



# Domestic Institutions and Credible Signals<sup>1</sup>

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Audience costs are a central feature of many prominent theories of international conflict. We advance the understanding of audience costs by specifying the domestic institutions necessary to generate them. In our conceptualization, audience cost capacity (ACC) is a function of the availability of alternative rulers and the cost of mobilizing against the incumbent. This conceptualization leads to the first measure of ACC that has variation between more and less democratic political systems and variation within autocracies. We subject our measure to a rigorous set of tests that includes addressing selection effects and temporal treatment effects, neither of which have been fully examined in this research area. The empirical analysis offers strong support for the validity of our measure.

Which domestic political institutions affect the probability that a domestic audience will sanction its leader for unpopular international actions? Fearon (1994) formalized Waltz's (1959) second image link between the domestic restraints a leader faces and his international behavior, arguing that in some states a leader is an agent of the people: He does their bidding at the international level. Because leaders are subject to a principal, they may face or experience sanctions for unpopular international actions, such as backing down from public threats. Fearon labels these sanctions audience costs. In turn, leaders subject to audience costs are better able to send costly signals to clarify their resolve. Drawing on this logic, Schultz (1999) contends that other states will be less likely to respond to military threats issued by leaders subject to high audience costs than to threats issued by leaders who do not face such costs. Despite the important role audience costs are thought to play in international interactions, it is not clear which leaders, or which sorts of political systems, are likely to be subject to audience costs.

A state's audience cost capacity (ACC) is a function of principal-agent interactions. The central debate in

the literature is about the domestic political institutions that facilitate or hinder the principal's ability to control the agent through domestic punishment for behavior contrary to the principal's preferences. Existing arguments contend (i) that democratic political systems can generate audience costs but nondemocracies cannot (Schultz 1998, 1999); (ii) that certain regime types (democratic regimes, single-party regimes, military regimes, dynastic monarchies, and some well-established autocracies) can generate audience costs (Weeks 2008); (iii) that audience costs are a function of executive constraints (Partell and Palmer 1999); or (iv) that audience costs are a function of "the stability of domestic political structures" (Prins 2003:68). We contend that each of these arguments only contains part of the story. The first view does not allow for any nondemocracy to be able to generate audience costs, contrary to Fearon's (1994) original article. The regime type argument does not specify precise institutions or allow for variation in ACC within regimes that can generate audience costs. The executive constraints story is one of *ex-ante* restraints, but audience costs are about *ex post* punishment. That is, it is not the formal laws of a state that constrain the actions of a leader, but the institutions that allow for the leader to be punished if her actions are deemed unsuitable by her audience. Finally, the structural stability argument does not explain how stability trumps repression in autocratic regimes or allow for variation in ACC between the most authoritarian and most democratic regimes. Building on these approaches,

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particularly Weeks (2008), we present a more general and developed conceptualization of the domestic political institutions governing ACC, a conceptualization that accounts for how ACC varies within and across regime types.

Rather than focusing on the leader's ability to "monitor and punish" potential challengers (Weeks 2008:39, 41), we contend that it is more useful to focus on how institutions affect the specific costs the principal bears for challenging the incumbent. Specifically, institutions affect the exit cost that challengers face as well as the transaction, opportunity, and possible sanctioning costs for supporters of a challenger. This conceptual shift to the principal's cost terms leads us to create a new measure of ACC that is not based on regime types but on institutions that vary within and across regime types. Our measure of ACC is the first that has (i) variation between more and less democratic political systems and (ii) variation within nondemocratic political systems. It also covers a much larger temporal and cross-sectional domain compared with recent efforts to measure autocratic audience costs.

To demonstrate the usefulness of our measure of ACC, we use it to test standard models of interstate conflict. Specifically, we test whether increases in a leader's ACC increase the likelihood of other states backing down from military threats. We find robust support for this hypothesis across a wide variety of model specifications and time periods, including the pre-Cold War era. We also address concerns about selection effects and still find strong support for the audience cost hypothesis using our measure of ACC. When this strong empirical support for our measure is coupled with the conceptual clarity we offer on which domestic institutions generate audience costs, we believe our measure of ACC offers significant improvements over existing measures of ACC.

The paper proceeds as follows. We first review the key elements of the audience cost argument and extant measures of ACC. We then offer our account of how domestic institutions affect the audience costs faced by leaders. Building on this account, we describe a new measure of ACC that allows us to capture the types of domestic institutions that affect the ability and willingness of the principal to impose such a cost on its agent. After describing the research design, we present empirical analyses along with a wide variety of robustness checks and sensitivity analyses.

### **Background: Audience Costs and International Conflict**

The idea of "cheap talk" extends far back in the annals of political science. Scholars have long noted that leaders have an incentive to misrepresent their actions, capabilities, desires, and willingness in attempts to better their position at the international bargaining table. Schelling (1960, 1966) posited that in order to overcome this perverse incentive, a leader must find a way to credibly signal his intentions. According to Schelling, this could be done by tying the leader's reputation to both domestic and international sources. Sources of domestic credibility come from a domestic audience's ability to remove a leader

who backed down on what he promised his people. If a leader made an international promise, and later backed down from it, he would lose international credibility and the ability to make subsequent believable promises.

Fearon (1994) formalized the link between the domestic constraints a leader faces and her international behavior. Fearon argued that in some states, a leader is an agent of the people and does their bidding at the international level. Backing down from a public threat calls a leader's competence into question. In backing down, a leader risks domestic punishment for demonstrating poor leadership and a lack of resolve by making statements that should probably not have been made in the first place. Fearon (1994:577) called the costs a leader faces for poor leadership "audience costs." What is significant about ACC is that it enables a leader to send costly signals to clarify her resolve and thereby resolve crises diplomatically, short of all-out war. Leaders who face large audience costs for renegeing on threats or promises are not likely to issue hollow threats. Audience costs, then, can be seen as a type of tying-hands signal (Fearon 1997) that ameliorates the information and commitment problems contributing to the outbreak of war (Fearon 1995).

In Fearon's (1994) original war-of-attrition signaling model, audience costs are only generated if a domestic audience can hold its agent (the leader) accountable for her actions, the leader makes a public threat from which she backs down, and the audience views the leader's decision to back down from a threat as worse than conceding without having made a threat. If, as Fearon suggests, various regime types are able to produce audience costs, the question becomes what institutions strengthen a principal's control over its agent and allow the principal to punish the leader?

