Communication and Credibility in Multilateral Negotiations*

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Abstract

Multilateral negotiations form the basis of much international cooperation, but the hurdle of reaching agreement often proves insurmountable. One prominent example of such negotiations is the Doha round of trade liberalization talks in the World Trade Organization (WTO). The round has already lasted more than fourteen years but, so far, has fallen short of its original ambition. This article identifies one possible reason why multilateral negotiations such as those of the Doha round face difficulties, namely the dysfunctional communication among states. I contend that a state's ability to effectively articulate its interests is inhibited when its interests are dispersed across a number of issues under negotiation rather than focused on one or two primary areas. For straightforward domestic political reasons, a state that pursues multiple interests in negotiations will have difficulty in credibly communicating its position to other participants. This decreases the efficiency of negotiations, creates delays, and may lead to negotiation deadlock. I test this proposition with the use of a newly collected dataset of coded public statements by representatives of WTO member states at the eight ministerial conferences between 1996 and 2011.

Keywords: multilateral negotiations; World Trade Organization; Doha development agenda; international trade; interest articulation, domestic politics

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1. Introduction

Multilateral negotiations form an essential part of international politics. Yet, in many key issue areas of international cooperation the progress of negotiations has for years been lagging behind expectations. To find agreement between dozens of states with diverse and conflicting interests is of course no easy task and the talks often degenerate into a series of

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accusations about who is responsible for the lack of progress. The Doha round of multilateral trade liberalization talks within the World Trade Organization (WTO) is an excellent example. Even though a deal on a first mini-package was reached in 2013, even after fifteen years of negotiations, most of the important parts of the Doha agenda are yet to be agreed upon. This means that global trade flows are, at the highest level, regulated by rules the negotiation of which started thirty years ago and entered into force in 1995. Of course, the global economy has changed dramatically since then, and in many respects the existing rules are rather obsolete, a fact which presents a serious challenge to the WTO as the body responsible for the creation and maintenance of the rules for global trade. A similarly dismal picture can be seen in the global negotiations on environmental protection: much disagreement among the major players and little prospect of any meaningful agreement in the near future. All too often multilateral negotiations take too long and deliver too little.

In this article, my target is to shed light on one of the reasons for such principle difficulties, and to identify a problem of multilateral negotiations that has so far evaded scholarly attention. Studying the case of the Doha talks and the WTO, I argue that one possible reason why important multilateral negotiations face such insurmountable problems lies in the dysfunctional communication among the participants. Specifically, I contend that if a state's interests are dispersed across multiple areas of the negotiations, as is often the case, its ability and willingness to articulate its interests with any clarity is weakened. For straightforward domestic political reasons that I discuss later in the text, state representatives do not have the necessary incentives to communicate their key interests in a credible way, with the help of 'costly' public signalling. As was put to me in an interview with one ambassador from the early days of the Doha round of trade talks, the success of negotiations depends on negotiators having 'a thorough knowledge of the interests and needs of all the partners, so that they can realize what is and what is not realistically possible." I argue that many of the important WTO members have difficulties communicating this information to their partners. I do not mean to suggest that this single problem can explain the deadlock in the Doha or other multilateral negotiations. Alternative and complementary explanations may be put on the table. However, I try to identify a factor that seems to significantly contribute to the impasse of the Doha negotiations, and possibly of other multilateral talks as well.

I assess my hypothesis with a new dataset that covers the patterns of communication of WTO member states. The dataset is based on the manual coding of the public statements of ministers at the eight WTO ministerial conferences (MC) between 1996 and 2011. It covers the 47 largest exporters, which together account for more than 90 % of the world trade volume.³ These coded statements provide a unique source of data concerning both the political-economic interests of the member states and their ability and willingness to signal their interests to their counterparts. A set of regression analyses shows that the hypothesized relationship has considerable empirical support.

The article is structured in the following way: in section two I present, in some detail, the main argument of the article; in section three I outline the design of my research and present the newly collected dataset used to assess the argument; section four presents the main results of the empirical analysis; an online appendix offers additional quantitative robustness checks.

Multilateral negotiations and the dispersion of a state's interests

Typically, the purpose of multilateral international negotiations is to devise an international agreement regulating the behaviour of states and other actors in a certain sphere of international life, and the current trade liberalization talks of the Doha round are no exception. The negotiations commenced in November 2001 at the Ministerial Conference in Doha, Qatar. The mandate of the negotiations, formulated in the Doha Ministerial Declaration, covers a broad range of trade areas and measures, with the overall purpose to achieve globally significant liberalization of the trade with goods and services (WT/MIN(01)/DEC/1, see World Trade Organization 2001). Since 2001, the negotiations have gone through several crises, including as early as the 2003 Cancún Ministerial Conference (Narlikar, Wilkinson 2004), and later in 2007 and especially in 2008, when the negotiations effectively collapsed (The Financial Times 2008). Talks were partly revived afterwards, and an agreement on the carefully selected, least contentious issues was finally reached in 2013 at the Ministerial Conference in Bali, Indonesia. However, the bulk of the original Doha agenda has not been dealt with. In fact, after the mini-package was finally agreed upon in late 2013, the WTO secretary-general Roberto Carvalho de Azavêdo stated publicly that 'Bali is just the start' (World Trade Organization 2014). It is telling that such a statement was made after 12 years of negotiations. In 2011, Susan Schwab, then United States Trade Representative, substantively assessed that 'the talks are dead'. This seems almost as true today as when the statement was made (Schwab 2011: 105). As of late 2015, no headway has yet been achieved in the negotiations.

