

Deliberation in International Institutions: Evidence from WTO Accession Negotiations

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Abstract

Deliberation is pervasive in international institutions yet has received comparatively little scholarly attention. Drawing on theories of deliberative democracy, I conceptualize deliberation as the process by which states come together in order to exchange arguments and seek collective agreement on a course of action. Deliberation can have far-reaching consequences as it can give rise to both formal agreements and lasting precedents. Accordingly, I argue that states should take these effects into account, seeking out opportunities to participate in deliberations as they unfold. I test this argument in the context of WTO accession negotiations. I employ a statistical measure of information contained in negotiating documents and original data on the participation of WTO Members in the accession process. The results of the analysis support the argument that states do value deliberation and are willing to expend valuable resources in order to participate.

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1 Introduction

In one form or another, deliberation is pervasive in international institutions. Members of the UN Security Council meet regularly to discuss emerging security challenges around the world. The IMF's Executive Directors gather on a near-daily basis to debate the merits of proposals submitted by the IMF staff. And WTO Members participate in a range of a standing committees and ad hoc working groups through which they exchange views on trade policy and WTO law and lay the groundwork for future negotiations. To varying degrees these meetings, as in other political institutions, represent opportunities for both economic-style bargaining and the deliberative exchange of information and views (Elster, 1991). Yet while bargaining in international institutions has received considerable attention, less is known about their deliberative functions.

Drawing on deliberative democratic theory I define deliberation as the process by which individuals come together in order to exchange arguments and seek collective agreement on a course of action. The effects of deliberation, both positive and normative, have been the subject of much empirical study. Most recently, a growing empirical literature examines the effects of deliberation within political institutions themselves. I depart from this literature by exploring what value participants themselves place on deliberation. If deliberation has the far-ranging implications attributed to it by theorists, states should take this into account and seek out opportunities to participate in deliberations as they unfold.

I test this hypothesis in the context of WTO accession negotiations. While economic-style bargaining is certainly present in accession negotiations, I argue below that they also represent important opportunities for Members to discuss and debate both existing provisions of the WTO agreements and policy areas in which WTO law has not yet been established. If deliberation is valuable to states, then Members should show greater interest in accession negotiations which touch on such novel subjects. I employ a statistical measure of information content to analyze a corpus of negotiating texts and combine this with original data

on participation in accession working parties. The empirical analysis supports the argument that states value deliberation and are willing to devote valuable human resources to ensure their participation.

2 Theories of Deliberation

The concept of deliberative governance stretches back to the Athenian democracy of the fifth century and the works of Aristotle (Gutmann and Thompson, 2004). However, by far the most influential recent work in the area is that of Jürgen Habermas whose formulation of deliberation as “communicative action” has become the central tenant of deliberative democratic theory. Thousands of essays have been written on the nature and functioning of deliberation as deliberative democracy has become the “most active” area of research in political theory (Dryzek, 2007).

Deliberation is the process by which individuals come together in order to exchange arguments and seek collective agreement on a course of action. Agreement is sought not through economic-style bargaining, but rather through persuasion on moral, logical, or procedural grounds. Crucially, deliberation theory assumes that interests are malleable over the course of an interaction. Rather than doggedly pursuing objectives which are fixed *ex ante*, individuals participating in deliberation attempt to convince others of their views, but are also open to persuasion themselves about what is in their own interests. As Habermas himself describes:

I speak of communicative actions when the action orientations of the participating actors are not coordinated via egocentric calculations of success, but through acts of understanding. Participants are not primarily oriented toward their own success in communicative action; they pursue their individual goals under the condition that they can co-ordinate their action plans on the basis of shared

definitions of the situation (cited in Risse, 2000).

The collective pursuit of truth through argumentation is thus a defining feature of the theory.

Deliberative theory is primarily normative, advocating deliberation as a means of enhancing the legitimacy of collective decision making. Yet its descriptive elements can be helpful in developing a positive theory of how states interact in settings organized around debate and information exchange. Gutmann and Thompson (2004) identify four characteristics which define deliberative decision making.

First is the premise that decisions must be justified through the presentation of evidence or argumentation. Second, deliberations must be accessible and open to all concerned. Third, deliberation must result in binding decisions. Deliberation is intended not simply as an academic exercise but rather as a means of achieving agreement on some meaningful issue. Fourth, while outcomes are binding in the near term they may be re-evaluated in the future. Deliberation is a dynamic process through which prior conclusions may be subsequently challenged in the light of new arguments or evidence. Thus:

Combining these four characteristics, we can define deliberative democracy as a form of government in which free and equal citizens (and their representatives), justify decisions in a process in which they give one another reasons that are mutually acceptable and generally accessible, with the aim of reaching conclusions that are binding in the present on all citizens but open to challenge in the future (Gutmann and Thompson, 2004).

These four conditions can be re-interpreted as scope conditions under which deliberative behavior is most likely to emerge. That is, deliberation should be most likely in settings where 1) issues are openly debated by states prior to decisions being taken, 2) debates are open to the participation of a wide range of states (though perhaps not all states as true deliberation would require), 3) the outcome of deliberations is binding or at least sticky in some sense, and 4) consensus on an issue may evolve over time with implications for future

policy.

In the past fifteen years many scholars have undertaken empirical studies of deliberative theory's normative claims. The body of existing research provides at best mixed support for the basic premise that deliberation can improve decision making. A classic work along these lines is Hibbing and Theiss-Morse (2002) who find that in specially-organized focus groups and other settings, "real-life deliberation can fan emotions unproductively, can exacerbate rather than diminish power differentials...is ill-suited to many issues and can lead to worse decision than would have occurred if not deliberation had taken place" (cited in Thompson, 2008). Conover and Searing (2005), Jackman and Sniderman (2006), and Mendelberg and Oleske (2000) reach similar conclusions. Yet Thompson argues these null findings reflect in part the importance of context in the success or failure of deliberations: "If only theorists can identify the right conditions, they can confidently continue to extol the virtues of deliberative democracy" (500, 2008).

While support for deliberative democracy's normative claims remains mixed, its descriptive emphasis on the importance of deliberation has received considerable support. In particular, a growing body of empirical evidence studies how deliberation in various political institutions affects decision making. Iaryczower, Shi, and Shum (2016) estimate a structural model of deliberation in the US appellate court and find that pre-vote deliberation can have a large impact on judicial decision making. Lopez-Moctezuma (2015) similarly estimates the effect of sequential deliberation in the U.S. Federal Open Market Committee, finding that the information obtained during deliberation often dominates the effect of participants' *ex ante* private information.