There are four existing arguments, and accompanying measures, about which domestic political institutions facilitate the generation of audience costs. First, Schultz (1998) argues that opposition political parties are central to audience costs. Opposition parties can gain electorally from challenging a leader's decision to engage the state in conflict when the leader's choice produces unsuccessful foreign policy. If the opposition believes that such gains are possible from opposing a conflict, it will challenge the leader's decision to escalate a dispute. Since dissent can be costly to the opposition party, the opposition will only challenge the leader when it believes the proposed course of action is not likely to succeed. Therefore, a leader who faces an opposition party is unlikely to engage in international disputes unless highly resolved. Not all leaders have to contend with opposition political parties, and when this is the case, leaders cannot generate meaningful audience costs. Based on this argument, Schultz (1999) measures audience-cost-generating institutions as a dichotomous variable equivalent to whether a state is democratic or not. If a state has a score of seven or greater on the Polity democracy-autocracy index, then a state can generate audience costs; states scoring below this value cannot generate audience costs. Schultz's operationalization of the audience cost concept is consistent with Fearon's (1994) argument that democratic

states can either generate greater degrees of audience costs or generate them more quickly than autocracies, but his empirical approach does not allow for variation in the ability of autocracies to generate audience costs, which is not consistent with Fearon (1994).

Second, Partell and Palmer (1999) argue that constraints on the executive are the basic characteristic of audience costs. They argue that as a leader's policy autonomy decreases, the more she is reliant on others, and thus it is easier to remove her should she fail to perform her duties to a satisfactory level. Partell and Palmer (1999), then, measure audience-cost-generating institutions as constraints on the chief executive. This measure has the virtue of allowing at least some autocracies to create audience costs while allowing most democratic regimes to generate more audience costs. However, the audience cost story is one of *ex post* punishments rather than *ex-ante* restraint. Laws that forbid action are not necessary for the production or measure of audience costs, since these laws are useless if institutions are not in place that allow for the punishment of undesired actions. Indeed, Partell and Palmer do not explain how executive constraints lead to sanctions on the executive should a policy failure occur.

Third, Prins (2003) contends that unregulated and factional political participation creates uncertainty about the leadership's preferences and resolve. In turn, target states are less likely to back down from threats issued by states with "non-institutionalized (that is, factional) political participation" (Prins 2003:72). This approach has much to recommend it. Political participation, in some sense, as we elaborate below, is a necessary condition for audience costs. While this approach allows some nondemocratic regimes to generate audience costs, it suggests that the ACC of a fully democratic state is the same as an autocratic state. That is, the measure used by Prins does not capture variation in ACC across regimes. Insofar as the regulation of political participation is what is key, this measure errs in equating the ACC of strong autocratic states with institutionalized and developed democratic states. Finally, this approach does not provide an explanation of why factional participation should be viewed the same as unregulated participation. Nevertheless, we think that Prins' argument about the importance of political participation highlights a key element of ACC, an element that subsequent measures of autocratic audience costs have neglected.

Fourth, Weeks (2008) argues that audience costs depend on (i) the ability and desire of the opposition to coordinate to punish a leader; (ii) viewing backing down as worse than following through; and (iii) outsiders having the ability to observe the possibility of sanctions. Instead of examining different domestic institutions, Weeks looks at regime types to determine whether a particular leader is likely to be able to generate audience costs. Some specific regimes can generate audience costs, and some regimes cannot. In "practice", Weeks' measure boils down to whether a leader controls appointments to the security organs or the security organs themselves because if the leader can monitor and punish opponents, then coordination by the opposition to punish the leaders is not possible

(Weeks 2008:39, 41). "More specifically, elites will have greater incentives to coordinate if the leader cannot monitor and punish defection through personal control of intelligence and security organs and does not control political appointments" (Weeks 2008:44). We agree that a leader's ability to monitor and punish potential defectors affects the coordination costs of challenging an incumbent and that coordination influences the generation of audience costs. However, this conceptualization does not identify the full set of costs the principal faces if it wants to punish the agent. Challengers have to consider the exit costs associated with a failed challenge. Further, as we describe in more detail below, it is more precise to say that coordination costs are a function of transaction and opportunity costs. Finally, the conceptual focus on monitoring and punishing leads Weeks to create a dichotomous measure of audience costs. Such a measure implies that democratic regimes have no greater ability to generate audience costs than most autocracies, though original discussions of the concept indicate the contrary (Fearon 1994:578).<sup>2</sup> In the next section, we present a more general conceptualization of state audience cost capacity. In the next section, we build on Weeks (2008) and offer a more general conceptualization of ACC.

#### A More General Conceptualization of Audience Cost Capacity

Fearon (1997:69) defines audience costs as the costs "that would be suffered if the leader backed down or backed away from a public threat or warning issued in a crisis." According to Fearon (1994), levels of audience costs sufficient to bind a leader to her threats can only be generated in those polities in which the leader acts as the agent of some domestic audience (the principal). In such states, the principal is able to control the leader's actions through a type of "wage contract," by punishing the leader for escalating a crisis and then backing down. The likelihood that a leader is held accountable by the audience varies according to the institutional arrangements of the state (McGillivray and Smith 2000).

Audience costs are best understood from a principal-agent perspective. In the context of international relations, the domestic audience is the principal and the leader is the agent. The leader is supposed to represent the interests of the audience on the international stage. However, delegation introduces the problem of moral hazard, in that it gives the leader the opportunity to take actions that her audience would not want her to take. Moral hazard increases as the agent becomes more insulated from risk. Domestic audiences desire foreign policies under which the state prospers (Smith 1998). In the international context, then, risk can be understood as the probability of engaging in an action likely to have negative consequences for state prosperity (Buono de Mesquita, Smith, Siverson, and Morrow 2003). If a leader is

<sup>2</sup> It is also not clear that one can extract the necessary information about control of the security organs from Geddes's (2003) data. Geddes bases her classifications on a composite score and, in her book, does not provide the data on answers to specific questions.

unlikely to lose office for failure to conduct a good foreign policy, the leader has little incentive to abide strictly by the desires of her audience and moral hazard increases.

Audience costs are the mechanism through which the audience attempts to limit moral hazard (Fearon 1994). If the leader is subject to punishment for bad foreign policy, she is tied more closely to the risk associated with her policies and is less likely to engage in foreign policies that do not benefit her audience. Thus, to reduce moral hazard, the audience must be able to punish the leader, exposing her to the cost associated with a poor foreign policy.

