c_c$ in which escalation is possible may or may not be greater under the Non-Diversionary Equilibria than the Diversionary Equilibria.[24]

The MID data, which are typically used in quantitative analyses of interstate conflict and will be employed here, capture incidents where one state made a verbal threat towards another state even if that state took no actions in response. Arguably, such events might be consistent with immediate concession in bargaining models. However, typically, scholars

[23] Since $s_2 > s_1(0)$, and $\frac{\partial s_1(\pi_2)}{\partial \pi_2} \leq 0$, the Challenger cannot prefer conceding to $\pi_2$ over receiving $s_2$ unless $\pi_2 < 0$. As $\pi_2^s$ is constructed to ensure the Challenger concedes, $\pi_2^s < 0$ must be true.

[24] The conditions under which escalation is possible is similar in the two figures. Note that $\underline{c}_l < \hat{c}_l < \bar{c}_l$. When $\hat{c}_l \leq c_l < \bar{c}_l$, and $\underline{c}_c \leq c_c < \bar{c}_c$, escalation is possible in the Diversionary Equilibria but not the Non-Diversionary Equilibria. However, when $\underline{c}_l \leq c_l < \hat{c}_l$ and $c_c \geq \bar{c}_c$, escalation is possible for the Non-Diversionary Equilibria but not the Diversionary Equilibria. Depending upon the proportion of empirical observations falling under each of these regions, either family of equilibria may produce a higher overall probability of escalation.

empirically evaluating bargaining models only expect to observe even low-level disputes when the initial demand was rejected.[25] I therefore assume that militarized disputes are only expected to be observed when the equilibrium involves either escalation or stalemate.

In both the Diversionary and Non-Diversionary Equilibria, disputes ending in escalation are possible, but there is no theoretical reason to consider either side to be more likely to be the initiator.[26] However, under the Diversionary Equilibria, disputes ending in stalemate are initiated by the Challenger, which they are not under the Non-Diversionary equilibria. This produces the first key empirical expectation.

**Expectation 1**: *The probability that the Challenger initiates a dispute against the Leader is greater in the presence of diversionary incentives for the Leader than in their absence.*

Stalemated disputes initiated by the Leader occur in the absence of diversionary incentives but not in their presence. However, no disputes occur under complete information if, in addition to $r_2 = r_3 = r_1(0)$, $s_2 = s_3 = s_1(0)$ also holds – which may be plausible if the Challenger does not represent an electoral democracy. While disputes do occur due to incomplete information, there is no reason to believe one side is more likely to be the initiator of such disputes than the other. Thus, the model does not provide a clear expectation about the relationship between diversionary incentives and the probability that the Leader initiates disputes against non-democratic Challengers, which comprise most of the dyads analyzed below.

**Expectation 2**: *The probability that the Leader initiates a dispute against the Challenger is likely to be no different in the presence of diversionary incentives than in their absence.*

[25] See Reed et al (2008) for a recent example of the empirical evaluation of a well-known crisis bargaining model from Powell (1999).

[26] The Challenger is indifferent between making a demand and allowing the Leader to make a demand, since escalation will occur either way.

# Empirical Evaluation

Table 3 lists the empirical relationships expected by my argument, traditional diversionary approaches, and the three prominent critiques discussed above: Colaresi's informational theory of the rally effect, Smith's strategic conflict avoidance, and Gaubatz's electoral cycles of war. Specifically, I focus on the expected relationships between diversionary incentives and the initiation of disputes by, and against, vulnerable leaders, as well as the characteristics of the opposing state.

[Table 3 about here]

In contrast to existing approaches, the argument developed here expects there to be no relationship in either direction between diversionary incentives and the probability that the vulnerable leader initiates an international conflict. Traditional diversionary approaches expect a direct relationship, while the three critiques all anticipate an inverse relationship.

Further, my argument expects a direct relationship between diversionary incentives and the probability that vulnerable leaders will be the target of international disputes, whereas none of the others anticipate such a relationship. The informational theory of the rally effect only seeks to explain the relationship between the president's decisions and the public's response, and therefore cannot speak to the probability of vulnerable leaders being targeted. Strategic conflict avoidance and Gaubatz's electoral cycle argument both anticipate the precise opposite relationship, though for different reasons. For SCA, vulnerable leaders prefer to enter into conflict, but lack the opportunity to do so. For the electoral cycle argument, vulnerable leaders themselves avoid conflict, fearing the casualty aversion presumed to be common amongst democratic publics.[27]

Regarding the characteristics of the target state for diversionary conflicts, I can only contrast my argument with traditional diversionary approaches. The other three arguments do not expect conflicts to occur, and therefore do not yield any expectations about the

[27]However, see Gelpi Feaver and Reifler (2009) for evidence contrary to this assumption.

characteristics of the states involved. The diversionary behavior described above requires that the Challenger be very unresolved ($c_c \geq \overline{c}_c$). Naturally, it is difficult to measure a state's subjective costs for escalation. However, $c_c \geq \overline{c}_c$ is more likely to be satisfied as $p$ increases, holding $c_c$ itself constant, since $\frac{\partial \overline{c}_c}{p}$ is negative.[28] Therefore, as $p$ increases, $\overline{c}_c$ decreases, ensuring that even relatively low values of $c_c$ will exceed $\overline{c}_c$. I thus assume that the diversionary behavior described here is more likely to occur when the leader's state has a preponderance of material capabilities relative to the target's state. In contrast, traditional diversionary approaches generally expect that diversionary conflicts are more likely to involve stronger targets. Empirical studies of the rally effect have found the size of a rally to be determined largely by prominence of coverage, which is greater for crises with major power involvement (Oneal & Bryan 1995), while formal models of diversion emphasize that the public is more likely to view leaders as competent if the leader prevails over a strong opponent, as even incompetent leaders could be expected to defeat weak states (Smith 1996).