Risse (2000) applies the concepts of deliberation to international politics, arguing that communicative action is an important lens through which diplomatic negotiations and public discourse in particular can be understood. He also provides qualitative evidence in favor of the argument through case studies of German unification and international human rights

norms. Similar studies include Muller (2004) and Dryzek (2006). Lang and Scott (2009) highlight the role of deliberation in their study of WTO committees. The authors argue that committees are important sites for information sharing and norm elaboration, both of which promote a collective understanding of the issues under discussion. While these studies provide descriptive evidence of the occurrence of deliberation in international politics they do not engage the question of when deliberation will occur or what importance states themselves place on deliberation when it does occur.

3 Participation in WTO Accession Negotiations

The legal framework governing accessions to the WTO is extraordinarily broad giving current Members wide discretion in negotiating accession terms. Accessions are governed by a sole legal provision, Article XII of the Marrakesh Agreement which states that applicants may join the organization “on terms to be agreed between it and the WTO” (Marrakesh Agreement Establishing the World Trade Organization). As the WTO Secretariat acknowledges:

Perhaps the most striking thing about WTO Article XII is its brevity. It gives no guidance on the ‘terms to be agreed’, these being left to negotiations between the WTO members and the applicant. Nor does it lay down any procedures to be used for negotiating these terms, these being left to individual Working Parties to agree (WT/ACC/10, 7)

In practice a standard set of procedures has evolved by which accession negotiations are conducted. These include two parallel tracks of negotiations. The first of these is bilateral negotiations between the applicant and individual WTO Members on specific, binding tariff commitments. The second is a series of plurilateral “working party meetings” in the course of which applicants negotiate the domestic legal and regulatory reforms necessary to join the organization. As is discussed in more detail below, the majority of working party members

do not participate in bilateral negotiations, but only in these plurilateral meetings. It is in these meetings where deliberation may play a key role.

In addition to overseeing and evaluating an applicant's progress towards conformity with existing WTO law, in the course of its meetings the working party typically agrees on additional specific commitments which must be observed by the applicant upon accession. These commitments frequently go beyond the requirements of existing WTO agreements, imposing new requirements on applicants above and beyond those observed by the existing Members. For example, in the course of accession negotiations, Moldova committed to reduce its reliance on price controls, Estonia committed to the application of national treatment in direct taxation, and the Kyrgyz Republic committed to accept international certification for products as safe for human use rather than require additional certifications (Cattaneo and Primo Braga, 2009, 19).

These provisions are nearly always controversial. Not only do they have important implications for the applicant, they also extend WTO law into areas not previously regulated creating the potential for precedential effects later down the line. Indeed, as Kennedy notes, the accession commitments of new members "tend to build on those of earlier accessions and [now] represent a substantial body of WTO law" (2013, 46). The confidential nature of the working party's meetings as well as their open-ended nature thus make them ideal sites for deliberation.

Participation in accession working parties is self-selecting and open to all member states. Participation in accession working parties varies considerably across applicants as well as over time. The smallest working party to date was that of Vanuatu, with just 15 members. China, Russia, Saudi Arabia, and Kazakhstan have attracted the largest number of participants to date, each with over 60 members. The mean number of participants is 34. Moreover, conveniently for the current study, membership rosters for each working party are publicly available and updated regularly making it possible to track changes in states' participation

over time.

Few studies exist on the dynamics of working parties though Neumayer (2013) argues that economic competitors may join the working party in order to delay an applicant's entry. Allee and Scalera (2012) find that applicants with a larger number of working party members experience greater gains trade after joining the WTO, reflecting more rigorous demands for liberalization during the accession process. However, the empirical analysis does not explore the direction of causality between rigorous accessions and interest in the working party. If deliberation drives interest in accession negotiations then accessions in which new WTO-plus commitments are required are likely to generate the most interest amongst the membership.

Agreements struck between the applicant and the accession working party are binding, since the terms of each accession protocol have the status of law under the WTO's Dispute Settlement Understanding. Each accession protocol contains a clause indicating that it forms an "integral part of the WTO Agreement." Legal scholars describe this as a form of legal amendment, albeit one which the broader membership of the WTO is not required to formally approve (Kennedy, 2013). As an integral part of the WTO agreements, accession protocols are also generally recognized as covered agreements under the Dispute Settlement Mechanism. That is, commitments reached in accession protocols can be litigated under the DSU even where they exceed those commitments contained within the broader WTO agreements.

Accession protocols have been litigated under the DSU many times, beginning with the *China-Auto Parts* ruling of 2008. In that case both the panel and the Appellate Body accepted and ruled on the litigants claims under China's protocol of accession. Two subsequent cases went further in accepting not only China's accession protocol, but also the final report of the accession working party as integral parts of the WTO Agreements. For example, in *China-Publications and Audiovisual Products* the Appellate Body upheld the Panel's ruling that China had violated its obligation to provide trading rights on a non-discretionary basis,

in violation of both its accession protocol and the report of the accession working party (WT/DS/363/AB/R). Many, though not all, of the cases in which an accession protocol has been litigated under the DSU concern China.

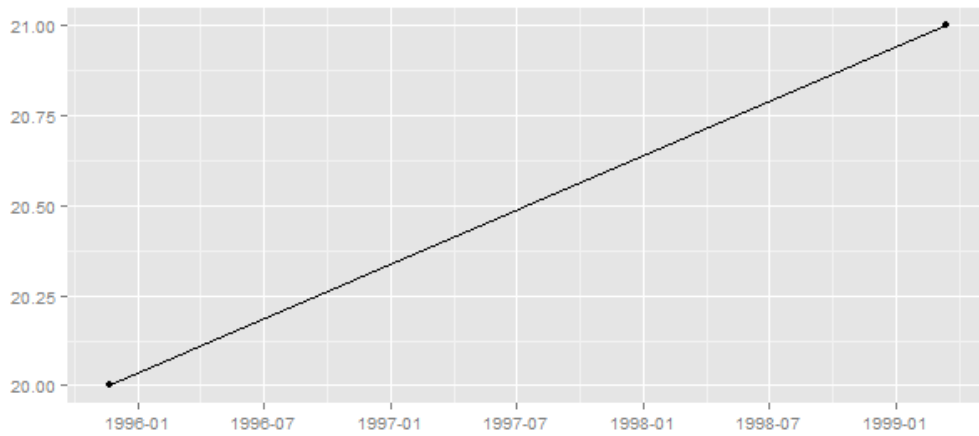
Finally, it is important to note that accessions are not necessarily binding on one another or on the broader membership. Thus issues may be revisited in subsequent negotiations and consensus on the “correct approach” may evolve over time.