How is an audience able to make the leader sensitive to these costs? We argue that audience costs are primarily a function of institutions affecting the contestability for the head of state position. As contestability increases, a leader faces greater risk (that is, a greater probability of suffering a cost for a poor policy choice), and therefore, audience costs for the leader increase. We build on Lake and Baum (2001:593), who argue that contestability is a function of two types of costs: exit and mobilizing costs.<sup>3</sup>

First, potential challengers are more plentiful as “barriers to exit” or the cost of losing decreases. This is because the “incentives for politicians to enter the political market depend crucially on their subsequent barriers to exit” (Lake and Baum 2001:594). Barriers to exit, or challenger costs, are primarily a function of sanctioning costs associated with a failed challenge. In countries with low barriers to exit, challengers who lose can often remain in politics (in an opposition party) and can possibly compete in the next election. The worst-case scenario is leaving politics altogether, quite possibly to (re)turn to an occupation with higher remuneration. However, there is a significant variation in the sanctioning cost of failed challenges across countries. In countries with high barriers to exit, incumbents who lose office are “excluded from power and often exiled or murdered” (Lake and Baum 2001:594). In countries with high barriers to exit, the cost of violating the norms is high and contestation is very limited, and as a result, fewer potential challengers enter the political market. In contrast, when the cost of challenging is low, then more individuals have an incentive to highlight how the agent’s actions do not accord with their (the principal’s) preferences. Thus, as the pool of potential challengers increases, leaders are more mindful of the principal’s preferences in order not to run afoul of them and risk a challenge (Tullock 1987:12). Lake and Baum treat democracies as an example of countries with low barriers to exit and autocracies as an example of countries with high barriers to exit. While we agree that barriers to exit would tend to be lower in countries where free and fair elections are routine (typical of democracies), compared to countries whose leaders are sometimes ousted by violent coups (which is more likely to occur in an authoritarian country), we also expect to see the

variation over the costs of exit within both democracies and dictatorships.<sup>4</sup> What distinguishes countries is challenger exit costs, as well as transaction costs associated with mobilizing supporters, which we discuss next. All else equal, the costs of challenging are significantly lower in a system that allows anyone in the principal to become the next head of state.

Second, institutional arrangements that affect the cost of mobilizing against the agent significantly influence the regime’s ACC. When mobilizing is costly, individuals are much less likely to act collectively. Mobilizing against the agent involves both transaction costs and, potentially, sanctions. The decision to protest or rally against the incumbent depends on how difficult it is to voice disapproval of the incumbent and on what an individual thinks will happen to him should he mobilize. In a political system in which freedom of assembly is not permitted, it is much more difficult to voice disapproval and one is more likely to think others will not join in rallying against an incumbent (Kuran 1991). In contrast, as freedom of assembly increases, it is easier to form standing political parties, which decrease the transaction costs of mobilization (Lake and Baum 2001). Further, as freedom of assembly increases, sanctioning costs decrease, at least to the extent that more individuals take part in the action, for it is much more difficult to punish a large number of opponents than a small number. Thus, as freedom of assembly increases, more individuals are likely to mobilize as their individual cost for acting decreases, and as more individuals mobilize, successful punishment of the agent is more likely to occur. These reasons are perhaps clearer when viewed from the opposite angle. When institutions significantly restrict assembly, transaction and opportunity costs associated with mobilizing increase. Without freedom of assembly, it is more difficult to get out one’s message, more difficult to coordinate with others as you likely have to act in secret, and easier for the regime to punish you.

To summarize, audience costs are a function of the cost of exit for any individual challenger and the cost of mobilizing against the agent. If the cost of exit is sufficiently small and a leader has proven to be incompetent by backing down from a public threat, then someone within the principal is likely to challenge the incumbent. Whether that challenge is successful or not depends on that challenger’s ability to mobilize others to his side. When the transaction and sanctioning costs connected to mobilizing are high, challenges are less

<sup>4</sup> Recent literature on institutions in authoritarian regimes shows how the concentration of power in dictatorships varies (see Gandhi and Lust-Okar 2009 for a review). Svobik (2009), for example, models power-sharing in authoritarian regimes to explain why power can be either narrowly concentrated around a single individual or shared among several groups in authoritarian regimes. Similarly, Przeworski et al. (2000:31) say that “some dictatorships are ‘mobilizing,’ whereas others are ‘exclusionary.’” Bunce and Wolchik (2010) examine competitive authoritarian regimes, where some competition for political office is tolerated, and find that even within this type of dictatorship, there is a variation in how much contestation is allowed. Leaders in politics that can be considered more open “in terms of the rules of the political game to electoral challenges” are expected to be more vulnerable, “because they provide a more level playing field for political competition” (Bunce and Wolchik 2010:48). This burgeoning literature highlights the extraordinary amount of institutional variability, in terms of the availability of alternative rulers and the cost of mobilizing against incumbents, within countries typically classified as dictatorships.

<sup>3</sup> Contestation, generally, is a central feature of many theories of democracy, though the term rarely captures identical concepts (Schumpeter 1942; Dahl 1971; Przeworski, Alvarez, Cheibub, and Limongi 2000). We find Lake and Baum’s 2001 conceptualization useful for thinking about audience cost.

likely to succeed. As transaction and sanctioning costs decrease, a challenger is better able to rally a sufficient number of individuals within the principal to punish the agent. Audience costs, then, depend on institutions that lower the cost of challenging an incumbent and lower the cost of mobilizing behind a challenger. If either of these costs is sufficiently high, then contestability for the head of state position will be negligible and a leader will not be able to generate audience costs. We call this the contestability theory of ACC.

### Operationalizing Audience Cost Capacity

As we just discussed, we argue that ACC is a function of the domestic political institutions that structure the relationship between the principal and the agent. To operationalize ACC, we propose a composite measure based on the Polity IV data (Marshall and Jaggers 2008). This measure is designed to match the underlying concept of audience costs more closely than the existing measures do. It explicitly states which institutions are necessary for the production of audience costs, it is not confined to democratic states, it does not rely on *ex-ante* executive constraints, and it allows for variation across all regime types, both democratic and autocratic.

We have argued that two sets of institutions influence the generation of audience costs: institutions affecting the availability of alternative rulers and those affecting the cost of mobilizing against an incumbent. When the institutions governing accession to the head of state position are not open to any member of the principal becoming the next head of state, then it is nearly impossible that a challenger will emerge. When the costs of political mobilization are extremely high, then individuals within the principal are not likely to risk being identified as opponents of the regime and rally behind a challenger. That is, ACC is a function of two necessary conditions: the emergence of challengers and the ability of challengers to mobilize supporters. In addition, we contend that a regime's ACC varies with the cost of political mobilization. In other words, assuming alternative rulers exist and the cost of political mobilization is below some threshold, then as the cost of political mobilization declines, the probability of punishment increases, meaning the concept of ACC is continuous in the cost of political mobilization.<sup>5</sup>

<sup>5</sup> An alternative indicator of accountability is Bueno de Mesquita et al. (2003) measure of winning coalition size. Like the contestability theory we focus on, selectorate theory underscores the importance of public goods provision and leader selection. To test their theory, Bueno de Mesquita et al. create a measure using three of the Polity components (xrcomp, xropen, and parcomp) and include an indicator of whether the regime type of the state is military or military-civilian (see Morrow, Bueno De Mesquita, Siverson, and Smith 2008:395 for a complete description). From our perspective, the primary limitation of this measure is that it is based, in part, on a state's regime type. While "regime type" may be a label for states possessing a certain set of institutions, it is not clear exactly what institutions these are. Intuitively, we may know what makes a military junta different from a single-party regime, but the regime type label obscures precisely how these regimes differ from one another. More concerning is the fact that not all military juntas are the same. Using the component "military junta" eliminates the ability to observe the variation among same-type regimes. Our measure of ACC is based purely on institutions. We are explicit about how these institutions work, and which states possess which institutions. This approach also allows for the possibility of variation in institutions among states with the same regime type.

