

Horn, Henrik; Mavroidis, Petros C.

Working Paper

Multilateral environmental agreements in the WTO: Silence speaks volumes

IFN Working Paper, No. 983

Provided in Cooperation with:

Research Institute of Industrial Economics (IFN), Stockholm

Suggested Citation: Horn, Henrik; Mavroidis, Petros C. (2013) : Multilateral environmental agreements in the WTO: Silence speaks volumes, IFN Working Paper, No. 983, Research Institute of Industrial Economics (IFN), Stockholm

This Version is available at:

<https://hdl.handle.net/10419/95663>

Standard-Nutzungsbedingungen:

Die Dokumente auf EconStor dürfen zu eigenen wissenschaftlichen Zwecken und zum Privatgebrauch gespeichert und kopiert werden.

Sie dürfen die Dokumente nicht für öffentliche oder kommerzielle Zwecke vervielfältigen, öffentlich ausstellen, öffentlich zugänglich machen, vertreiben oder anderweitig nutzen.

Sofern die Verfasser die Dokumente unter Open-Content-Lizenzen (insbesondere CC-Lizenzen) zur Verfügung gestellt haben sollten, gelten abweichend von diesen Nutzungsbedingungen die in der dort genannten Lizenz gewährten Nutzungsrechte.

Terms of use:

Documents in EconStor may be saved and copied for your personal and scholarly purposes.

You are not to copy documents for public or commercial purposes, to exhibit the documents publicly, to make them publicly available on the internet, or to distribute or otherwise use the documents in public.

If the documents have been made available under an Open Content Licence (especially Creative Commons Licences), you may exercise further usage rights as specified in the indicated licence.

IFN Working Paper No. 983, 2013

Multilateral Environmental Agreements in the WTO: Silence Speaks Volumes

Henrik Horn and Petros C. Mavroidis

Multilateral Environmental Agreements in the WTO: Silence Speaks Volumes*

by

Henrik Horn

Research Institute of Industrial Economics (IFN), Stockholm;
Bruegel, Brussels; and CEPR; London

and

Petros C. Mavroidis

EUI, Florence

October 9, 2013

Abstract

This study contributes to the debate concerning the appropriate role of multilateral environmental agreements (MEAs) in WTO dispute settlement. Its distinguishing feature is that it seeks to address this relationship *in light of the reason why* the parties have chosen to separate their obligations into two bodies of law without providing an explicit nexus between them. The basic conclusion is that legislators' silence concerning this relationship should speak volumes to WTO adjudicating bodies: MEAs should *not* be automatically understood as imposing legally binding obligations on WTO Members, but could be used as sources of factual information.

Keywords: WTO, dispute settlement, environmental agreements

JEL Classification: F13, K32, K33, Q56

* This paper is under consideration for a Special Issue of the *International Journal of Economic Theory* in honor of Professor Wilfred J. Ethier. We are grateful to Kyle Bagwell, Eyal Benvenisti, Jaime Demelo, Giovanni Distefano, Sven-Olof Fridolfsson, Trevor Houser, Robert L. Howse, Alan Sykes, Thomas Tangerås, Joel Trachtman, and Erik Wijkstrom for discussions and comments on previous drafts, and an anonymous Referee provided very detailed and helpful comments. We have also benefitted from interactions with the Entwined Research Group, and the Entwined Board. Financial support from Mistra, and from Riksbankens Jubileumsfond, is gratefully acknowledged.

Table of Contents

1	Introduction	1
2	The Possibilities to Bring MEAs into the WTO	2
2.1	Legislators' Silence	2
2.1.1	MEAs are Not Covered Agreements.....	2
2.1.2	MEAs in the Committee on Trade and the Environment.....	3
2.2	MEAs in WTO Case Law	3
2.2.1	<i>US – Tuna</i>	4
2.2.2	<i>US – Shrimp</i>	4
2.2.3	<i>EC – Approval and Marketing of Biotech Products</i>	5
2.3	WTO Agreements between Some But Not All WTO Members.....	5
3	Gains from an Encompassing Trade and Environment Agreement.....	7
4	Gains from Separate Agreements	10
4.1	Separate Agreements to Save Contracting Costs	10
4.1.1	Two Sources of Contracting Costs.....	12
4.1.2	Why an Encompassing Agreement is Likely to be Very Costly.....	13
4.1.3	The Trade/Environment Divide	14
4.2	Separation for Strategic Reasons.....	15
5	How Should MEAs Be Viewed in WTO Disputes?	17
6	Conclusions	18