For the negotiations to succeed, a zone of possible agreement needs to exist among the states, so every party to the future agreement must perceive it as superior to the status quo and to other alternatives. The most prominent scholarly approach towards the study of multilateral negotiations is the so-called negotiation analysis (e.g. Raiffa 1982; Sebenius 1992; Lax, Sebenius 2006; Zartman 2008). It offers a range of theoretical and empirical insights into the conditions under which negotiations can be successful, and of course also into the problems negotiations typically face. Its insights have been applied also to the WTO and trade talks (Odell 2009; 2012; Narlikar 2010). The most obvious problems are connected with tactics adopted by the parties. The negotiators often focus too strongly on so-called distributive bargaining, or the cutting of the proverbial cake, rather than on integrative bargaining, or the need to bake the cake in the first place (Lax, Sebenius 1986). Other problems stem, for example, from the excessive complexity of the negotiation agenda (Zartman 1994; Crump 2015), the information asymmetry faced by the negotiating parties (Morrow 1994), or the two-level nature of international negotiations, with the need for domestic (often parliamentary) ratification of the agreements reached by the executives (Schelling 1960; Putnam 1988). The core of my argumentation builds on the last two problems mentioned - information asymmetry and the connection of international negotiations with domestic politics.

One critical obstacle faced by negotiators lies in the chronic uncertainty of the parties about their partners' domestic political constraints, or the red lines that cannot be crossed in the negotiations if the agreement is to be ratified. By and large, the crux of most international negotiations consists of trade-offs and issue-linkages, whereby concessions in one

area are exchanged for gains in other areas. International trade is a prime example (Davis 2004; Tollison, Willett 1979). As one former ambassador to the WTO expressed in an interview, 'the [Doha] negotiations are really about horse trading. You gain something, you lose something else.' The heart of most negotiations lies in the determination of the exchange rates between the areas under negotiation, or in the haggling over the prices for which gains and losses in the various areas are traded. This aspect of trade-off in negotiations in the WTO is most clearly captured in the principle of 'single undertaking', by which 'nothing is agreed until everything is agreed' (World Trade Organization 2001 Art. 47).

If the negotiators knew everyone's valuations of the individual areas, they could in principle devise the corresponding agreements. One reason this efficient outcome does not easily materialize is the problem of private information. Individual actors do not know how much others truly value the individual areas under negotiation and hence how much they value the specific proposals on the table (Morrow 1994), and this uncertainty has been identified as a major impediment to the progress of the Doha talks (Narlikar, Van Houten 2010). If the actors do not know whether the deal they are being offered is good enough, in relation to the gains others would obtain, they will hesitate to sign a deal.

This problem of private information is a general feature of bargaining situations (Akerlof 1970; Fearon 1998), yet it is especially pronounced when domestic politics are brought into the negotiations. If the negotiators can claim to be constrained by their domestic political settings, they may be able to induce more concessions from their counterparts, as famously explained previously by Thomas Schelling (1960; cf. Putnam 1988). Because of this, they have a powerful incentive to overstate their domestic political constraints and political cost of the agreement, and to understate their negotiation flexibility. This strategic dimension of such two-level negotiations further exacerbates the private information problem. The lack of credibility problem can be illustrated by the following transcript of an exchange between the U.S. Deputy Trade Representative Michael Punke and the head of the Brazilian delegation and current WTO secretary-general to the WTO, Roberto Carvalho de Azavêdo. At an informal workshop in 2010, they were asked by then secretary-general of the WTO Pascal Lamy to explain the reasons for the deadlock in negotiations. Punke referred directly to the problem of domestic political constraints:

What is clear to us [in the negotiations] is [our] pain, and what is not so clear is the gain (...) [Doha] got to be a deal that creates new market access. (...) Ultimately, our Congress will vote up or down. And whether or not we can get (...) support will depend on, most significantly, new market access (World Trade Organization 2010 after 35:05).

In response, Azavêdo mentioned the problems of private information and domestic constraints as key to the negotiations. Referring to Punke's claims about domestic political pains, he responded:

Only the person who is feeling [the pain of making concessions] knows how intense it is. (...) It is difficult to quantify the pain. (...) It is difficult to quantify the political effort that is put into this Round, especially if it is on the other side. (...) And believe me, we do have a Congress as well (World Trade Organization 2010 after 41:40).

The negotiators know that any deal will involve painful domestic sacrifices, but they cannot immediately assess how evenly distributed these domestic political costs are, as they are unable to assess the true severity of each other's domestic constraints. The domestic political costs and constraints, and the uncertainty over which outcomes are and are not acceptable to the individual members, lie at the heart of the problems in the negotiations (cf. Narlikar, Van Houten 2010).

So can this information asymmetry problem be solved? Are there ways the negotiators can credibly communicate to others the constraints they face? It turns out that there are at least two possible ways in which one can credibly demonstrate to others in the negotiations his or her true domestic constraints. One way is to be willing to bear the cost of delays (e.g. Muthoo 2000). If one does not move in spite of the rising cost of delays and gridlock, then one probably really cannot move. In the Doha negotiations context, this practice of waiting for others to move first and thus show weakness has been used perhaps too pervasively in the last decade of the negotiations, as often expressed by the negotiating parties in their statements. Simply holding on does not seem to move the negotiations forward.