4 Research Design

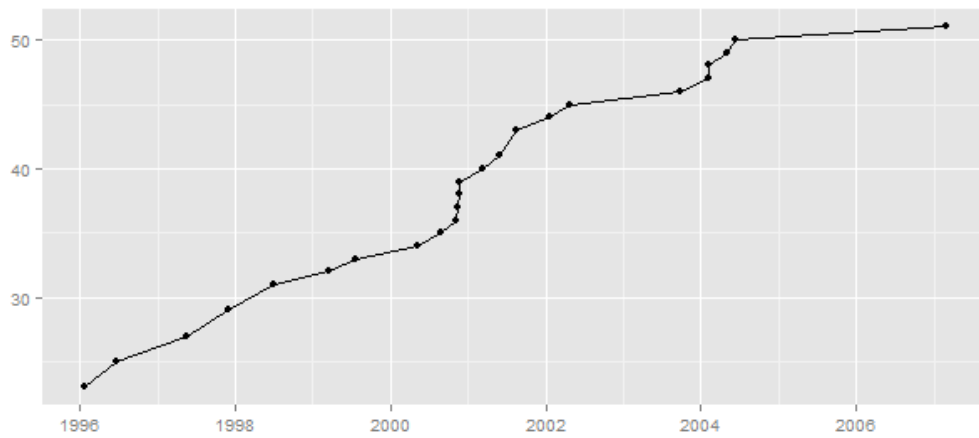
In order to explore how deliberation influences participation in bureaucratic bodies, I focus on temporal variation in working party membership. Figure 1 depicts changes in the membership of two working parties over the course of accession negotiations. Initially, the working party on the accession of Estonia and the working party on the accession of Ukraine attracted around 20 members each, somewhat below the average. However, participation in the two bodies diverged dramatically over the course of accession negotiations. Membership in Estonia’s working party (Figure 1a) remained relatively constant, with only one new member joining near the end of the accession process. In contrast, Ukraine’s working party steadily attracted new members, nearly doubling in size over the course of negotiations (Figure 1b).

To assess how membership responds to new opportunities for deliberation, I use text analysis to explore the substantive content of negotiations at each stage of the accession process. Given the sensitive nature of negotiations to join the WTO for many applicants, few documents pertaining to the actual meetings of the working parties are publicly available. However, preparatory documents, in the form of questions and replies, are available via the WTO’s website. These documents comprise collections of questions submitted by members of the working party prior to each working party meeting along with the applicant’s written

Figure 1: Working Party Membership Over Time



(a) Working Party on the Accession of Estonia



(b) Working Party on the Accession of Ukraine

responses. These documents form the basis of discussion in working party meetings and provide insight into the subjects which arise in the course of the accession process for each country.

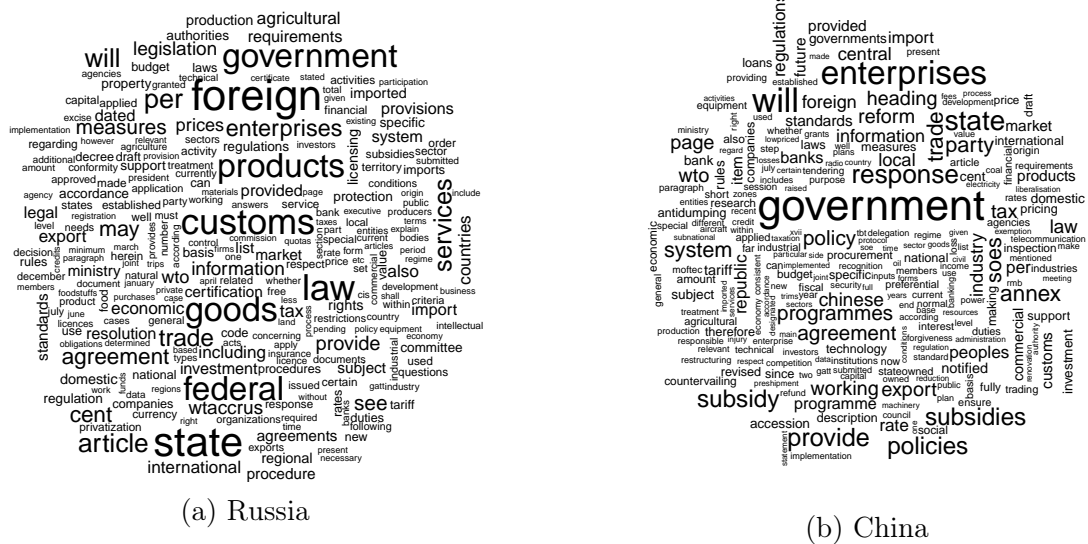
For example, in an early document from Montenegro's accession, working party members requested additional information on pricing policies:

Regarding the retained authority of the government of Montenegro to regulate prices for medicines, oil and oil derivatives and coal, please describe how Montenegro will ensure that any price controls will not be applied in a prejudicial manner, consistent with Article III:9 of the GATT (WT/ACC/CGR/23, 1).

Montenegro responded with a detailed description of its price controls in each industry, including the basis for maximum price calculations as well as how ongoing privatization would alter existing practice. While questions from the working party early on in accession negotiations tend to elicit information from the applicant regarding various features of its economic policies, later documents also incorporate specific requests or suggestions from the working party. A "question" submitted to Jordan during the drafting of its accession protocol states:

We suggest the last sentence of paragraph 29 of [the working party report] be made a separate paragraph and redrafted as follows: 29. The representative of Jordan confirmed that prices for goods and services in every sector of Jordan were determined freely by market forces with the exception of those listed in Table1 (a and b) 29bis. The representative of Jordan confirmed that Jordan would apply, from the date of accession, the price and profitability controls described in paragraphs 26-29 and Table 1(a and b) and any applied in the future, in a WTO-consistent fashion, and would take account of the interests of exporting WTO Members as provided for in Article III.9 of the GATT 1994. Jordan would publish any list of goods and services subject to State price controls in the Official

Figure 2: Frequently Used Words in Accession Negotiations



Journal, including any changes regarding existing price controls. The Working Party took note of these commitments (WT/ACC/JOR/22).

