# Bargaining, Delegation and Enforcement in International Organizations

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#### Abstract

International organizations involve a complex web of bargaining, delegation and enforcement. While the theoretical literature has started to make some foray in studying how enforcement of international agreements (which form the essence of international organizations) affects the way in which these agreements are negotiated, the issue of delegation is still largely neglected. In this paper I propose to theoretically analyze how bargaining over international agreements is affected simultaneously by the problems of enforcement and the delegation of tasks to both an international body and/or member countries.

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#### 1 Introduction

Increasingly international organizations imply a complex web of bargaining, delegation, and implementation, where some actors take up multiple roles. More concretely, international organizations like the European Union (EU), the World Trade Organization (WTO) etc. are the result of negotiations among governments. Once set up, the institutions created with these international organizations become agents of the governments that act as their principals. In carrying out their tasks most international organizations are, however, too weak to implement the policies they adopt or that were enshrined in the treaties having set up the organization. Hence, implementation of these policies is often delegated to the governments having signed the treaties establishing the international organization. Such delegation may, quite logically, lead to shirking by the governments reluctant to live up to their treaty obligations. As a consequence, almost all international organizations involve some enforcement mechanisms, be it by the Commission and the European Court of Justice in the EU, or the dispute settlement committee in the WTO etc..

As this little sketch clearly suggests, the same actors take up different roles in international organizations. Governments are both principals delegating tasks to the international organization and agents implementing policies adopted by this same organization. Institutions of the international organization are both agents of the governments when proposing policies, but when delegating their implementation to these same governments these institutions become principals.

While the literature has become increasingly attuned to this complex web of principal-agent relations, both theoretical and empirical work focuses most often on only parts of this complex web (e.g., Jönsson and Tallberg, 1998; Busch and Reinhardt, 2000; Franchino, 2001; Reinhardt, 2001; Tallberg, 2002; Franchino, 2007; König and Luetgert, 2007 (forthcoming.); Steunenberg, 2007). In this paper I thus wish to present a simple model that allows me to capture some of the intricate interactions of these principal-agent relationships and to present the implications regarding delegation and enforcement. To do so I first discuss some of the literature on which I draw upon in the next section. In section three I present the model and based on an equilibrium analysis derive empirical implications. These empirical implications are the focus of section four where I attempt them to link with empirical regularities as discussed in the literature, before concluding

# 2 Bargaining, delegation and implementation

The literature on bargaining as related to international institutions can be traced back at least to the incisive work by Schelling (1960). While his contribution focused mostly on crisis bargaining, he has left an important mark on the literature by emphasizing how domestic constraints may affect international bargains leading to the set up of international organizations. While Schelling (1960) put forward the important role played by domestic constraints in explaining international cooperation, a series of scholars more recently has emphasized that negotiations at the international level have also to consider the enforcement of the ensuing agreements.

Some initial contributions appeared in Downs and Rocke (1995) when focusing on the link between domestic concerns and international institutions. A rather simple formalization of these thoughts appeared in Downs, Rocke and Barsoom (1998), where the authors try to assess how enforcement issues affect bargaining at the international level.

Both Fearon (1998) and, largely building on his work, Martin (2000) stressed how domestic constraints not only directly affect bargaining along Schelling's (1960) "paradox of weakness" conjecture, but that they also might enhance the enforcement of international agreements. Building up on a more general bargaining model proposed by Banks and Duggan (2000), Gilligan (2004) uses this framework to assess how enforcement problems may affect the tradeoff between deeper and more broader international agreements.

In part in parallel to this work several scholars attempted to understand from a game-theoretic perspective, how international organizations should be set up (Kydd and Snidal, 1993-95; Koremenos, Lipson and Snidal, 2001).<sup>2</sup>

While this literature alerts us to some of the complications when trying to understand the way in which international agreements are set up, our understanding of their consequences at the domestic level is still rather underdeveloped. In

<sup>&</sup>lt;sup>1</sup>His work led to the literature on two-level games as popularized by Putnam (1988). Since this literature focused considerably on international cooperation, it is also of relevance, and will be referred to below, for what follows.

<sup>&</sup>lt;sup>2</sup>Some of this work is also rightly criticized for neglecting how previous arrangements affect the changes possible in an organization's setup (e.g., Duffield, 2003).

the study of the European Union and to a lesser degree the WTO some research focuses on how agreements are applied and implemented. While empirically, at least for the EU, quite a few facts are known, the theoretical foundations for the later are still largely lacking. Some innovative modeling approach appears in the work by Steunenberg (2007), who emphasizes, at least in the EU context, the very considerable differences among different ways to implement EU policies. Steunenberg (2007) also emphasizes, that implementation decisions and processes have to be studied in their (domestic) strategic context.<sup>3</sup>

More general and systematically quantitative studies have attempted to understand the implementation patters in the EU (e.g., Franchino, 2001; Franchino, 2007; König and Luetgert, 2007 (forthcoming.); Steunenberg, 2007). and to a lesser degree of the WTO (e.g., Busch and Reinhardt, 2000; Reinhardt, 2001). However, in both strands of the literature an integrated view is, in my view, still missing.