A more positive approach is to structure the negotiations by communicating to others the location of the red lines, and thus progressively narrowing down the 'landing zone' within which an outcome will need to lie.⁵ Since each actor has individual incentives to present his or her constraints as more severe than they truly are, the credibility problem is here particularly important. As extensively discussed in the literature, in such situations the way to establish one's credibility lies in what is referred to as costly signalling (Fearon 1994; Morrow 1999). This basically means that the actors can make their positions and constraints credible in the eyes of others if they are willing to communicate them publicly, making it costly for themselves to renege in the future.

Put simply, according to signalling games logic, making a claim about one's position and domestic constraints publicly raises the expectation by domestic audiences that the positions will indeed be held and the red lines not crossed. If a speaker made a statement which committed him or her to the defence of certain position but then failed to hold it, he or she would suffer domestic political costs for having failed to defend the declared national interests. In this sense, negotiators can really make their positions credible by arguing their cases openly and in public; the very publicity lends credibility to their claims. After all, a negotiator who is not truly committed to a certain outcome would not want to publicly claim that he or she was, as this might backfire later on when the outcome turns out to be unacceptable to others. If actors choose to generate domestic audience costs by making strong public statements about their positions, they are most probably resolved to indeed defend them. Of course, this costly signalling mechanism presumes that at least the key businesses and interested NGOs follow the negotiations, and in this sense that there indeed are audiences whose expectations can be raised. Such an assumption is widely accepted in the political economy literature (e.g. Grossman, Helpman 2002), and is supported by empirical studies of the influence of interest groups on international negotiations (Dür, Mateo 2014). If all the key actors were able to credibly formulate their interests and constraints in this way, they should be better suited to delimit the shape of the zone of agreement and to locate a possible deal. So much is clearly spelled out in the signalling games framework and in the bargaining theory literature (e.g. Morrow 1992; Fearon 1998).

The challenge is – and this is the core of my argument – that while for some states sending such costly public signals will present no problem, for others it is extremely difficult. To see why, we need to consider how states differ in terms of the *dispersion of their interests* across the negotiated agenda. States can be categorized according to the breadth, or *dispersion*, of their interests across the multiple areas of the negotiations. For states with concentrated interests, only one area (or a very few areas) attracts the majority of their attention, while results in other areas are relatively unimportant to them. In the Doha talks, middle-income and developing economies represent the group of states with concentrated interests. For these states there are two dominant negotiation areas that override the importance of others, namely the liberalization of trade in agricultural products, and their special status in terms of the 'softer' requirements concerning their policies corresponding to their development status (special and differential treatment).⁶ These two areas represent a priority over which there is broad domestic agreement. Other areas, although relevant in specific instances, are significantly less salient.

It is, then, simple for negotiators from middle-income and developing states to identify these priority areas publicly and to commit themselves, through signalling and domestic audience costs, to certain outcomes and to high demands in these areas. By making highly committing statements in the priority areas, they implicitly or explicitly accept losses in the non-priority areas. As long as these non-priority areas are relatively non-salient in political terms, this does not present a problem. For countries with concentrated interests, the costly signalling mechanism can work well.

For states with highly dispersed interests, the situation is more complex. In the Doha talks, a high degree of interest dispersion is closely associated with the more advanced economies. These countries tend to pursue a full range of interests, as most of the negotiation areas are relatively equally economically and politically salient. In other words, there is no single dominant area that would override the others in terms of importance. In stark contrast to countries with concentrated interests, when countries with widely dispersed interests decide to publicly prioritize a certain area over others, the domestic political cost they pay will be higher. A similar political and economic salience of the negotiation areas implies that the sacrifice of one for the sake of another will induce domestic opposition comparable in its strength to the forces that would support it. Any choice a state representative makes concerning the sacrifice of a certain area will be politically painful. Hence, states with dispersed interests will hardly choose to send these costly signals because doing so would mean openly and publicly identifying those who will ultimately lose out domestically.

The argument here is not that states with dispersed interests cannot prioritize – in trade-off negotiations they have to prioritize, and some interests have to be sacrificed. The key finding is that even having made the political choice to prioritize certain areas, they will still not be able and willing to communicate it to others through the use of costly signalling. Yet from what we know about bargaining, multilateral negotiations are unlikely to be efficient or even remotely successful if the participants cannot credibly communicate to each other what it is they want and how much they want it, and, equally, which outcomes they cannot accept.

To be sure, this is a highly stylized argument and the empirical reality of the negotiations is messier. For example, domestic audiences may differ considerably in their ability

and readiness to closely follow the negotiations and in this sense the operation of the causal mechanism may not be uniform across states and over time. Nevertheless, the core of the argument is simple. The more evenly politically salient the negotiated issues for a state are, the more difficult it is for the state to sacrifice one area for the sake of another. Even if the negotiator and the executive ultimately need to make the sacrifices, it is politically costly to communicate this publicly. Doing so may be necessary, however, if the discussions among negotiators about their domestic constraints are to be credible.

I do not suggest that there are no other problems than the communication of the red lines in the Doha round and the WTO. On the contrary, two high-profile reports were published that identified all kinds of substantive as well as institutional challenges faced by the negotiators and the WTO as such (Consultative Board of the WTO 2004; Warwick Commission 2007). They advocated the adoption of measures such as a variable geometry approach to the negotiations, a significantly strengthened role for ministers, and the improvement of the position of developing countries. Other proposals put forward include a shift of some areas of negotiation from the round-design to a continuous-ongoing negotiation design (Cottier 2010), a greater inclusion of domestic societal actors in negotiating teams (Lilja 2012; Sjöstedt 2012; see the entire special issue, Albin 2012), and a strengthened role of the chair (Odell 2009; Tallberg 2010). The success of the negotiations may also be positively affected by higher involvement of the secretariat (Elsig 2010). The argument I present is not that these other possible concerns are unimportant. However, I do argue that the multilateral negotiations are bound to face serious difficulties unless the problem of private information and the credibility of domestic constraints is satisfactorily addressed.

