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February 2015

CEEPR WP 2015-001

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A Model-Based Assessment of the Two-Level Game between International Climate Change Negotiations and Domestic Politics

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Abstract

In climate negotiations, negotiators frequently reject soft forms of cooperation that require no hard commitments and at best simple coordination. Why? We argue that in some cases negotiators reject these cooperative initiatives because they can thus signal their resolve to domestic audiences. If domestic audiences expect tough bargaining in the future, and therefore prefer a resolute negotiator, the incumbent negotiator may reject soft forms of cooperation to avoid losing the support of a hawkish domestic audience. In this paper, we develop a formal model to clarify the relationship between domestic politics, distributional conflict, and the choice between “soft” and “hard” cooperation. Applying this model to South Africa’s and India’s positions on transparency of domestic mitigation efforts during the 2005-2009 period provides tentative evidence for the foregoing theory. South Africa’s moderate domestic audiences allowed negotiators to compromise and even be proactive, while India pursued a conservative position. When India’s new Environment Minister, Jairam Ramesh, attempted to use transparency to increase cooperation with industrialized countries in 2009, he was faced with heavy domestic criticism. More generally, the model thus sheds light on how the shadow of a distributional conflict can prevent soft forms of cooperation.

Keywords: climate policy, game theory, international negotiations, two-level games, transparency

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1 Introduction

In climate negotiations, negotiators frequently reject “technical” initiatives that only require simple coordination, instead of realizing affordable reputational gains from cooperation. For example, promoting the international transparency of greenhouse gas emissions through regular inventories and reporting by all major economies has been one of the key sources of disagreement in the United Nations (UN) climate regime, although the initiatives to enhance transparency would not require countries to accept legally binding obligations concerning emissions reductions or provide climate finance. It is not surprising that big developing countries reject legally binding requirements to mitigate emissions, but it is puzzling that “softer” initiatives, such as data exchange and regular inventories, face opposition.

Typical examples of this sensitivity towards transparency and reporting were once again seen in the Lima Conference of Parties in December 2014. The paragraph intended to provide a framework for countries to communicate their mitigation actions ended up softened to the extreme, merely noting that the information provided by Parties “may include, as appropriate, inter alia, quantifiable information” (UNFCCC, 2014). The attempt to include voluntary transparency measures as “a non-intrusive and facilitative dialogue, respectful of national sovereignty – of those Parties willing to do so” was removed from the final decision text altogether.³

Conventional cooperation theories based on neoliberal institutionalism (Keohane, 1984; Abbott and Snidal, 1998; Koremenos, Lipson, and Snidal, 2001) cannot sufficiently explain such cases. If “soft cooperation”, defined as coordination that does not oblige behavioral change, offers flexibility and cooperation at a low cost (Abbott and Snidal, 2000), why would the seemingly technical issue of measuring and reporting provoke major and long lasting controversies? Why would big developing countries adopt an intransigent position on reporting, instead of using it as an opportunity to realize affordable reputational and coordination gains from cooperation with the industrialized countries? Conventional accounts of international bargaining offer little more guidance here, given their emphasis on bargaining over “hard”, enforceable commitments to behavioral change (Fearon, 1998; Gilligan, 2004; Putnam, 1988).

To clarify the relationship between domestic politics, distributional conflict, and the choice between “soft” and “hard” cooperation, we develop a formal model. Since our emphasis is on the strategic decisions of national leaders, we have to account for potentially complex incentives and choice under incomplete information. Our model is developed around the following intuition. First, we assume that state governments

³ Draft decision, circulated 11 December 2014, on file with author.

can engage in “soft cooperation” that is not characterized by distributional conflict. In our empirical case, for example, soft cooperation consists of reporting with guidelines and common accounting rules for all parties. Conversely, legally binding obligations for behavioral change are modeled as “hard cooperation,” with the assumption that it features bargaining under distributional conflict.⁴ For example, hard cooperation could be about binding commitments to reduce greenhouse gas emissions or trade tariffs. Second, we assume that a government’s political survival is determined by a domestic audience, such as the legislature or the military elite, depending on the regime type of the state. Since the domestic audience has limited information regarding the government’s preferences, it uses soft cooperation as an indicator for whether the government is “moderate” or a “hardliner.” In equilibrium, a negotiator’s approach to soft cooperation informs the domestic audience about his likely behavior in bargaining over hard cooperation with binding obligations.

We propose that countries at times reject soft cooperation in international negotiations if they worry that their domestic audiences punish them for adopting moderate positions. If domestic audiences believe that their interests are best represented by intransigent negotiators who drive a hard bargain in the future, then negotiators have incentives to reject even the most innocuous proposals. If the negotiators were to accept proposals for soft cooperation, their domestic audiences would worry about their willingness to compromise on other issues in the future. Since moderate negotiators might not drive hard bargains in negotiations in a distributional conflict, such as over emissions reduction commitments, audiences would remove negotiators who appear irresolute by accepting soft cooperation. In the shadow of a distributional conflict, soft cooperation may fail due to domestic audience pressure.

Our model generates a variety of predictions that allow us empirical testing. For example, the model predicts that only moderate negotiators have strong incentives to deviate from the domestic audience’s preferred policy, and counter to intuition, the response of hardline negotiators is not symmetric. They do not reject soft cooperation due to their own policy preferences. To test the theory, we conduct a comparative analysis of Indian and South African negotiation behavior in UN climate negotiations during the 2005-2009 period. At this time, reporting and international transparency was once again one of the key “soft” issues on the agenda. South Africa adopted a moderate negotiation position throughout, India’s position remained much less compromising. However, toward the 2009 Copenhagen summit India’s opposition begun to recede, as the newly appointed Environment Minister, Jairam Ramesh, sought to portray India as a cooperative country to benefit the wider foreign policy objectives.

⁴ Some analysts may argue that transparency is actually a “hard” issue, and that reporting would lead rather directly to hard, enforceable commitments. For these viewpoints, see *Alternative Explanations* (pp. 18-19).

We offer a quantitative analysis of *Times of India* and *Johannesburg Star* newspaper articles on climate negotiations, complemented with a compact qualitative case study of each country. The results are consistent with the idea that negotiators face pressures to adopt hardline positions even on issues that do *not* involve commitments to behavioral change. Moreover, should they ever deviate from the expected hardline position, their domestic audiences will punish them. The findings also cannot be explained away with references to personal idiosyncrasies, since the evidence on the domestic media and stakeholder response shows that other actors behaved as predicted by the theory. The strategic approach of this Working Paper to the relationship between “soft” cooperation and a distributional conflict offers an empirically falsifiable model applicable to a variety of issue areas beyond climate policy.

2 Soft Cooperation, Distributional Conflict, and Domestic Politics

The importance of global regulation has led to the “legalization” of international relations (Chayes and Chayes, 1995; Abbott et al., 2000). There is significant variation in the scope, form, and content of international agreements. Driven by the realist challenge to prove that international law can exert influence on nation states, much of the scholarship focused on international agreements in their “hard law” form, such as the World Trade Organization. Since the early 1990s, both legal scholars and political scientists have shown increased interest in “soft law” (Lipson, 1991; Chinkin, 1989; Klabbers, 1998; Abbott and Snidal, 2000), and there is a growing body of research that studies networks, transnational standards, partnerships with non-state actors, and other soft modes of global governance (Braithwaite and Drahos, 2000; Shelton, 2000; Bernstein and Cashore, 2007; Black, 2008).

The literature gives many different typologies to approach this multitude of international agreements. Some articles prefer a formalist approach, in which the form or the source defines the “hardness” of the agreement, and “soft law” is simply something that is not legally binding, that does not emerge from a treaty or customary law. Others, such as Abbott and Snidal (2000), place more emphasis on the substantive dimension, using the term “hard law” to refer to legally binding agreements that *oblige* a behavioral change, with a degree of *precision* and *delegation* of authority to the international level. Agreements that lack this criteria fall under the realm of “soft law”. Our binary division of “soft cooperation” and “distributional conflict” highlights the content of the international agreement in question, instead of focusing on the legal form (Abbott and Snidal, 2000; Abbott et al., 2000).

We explore how the distributional conflicts – surrounding “hard law” that obliges behavioral change (Abbott and Snidal, 2000) – may impede “soft cooperation” that does not require such commitment to

change state behavior. It bears emphasizing that our analysis relies heavily on the rationalist approach to international law and cooperation (Keohane, 1984; Lipson, 1991; Abbott and Snidal, 1998; Goldsmith and Posner, 2005; Guzman, 2008), which emphasizes that different agreements offer states different costs and benefits. From this point of view, states and other international actors utilize international agreements to order their relations because it helps to reduce transaction costs, strengthen the credibility of their commitments, expand available political strategies, and resolve problems of incomplete contracting.

Since international agreements also restrict state behavior and sovereignty, the rationalist paradigm sees the lower sovereignty cost to states as a key advantage of soft cooperation (Lipson, 1991; Abbott and Snidal, 2000; Kirton and Trebilcock, 2004; Shaffer and Pollack, 2010). Soft cooperation reduces a government's policy autonomy to a lesser extent, allows experimentation with different rules in complex circumstances, and facilitates compromise in bargaining (Abbott and Snidal, 2000). Even if states are not ready to accept legal obligations to change their behavior that present high compliance costs, they may benefit from less intrusive forms of cooperation.