# 3 A model of bargaining, delegation and implementation

Interactions in international organizations involve a complex web of processes of bargaining, delegation of tasks to supranational bodies, and enforcement of the ensuing decisions. This complex web is probably most developed in the context of the European Union (see for instance Hix, 2005). For this reason I propose a simplified model of delegation and implementation that captures some of the main aspects of the EU's context. Despite this focus on the EU, the main underlying mechanisms are also present in other international organizations, like the World Trade Organization, the UN etc..

# 3.1 Model and assumptions

Figure 1 presents schematically the interaction between three actors, namely government(s), a supranational body called commission, and a national bureaucracy,

<sup>&</sup>lt;sup>3</sup>This author has also proposed a series of interesting studies focusing on the implementation of EU policies through the so-called "comitology," i.e. procedures where national bureaucrats may take the upper hand again (Steunenberg, Koboldt and Schmidtchen, 1997; Schmidtchen and Steunenberg, 2002).

in a simplified extensive form game.<sup>4</sup> The game starts<sup>5</sup> by government(s) delegating to the Commission to make a policy proposal. The commission, after obtaining this task, can decide whether to invest resources to learn about how policy proposals map into policy outcomes. More specifically, assuming that a policy proposal  $x_p$  relates to the policy outcome  $x_o$  in the following way<sup>6</sup>

$$x_o = x_p + \epsilon \tag{1}$$

the Commission may spend resources to learn about the value of  $\epsilon$ . Assuming that  $\epsilon$  is uniformally distributed in the interval [0,1], the Commission may learn whether  $\epsilon$  is in the lower  $([0,\frac{1}{2}))$  or upper half  $([\frac{1}{2},1])$  of the interval. If the Commission has obtained this information it will possibly condition its proposal on the value of  $\epsilon$ , while if the Commission refrains from obtaining the information, this conditioning is not possible.

Once the Commission has made a proposal, the governments have to choose their implementation strategy.<sup>7</sup> Following the model of Epstein and O'Halloran (1999) I assume that governments may either transpose the policy themselves, or delegate the implementation to the bureaucracy. The latter actor, if the government delegates the implementation task to it, may invest time to learn thes value of  $\epsilon$  or refrain from doing so.<sup>8</sup> All aspects of the game are common knowledge with the exception of the exact value of  $\epsilon$ .<sup>9</sup>

<sup>&</sup>lt;sup>4</sup>The inspiration for this game comes from Mäder and König (2007), who propose a similar game but do not explicitly solve it for its equilibria.

<sup>&</sup>lt;sup>5</sup>Strictly speaking the game would start with a move by nature determining the way in which implementation decisions map into policy outcomes. I will come back to this issue below.

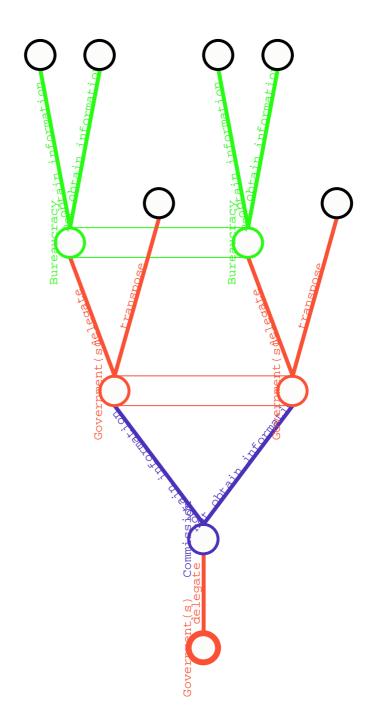
<sup>&</sup>lt;sup>6</sup>This formulation is identical to that found in most of the models in the implementation and principal-agent literature. For the latter a nice review appears in Epstein and O'Halloran (1999).

<sup>&</sup>lt;sup>7</sup>Strictly speaking, in the EU context the governments would have to decide on whether they accept the proposal by the Commission or not. Given that the governments in the game have quite some leeway in the implementation phase, omitting this stage is not likely to affect strongly the results. Future versions of the model will attempt to include this additional stage.