Based on these arguments, we use two indicators from the Polity data to create the variable ACC. An ideal measure of ruler availability would tell us the average expected cost an individual will incur if he challenges the incumbent. Lake and Baum (2001) note that cost here is a function of the individual's opportunity cost associated with pursuing a challenge and potential sanctioning costs associated with a challenge. We do not have good data on either of these factors. However, each of them should be correlated with the openness of the regime to a new leader emerging from the principal. If individuals within the principal cannot compete to become the next leader, then anyone challenging the leader is also challenging the system, the entire regime. The cost of challenging is much higher as a result. To gauge the probability of alternative rulers emerging from the principal to challenge the agent, we use the Polity indicator on openness of executive recruitment (xropen). Executive recruitment is open "to the extent that all the politically active population has an opportunity, in principle, to attain the position through a regularized process" (Marshall and Jaggers 2008:20). Executive recruitment does not require elections; it only requires that some group choose the executive and that they choose from all members of the political elite. Thus, when advancement to the chief executive position is open to the principal, the cost of challenging the leader dramatically decreases. The executive recruitment process is not open if advancement to the head of state position occurs chiefly through heredity. Under such a system, there is no meaningful openness or competition to become the next head of state; as a result, there is little incentive for the ruling group to engage in activity against the head of state. Alternatively, one may think of a system with closed executive recruitment as not having an effective principal, and of course if there is not an effective principal, then there is no established group that can impose audience costs. In brief, openness of executive recruitment is an indirect measure of the availability of alternative rulers. Although indirect, we contend that it captures meaningful variation, even within autocracies, in the cost of challenging to become the next head of state.

Ideally, to measure the cost of political mobilization, we would want a measure of the principal's transactions costs and any focal institutions or individuals around which challengers may rally. These data also do not exist. We proxy the cost of political mobilization by using the Polity indicator on restrictions on political participation (parcomp in the Polity data). This indicator "measures the degree to which this political participation is free from government control" (Marshall and Jaggers 2008:68). As restrictions on political participation increase, it becomes more costly to rally against the incumbent. For example, a political participation score of one indicates that the state severely represses political mobilization, that is, "the regime bans the organization of all rival political parties and oppositional social movements" (Marshall and Jaggers 2008:69). Under such conditions, the costs of trying to organize against the leader are great; as a result, it is unlikely that a leader can generate audience costs. More generally, as more people are allowed to

assemble, it becomes less costly to organize and coordinate against the head of state. Freedom to assemble reduces the costs of opposing the leader because it takes away legal sanctions against organizing. Although this is a measure of the restrictions on political participation for all individuals in society, as opposed to focusing exclusively on costs that the principal faces, and it does not identify specific focal individuals on which the opposition is likely to coordinate, coordination is much more difficult when participation is not free.

Our measure of ACC can take on four values, ranging from 0 (no ACC) to 3 (high ACC). Specifically, the variable ACC equals zero when the Polity variable *x*open is less than or equal to two or the Polity variable *parcomp* is equal to one. These cutoffs capture the necessary conditions discussed above. An *x*open score of zero or one indicates that the leader is chosen by heredity, or that if there is a chief minister, this person is not selected through elections. When *x*open is greater than two, anyone in the politically active population can become the leader. As noted above, a *parcomp* score of one means freedom of assembly is extremely limited. The variable ACC equals one, representing a situation of low audience costs, if *x*open is greater than two and *parcomp* equals two or three. A *parcomp* score of two indicates that there is some but very limited ability to politically participate. With a score of two, at least 20% of the adult population is denied the right of political participation. A score of three indicates that <20% of the adult population is denied the right of participation (Marshall and Jagers 2008:75), but participation is highly factionalized. ACC equals two, a medium level of ACC, if *x*open is greater than two and *parcomp* equals four. A *parcomp* score of four indicates that political participation is open to almost all people in society but the government sometimes interferes in elections, typically through police brutality or some limits on political speech and assembly (Marshall and Jagers 2008:78, 80). A high level of ACC, where ACC equals three, occurs if *x*open is greater than two and *parcomp* equals five. A *parcomp* score of five means that “No major social group or groups are routinely excluded from the political process” (Marshall and Jagers 2008:82).<sup>6</sup> Finally, states that are experiencing a regime transition, foreign interruption, or anarchy are coded as not having any ACC.<sup>7</sup> Table 1 illustrates how *parcomp* and *x*open are used to create the composite ACC measure.

The value-added of our measure is threefold. First, we provide a more nuanced theoretical justification. From a conceptual standpoint, existing measures fall short by (i) not identifying specific institutions that allow for variation both between democracies and autocracies and within autocracies and (ii) not specifying the two critical institutional features—exit costs

and mobilization costs—that are jointly necessary for the principal to sanction the agent. Arguments by Schultz, Prins, and Weeks fail to satisfy both points A and B. On first glance, the Partell and Palmer (1999) idea meets both criteria. However, they do not root their argument in principal–agent terms, making it unclear what costs and barriers the principal must overcome to sanction the agent.

Second, our measurement proxies, while imperfect, more closely match the concepts in our theory. Schultz argues that political parties are necessary, but boils this argument down to an indicator variable for democracy based on the Polity democracy–autocracy index. While this index surely correlates with political parties, it is largely driven by executive constraints (Gleditsch and Ward 1997). Further, some autocracies have political parties, but it is unclear from Schultz’s argument if these regimes can generate audience costs. Is it parties or just parties in democracies? Weeks’ (2008) measure focuses on non-executive control of the security apparatus, but the regime proxies she employs do not directly measure this feature. To be clear, Geddes’ (2003) coding scheme involves a question about control of the security apparatus, but determination of the regime coding is based on a composite score rather than the answer to this or any other single question. The indirectness of Weeks’ measure is also seen in the coding of interregna regimes as not capable of generating audience costs. Although this is a reasonable argument, there is no particular reason why it takes three (and not two or four or five) years for a leader to consolidate control. Prins contends that unregulated participation is the key, but his measure treats factional participation the same as unregulated. For Partell and Palmer (1999), the main feature is whether the executive can implement policies on her own. The weakness with their measure is that no argument is given for why executive autonomy increases linearly in constraints.