2.1 Model

The game is played by a *leader*, a domestic *audience*, and a *foreign country*. The leader and the audience are in one country, and their country engages in formal negotiations with the foreign country. For simplicity, we model the foreign country as a unitary actor. We also simplify by assuming the domestic audience is unitary; while this latter assumption is not realistic, the domestic audience's position can be thought of the median position of a diverse domestic audience. The leader's Bayesian type is his private information. It can be "moderate" or "hardliner," and it is not revealed to any other players.

Sequence of moves. The sequence of moves is the following:

1. The leader decides on soft cooperation with the foreign country, $S \in \{YES, NO\}$.
2. The audience selects a support level for the leader, $L \in \{-1, 0, 1\}$.
3. The leader engages in Nash bargaining with the foreign country over hard cooperation.

This sequence captures the intuition that soft cooperation may influence the domestic audience's decision to support or oppose the leader. This effect depends on whether the domestic audience wants to keep a moderate or hardliner leader for hard cooperation. Here, soft cooperation is temporally prior to hard cooperation. Empirically, this may not always be the case. Our interest is in situations in which hard cooperation with legally binding obligations is difficult. In such circumstances, it seems plausible to assume that hard cooperation occurs with delay, if at all. This does not prevent countries from engaging in soft cooperation.

Information. The leader learns his Bayesian type, $t \in \{MOD, HAR\}$, as the game begins. All other actors initially believe that the leader is a hardliner with a prior probability $p \in (0, 1)$. If the leader is replaced, the new leader is also a hardliner with the same prior probability p .

The leader's type is revealed to the foreign country before the Nash bargaining game begins. The reason for assuming that the domestic audience is unaware of the leader's type is threefold. First, a negotiator is rarely, if ever, responsible for one set of negotiations. The domestic audience's ability to evaluate the negotiator's preferences across many negotiations *ex ante* is limited. Second, the negotiator is typically chosen through a complex process of coalition formation within the government, making it hard for any given member of the domestic audience to select an optimal negotiator. Finally, the domestic audience has many issues to attend and international negotiations are but one issue on their agenda. It would be hard for the domestic audience to invest enough time and energy to fully identify the negotiator's preferences in advance. These same observations also provide an explanation for why there may be a discrepancy between the domestic audience's and the negotiator's preferences, similar to typical principal-agent issues in political institutions (Putnam, 1988; Milner, 1997).

For simplification, we assume the negotiators are aware of each other's type. This simplification is analytically innocuous because the international negotiations only occur at the last stage of the game, leaving each leader with ample opportunity to signal his type to the other leader in the negotiations themselves. In other words, it is not necessary to send signals to the foreign country through soft cooperation. A leader can focus on sending signals to the domestic audience at the soft cooperation stage and then make strategic bargaining moves toward the foreign country's leader in the negotiations themselves. For example, it is common for international negotiators to threaten to abandon the talks unless the other party offers concessions, but such signals are too late into the game from the domestic audience's perspective.

Nash bargaining. The Nash bargaining game is described and solved in detail in the mathematical appendix. The main assumption is that the leader and the foreign country share a pie worth $\pi > 0$. The solution is the Nash Bargaining Solution, so in equilibrium they share the surplus over their disagreement points 50 – 50. This bargaining solution splits the difference between the two countries based on their relative bargaining power, and this relative bargaining power depends on the disagreement points only. As a country's dependence on cooperation increases, its bargaining position deteriorates because it cannot credibly threaten to reject cooperation.

Political survival. If $L = -1$, the audience actively opposes the leader. Consequently, the leader loses power. If $L = 0$, the leader survives with probability $\lambda = \frac{1}{2}$, because the audience neither supports nor opposes the leader. The simplifying assumption of equal survival probability is important because it prevents complications from an intrinsic bias toward fearing the interest group's opposition as opposed to hoping for its support. If $L = 1$, the audience actively supports the leader so she retains power with certainty.

When the leader does not survive, a new leader type is drawn from the prior probability distribution. Thus, the new leader will be a hardliner with probability p . This assumption can be motivated with reference to a group of political competitors with unobservable preferences. If the current leader loses power, a new leader must be chosen. The new leader has yet to establish a reputation for international negotiation positions, so his Bayesian type is subject to uncertainty.

Foreign country payoffs. The foreign country obtains some positive payoff $F^S > 0$ if the leader agrees on soft cooperation. In the Nash bargaining game, it obtains a disagreement payoff of zero from failure. Since the pie to be distributed is worth π , in equilibrium the foreign country's Nash bargaining payoff upon successful bargaining is $\frac{1}{2}(\pi - q)$, where q is the leader's disagreement payoff, as shown in the mathematical appendix. This payoff must be strictly positive for successful bargaining.

Audience payoffs. The audience obtains some positive payoff $A^S > 0$ if the leader agrees on soft cooperation. If the leader and the foreign country fail to reach an agreement in the Nash bargaining game, the audience obtains a disagreement payoff normalized to zero. If the leader and the foreign country successfully reach an agreement, the payoff to the audience is $W(x)$, where W is a strictly increasing function of the leader's bargaining share $x \in [0, 1]$. Notably, we do *not* assume that W is necessarily positive: it is possible that the audience prefers no deal to a bad deal. In this case, the audience can be regarded as relatively hawkish.

Leader payoffs. The leader obtains a payoff with three parts. From soft cooperation, she obtains a payoff bonus of +1. Since soft cooperation is modeled as a coordination effort, we assume that this payoff does *not* depend on the leader's Bayesian type.⁵ If the leader remains in office, we assume she reaps a bonus of $R > 0$. This denotes the direct value of office, either through private rents or the ability to exercise domestic power.

From Nash bargaining the leader obtains a payoff that depends on his disagreement payoff and bargaining share. The disagreement payoff to the leader is q , where $q = q$ for a hardliner and $q = \bar{q}$ for a moderate. Thus, a hardliner is a more aggressive bargainer than a moderate leader. In the Nash bargaining game, the leader's equilibrium payoff is q whenever no bargaining range exists because $q \geq \pi$. To avoid implausible outcomes, we suppose $q < \pi$ so that the moderate leader is always willing to bargain. However, we allow the possibility that $q > \pi$, so that the hardliner may prefer no deal at all.

If $q < \pi$, mutually profitable bargaining is possible. The equilibrium bargaining payoff to the leader is

$$q + \frac{1}{2}(\pi - q). \quad (1)$$

The first term is the disagreement payoff, and the second term is the leader's share of the bargaining surplus. Notably, this equilibrium bargaining payoff is always strictly increasing in the value of the disagreement payoff q . Thus, a hardliner leader can expect a higher equilibrium bargaining payoff than a moderate leader.

Strategies. The foreign country only moves in the Nash bargaining game, and its bargaining strategy are fully described in the mathematical appendix. The leader's strategy comprises (i) a mapping from his type into the initial soft cooperation decision and (ii) a bargaining strategy as described in the mathematical appendix. The audience's strategy maps the leader's soft cooperation decision into a support decision.

2.2 Solution Concept

For a dynamic game of incomplete information, an appropriate solution concept is the Perfect Bayesian Equilibrium in pure strategies. An equilibrium of the game is a strategy vector that meets the following conditions. First, the actions in the Nash bargaining game must be best responses to each other. Second, the audience's support level L^* must be optimal given the audience's beliefs and the equilibrium of the Nash

⁵ All results hold even if the soft cooperation bonus varies with the Bayesian type, as long as the payoff difference is sufficiently small.

bargaining game. Third, the leader's soft cooperation decision S^* must be optimal given the equilibrium of the subgame that it induces. Finally, beliefs must be consistent with behavior on the path of play. To simplify, we restrict attention to pure strategies.

As an equilibrium refinement, beliefs "off the path of play" are updated as follows: if the leader deviates from equilibrium play by refraining from soft cooperation, the audience believes that the leader is a hardliner. The audience responds to deviations intuitively: a deviating leader is probably a hardliner. Given that the hardliner must obtain a higher payoff from the Nash bargaining game than the moderate leader, and the soft cooperation payoffs are identical across Bayesian types, this equilibrium refinement is reasonable. Indeed, the refinement is innocuous in that the equilibria of the game could also be constructed by assuming that the hardliner is slightly less interested in soft cooperation than the moderate leader.

A second equilibrium refinement is that all equilibria off the Pareto-frontier are rejected. If two equilibria exist, and one of them produces an unambiguously higher payoff for all players of the game, the Pareto-inferior equilibrium is rejected. This refinement is used to remove substantively implausible equilibria, whereby all players of the game would gain from a simple and strategically credible change of strategies. Finally, we assume that if the domestic audience is exactly indifferent between support levels L , it remains neutral unless this results in non-existence of equilibria. This assumption is plausible if one assumes that active support or opposition carries a small transaction cost.

2.3 Pooling Equilibria

The game has two classes of equilibria in pure strategies. First, in a "pooling equilibrium" both governments engage in soft cooperation. Second, in a "separating equilibrium" only moderate governments engage in soft cooperation. In the mathematical appendix, we show that no other equilibria in pure strategies may exist. We begin with the pooling equilibria of the game. First, we describe the conditions under which both types of leader engage in soft cooperation.