The importance of prominent news coverage in generating rallies leads to another expectation. Since disputes involving traditional rivals are more newsworthy, I assume that the core condition producing the Diversionary Equilibria, $r_2 - r_1(\pi_1^s) > s_1(\pi_1^s) - s_3$, is more likely to be satisfied if the other state in the dyad is an enduring rival of the US. This expectation appears inconsistent with that of traditional diversionary accounts, though again it is difficult to claim a clear expectation. Many authors do not address the question. Of the two notable exceptions, Mitchell & Prins (2004) argue that diversion is more likely against rivals, while Foster (2006) argues that is only true of minor powers, as major powers such as the US are free to target either rivals or non-rivals. Given that the empirical analysis here will focus exclusively on the US, Foster would not expect rivalry to be important.

Note that my argument does not yield any clear expectation about the probability that any crises that do occur in the presence of diversionary incentives escalate. Two of the other arguments appear to anticipate a greater probability of escalation. Traditional diversionary

[28] $\frac{\partial \overline{c}_c}{\partial p} = \frac{\partial(1-2p-p(\overline{s}-\underline{s})-s_1)}{\partial p} = -2-(\overline{s}-\underline{s}) < 0.$

accounts often, though not always, imply a positive expectation. Yet a few authors have claimed that diversion may be more likely to be associated with limited uses of force than war (Levy 1989, Fordham 1998). Strategic conflict avoidance and the electoral cycle argument do not expect conflicts to occur, so it is difficult to determine whether they expect that those conflicts that do nonetheless occur will be more likely to escalate or not. As neither my argument, traditional diversionary approaches, or any of the prominent critiques yield clear expectations, I will not focus any further on escalation.[29]

To sum up, my argument anticipates no relationship between diversionary incentives and the probability that vulnerable leaders initiate international disputes, in contrast to both traditional diversionary approaches and prominent critiques thereof. Rather, my argument expects that in the presence of diversionary incentives, leaders should be more likely to have disputes initiated against them, but are no more likely to initiate disputes themselves. No other argument expects these two relationships.[30] Finally, the expectations of my argument, that vulnerable leaders are more likely to be the targets of disputes but not initiators, are most likely to be observed amongst militarily weak enduring rivals. Traditional diversionary arguments are not clear about the role of rivalry, though the most recent work suggests it should be unimportant for the US. These arguments also generally expect diversion to involve militarily strong targets.

[29]I have examined the impact of diversionary incentives, as defined below, on the probability that militarized disputes involving the US become fatal. The effect appears to be negative. However, the results are sensitive to the threshold used to define "fatal" (1 or more fatalities versus 25 or more fatalities), and the marginal effects are only significant for very high values of presidential approval. Results available from the author upon request.

[30]Some might argue that vulnerable leaders are ripe for being targeted simply because they are easy targets. If vulnerable leaders are attractive targets because they are constrained against acting, such leaders should also be less likely to initiate disputes themselves. Moreover, it is not clear that we should only expect weak rivals to take advantage of such a situation. Therefore the overall implications of my argument are distinct from those of an "easy target" approach as well.

## Research Design

The above claims will be evaluated using quarterly data from $1949-2000$, the period covered by the approval data.[31] The unit of analysis for all models is the dyad-quarter.

The dependent variables come from the Militarized Interstate Dispute data set (version 3.02).[32] *Target* records whether the US was side B in a dispute initiated by the other state in the dyad, while *Initiate* indicates that the US initiated a dispute against that state. A state initiates a dispute when it is an original participant in the dispute and was coded by the MID project as having taken the first militarized action.[33]

The key independent variables are *Approval* and $Approval^2$. I lag the average of all Gallup surveys for each quarter to avoid predicting conflict behavior with approval numbers that may have been observed after the dispute.[34] Quadratic measures of approval allow for a curvilinear relationship. Thus we can determine whether the behavior of presidents near 50% approval differs from that of presidents at the extremes of the distribution, for whom the outcome of the next election is less uncertain (as very popular presidents expect to be reelected and very unpopular presidents expect to lose). The average quarterly approval during this period is 55%, with a minimum of 25, a maximum of 80.7, and a standard deviation of 12.3. The distribution of approval during election years is similar, with an average of 51, a minimum of 25, a maximum of 76.2, and a standard deviation of 14.

[31] Quarters are used rather than yearly data because too much information would be lost by employing that level of aggregation. I believe a monthly series is problematic for two reasons. The approval data are fitted from the Gallup organization's presidential approval polls, which are the longest running approval surveys. Yet Gallup does not conduct the survey at regular time intervals. Some quarters have several observations (which were then averaged), others only have one. Interpolating a monthly series creates many observations that contain no new information. Further, fluctuations from month to month may represent little more than noise. Both of these concerns are minimized when using quarterly data.

[32] A MID occurs whenever there is a threat, display or use of force by one state against another (Ghosn, Palmer & Bremer 2004).

[33] The problems with inferring responsibility for a dispute from this coding are well-known. However, the expectations outlined above explicitly refer to which state is likely to take the first action in the dispute. Therefore I do not consider the limitations of the MID data to be problematic for this analysis.

[34] The exception is the first quarter of a new presidency, in which the first recorded quarterly observation of approval for that president is used for both the first and second quarters of their presidency. While this is potentially problematic in that some disputes may occur before the approval numbers that are supposedly predicting them, I consider it even more problematic to allow the approval of an outgoing president to predict the conflict behavior of their successor.

*Election* includes only the first three quarters of the year in which an election is held, since election day occurs roughly one third of the way into the fourth quarter. I set this variable equal to zero during election years in which the incumbent president was ineligible for reelection, as was the case in 1960, 1988, and 2000.[35] I include not only the interactions between approval, approval$^2$, and election, but also the constitutive terms (Braumoeller 2004, Brambor, Clark & Golder 2006).[36]

I include *Relative Capabilities* as a proxy for $p$.[37] This measure equals $\frac{Cap_{US}}{Cap_{US}+Cap_{Target}}$, where $Cap_{US}$ and $Cap_{Target}$ reflect the capabilities of the US and the second state in the dyad, using the Composite Index of Material Capabilities, or CINC scores, from the Correlates of War project (Singer, Bremer & Stuckey, 1972).