3. The dataset and the research design

In this section I briefly describe the empirical data upon which I assess the theoretical argument presented above. If my argument is correct, countries with interests spread across more areas of the Doha negotiations should be less able to publicly signal their positions, priorities and forbidden zones than are countries with interests concentrated into one or two areas of negotiation. As indicated, the data I use to test the proposition are drawn from a newly collected dataset of public statements by ministers at the eight ministerial conferences (MCs) of the WTO between 1996 and 2011. The dataset covers statements by the 47 largest exporting countries (including the EU Commission as a separate actor), which account for more than 90% of world trade over the entire period. The dataset contains 354 documents, each document covering one statement of a single minister at one particular MC. There are four countries in the dataset that acceded to the WTO only recently and hence are excluded from the analysis. Their accession status meant they could not make any credible commitments. The sample used in the analysis therefore consists of 42 states plus the EU, N=43.9

Using manual coding of ministerial statements presents some methodological challenges. Specifically, in the area of international political economics, scholars tend to work with data that are somewhat 'harder' in nature, such as statistics from international institutions

concerning the composition of a state's trade or its tariff levels. Using a mixed methods approach – in which the quantitative data that are statistically analysed are derived from the qualitative coding of statements – carries the danger of falling between two stools: the analysis may be deemed neither qualitatively 'rich' enough nor quantitatively 'hard' enough. Notwithstanding these risks, there is one major reason for taking this middle road: in contrast to the hard economic data, the data from the ministerial statements cover what is really at the core of my argument, and that is the *politics* of the negotiations. On the basis of drafts from the permanent missions in Geneva, the ministerial teams craft their statements very carefully in order to reflect their position on the politically salient issues under negotiation. In this sense, the ministerial statements provide an invaluable source of politically rich information – information such as purely economic data that is not captured by other sources.

3.1 The dependent variable: signalling activity

According to my hypothesis, the more dispersed a state's interests across the negotiation areas, the less it is likely to be able to commit itself, through costly signalling, to certain negotiation outcomes, or to exclude other outcomes as unacceptable. Doing so would raise domestic opposition. In deriving the dependent variable that captures the signalling activity of the states, I make full use of the fact that if actors wish to communicate their domestic constraints to their counterparts, the signals they send need to be costly and therefore need to be expressed in public. To study how actors signal to others, we need to focus on publicly available resources – in the case of the Doha talks this means ministerial statements.

To capture such signalling activity, in each ministerial statement I manually coded all expressions that indicated a commitment by the speaker to a certain negotiation position, that is, expressions of a *sine qua non* nature or statements emphasizing the importance of progress in a certain area if overall agreement was to be reached. Three levels of strength, or 'weight', of the signals were coded: weight 1 for weaker signals (45 % of cases), weight 2 for medium-strength signals (41 %), and weight 3 for stronger signals (14 % of cases). The coding scheme is illustrated by the following statements, in which ministers back up their positions with public commitments to outcomes in a given area.

Spain, MC 2005; weight 1; italics added

[I]mportant though agricultural products are in world trade, industrial goods are even more important. *No Development Round can be envisaged* that does not make possible substantially improved market access to industrial sectors of both the developed countries and, in particular, the developing countries.

Germany, MC 2005; weight 2; italics added

We know that agriculture is *the key* to success. Germany *has worked hard* to ensure that the EU submits a substantive offer in the farm sector. The intensive discussion of our offer within the European Union shows that the *EU's threshold of pain has been reached*. And we hope that this is acknowledged by our partners.

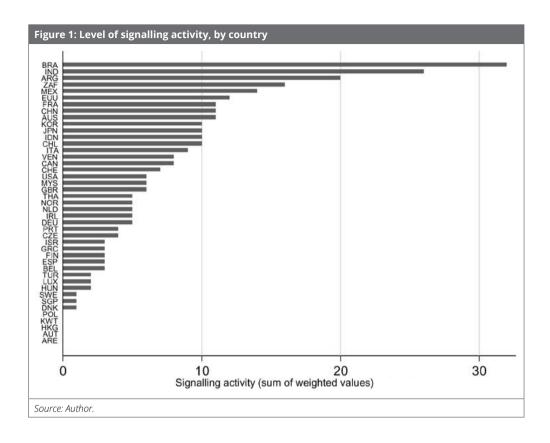
Australia, MC 2003; weight 3; italics added

Agriculture is critically important to Australia, to the Cairns Group and to many developing countries. Achieving an ambitious outcome on agriculture is *the key* to the entire Doha Round Agenda and *the key* outcome to advance the economic prosperity of developing countries. We cannot claim that the Doha Round is truly a Doha Development agenda unless we make some real progress on agriculture. *We will only accept* an outcome that will result in a *significant improvement* in world agricultural trade.

