



Analysis

Interpreting bargaining strategies of developing countries in climate negotiations. A quantitative approach

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ABSTRACT

Despite the efforts made during the last climate conferences (COPs), countries participating in the negotiation process are still far from reaching an agreement on the implementation of a new Post-Kyoto climate regime. The growing role played by developing countries in negotiations is one of the main causes behind the deadlock. Further attention should therefore be paid to the composition of the alliances formed by developing countries in order to better understand the key structural features driving their bargaining positions. By applying a cluster analysis, this paper aims to investigate the role played by heterogeneity in specific characteristics of developing countries in explaining divergent costs and benefits associated with alternative climate negotiation outcomes. By clustering developing countries according to their economic, geographic, environmental, energy, and social characteristics, the paper presents some considerations on climate political economy strategies in these countries with respect to existing bargaining coalitions.

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1. Introduction

In 2007, during the COP13 in Bali, the Parties started to negotiate for a new climate agreement to be implemented at the end of the first commitment period defined by the Kyoto Protocol (KP) in 2012. Nevertheless, the so-called Bali Action Plan was too ambitious and the Parties failed to achieve a new binding agreement for all countries. As a result, the KP has been extended for a second commitment period (2013–2020), with the intent of reaching an agreement by 2015 for the implementation of a new climate regime to be effected by 2020.

Despite this failure, climate negotiations have been characterized by a remarkable novelty. While in the first phase the main objective was to get also reluctant Annex I countries to ratify the KP whereas developing countries' concerns remained marginal (Najam et al., 2003), in current negotiations, developing countries have assumed a central role (Cantore et al., 2009; Ott et al., 2008).

The attention devoted to developing countries' interests results in two major decisions. The first one is the implementation of Nationally Appropriate Mitigation Actions (NAMAs), debated during COP16 (Cancun 2010) and COP17 (Durban 2011). By submitting country-specific NAMAs, developing countries can obtain support in terms of technology, financing and capacity-building transfer from economically

advanced Parties to enable and facilitate their mitigation efforts.¹ The second achievement is represented by the institution of the Green Climate Fund (GCF), created to become the main financial instrument for promoting the adoption of mitigation and adaptation measures in developing countries. The GCF, in particular, constitutes a great success for developing countries that have actively supported it (especially the ALBA group)² and have a strong representation in its current management structure.³

Other relevant decisions concerning developing countries were taken during COP19 held in Warsaw in 2013, such as the establishment of the Warsaw International Mechanism for Loss and Damage intended to address the adverse impacts of climate change in developing countries that are expected to be particularly vulnerable to extreme events (IPCC, 2014).

In this complex scenario, the Parties seem to be far from reaching the main objective of negotiations: a new agreement for the implementation of an ambitious climate regime that limits average global warming to 2 °C above pre-Industrial Revolution levels. The only step ahead is represented by the agreement signed at COP20 (Lima 2014), where

¹ This process is facilitated by the implementation of the NAMA registry, a web platform where developing countries publish their mitigation plans so that developed countries can decide whether to participate or not.

² The ALBA group consists of Bolivia and other Latin American and Caribbean countries with the exception of Brazil.

³ 12 out of 24 Board members represent developing countries.

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the Parties agreed on the basic rules to be adopted in order to facilitate the Intended Nationally Determined Contributions (INDCs) that will form the foundation for climate action post 2020 when the new agreement expected in COP21 (Paris 2015) is set to come into effect. The regulation of INDCs constitutes a small contribution to escaping the deadlock, since they only suggest how Parties should contribute to the discussion in climate negotiations, without concrete solutions to the distribution of mitigation efforts and the allocation of investment resources.

The causes behind the deadlock are diverse and involve not only the huge projected global costs of achieving ambitious emission targets but also the growing attention that vulnerability and adaptation issues are achieving in the political debate. Indeed, concerns about the costs of mitigation actions and equity considerations have highlighted the need for introducing compensatory measures and mechanisms to cope with unavoidable effects of climate change, in order to stimulate the participation of developing countries to international agreements.

A related argument behind the deadlock has been the emergence in climate negotiations of more differentiated positions compared with the traditional segmentation between developed and developing countries. In particular, the group of developing countries, which in the past proposed itself as extremely solid and unanimous, promoting a common interest in negotiations mainly under the umbrella of the G77 group, has become significantly fragmented (Brunnée and Streck, 2013; Hurrell and Sengupta, 2012). Fragmentation and conflicts of interests within the group have weakened the position of the great majority of developing countries, especially of those that are more vulnerable to climate change and that could benefit the most from the adoption of ambitious commitments. On the contrary, large emerging economies, such as China and India, frequently negotiate bilaterally with industrialized countries on issues such as climate, energy security, and technology transfer, outside the official climate negotiations (Kasa et al., 2008). All these factors raise concerns about the possibility of reaching an agreement with the involvement of developing countries.