For reasons discussed above, I limit some of the analyses to dyads involving weak rivals, though I also estimate the probability disputes are initiated against the US amongst the remaining dyads for purposes of comparison. *Weak Rivals* are those with less than 20% of the capabilities in the dyad, which excludes Russia and China. The rivalry data are taken from Diehl & Goertz (2000).

A logit estimator is employed for all of the analyses. Robust standard errors, clustering on the second state in the dyad, are included to adjust for spatial dependence. Following Carter & Signorino (draft), I include cubic measures of the time since the DV last took on a value of 1, *Peace, Peace*$^2$ *and Peace*$^3$, to adjust for temporal dependence.

[35]However, I do not exclude those observations where incumbent presidents ultimately chose not to seek reelection despite being eligible for another term, as was the case in 1952 and 1972. There is good reason to believe these presidents would have preferred to seek reelection if they thought they could win, so their behavior provides an important basis of comparison for other incumbents.

[36]Omitting the constitutive terms is equivalent to imposing the assumption that the effect of $x_1$ in the absence of $x_2$ is 0. My argument provides theoretical reason to expect the effect of approval to be zero, so one might argue that omitting approval and approval$^2$ would be justified. However, inclusion of all terms allows me to determine whether this expectation is supported and the sample sizes are sufficiently large that there is little concern about the loss of efficiency.

[37]While there are certainly other factors that determine the probability of victory in war, the effect of capabilities has been found to be important, and monotonically increasing (Stam 1996). Relative capabilities is therefore not a perfect measure of the model's parameter, but it is a reasonable proxy.

## Statistical Results

I now briefly present the results of the statistical analyses. Due to the presence of multiplicative interactive terms, the coefficient estimates cannot be used for hypothesis testing, as the marginal effect of approval by definition depends upon the level of approval and whether it is an election year. I will present predicted probabilities with confidence intervals in the next section in order to facilitate interpretation (Brambor, Clark & Golder 2006).

Table 4 presents the results of three models. In the first model, the dependent variable is Target, and the analysis is restricted to weak rivals. This is the primary model assessing the implications of my argument. The second model presents the same analysis for all other dyads. In the third model, the dependent variable is Initiate, and the analysis is again restricted to weak rivals. Robust standard errors appear in parentheses.

[Table 4 About Here]

Recall that the expectation is that during election years, approval will have a curvilinear effect on Target amongst weak rivals, with Target most likely to occur when approval takes on values close to 50%. This implies that we should observe an inverted-U shaped curve.

No significant relationship between approval and Target should be observed for the other dyads, and no relationship is expected between approval and Initiate. Further, no relationship is expected between approval and either Target or Initiate during non-election years.

We can see that there is no relationship between how preponderant the US is over its weak rivals and the probability that they initiate disputes against the US, or that the US initiates disputes against them. This is likely because there is too little variation in relative capabilities amongst these dyads, as the US is less likely to have disputes initiated against it by all other states besides its weak rivals as it becomes more preponderant. However, the tables alone do not allow us to easily determine the effects of any of the other variables. Therefore, I now present graphical analyses to evaluate the key expectations.

## Graphical Results

The predicted probabilities depicted in Figure 2 were generated using the results from the first model in Table 4. Relative capabilities and the peace terms were held constant at their means for this sample (0.97 and 19, respectively). Those in Figure 3 were generated using the results from the second model in Table 4. The average value of Relative Capabilities is also 0.97 in this sample, but the average length of time since a dispute was last initiated against the US is 79 quarters. This helps explain why the probability of Target is generally much lower in Figure 3 than Figure 2. The probabilities in Figure 4 were generated using the results from the third model in Table 4. Again, the average value of Relative Capabilities is 0.97. The average length of time since the US initiated a dispute against a weak rival is 38 quarters. The confidence intervals were calculated through simulations, following the example of Brambor Clark & Golder (2006).

[Figure 2 About Here]

[Figure 3 About Here]

[Figure 4 About Here]

As expected, we see that during election years, presidential approval exerts an inverted-U shaped effect on the probability the US is the target of a dispute initiated by one of its weak rivals. However this effect is not observed among other dyads. Nor is there a similar relationship between approval and the probability that the US initiates a dispute against its weak rivals.

While the effect of approval in non-election years appears slightly curvilinear in each of the three figures, these effects cannot be reliably distinguished from 0.[38] The graphs therefore indicate that approval does not have a consistent impact on the probability that disputes are initiated by, or against, the US outside of election years.

[38]Graphs of the marginal effects of Election and Approval are not shown for reasons of space.

Analysis of the marginal effects reveals that weak rivals are generally less likely to initiate disputes against the US during election years, but this effect is only significant for lower and higher values of approval (below 30 and above 55). We can conclude then that weak rivals of the US are generally less likely to initiate disputes during presidential election years, consistent with Gaubatz's argument. But this is not the case when approval takes on values near 50% and diversionary incentives are at their greatest.

Within election years, the effect of presidential approval is only indistinguishable from 0 over the range where diversionary incentives should be at their greatest (specifically, between 40 and 55). The effect is consistent with the expectations of my argument, with approval having a positive impact on Target as approval increases from 40 to 48, and negative impact as approval increases past 48%. As unpopular presidents become more popular, disputes are more likely to be initiated against them, but only up to a point. Once they become sufficiently popular, further increases in their popularity make it less likely that disputes would be initiated against them.

Further, the marginal effects of election and approval for Figures 3 and 4 reveal no significant relationship between diversionary incentives and the probability that the US is targeted by states other than its militarily weak rivals or the probability that the US initiates disputes against such rivals.