Proposition 1 (pooling equilibrium, soft cooperation). *A unique pooling equilibrium such that both leader types engage in soft cooperation exists if and only if one of the following conditions hold:*

1. *The audience's expected payoff from bargaining on hard cooperation is higher under a moderate than a hardline leader;*

2. *The audience's expected payoff from bargaining on hard cooperation is higher under a hardline than a moderate leader, but the hardline leader's valuation of soft cooperation exceeds his valuation of the expected payoff from retaining power with a higher probability due to increased audience support.*

The first condition is empirically essential. If the domestic audience wants a moderate leader at the bargaining table because the hardliner is expected to fail to reach a deal, soft cooperation can be expected. Neither type of the leader has an incentive to deviate, for any deviation would result in the domestic audience's withdrawing support to the leader. In our case study of South Africa's climate policy, we show that this condition is met.

The second condition is somewhat more restrictive, but theoretically interesting. Even if the audience prefers a hardline leader, this leader may herself ascribe value to soft cooperation. In such a case, pooling to soft cooperation is possible because even hardline prefers to continue soft cooperation. Empirically, this contingency appears unlikely. What about pooling to rejecting soft cooperation?

Proposition 2 (pooling equilibrium, no soft cooperation). *A unique pooling equilibrium such that both leader types reject soft cooperation exists as long as both of the following conditions hold:*

1. *The audience's expected payoff from bargaining on hard cooperation is higher under a hardline than a moderate leader;*
2. *The moderate leader's valuation of soft cooperation falls below his valuation of the expected payoff from retaining power with a higher probability due to increased audience support.*

This is a key result from our analysis. It shows that if the audience prefers a hardliner, and the expected value of political survival with the audience's support is high, then equilibrium exist such that *all* leaders reject soft cooperation. In this case, the incentive to retain power forces even intrinsically moderate leaders to avoid soft cooperation. If they did so, then the audience would learn that the leader is moderate. This would result in the leader's replacement. In our case studies, India's climate policy before Environment Minister Jairam Ramesh's entry into power seems to fit this pattern.

2.4 Separating Equilibrium

Consider now the scenario of a “separating equilibrium,” whereby the hardline leader decisively rejects soft cooperation while the moderate leader accepts it.

Proposition 3 (separating equilibrium). *In the separating equilibrium of the game, the moderate (hardline) leader type accepts (rejects) soft cooperation. A unique equilibrium exists as long as all of the following conditions hold:*

1. *The audience prefers a hardliner to a moderate;*
2. *The hardliner’s expected payoff from political survival with the audience’s support exceeds the value of soft cooperation;*
3. *The moderate’s expected payoff from political survival with the audience’s support does not exceed the value of soft cooperation.*

This proposition provides a rationale for why some leaders reject soft cooperation in the shadow of distributional bargaining over hard cooperation, while others accept it. By rejecting, hardliners can signal their toughness to domestic audiences. This requires that the value of political survival exceeds the value of soft cooperation. This is a plausible scenario if the audience has a clear preference for a hardliner and the audience’s ability to influence the leader’s political survival is high.

The surprising aspect of this result pertains to the moderate type’s behavior. Why does she not try to signal toughness by rejecting soft cooperation? The reason is that the moderate’s ability to secure concessions in international negotiations is limited. In the actual bargaining, the foreign leader is able to secure a favorable deal when dealing with a moderate. Therefore, the moderate’s own benefit from remaining in the negotiating position is actually lower than that of his hardliner counterpart. Although there is no intrinsic difference between the moderate and hardliner in terms of their goals, the hardliner’s bargaining ability makes him put a stronger emphasis on remaining in office.

2.5 Existence and Uniqueness of Equilibria

We offer a graphical illustration of the possible equilibria in Figure 1. If the audience does not prefer a hardliner, the unique equilibrium has both leader types engaging in soft cooperation. If the audience prefers a hardliner, it is required that the moderate type nonetheless prefers soft cooperation while the hardliner does not.

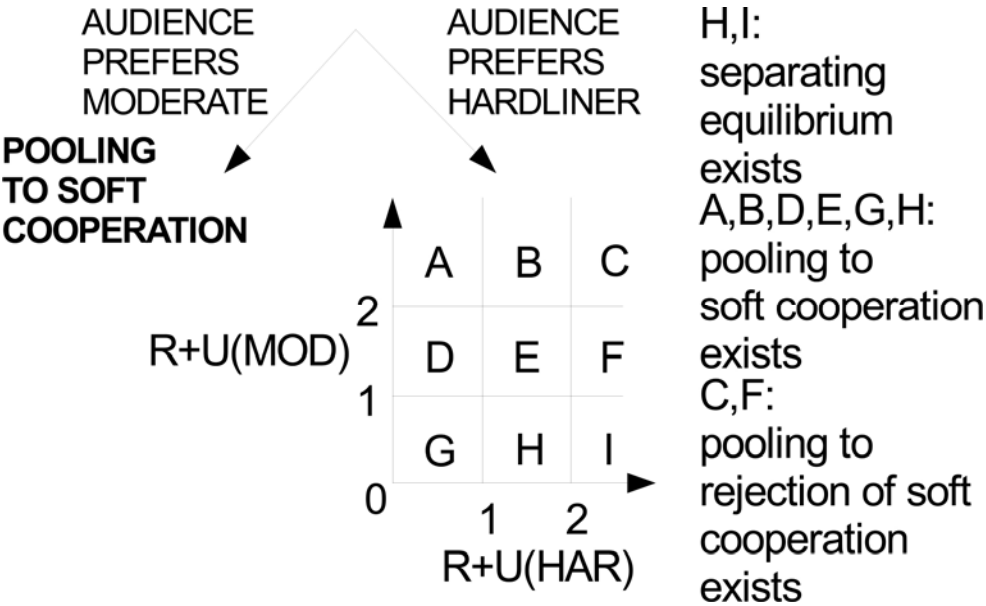


Figure 1: Equilibrium behavior. The arrows indicate whether the audience prefers moderate or hardline leaders, and the chart shows equilibrium existence conditional on the audience’s preference for a hardline leader.

3 Research Design

To test the theory, we exploit cross-national and temporal variation in state behavior in international negotiations. We expect that not only will negotiators of states with moderate domestic audiences accept soft cooperation, but even negotiators of states with hardline domestic audiences may engage in soft cooperation if they (i) ascribe a high value to soft cooperation and (ii) are personally moderate. As a further test, we examine audience reactions to soft cooperation decisions. We would expect hardline domestic audiences to react to soft cooperation in a hostile fashion, even if such soft cooperation does not have any immediate material consequences for the hardliners.

The cases focus on South Africa's and India's strategies in multilateral climate negotiations during the crucial 2005-2009 period. South Africa is a state with a relatively moderate domestic audience, and we indeed find that South Africa's position has been consistently accommodating. India is a state with a hardline domestic audience, yet we find that India's position on soft cooperation shifted dramatically during the first part of 2009. This shift resulted from the entry of a new negotiator, the Environment Minister Jairam Ramesh, in spite of domestic criticism.

3.1 Empirical Implications

Consider now some hypotheses.

Hypothesis 1 (audience supports moderate leaders). *If the domestic audience in a country prefers the moderate leader in distributional bargaining over hard cooperation, the negotiator supports soft cooperation with a high probability.*

In this case, a pooling equilibrium with soft cooperation is the unique equilibrium of the game. This implies that the probability that soft cooperation be rejected is low.

Hypothesis 2 (audience supports hardline leaders). *If the domestic audience in a country prefers the hardline leader in distributional bargaining over hard cooperation, the negotiator supports soft cooperation with a low probability.*

If the audience supports hardline leaders, we should see a lower probability of soft cooperation.

Hypothesis 3 (moderate leaders engage in soft cooperation despite domestic criticism). *Only a negotiator with moderate preferences supports soft cooperation in a country where the domestic audience prefers the hardline leader. The decision to support is followed by domestic criticism.*

Suppose the audience supports hardline leaders. If the audience is politically influential, only negotiators with a clear preference for moderate positions support soft cooperation. They face domestic criticism for doing so.

This is our key hypothesis because it distinguishes the theory from a simple account of audience preferences. Negotiators face international pressures, such as accusations of obstructionism in the

negotiations, that do not affect the domestic constituencies. It is, therefore, logical that their preferences may diverge. The negotiator spends a considerable amount of time and energy in the international realm and may develop a nuanced understanding of the other parties' positions. Our case study of India contains a typical example of diverging preferences of the negotiator and the audience, that is, an internationalist negotiator at odds with the more conservative, hardline audience.

3.2 Case Selection Criteria

For present purposes, case selection presents three important challenges. First, which *issue* should we analyze? It must be salient and such that both soft and hard cooperation are relevant. It must also feature repeated negotiations over time, so that we can explore soft cooperation decisions and audience reactions to these decisions.