Jordan responded by accepting the proposed language.

Figure 2 depicts the most frequently-appearing words in the documents pertaining to the accession of Russia and China respectively. These figures suggest that the text of these documents does reflect the substance of accession negotiations. In the case of China, the most prominent words include “government,” “subsidy,” and “enterprise” reflecting concerns of the WTO membership about the active role of the Chinese government in its economy. In the case of Russia, the most prominent terms are related to more basic WTO obligations (“products,” “goods,” and “customs”) indicating that Russia’s accession negotiations were focused on more traditional barriers to trade.

In line with the arguments laid out above, I predict that participation in working parties should respond to new opportunities for deliberation. These opportunities should arise whenever discussions in the working party turn to relatively novel topics or when similarly novel information is revealed by the applicant in the course of negotiations. These subjects

include for example new areas of regulation on which the WTO agreements are ambiguous or silent. In these contexts, membership in the working party, and thus participation in working party meetings, may provide states with the opportunity to argue in favor of its preferred interpretation while also participating more generally in consensus building on how such issues should be tackled. Thus, I hypothesize that subjects which are novel relative to previous negotiations should prompt greater working party participation.

I operationalize novel information in two ways. First, I measure novelty relative to accession negotiations *across all applicants*. My second measure estimates novelty relative to previous negotiations *within the same accession*. Each observation corresponds to a unique document. Both measures are constructed by estimating the Kullback-Liebler divergence between the document in question and all other documents either across all accessions or within the same country's accession. The KL divergence is a measure of information content commonly used in natural language processing. Intuitively, the KL divergence between two word frequency distributions measures the extent of information loss when the first distribution is used to approximate the second. Thus it measures the extent of novel information contained in one distribution relative to another.

Formally, for two word frequency distributions, P and Q , the KL divergence from Q to P is:

$$D_{KL}(P||Q) = \sum_i P(i) \log \frac{P(i)}{Q(i)} \quad (1)$$

In the present context, P represents the distribution of word frequencies in a particular document i , while Q represents the word frequency distribution across all previous documents (either within the same accession or across all accessions). Below I describe in greater detail the data which I use to test my hypothesis as well as the empirical analysis. Before this though, the next section considers the most important alternative explanation for working party membership.

5 Alternative Explanation

The most important alternative explanation to contend with is direct economic self-interest. States may join the working party in order to extract particular economic concessions from the applicant. Empirically I address this concern in three ways. First, I include a variety of economic covariates to control for a state's overall attractiveness as an export market. Second, I include country fixed effects so that results reflect variation within applicant countries over time rather than across countries. Finally, I show that results are robust to excluding observations which encompass the initial formation of the working party and to controlling for the number of members to join at that date. Those members who wish to extract particular economic concessions should be those most likely to join at the outset of the accession process rather than in response to developments in accession negotiations later down the line. Additionally, controlling for the number of working party members in the early stages of the accession process allows me to proxy for the level of overall interest in an applicant's accession.

At the same time, qualitative evidence suggests that membership in working parties is not driven primarily by the desire to extract concessions. First, states face considerable incentives to free-ride on the negotiating efforts of others. A unique feature of the WTO accession process is that while market access commitments are negotiated bilaterally, they are ultimately multilateralized upon the completion of negotiations. This means that all WTO members benefit from the negotiating efforts of the working party, whether or not they contribute to those efforts. Thus while one might expect working party membership to be determined by trade volumes, states also face considerable incentive to free-ride on the negotiating efforts of others.

This is the case both because of the high costs associated with working party membership and because states should expect little additional benefit from joining in negotiations where export interests overlap with those of the United States in particular. The United States

has joined every accession working party to date and adopts a self-described “leadership role in all aspects of WTO accessions” (USTR Website, “WTO Accessions”). Given its standing interest in accession negotiations, its considerable legal and technical expertise, and its broader geopolitical influence, it is reasonable to expect that the U.S. will be particularly effective in negotiating market access concessions. Because they will ultimately apply to all WTO members, the potential working party member can expect to benefit from these U.S.-negotiated concessions whether or not it joins the working party itself.

Anecdotal evidence suggests that negotiators from developing countries in particular recognize this negotiating advantage as well as the incentives to free-ride. As one Moroccan negotiator explained during a regional workshop on WTO accession:

Morocco has never made any demand on developing countries in their stage of accession...industrialized countries are doing a much better job than we can do!
(Achy, 2004).

Nonetheless, Morocco has participated as a member of the working party in nearly a third of all accessions completed to date. This pattern of countries participating in working parties yet not pursuing economic concessions is widespread. Anecdotal evidence suggests that of the 38 countries who joined the working party on the accession of Tajikistan, only 13 engaged in direct bilateral negotiations over tariff concessions (World Trade Organization, 2012a). The working party on the accession of Laos attracted 66 members in total, yet only nine of those pursued bilateral tariff negotiations (World Trade Organization, 2012b).

6 Data

To implement the research design described above I collect all questions and replies circulated in the course of accession negotiations completed before August 1, 2016.¹ This results in 549

¹Available via the WTO’s online search facility.

individual documents. Of these, 246 consist of addenda to previously-circulated documents. These addenda vary in how closely they follow their parent document with some addenda circulated many years later.² At the same time, many addenda are circulated the same or the following day as their parent document. For the analysis below I merge addenda which closely follow their parent document (within one month of the latter’s circulation), but treat the remaining addenda as individual documents.³ I also combine any documents pertaining to the same country’s accession that are circulated on the same day. This results in a corpus of 372 documents with 41,612 unique words. Table 1 displays the number of documents associated with each applicant.