Overall, the statistical analysis indicates that diversionary incentives increase the probability that the US will be the target of disputes initiated by its militarily weak rivals. However, this relationship is not found among other dyads. Nor is the US more likely to initiate disputes against these rivals. These patterns are all consistent with the argument I have developed. Traditional diversionary approaches and prominent critiques thereof cannot fully account for these patterns.[39]

[39]One might wonder whether presidents actually benefit from low-level disputes with weak rivals under conditions that would otherwise appear to encourage politically motivated crises. Preliminary analysis shows that when disputes occur under the conditions I associate with diversionary incentives, approval is expected to increase by less than 1 percentage point. Presidents who are not involved in disputes under these conditions, on average, have their approval decline by a little over 2 percentage points, indicating a net

# Conclusion

Scholars of international relations have long worried that domestic vulnerability might encourage leaders to start unnecessary wars. Prominent critiques of the diversionary argument have suggested that the public is too sophisticated to offer a rally to a leader seeking to exploit public opinion, foreign states generally would not allow themselves to be used in this manner, and worse, might prove more resolved than the vulnerable leader expected. While all of these arguments have some merit, I have argued that the constraints they identify do not preclude diversionary behavior in all its forms.

The diversionary behavior I have identified results from unresolved challengers initiating low-level disputes against moderately resolved leaders who would otherwise make demands backed by credible threats to escalate if their demands are not met. These disputes provide a rally effect for the leader, precisely the goal of diversionary conflict envisioned by most empirical studies of diversionary conflict.

The model identifies a logically consistent argument that demonstrates that the factors thought to prevent exploitation of the rally effect leave more room for diversionary behavior than previously realized. However, the conditions under which challengers initiate crises against leaders that allow those leaders to benefit from a rally effect are relatively restrictive.

To address this, I subjected the primary implications of the model to empirical evaluation. The results indicate that when diversionary incentives are present, the US is more likely to have disputes initiated against it by its weak rivals, though no more likely to initiate disputes itself against these states. The statistical analysis cannot provide unequivocal evidence that the behavior described by the formal model has taken place. However, the patterns observed are consistent with the expectations of the formal model and counter to the expectations both of traditional diversionary approaches and prominent critiques thereof.

benefit of just over 3 percentage points. The confidence interval on this estimate excludes zero (results not shown). This suggests that there is a small but non-zero benefit, consistent with previous studies of the rally effect. However, presidents with approval rates just under 50% within months of an election may consider a net benefit of just over 3 percentage points to be very politically meaningful.

These results have important implications for the study of diversionary conflict. The formal model challenges the logic of several prominent critiques of diversionary behavior by demonstrating that even if the patterns specified by these arguments are assumed to operate, this does not logically preclude the possibility of leaders benefitting from the rally effect just when they need it most. Future work in this area should more carefully specify the logic relating domestic vulnerability to the presence or absence of international conflict, particularly the incentives potential targets may or may not have to avoid allowing such conflicts to take place.

Table 1: Equilibrium Outcomes: Diversionary Incentives

| | $c_l < \underline{c}_l$ | $\underline{c}_l \leq c_l < \overline{c}_l$ | $c_l \geq \overline{c}_l$ |
|---|---|---|---|
| $c_c \geq \overline{c}_c$ | Potential Escalation | Stalemate (Challenger) | Negotiated Settlement |
| $\underline{c}_c \leq c_c < \overline{c}_c$ | Potential Escalation | Potential Escalation | Negotiated Settlement |
| $c_c < \underline{c}_c$ | Potential Escalation | Potential Escalation | Potential Escalation |

Cells indicate the outcome reached on the equilibrium path, given the restrictions $r_2 - r_1(\pi_1^s) > s_1(\pi_1^s) - s_3$ and $r_1(\pi_2^s) - r_3 \geq s_2 - s_1(\pi_2^s)$.

Table 2: Equilibrium Outcomes: Non-Diversionary

| | $c_l < \hat{c}_l$ | $c_l \geq \hat{c}_l$ |
|---|---|---|
| $c_c \geq \overline{c}_c$ | Potential Escalation | Stalemate (Leader) |
| $\underline{c}_c \leq c_c < \overline{c}_c$ | Potential Escalation | Stalemate (Leader) |
| $c_c < \underline{c}_c$ | Potential Escalation | Potential Escalation |

Cells indicate the outcome reached on the equilibrium path, given $r_2 = r_3 = r_1(\pi_i = 0)$.

Table 3: Implications of Diversionary Incentives

| | Author | Trad. Diversion | Info. Rally | SCA | Elec. Cycles |
|---|---|---|---|---|---|
| L Initiates | No relationship | Direct | Inverse | Inverse | Inverse |
| L Targeted | Direct | Unclear | Unclear | Inverse | Inverse |
| Target Rival | Yes | Unclear | Unclear | Unclear | Unclear |
| Target Weak | Yes | No | Unclear | Unclear | Unclear |

Table 4: Diversionary Incentives and Disputes, US Dyads, 1949-2000

| Variable | Target | Target | Initiate |
|---|---|---|---|
| Sample | Weak Rivals | Other Dyads | Weak Rivals |
| Election Year | $-114.652^{**}$ | $-0.415$ | 1.733 |
| | (45.183) | (3.600) | (4.176) |
| Approval | $-0.081$ | $-0.013$ | $-0.019$ |
| | (0.72) | (0.097) | (0.117) |
| Approval$^2$ | $8.62E-04$ | $1.01E-04$ | $8.15E-05$ |
| | $(6.47E-04)$ | $(8.75E-04)$ | $(1.13E-04)$ |
| Election*Approval | $4.980^{**}$ | 0.024 | $-0.093$ |
| | (1.865) | (0.131) | (0.166) |
| Election*Approval$^2$ | $-0.054^{**}$ | $-2.12E-04$ | 0.001 |
| | (0.19) | $(1.18E-03)$ | (0.002) |
| Relative Capabilities | 3.559 | $-7.380^{**}$ | $-9.327$ |
| | (6.400) | (0.529) | (6.871) |
| Peace | $-0.009$ | $-0.025$ | $-0.022$ |
| | (0.019) | (0.023) | (0.029) |
| Peace$^2$ | $3.34E-04$ | $1.64E-04$ | $1.52E-04$ |
| | $(2.78E-04)$ | $(3.34E-04)$ | $(4.56E-04)$ |
| Peace$^3$ | $-1.40E-06$ | $-6.51E-07$ | $-1.79E-07$ |
| | $(1.02e-06)$ | $(1.20e-06)$ | $(1.89E-06)$ |
| Constant | $-4.820$ | 1.865 | 6.709 |
| | (6.170) | (2.769) | (5.988) |
| N | 1199 | 27,449 | 1199 |
| prob $< \chi^2$ | $<0.001$ | $<0.001$ | 0.2467 |
| Pseudo-R$^2$ | 0.0308 | 0.1689 | 0.0199 |

Logit Regressions. Robust standard errors, clustered on the dyad. $^{*}$ indicates $p < 0.05$, $^{**}$ indicates $p < 0.01$. Two-tailed tests.