Coding a minister's verbal signalling activity is unavoidably a somewhat subjective matter, as is, after all, the signalling activity itself. Whether a particular statement is or is not considered by its author and by its recipients as a committing signal is a matter of interpretation. To assess the reliability of the coding, I randomly selected 10% of the statements and re-coded them independently one year after the initial coding procedure. At the level of the individual codes, the new signalling scores correlate with the original ones at r=0.73. At the aggregate country-level, the correlation reaches r=0.92. These values show a solid level of overlap between the two coding phases but also a non-negligible level of variance due to the imperfections and subjectivity of the coding process. On the one hand, the value of the correlation of individual codes indicates a need for the development of more reliable measures of signalling activity. On the other hand, the fact that the aggregate scores are correlated at higher than 0.9 suggests that the results of this specific analysis are not particularly sensitive to the coding procedure. Description of the coding procedure.

To further assess the sensitivity of the results to the coding, I ran the main analysis under alternative dependent variable specifications. The main analysis is conducted with the dependent variable based on the assigned weights: a statement coded 3 weighs three times as much as a statement 1. In the subsequent robustness checks I re-ran the analysis with two alterations to the dependent variable coding. The first alteration takes all the statements that were coded as containing a signalling element and assigns to them weight 1 (i.e. it disregards the weights). In this way we can control for the subjectivity of assignment of the signalling statements to the individual categories. The second alteration deals with the subjectivity of the decision as to whether something is or is not a signalling statement. In this robustness check, reported in the online appendix to the article, the dependent variable contains only those statements that have been coded with weights 2 or 3, with all of the weaker signals being disregarded. All of the important results of the analysis are consistent under all three specifications of the dependent variables.

In addition to signals attached to individual areas, signals were also coded in situations where ministers make a statement in which they demonstrate the strength of their position by referring to a strong coalition of supporters. Finally, signals were also coded when a willingness to concede in some areas was directly linked to certain institutional issues, the prominent examples being the need for the complete implementation of previous commitments or for the enhancement of the monitoring capabilities of the WTO. (Here, the progress of negotiations is conditioned not on substantive concession but on institutional changes). An overwhelming majority (91.5%) of the cases is attached to a specific issue area, as in the three examples above. Figure 1 shows the distribution of the committing statements across states.



3.1 The independent variable: interest dispersion

The independent variable is defined as the extent of domestic interest dispersion, or the breadth of an individual state's interests with respect to the Doha agenda. To obtain the extent of interest dispersion, I first calculate the relative salience of the individual issues, estimated as the relative amount of attention ministers pay them in their statements.

I have already indicated why the use of coded statements seems to be appropriate. Because the statements are public and recorded in the media, they can be expected to reflect the composition of the political, commercial and social interests of any given state. They would otherwise impose costs on the speakers in their domestic political settings. Later in the analysis, I introduce as controls various economic variables, such as the composition of a state's economy. Identification of the individual areas in the statements is operationally straightforward as the ministers themselves specifically and explicitly identify the topics to which they are referring. The coding categories of the negotiation areas were identified inductively during the initial stages of document collection and revision. Beyond the obvious categories such as agriculture, industrial goods, and services, the coding scheme includes specific codes for statements that explicitly refer to the problems of development and the situation of the least developed countries, as well as other topics. The relative salience of

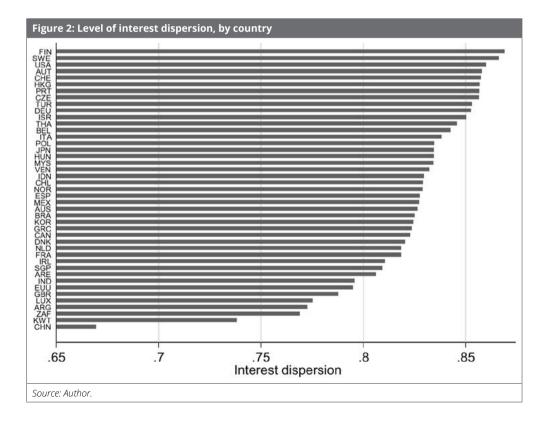
each topic was then calculated as the share of the text dedicated to the issue compared to the total across all areas for a given country and across all eight conferences. The observations in the dataset are therefore at a country-issue level. ¹⁴

The *independent variable* that captures the dispersion of interests is operationalized as the degree of variation in the salience that each individual state attaches to all the specific topics. It is not concerned with the salience of a particular issue but rather with whether there is a single dominant issue or many different interests of comparable salience. The most straightforward approach towards the assessment of dispersion is the use of the Hirschman-Herfindahl index (HHI), otherwise used as a measure of industry concentration. In the context of my analysis, this index is defined as:

$$HHI = \sum_{i=1}^{I} s_i^2$$

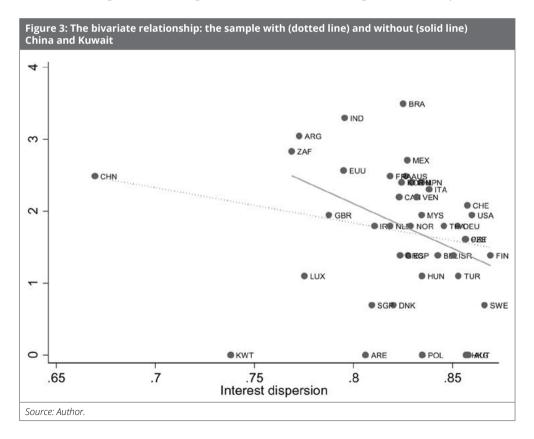
In this formula, is the share of attention a particular area i receives in the statements of a given state. HHI takes on values between 0 and 1, where a value of 1 is attained when a country has a single interest that captures 100% of its agenda. To obtain the variable of interest dispersion, we can define an interest dispersion index (IDI) by subtracting the value of HHI from 1, so that the interest dispersion index is measured as:

$$IDI = 1 - HHI = 1 - \sum_{i=1}^{I} s_i^2$$



The higher the value of IDI, the more dispersed the interests of any given state are across the negotiation area. A formally equivalent index is used in comparative politics as a measure of party system fractionalization (Rae 1968). Figure 2 shows the values of the independent variable for all the states included in the analysis. In the case of China, the exceptionally low score is driven by its strong emphasis on the development dimension of the negotiations, and especially on the special and differential treatment that is granted to developing countries. China has been pushed into drastic liberalization measures during its accession process (Pelc 2011) and much of Chinese interests today have to do with the quest for general recognition of its developing country status. For some states the most salient area is agriculture. For many others, especially the economically more advanced countries, there are no outstanding areas and the value of the index is therefore higher.

