

A ‘Need to Know’: How Institutional Design Impairs Articulation of Interests in Trade Negotiations

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Abstract

In the present text I ask whether the WTO performs the functions it – as an international institution – should perform. I examine its institutional framework from the perspective of quality of information transmission, and in particular from the perspective of its ability to have all the member states effectively articulate their interests in the trade liberalization negotiations (the Doha Round). I put forward a conjecture that the exclusively intergovernmental design of the WTO is functionally inappropriate in a situation in which much of what is going on in the trade negotiations has potentially dramatic distributive consequences across societal groups within the negotiating states. To demonstrate this I develop and test a hypothesis about how the given WTO institutional setup ceases to perform its information transmission function as the degree of domestic political contestation of the issues that are dealt with in the negotiations increases. I test the hypothesis by examination of the WTO Doha negotiations across different issue areas and across states, on the basis of a large dataset of public statements at the ministerial conferences between 1996 and 2011.

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1 Introduction

As observed several decades ago, the primary function of international institutions is to enhance among the cooperating actors transmission of information, i.e. to secure that vital information that would otherwise be impossible or costly for the actors to obtain is available to them (Keohane, 1984). The present text examines the institutional framework of the existing global economic institutions, and in particular of the World Trade Organization (WTO), from this information-transmission perspective: *Does the institutional setup of the WTO effectively enable transmission of all the key information necessary for successful negotiations?* My conjecture is that it does not, and that indeed institutional design of WTO (and other IOs) is in important ways deficient. What we see when considering the Doha negotiations is an interesting paradox of information: On the one hand, the negotiators have dwelt upon their agenda now for more than a decade and they can be expected to be familiar with it into a great detail. Yet, the most important piece of information – who wants what and *how much*, and hence who will need to make the next move and make more concessions – they clearly lack.

The reasons for this lies in that, broadly speaking, there is a structural tension between the mostly or exclusively intergovernmental design of the WTO (and most key existing IOs) and the domestic political consequences of their rulings. In my understanding, design based on exclusively intergovernmental representation leads, in a situation in which domestic politics play a major role in the negotiation outcomes, to deficiencies in transmission of vital information about the domestic constraints faced by the individual negotiating parties. I develop and test the hypothesis that, with the given exclusively intergovernmental institutional setup, the WTO ceases to perform its information transmission function (dependent variable) as the degree of domestic political contestation of the issues that are dealt with in the negotiations increases (independent variable).

The text is built in the following way. In the next section, I review the key theoretical literature. Section three discusses the institutional framework of the WTO, and shows why we should expect the framework to function poorly in terms of its information-transmission function. In section four I present qualitative and in sections five and six quantitative evidence on the basis of which I assess the validity of my argumentation.

2 The theoretical framework: bargaining, information, and the interests to be articulated

Much of what is going on in current global affairs has severe distributive consequences not only across states but also *across societal groups within the states*. International agreements, even if they are in absolute terms beneficial to all the negotiating states, create both domestic winners and losers. The area of international trade is no exception.

The Ricardian theory of comparative advantage demonstrates that trade is profitable for all participants but there is a significant body of literature in trade theory pointing at the potentially very significant distributive consequences of trade liberalization on the domestic level (e.g. Suranovic, 2012, chs. 4 and 5). Among others the factor-proportions-based models of trade, and in particular the Stolper-Samuelson theorem, show that liberalization of trade alters the distribution of values within the liberalizing countries, providing gains to the exporting sectors and imposing costs on the import-competing sectors (cf. Feenstra, 2003). Rogowski goes even as far as to argue that changes in exposures to international trade translate into changes in the very nature of political competition within individual countries. Trade liberalization can be expected to actually have a significant impact on the very cleavages around which the political systems are aligned (1989; cf. Frieden, 1991; Frieden & Rogowski, 1996).

Given this, there seems to be a tension, or a misfit, between the *international* nature of the institutional fora in which many global policies are made on the one hand, and their *domestic* distributive consequences on the other. In other words, the decisions are made internationally, or more precisely *inter-governmentally*, but their impact is varied not only across nations, but also *within* them, across individual societal actors. It has been convincingly argued that unless this misfit is remedied through changes in the institutional structure of global governance, functionality of the governance scheme will be put at stake (e.g. Reinicke, 1998). For cooperation on the global level to emerge and function, the agreements among the signatory governments need to deal not only with distributive consequences across states (in the logic of the *neo-neo debate*, cf. Baldwin, 1993), but also with distributive consequences across societal groups, in the sense of the liberal theory (Moravcsik, 1997).

At the same time, we know that agreements with distributive consequences are in general difficult to reach. The reason is that there are often many alternative settlements with different distributive consequences and the actors cannot agree onto which to converge (Krasner, 1991; cf. Gowa & Kim, 2005). There do exist analyses according to which it should be possible for the bargaining actors to find out efficiently the (unique) solution(s) to the particular bargaining problems - the most notable being the Nash bargaining solution (Nash, 1950; cf. Osborne & Rubinstein, 1994) or also the Rubinstein sequential bargaining model (Rubinstein, 1982; cf. McCarty & Meirowitz, 2007). However, these concepts lose much of their analytical bite if we allow for the possibility of incomplete/asymmetric information. As soon as we introduce to the models uncertainty and information asymmetry the outcomes become very quickly either undetermined or dependent on a number of additional assumptions. As put forward powerfully by Fearon (1998), in such situations the bargaining process may easily become highly inefficient and mutually beneficial agreements may be missed.

This problem becomes ever more complex, in both practical and analytical terms, once we allow into the picture the domestic level of the negotiations, i.e. when we abandon the simplifying assumption of the states

as unitary actors. The government negotiators, then, do not only have to strike bargains on the cross-state level (level 1, in Putnam's terms, Putnam, 1988), but also have to negotiate outcomes that are politically acceptable on the domestic level (level 2), i.e. that can be domestically ratified. The situation becomes more complex not only due to the increase in the number and types of actors involved, but entirely new dynamics emerge in it, in which such phenomena as the Schelling's paradox of weakness and issues of commitment become arguably crucial (Schelling, 1960; Muthoo, 1999).