# Appendix

Under complete information, the following strategies comprise subgame perfect equilibria:

a) When $c_l \geq \overline{c}_l$ and $c_c \geq \overline{c}_c$, Challenger plays:

| | |
|---|---|
| *demand* | if $s_1(\pi_1^s) - s_3 \geq r_2 - r_1(\pi_1^s)$ and $s_1(\pi_1^s) - s_2 \geq r_2 - r_1(\pi_1^s)$, $\neg$*demand* otherwise |
| $\pi_1 = \pi_1^s$ | if $s_1(\pi_1^s) - s_3 \geq r_2 - r_1(\pi_1^s)$, $\pi_1 < \pi_1^s$ otherwise |
| *concede* | if $\pi_2 \leq \pi_2^s$, *resist* otherwise |
| *stalemate* | if $c_c \geq \overline{c}_c$, *escalate* otherwise |
| *wait* | if $c_c \geq \underline{c}_c$, *escalate* otherwise |

and Leader plays:

| | |
|---|---|
| $\pi_2 = \pi_2^s$ | if $r_1(\pi_2^s) - r_3 \geq s_2 - s_1(\pi_2^s)$, $\pi_2 > \pi_2^s$ otherwise |
| *concede* | if $\pi_1 \geq \pi_1^s$, *resist* otherwise |
| *wait* | if $c_l \geq \underline{c}_l$, *escalate* otherwise |
| *stalemate* | if $c_l \geq \overline{c}_l$, *escalate* otherwise |

b) When $c_l \geq \overline{c}_l$ and $\underline{c}_c \leq c_c < \overline{c}_c$, Challenger plays:

| | |
|---|---|
| *demand* | if $\{NOESCAL1\}$ and $r_1(\pi_1^e) - e_l \geq s_2 - s_1(\pi_1^e)$, $\neg$*demand* otherwise |
| $\pi_1 = \pi_1^e$ | if $\{NOESCAL1\}$, $\pi_1 < \pi_1^e$ otherwise |
| *concede* | if $\pi_2 \leq \pi_2^s$, *resist* otherwise |
| *stalemate* | if $c_c \geq \overline{c}_c$, *escalate* otherwise |
| *wait* | if $c_c \geq \underline{c}_c$, *escalate* otherwise |

and Leader plays:

| | |
|---|---|
| $\pi_2 = \pi_2^s$ | if $r_1(\pi_2^s) - r_3 \geq s_2 - s_1(\pi_2^s)$, $\pi_2 > \pi_2^s$ otherwise |
| *concede* | if $\pi_1 \geq \pi_1^e$, *resist* otherwise |
| *wait* | if $c_l \geq \underline{c}_l$, *escalate* otherwise |
| *stalemate* | if $c_l \geq \overline{c}_l$, *escalate* otherwise |

c) When $\underline{c}_l \leq c_l < \overline{c}_l$ and $c_c \geq \overline{c}_c$, Challenger plays:

| | |
|---|---|
| *demand* | always |
| $\pi_1 = \pi_1^s$ | if $s_1(\pi_1^s) - s_3 \geq r_2 - r_1(\pi_1^s),\ \pi_1 < \pi_1^s$ otherwise |
| *concede* | if $\pi_2 \leq \pi_2^e,\ resist$ otherwise |
| *stalemate* | if $c_c \geq \overline{c}_c,\ escalate$ otherwise |
| *wait* | if $c_c \geq \underline{c}_c,\ escalate$ otherwise |

and Leader plays:

| | |
|---|---|
| $\pi_2 = \pi_2^e$ | if $\{NOESCAL2\},\ \pi_2 > \pi_2^e$ otherwise |
| *concede* | if $\pi_1 \geq \pi_1^s,\ resist$ otherwise |
| *wait* | if $c_l \geq \underline{c}_l,\ escalate$ otherwise |
| *stalemate* | if $c_l \geq \overline{c}_l,\ escalate$ otherwise |

d) For all other combinations of $c_l$ and $c_c$, Challenger plays:

| | |
|---|---|
| *demand* | if $\{NOESCAL1\},\ \neg demand$ otherwise |
| $\pi_1 = \pi_1^e$ | if $\{NOESCAL1\},\ \pi_1 < \pi_1^e$ otherwise |
| *concede* | if $\pi_2 \leq \pi_2^e,\ resist$ otherwise |
| *stalemate* | if $c_c \geq \overline{c}_c,\ escalate$ otherwise |
| *wait* | if $c_c \geq \underline{c}_c,\ escalate$ otherwise |

and Leader plays:

| | |
|---|---|
| $\pi_2 = \pi_2^e$ | if $\{NOESCAL2\},\ \pi_2 > \pi_2^e$ otherwise |
| *concede* | if $\pi_1 \geq \pi_1^e,\ resist$ otherwise |
| *wait* | if $c_l \geq \underline{c}_l,\ escalate$ otherwise |
| *stalemate* | if $c_l \geq \overline{c}_l,\ escalate$ otherwise |