Climate policy is in several ways an illustrative case to be investigated. Both soft and hard cooperation are relevant. According to some factions in the international climate negotiations, the ultimate goal of multilateral climate negotiations is the formation of a legally binding, global treaty to prevent dangerous climate change (Barrett and Toman, 2010). Yet negotiating such an agreement is difficult, and much of the actual negotiations focus on soft cooperation issues, including capacity building and reporting (Breidenich and Bodansky, 2009; Brewer, 2008). Additionally, climate policy has been one of the most salient domestic political issues across the globe (Agrawala and Andresen, 1999; Najam, Huq, and Sokona, 2003). Therefore, climate policy is an interesting case for analyzing the negotiator's incentives as a "dual politician" facing simultaneous domestic and international pressures (Evans, Jacobs, and Putnam, 1993).

The second question pertains to choosing the states and events to be analyzed within this issue area. Our research method is a structured and focused comparison of two rather similar country cases. We chose to focus on two important developing countries, South Africa and India. Both are democracies with free media, so information concerning audience preferences is available for measurement. Second, both countries have in many ways similar concerns – they are rapidly industrializing countries with growing greenhouse gas emissions and severe developmental challenges with high levels of poverty, they are concerned about the possibility of binding mitigation obligations in the future, and they both are important regional powers with global ambitions in their foreign policy.

In the case of South Africa, the value of our primary independent variable, namely audience preferences, remained moderate throughout the case study. In the case of India, it remained hardline throughout the case study. But while the attributes of South Africa’s negotiator did not change over time, India’s negotiating team changed significantly. Before 2009 India negotiated with a minister with no real foreign policy profile and influential civil servants, whose background induced a clear preference for traditional hardline positions. In 2009 a new ministerial figure took the lead, with interest in broader foreign policy moderating his personal policy positions, which culminated in the resignation of the top civil servants in favour of the traditional position. This basic setting allows comparison of across countries and over time. Across countries, the value of audience preferences varies. Over time, negotiator preferences remain unchanged in South Africa but change in India. Thus, we would expect South Africa to adopt an accommodating strategy throughout the case study while India’s behavior should become more accommodating over time. Finally, this increased accommodation should be followed by a firestorm of domestic criticism. These expectations are summarized in Table 1.

Table 1: Summary of testable hypotheses.

Expectations	Pre-Copenhagen	Copenhagen
India	Hardline	Moderate
South Africa	Moderate	Moderate

For practical reasons, we limit our quantitative attention to three negotiation rounds, each centering on a specific Conference of Parties (COP). We selected these three rounds in view of their growing importance. The first is the 2005 Montreal COP-11; the second is the 2007 Bali COP-13; and the third is the 2009 Copenhagen COP-15. All three featured extensive substantive questions, attracted lots of domestic attention, and featured intense bargaining between sovereign states.

3.3 Coding the Dependent Variables

There is a plethora of soft cooperation issues being negotiated under the UNFCCC treaty. We have selected the debate concerning monitoring emissions and reporting domestic climate policies to enhance transparency. This has for long been a crunch issue between developed and developing country parties, for example in the debate on the mandate of the Consultative Group of Experts (CGE) since the late 1990s.⁶ Intensive negotiations over transparency have also taken the limelight in our case study meetings such as the Bali COP-13 and the Copenhagen COP-15.

⁶ For background, see http://unfccc.int/national_reports/non-annex_i_natcom/cge/items/2608.php, accessed February 14, 2015.

In sum, the transparency issue, with reporting and its guidelines, scope and institutional follow-up, has been a consistently sticky issue throughout the history of climate negotiations, although it is a soft cooperation agenda item that involves no distributional conflict.

To investigate the positions of India and South Africa on transparency in climate change negotiations, we have drawn on the country submissions to the UNFCCC and the archives of the Earth Negotiations Bulletin,⁷ participatory observation and the authors' notes from 2007 onwards.⁸ The criterion on agreeing and opposing different initiatives is easily verified from country statements in these meetings via the ENB and authors' notes.

Media analysis is a plausible way to identify the differences in the endogenous reactions of home audiences in India and South Africa. Since these reactions are endogenous in the model, they are considered dependent variables in the empirical analysis. For coding audience preferences, we use other data. The role of mass media in shaping and reflecting public understanding of climate change has been researched extensively (Pellechia, 1997; Boykoff and Boykoff, 2004, 2007; Billett, 2010), and the data is rather easily accessible and open to both quantitative and qualitative analysis.

We chose two leading English language daily newspapers, *The Johannesburg Star* (JS) and *The Times of India* (ToI), to represent the media in respective countries. The data from these sources is summarized in Table 2. Public polling cited by Billett (2010) suggests that the print media is the major source of information for the Indian literate public on climate change issues and that 74% of the surveyed population used newspapers as the primary source of information on climate change.⁹ ToI is the leading Indian nationally circulated daily newspaper with readership of 7 million people. JS has a readership of 840,000 and is, according to its website, "unchallenged as South Africa's most influential daily newspaper."¹⁰ We chose these two newspapers because both are established, moderate, mainstream media outlets in their respective countries. The qualitative method allows us to estimate audience preferences without tautological inferences based on the newspaper articles.

⁷ See <http://www.unfccc.int> and <http://www.iisd.ca/enbvol/enb-background.htm>, accessed February 14, 2015.

⁸ We have observed on site the following meetings of the UNFCCC: Vienna (27-31 August 2007), Bali (3-14 December 2007), Bonn (2-13 June 2008), Poznan (1-12 December 2008), Bonn (2-13 June 2009), Bonn (10-14 August 2009), Barcelona (2-6 November 2009), Copenhagen (7-18 December 2009), Bonn (9-11 April 2010), Bonn (2-6 August 2010), Cancun (29 November-10 December 2010), Bonn (6-17 June 2011), Durban (28 November-December 2011), Bangkok (28 August-7 September 2012); Doha (26 November – 7 December 2012); Bonn (29 April – 3 May 2013); and Warsaw (11-22 November).

⁹ See the 2010 Indian Readership survey at <http://archives.newswatch.in/newsblog/7983>, accessed February 15, 2015.

¹⁰ For JS readership, see <http://www.iol.co.za/the-star/readership-1.913275>, accessed February 15, 2015.

Table 2: Newspaper articles in *The Johannesburg Star* and *The Times of India*

Meeting	Time	Place	<i>Times of India</i>	<i>Johannesburg Star</i>
UNFCCC COP-11	12/2005	Montreal	14	3
UNFCCC COP-13	12/2007	Bali	33	4
UNFCCC COP-15	12/2009	Copenhagen	85	33
Total			132 articles	40 articles

The data for the analysis was selected by collecting and analyzing all relevant articles in each chosen newspaper two days prior the meeting, during the proceedings, and four days after the given meeting. Searches were conducted by using a combination of dates and keywords. The keywords were the location of the meeting, such as “Bali” and “climate.” We then dismissed articles that did not concern climate negotiations. The ToI data was collected from the ToI e-archives (Delhi edition); according to the website, the archives should include all articles published in the original paper version. The JS data was collected from the internet archive of the JS paper edition.

3.4 Coding the Independent Variables

The analysis was built on the assumption of audience preferences staying constant over time. The stability of the preferences of the Indian elite in climate politics is well documented (Rajan, 1997; Rangreji, 1999; Rajamani, 2008; Dubash, 2009; Vihma, 2011; Dubash, 2012), and the literature analysis indicates that there has not been a concrete shift in audience preferences in India. South African elite preferences have been internationalist since the end of the Apartheid era, following some unsuccessful unilateralist policy experiments in the 1990s (Mandela, 1993; Olivier and Geldenhuys, 1997; Kagwanja, 2006; Jordaan, 2012). In our period of study, it is credible to argue that the audience preferences in climate policy have been stable.

The negotiator is a “dual politician” who faces pressure from both domestic audience and the international sphere (Evans, Jacobs, and Putnam, 1993). The Indian example underscores that the relation of domestic public opinion and the negotiator is not direct and trivial, in which negotiator simply does what audience asks. In the Indian case, the opinion of the domestic public does not change, yet the negotiator goes through a notable political struggle. In the case of South Africa, the value of our primary independent variable, namely audience preferences, remained moderate throughout the case study. We argue that the relationship of audience and negotiator is based on signaling and takes place in conditions of asymmetric information and uncertainty.

In practice, the Indian position in climate change negotiations in the 1990s was largely formed and outlined by civil servants of leading ministries, and they did not face international pressure via the broader foreign policy and its issue inter-linkages (Rajan, 1997). This practice was changed in 2007, when the Prime Minister's Council on Climate Change, a high-level working group chaired by the prime minister himself, was formed to coordinate India's national climate change action. The real policy shift took place in 2009 via Minister Jairam Ramesh. A known cosmopolitan, Minister Ramesh's agenda as environment minister was peppered with broader foreign policy concerns, most notably towards China, but also in strategic relations to the US and the EU (Vihma, 2011).

South African negotiators made no major policy shift in the study period. The climate talks have been traditionally seen as part of broader, multilateral foreign policy agenda. The South African negotiations team was led by ministers Marthinus van Schalkwyk (Minister of Environmental Affairs and Tourism, until May 2009) and Buyelwa Sonica (Minister of Water and Environmental Affairs, May 2009 onwards), and senior civil servant negotiators.