Table 1: Number of Documents by Applicant

Ukraine	32	Oman	8
Kazakhstan	26	Moldova	7
Vietnam	21	Cambodia	6
Russia	20	Estonia	6
Saudi Arabia	18	Latvia	6
Lao PDR	17	Taiwan	5
Samoa	14	Georgia	4
Tajikistan	14	Jordan	4
Yemen	14	Tonga	4
Afghanistan	13	Armenia	3
Croatia	12	China	3
Cape Verde	11	Mongolia	3
Montenegro	11	Nepal	3
Seychelles	11	Panama	3
Lithuania	9	Vanuatu	3
Macedonia	9	Liberia	2
Albania	8		

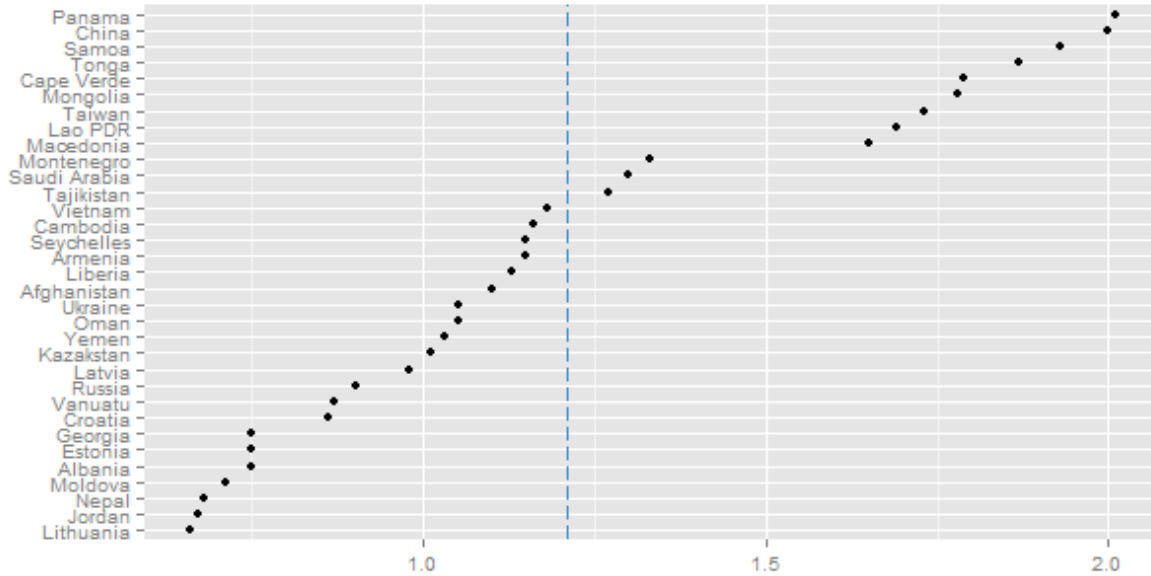
Number of documents labeled “Questions and Replies” for each applicant to the World Trade Organization, 1995-2016.

For each document I calculate the two measures of information content described above. Let documents be indexed $i \in 1, \dots, I$ and applicants indexed $j \in 1, \dots, J$. The first mea-

²For example, one document from Kazakhstan’s recent accession, WT/ACC/SPEC/KAZ/7, contained questions and replies on the subject of domestic support and export subsidies to agriculture. An addenda, WT/ACC/SPEC/KAZ/7/add3, was circulated nearly nine years later.

³The results are not changed by treating all addenda as individual documents or excluding all addenda from the analysis.

Figure 3

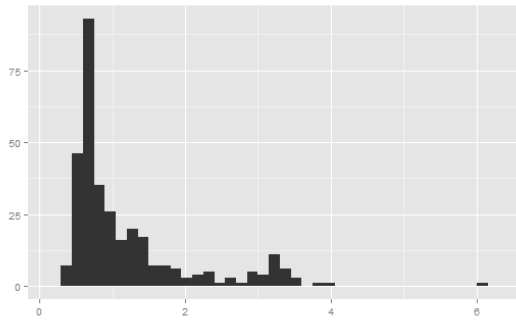


sure, KL_All , is the Kullback-Leibler divergence between document i, j and all previously-circulated documents. As described above, this measure can be interpreted as the distance between the document in question and all previous accession documents. A high value of KL_All indicates that the topics under negotiation are relatively novel or haven't yet been examined in-depth in previous negotiations. The second measure, KL_Own , is the KL divergence between document i, j and all preceding documents pertaining to country j 's accession. A high value of KL_Own indicates that the subjects discussed in the current document differ significantly from those discussed in earlier documents generated by the same applicant. In practice, the two measures are very similar with a correlation of 0.84. The mean of KL_All for each country across all documents is displayed in Figure 3.

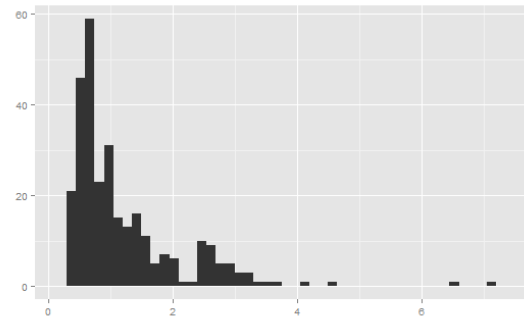
To operationalize the dependent variable, *Joins*, I first calculate a six month window following each of the documents in the corpus. I then count the number of WTO members joining the relevant working party during this window. I predict that higher values of KL_All and KL_Own will lead to greater interest in the negotiations and thus more countries joining.⁴

⁴Changes in working party membership are coded using official WTO documents.

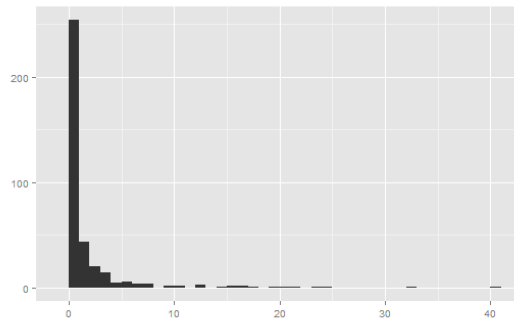
Figure 4: Distribution of Key Variables



(a) KL Divergence (All Accessions)



(b) KL Divergence (Own Accession)



(c) No. Countries Joining

The resulting variable is a count ranging from zero to 40. The variable is heavily skewed, taking on a value of zero in nearly 70% of cases. As the distribution makes clear, it is heavily skewed, taking on a value of zero in nearly 70% of cases.