where $\underline{c}_l \equiv 2p - 1 + p(\overline{r} - \underline{r}) - r_2$; $\overline{c}_l \equiv 2p - 1 + p(\overline{r} - \underline{r}) - r_3$; $\underline{c}_c \equiv 1 - 2p - p(\overline{s} - \underline{s}) - s_2$; $\overline{c}_c \equiv 1 - 2p - p(\overline{s} - \underline{s}) - s_3$; $\pi_1^s \equiv r_2 - r_1(\pi_1)$; $\pi_1^e \equiv e_l - r_1(\pi_1)$; $\pi_2^s \equiv s_1(\pi_2) - s_2$; $\pi_2^e \equiv s_1(\pi_2) - e_c$; $\{NOESCAL1\}$ holds if $s_1(\pi_1^e) + r_1(\pi_1^e) - p\left((\overline{r} - \underline{r}) - (\overline{s} - \underline{s})\right) + c_l + c_c \geq 0$; and $\{NOESCAL2\}$ holds if $s_1(\pi_2^e) + r_1(\pi_2^e) - p\left((\overline{r} - \underline{r}) - (\overline{s} - \underline{s})\right) + c_l + c_c \geq 0$.

When diversionary incentives are absent, or $r_2 = r_3 = r_1(0)$, the following strategies comprise subgame perfect equilibria:

a) When $c_l \geq \hat{c}_l$ and $c_c \geq \overline{c}_c$, Challenger plays:

| | |
|---|---|
| $\neg demand$ | always |
| $\pi_1 = 0$ | always |
| *concede* | if $\pi_2 \leq \pi_2^s$, *resist* otherwise |
| *stalemate* | if $c_c \geq \overline{c}_c$, *escalate* otherwise |
| *wait* | if $c_c \geq \underline{c}_c$, *escalate* otherwise |

and Leader plays:

| | |
|---|---|
| $\pi_2 > \pi_2^s$ | always |
| *concede* | if $\pi_1 \geq 0$, *resist* otherwise |
| *wait* | if $c_l \geq \hat{c}_l$, *escalate* otherwise |
| *stalemate* | if $c_l \geq \hat{c}_l$, *escalate* otherwise |

b) When $c_l \geq \hat{c}_l$ and $\underline{c}_c \leq c_c < \overline{c}_c$, Challenger plays:

| | |
|---|---|
| *demand* | if $\{NOESCAL1\}$ and $r_1(\pi_1^e) - e_l \geq s_2 - s_1(\pi_1^e)$, $\neg demand$ otherwise |
| $\pi_1 = \pi_1^e$ | if $\{NOESCAL1\}$, $\pi_1 < \pi_1^e$ otherwise |
| *concede* | if $\pi_2 \leq \pi_2^s$, *resist* otherwise |
| *stalemate* | if $c_c \geq \overline{c}_c$, *escalate* otherwise |
| *wait* | if $c_c \geq \underline{c}_c$, *escalate* otherwise |

and Leader plays:

| | |
|---|---|
| $\pi_2 > \pi_2^s$ | always |
| *concede* | if $\pi_1 \geq \pi_1^e$, *resist* otherwise |
| *wait* | if $c_l \geq \hat{c}_l$, *escalate* otherwise |
| *stalemate* | if $c_l \geq \hat{c}_l$, *escalate* otherwise |

c) For all other combinations of $c_l$ and $c_c$, Challenger plays:

$$\begin{array}{ll} \textit{demand} & \text{if } \{NOESCAL1\},\ \neg\textit{demand} \text{ otherwise} \\ \pi_1 = \pi_1^e & \text{if } \{NOESCAL1\},\ \pi_1 < \pi_1^e \text{ otherwise} \\ \textit{concede} & \text{if } \pi_2 \leq \pi_2^e,\ \textit{resist} \text{ otherwise} \\ \textit{stalemate} & \text{if } c_c \geq \overline{c}_c,\ \textit{escalate} \text{ otherwise} \\ \textit{wait} & \text{if } c_c \geq \underline{c}_c,\ \textit{escalate} \text{ otherwise} \end{array}$$

and Leader plays:

$$\begin{array}{ll} \pi_2 = \pi_2^e & \text{if } \{NOESCAL2\},\ \pi_2 > \pi_2^e \text{ otherwise} \\ \textit{concede} & \text{if } \pi_1 \geq \pi_1^e,\ \textit{resist} \text{ otherwise} \\ \textit{wait} & \text{if } c_l \geq \hat{c}_l,\ \textit{escalate} \text{ otherwise} \\ \textit{stalemate} & \text{if } c_l \geq \hat{c}_l,\ \textit{escalate} \text{ otherwise} \end{array}$$

where $\hat{c}_l \equiv 2p{-}1{+}p(\overline{r}{-}\underline{r}){-}r_1(0)$, and $\underline{c}_c$, $\overline{c}_c$, $\pi_1^e$, $\pi_2^s$, $\pi_2^e$, $\{NOESCAL1\}$ and $\{NOESCAL2\}$ are as defined above.

The outcomes expected to occur along the equilibrium path, depicted in Tables 1 and 2, follow directly from the above results. Note that the Diversionary Equilibria described in the paper refer specifically to the equilibria resulting when $r_2 - r_1(\pi_1^s) > s_1(\pi_1^s) - s_3$ and $r_1(\pi_2^s) - r_3 \geq s_2 - s_1(\pi_2^s)$, indicating the Leader is more sensitive to crisis bargaining outcomes than the Challenger. The Non-Diversionary Equilibria include *any* equilibrium where $r_2 = r_3 = r_1(0)$.

**Lemma 1 (Diversion with Incomplete Information)**: *Stalemated crises originating with a demand from the Challenger may occur in equilibrium even if the Challenger's costs for escalating, $c_c$, are unknown to the Leader, and the Leader's costs for escalating, $c_l$, are unknown to the Challenger.*

Proof: Suppose that even if $c_l = 0$, $r_2 \geq r_1(\underline{\pi}_2) + \underline{\pi}_2 \geq e_l \geq r_3$, where, $\underline{\pi}_2 \equiv s_1(\underline{\pi}2) + 2p - 1 + p(\overline{s} - \underline{s})$. Suppose also that the Leader sets $\pi_2 = \underline{\pi}_2$. This ensures that no type

of Challenger plays *resist*, as $s_1(\underline{\pi}_2) + 1 - 2p - p(\overline{s} - \underline{s}) \geq 1 - 2p - p(\overline{s} - \underline{s}) - c_c$ simplifies to $s_1(\underline{\pi}_2) + c_c \geq 0$, and the left side is strictly positive for all values of $c_c$. Finally, suppose $s_3 \geq s_1(\underline{\pi}_2) - \underline{\pi}_2 \geq s_1(\pi_1^s) - \pi_1^s$.