If my argument is correct, the countries with domestically dispersed interests should be less able to credibly commit themselves to their negotiating positions than are countries with one or two dominant interests. In figure 3, I present a bivariate plot of the independent and dependent variables. The dependent variable is measured in the natural logarithm, because in its raw form it is highly right-skewed; this transformation is used in all linear regression models. Two ordinary least squares (OLS) models are fitted through the data, one with the full sample and one with China and Kuwait excluded as potential outliers. A significant relationship runs in the expected direction: the more dispersed a country's interests,



the less willing they are to make categorical statements and strongly commit themselves to particular outcomes. Countries with highly concentrated interests possess a much greater ability to commit themselves publicly (in a costly way) to their positions. Having noted that, figure 3 also reveals considerable variation in signalling activity that is *not* explained by interest dispersion. A more comprehensive, multivariate inferential approach is therefore desirable, to complement the descriptive evidence.

4. The main empirical results

In this section, I present the results of a multivariate analysis in which I control for a number of potentially confounding covariates and test alternative explanations for the pattern indicated in figure 3. On the basis of the existing literature, I identify nine potentially relevant factors and group them, for the purposes of presentation, into four theoretically coherent categories: 1) basic polity-level factors, 2) factors that determine a state's membership in negotiation groups, 3) factors pertaining to strategic aspects of the negotiations, and 4) factors that capture the underlying material (economic) interests of a state.

4.1 The control variables and their expected effect

There are several important factors to take into account that relate to the nature of the polity. The first factor to control for is whether a country is a democracy or an authoritarian regime (e.g. Fearon 1994). In democracies, it is important for politicians to communicate publicly to their constituencies that they are defending their interests. At the same time, democratic countries have open political systems and the range of interests that needs to be catered for by political representation is broader. In other words, we may expect democracies to have, *ceteris paribus*, more dispersed interests. I use the variable *polity* of the Polity IV dataset as a measure of regime type (Polity IV Project 2010). The second key factor is a state's level of development. The Doha round is ostensibly about development: the notion of development and related issues of poverty also bear high normative significance in the OECD countries' public debates. I measure a country's development status by the Human Development Index (United Nations Development Programme 2012). The last of the key polity-level parameters is the measure of a country's power, approximated by the size of its GDP (World Bank 2013). We can expect more powerful countries to be more assertive in the negotiations and to attempt to demonstrate their power through more intense public signalling.

Another two control variables capture a state's membership of larger country groupings. First, a binary variable captures whether a state is a member of the European Union. Intuitively, EU member states can be expected to make fewer signals due to the dominant role of the European Commission in the negotiations. Secondly, I control for the 'rising power' status of a country. Large and fast-growing countries may wish to demonstrate their increasing power through more assertiveness in the negotiations and hence through stronger public statements (cf. Stephen 2012; 2014). To control for this phenomenon I include a binary

variable for BRIC countries that scores 1 for Brazil, India and China (with Russia excluded from the sample due to late accession in 2011). 16

Two more control variables capture a state's strategic standing in the negotiations. First, the willingness to signal one's position may be related not only to power in some absolute sense (measured in terms of GDP) but also to strategic bargaining leverage. I include in the analysis a variable that captures the average tariff overhang of each country, where tariff overhang refers to the difference between a country's bound and applied tariffs. Countries with higher overhang have more leverage in the negotiations as they can use the threat of increasing their applied tariffs as a negotiation asset (cf. Pelc 2013). In the power-based logic outlined above, I would therefore expect that countries with higher overhang would be more willing to make strong committing statements in an effort to tilt the negotiation balance in their favour. Data on tariff overhangs were obtained from the 2010 WTO Trade Profiles (World Trade Organization 2013a). Secondly, I control for the relative economic importance of trade for a given country, as captured by the share of exports on their economic output (World Trade Organization 2013b). *Ceteris paribus*, a country exhibiting a greater level of dependence on trade has a weaker position in the negotiations and may not, therefore, feel able to commit itself to specific outcomes.

Finally, I include control variables that capture the underlying economic importance of the three key negotiation areas, namely the liberalization of trade with agricultural and industrial products and with services, and in particular what proportion of a country's exports these respective sectors account for. This step enables us to draw closer to the very phenomenon that we are attempting to capture with the independent variable of interest dispersion, namely whether a country's position is or is not domestically *politically* contestable. When controlling for these economic factors, only the variation in interests attributable to a member's political considerations remains in the analysis.

4.2 The main multivariate results

To assess the hypothesized relationship between interest dispersion and signalling behaviour, I present two classes of models, one built on OLS linear regression and one using Maximum Likelihood Estimation (MLE) and negative binomial distribution. In the linear regression analyses the dependent variable is measured in the natural logarithm, because in raw form the number of signals has a large positive skew; in the negative binomial regressions, the raw number of signals can be used. OLS regression allows for a straightforward interpretation of the results, but negative binomial regression makes better use of the available information and better reflects the true count nature of the dependent variable.