Before moving on, it is important to highlight a potential issue with the use of the *KL_Own* variable. By the nature of the measure, the word distribution in documents circulated early on in a country's negotiations is compared with the relatively narrow word distribution so far. In contrast the word distribution in documents circulated later on is compared with a broader, more established word distribution (i.e. the sum total of all preceding documents). This implies that the earliest observations should have systematically higher values of *KL_Own* than later observations. This is problematic since the highest values of *Join* invariably reflect the initial formation of the working party (i.e. those countries who join the working party immediately). Thus these early observations may induce a spurious

relationship between *KL_Own* and *Joins*. To address this problem, in all analyses including *KL_Own* I drop the first three observations for each country. This reduces the number of observations in those specifications to 304. I choose three since it is the minimum number of documents which must be dropped to eliminate all instances in which *Join* reflects the initial formation of the working party.⁵

Finally, the data include a number of covariates which might be expected to correlate with interest in accession negotiations. First I include the number of WTO members who initially join the working party. This variable should function as a proxy for the amount of interest exogenously generated by an individual applicant's accession. Next, Pelc (2011) and Neumayer (2013) suggest that economic considerations should be an important determinant of working party membership. Thus I include the value of the applicant's total trade as well as gross domestic product. I also include a measure of the applicant's regime type (Polity IV) again following Pelc (2011). Finally, following Davis and Wilf (2013) I include a measure of the applicant's foreign policy orientation using ideal points estimated by Bailey et al. (2015). Descriptive statistics for all variables are included in Table 2.

Table 2: Descriptive Statistics

Statistic	N	Mean	St. Dev.	Min	Max
Joins	180	1.58	4.40	0	32
KL_All	180	1.05	0.71	0.39	4.00
KL_Own	180	1.10	0.87	0.37	7.11
Original Membership	180	21.86	8.22	9	43
Trade (Log)	180	5.89	0.40	5.07	6.67
GDP (Log)	180	4.72	0.45	3.77	5.65
Polity	180	1.85	6.42	-10	10
UN Ideal Point	180	0.22	0.79	-1.17	1.57

⁵The results are robust to dropping both more and fewer observations as discussed in more detail below.

7 Empirical Analysis

To test the hypothesis described above I employ zero-inflated negative binomial regression. While the Poisson model is often used for count data, the negative binomial allows for over dispersion so provides a better fit in the present context. As noted above, the dependent variable exhibits a high proportion of zeros. The zero-inflated version of the negative binomial addresses this by estimating a mixture model with two components: a point mass at zero and a negative binomial distribution for the count component of the variable (also possibly zero). Observations may be drawn from either distribution, but the true distribution for each is unobserved. The choice of this unobserved state is modeled using logistic regression. I use the `pascal` package to implement all models.

I begin by regressing *Joins* on only *KL_All* and the number of initial members in the working party. The results are presented in column 1 of Table 3. In column 2 I introduce the economic covariates, trade and GDP, and in column 3 I introduce the political variables, regime type and UN ideal point. All three models also include year fixed effects. In Table 4 I present the same three models with *KL_Own* replacing *KL_All*. To confirm that the zero-inflation model is appropriate I perform Vuong tests for each specification by estimating the same model via simple negative binomial regression and comparing the results to those below. In most cases the zero-inflation model is a significant improvement on the regular negative binomial and in no cases does the negative binomial appear to be superior.

Across all models, both independent variables, *KL_All* and *KL_Own*, are estimated to have a positive and statistically significant relationship with *Joins*. While most covariates do not achieve statistical significance, model three provides the best fit in both cases. Chi squared tests on the difference in log-likelihoods confirm that model 3 is a significant improvement over models 1 and 2 in both cases. This suggests that both the economic and political variables taken together are important predictors of working party membership. Plots of the predicted number of joiners and marginal effects, relying on parameter estimates from model

Table 3

	(1)	(2)	(3)
KL_All	0.39** (0.19)	0.48*** (0.18)	0.61*** (0.19)
OriginalMembership	-0.02 (0.02)	0.04 (0.03)	0.06 (0.04)
LogTrade		-2.78 (1.96)	-3.60* (2.13)
LogGDP		0.92 (1.97)	0.92 (2.07)
Polity			-0.09** (0.03)
UNIdealPoint			0.14 (0.28)
Constant	3.45*** (0.69)	13.49*** (3.49)	18.04*** (4.52)
Observations	329	218	194
Log Likelihood	-422.33	-258.54	-226.96

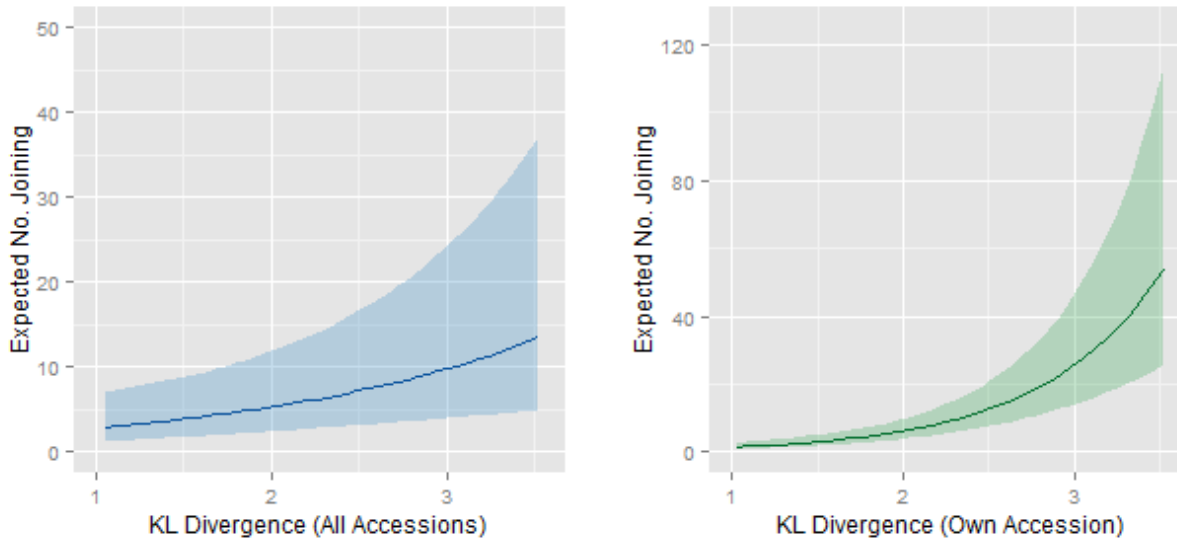
Zero inflated negative binomial regression with year fixed effects. Standard errors in parentheses. * significant at $p < .10$; ** $p < .05$; *** $p < .01$. Dependent variable is number of WTO Members joining accession working party within six months. Independent variable is estimated relative to all prior accession documents.

