

# HOW TO NEGOTIATE AND UPDATE CLIMATE AGREEMENTS

BY BÅRD HARSTAD



## OVERVIEW

The outcome of negotiations depends on the bargaining rules. Those hoping for a successful international climate agreement should thus pay attention to the rules governing the negotiation process. This paper describes seven bargaining rules that would facilitate agreement on a post-2012 climate treaty.

## DISCUSSION

**Prepare for negotiations:** Not only is it challenging to negotiate a climate treaty from scratch, but climate change is a dynamic problem, and any treaty is going to need updating and thus renegotiation later on, as we learn more about the benefits and costs of abatement.

Anticipating future negotiations generate what are called “hold-up problems” in economics: countries that have poor abatement technology are able to hold up the countries with better technologies and require that the high-tech countries share their technologies or contribute the most to the next commitment period. Anticipating this, each country is discouraged from investing in abatement technology. Other problems arise as well: to enhance its future bargaining position, a country may want to (i) adapt more to climate change than socially optimal, (ii) signal reluctance to negotiate by delay, or (iii) delegate bargaining authority to representatives that are less favorable toward an agreement. Such strategies improve the bargaining position of an individual country, but collectively it becomes harder to arrive at an efficient outcome. If no rules are governing the negotiation process, these strategies can be extremely detrimental, and the gains from international negotiations may vanish entirely. It is thus immensely important to think carefully about the rules governing the negotiation process.

Many international agreements are governed by bargaining rules. Examples include the United Nations’ voting rules and the World Trade Organization’s “reciprocity principle.” For climate negotiations, this paper proposes seven bargaining rules that can mitigate the problems described above. These rules relate to the voting process, the use of formulas, the time horizon of an agreement, the minimum number of participants, the default outcome (i.e., the outcome if the negotiations should fail), R&D subsidies, and whether one should link to trade agreements.

## KEY FINDINGS & RECOMMENDATIONS

- ▶ *Harmonization or formulas should be used to calculate national obligations and contributions.* If the distribution of contributions is determined by a formula, it is harder for a country to renegotiate its own share of the burden. Enhancing its bargaining position is then less useful, and investments in R&D increase. Harmonization can be harmful if countries are heterogeneous, but formulas can be cleverly designed (to depend on GDP and growth, for example) to mitigate these concerns.
- ▶ *A future climate treaty should have a long time horizon.* A longer time horizon reduces the frequency at which the agreement is renegotiated and thus countries’ motive to enhance their bargaining power.
- ▶ *The treaty should specify the default outcome if the (re)negotiation process should break down, and this default outcome should be an ambitious agreement.* If the bargaining failure would lead to a pre-specified ambitious agreement, a country cannot enhance its bargaining power simply by investing little in R&D (or using strategies (i)-(iii) above). Instead, a better technology is necessary to improve a country’s bargaining position and, anticipating that, countries invest more, to the benefit of everyone.

- *Investments in R&D, or trade in abatement technology, should be subsidized internationally.* This follows since countries may otherwise under-invest in R&D, as explained above.
- *The unanimity requirement should be replaced by a majority or a super-majority rule when it comes to treaty amendments.* Unanimity means that even the most reluctant country must agree, and it is exactly this requirement that induces countries to strengthen their bargaining power. Reducing the majority requirement mitigates the strategic considerations, and investments in R&D will increase.
- *Each of the rules above is more important if the other rules are not followed.* The rules are thus “strategic substitutes.” This means that subsidizing R&D is more important if the time horizon is short and if formulas are not used in the negotiations. Similarly, the time horizon should be longer if unanimity is required for each amendment, or if the default outcome (if the renegotiations should fail) is no agreement rather than an ambitious agreement.
- *A linkage to international trade agreements makes each of the rules more credible and efficient.* For each rule above, a problem arises if a country can credibly threaten to opt out of the agreement unless it gets a more favorable deal. Opting out would be less tempting if a trade agreement provided additional benefits to the participating members. Thus, a linkage to trade benefits/sanctions is a “strategic complement” to each of the rules above.
- *A “minimum participation rule” can discourage free-riding.* If the treaty enters into force only after a certain number of countries have ratified it, opting out becomes less tempting if that could make the agreement unravel. Thus, a minimum participation requirement complements the rules above.

## CONCLUSION

Climate change agreements should—and certainly will—be updated over time. Anticipating future negotiations, countries may try to enhance their future bargaining power (e.g., by under-investing in R&D). This reduces the gain from international cooperation, unless we pay careful attention to how the bargaining process should be structured. This paper discusses several useful rules and how they relate to each other.

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## ABOUT THE HARVARD PROJECT ON INTERNATIONAL CLIMATE AGREEMENTS

The goal of the Harvard Project on International Climate Agreements is to help identify key design elements of a scientifically sound, economically rational, and politically pragmatic post-2012 international policy architecture for global climate change. It draws upon leading thinkers from academia, private industry, government, and non-governmental organizations from around the world to construct a small set of promising policy frameworks and then disseminate and discuss the design elements and frameworks with decision-makers. The Project is co-directed by Robert N. Stavins, Albert Pratt Professor of Business and Government, John F. Kennedy School of Government, Harvard University, and Joseph E. Aldy, Fellow, Resources for the Future. Major funding for the Harvard Project on International Climate Agreements is provided by a generous grant from the Climate Change Initiative of the Doris Duke Charitable Foundation.

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