1 Introduction

The Members of the *World Trade Organization* (WTO) *Agreement* are legally bound to respect negotiated reductions of barriers to trade. At the same time, many of these countries are also members of multilateral environmental agreements (MEAs) that often impose rights or obligations for members to *restrict* trade. The relationship between these two bodies of law has created significant controversy, since neither the WTO Agreement, nor typically the MEAs, clarify the relationship between these sometimes, at least seemingly, contradictory undertakings. As will be explained in more detail below, in the few cases relating to this issue that have gone through the WTO Dispute Settlement process, judges have been hesitant or unwilling to accept MEAs as relevant for the WTO adjudication. This position has been criticized both by environmental lobby groups, as well as by many legal scholars.

The purpose of this paper is to add to the debate on the role that MEAs should play in WTO dispute settlement. The distinguishing feature of the study is that it seeks to address the relationship between MEAs and WTO law in light of the *possibilities* that countries have for bringing MEAs into the WTO legal order, and in light of the *reason(s)* why the parties have chosen not to use existing possibilities, but to separate their obligations into two bodies of law. The approach of the paper is based on the belief that absent an understanding of the forces that drive separation, recommendations concerning the relationship between the agreements may not adequately reflect the factual situation at hand.

The paper starts in Section 2 by exploring the legal *possibilities* to integrate MEAs into the WTO Agreement. The general conclusions that emerge are that there are indeed a number of ways through which MEAs could have been integrated into WTO law, both through legislative means, and through adjudication. But WTO Members as well as WTO judges, be it panels or the Appellate Body (AB), have nevertheless almost entirely refrained from using these possibilities.

In Sections 3 and 4 we turn to an economic analysis of the reasons why WTO Member countries have chosen to keep their commitments in the trade area separate from those in the environment area. Section 3 points to several reasons why WTO Members the countries could have benefitted from coordinating their commitments in the two areas; for instance, this would have allowed them to save fixed costs, to materialize deeper cooperation by making it possible to exchange concessions across the trade and the environment areas, and to enhance the possibilities to enforce commitments in the environmental area.

The fact that it would have been both possible and beneficial for countries to coordinate their commitments in trade and environment raises a fundamental question for the discussion concerning the appropriate role for MEAs in WTO dispute settlement: *why* have WTO Members refrained from using the possibilities to bring MEAs into WTO law? Section 4 highlights what we believe is the major reason for separation: the costs associated with negotiating complex agreements. These “contracting costs” can take several forms, e.g. administrative resources (labor time in particular) that are required to prepare and conduct the negotiations; the time to implement cooperation; and possibly also a higher risk of breakdown of negotiations. These costs

serve as strong incentives for the parties to simplify negotiations, and one means of doing this is to conduct separate negotiations on trade and on environment.

In Section 5 we turn to the normative question of how WTO adjudicators *should* treat MEAs in the WTO, in light of what we believe are the reasons for the current separation of the two sets of agreements. Our main conclusion, which stands in contrast to much of the legal academic writings on the issue, is that MEAs should *not* be interpreted as imposing rights or obligations in the WTO legal order: if WTO Members have abstained from working out the desirable relationship between their obligations in the two policy areas, it is highly unlikely that WTO judges can fill the gaps in these international agreements. This does not require closing the door to MEAs completely, however, since MEAs can still provide a useful source of factual information for WTO judges.

2 The Possibilities to Bring MEAs into the WTO

This Section briefly describes the legal avenues through which MEAs could be brought into the WTO and how these opportunities have largely been unexploited.

2.1 Legislators' Silence

The two primary ways for WTO legislators to express their views on the role of MEAs in the WTO is through the agreement itself, and/or through 'secondary law', e.g. through a decision by a WTO Committee or Council.

2.1.1 MEAs are Not Covered Agreements

Appendix 1 of the WTO Agreement lists exhaustively the *covered agreements*, that is, the agreements that constitute the WTO sources of law, the law that WTO Members must respect as a result of their adherence to WTO. They are divided into multilateral, which all WTO Members must observe, and plurilateral agreements, which only bind those Members that have accepted them. Central for the issue at stake here is the fact that no MEA features among covered agreements.