Table 4

	(1)	(2)	(3)
KL_Own	0.66** (0.26)	1.29*** (0.20)	1.41*** (0.20)
OriginalMembership	0.01 (0.02)	0.08** (0.03)	0.07* (0.04)
LogTrade		-2.71 (2.35)	-2.11 (2.40)
LogGDP		1.15 (2.36)	0.92 (2.36)
Polity			-0.01 (0.04)
UNIdealPoint			0.01 (0.25)
Constant	1.43 (1.03)	10.42*** (3.88)	8.06* (4.78)
Observations	268	184	163
Log Likelihood	-300.46	-176.91	-151.33

Zero inflated negative binomial regression with year fixed effects. Standard errors in parentheses. * significant at $p < .10$; ** $p < .05$; *** $p < .01$. Dependent variable is number of WTO Members joining accession working party within six months. Independent variable is estimated relative to applicant's prior accession documents.

Figure 5



3, are presented in Figures 5 and 6 respectively. These plots highlight important differences between the two estimates. In particular, the slope of the plot on the right hand side of Figure 5 (corresponding to KL_Own) is much steeper than on the left hand side (KL_All) and is estimated with greater precision.

Next, I run several checks to test the robustness of the baseline results (model 3) for each variable. Both results are robust to the inclusion of country fixed effects.⁶ The results of these models are included in Table 5. I next drop countries one at a time and re-estimate both models on the remaining observations. In all cases the coefficients for KL_All and KL_Own remain positive and statistically significant (results included in the appendix). I also re-estimate both results using a 12-month window to measure *Joins* instead of a six-month window. This attenuates the point estimate slightly in each case though both retain their statistical significance (Table 6).

Finally, I re-estimate the baseline model for KL_Own dropping only the first observation, the first two observations etc. up through the first five observations. The weakest result is obtained by dropping only the first observation though this continues to be significant

⁶Models with country fixed effects estimated via negative binomial regression.

Table 5

	(1)	(2)
KL_All	0.54** (0.23)	
KL_Own		0.74*** (0.24)
OriginalMembership	0.38 (0.47)	3.20 (2, 107, 468.00)
LogTrade	9.82 (6.79)	8.32 (5.91)
LogGDP	-46.76*** (16.88)	-37.46*** (14.54)
Polity	-0.14 (0.15)	0.005 (0.14)
UNIdealPoint	-5.30*** (1.87)	-4.04** (1.65)
Constant	145.93*** (38.05)	35.86 (56, 901, 625.00)
Observations	194	163
Log Likelihood	-240.74	-165.28

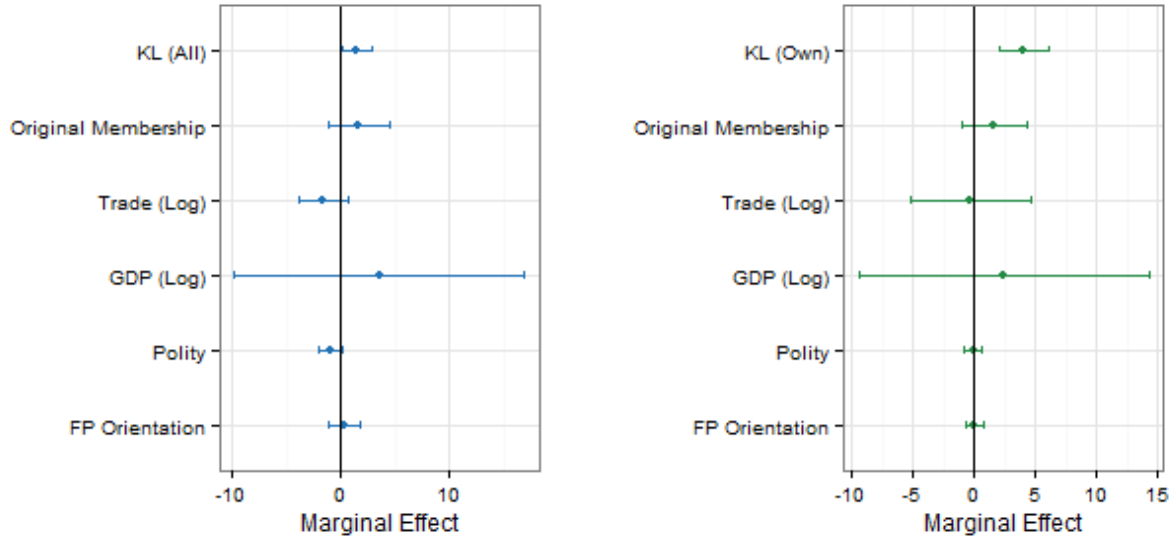
Zero inflated negative binomial regression with country fixed effects. Standard errors in parentheses. * significant at $p < .10$; ** $p < .05$; *** $p < .01$. Dependent variable is number of WTO Members joining accession working party within six months. Independent variables estimated relative to all prior accession documents and to applicant's own accession documents respectively.

Table 6

	(1)	(2)
KL_All	0.50*** (0.18)	
KL_Own		1.08*** (0.19)
OriginalMembership	0.04 (0.04)	0.03 (0.03)
LogTrade	-4.40** (1.78)	-3.93* (2.21)
LogGDP	2.35 (1.71)	3.23 (2.12)
Polity	-0.08** (0.03)	-0.02 (0.03)
UNIdealPoint	-0.02 (0.25)	-0.16 (0.23)
Constant	16.90*** (4.19)	9.60** (4.41)
Observations	194	163
Log Likelihood	-257.95	-176.38

Zero inflated negative binomial regression with year fixed effects. Standard errors in parentheses. * significant at $p < .10$; ** $p < .05$; *** $p < .01$. Dependent variable is number of WTO Members joining accession working party within twelve months. Independent variables estimated relative to all prior accession documents and to applicant's own accession documents respectively.

Figure 6



at the 0.10 level. This may not be surprising given that the second observation frequently comes before the establishment of the working party so in most cases would result in a zero value for *Joins* but a very high value for *KL_Own*. In all other specifications the result remains unchanged. These results are included in Table 7. Overall the empirical analysis supports the hypothesis that states are willing to expend resources in order to participate in deliberations within international institutions. Members are more likely to participate in accession working parties when novel matters are brought up in the course of negotiations.