As it has become evident during the last COPs, developing countries have different expectations and concerns about climate change negotiations, reflecting huge differences with respect to their economic, political, and human conditions (Gupta, 2008). Divisions within the group are expected to even exacerbate in the future, leading to the formation of new or differently shaped alliances that foster the common interest of countries' subgroups, especially with respect to the major issues at stake, namely, emissions reduction obligations and vulnerability.

These recent trends in climate negotiations suggest the need of investigating the dynamics behind the emergence of new positions and alliances within the group of developing countries, especially in view of the run-up of a new climate agreement (Blaxekjær and Nielsen, 2014). Specifically, both similarities across developing countries and heterogeneities among different subgroups need to be carefully evaluated in the development of compensatory measures to tackle climate change impacts (Tanner and Horn-Phanthanothai, 2014). As far as the GCF is concerned, for instance, the allocation rule between adaptation and mitigation purposes should be part of the negotiations process; accounting for countries' specificities that affect mitigation costs or vulnerability to climate change could be the key to guarantee the involvement of developing countries (Markandya et al. 2015).

In this paper, we explore the driving forces leading to the formation of alliances among subgroups of developing countries, in order to support their position in the bargaining process with greater emphasis with respect to other big players (such as developed countries) or groups of players (such as the BASIC group). In our work, the formation of potential alliances is driven by countries' characteristics that are especially relevant to explain their positions and concerns about mitigation and adaptation efforts. To this end, we have adopted a multiplicity of indicators referring to several dimensions (geography, economy, demography, energy, institutional quality, technological innovation, and development), in order to capture the most relevant features that

can affect each country's ability to cope with the main challenges of climate change.

The idea behind this quantitative analysis is that countries which share common characteristics will be interested in promoting the same position in climate negotiations; therefore, countries characterized by high level of vulnerability to climate change and low emissions, for instance, will be interested in pushing for stricter mitigation commitments and larger resources for adaptation. Accordingly, we hypothesize that cohesion within countries forming an alliance depends on the degree of homogeneity with respect to climate change-related challenges. As stated by Kasa et al. (2008 p. 114): “a core element behind this cohesion is that these countries share problems related to varying degrees of political vulnerability as much as poverty and economic underdevelopment.”

This idea is confirmed also by the emergence of new political groups and forums, such as the Climate Vulnerable Forum, the group of “Like-minded developing countries,” or the Association of Independent Latin American and Caribbean Countries, whose narratives confirm that common interest is better represented and supported by countries that share similar problems with respect to the effects of climate change (Blaxekjær and Nielsen, 2014).

We explicitly focus on developing countries because of their growing role in recent climate negotiations and because their active involvement is strictly required for the implementation of an agreement that could be effective in slowing climate change. As noted above, developing countries are by no means a homogeneous group: some of them will have to engage in strong mitigation efforts, while others are likely to be seriously affected by climate change and will have to undertake a larger amount of adaptation. It is then essential to consider structural features and specificities of different developing countries to understand their main concerns in climate negotiations and increase their confidence in the fairness of the bargaining process.

Given this aim, we have excluded from the analysis the so-called emerging economies (the BASIC countries, i.e. Brazil, China, India, and South Africa), not only because these countries, in latest years, have started to act as independent players in international agreements but also because their interests in terms of abatement targets and adaptation needs are different from those of other developing countries.⁴

In order to study the formation of potential new alliances among developing countries, we perform a cluster analysis by exploiting a plurality of national specificities and structural features, and identify subgroups of countries, pooled together by reasonably homogeneous interests relevant for climate change issues. In such a way, we single out potential alliances that are expected to act as different “single” players, interacting with other groups of developing and developed countries to form new coalitions at climate negotiations.⁵

In this respect, our work complements studies that explore the issue of coalition stability by adopting the conceptual framework provided by the game-theoretic literature (see, for instance, Lessmann et al., 2015). These works generally assess coalitions' stability by performing numerical simulations, where a limited number of world's macro-regions is considered. Among them, developing countries are generally included in groups characterized by a high level of aggregation, where countries

⁴ In several cases, separated negotiations between the major emerging economies and developed countries have worsened relationships among developing countries. As noted by Hurrell and Sengupta (2012, p.473): “At Copenhagen, the apparent entry of the BASICs into the closed councils of the most powerful caused intense resentment on the part of countries such as Bolivia. At Durban, the representatives of small island developing states were even more critical of an India that seemed to stand in the way of a final deal: ‘While they develop, we die; and why should we accept this?’”

⁵ An example of this type of coalition between groups of developing and developed countries is the Cartagena Dialogue for Progressive Action, which includes countries from EU, AOSIS, LDCs and Latin America. Nevertheless, the participants have a clear idea about the identity of the coalition, that is a dialogue and not a formal political negotiation group. According to Yamin and Depledge (2004), the explanation of this attitude is that many developing countries find it difficult to be associated with developed countries in negotiations due to formal group memberships and a sense of loyalty to G77.

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