It is also possible for the WTO to establish links with other institutions. Art. V of the *Agreement Establishing the WTO* reads:

The General Council shall make appropriate arrangements for effective cooperation with other intergovernmental organizations that have responsibilities related to those of the WTO.¹

But WTO Members have abstained from using this possibility to bring MEAs within the WTO legal order. The WTO has not gone further than to accord observer status to certain institutions that deal exclusively or in part with environmental issues, such as the *Convention on Biodiversity*; the *Convention on International Trade in Endangered Species of Wild Fauna and Flora* ("CITES"); the *Control of Trans-boundary Movements of Hazardous Waste and their Disposal* (the "Basel Convention"); the *United Nations Environment Programme*, etc. Both the ancient regime (the GATT), as well as the WTO, have been quite reluctant to do even this, despite the

¹Mavroidis *et al.* (2010) pp. 916-918.

fact that granting observer status in the overwhelming majority of cases is tantamount to simply establishing a communication channel between the WTO and the observer.²

2.1.2 MEAs in the Committee on Trade and the Environment

WTO *Committees* have the authority to adopt decisions of legal relevance.³ The WTO Committee of interest to our discussion is the CTE. The CTE was established at the first meeting of the General Council of the WTO following the *Decision on Trade and Environment* adopted in Marrakesh in 1994. Since its very first meeting, it has dedicated considerable time to studying the interaction between MEAs and the WTO. In the document issued following its very first meeting,⁴ the CTE notes in § 8 the large consensus in favor of multilateral solutions to address environmental concerns. A number of proposals have been advanced before the CTE, which can be usefully divided into ‘legislative’ and ‘adjudicative’ initiatives aiming to establish a link between MEAs and the WTO. Among the former, WTO Members have expressed ideas ranging from modifying the General Exceptions clause (Art. XX GATT) to ensuring effective participation of the trade and the environment communities in each other’s meetings (§§ 9-21). Among the adjudicative proposals we note proposals for how to deal with disputes between WTO Members that are also signatories to a MEA, and what the forum (WTO or MEA) for such disputes should be (§§ 36ff.). None of the proposals were accepted by the Committee.

The Chairman to the WTO TNC (Trade Negotiating Committee), the body overlooking progress in all negotiating groups including the group discussing Trade and Environment, issued in 2010 a report that summarizes the state of art in the relationship between trade and environment.⁵ The report calls for proposals e.g. to discuss in meaningful manner the relationship between specific trade obligations included in MEAs and the WTO, the involvement of MEA-expertise in WTO dispute settlement proceedings, but the conclusion is this: 14 years after its first report, the CTE continues to have a positive attitude towards MEAs, but it has not managed to substantively advance the agenda—virtually nothing of importance has been decided on the role of MEAs or environmental policies more generally in the CTE.

2.2 MEAs in WTO Case Law

WTO case law has repeatedly emphasized that domestic policies are set by WTO Members and not at the WTO-level. At the same time, domestic instruments that affect trade (as is almost always the case) must respect the Most-Favored Nation, and National Treatment principles. Consequently, as long as these are adhered to, WTO Members are free to pursue their environmental policies alone, or through an MEA.

²CITES was complaining for example, about lack of reciprocity since the WTO was invited as observer to participate in all CITES meetings, whereas CITES was invited to participate only in some of the WTO meetings. It was not invited to the, in its view, most important ones, such as the special session of the WTO Committee on Trade and Environment, but where it instead managed to get invited under the unceremonious title “ad hoc observer” (See CITES, SC55 Doc. 9 of June 2, 2007; letter by Cristian Maquieira, Chairman of CITES Standing Committee of March 8, 2007; and response by Pascal Lamy of March 2007 (on file with the authors).)

³For a detailed discussion, see Mavroidis (2008).

⁴WTO Doc. WT/CTE/1 of November 12, 1996.

⁵WTO Doc. TN/TE/19 of March 22, 2010.

2.2.1 *US – Tuna*

During the GATT years, two panels had outlawed legislation aimed at protecting dolphins caught in the nets of tuna fishermen, simply because the measure had been unilaterally decided by the importing country, the US. Its domestic law required from both domestic and foreigners fishermen, wishing to sell tuna in the US market, not to fish for tuna using fishing nets that led to the accidental killing of dolphins (purse sein nets). The GATT Panel on *US – Tuna (Mexico)* established to discuss the consistency of the US measures with the GATT, found that a violation of the prohibition of quantitative trade restrictions in Art. XI GATT had been committed, and rejected the argument advanced by the US that the measure was eligible to an exception under Art. XX GATT: (§ 5.27). The Panel's reasoning illustrates well a common attitude in the trade community concerning unilateral environmental policies:

The Panel considered that if the broad interpretation of Article XX(b) suggested by the United States were accepted, each contracting party could unilaterally determine the life or health protection policies from which other contracting parties could not deviate without jeopardizing their rights under the General Agreement. The General Agreement would then no longer constitute a multilateral framework for trade among all contracting parties but would provide legal security only in respect of trade between a limited number of contracting parties with identical internal regulations.