And empirical studies show that constellations of domestic politics, as well as politics, indeed matter for outcomes in international trade agreements. It has been shown, for instance, what crucial role the domestic interest groups play in the trade negotiations, in the U.S. (Grossman & Helpman, 2002) as well as in the EU (Dür, 2007). Bailey et al. argue that ultimately the key reason for success of multilateral trade liberalization in the period after the WW2 was delegation by the U.S. Congress of powers to negotiate trade agreements to the president and thus their isolation from domestic pressure groups (1997). Similarly, Conceicao-Heldt (2011a) shows how domestic institutional arrangements determine the negotiation success. All these matters obviously complicate cooperation and indeed arguments have been made about how difficult it may be for the actors to arrive at a trade agreement in the absence of strong external factors inducing cooperation exogenously (for instance via an issue-linkage with a different non-politicized, overwhelmingly important area, such as national security; cf. Gowa (1995).

Based on these two pieces of established theory – that, for bargaining, information asymmetry is a crucial problem, and that domestic politics are in the trade negotiations as important as the international ones – one thing becomes clear: for the international cooperation to emerge and become successful, the negotiating actors must be able to find out whose interests and barriers of acceptability lie where or, more bluntly, they need to have what they perceive as reliable information about *who wants what* and in particular *how much*. Without this information on each others' interests the actors can hardly reach an agreement.

The key problem underlying this article is that in the bargaining situations this key information is very difficult to obtain. In the crude form, as it is simply communicated by the actors to their counterparts, the information is on its own not credible because all actors have strong motivations for misrepresentation of their interests. In particular, all actors have incentives to overstate their domestic political costs of agreement (understate their true flexibility) and thus to induce others to make more concessions in the negotiations (Schelling, 1960). In such a situation, even if in principle a large area of agreement (the negotiation core) is available, the negotiations may end up in a stalemate.

Worse than that: even if *none* of the actors actually did misrepresent their preferences, i.e. if all negotiated fully sincerely, cooperation may not be achieved. Applying the argument developed by Akerlof in his treatise on 'market for lemons' (1970), one can expect that in the international negotiations if the actors know about each other that they have incentives for interest misrepresentation, and if they do not have the means to

ascertain the true state of each others' preferences, they are likely to attach to every possible agreement an additional risk premium. If both sides do so, a mutually beneficial agreement may be prevented.

As a result of these incentives of the actors for misrepresentation of their interests, the only way for them to arrive at an agreement is to credibly commit to their positions and thus to demonstrate to others that the preferences they reveal are the true ones. For such commitment to be credible, however, they need to be based on signals that are sufficiently costly to make (cf. Fearon, 1998; Muthoo, 2000). The problem, then, is whether the institutional framework of the negotiations does or does not allow, induce, or even require, the actors to make such commitments.

3 The role of the institutional framework and the hypothesized failure

If the actors do not have incentives to provide the necessary information reliably on their own, this has to be secured by appropriate institutional framework within which their interaction takes place. This, after all, is precisely what the (neoliberal) institutionalist literature discusses – the very function institutions are supposed to fulfill is to secure transmission of information among the actors, especially of the information that would otherwise be available only at high costs or not at all (Keohane, 1984, ch. 6; cf. Hasenclever *et al.*, 1997; Coase, 1937, 1960). The question then is: How do we design institutions to make them better work with information? Or, more precisely, how do we secure, through changes in institutional arrangements, that all the information necessary for successful negotiations is available to the actors?

Inspecting the existing literature, we find that there is a body of works dealing, at least implicitly and on a general level, with the problem of institutional design and with the issue of information transmission. Works as those by Crawford and Sobel (1982), Banks (1990), or Abreu and Gul (2000), for instance, provide interesting insights into the problem, especially concerning the strategic dimensions of the whole problem, i.e. the structure of the actors' incentives for interest misrepresentation and the likely results of their interaction under varying conditions.

Another source may be found in the IR literature on institutional design, in works specifically discussing how institutions are designed by the actors in ways that are supposed to maximize their utility (Koremenos *et al.*, 2001). Relevant insights can be found in this literature, with numerous works actually discussing the case of trade liberalization and addressing the problems of information and uncertainty. Rosendorff and Milner, for instance, put forward arguments about how uncertainty about the future state of the world (in particular domestic pressures for protection) determine design of the trade agreements (2001; cf. Rosendorff, 2005). Kucik and Reinhardt examine this framework empirically in the context of anti-dumping measures (2008). Pelc discusses a related topic of how states strive for flexibility and how they distribute it across

industries (2011), and qualifies the previously made argument about the need for combination of flexibility measures with their costliness (2009).

The problem I address in this text is concerned with institutional design not as with the *explanandum*, but rather as with the *explanans*; the *outcomes* I try to investigate deal with *functioning* of the institutions, not their formal design (cf. Steger, 2010). My approach is somewhat close to that of Baccini (2012; 2010) who discusses transmission of information in the international trade negotiations. Yet, while he focuses on quality of *domestic* institutions and shows how domestic transparency and rule of law lower the transaction costs of the bargaining process, I focus on how the design of the *international* negotiation forum impacts on the bargaining process.

Using the insights from these works, and based on the broad misfit between the *international* nature of the global governance bodies and their distributive consequences on the *national* level, one can argue that the institutional framework of some of the key international economic organizations, in our case the WTO, is in principle ill-equipped for performance of the vital information transmission function.

Considering the institutional framework within which the negotiations of the Doha Development Agenda (DDA) take place, we see that there are very few institutional mechanisms that would induce actors to transmit the information on their domestic gains and costs, and on how far they can concede in particular areas. On the working level, this may not be such a problem as the negotiating teams have a stable composition, the negotiations take place in a very iterative setting, and hence arguably in relative informational abundance. The negotiators know their particular agenda into detail, they can be expected to be fairly familiar with the interests of their counterparts in the individual negotiated areas¹.