Note that $r_2 \geq r_1(\underline{\pi}_2) + \underline{\pi}_2$ to hold, $p \leq \frac{1 - r_2 - r_1(\underline{\pi}_2) - s_1(\underline{\pi}_2)}{2 + \overline{s} - \underline{s}}$ must also hold. For $r_1(\underline{\pi}_2) + \underline{\pi}_2 \geq r_3$ to hold, $p \geq \frac{1 - r_3 - r_1(\underline{\pi}_2) - s_1(\underline{\pi}_2)}{2 + \overline{s} - \underline{s}}$ must also hold. Since $r_2 > r_3$, there must exist values of $p$ that satisfy both inequalities. For $s_3 \geq s_1(\underline{\pi}_2) - \underline{\pi}_2$ to hold, $p \geq \frac{1 - s_3}{2 + \overline{s} - \underline{s}}$ must hold. Provided $r_2 + r_1(\underline{\pi}_2) + s_1(\underline{\pi}_2) \geq s_3$ holds, there must exist values of $p$ that produce the preference profiles outlined above.

The Leader must prefer to set $\pi_2 \geq \underline{\pi}_2$ in all equilibria, since the only benefit of lower $\pi_2$ is to make it more likely that the Challenger concedes, which all types of Challenger do when $\pi_2 = \underline{\pi}_2$. Given the preference profiles outlined above, the Challenger cannot have any incentive to deviate from the equilibrium strategies required to sustain Lemma 1. Specifically, the Challenger will play *demand*; set $\pi_1 < \pi_1^s$; accept any $\pi_2 \leq \pi_2^e$, where $\pi_2^e \geq \underline{\pi}_2 \; \forall \; c_c$; play *stalemate*; and play *escalate*.

Notice that the incentive for the Challenger to deviate from these strategies increases as $\pi_2$ decreases, as playing *demand* will become increasingly less attractive than playing $\neg$*demand*. Therefore, the willingness of the Challenger to play these strategies even when $\pi_2 = \underline{\pi}_2$ is sufficient to establish the result. □

**Lemma 2 (Domestic Causes of Escalation)**: *When neither Leader's nor Challenger's ability to retain office depends upon crisis bargaining outcomes, escalation never occurs under complete information.*

Proof: Suppose $\overline{r} = \underline{r}$ and $\overline{s} = \underline{s}$. This ensures that neither player ever benefits or suffers domestically from any outcome to the game. When $\overline{r} = \underline{r}$ and $\overline{s} = \underline{s}$, $\{NOESCAL1\}$ and $\{NOESCAL2\}$ always hold. In both of the inequalities identified above for these conditions, the left side is strictly positive when $\overline{r} = \underline{r}$ and $\overline{s} = \underline{s}$. As the right side for both is 0, both inequalities must hold. Therefore, by definition, escalation cannot occur. □