This Panel did not discuss in explicit manner the relevance of MEAs in GATT-law, however. But by sanctioning the US measures it opened the door to speculation regarding the response by GATT Panels were they to face claims concerning MEA-mandated environmental policies.

2.2.2 *US – Shrimp*

The *US – Tuna* determination was overturned by the AB in its *US – Shrimp* jurisprudence. The US government enacted legislation this time to, at least allegedly, prevent the accidental taking of life of sea turtles, a species that was acknowledged as 'endangered species' by a multilateral international convention, the CITES,⁶ an MEA prohibiting trade in such species. The US went one step further and prohibited the sales of another product – shrimps – allegedly at least to preserve an endangered species. The US law required shrimps to be caught with nets that allowed sea turtles to swim out of the net where shrimps had been caught. The US claimed that these devices were effective means to protect the life of sea turtles.⁷

Some producers/exporters of shrimps (Malaysia and Thailand leading the way) complained. Referring to prior GATT case law, the complainants challenged the consistency of the US measure with the GATT, arguing that its inconsistency with the GATT was direct consequence of its unilateral character. The Panel followed the ruling on *US – Tuna (Mexico)*. But the AB overturned the Panel, holding that a measure would not be judged to be GATT-inconsistent, simply because it had been unilaterally defined. This finding has been consistently re-produced and emphasized in subsequent case-law (see AB, *US – Shrimp (Article 21.5 – Malaysia)*, §§ 137 – 138).

⁶For the sake of accuracy, a number of categories of sea turtles have been acknowledged as endangered species.

⁷ See the discussion in Howse and Neven (2007).

As a result, it is now uncontested in WTO law that GATT condones *regulatory diversity*.⁸ Since WTO Members are free to design their environmental policies, they can also do so by signing MEAs. In fact, the AB did refer to CITES in reaching its conclusion, although more so in order to support a conclusion it had already reached on what constitutes an ‘exhaustible natural resource’ (§§125ff.). This report did open the door to MEAs, albeit in timid manner.

2.2.3 EC – Approval and Marketing of Biotech Products

In *EC – Approval and Marketing of Biotech Products*, the EU was called to defend its policies on genetically modified organisms (GMOs). The complainant argued that the EU had established a *de facto* moratorium against imports of GMOs. The EU justified its position on GMOs by referring *inter alia* to two MEAs that in its view condoned its practice. The Panel dismissed their relevance because neither all the parties to the dispute, nor many other WTO Members had signed or ratified the two agreements. This decision has been criticized for viewing the WTO to stand in isolation of public international law, and MEAs in particular.⁹

In short, our discussion so far leads us to the following conclusion: the behavior of the WTO framers is best described as silence. Case law has not hermetically closed the door to the relevance of MEAs, and has not opened it wide either.¹⁰

2.3 WTO Agreements between Some But Not All WTO Members

As the above exposition of the case law shows, a central issue for WTO judges has been the fact that there is typically not a complete overlap between the memberships of the WTO and of relevant MEAs. But as will be argued next, this could hardly be a reason for keeping MEAs completely outside the WTO, since there are several other forms of arrangements within the WTO Agreement that only apply to some WTO Members.

Preferential Trade Agreements (PTAs): One of the most common forms of agreements among subsets of WTO Members is that of a preferential trade agreements, with hundreds of such agreements in place. Such agreements effectively allow WTO Members to treat products originating in WTO Members with which they have formed a PTA better than like products originating in the remaining WTO Members. WTO law request such agreements to fulfill certain conditions, in particular that they must remove trade barriers to substantially all trade. But nothing prevents these PTAs to also include environmental commitments. Indeed, most PTAs signed with either the EU or the US as a counterpart contain environmental clauses.¹¹ But these provisions do rarely go further than to request members of the PTA to respect their own national

⁸Irwin, Mavroidis and Sykes (2008) find that this had always been the intention of the GATT framers., Horn and Mavroidis (2008, 2009) explain how the concept has been applied ever since the advent of the GATT in case-law.