An information transmission problem emerges, however, once we start ‘climbing up’ in the negotiations hierarchy, to the Trade Negotiations Committee (TNC) and in particular to the ultimate locus for the political decisions and concessions, the biannually held ministerial conferences (MCs). These are the bodies where the *politically* painful trade-offs need to be negotiated. It is here where the information on the counterparts’ domestic political situations and constraints – not merely on the nature and content of their interests within the individual areas – becomes crucial. How dear are for the counterparts their concessions in certain areas, in comparison to the gains they obtain in other areas? And where are the boundaries beyond which the negotiators cannot go due to their domestic political constraints?

There are hardly any mechanisms through which this information could be obtained by the negotiators. The TNC, composed of the member states’ ambassadors to the WTO, is in principle a body in which the deals across issue-areas could be made. It has both a high degree of stability and iterativeness of bargaining, and it has the cross-issue reach necessary for creation of the trade-offs and issue-linkages. Yet, it is a

¹Even within the specific areas, however, at all discussing issues of domestically conflictive nature may be difficult and the negotiation groups may avoid it for very long periods of time (cf. WTO, 2012b, a recent exposition by the chairman of the Negotiating Group on Market Access).

bureaucratic body without direct political backing; on its own it cannot determine the political outcomes of the negotiations (cf. the Doha Ministerial Declaration, WTO, 2001). Furthermore, even if the chief negotiators actually were authorized to make major trade-offs and concessions, the two-level logic that holds for the executive-legislation tandem in the Putnam's analysis also holds on this negotiator-executive level, i.e. the negotiator (the ambassador) is also only a delegate of the executive and thus has incentives to misrepresent her negotiation constraints (given by the political executive leadership in his country) and thus induce concessions from others.

The ministers, who in principle do have the ability to credibly commit their countries to particular negotiation positions and thus to focus the negotiations, only meet biannually within the framework of the MCs. There they have little time to actually conduct the negotiations, at least on the multilateral basis. What the ministers can do to enhance credibility of their positions is to draw publicly the lines which their negotiators will not be able to cross. If the statements are recored in their domestic settings, backing on them would be costly for the ministers, and hence their position is more credible. Another thing the ministers can do to back their positions is to engage representatives of various powerful interest groups – from business associations, to trade unions and NGOs – to demonstrate to others their domestic political constraints. Indeed, representations of many of the WTO member countries at the MCs comprise representatives of dozens interest groups (e.g. WTO, 2003). Whether these are perceived by the negotiators as truly representing the domestic constraints of their counterparts is questionable, however, as the individual government clearly have incentives to bring to the conferences the more hawkish interest groups. Similarly, if the Seattle protests were meant to show to the developing world how strong an opposition the U.S. government faces domestically, it was only met with hostility and accusations of misusing its host role (e.g. WTO, 1999, the statement of the South African minister).

Last but not least, domestic political cycles mean that a lot of the negotiation information that is correct at some point may become outdated in the course of the negotiations, and hence useless (see Conceicao-Heldt, 2011a), for instance as a liberal government is replaced by a more protectionist one. It seems that at the current stage of negotiations a number of members is beginning to reconsider the already agreed solutions, even at the risk of losing what is on the table (WTO, 2012a).

With a slight exaggeration, then, the only thing the negotiators can do is to keep negotiating longer and longer, hoping that matches between interests emerge in the integrative bargaining sense (Sebenius, 1992); yet, there is hardly any mechanism through which they could make any piece of the information on how much they are willing to concede credible. The problem has been well summarized by the Brazilian head of delegation Roberto Carvalho de Azevedo in an informal workshop:

[W]e ask the question “What else can you do?” And what you hear from every single mike is “Nothing. I am at the limit. I have done everything I can”. Now, either you have 100 liars in the

room, or you have to believe that at least some of them are saying the truth. (WTO, 2010, time 40:00)

To pin the problem discussed here down to specific design features, I would argue that the design of the WTO, and of many other international organizations, is deficient in its purely intergovernmental nature. There is a structural tension in that the whole domestic political spectrum within the individual MSs is supposed to be condensed into a single political position, resented internationally by the MS's professional chief negotiator, the ambassador. In many issues that are at play in the DDA negotiations no single national position that would be stable over time exists, the negotiation positions are themselves matters of domestic political contestation. Credibility of the negotiators' positions expressed in the negotiations is then, especially when it comes to the political questions of weighting against each other gains and losses in the individual areas, necessarily low. Unless the international body is able to accommodate in the negotiations the fuller spectrum of domestic politics, e.g. via some type of parliamentary representation, the tension between *inter-governmental* negotiations, and *domestic* distributive consequences, will cripple the body by impeding its vital information transmission function.

An exchange between the U.S. Deputy Trade Representative Michael Punke and the Brazilian head of delegation from an informal workshop on the Doha impasse illustrates the problem of estimating each other's domestic costs:

United States: [W]hat is clear to us is [our] pain, and what is not so clear is the gain (...) [The 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 [for Doha] will depend on, most significantly, new market access, new opportunities" (WTO, 2010, after 30:00).

Brazilian reaction: The pain, only the person who is feeling it knows how intense it is. For everybody else, [the person] can always do a little bit better. (...) It is difficult to quantify the political effort that is put into this Round, especially if it is on the other side. (...) In agriculture, what we are getting exactly, I don't know. (...) I guarantee you that [this kind of outcome in agriculture] will not fly. (...) Believe me, we do have a Congress as well. (WTO, 2010, after 40:00)

The argument I put forward is obviously not of universal nature, as successful conclusion of an agreement may be driven by exogenous factors even if the information transmission function is not well performed. A group of negotiating states may be induced to find a quick agreement e.g. by a shared external threat or in general some security concern (Gowa, 1995). The nature of the agreement may be also naturally dictated by an overwhelming power dominance of one of the actors, as suggested by the hegemonic stability theory (Kindleberger, 1986). Also, the information problems may be overcome if the number of the negotiating

partners is small enough, so that they can expect each other to have a detailed overview of everyone's interests.²In the increasingly interdependent and multi-polar post-Cold War World, however, multilateral cooperation based on the purely intergovernmental design can hardly be expected to function well.