Third, in practice, the most common measure of autocratic audience costs is the one offered by Weeks. Our measure covers a much larger empirical domain. Given that our measure always performs as well or better than Weeks’, the much larger empirical coverage that we offer should be appealing to scholars working in this area.

### Description of the Data

Table 2 shows the frequency of state-years across the range of ACC as well as the distribution of ACC for democratic and nondemocratic regime types. For this analysis, we created a state-year data set that spans the period 1816–2000 and coded a state as democratic if it scores six or higher on the Polity democracy–autocracy index (that is, Polity’s “*polity2*” variable). We expect that almost all democratic states will be able to generate audience costs, that there will be variation in ACC across democracies, and that some nondemocratic regimes will also have ACC. The information presented in Table 2 supports these general expectations. Approximately 95% of all democracies score a one or higher on our ACC measure. However, only 59% of democracies earn the maximum ACC score of three. Examples of

<sup>6</sup> We use the 2004 version of the Polity data made for the Eugene program (Bennett and Stam 2000). Using the Eugene version of the data ensures that we match country codes.

<sup>7</sup> We also created a measure of ACC in which the Polity codes of –88 (regime transition), –77 (foreign interruption), and –66 (anarchy) are coded as missing. None of our model results are negatively affected. These results, along with all other robustness checks mentioned below, are available in the online appendix.

TABLE 1. Constructing the Audience Cost Capacity Measure

Values on XROPEN	Values on PARCOMP			
	0-1	2-3	4	5
Xropen $\leq$ 2	ACC = 0	ACC = 0	ACC = 0	ACC = 0
Xropen $>$ 2	ACC = 0	ACC = 1	ACC = 2	ACC = 3

(Note. PARCOMP and XROPEN are both measures from the Polity IV data set.)

democracies that score one or two on our ACC measure include the United States in the first half of the nineteenth century and Great Britain for most of the nineteenth century. The reason the United States and Great Britain do not have maximum ACC in those periods is that political participation was limited. Weingast's (1997) argument about the political foundations of democracy underscores the validity of these codings. He notes that in highly fractionalized polities, as in the United States around the time of its Civil War, citizens will have difficulty coordinating and holding the principal accountable. Although he does not focus on coordination problems, as Weingast does and we do, Prins (2003) also contends that accountability decreases in fractionalized polities. Perhaps even more interesting than democracies with an ACC score of one or two are those with a score of zero. France in the late nineteenth century is an example of a regime with a high score on the Polity democracy-autocracy index (they score a 7, making them a democracy using the standard cut points for this index) but an ACC score of zero. France scores a zero at that time because they did not have any freedom of assembly.

Table 2 not only shows that most democracies have some ACC and that there is variation in ACC across democracies, but also shows that democratic political regimes are much more likely to have an ACC score above zero than nondemocratic political regimes. About 70% of autocracies have no ACC. This helps explain why Schultz (1999) finds empirical support for democracy as a measure of ACC. Relative to nondemocracies, democracies are more likely to be able to generate audience costs. Chile under Pinochet is representative of this type of regime, an autocracy unable to generate audience costs, despite the stability of its political regime under Pinochet. Japan, from the beginning of the Meiji restoration through World War II, also scores zero on our measure of ACC. Yet, as Partell and Palmer (1999), Prins (2003), and Weeks (2008) point out, some autocracies can generate audience costs. South Africa in the 1970s and 1980s is an example of a nondemocracy that scores a one on our measure of ACC. Russia in the 1990s scores a two on ACC. And, the most noteworthy example of a three on ACC for a nondemocracy is France from about 1958-1964. This coincides with the founding of the Fifth Republic by Charles de Gaulle.

Finally, Weeks (2008) has become the most prominent analysis of autocratic audience costs. Weeks not only contends that some types of autocracies are able to generate audience costs but that they can do so to the same degree as democracies. We contend that some autocracies are able to generate audience costs,

but that autocracies are not likely to score as high as well-developed democracies on the institutional factors that allow for ACC. Indeed, only one autocracy in Weeks' data scores a three on ACC, France in 1963 and 1964. We expect that the types of autocracies she identifies as able to generate audience costs will tend to have scores above zero on our measure of ACC. We also expect that the regime types Weeks identifies as not able to generate audience costs will generally have scores of zero.

Weeks (2008) posits that the following regime types can generate audience costs: democracy, single-party, dynastic monarchy, military, and mixed nondemocracies. She argues that personalist, non-dynastic monarchies, new democracies, and interregnum regimes cannot generate sufficient audience costs to deter military responses. We find that 76% of personalist states score a zero on our measure of ACC and the additional 24% have a score of one. Similarly, 60% of interregnum regimes register a zero on our measure with another 36% scoring a one. Nearly, all non-dynastic monarchies score a zero on our measure of ACC. In sum, the types of regimes that Weeks identifies as not able to generate audience costs are disproportionately likely to score a zero or one on our measure of ACC.

To be sure, one could quibble with a specific coding about whether a state is democratic or not or some other specific regime type, but in each of the cases just mentioned, the Polity project provides more objective evidence about the extent of political participation and openness of executive recruitment. The ultimate test of the validity of the measure will be how it performs in an appropriate theoretical model. Table 2 presents the distribution of the ACC measure along with the distributions of Partell and Palmer (1999), Prins (2003), and Weeks (2008).<sup>8</sup>

### Empirical Evaluation of ACC Measure

We evaluate our measure of ACC using standard empirical models from this literature. Fearon's (1994) initial war-of-attrition model was one of asymmetric information: States know their own costs, but cannot observe the costs faced by other states. This is a signaling game in which each state infers the possibility that the opposi-

<sup>8</sup> The correlation between our ACC measure and the xconst measure used by Partell and Palmer (1999) is 0.83. The correlation between ACC and the measure used by Prins (2003) is 0.08, while the correlation between ACC and that used by Weeks (2008) is 0.40. ACC does correlate significantly with the executive constraints measure provided by Partell and Palmer, though we believe that our measure has stronger theoretical justification and is not an *ex ante* constraint.