I start with the basic setup in which the independent variable of interest dispersion is complemented in the analysis by only the three major polity-level variables: democracy, level of development, and size of economy (model 1, table 1). The independent variable of interest dispersion and all the control variables show a significant effect in the expected direction. All else being equal, democratic countries signal more, developed countries signal less, and stronger countries signal more. Most importantly, countries with interests

dispersed to a greater extent across the negotiation areas make significantly fewer committing signals.¹⁷

The effects are substantively important: a 0.1 increase in IDI leads to an approximately 70 % decrease in the occurrence of signals. If we consider that the IDI of most countries lies between 0.75 and 0.85, we can see that a country with IDI = 0.75 (such as Argentina) makes, *ceteris paribus*, 70 % more committing statements than a country with highly dispersed interests (IDI = 0.85, e.g. Germany). A strong substantive effect is also produced by the level of development, where a 0.1 rise on the Human Development Index leads to a 40 % decrease in signalling. The substantive effects of the other two control variables are also important: a one-level step upwards on the polity score (ranging from -10 to +10) leads to a 10 % increase in signalling, and a 10 % increase in the size of an economy leads to a 2.7 % increase in signalling. Later I will introduce further control variables into the analysis and the statistical significance of some of the control variables is absorbed by these new covariates, but the sizes of the coefficients remain fairly stable.

In model 2, I add a number of covariates, mentioned above, that could be expected to influence a state's ability and willingness to make committing statements during negotiations. Somewhat surprisingly, only EU membership demonstrates a significant effect (running in the expected direction). The fact that none of the other covariates reaches the standard significance level may be partially explained by the negative correlation between IDI and both BRIC membership and tariff overhang. Furthermore, the variable Human Development Index loses statistical significance, an effect most likely due to the inclusion of the BRIC dummy.

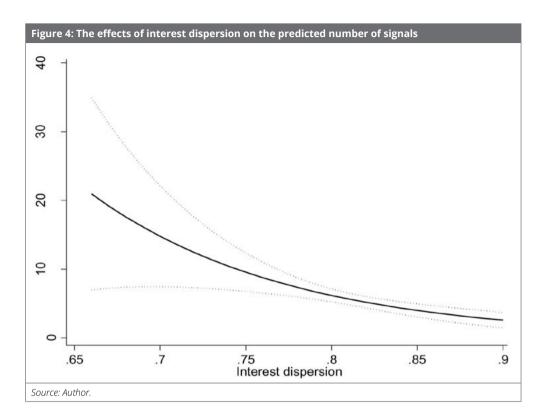
To better account for the count nature of the data, I re-ran the analysis using MLE based on a negative binomial distribution. The results (model 3) are consistent with those from the OLS analysis. Models 2 and 3 both show very good fit values. The OLS regression explains about two-thirds of variance and for the negative binomial model the correlation between the predicted and observed values reaches rho=0.8.

In the next step (models 4 and 5), I introduce the control variables that capture the relative economic importance of the individual areas of production (variables: Agriculture as a % of exports; Industry as a % of exports). ¹⁹ Controlling for these factors does not reduce the importance of the dispersion of interests. Substantively, the results presented above hold and are even a bit stronger: a 0.1 increase in IDI lowers the predicted number of signals by more than 80 %. Again, the models show very good fit values: the OLS model explains 70 % of variance; in the negative binomial regression the predicted values correlate with the observed values at rho=0.92.

To make the substantive size of the effects more apparent – and because interpreting non-linear models such as the negative binomial regression is far from straightforward – in figure 4, I present the effect of interest dispersion on the signalling activity in graphic form. Here we see that the number of predicted committing signals goes from around 20 for countries with relatively concentrated interests to fewer than 5 for those whose interests are dispersed. All models provide consistently strong support for the hypothesis that as interests become more dispersed, there is less clear communication of the states' interests via committing public statements. The appendix offers a set of further robustness checks, all supporting the quantitative results presented here in the body of the text.

	(1)		(2)		(3)		(4)		(5)	
	Signalling (In)		Signalling (In)		Signalling		Signalling (In)		Signalling	
Interest dispersion	-7.239**	(-2.27)	-7.335**	(-2.26)	-8.464***	(-3.10)	-8.175**	(-2.45)	-8.735****	(-3.88)
Polity score	0.0994****	(4.23)	0.121****	(4.37)	0.130****	(3.86)	0.139****	(4.28)	0.143****	(5.48)
Human development index	-3.951****	(-3.83)	-2.149	(-1.63)	-2.014	(-1.60)	-2.107	(-1.68)	-1.981**	(-2.17)
GDP (In)	0.277****	(3.68)	0.214**	(5.09)	0.175*	(1.80)	0.230**	(2.25)	0.166***	(2.58)
BRIC country			0.533	(1.08)	0.458	(1.22)	0.534	(1.13)	0.446**	(2.07)
EU member			-0.613**	(-2.55)	-0.601***	(-2.76)	-0.562**	(-2.44)	-0.491**	(-2.48)
Exports % of GDP (log)			-0.0116	(-0.05)	-0.222	(-1.02)	0.108	(0.48)	-0.169	(-1.10)
Tariff overhang			0.00103	(0.13)	0.00476	(0.41)	0.00258	(0.35)	0.00314	(0.37)
Agriculture % of exports							2.791**	(2.17)	3.611****	(5.16)
Industry % of exports							1.019	(1.43)	2.115***	(5.96)
Constant	2.701	(0.78)	3.031	(0.78)	4.506	(1.47)	2.277	(0.57)	3.126	(1.36)
Observations	43		43		43		43		43	
R ²	0.564		0.648				0.699			
Adjusted R ²	0.519		0.565				0.605			
Predicted vs. observed (Rho)					08.0				0.92	

t statistics in parentheses * ρ < 0.10, ** ρ < 0.05, *** ρ < 0.01, **** ρ < 0.05 Source: Author.