Formally, then, the hypothesis can be stated in the following way: *With the given exclusively intergovernmental institutional setup, the WTO ceases to perform its information transmission function, as the degree of domestic political contestation of the issues that are dealt with in the negotiations increases.* Informally: the more domestic politics matter, the less the WTO functions as an international institution.

The empirical test of the hypothesis consists of a short qualitative and a quantitative part. Both are based primarily on a large dataset of public statements of the ministers at the eight ministerial sessions of the WTO between 1996 and 2011 collected for the purpose of this research. The dataset covers statements by the 47 largest exporting countries, accounting for more than 90% of World trade over the entire period. In total the dataset contains 354 documents (individual ministerial statements, on average of about 1000 words), amounting to 2581 codings relevant for our purposes. More information on operationalization of the variables is provided in section 5 where the results of the bivariate analysis are presented. Data for a whole range of control variables have been collected as well; these are presented together with the results of the multivariate analysis in section 6.

A note should be made on the problem of publicity of the ministers' statements. I use the data for two purposes: to operationalize the variety (dispersion) of each state's interests across the negotiation areas, and to measure how many committing statements they signal. In both cases, the public nature of the statements is an advantage rather than a problem. In the former case, because the statements are public and recorded in the media, they need to reflect the composition of political, business, and societal interests in the states to a considerable degree, otherwise they would potentially impose on the speakers costs in their domestic political settings. In the latter case of signals, it is in the very nature of costly signals that they need to be public (and recorded by the relevant audiences). Hence, not only that publicness should not be a problem, in fact the more public the statements are, the more reliable they are for my analysis.

4 The information problem in the DDA I: the issue-linkages and development in qualitative analysis

I hypothesize that the Doha negotiations suffer from an important information deficit problem. In this section I briefly discuss two observations based on the data from the statements that point in this direction.

²A brilliant example of this are the negotiations on the North American Free Trade Agreement (NAFTA), in which (as documented by Bertrab, 1997) the Mexican delegation spend an enormous amount of resources in seeking and persuading individual U.S. Congressmen, effectively entering the U.S. domestic political scene.

They suggest that a great deal of the Doha negotiations impasse may indeed lie in the actors' wrong reading, or in general inability to read, the others' domestic politics.

The first observation is that the core of the conflict around which the DDA impasse is centered does not deal with individual issues, such as agriculture, but with the relationship across them, i.e. with the overall balance across all areas. Yet, as I indicated, the balance across areas is precisely where we can expect the information problem to be most significant. To be sure, agriculture is very conflictive and it is clear that unless the developed countries, especially the EU and the US, offer enough a deal cannot be struck. At the same time, this is something everyone in the DDA knows, and indeed it is undeniable that significant offers have been made by the developed world in the area of agriculture; in fact, it has been argued that the European Commission put on the table in DDA even more than the key individual EU member states were willing to (Conceicao-Heldt, 2011b).

Despite all the discords in the agriculture, the cause of the Doha impasse does not lie within this area, but in the trade-off between agriculture on the one hand, and non-agriculture market access (the industrial production, NAMA), services and other areas on the other hand. Analyzing the statements, we see that the key disagreement is on the relative value of concessions in these areas, i.e. about who concedes how much in a particular area in exchange for progress in another area. Two statements for illustration; on the one side, Argentina:

(...) we note that the aspirations of some Members in respect of industrial goods and services are out of all proportion to what they are prepared to offer on agriculture (...) [T]hey jeopardize the possibility of achieving the consensus necessary for the conclusion of negotiations. (*Argentina, MC 2005*)

And on the other side Germany:

The Doha Development Agenda cannot be reduced only to agriculture. Without an equivalent and parallel opening of markets for industrial goods and services, progress will not be possible on the farm sector. (*Germany, MC 2005*)

In fact, in the dataset there are more than 130 statements of this kind, directly referring to the need for the linkage across issues in the negotiations, and many more referring to this need indirectly or implicitly. Such expressions as “whatever is agreed (...) [does] not imply the end of the Round”, “achieving the right balance”, or achieving “balanced progress across all areas of our negotiations” only illustrate the same point (these are all taken from a very short recent statement by the TNC chairman, see WTO, 2012c). The ultimate expression of the criticality of issue-linkages is the key design feature of the entire DDA negotiations, the single undertaking principle, according to which *nothing is agreed until everything is agreed*.

The second observation that stands out in the analysis of the ministerial statements is the enormous role the notion of development plays in the DDA. Here as well it seems that inability of some actors, the developing countries, to read the domestic politics of their counterparts might have played an important role. While it is clearly the developing countries who put on the issues related to development and problems of the least-developed countries most pressure, similar concerns are surprisingly forcefully and frequently put forward by the developed countries' representatives as well. From them this is to some extent a rhetorical game as for the negotiators from the developed world it is important domestically to be able to sell the round vis-a-vis public as being driven by development. Yet, this is precisely where arguably an information transmission problem lies.

As it appears, the developing countries may have overstated the extent to which the developed countries were willing to make concessions for the sake of development as such and to remedy the unjust trade system (because they would be pressed to do so by domestic public). A number of statements by the developing countries indicates that they may have fallen into the rhetorical trap and started to gamble on that the domestic pressures in the developed countries will ultimately lead them to the situation in which development will really become the cornerstone of the Round, and the imbalances built into the system will be addressed. Consider the following illustrative examples:

Rich countries cannot expect to receive payment for doing what they should have done long ago. After so many years - should I say decades or centuries? - remnants of feudalism have been lingering on side by side with other forms of unacceptable privileges. Poor countries cannot wait for another 20 years to see true reform in agricultural trade. (*Brazil, MC 2005*)

(...) we dare not be confused that the central and overriding task we face in this negotiation is to decisively address the fundamental structural imbalances in the current world trading system. For South Africa and the developing countries, this is a fight about social and economic justice. (*South Africa, MC 2003*)

In the name of completion, if the content of this Round only perpetuates the inequities of global trade, then it will be no Round (*India, MC 2005*).