TABLE 2. Distribution of Audience Cost Capacity Measure and Previous Audience Cost Measures

ACC Score	Overall Frequency, 1816–2000 (%)	Frequency Among Nondemocracies, 1816–2000 (%)	Frequency Among Democracies, 1816–2000 (%)
	0	52	70
1	25	28	18
2	6	1	19
3	17	1	59

  

Weeks' Score	Overall Frequency, 1946–2000 (%)	Frequency Among Nondemocracies, 1946–2000 (%)	Frequency Among Democracies, 1946–2000 (%)
	0	37	54
1	63	46	86

  

XCONST	Overall Frequency, 1946–2000 (%)	Frequency Among Nondemocracies, 1946–2000 (%)	Frequency Among Democracies, 1946–2000 (%)
	0	4	5
1	24	36	0
2	8	12	0
3	24	36	0
4	2	3	0
5	8	5	13
6	4	1	11
7	27	2	76

  

Prins' Score	Overall Frequency, 1946–2000 (%)	Frequency Among Nondemocracies, 1946–2000 (%)	Frequency Among Democracies, 1946–2000 (%)
	0	16	24
1	84	76	100

(Notes. For audience cost capacity (ACC) measure, column totals may not add to 100% due to rounding. Democracy is defined as a score of six or higher on the Polity democracy–autocracy index. Weeks' score equals one if the regime is democratic, single-party, military, dynastic monarchy, or other autocracy, zero otherwise. XCONST is the executive constraints measure from Polity IV, and Prins' score refers to the measure used in Prins 2003).

tion's leader faces sanctions given his actions. Thus, the value of audience costs is that they are a credible signal of a state's resolve. As Schultz (1999) notes, it is difficult to test audience costs directly due to the incentive a leader has to avoid behaviors in which he would suffer such costs. Therefore, any test of institutions that lead to audience cost production must be an indirect test. Rather than test the actual level of audience costs produced, we must examine those situations in which a leader would avoid having to back down from his threat. Past studies have provided this test by examining the rate at which other states reciprocate a militarized challenge (Schultz 1998; Prins 2003; Weeks 2008). The idea expressed through such a test is that states that are better able to communicate their level of resolve should face lower rates of resistance. Stated in terms of our composite ACC measure, we expect the following:

**Hypothesis 1:** *As a leader's audience costs capacity (ACC) increases, other leaders will be less likely to resist a military challenge, that is, they will be more likely to back down.*

## Research Design

If our measure is valid and existing theoretical arguments are sound, then we should observe that as ACC increases, targets are less likely to reciprocate a militarized challenge. The unit of analysis for our initial tests is the directed-dispute-dyad-initiation. Following Schultz (1999), Prins (2003), and Weeks (2008), we only examine original participants in the dispute. A militarized interstate dispute (MID) is an event "in which the threat, display, or use of military force short of war by one member state is explicitly directed toward the government, official representatives, official forces, property, or territory of another state" (Jones, Bremer, and Singer 1996:168). The dependent variable for this research is *MID Reciprocation*, which equals one when the target of a MID responds with a threat, display, or use of force; zero otherwise.<sup>9</sup> The reason we focus on reciprocation is the difficulty, addressed earlier, in testing audience costs directly due to the incentive a leader has to avoid behavior in which he would suffer such costs. Reciprocation allows us to examine whether the targeted state believes the credibility of the initiator's action. As previous works have argued, a state that generates high levels of audience costs should be less likely to face reciprocation to its threat or use of force because of the credibility generated when a leader faces potential audience costs. A leader in a state that can generate audience costs is unlikely to initiate militarized action and then back down, for doing so calls the leader's competence into question and subjects the leader to audience costs (Schultz 1998; Smith 1998). We use version 3.1 of the COW MID data for the years 1816–2000 (Ghosn, Palmer, and Bremer 2004) as generated by EUGene (Bennett and Stam 2000).

Of course, the primary independent variable of interest is ACC, whose construction we described previously. In addition, we include the same battery of control variables as Weeks (2008): Major Power Initiator-Major Power Target, Minor Power Initiator-Major Power Target, Major Power Initiator-Minor Power Target, Initiator's Relative Power, Contiguity, Allies Dyadic Alliance Portfolio Similarity, Initiator's Alliance Portfolio Similarity with the Regional Leader, Target's Alliance Portfolio Similarity with the Regional Leader, Territorial Dispute, Regime Dispute, Policy Dispute, and Other Dispute. For a detailed discussion of the operationalization of these variables, see the Appendix 1.

## Empirical Tests of the Validity of ACC

We begin the assessment of ACC with a set of multivariate logistic models using maximum-likelihood estimation with standard errors clustered on the dispute. In Model 1 (Table 3), we examine the relationship between ACC and MID reciprocation for the post-World War II period. As expected, an increase in ACC decreases the likelihood of MID reciprocation. Substantively, a change in ACC from its minimum to its

<sup>9</sup> Specifically, the variable MID reciprocation equals one when the Correlates of War (COW) hostility index score for the target (cwhost2) is greater than one.



TABLE 3. Logit Analysis of Effect of Audience Cost Capacity on MID Reciprocation Dependent Variable: Did the Target of a MID Respond with Threat/Force? 1 Yes, 0 No

<i>Independent</i>	<i>Model 1</i>	<i>Model 2</i>	<i>Model 3</i>	<i>Model 4</i>	<i>Model 5</i>	<i>Model 6</i>
<i>Variable</i>	<i>ACC 1946–2000</i>	<i>Weeks 1946–2000</i>	<i>ACC, Weeks 1946–2000</i>	<i>ACC 1816–2000</i>	<i>ACC 1816–1945</i>	<i>Low/High ACC 1946–2000</i>
ACC State A	–0.245 (0.068)***		–0.356 (0.108)***	–0.165 (0.052)***	–0.181 (0.087)**	
Low-ACC Autocracies						0.472 (0.185)***
Low-ACC Democracies						0.668 (0.295)**
High-ACC Autocracies						0.067 (0.473)
Personalist		1.008 (0.220)***	0.298 (0.298)			
Single-Party		0.021 (0.219)	–0.825 (0.333)**			
Military		0.444 (0.352)	–0.194 (0.392)			
Hybrid		0.450 (1.067)	–0.257 (1.078)			
Other Autocracy		0.062 (0.241)	–0.353 (0.268)			
Dynastic		0.319 (0.591)	–0.465 (0.635)			
Non-Dynastic		0.633 (0.375)*	–0.079 (0.418)			
Interregna Autocracy		0.528 (0.199)***	–0.064 (0.264)			
Interregna Democracy		0.209 (0.457)	0.065 (0.459)			
Controls (not shown)						
Constant	0.081 (0.245)	–0.683 (0.276)**	0.137 (0.356)	–0.186 (0.206)	–0.536 (0.435)	–0.507 (0.288)
Log likelihood	–995.93	–986.30	–979.99	–1606.84	–581.98	–999.05
Observations	1,667	1,667	1,667	2,627	960	1,667

(Notes. Robust standard errors, clustered on dispute, in parentheses. “Controls” are independent variables from Weeks (2008) specification that are used, but not shown, in all models and are listed in the Appendix 1.

\* $p < .10$ , \*\* $p < .05$ , \*\*\* $p < .01$ .)

maximum value decreases the likelihood of MID reciprocation by about 40%.<sup>10</sup> To ensure that our data are comparable to those used in existing research, we replicate Weeks (2008) core model specification, and our findings are nearly identical (Model 2). In Model 3, we include all of Weeks’ regime type variables as well as our measure of ACC. The results show that ACC is still significant and negative, but all of Week’s previously significant regime variables have lost significance. ACC appears to be a more robust measure of audience costs than the regime type approach.