5. Conclusions

There are many reasons why some of the key global multilateral negotiations have been lagging behind expectations, failing to deliver timely results. In this paper I have identified one problem that has been thus far missing the in the scholarly debates. An important factor in the success of negotiations lies in parties being able to communicate which outcomes are, and which are not, politically acceptable for them in terms of their domestic politics. Yet, countries with interests dispersed across a number of negotiation areas find it difficult to communicate their interests to their negotiation counterparts in a credible way. I argue theoretically and empirically that when a state's interests are dispersed across a number of different negotiation areas, it is problematic for the negotiators to articulate these interests clearly and credibly.

Although the distinctive focus of this study is multilateral trade negotiations in the WTO, the problems I identify may also impede cooperation in other areas. In areas such as the environment or finance, to name but two examples, 'getting to yes' necessarily involves painful domestic sacrifices for the negotiating parties (Fisher et al. 1991). In the ever more intensely globalized world, we observe an increase in the extent to which international cooperation schemes involve behind-the-border issues and cut into domestic politics. But,

of course, these schemes also become more domestically politically contested (cf. Zürn et al. 2012). The implication is that while international cooperation may be becoming more important than ever, there is no improvement in the ability of state representatives to find substantive solutions to global problems. The difficulties of communication and credibility I have identified here contribute to the problems.

Footnotes:

- 1. The current regulation within the global trade regime is based on the results of the Uruguay round of liberalization talks, lasting 1986–1994.
- 2. Author interview, February 13, 2013.
- 3. Of these 47 largest exporters, 43 are part of the statistical analysis. The four remaining states are members that only joined the WTO in the later years of the Doha negotiations.
- 4. Author interview, February 13, 2013.
- 5. 'Landing zone" is a favourite expression of the former WTO secretary-general and chairman of the Trade Negotiations Committee, Pascal Lamy, for what is normally referred to as the zone of possible agreement.
- 6. For evidence of this, see figure 2.
- 7. This is an empirical statement based on the data presented in section 3, but it closely and intuitively corresponds to the level of a country's economic complexity (Hausmann, Hidalgo 2013).
- 8. It is clear that there will be those who lose out. Any degree of trade liberalization creates domestic distributive consequences, as discussed, for example, in the Heckscher-Ohlin factor-proportions model, or the Ricardo-Viner specific-factors model (see e.g. Krugman, Obstfeld 2003: 3–5). These economic realities have significant repercussions for the domestic political competition (Galantucci 2013; e.g. Goldstein 1998). Rogowski goes as far as to argue that changes in exposure to international trade translate into changes in the very nature of political competition within the individual countries. They impact on the cleavages around which the political systems are oriented (cf. Frieden, Rogowski 1996; Rogowski 1989).
- 9. See the appendix for the list of countries included. The full dataset is available at http://www.mi-chalparizek.eu/data.
- 10. To the best of my knowledge, no rigorous tool exists that would enable us to analyse text from the perspective of the presence of committing statements.
- 11. For discussion of intra-observer reliability assessments, see Krippendorff (2012: 214–215).
- 12. The results of the analysis do not change in any substantive way when the newly coded data are used instead of the original data. This should be no surprise, however, as the new data cover only 10 % of the statements.
- 13. This intuitive view that the content of a statement closely reflects a minister's interests has been independently confirmed by several members of permanent missions at the WTO, whom I asked to assess the reliability of such an approach (interviews took place in July 2013). One of the interviewees, for example, commented on this question in the following way: 'I work on the guidelines the negotiators give to the ministers, the counsellors help them, but from then on the ministers decide what issue is more pressing. (...) After all they have the bigger picture. I can tell you what to say or not in agriculture, and my colleague will say about NAMA. But in the end [the minister] has the barometer to read what is happening politically in our constituency. What is the message to be sent' (Interview with a member of a large Latin American country delegation, July 23, 2013).
- 14. See the appendix for the overview of the coding scheme.
- 15. More precisely, I use the transformation signalling (ln)=ln(1+signalling). This way the five states with signalling=0 do not drop out.

- 16. Note that including these variables has a strong conservative bias with regard to my results. Many of the countries with highly dispersed interests in the sample are EU members. Similarly, the BRIC countries are all middle-income economies with concentrated interests. Therefore, introducing an EU membership dummy and a BRIC dummy is bound to reduce the effect of the interest dispersion variable. The true effects are then certainly even stronger than those reported in the tables.
- 17. In all the regression models, I have run the standard post-estimation diagnostics. Variance inflation factors of all variables included in all models are safely below VIF=4. The Breusch-Pagan test shows no heteroskedasticity. The Ramsey RESET test shows no omitted variable bias.
- 18. Note that with the use of natural logarithmic transformation, the coefficients can be interpreted as % changes rather than as value changes.
- 19. Note that the variable 'Services as a % of exports' is omitted due to perfect collinearity with the two complementary variables.

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