It seems, however, that the developed countries' governments were able to effectively weaken their domestic public pressure for concerns with development in that they were able to divide the developing countries into two groups: the least developed countries (LDCs), on which the normatively driven concerns with poverty alleviation fully apply, and the other developing and emerging countries, on which they do much less, and which in many ways are domestically presented in the developed countries as aggressive competitors rather than victims. This has been bluntly put by the U.S. Trade representative on the last MC in December 2011:

For all of the Round's complexity, the current impasse in many ways comes down to one single, vexing quandary: the WTO has not come to terms over core questions of shared responsibilities among its biggest and most successful Members. The world has changed profoundly since this negotiation began a decade ago, most obviously in the rise of the emerging economies. The results of our negotiations thus far do not reflect this change, and yet they must if we are to be successful. (*USA, MC 2011*)

The observation about the role played by development, and the distinction between the developing and the least-developed countries, is actually supported also directly by the developing countries themselves. In some statements their representatives even explicitly call on the developed countries to abandon their strategy of dividing the developing world into two blocks (by offering much larger concessions and special relations to the LDCs), and repeatedly claim unity across the developing/LDC world (*South Africa MCs 2003 and 2005; Brazil MC 2003*).

These are two qualitative insights into the negotiations that, I would contend, point at the information transmission problem outlined above. The negotiators do not see into each others' domestic politics: they do not know how their counterparts value the individual areas of negotiations, and they poorly estimate the pressures they face.

5 The information problem in the DDA II: the bivariate quantitative analysis

In this section the results of a cross-section bivariate analysis are presented: I show that the states with more diverse (less concentrated) interests, and hence more involvement of domestic politics in formulation of their positions in the negotiations, are significantly less capable of committing themselves to certain positions through costly signals.

The nature of the data used was already briefly presented in section 3: the analysis is based on a dataset of public statements by the ministers during the ministerial sessions. The independent variable ought to operationally capture how much politics is involved on the domestic level in formulation of the states' positions. I measure this potential for political contestation indirectly, by considering how much the particular state's interests are concentrated into a single or few related areas, or on the contrary dispersed across many areas. In those states that have a single dominant interest or only few salient interests (high concentration of interests), a consensual national position can be presented in the negotiations; the position itself is not domestically contested, it reflects what may be plausibly described as *the* national interest.

When the portfolio of the states' interests is broad (interests are spread, dispersed across areas), on the other hand, the position presented in the negotiations is necessarily itself domestically contested. The

negotiations consist of a series of trade-offs and *quid pro quos* in which the states sell some of their interests for concessions in other areas. This creates domestic losers and puts the governments under pressure from those societal groups whose interests were sold. In these states, hence, the position presented in the international negotiations is itself domestically politically contested.

The *independent variable* capturing the domestic concentration of interests (in the analysis labeled as INTEREST_CONCENTRATION) is then operationalized as the degree of variation in the salience each individual state attaches to all the specific topics. So the variable is not concerned with how salient particular issues are but rather with whether there is a single dominant issue on which there is a large agreement in domestic politics, or whether the country promotes many different interests, the relative weight of which is then domestically conflictive and contested.

For calculation of this variable relative salience of each individual topic for each state needs to be obtained. In each statement all parts of the texts were coded in which some of the negotiated issues was discussed. Relative salience of each topic was then calculated as the share of the text dedicated to the issue, over the total across all areas (for the given country over all eight conferences, hence the data is on the country-issue level).³

The coding categories – the 11 issue areas – were identified mostly inductively. This was helped by that in the statements the ministers almost always very specifically and explicitly identify the given topic they refer to. Beyond the obvious categories such as agriculture, NAMA, or services, the coding scheme also includes specific codes for statements explicitly referring to the problems of development and situation of the LDCs.⁴

From the raw data there are several ways to calculate the value of the independent variable of interest concentration. The simplest and arguably the most elegant is to consider only the salience of the single most dominant area; the higher the share of the most salient area in the overall portfolio, the more concentrated are in general the interests. A somewhat more nuanced measure would be to take the 1st and the 2nd (and perhaps the 3rd) most salient area and subtract the salencies, i.e. to find how much more salient the 1st is than the 2nd, and the 2nd than the 3rd. Again, the higher the value, the more concentrated are the interests. Another option is to take the standard deviation of the salience values for the given country across

³In the previous stages of the research the statements were also coded for their ‘strength’, i.e. essentially for what weight one should assign to the statement, in relation to the others. Remarkably, the resulting value correlated very highly (consistently at around 0,8 or higher) with the much simpler measure I use now, in which the ‘strength’ or weight of each coded statement is measured simply as its length in characters.

⁴The list of categories then comprises: agriculture (agr); development (dev); environment (env); intellectual property rights (IPRs, coded as ipr), which includes both trade-related IPRs and geographical indications; LDCs’ concerns (ldc); industrial goods (NAMA, coded as nam); rules (rul), dealing with issues such as anti-dumping measures; services (ser); the so-called Singapore issues, including later in negotiations primarily the trade-facilitation matters (sin); social and labour issues (soc); and the very small category of other substantive issues (oth), used when certain country specific products are discussed.

all 11 issue areas. The more evenly salient the issues for a given country, the lower the value of the standard deviation; the more concentrated the interests, the higher the resulting value. Each of the three measures may have some unwelcome statistical properties but in fact empirically all of them yield in principle the same results (and their pairwise correlations reach above 0.9 or even 0.95). In the analysis I use the first and simplest measure described, the share of the most salient area (summary statistics and pairwise correlations of all variables are in tables 2 and 3 in the appendix).