Next, we vary the time period analyzed as a way of checking for temporal treatment effects. Given the historical uniqueness of the Cold War, this is particularly important for studies of conflict behavior. In Model 4, we examine the pre–Cold War era (1816–1945) and in Model 5, the entire time period 1816–2000. The variable ACC is statistically significant and negative in both models, suggesting that the validity of ACC as an indicator of audience costs is not limited to the post-war era.<sup>11</sup>

Some examples of specific countries illustrate the utility of ACC. France exhibits significant variation on our ACC measure since 1816. When it had an ACC score of zero, targets reciprocated about 46% of the time; when

its ACC score was one, it had a reciprocation rate near 60%, but when its ACC score was two or three, targets only reciprocated 38% and 39% of the time, respectively. The experience of Spain is even more consistent with the audience cost theory and our measure. When Spain’s ACC was zero, targets reciprocated about 64% of the time, but when its ACC was at least one, it had no reciprocations, though it initiated 12 disputes. Chile had an ACC score of zero during the Pinochet years, and its targets always reciprocated its disputes. However, in the years during which Chile had an ACC score of one, only 18 of 31 disputes were reciprocated. Turkey’s experience is also consistent with the posited effects of ACC. When Turkey had an ACC score of zero, about 68% of targets reciprocated, but only about 44% reciprocated when Turkey had an ACC score greater than zero.

Notwithstanding the strength of the multivariate model results and the aforementioned examples, it would still be nice to know whether the results are driven primarily by democracies. To this end, we conducted two analyses. First, we deleted all democratic states from the data, with democracy defined as any state scoring six or higher on the Polity democracy–autocracy index. The variable ACC is still significant and negative. Thus, not only does our measure capture variation across all regimes, it shows that there is a significant variation within autocratic regimes. Some autocracies can generate audience costs, and ACC is a useful indicator of autocratic ACC. Second, if our measure is valid, then we should find (i) that high-ACC democracies and high-ACC autocracies have lower reciprocation rates than low-ACC democracies and low-ACC autocracies; (ii) that low-ACC democracies and low-ACC autocracies have similar reciprocation rates; and (iii) that high-ACC democracies and high-ACC autocracies have similar reciprocation rates. To

<sup>10</sup> We used Clarify (King, Tomz, and Wittenberg 2000) to calculate the change in predicted probability. This change is for a dyad involving two contiguous minor powers over a policy issue; all continuous variables are set to their mean, and binary variables are set at their median value.

<sup>11</sup> The results for Model 4 hold if we only examine bilateral disputes and drop all disputes during the World War years (1914–1918, 1939–1945). In addition, the ACC measure is negative and significant in additional analyses in which we examine (i) only disputes between autocracies; (ii) only bilateral disputes; and (iii) only politically relevant dyads. We also examined models with ACC disaggregated into its two component variables, *xropen* and *parcomp*, and an interaction of these variables. Consistent with the arguments we advance, neither component variable was significant but the interaction term was statistically significant and negative (Clark, Gilligan, and Golder 2006).

identify low- and high-ACC states, we have to choose a cutpoint on our ACC scale. We chose to identify any state with an ACC score of two or more as having high-ACC, thereby making low-ACC states those with scores of zero or one on our ACC scale. We identify democracies as any state scoring six or higher on the Polity democracy–autocracy index.<sup>12</sup>

For the period 1816–2000, we find the following reciprocation rates: 48.23% for low-ACC autocracies, 50.26% for low-ACC democracies, 31.58% for high-ACC autocracies, and 34.49% for high-ACC democracies. Differences in means tests confirm that there is no statistical difference in reciprocation rates between low-ACC autocracies and low-ACC democracies, that there is no difference between high-ACC autocracies and high-ACC democracies, that low-ACC autocracies are different from high-ACC autocracies, and that low-ACC democracies are different from high-ACC democracies. In addition, we examined multivariate models in which we replaced ACC with low-ACC autocracy, low-ACC democracy, and high-ACC autocracy (high-ACC democracy is the base category). For these multivariate analyses, the expectation is that the two low-ACC variables will be significant and positive and that high-ACC autocracy will be insignificant. This is what we find (see Model 6).

#### *Selection Effects*

Although Prins (2003) and Weeks (2008) subject their measures to extensive sensitivity testing, these tests do not address concerns about selection effects. Schultz (1999) noted that states with higher audience costs might choose targets that are particularly likely to back down; if this is the case, then omitting the features of the target states that make them more likely to back down will negatively bias the coefficient on the audience cost variable. To mitigate this threat to validity, Schultz used target fixed effects as a way of capturing unobserved characteristics of the target states that might influence their likelihood of backing down.<sup>13</sup> However, fixed-effects estimation is potentially problematic with a binary dependent variable as independent variables that have no variation on the dependent variable lead to observations being dropped. King (2001) and Beck (2001) note that this warrants concern.<sup>14</sup>

<sup>12</sup> To shed some light on how ACC varies across autocracies, we note some of the high-ACC autocracies here (as defined by the criteria above). These include Russia starting in 1993, France in the late 1950s and early 1960s, Albania in the late 1990s, and Senegal in the late 1980s and early 1990s. Of course, a significant percentage of autocracies receive an ACC score of 1, as documented in Table 2. It is also worth noting that reciprocation rates for autocracies with an ACC score of zero are significantly different (and higher) than for autocracies with an ACC score of one (49% vs. 45%).

<sup>13</sup> Schultz concludes that there is some evidence for the existence of a selection effect, but it is not strong and he was unable to reject the null hypotheses that the coefficients on the main audience cost variable were equivalent in the models with and without the target fixed effects (Schultz 1999:258).

<sup>14</sup> We did estimate logistic models with target fixed effects, and ACC remained statistically significant and negative. However, the sign and significance of several of Weeks' regime variables change when we estimate a logistic model with target fixed effects.

To better address selection effects, we analyze a bivariate probit with sample selection.<sup>15</sup> The selection equation models the initiation of a MID and the outcome equation models the same process as before, whether the MID was reciprocated. The first probit equation, modeling MID initiation, is completely observed. The second probit equation, modeling whether the MID is reciprocated, is only partially observed, because we only observe opportunities for reciprocation if initiation occurred.<sup>16</sup> Using the bivariate probit allows us to confirm the robustness of the ACC measure even when we take account of potential selection effects.