⁹Charnovitz (2007), Howse and Busch (2003).

¹⁰In *EC-Aircraft*, the AB adopted a different approach which would provide WTO adjudicating bodies with substantial discretion when deciding which rules of public international law (Art. 31.3(c) VCLT) they should take into account in the context of a WTO adjudication (§§839ff.). Still in § 845 it explicitly acknowledged the following: ‘in a multilateral context such as the WTO, when recourse is had to a non-WTO rule for the purposes of interpreting provisions of the WTO agreements, *a delicate balance must be struck between, on the one hand, taking due account of an individual WTO Member’s international obligations and, on the other hand, ensuring a consistent and harmonious approach to the interpretation of WTO law among all WTO Members*’ (emphasis added). As we will show later, similar concerns constitute the basis of our preferred approach.

¹¹ See Horn, Mavroidis and Sapir (2010).

environmental laws, and are thus very far from MEAs in terms of the level of detail. The EU itself has gone much further than this however, since has delegated decision making concerning environmental matters to a central decision maker. It required a very process of political integration to achieve this however, and it was achieved among fairly similar countries.

Plurilateral Agreements (PAs): The WTO is often referred to as the result of a *single undertaking*: this term denotes that trading nations, by virtue of their WTO Membership, had to adhere to all agreements coming under the WTO. The *single undertaking*-approach was adopted during the Uruguay Round in order to avoid the situation that resulted following the Tokyo Round, where GATT contracting parties had varied legal relationships with each other depending on which of the Tokyo Round codes they had each signed. The WTO Agreement contains an important form of exception to the single undertaking approach, however. These are WTO Agreements that bind only those Members that have accepted them, and that neither create rights nor obligations for remaining Members.

Each of the four existing plurilateral agreements spell out the exact terms for participation. But they are all open for accession to WTO Members, i.e. to states that have accepted all the *multilateral* agreements. Importantly for the issue at stake here, WTO Members can through *consensus-voting* add a *trade agreement* to the existing list of plurilateral agreements. Given the consensus rule, any WTO Member can say no when the final text of a proposed PA is presented to them. Less clear is whether WTO Members that are non-participants in a proposed PA can suggest changes or impose conditions for the acceptance of the PA. In principle there is nothing to preclude this, although in practice it is unlikely that parties to the proposed agreement would be willing to make changes unless these had the support of a significant number of WTO Members. Whether or not any such suggestions are made, a basic difference with PTAs is that the WTO Membership can vote down an initiative to negotiate a PA whereas in the case of preferential trade agreements parties are free to do what they like (risking only a challenge before a panel, which as mentioned above is a very low probability event).¹² The fact that there are no provisions or criteria on what is (should be) permitted in terms of sectors or their content/coverage implies that there is great flexibility in principle for those aspiring to establish a PA, but that utilization of this flexibility is constrained by the need to obtain approval by *all* WTO Members. Consequently, one could very well imagine that WTO Members could use this possibility to add an existing or a new MEA to the legal arsenal of the WTO.

Recognition: Through unilateral or mutual recognition agreements, subsets of WTO Members can agree to recognize each other's standards as equivalent and thus absolve participants from the obligation to undergo *conformity assessment* regarding goods. Such agreements exists in two WTO Agreements dealing with trade in goods, the *Agreement on Technical Barriers to Trade* and the *Agreement on Sanitary and Phyto-sanitary Measures*, as well as in the *General Agreement on Trade in Services*. Both agreements deal in part with environmental protection.

¹² Indeed, as we will develop in more detail below, approval of a PA implies that it becomes impossible to raise legal challenges against it, whereas the de facto non-approval of PTAs as a result of the advent of the Transparency Mechanism in 2006 means that PTA participants always run the risk of confronting a challenge before a WTO panel. This raises the possibility that PA participants might be willing to pay a price in the sense of accepting to 'water down' their PA following objections by non-participants when the PA is presented for approval at the WTO. There is no practice on this score so far.

Nothing stops WTO Members who enter into reciprocity arrangements to do so in the context of environmental standards they adopt by signing MEAs.