As far as the *dependent* variable is concerned (in the analysis labeled as COMMITMENT), I make full use of the fact that if the actors want to communicate to their counterparts their domestic constraints the signals they send need to be costly, and hence expressed in the public in the ministerial statements. What I did in the analysis was that I sought in the statements all signs of strong commitments by the ministers to their positions, basically expressions of the *sine qua non* nature, or emphasizing the criticality of progress in certain area, if the overall agreement was at all to be reached. Two examples, from the Australian and the Argentinian statements, might illustrate the nature of the coding.

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. (Australia, MC 2003)

No other trade sector [than agriculture], not even highly penalized textile products, is subject to so much uncertainty and penalization after five decades of the multilateral system. For Argentina, where agricultural exports account for over 50 per cent of export earnings, correcting this imbalance is a matter of State. Agriculture with low prices and no opportunities for expansion is an attack on its economic viability. (Argentina, MC 1999)

In both these cases the ministers are backing their positions with a public commitments, with an expression of the need for progress in the given area. Signal was also coded in a situation in which the minister makes a statement in which he demonstrates the strength of his position, e.g. by referring to a strong coalition of supporters of his position. Lastly, signals were coded also when willingness to concede in some areas was directly linked to certain institutional issues, the prominent examples being the need for complete implementation of previous commitments or for enhancement of the monitoring capabilities of the WTO. An overwhelming majority of the cases is attached to a specific issue area, as in the two examples above. Three levels of strength or weights of the signals were coded, Weight 1 was used for only weak signals (45% of cases), weight 2 for standard signals (41%), and weight 3 then for exceptionally strong signals (14% of

cases). The dependent variable used in the calculations (labeled COMMITMENT) is based on these weights, so its value gives the weighted signals, not the raw number of coded signals.

If my argument is correct, the countries with domestically concentrated interests, i.e. countries which have single clear domestically non-contested interests, should be more able to credibly commit to their negotiations positions and thus more effectively transmit the information on their interests, than countries whose positions are inherently multi-dimensional and at least potentially domestically politically contested. In other words, my hypothesis states that as the domestic conflicts about the negotiated agenda increase, performance of the institution in terms of information-transmission function drops.

Looking at the bivariate plot of the two variables presented in figure 1 (with an OLS model plotted through the data) or at the numerical results presented in Model (1) in table 1, we see that there is a strong relationship running in the expected direction, that means the more concentrated the countries' portfolios, the more they are willing to make in the negotiations categorical statements and strongly commit themselves to particular outcomes. On the other hand, the countries with complex and multidimensional interests, because they have to weight the individual areas and the domestic distributive consequences from concessions in them, have much lower ability to commit themselves publicly (in a costly way) to their positions⁵.

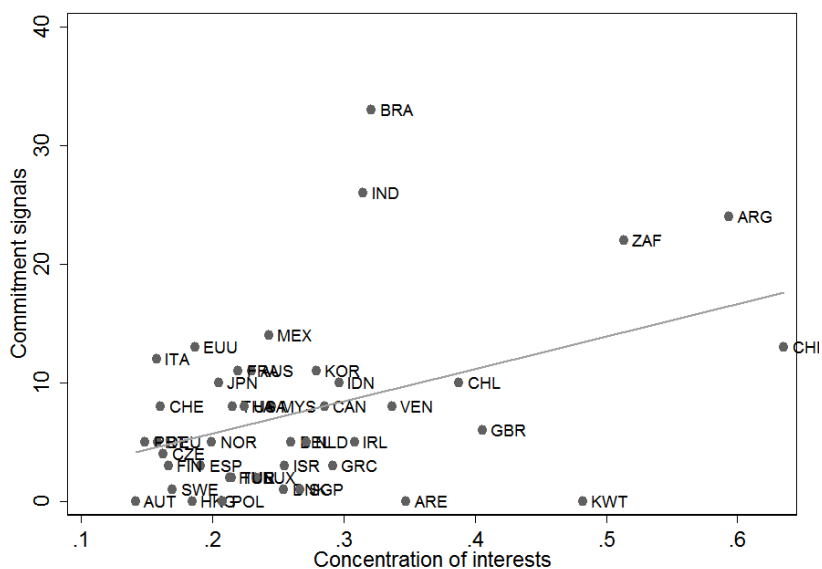


Figure 1: Bivariate relationship

The rare incidences of commitment by the countries with low concentration of interests (mostly the OECD

⁵The four countries that acceded the WTO only during last years, i.e. Saudi Arabia (2005), Viet Nam (2007), Ukraine (2008), and Russia (2012), are omitted from the analysis. Given their accession status, it is quite understandable that they 1) could not make any credible commitments, not being full members with voting rights, and 2) did not have motivations to alienate anyone during the accession process.

world) tend to fall either on the issue of development (paradoxically, as I discuss above) or on the area where some of the countries have particularly strong domestic defensive interests, namely agriculture. This area is frequently directly linked with the problem of food security, as in the examples of Japan and Korea, who very explicitly argue in favour of protection of the agricultural sectors due to important non-trade concerns and due to their high dependence on food imports.

Investigation of the bivariate plot indicates that rather than with a simple linear relationship (assessed in the OLS analysis) we might be dealing with two groups of states, the small group of large developing and middle income countries, that score higher on both variables, and the larger group of the OECD countries plus the smaller developing and middle income countries, that score on both the variables relatively low. This would point to that variation in the dependent variable may be explained by the popular argument about the increasing assertiveness of the rising powers (Stephen, 2012). To deal with this potential alternative explanation, as well as to check more comprehensively the robustness of my results, I move in the following (last) section to multivariate analysis.

6 The information problem in the DDA III: the multivariate quantitative analysis

Clearly, the dependent variable of costly signals of commitments may be driven by various factors, many of which may be directly systematically related also to the independent variable of concentration of the states' interests and hence need to be controlled for if we are to obtain an unbiased estimate. Also, there are plausible alternative explanations of the observed variation, in particular the rising-powers explanation indicated in the previous section. To address these possibilities I introduce into the analysis a range of control variables with which I want to demonstrate that it in fact is the independent variable of my interests – concentration of domestic interests – that causes the variation in the states' willingness to signal their positions to others.