3.5 Alternative Explanations

Power differences between India and South Africa may provide one explanation for the two countries' different bargaining postures. If powerful countries generally have their way in multilateral negotiations, one would expect India to continually adopt more aggressive positions than South Africa. Moreover, India's position should become increasingly aggressive over time due to its rapid economic growth. Audiences in both countries should by and large support their national negotiation positions.

Alternatively, elite preferences may explain a country's interest in soft cooperation. According to this view, the foreign policy elite's own ideological views would determine the country's position. Moreover, the countries would not significantly respond to audience criticism. A third alternative explanation would place causal priority on audience preferences. If elites simply reacted to constituency demands, then audience preferences should be the primary explanation for approaches to soft cooperation. Elite preferences themselves should be largely irrelevant.

A fourth, important alternative explanation is that transparency measures actually carry real costs and thus should be rationally avoided by big developing countries. They can be seen as a necessary step toward hard commitments: if this first step is not taken, then the latter ones are impossible. Delaying the "first step"

could be seen as rational. More detailed, timely and official information about emission trends in emerging economies could also increase the international political pressure on these countries to engage more deeply in potentially costly mitigation activities. This argument has been used e.g. by India. Indian negotiator emphasized in 2009 that transparency is a first step in a downward spiral; “the fact is that a proposal [for transparency] regardless of how you call it, puts obligations on developing countries as well as the industrialized countries, only of varying degrees at the moment, and to be scaled up in due time” (Times of India, 2009a). We think, however, that the idea that measuring and reporting is a slippery slope to legally binding emissions reductions strains credibility. How does the “slippery slope” work in practice? It seems unconvincing that skilled negotiators of a large sovereign country like India could somehow be forced to going further (“scale up the obligation”) than they are able and willing in multilateral negotiations. Also, if this would be a credible threat, one would rationally expect similar position from all developing countries. Furthermore, given South Africa’s much higher per capita carbon dioxide emissions and economic wealth than India’s, one would expect South Africa to be particularly reluctant to engage in any kind of cooperation, including of the soft type.¹¹ It would be equally unconvincing to argue that greenhouse gas inventories and reports themselves would cause a notable financial burden. Several developing countries carry out such exercises on their own terms, and international support for these actions would be easy to mobilize.

4 The Evidence

This section presents the results from the empirical analysis. The political backdrop for the analysis is the long history of transparency and developing country reporting in the UNFCCC negotiations. In the Convention, signed in 1992 with entry into force in 1993, the developing countries faced virtually no transparency requirements. The submission of National Communications was framed in irregular and voluntary terms – not in accordance with international guidelines, as was the case for developed country reporting – and was allowed to use ancient data. For example India submitted its first National Communication in 2004, twelve years after signing the framework convention, and assessed its greenhouse gas emissions for the year 1994 (Government of India, 2004). Improving the relevance, reliability and frequency of reporting for major developing countries has been one of the priorities of developed countries in the climate change negotiations, and some major developing countries such as India and China have successfully resisted this pressure.

¹¹ For comparisons of CO₂ emissions and Gross Domestic Product in per capita terms, see for example The World Bank Databank, at <http://data.worldbank.org/indicator/EN.ATM.CO2E.PC> and <http://data.worldbank.org/indicator/NY.GDP.PCAP.CD>.

We begin with the South African case and show that due to moderate audience preferences, South Africa's negotiators never faced pressure to adopt hardline position. This amounts to the pooling equilibrium captured in our first proposition, where South Africa's negotiators consistently choose to support soft cooperation. In India, the situation was different. Historically, the country has adopted hardline positions due to a domestic preference for aggressive negotiators. With Minister Ramesh's entry, the official Indian position softened, but Ramesh paid a domestic political price for his willingness to compromise internationally. This amounts to the separating equilibrium, whereby moderate politicians have incentives to engage in soft cooperation in spite of the expectation of future domestic criticism.

4.1 South Africa: Accepting Soft Cooperation

South Africa does not have a tradition in its foreign environmental policy in the same way most other countries do. At the end of the 1980s, South Africa was one of the most isolated states in the world. To recover from this difficult condition, the new ruling party African National Congress (ANC) began to develop policies to "take South Africa into the new world order as a responsible global citizen" (Mandela, 1993) in the early 1990s. From this effort comes the normative strand in the foreign policy making of South Africa, which highlights South Africa's moral power, "derived from its extraordinary political transition from apartheid to democracy" (Kagwanja, 2006: 28). South Africa's Foreign Affairs Department's strategic plans have throughout the 2000s highlighted multilateralism as the entry point of achieving foreign policy objectives (Department of Foreign Affairs, 2005). Underscoring the role of the UN has been a guiding line in South Africa's responses to global security issues, such as "the war on terror," as well as for dealing with multiple environmental issues. The normative legacy in South African foreign policy has also, naturally, been contrasted with a pragmatist power-based approach. This has led to ad hoc policy-making with some strategic inconsistencies (Fairbanks, 2012).

The media analysis in Figure 2 indicated that there is clearly less domestic discussion of international climate change negotiations in South Africa than in India. The articles in JS show a rising trend in 2005-2009, but on a significantly lower level than in ToI. The articles in JS were also more general in their nature – the moves made by the delegation in the climate negotiations seem less politicized in South Africa than in India.

Johannesburg Star articles on climate negotiations, 2005–2009

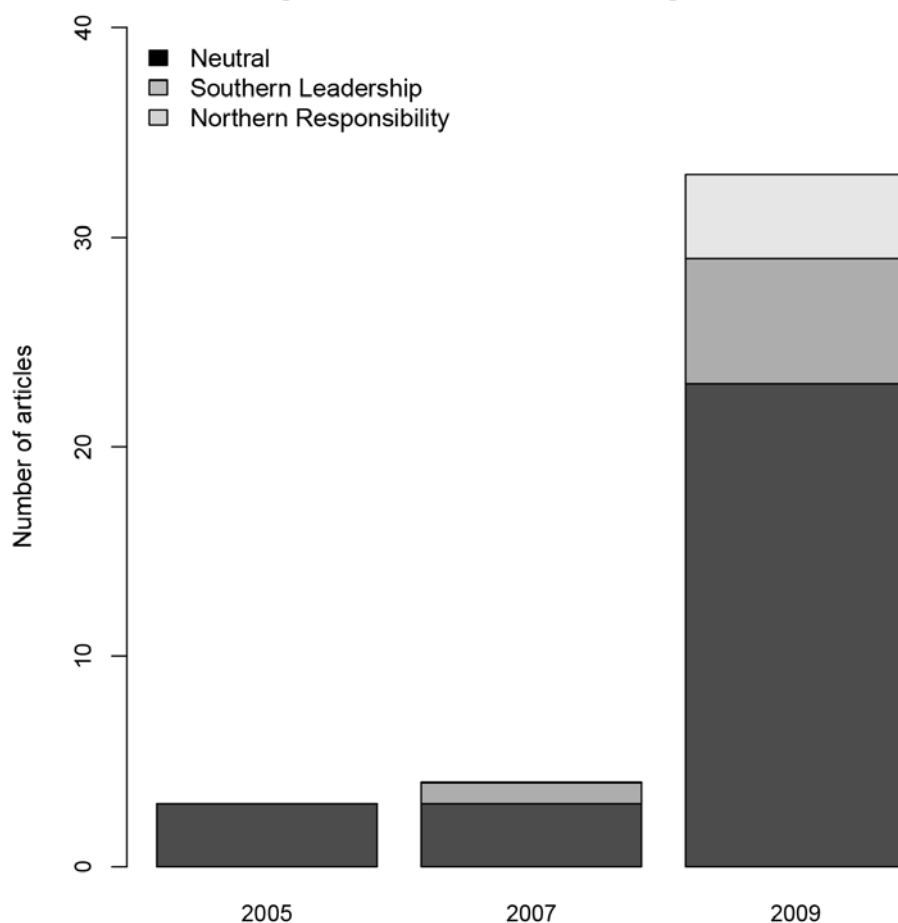


Figure 2: Media analysis of *Johannesburg Star*, 2005-2009.

Of the 40 JS articles analyzed, 73 percent showed a fundamentally neutral approach to climate talks. The view of insufficient Northern action on reducing emissions was flagged in 10 percent of the articles, but usually without an underlying view in which international policy is focused on trying to relocate responsibility for emissions cuts to developing world.

The analysis indicates that the audience reaction to soft cooperation issues such as the transparency debate has been moderate or even supportive. There was in essence no “neo-colonialist” argumentation which would present climate politics as a Northern agenda or argue that responsibility for climate change rests solely with developed countries. The moderate line in climate negotiation reporting by the JS reflects the wider approach to climate change in South Africa. Climate change is viewed as a global threat that needs to be addressed multilaterally and not first and foremost as a North-South issue in historical and developmental terms. Not a single article in the JS argued that South Africa should *avoid compromising* in climate change negotiations. Moreover, we filed 18 percent of JS articles under “Southern leadership.”

These articles describe the proactive and leading role of developing countries, in almost all cases South Africa itself, brokering the agreement with “bold” and “ambitious” actions, and being the “star” of the climate talks (Johannesburg Star, 2009b). The South African audience does not seem to be looking for hardline signals from leader. In a JS article, a South African NGO campaigner elaborated further (Johannesburg Star, 2009a):

“South Africa has long been a progressive voice in the negotiations and also has the interests of the African continent and the global South (developing nations) at heart [...] we have a very real interest in a successful global deal that is fair, ambitious and binding.”