Table 4 shows the results of two bivariate probit models. In each model, we observe that the parameter estimating the correlation of errors between the two equations,  $\rho$ , is statistically significant, indicating that the probability of MID reciprocation is related to the probability of a MID initiation. Even when addressing the selection process, we find, in both models, that the variable ACC is significant and negative in the outcome equation (where the dependent variable is reciprocation). As before, this result holds for multiple time periods: 1946–2000 (Model 7), 1816–2000 (Model 8), and 1816–1945 (not shown).<sup>17</sup>

#### **Conclusion**

We started this research asking which domestic institutions were central to the generation of audience costs. A first wave of research on audience costs answers this question with one word: democracy. That is, democratic political institutions allow for the generation of audience costs, while nondemocratic political institutions do not. However, this runs counter to initial discussions of the concept of audience costs, which noted that some nondemocratic regimes should be able to generate audience costs. Democracy, we contend, is not a satisfactory answer for a second reason. It does not specify which institutions associated with democracy lead to ACC. Recent research echoes some of these criticisms (Prins 2003; Weeks 2008). None of the measures currently used, however, allow for variation within regimes that can generate audience costs. If ACC contributes to conflict resolution short of war, then understanding which institutions facilitate the realization of these costs, rather than relying on regime types as proxies for the relevant institution, is an important task.

<sup>15</sup> This model is sometimes referred to as a censored probit (Lemke and Reed 2001).

<sup>16</sup> Although the model is, technically speaking, identified when the same explanatory variables appear in both equations (Greene 2008:822), this identification is based on assumptions about the distribution of the residuals instead of on variation in the explanatory variables (Sartori 2003:112). Fortunately, we have theoretical reasons to avoid using the exact same set of independent variables in both equations. We follow the norm in studies of conflict initiation in including time since the previous MID (the peace-years variables) as factors that influence the initiation of MID but not its reciprocation, and we include the issue variables, which describe the type of conflict of the MID itself, in the outcome equation.

<sup>17</sup> Anderson and Souva (2010) argue that any accountability mechanism, such as ACC, should be interacted with the balance of power when explaining the initiation of militarized disputes and that accountability and power positively interact. Our results confirm their findings. Dropping the interaction from the first stage does not affect our second-stage findings.

TABLE 4. Bivariate Probit with Sample Selection Model of Effect of Audience Cost Capacity on MID Initiation and Reciprocation. Dependent Variable (Selection equation): Was a MID Initiated? 1 Yes, 0 No. Dependent Variable (Outcome equation): Did the Target of a MID Respond with Threat/Force? 1 Yes, 0 No

Independent Variable	(Model 7) ACC 1946–2000		(Model 8) ACC 1816–2000	
	Selection	Outcome	Selection	Outcome
ACC State A	–0.106 (0.025)***	–0.119 (0.038)***	–0.060 (0.019)***	–0.092 (0.027)***
Power Ratio	0.068 (0.058)	–0.033 (0.141)	–0.03 (0.057)	–0.046 (0.108)
ACC State A × Power Ratio	0.059 (0.034)*		0.060 (0.026)**	
Peace-Years	–0.110 (0.008)***		–0.106 (0.006)***	
Territory Issue		0.033 (0.097)		0.209 (0.073)***
Regime Issue		–0.061 (0.150)		0.268 (0.135)**
Policy Issue		–0.837 (0.097)***		–0.562 (0.075)***
Other Issue		–0.759 (0.183)***		–0.446 (0.155)***
Controls (not shown)				
Constant	–0.571 (0.180)***	1.109 (0.398)***	–1.493 (0.165)***	1.550 (0.310)***
Correlation parameter ( $\rho$ )	–0.457 (0.085)***		–0.496 (0.64)***	
Log likelihood		–8776.4		–14260.2
Observations		986,613		1,211,320

(Notes. Robust standard errors, clustered on dyad, in parentheses. “Controls” are independent variables that are used, but not shown, in all models and are listed in the Appendix 1.

\* $p < .10$ , \*\* $p < .05$ , \*\*\* $p < .01$ .)

In this paper, we offer a more precise conceptualization of ACC than found in the extant literature, arguing that audience costs are not driven primarily by executive constraints or factionalism. Rather, we contend that ACC is a function of political contestability and, drawing on Lake and Baum (2001), note that contestability is a function of both alternative rulers and the cost of mobilizing to challenge the leader. As contestability increases, audience costs increase. Contestability is higher when the path to the head of state position is open to a larger group and when the costs of political mobilization are low. We create a measure of ACC that unites these two components and test its validity by situating it within extant models of interstate conflict. This is the first measure that has variation between more and less democratic political systems and variation within non-democratic political systems. Our measure also covers a larger empirical domain than recent efforts to identify which autocratic regimes are able to generate audience costs. We find that our measure of ACC performs exceptionally well. As a state’s ACC increases, targets are more likely to back down from a militarized challenge. We find support for this hypothesis across multiple model specifications, different time periods (including pre–Cold War), and even after controlling for selection effects. The latter is especially relevant as previous research has not adequately addressed this concern. Although our measure of ACC is still an imperfect proxy for the central institutional mechanisms behind the production of audience costs, the robust empirical support we find for it suggests that it is tapping into the primary aspects of the concept.

### Appendix 1

We include the following 13 control variables in our models in Table 3 in addition to our primary indepen-

dent variable of interest, ACC. These are the same variables and operationalizations used by Weeks (2008). Each of these variables was generated using EUGene (Bennett and Stam 2000) version 3.204. The “Controls” referred to in Table 4 also include a measure of the log of the distance between countries in a dyad in both the selection and outcome equations, and cubic splines in the selection equations.

*Major Power Initiator–Major Power Target:* This variable equals one if both the initiator and target of the MID were major powers, as determined by the COW; otherwise, it is zero.

*Minor Power Initiator–Major Power Target:* This variable equals one if the initiator was not a COW major power, while the target was a COW defined major power, zero otherwise.

*Major Power Initiator–Minor Power Target:* This variable equals one if the initiator was a COW major power and the target was not a COW major power, zero otherwise.

*Minor Power Initiator–Minor Power Target* is left as the reference category.

*Initiator’s Relative Power* equals the COW National Capabilities score for State A divided by the sum of the capabilities for States A and B.

*Contiguity* equals one if the states in the dyad are contiguous on land or no more than 400 miles apart across water, zero otherwise.

*Ally* equals one if the two states share a defense pact, neutrality pact, or entente, as defined by the COW project, zero otherwise.

*Dyadic Alliance Portfolio Similarity* is the weighted global S score between the two states in the dyad.

*Initiator’s Alliance Portfolio Similarity with the Regional Leader* is the S score between the initiator and the regional leader using countries in the relevant region.

*Target’s Alliance Portfolio Similarity with the Regional Leader* is the S score between the target and the regional leader using countries in the relevant region.

*Territorial Dispute* equals one if the primary revision coding of the dispute is territory, zero otherwise.

*Regime Dispute* equals one if the primary revision coding was Regime.

*Policy Dispute* equals one if the primary revision coding was Policy. (If no revision type was specified in the MID, it is coded as *Other*.)

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