Export Credits: The *WTO Agreement on Subsidies and Countervailing Measures* (SCM Agreement) provides that government grants of export credits in conformity with the provisions of the *Arrangement on Guidelines for Officially Supported Export Credits* (Arrangement on Guidelines) of the OECD shall not be considered export subsidies. Annex I(k) of the SCM Agreement states:

[I]f a Member is a party to an international undertaking on official export credits to which at least twelve original Members to this Agreement are parties as of 1 January 1979 (or a successor undertaking which has been adopted by those original Members), or if in practice a Member applies the interest rates provisions of the relevant undertaking, an export credit practice which is in conformity with those provisions shall not be considered an export subsidy prohibited by this Agreement.

The “international undertaking” described is the OECD Arrangement on Guidelines; by virtue of its incorporation, it is clearly a source of WTO law. Consequently, a sub-set of the WTO Membership has negotiated an interpretation of the term *export credit* without having to seek approval of the WTO Membership, despite the fact that this interpretation can be used in trade with WTO Members that are not members of the OECD. This would be akin for the WTO Membership to accept that a sub-set of Members that have signed an MEA can continue re-negotiating it in the future, with every outcome being binding on all WTO Members.

The main implications to be drawn from this discussion is that WTO law contains a number of ‘club’ agreements (e.g. agreements between a sub-set of the Membership), which seems to suggest that MEAs could also have been included. The discussion also reveals that, with the exception of the OECD Arrangement for Export Credits, WTO law aims to ensure that club agreements will not impose negative external effects on non-signatories.

3 Gains from an Encompassing Trade and Environment Agreement

The previous section showed that WTO Members have refrained from using ample opportunities to integrate MEAs into WTO law, and this has created the current situation with an unclear relationship between the two bodies of law. We will now seek to shed light on possible reasons for this stance, drawing on economic theory. This section will point to three broad reasons why countries could have benefitted from integrating commitments in the two areas into a single agreement, namely fixed cost savings, enhanced possibilities to enforce commitments in the environmental area, and exchange of concessions across the trade and the environment areas. Section 4 will then discuss the forces that we believe have led countries nevertheless to choose to separate these obligations. The exposition will be informal, in order to be accessible to readers with little training in economics. But many of the arguments already have formal underpinnings in the literature. In the next section we will also have to “extrapolate” from existing models, however.

One advantage of forming a joint trade and environment agreement is that it *reduces duplication of certain efforts* that are required in connection with the negotiation and administration of agreements. To take an extreme example, it would be possible for each pair of countries to negotiate separate agreements for each tariff line and for each trade direction. However, this would be extremely costly since there would be a number of provisions that would be basically identical across agreements and that would have to be negotiated separately. It would also be extremely costly to maintain a separate dispute settlement mechanism for each agreement. Furthermore, the quality of adjudication would likely be lower, given the very few cases that each dispute settlement system would adjudicate (the counterfactual being one dispute settlement system for both agreements). Consequently, an agreement containing a package of tariffs has several advantages, such as saving on administrative costs, and enhancing the quality of the cooperation.

Another possible advantage with a single agreement is it may *enhance the possibility to enforce obligations*. For instance, it is often argued that a separate environmental agreement may be hard to enforce, since there are no means of targeting an individual deviator from say a climate agreement through the withdrawal of undertakings in this agreement: both the country withdrawing its climate measure, as well as all parties to the environmental agreement, would be affected by a withdrawal of concessions. It would therefore be easier to enforce an environmental agreement if this could be done through the treat of withdrawal of e.g. tariff concessions, since this would more directly target the deviator. A fair amount of research has been done on such benefits from linkages.^{13 14}

A third advantage from a single agreement on trade and environment is that it would *allow for linkages between concessions* in the two areas, thus allowing countries to go further in their cooperation than it would have been possible, if separate agreements had been formed instead. This form of benefit requires a bit more examination than the previous two. To this end, let us as a simple illustration, consider a situation where a country denoted “Home” imposes a tariff on imports from the trade partner “Foreign.” Loosely speaking, while beneficial to the government of Home, the tariff benefits the Home government less than the costs it imposes on the Foreign country government; the tariff is hence “internationally inefficient.” There is thus scope for a mutually beneficial exchange, where Home reduces its tariff in return for compensation from Foreign.