<sup>&</sup>lt;sup>8</sup>This is the simplest way to account for informational asymmetries at the two levels of delegation. It might be that a better approximation would allow for the two uncertainties to be correlated but not perfectly, as they are in the setup chosen here.

<sup>&</sup>lt;sup>9</sup>Strictly speaking this game does not include a bargaining phase. Given that in bargaining processes all negotiators, i.e., governments, have to agree with the bargaining, the step involving delegation to the commission and the implementation step, where governments have to accept the proposal, in part capture this bargaining phase

Figure 1: A game of delegation and implementation



For simplicity I assume the following Euclidean utility functions for the three actors  $i \in \{G, C, B\}$  involved:<sup>10</sup>

$$U_i(x_o) = -|x_i - x_o| - i_i \times c_i \tag{2}$$

 $c_C$  and  $c_B$  correspond to the costs for obtaining information on the value of  $\epsilon$  for the Commission and the Bureaucracy, while  $c_G$  corresponds to the costs of direct implementation by the government.  $i_i$  is an indicator equaling one if these costs have to be born and zero otherwise.

### 3.2 Equilibria

The game may be easily solved for its Perfect Bayesian equilibria by backward induction. A series of easily proven lemmas allow for an intuitive derivation of the main propositions.

**Lemma 1** If  $c_B = 0$  then obtaining information is at least a weakly dominant strategy for the bureaucracy.

Proof of lemma 1: If the government delegates implementation to the bureaucracy then obtaining information yields  $EU(information) = -|x_B - x_B| - c_B$  while implementing without obtaining information yields  $EU(no\ information) = -|x_C + e_n + \frac{1}{2} - x_B|$ . Hence information yields higher expected utility if  $-c_B > -|x_C + e_n + \frac{1}{2} - x_B|$ , which, by definition always holds if  $c_B = 0$ .

The proof of lemma 1 suggests that the bureaucracy only obtains information if  $-c_B < -|x_C + e_n + \frac{1}{2} - x_B|$ . If the bureaucracy obtains no information, then the government is indifferent between delegating the implementation or transposing the commission proposal itself. In both cases the expected value of the outcome is  $E(x_o) = x_C + e_n + \frac{1}{2}$ . Based on this the following equilibrium can be derived:

**Proposition 1** If  $|x_C - x_B| < c_B$  then in a pooling equilibrium,  $x_p = x_C + e_n$  where  $e_n = -E(\epsilon)$  which the government transposes itself, since the bureaucracy will not obtain information.

 $<sup>^{10}</sup>$ Such "tent-utilities" imply that actors only obtain information if this allows them to move the expected outcome closer to their ideal-point, while reducing the uncertainty over policy outcomes due to  $\epsilon$  is not valued in itself. As will become apparent below, this has some consequences for the equilibrium analysis.

<sup>&</sup>lt;sup>11</sup>In what follows I assume that  $c_G$  is equal to zero. Assuming otherwise would not qualitatively change the implications of this game.

Sketch of proof of proposition 1: The proof follows the remarks introducing proposition 1.

For the equilibria where if  $|x_C - x_B| \ge c_B$  the following lemma will prove useful.

**Lemma 2** A pooling equilibrium, in which after obtaining information the proposed policy by the commission is conditioned on the information obtained is only possible if  $c_C = 0$  and involves weakly dominated strategies.

Sketch of proof of lemma 2: In equilibrium the government will condition its transposition decision on the proposal made by the commission. In a pooling equilibrium, no information transpires, implying that the government will act as if the commission had not obtained information. Hence, the equilibrium strategies after the commission's decision will be identical and thus yield the same outcome whether the commission has obtained information or not. Hence, this can only be part of an equilibrium if  $c_C = 0$  and in addition involves weakly dominated strategies.

Hence, if  $|x_C - x_B| \ge c_B$  the commission may choose its proposal in such a fashion either to ensure direct implementation by the government or delegation to the bureaucracy which will gather information. The government's decision will hinge on a comparison of the utilities attached to transposing a policy directly  $(EU_G(transpose) = -|x_p + E(\epsilon) - x_G|)$  and the ones obtained by delegation  $(EU_G(delegation) = -|x_B - x_G|)$ . Hence, delegation will occur if the expected outcome (without delegation) falls outside a closed interval around  $x_G$  More specifically, if  $x_p + E(\epsilon) \in [x_G - |x_G - x_B|, x_G + |x_G - x_B|]$  then the government will refrain from delegating.

From this the following proposition establishes another equilibrium:

**Proposition 2** If  $|x_C - x_B| \ge c_B$  and  $x_C \in [x_G - |x_G - x_B|, x_G + |x_G - x_B|]$  C proposes  $x_C + e_n$ , where  $e_n = -E(\epsilon)$ , which is directly transposed by the government.