Another NGO representative noted that “[c]limate change is not about individual countries, but the fate of humanity as a whole. Every leader needs to commit to real action in the name of our common good” (Johannesburg Star, 2009a).

In the early stages of the Copenhagen COP-15, President Jacob Zuma gave an ambitious pledge of voluntary greenhouse gas reductions on condition of an equitable deal and sufficient funding. This raised some domestic criticism of “punching above its weight” in the contribution to mitigation action (Atteridge, 2011; Johannesburg Star, 2009c), as the pledge reflected one of the most ambitious scenarios of the country’s modeling exercise. It is also notable that it was the President’s office that gave the pledge, and decided on the scale of the pledge, indeed suggesting that Zuma’s role as a “dual politician” sensitive to broader foreign policy objectives indeed played a role in South Africa’s climate diplomacy. The domestic discussion that followed indicates (Johannesburg Star, 2009c), in turn, that climate policies do get their share of following and political attention in South Africa. In the case of capping the emissions – an issue with actual distributional effects – the audience does react.

South Africa has acted as the “good multilateralist” (Mantzikons, 2010), seen widely as playing a bridge-builder role between industrialized and developing countries in climate negotiations (Atteridge, 2011). The positions of South African negotiators have typically been perceived as moderate and progressive. South Africa has noted its flexibility in the legal form of the future agreement – it would be willing to agree on a legally binding agreement as a part of a global deal. This became explicit in Durban COP-17 final plenary, in which South Africa associated with Parties that supported a mandate for negotiating a global legally binding agreement.¹²

¹² For a summary of the South African position, see for example <http://www.climateaction.org.za/cop17-cmp7/sa-government-position-on-climate-change>, accessed 15 February 2015.

South Africa has often been a spokesperson for the African Group, and African countries have relied on South Africa's capacity to engage in the negotiations (Unmusig and Cramer, 2008). Several South African negotiators are prolific figures and respected for their skills and professionalism in the negotiations, and they are often appointed as Chairpersons in important meetings and working groups. This deep engagement in the UNFCCC negotiations has, for its part, given South Africa the reputation of a committed multilateralist in the climate context.

South Africa has engaged actively in fostering soft cooperation on the transparency issue. Especially after the Bali meeting the country has sought to clarify how to operationalize the MRV paragraphs in concrete terms with several submissions and other initiatives. In Bali the South African minister declared that "our actions will be measurable, reportable and verifiable" and that "there is no longer a plausible excuse for inaction by any country", and thus "broke ranks with developing country ally India", as noted by a JS article (Johannesburg Star, 2007). Already in a submission to the UNFCCC in 2008, South Africa noted its openness to more frequent reporting and international guidelines (Republic of South Africa, 2008).

In the domestic sphere the South African government has announced its intention to make emissions data reporting mandatory for emitters of more than a 0.1Mt of greenhouse gases per year in the 2011 National Climate Change Response White Paper (Republic of South Africa, 2011: 29). The initiative outlines a domestic transparency system that "evolves with international measuring, reporting and verification (MRV) requirements" (Republic of South Africa, 2011: 7). Since then, South Africa has also introduced policies such as a carbon tax and offset scheme that require, *inter alia*, mandatory reporting by covered installations. In sum, South Africa has accepted soft cooperation, and this has been seemingly supported by its moderate domestic audience.

4.2 India: Rejecting Soft Cooperation

The tradition in Indian foreign environmental policy is to frame environmental stewardship and economic development as contrasting priorities. Indian Prime Minister Indira Gandhi stated in her famous address to the 1972 UN Conference on Human Environment in Stockholm that "we do not wish to impoverish the environment any further and yet we cannot for a moment forget the grim poverty of large numbers of people. Are not poverty and need the greatest polluters?" (Gandhi, 1972). The foreign policy dimension of Mrs. Gandhi's Stockholm speech also had a strong anti-North streak and captured a historical perspective on the colonial past.

India's negotiators are known as conservatives or hardliners in international climate politics. An opinion leader in the developing country bloc, India has sought to champion the concerns felt by other developing countries, and to occupy the moral high ground as a defender of poor countries' rights (Rajan, 1997; Rajamani, 2008). In the 1970s, when environmental issues first entered global politics, the prevailing view of the developing world was that global environmental problems are problems that have been caused by, and should be solved by, the developed countries of the North. India and many other developing countries shared a perception that the South was taken on board to solve the problems and concerns of the rich industrialized North without proper compensation (Gupta, 1997; Jakobsen, 1999; Rajan, 1997; Vihma, 2011). This position, seen as steadfastness from the Northern perspective, has earned India a reputation among developed countries of being a difficult negotiating partner, a Southern hardliner. India has defended itself by stating that its emissions do not have a significant impact. They are "only a fraction of the global figure" (Saran, 2008) and "action by India will have a marginal effect" (Singh, 2007), and even if India were to "eliminate all its greenhouse gas emissions, essentially by going back to the Stone Age," it would hardly affect ongoing climate change (Ghosh, 2007).

India has refused legal international obligations to limit its greenhouse gas emissions (distributional conflict). Also soft cooperation has been rejected: for example reporting initiatives have met sharp resistance. This resistance to soft cooperation has included opposing international guidelines on developing countries' national communications as well as refusal to allow an expert body to compare and consult on developing country reporting. From 1999 to 2007, India joined China in a long-standing conflict with the North on the mandate of the Consultative Group of Experts on National Communications from Parties not included in Annex I to the Convention (CGE). India has often emphasized that developing countries face no review requirements in the Convention, and declared that this position is not to change.

Indian environmental NGOs, research institutes, the media, and civil society actors have mostly supported India's traditional stance. Based on the surveyed ToI articles, Indian audiences viewed the UNFCCC negotiations primarily through a hardline perspective, where the responsibility for present and future change lies with developed countries, the international "other" (Billett, 2010). According to the Indian view, the North is "bullying" developing countries (Times of India, 2007b), shifting goal posts, plotting, and scheming. India, on the other hand, is seen as engaged in a defensive battle. As explained by a journalist (Times of India, 2007a),

“The strong Indian delegation will have just one uphill task at hand – ensure the industrialized rich countries don’t paper over their past and present failures and shift the onus on India to improve the world’s future. In other words, India will try to ensure a stalemate in the global negotiations because it believes the solution already exists and the rich countries want to play blind to it.”

In keeping with the foregoing text, the wording and standpoints in 63 percent of the surveyed articles showed a clearly negative attitude towards the North (or “West”), often suggesting that developed countries are blocking the talks and not playing fairly. ToI also published several articles that only focused on US policies, often describing the US as the main opponent, who is plotting against India and developing countries as a whole.

A contrast to the more than 15 years of continuity in the “traditional” Indian position was witnessed in 2009, as the new environment minister Jairam Ramesh – seemingly with a level of support from his party and the PM’s office – began to soften India’s rhetoric in his many foreign visits. He declared that his intention was to “change the narrative of India in climate change negotiations” (Times of India, 2009c), and that his view of India’s role is “not defensive, not obstructionist” (Times of India, 2009a), but rather that of a country which truly wants to achieve a meaningful agreement in the Copenhagen COP-15, even if this means compromising on some aspects of the traditional position. In concrete terms, Ramesh changed the Indian position towards the transparency debate, in which India now outlined that improving National Communications by making them more frequent, detailed, and transparent would be an offer India is willing to make for the success of the post-2012 agreement.

This willingness to engage in soft cooperation displayed by the new negotiator – together with the implicit and explicit critique of the long-prevailing Indian hardline stance – prompted a wide domestic pushback in the press as well as from the opposition, from experts and from civil society. Clear signs of the audience’s displeasure emerged in September 2009, after the first concrete shift from the traditional position, when Prime Minister Singh signed the Major Economies Forum statement which endorsed the two-degree target on global warming (MEF, 2009). Already this move “generated much heat” in Parliament, as the opposition questioned the change in stance (Times of India, 2009c). The main opposition party (Bharatiya Janata) leader asked the Government for clarification, because “if India changed its stand on climate change, it would have to pay the price for pollution caused by developed countries” (Hindustan Times, 2009a). Accepting the reporting obligations in Copenhagen also became a subject of notable political controversy in the Indian Parliament after the meeting.¹³

¹³ For example, *Lokh Sabha* of the Indian Parliament, 21 December 2009, transcript on file with authors.

The two leading English-language daily newspapers, ToI and Hindustan Times, quickly positioned themselves against Ramesh’s project and in favor of the expected audience hardline position (Times of India, 2009b; Hindustan Times, 2009b). The sharp response to Ramesh’s initiative appears in our media analysis and is shown in Figure 3. ToI followed the Copenhagen meeting closely and published 85 articles on the negotiations during the talks. The North versus South framing was dominant: the percentage of articles we filed under “Northern responsibility” represented 68 percent in Copenhagen, and 62 percent in Bali, respectively. Overall, there was only one article out of the 133 total ToI articles that showed aspirations of Indian leadership through proactiveness and taking mitigation actions, “going green grass root” (Times of India, 2007c). This article was published well before Ramesh’s initiative.