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Figure 1: Bargaining Model

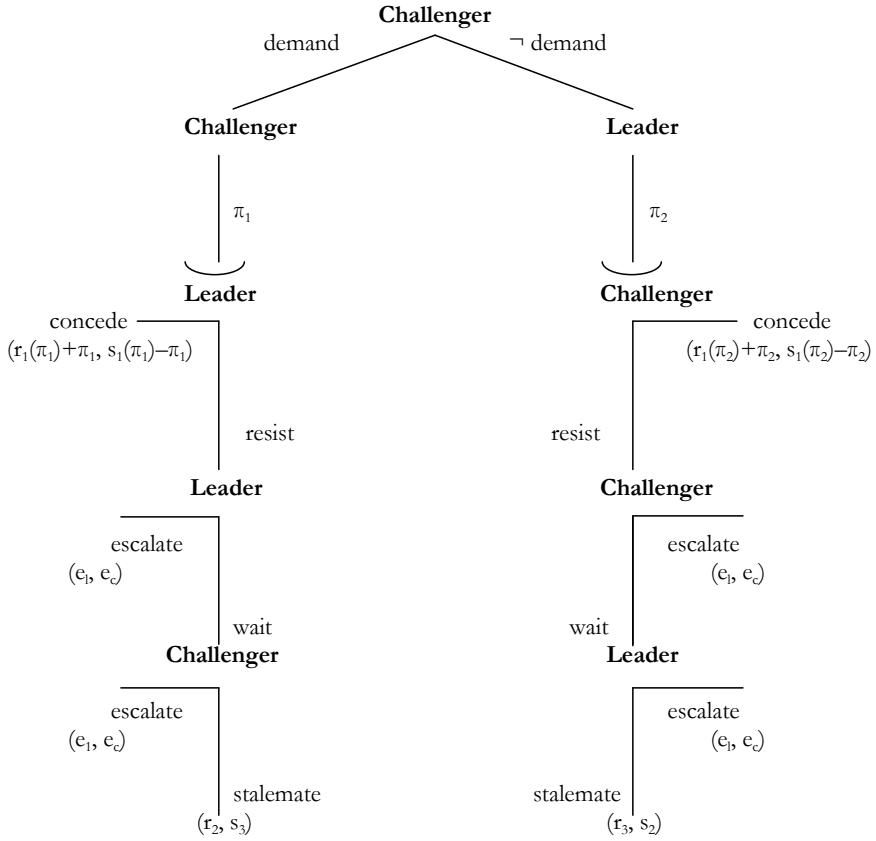

Figure 2: Predicted Probability US is Target of a Dispute, Weak Rivals

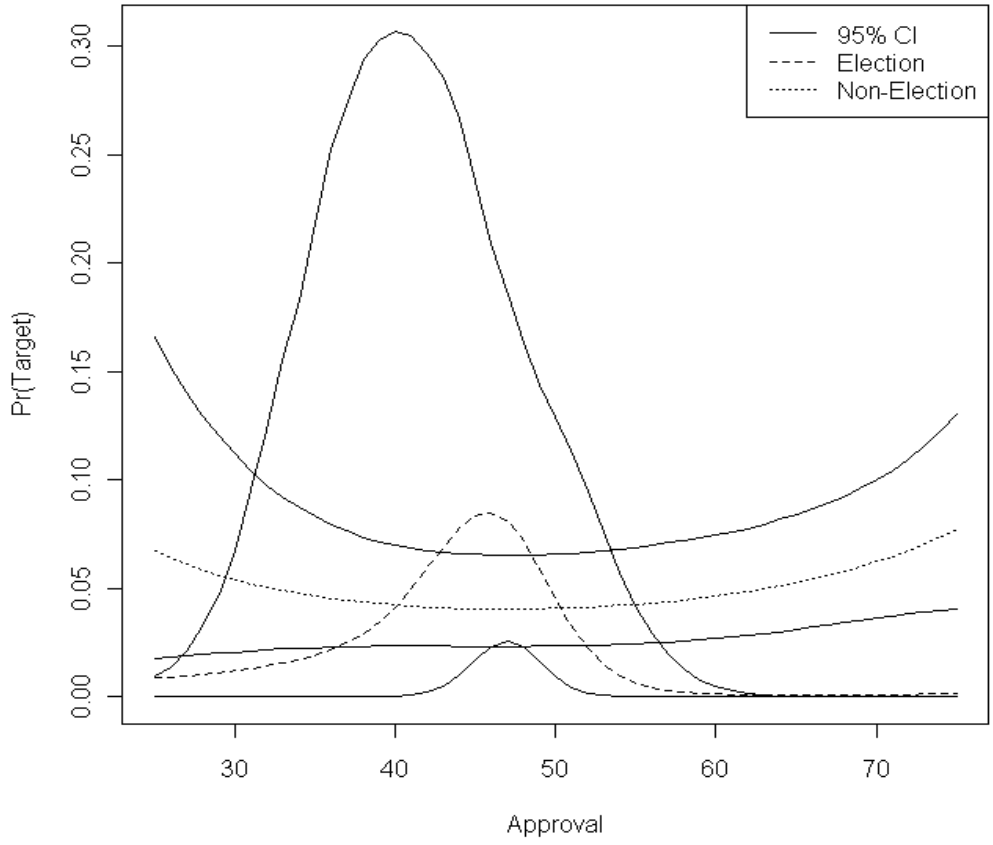

Figure 3: Predicted Probability US is Target of a Dispute, All Other Dyads

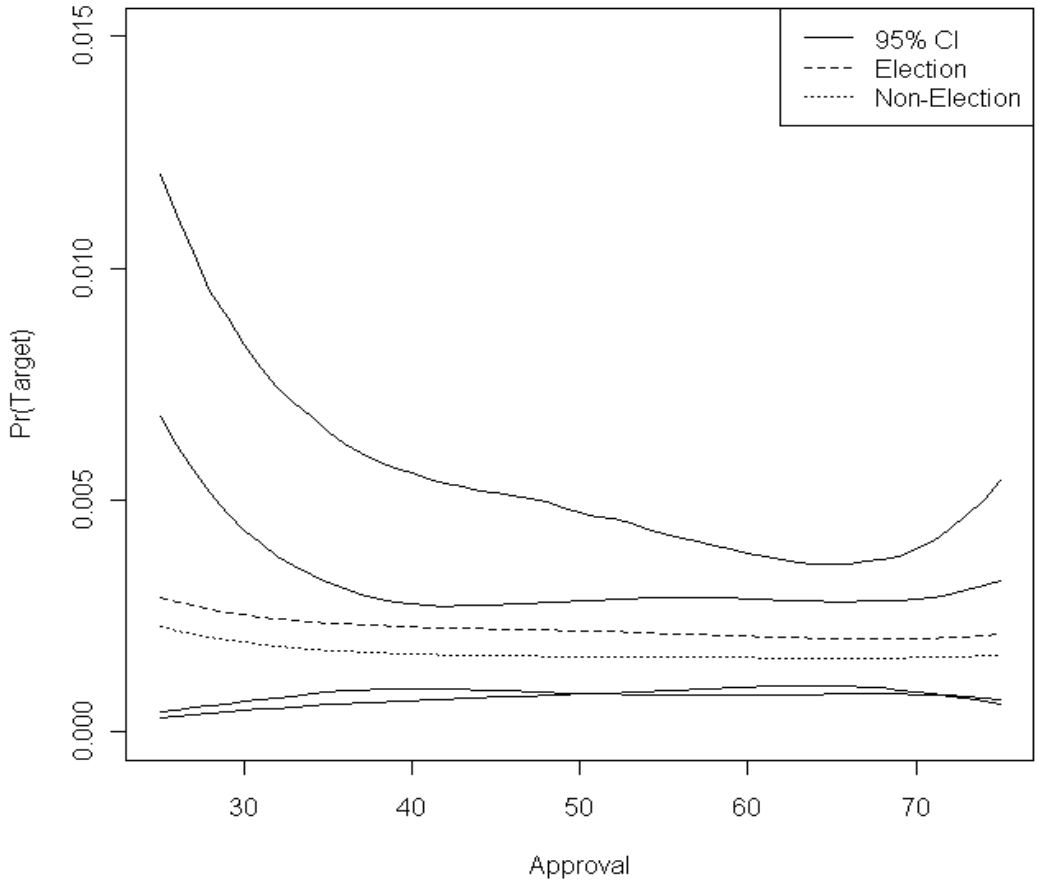

Figure 4: Predicted Probability US Initiates a Dispute, Weak Rivals