Sketch of proof of proposition 2: Given that the interests between commission and bureaucracy diverge considerably, the latter will gather information if asked to implement the policy. Given that the commission can propose a policy which

will lead in expectation to its ideal-point given that the government will transpose such a policy directly it will prefer doing so.

This leaves as last case the situation where  $|x_C - x_B| \ge c_B$  and  $x_C \notin [x_G - |x_G - x_B|, x_G + |x_G - x_B|]$ . The commission may in this situation either choose a proposal which will lead in expectation to an outcome  $x_o \in [x_G - |x_G - x_B|, x_G + |x_G - x_B|]$  which the government will implement itself, or make a different proposal which will lead the government to delegate the implementation to the bureaucracy. This leads to the following proposition:

**Proposition 3** If  $|x_C - x_B| \ge c_B$  and  $x_C \notin [x_G - |x_G - x_B|, x_G + |x_G - x_B|]$  C proposes  $x_p = 2x_G - x_B - E(\epsilon)$  if  $|x_C - x_B| \ge |x_C - X_G|$ , and  $x_p = x_C + e_n$  where  $e_n = -E(\epsilon)$  else. In the first case the government transposes  $x_p$  directly, while in the second case the government will delegate implementation to the bureaucracy which will gather information and choose a policy such that  $x_o = x_B$ 

Sketch of proof of proposition 3: Given that the commission cannot propose a policy that yields its ideal-point in expectation as outcome, it can only choose between actions leading to the bureaucracy's ideal-point as outcome or a policy that the government prefers in expectation to the bureaucracy's ideal-point.

# 4 Empirical implications

Propositions 1-3 cover all the relevant cost and preference configurations.<sup>12</sup> Not surprisingly the propositions imply close relationships between preference configurations, information costs and delegation and implementation decisions.

These propositions suggest that if the preferences of commission and bureaucracy or closely aligned relative to the costs  $c_B$  the expected outcome of the process will be simply the commission's preferred outcome, irrespective of the government's preferences. Hence, the international agent may coalesce with the national agent to outmaneuver the principal.

<sup>&</sup>lt;sup>12</sup>Implicit, though not explicitly derived above, is the implication that the commission will never find it in its interest to gather information as long as  $c_C > 0$ . This comes about by the fact that given the risk-neutrality assumed by the specific utility functions, uncertainty in the outcome does not affect the utility in any direct way. Hence, it is never in the interest of the commission to obtain information if  $c_C > 0$ . If  $c_C = 0$ , not obtaining information is a weakly dominated strategy.

In cases where the information costs are small relative to the preference differences between commission and bureaucracy, however, the government's preferences play a more central role. If compared to the commission the bureaucracy's preferred policy is more extreme from the government's position, the commission may propose a policy that will lead in expectation to its preferred outcome. If, however, it is the commission's ideal point that is more extreme than the bureaucracy's from the government's perspective, then either the commission will propose a policy which the government will submit for implementation to the bureaucracy. The latter will obtain information and implement a policy leading to the policy outcome corresponding to its ideal point. This happens if commission and bureaucracy have preferences on the same side of the government's ideal point. If this is not the case, the commission will propose the closest possible policy to its ideal point that will lead the government to implement it directly.

## 5 Conclusion

In this paper I offered a simple model illuminating partly the complex web of bargaining, delegation and enforcement processes in international organizations. While the implications of the model can shed some new light on the way in which decisions by international organizations depend on the implementation phase, and how the later is affected by information costs, several additional aspects are not yet sufficiently addressed by the model.

First of all, given that in equilibrium it is never in the interest of the commission (or international organization) to obtain information on how its policy proposal will translate into policy outcomes, it is obvious that either the informational assumptions or the utility functions might be adapted. If the actors involved in the game were risk-averse, obtaining information would reduce risk, leading clearly to situations where even the commission would want to obtain information. It might, however, also be the case that in international organizations uncertainty over policy outcomes might come in two different guises. First, there is uncertainty about how the various domestic implementation processes will affect the overall policy outcome for the international organization. Second, the uncertainty about policy outcomes might have some aspects which are proper to the national context. Hence allowing for these two types of uncertainty might be an additional way to address this issue.

Two further extensions would allow for a more explicit treatment of bargaining and enforcement. While aspects of the bargaining context were implicitly included in the model, an explicit treatment might yield additional insights. Similarly, given that international organizations often also have agencies dedicated to the enforcement of treaty obligations, neglecting this aspect might have consequences for the empirical implications. Hence, including aspects of the model by Steunenberg (2007), for instance, might allow for addressing also this isuee.

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