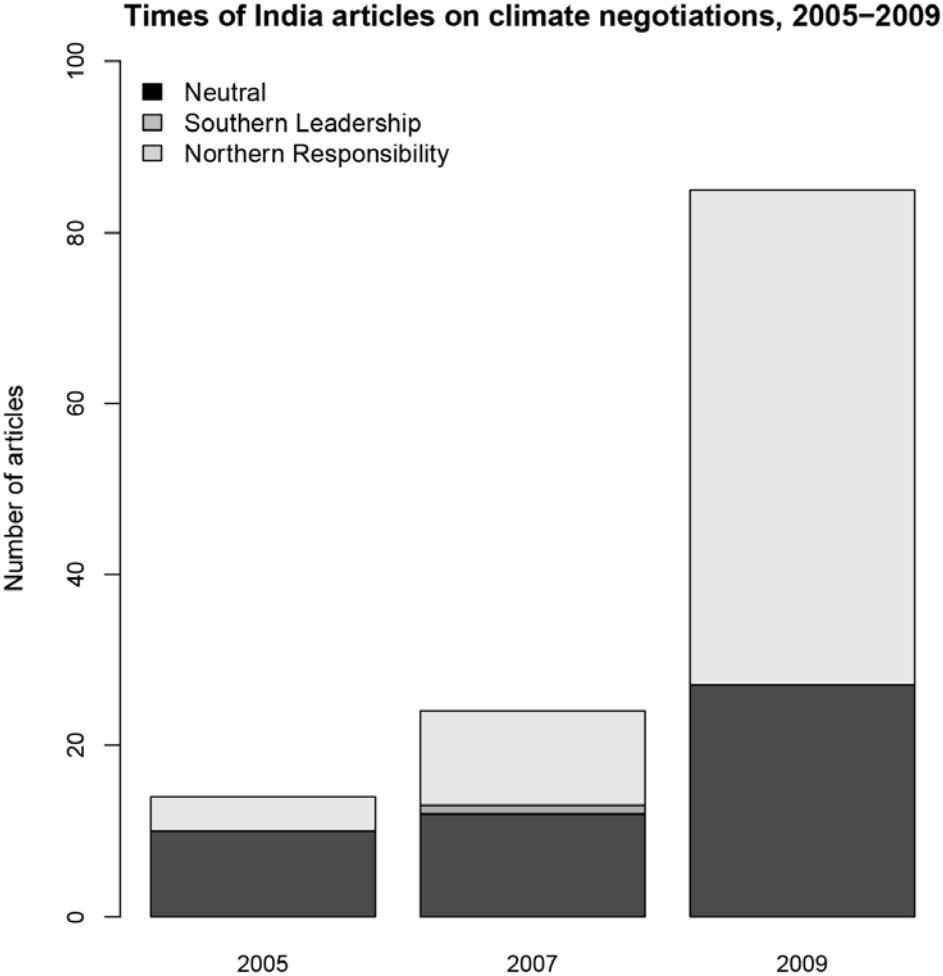


Figure 3: Media analysis of *Times of India*, 2005-2009

The ToI reporting was in most cases concerned about the Indian delegation compromising from the hardline position. With the exception of one NGO, Centre for Social Markets (CSM), virtually all other Indian stakeholders were sharply critical of the new stance outlined by Ramesh. The issues that drew the harshest criticism were the references to compromising with the United States and references to transparency and increased reporting (Times of India, 2009*b*). In October 2009, a group of 43 organizations wrote to Prime Minister Singh urging that any change in the climate negotiation position “should not compromise the country’s development” and that “civil society in India would oppose any moves to change India’s negotiating position in the direction being suggested by the government.”¹⁴

As a “dual politician,” Minister Ramesh explicitly stated to the domestic audience that he and the prime minister were concerned about the reputational impacts in foreign policy caused by India’s hardline position. Mr. Ramesh concluded that the traditional position could be “disfavored by the developed countries, small island states and vulnerable countries” and reduce possibilities for “India’s aspirations for permanent membership of the Security Council” (Times of India, 2009*d*). Minister Ramesh’s motivation to compromise on soft cooperation was due to broader foreign policy concerns and cosmopolitan preferences. It involved relations to the North, but also to fellow developing countries from the South. This point was emphasized by Minister Ramesh when he confronted critics in the Parliament after the Copenhagen meeting:¹⁵

“The Bangladeshi delegates asked, ‘why are you not settling the issue of transparency?’ The Maldives delegation asked me, ‘why are you not settling the issue of transparency?’ So, the issue of transparency had become a stumbling block.”

Minister Ramesh was reassigned to become minister for rural development in July 2011. The following environmental minister, Jayanthi Natarajan, soon articulated her cautious and suspicious rather than proactive and compromising position, which has been mostly supported by the hardline audience. Ramesh’s behavior is consistent with the separating equilibrium of our equilibrium solution. Despite domestic pressure to retain a hardline position, Ramesh chose to engage in soft cooperation and, in the end, paid a price for doing so.

¹⁴ The letter was signed by 85 individuals and 43 organizations, including ActionAid, the Delhi Science Forum, and the Jawaharlal Nehru University (JNU).

¹⁵ Rajya Sabha, 21 December 2009, transcript on file with authors.

5 Conclusion

In multilateral climate negotiations, several soft cooperation issues, such as the reporting of emissions and domestic climate actions, have provoked controversy. Why is that the case? At first sight, it is surprising that a “technical”, not financially costly issue directly unrelated to legally binding obligations on emissions reductions would become a lightning rod for controversy. We have proposed that the political disputes surrounding reporting and transparency stem from signaling and domestic politics. Even if soft cooperation does not itself contain the seeds of great and lasting political controversy, negotiators must consider the domestic audience’s reaction to their behavior in the negotiations on soft cooperation issues. If the domestic audience prefers a hardline negotiator in the key negotiations on a distributional conflict, such as legally binding emissions reduction commitments, negotiators may try to signal their resolve by acting tough even in talks on soft cooperation, such as reporting requirements.

We investigated the negotiation behavior of two large developing countries, namely South Africa and India, in multilateral climate talks from 2005 to 2009. Consistent with the model, South Africa’s moderate audience encouraged the country’s negotiator to adopt moderate positions. In the equilibria of our model, negotiators with moderate audiences behind them engage in soft cooperation to reap the gains from policy coordination. Even a hardliner engages in soft cooperation, if domestic audiences so wish.

In India, however, there was considerable pressure for the negotiators to reject even soft cooperation. Minister Ramesh’s departure from this norm, and the vitriolic domestic response that followed, are consistent with a separating equilibrium whereby only moderate negotiators are willing to pay a domestic political cost for soft cooperation. We hypothesized that moderate leaders like Ramesh may go against the preferences of their domestic audiences, even risking their own political survival, if they sufficiently value the benefits of soft cooperation. As a multilateralist and reformer, Ramesh made the calculation that the international benefits of soft cooperation outweighed the risk of being ousted. This explains why Ramesh would go against the preferences of influential domestic constituencies. This behavior is captured by our third proposition on the separating equilibrium of our model, in which hardliners reject soft cooperation to enhance their prospects of domestic political survival, while moderates may accept the calculated risk of losing office, given how much they value the benefits of soft cooperation with foreign countries.

The model contributes to combining two strands of inquiry. On the one hand, the importance of domestic politics for negotiation behavior has been long recognized (Putnam, 1988; Moravcsik, 1997; Milner, 1997). On the other hand, the importance of distinguishing between soft cooperation and legal obligations that

address a distributional conflict relates to a central research question for scholars of international law, especially in the debate on the relationship and qualities between soft and hard law (Abbott and Snidal, 2000). However, these research communities have not engaged in intellectual exchange. We have shown how domestic politics can explain why soft cooperation, which is supposed to be relatively easy to achieve when addressing pressing global problems, can provoke major political controversy. This unfortunate state of affairs requires the shadow of a distributional conflict.

A Mathematical Appendix

In this mathematical appendix, we first characterize the equilibrium of the Nash bargaining game and then analyze the equilibria of the entire game.

A.1 Nash Bargaining

The Nash bargaining game is played upon revelation of the leader's Bayesian type to the foreign country. Thus, the game is played under complete information. In the game, the leader selects a demand $d^{lead} \in [0, 1]$ while the foreign country selects a demand $d^{for} \in [0, 1]$. If $d^{lead} + d^{for} \leq 1$, then bargaining succeeds. If $d^{lead} + d^{for} > 1$, then bargaining fails and both players receive their disagreement payoffs.

Our equilibrium concept is the Nash Bargaining Solution. If a bargaining range does not exist with $q > \pi$, then bargaining fails as the leader proposes, say, $d^{lead} = 1$ and the foreign country proposes, say, $d^{for} = 1$. If a bargaining range exists because $q \leq \pi$, any combination of demands such that $d^{lead} + d^{for} = 1$ is a Nash equilibrium.