8 Conclusion

Deliberation is pervasive in international politics. In addition to helping to shape members' own preferences, deliberation can have lasting impacts on policy, as short-term decisions can become the basis for long-standing precedents. This paper demonstrates that states take such deliberations seriously and are willing to expend resources in order to participate. In particular, the empirical results suggest that WTO Members' participation in bureaucratic bodies such as accession working parties is driven in part by the desire to shape deliberative

Table 7

	(1)	(2)	(3)	(4)
KL_Own	0.32* (0.17)	0.81*** (0.26)	1.16*** (0.28)	1.03*** (0.32)
OriginalMembership	0.05 (0.04)	0.09* (0.05)	0.06 (0.04)	0.09 (0.06)
LogTrade	-3.39 (2.35)	-2.90 (2.46)	-4.52 (2.81)	-1.00 (4.21)
LogGDP	0.91 (2.23)	0.41 (2.44)	3.27 (2.78)	-0.28 (4.08)
Polity	-0.07* (0.04)	-0.10*** (0.04)	-0.04 (0.04)	-0.04 (0.05)
UNIdealPoint	0.08 (0.31)	0.34 (0.36)	-0.08 (0.31)	-0.18 (0.40)
Constant	17.15*** (5.12)	15.24*** (4.97)	9.44* (5.43)	5.30 (7.94)
Observations	180	173	153	142
Log Likelihood	-214.32	-196.28	-133.10	-118.22

Zero inflated negative binomial regression with year fixed effects. Standard errors in parentheses. * significant at $p < .10$; ** $p < .05$; *** $p < .01$. Dependent variable is number of WTO Members joining accession working party within six months. Independent variables estimated relative to applicant's prior accession documents. Model 1 drops first observation from sample for each country. Model 2 drops first 2, model 3 drops first 4, and model 4 drops first 5.

discourse. Much work remains though in exploring both the conduct and outcome of deliberations. How “sticky” are the shared understandings which arise from deliberations and how does their impact vary across institutional settings? To what extent are deliberations successful in modifying or amending states’ own preferences and what factors mediate this effect? The plethora of text data now publicly available combined with recent advances in automated content analysis suggest that the study of deliberation is a promising avenue for future research.

At the same time, theoretical accounts of deliberation must take into account the particularities of international politics. The exchange of truthful information or sincere arguments in the course of deliberation will be limited by participants’ own private biases which can give rise to incentives to misrepresent (Steinberg, 2010). Yet deliberation remains possible provided these biases are not too large (Crawford and Sobel, 1982). At the same time, asymmetries in the power of participants to the deliberation may have an important impact on their outcomes. This may be true either due to their prestige or simply because powerful countries may have greater resources and thus access to more credible information.

Finally, this paper has not engaged the long-standing debate between rational choice theorists and social constructivists. Yet further exploration is needed of whether or not deliberation is compatible with standard rational choice models. Risse (2000) and others have argued that while the communication of information may be reconcilable with rationalism, deliberation entails more than this. In the course of deliberation, not only factual or substantive matters are at stake, but also the fundamental “rules of the game.” Risse (2000) and others argue that this cannot be reduced to a rational model since it violates the common knowledge assumption central to game theoretic accounts. Yet Harsanyi’s (1967) classic work on imperfect information provides a potential solution to this problem, by reconceptualizing games with imperfect information (where the ideal rules of the game are not common knowledge) as games of incomplete information (where the ideal rules are unobserved, but players may

hold subjective or objective beliefs about them). It may be that the choice of rules itself can therefore be endogenized within a standard game theoretic framework.

Overall though, this paper goes beyond current accounts of states' behavior in international institutions by theorizing the conditions under which deliberation is most likely. It also makes an empirical contribution by exploring the dynamics of accession to the World Trade Organization and the motivations of those states who participate in the accession process.

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Appendix

Table 8

Country Dropped	Coefficient	P-value
Panama	0.60	0.00
Albania	0.63	0.00
Montenegro	0.68	0.00
Macedonia	0.46	0.01
Croatia		
Moldova	0.57	0.00
Russia	0.71	0.00
Estonia	0.62	0.00
Latvia	0.57	0.00
Lithuania	0.60	0.00
Ukraine	0.62	0.00
Armenia	0.61	0.00
Georgia	0.61	0.00
Cape Verde	0.71	0.00
Liberia	0.61	0.00
Seychelles	0.61	0.00
Jordan	0.76	0.00
Saudi Arabia	0.56	0.00
Yemen	0.54	0.00
Oman	0.54	0.01
Afghanistan	0.61	0.00
Tajikistan	0.61	0.00
Kyrgyz Republic	0.61	0.00
Kazakhstan	0.60	0.00
China	0.90	0.00
Mongolia	0.63	0.00
Taiwan	0.61	0.00
Nepal	0.61	0.00
Cambodia	0.57	0.01
Lao PDR	0.61	0.00
Vietnam	0.61	0.00
Vanuatu	0.61	0.00
Tonga	0.61	0.00
Samoa	0.61	0.00

Zero inflated negative binomial regression with year fixed effects, dropping one country at a time. Dependent variable is number of WTO Members joining accession working party within six months. Independent variables estimated relative to all prior accession documents.

Table 9

Country Dropped	Coefficient	P-value
Panama	1.41	0.00
Albania	1.43	0.00
Montenegro	1.57	0.00
Macedonia	1.25	0.00
Croatia	1.46	0.00
Moldova	1.24	0.00
Russia	1.70	0.00
Estonia	1.41	0.00
Latvia	1.42	0.00
Lithuania	1.42	0.00
Ukraine	1.49	0.00
Armenia	1.41	0.00
Georgia	1.38	0.00
Cape Verde	1.42	0.00
Liberia	1.41	0.00
Seychelles	1.41	0.00
Jordan	1.38	0.00
Saudi Arabia	1.46	0.00
Yemen	1.33	0.00
Oman	1.42	0.00
Afghanistan	1.41	0.00
Tajikistan	1.41	0.00
Kyrgyz Republic	1.41	0.00
Kazakhstan	1.49	0.00
China	1.41	0.00
Mongolia	1.41	0.00
Taiwan	1.41	0.00
Nepal	1.42	0.00
Cambodia	1.32	0.00
Lao PDR	1.41	0.00
Vietnam	1.41	0.00
Vanuatu	1.41	0.00
Tonga	1.41	0.00
Samoa	1.41	0.00

Zero inflated negative binomial regression with year fixed effects, dropping one country at a time. Dependent variable is number of WTO Members joining accession working party within six months. Independent variables estimated relative to applicant's own prior accession documents.