To start with, there are three factors that might be driving the dependent variable and that are also very close related with the independent variable as well: the nature of the polity, the level of the particular state's development, and the degree of its dependence on agriculture.

The first factor to control for in the analysis is whether the countries are democracies or authoritarian regimes, as it is only plausible to expect that in democracies it is more important for the politicians (the ministers) to communicate to the constituencies publicly that they are defending their interests. In other words, one may argue that, other things equal, the more democratic countries will have a tendency to signal their positions in the open setting of the ministerial statements more often. At the same time, empirically the democratic countries have more open political systems and it can be expected that the range of interests

that needs to be catered for by the political representation is broader, i.e. we may expect that democracies will have, *ceteris paribus*, lower concentration of interests. I use the variable DEMOCRACY of the Polity IV dataset as the measure (Polity IV Project, 2010).

The second and the third factors we need to control for is the state's level of development and its dependence on agricultural exports. With development, the logic is simple: the Doha round is supposed to be about development, the notion of development and related issues of poverty bear high normative significance, also in the OECD world public, and one can expect that the developing countries will have, other things equal, higher moral grounds for making strong statements about the need for robust development outcomes of the round. I measure the degree of development with the UNDP Human Development Index (variable HDI, see UNDP, 2012). In the case of agriculture, the situation is similar. The single most important area which should have been from the very beginning addressed in the Doha round is agriculture. The Uruguay and the previous rounds left agriculture mostly untouched, and from the very beginning liberalization of trade in agriculture and thus reversal of the built-in imbalance in the system was on the top of the agenda of the Doha mandate. Again, one can expect that countries with strong interest in agricultural exports (e.g. Argentina) will tend to attach to this area prime importance, and hence signal commitments more often and forcefully. I measure importance of agriculture for the given country as the share of its exports accounted for by agricultural production (variable AGRICULTURAL_EXPORTS), with the data being taken from the Trade profiles published by the WTO for year 2010.

These are, I would contend, the three key factors that might influence how much the states are willing to signal their commitments, and that are at the same time directly causally related also to the independent variable of my interest. By controlling for these I believe we significantly improve on the reliability of the estimates. Model 2 in table 1 gives the results of the analysis including these variables.

Two more potentially important factors should be controlled for in the analysis, both power-based. First, it is plausible to expect what was already indicated above, namely that an important determinant of the willingness of states to signal will be their rising power status, i.e. that the large and fast growing countries might want to demonstrate their increasing capacities through more assertiveness in the negotiations and hence through strong public statements. To control for this important phenomenon I include a binary variable BRICS that scores 1 for Brazil, Russia, India, and China. A more general approach would be to measure increases in power of all the states by considering their economic growth. Two more control variables account for this effect: variable GROWTH, that captures the cumulative absolute increase of the size of the country's economy measured in GDP over the period 1996-2011, and variable GROWTH-RATE, that captures its mean annual rate of GDP growth. While the latter measure accounts only for the dynamics of the countries' rise, the former takes into account also their overall size.

Second, it is plausible also to expect that the willingness to signal one's positions might be related not only

to power in some absolute sense, but to strategic bargaining leverage. In particular, I include in the analysis a variable capturing the average tariff overhang of each country (variable `TARIFF_OVERHANG`), that is the difference between its bound (negotiated maximum) tariff and its applied tariff (the actual value). Countries with higher overhang have more leverage in the negotiations, as they can use the threat of increasing their applied tariffs closer to the bound value as a negotiation asset. In the power-based logic outlined above, I would hence expect that the countries with higher overhang would be more willing to make the strong committing statements.

Looking at Models 2 through 4 in table 1 we see a considerable support for the importance of the role played by concentration (vs. domestic contestability) of interests. In all models the variable `CONCENTRATION` runs in the expected direction, with a statistically as well as substantively significant effect on the outcome variable. Two of the control variables show a significant effect on the outcome variable, namely `DEMOCRACY` and the binary variable `BRICS`. As expected, more democratic countries signal commitments, *ceteris paribus*, more; so do the BRICs countries. Variable `GROWTH-RATE` is significant at the .1 level, but runs in the opposite than expected direction.

While none of the other control variables reaches in Models 2-4 statistical significance, they all run in the expected direction. Dependence on agriculture (`AGRICULTURAL_EXPORTS`), the size of the economy's increase (`GROWTH`), as well as the size of the strategic bargaining leverage (`TARIFF_OVERHANG`) show a positive effect, the degree of the country's development shows, as expected, negative effect. It should be noted that the low number of observations makes it particularly difficult for the variables to reach the significance threshold. All the multivariate models have high explanatory power, where even the relatively parsimonious Model 2 explains almost half of the dependent variable's variation. Model 4 is included to demonstrate that the results do not alter when we include or exclude the EU as a collective actor from the analysis.

The impact of the key variable of interest - signals of commitment - on the outcome variable is conveniently captured in the added variable plot in figure 2, which shows the tested relationship while controlling for all other variables included in Models 3 and 4. Again, we see a strong positive relationship between concentration of interests and commitment signals.