Given the disagreement payoffs described in the main text, and the properties of the Nash Bargaining Solution (NBS), it must maximize

$$\left(q + d^{lead}(\pi - q) \right) \left(d^{for}(\pi - q) \right). \quad (2)$$

Writing $d^{for} = 1 - d^{lead}$, we obtain the solution $d^{lead} = d^{for} = 1/2$. Thus, the equilibrium payoffs are $q + \frac{1}{2}(\pi - q)$ and $\frac{1}{2}(\pi - q)$. Differentiating the former with respect to q , we see that it is strictly increasing in q whenever a deal is reached. Whenever $q > \pi$, the expected value is also strictly increasing in q . Let $U(t)$ denote the expected payoff to leader of type t from the bargaining game. Note that $U(HAR) > U(MOD)$ given that the bargaining payoff is increasing in q and $\bar{q} > \underline{q}$.

The audience's payoff is zero without a bargain and $W(x)$ otherwise. We let $E(NBS | t)$ denote the audience's expected payoff from the bargaining subgame given the leader's type t .

A.2 Solution Concept

Given that the game contains incomplete information, the appropriate solution concept is the Perfect Bayesian Equilibrium (PBE). We focus on pure strategies. A PBE consists of the above NBS, individually rational strategies for all players, and updated beliefs that accord with behavior on the path of play. The NBS notwithstanding, let $(S^* | t)$ denote the equilibrium strategy of a leader of type t . Let μ denote the audience's posterior belief that $t = HAR$ following the choice of S , and let $L^*(S)$ denote the audience's support level as a function of S . The PBE requires that these strategies be optimal given μ .

A.3 Equilibrium Refinements

To simplify the analysis, we impose a series of plausible equilibrium refinements. First, if the leader plays $S = NO$ off the path of play, then we require that $\mu = 10$. Second, if multiple equilibria exist and one of them Pareto-dominates the others, then this equilibrium be selected. Finally, if $\mu = p$, we set $L = 0$.

A.4 Pooling Equilibria

We begin with a characterization of the pooling equilibria of the game. In a pooling equilibrium, both types of the leader must play the action as to the decision on soft cooperation, $(S^* | MOD) = (S^* | HARD)$. The domestic audience's beliefs must remain unchanged from priors on the path of play, $\mu = p$.

Let us first prove that if both types of the pooling equilibrium exist, then the one with both rejecting soft cooperation is Pareto-dominated. Note that equilibrium behavior in both such equilibria must be exactly identical except for the soft cooperation stage. To see why, recall that the domestic audience selects $L^* = 0$ whenever indifferent, and so $L^* = 0$. As shown in the analysis of the Nash bargaining game, equilibrium behavior does not depend at all on the soft cooperation decision S^* . These two facts imply that the pooling equilibria must be exactly identical except for S^* . To conclude the proof, note that the payoffs to all players are identical in both classes of pooling equilibria, except that when both leaders engage in soft cooperation they both obtain a

payoff bonus of +1. Thus, the second equilibrium refinement excludes the pooling equilibrium with both players rejecting soft cooperation as Pareto-inferior.

First characterize the conditions for pooling to soft cooperation, with $S^* = YES$ for all t . By the first equilibrium refinement, the audience reacts to a sudden deviation through $S = NO$ by assuming that the leader is a hardliner, $mu = 1$. Clearly, such a deviation is not profitable whenever $E(NBS | t = MOD) > E(NBS | t = HAR)$ because $S = NO$ induces $L = -1$. Thus, an equilibrium with $S^* = YES$ exists when this condition holds.

Consider now the possibility that $E(NBS | t = MOD) < E(NBS | t = HAR)$. Given that $U(HAR) > U(MOD)$ and R does not depend on the leader's type, it suffices to consider the hardliner's possible deviation. The payoff from soft cooperation is given by

$$1 + \frac{1}{2} \cdot (R + U(HAR)), \quad (3)$$

whereas the payoff from rejecting it is given by

$$(R + U(HAR)). \quad (4)$$

Whenever the former dominates the latter, pooling to soft cooperation is an equilibrium.

Now, consider the possibility of pooling to rejecting soft cooperation, with $S^* = YES$ for all t . If $E(NBS | t = MOD) > E(NBS | t = HAR)$, this equilibrium clearly cannot exist because both types would benefit from reaping the +1 while shifting L from $L^* = 0$ to $L^* = 1$.

It remains to consider $E(NBS | t = MOD) < E(NBS | t = HAR)$. In this case, the audience prefers the hardliner. The payoff from deviating to soft cooperation is +1 given the equilibrium refinement, requiring that $L = -1$ whenever $S = NO$ off the path of play. The payoff from the equilibrium strategy is

$$\frac{1}{2} \cdot (R + U(t)), \quad (5)$$

clearly lower for the moderate. Thus, the equilibrium exists if and only if $\frac{1}{2} \cdot (R + U(MOD)) \geq 1$.

A.5 Separating Equilibria

Consider now the separating equilibria of the game. There are two logically tenable possibilities: either (i) only moderates engage in soft cooperation or (ii) only hardliners engage in soft cooperation. We begin by demonstrating that the second possibility can be rejected.

To see this, suppose toward a contradiction that only hardliners engage in soft cooperation, ($S^* = YES \mid t = HAR$) while moderates reject soft cooperation, ($S^* = YES \mid t = MOD$). In this equilibrium, only hardliners obtain the +1 bonus. Thus, the moderate must obtain a bonus of more than +1 from rejecting soft cooperation. The only possible benefit of rejecting soft cooperation would result from an increase in the probability of political survival. Let $\eta \in (0, 1]$ denote the probability increase. Thus, the benefit of rejecting soft cooperation for the moderate is $\eta(R + E^{mod})$, where E^{mod} is the expected payoff to the moderate from the Nash bargaining game. Conversely, the benefit of rejecting soft cooperation for the hardliner would be $\eta(R + E^{hard})$. With $E^{mod} < E^{hard}$, as shown in the analysis of the NBS, it follows that the hardliner has a larger incentive to deviate. This contradicts the definition of an equilibrium.

We are thus left with one candidate for a separating equilibrium: hardliners reject soft cooperation, ($S^* = NO \mid t = HAR$), while moderates accept it, ($S^* = YES \mid t = MOD$). In this equilibrium, the audience's posterior beliefs are perfectly informed by the leader's decision. Soft cooperation implies a moderate, so that $(\mu \mid S^* = YES) = 0$, while rejection implies a hardliner, so that $(\mu \mid S^* = NO) = 1$. Since both types obtain a +1 bonus from soft cooperation, and off-path acceptance of soft cooperation induces $\mu = 0$, it must be that the audience prefers the hardliner, $E(NBS \mid t = MOD) < E(NBS \mid t = HAR)$. Otherwise, the hardliner's expected payoff must increase from deviating by accepting soft cooperation, $S = NO$.

It remains to consider the possibility that $E(NBS \mid t = MOD) > E(NBS \mid t = HAR)$. In this case, it needs to be verified that neither type has an incentive to deviate. The moderate type does not have an incentive to deviate whenever

$$1 \geq R + U(MOD). \tag{6}$$

The hardliner type does not have an incentive to deviate whenever

$$1 \leq R + U(HAR). \tag{7}$$

Combining, we need $R + U(HAR) \geq 1 \geq R + U(MOD)$.

A.6 Equilibrium Existence

If the audience prefers the moderate leader, $E(NBS | t = MOD) > E(NBS | t = HAR)$ the separating equilibrium cannot exist. Moreover, only pooling to soft cooperation is possible by the equilibrium refinement.

If the audience prefers the hardliner, then we have the following:

1. If $R + U(HAR) > 1 > R + U(MOD)$, then the separating equilibrium exists;
2. If $\frac{1}{2}(R + U(HAR)) < 1$, then pooling to soft cooperation is possible;
3. If $\frac{1}{2} \cdot (R + U(MOD)) < 1$, then pooling to rejection of soft cooperation is possible, unless pooling to soft cooperation is possible.

Notably, these conditions cover the universe of possibilities, and so a PBE in pure strategies is guaranteed to exist.

A.7 Proofs

To prove Proposition 1, consider the conditions for pooling to soft cooperation. Whenever the audience prefers a moderate to a hardline leader, with $E(NBS | t = MOD) > E(NBS | t = HAR)$, pooling to soft cooperation is the unique equilibrium of the game. Suppose now $E(NBS | t = MOD) < E(NBS | t = HAR)$. In this case, it suffices that $(R + U(HAR)) < 1$ for pooling to soft cooperation to be the unique equilibrium of the game.

To prove Proposition 2, consider the conditions for pooling to rejecting soft cooperation. Recall that whenever the audience prefers hardline to a moderate leader, with $E(NBS | t = MOD) > E(NBS | t = HAR)$, pooling to soft cooperation is the unique equilibrium of the game. Therefore,

it suffices to consider the case of $E(NBS | t = MOD) < E(NBS | t = HAR)$. As shown in the equilibrium analysis, it is also required that $\frac{1}{2} \cdot (R + U(MOD)) \geq 1$, so that the moderate leader's valuation of soft cooperation falls below her valuation of the expected payoff from retaining power with a higher probability due to increased audience support.

For Proposition 3, recall again that we need $E(NBS | t = MOD) < E(NBS | t = HAR)$, as shown in the equilibrium analysis. There, it is also shown that we need $R + U(HAR) \geq 1 \geq R + U(MOD)$.

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