As the last point of the multivariate analysis, I would like to refer to Model 5 in table 1, in which the independent variable of interest from Models 1 through 4 is treated as the dependent variable and the impact of the first three control variables elaborated above on it is assessed. Recalling the logic behind their inclusion in the analysis, we can see that following our expectations `INTEREST_CONCENTRATION` is positively influenced by the level of the state's democracy (`DEMOCRACY`); the more democratic countries tend to have more diverse interests. Similarly, the more developed (`HDI`) and the less agriculture-oriented (`AGRICULTURAL_EXPORTS`) countries have more dispersed interests, with the developing and agricultural countries showing relatively

Table 1: Results of the bivariate and multivariate analysis

	(1)	(2)	(3)	(4)	(5)
	commitment	commitment	commitment	commitment	interest_concentration
interest_concentration	27.23** (2.97)	25.73* (2.47)	23.29* (2.53)	24.79* (2.68)	
democracy		0.615* (2.48)	0.687** (3.17)	0.686** (3.17)	-0.0133*** (-4.14)
HDI		-29.22** (-3.06)	-13.21 (-1.37)	-12.62 (-1.31)	-0.194 (-1.33)
agricultural_exports		0.146 (1.36)	0.0875 (0.92)	0.0797 (0.84)	0.00420** (2.75)
growth			7.65e-13 (1.19)	3.06e-13 (0.41)	
growth_rate			-52.87 (-1.79)	-51.42 (-1.74)	
tariff_overhang			0.0668 (1.19)	0.0624 (1.11)	
brics			14.06*** (3.91)	14.60*** (4.05)	
Constant	0.311 (0.12)	17.58 (2.00)	6.334 (0.72)	5.591 (0.63)	0.477*** (4.22)
Observations	43	42	42	41	42
R^2	0.177	0.479	0.680	0.689	0.462
Adjusted R^2	0.157	0.423	0.602	0.611	0.420

t statistics in parentheses

In Models 2-5 Hong Kong is excluded due to a missing value for democracy, Model 4 copies Model 3 but with the EU as an actor excluded.

* $p < 0.05$, ** $p < 0.01$, *** $p < 0.001$

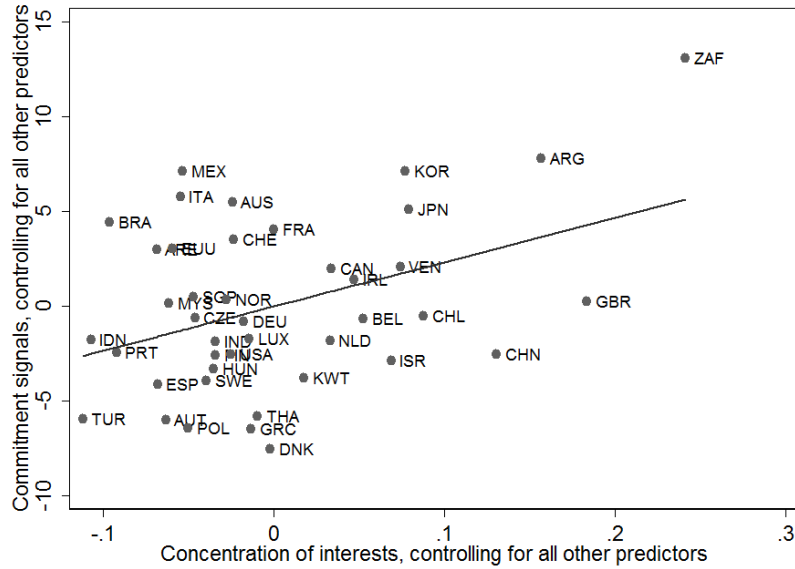


Figure 2: Added variable (partial regression) plot

more concentrated interests. This provides further supports to the logic underlying the construction of the independent variable `INTEREST_CONCENTRATION`.

Overall, then, the multivariate analysis confirms the findings from the bivariate analysis presented previously.

7 Conclusions

In the text I try to assess the institutional framework of the WTO from the perspective of how it secures transmission of important negotiation information. The purpose of international institutions is to make sure important information is available to the actors. In bargaining situations, such as those regarding trade agreements, it is essential for the actors to know who wants what, and how much. On the basis of a qualitative and quantitative inquiry into the Doha negotiations, I show that with the increasing amount of domestic political contestation of the agenda negotiated in the WTO the capacity of the WTO institutional framework to secure transmission this vital information on everyone's true interests and domestic constraints decreases. Hence, the WTO as an *international* institution ceases to perform its function when the *national* domestic politics of its members become more relevant.

The analysis may be seen from two perspectives. First, it indirectly addresses the problem of the negotiation impasse of the Doha round. By outlining an institutionalist argument about problems of information asymmetry it provides *an* explanation for why states in the Doha fail to reach an agreement despite the

obvious availability of joint gains and despite now more than 10 years of negotiations.

Second and more direct, I try to outline an argument about long-term viability of the WTO as an organization (and of other IOs by implication as well), in the World in which domestic and international politics are increasingly enmeshed, and in which what happens in the international negotiations has increasingly direct repercussions for domestic political competition within the states. I have argued that in such a situation the traditional intergovernmental design of most IOs is functionally inappropriate; it does not work.

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A Appendix

Table 2: Summary statistics

	mean	sd	min	max	count
commitment	7.833333	7.368081	0	33	42
interest_concentration	.2715722	.1145127	.1416356	.6351734	42
democracy	7.612547	4.808992	-8	10	42
HDI	.790959	.1043756	.4779414	.9174401	42
agricultural_exports	11.60527	9.556831	.1003253	50.71111	42
growth	5.42e+11	1.21e+12	-3.96e+11	6.19e+12	42
growth_rate	.0505988	.0297095	-.0362106	.1190942	42
tariff_overhang	9.441808	16.83588	-.1	95.26711	42
brics	.0714286	.2606612	0	1	42
<i>N</i>	42				

Table 3: Correlation matrix

(1)

	commitment	interest_concentration	democracy	HDI	agricultural_exports	growth	growth_rate	tariff_overhang	brics
commitment	1								
interest_concentration	0.420**	1							
democracy	0.0842	-0.537***	1						
HDI	-0.477**	-0.437**	0.359*	1					
agricultural_exports	0.464**	0.257	0.242	-0.169	1				
growth	0.184	0.104	-0.0580	0.0575	-0.0308	1			
growth_rate	0.0215	0.385*	-0.368*	-0.267	-0.220	0.157	1		
tariff_overhang	0.167	0.409**	-0.506***	-0.487***	-0.00400	-0.148	0.272	1	
brics	0.614***	0.375*	-0.250	-0.527***	0.134	0.228	0.320*	0.145	1

* $p < 0.05$, ** $p < 0.01$, *** $p < 0.001$