One possibility would be for Foreign to make a monetary transfer, or some other side payment. The transfer would of course have to be smaller than the benefit to Foreign of getting rid of the tariff, but larger than the foregone benefit from the transfer for Home. Such payments are rare in international agreements, however. One reason might be that monetary transfers are costly since raising revenue distorts the economy, and there are also other forms of collection costs. A second reason for the reluctance to use side payments is probably that it requires the parties to determine the monetary value of e.g. a tariff reduction, which may be complicated. But it should be noted

¹³ For discussion and analyses of the enforcement aspect, see e.g. Copeland and Taylor (1995), Barrett (1997), Abrego *et al* (2001), Ederington (2001), and Limão (2005).

¹⁴ A similar type of enforcement problem can also arise within a trade agreement when bilateral trade flows are highly unbalanced. In such an instance, each country may not import enough from the countries it is exporting to, to be able to punish the latter for deviations from an agreement; see Maggi (1999). See also Bernheim and Whinston (1990, sect 5).

that monetary transfer are not unheard of in international agreements; the EU, for instance, has an extensive scheme for such redistribution.

An alternative mode for Foreign to compensate Home for a tariff reduction would be through a reciprocal reduction of the tariff on some other product. Such an exchange of tariff reductions would avoid (or at least reduce) the need for financial transfers in order to exploit the gains from trade. Nor would it require the countries to determine the exact monetary value of tariff reductions. The common notion in the economic literature on trade agreements that trade negotiations are about exchange of market access fits this description. Indeed, in Ethier (2004) negotiators neglect the general equilibrium ramifications of tariff reductions, since these effects do not give rise to any political support.

These are clearly important reasons why in practice agreements on trade liberalization consists of packages of reciprocal tariff concessions. More importantly, what this example illustrates is a yet another advantage from having a single agreement: *a single agreement allows the parties to overcome the lack of, or the cost of, side payments.*

The same mechanism could be at work for the two countries also on the environmental side, in cases where there are international spillovers from pollution, such as in the climate area. Suppose that production in both Home and Foreign causes environmental damages on each other.¹⁵ In their decisions on abatement levels, each country disregards the benefits of their abatement efforts for the other country, and as a result they both abate too little from the perspective of their joint interest. They could in principle negotiate two separate agreements, one for each country's abatement, where the polluter is paid in order to increase abatement. But for the same reasons as on the trade side, the payments instead take the form of reciprocal undertakings to reduce emissions, with a package of exchanges forming the core of an environmental agreement.

We have thus far identified a plausible reason why countries form trade agreements and MEAs that each contains packages of reciprocal concessions. The same mechanism could under certain circumstances induce the countries to also put the trade agreement and the environmental agreement into the same package. This could be beneficial if there are asymmetries between countries that have prevented them from resolving all their trade problems and environmental problems through the two separate agreements. To see how, suppose that Home is exposed to emissions from Foreign, but that Home pollutes the environment of Foreign only marginally so. Home could not offer Foreign much in this configuration, but Foreign could offer Home a lot more (through drastic reduction of its emissions). Absence of side payments would make it impossible for the parties to remove the inefficient emissions through a reciprocal environmental agreement. An agreement that includes both trade and the environment could then enhance both countries' welfare, since it could induce Foreign to reduce its emissions further than stipulated in the MEA, and Home to reduce its tariffs further than stipulated in the separate trade agreement.¹⁶

¹⁵ To simplify, we also assume that the damages arise from production of non-tradables, and that their production is unaffected by the production for exports, and vice versa; this assumption allows us to discuss trade and environmental issues separately.

¹⁶ The reasoning presupposes that Home still has something to offer Foreign on the trade side. In principle, this would be possible even if Home has reduced its tariffs to zero through the separate trade agreement, since Home could still offer an import subsidy in exchange for a reduction in Foreign's pollution. Import subsidies are of course

¹⁷ Such an *exchange of concessions across policy areas* allows the countries to go further in terms of international cooperation than if trade and environmental negotiations were to be conducted separately. The linkage of the two policy areas hence serves as a substitute for side payments, and it is yet another reason for forming a single agreement on trade and the environment.

To conclude, there are several important sources of gains from forming a single agreement. *If countries nevertheless choose to have separate agreements, there must be considerable gains from doing this.* In what follows we will point to what we believe is the most plausible reason why countries may still prefer to separate their commitments into trade agreements and environmental agreements.

4 Gains from Separate Agreements

Our starting point for the analysis of how MEAs *should* be viewed in the WTO is the observation that the current structure has been *chosen* by WTO Members despite the possibilities to bring MEAs into the WTO that have been identified above. In order to decide how a WTO judge should view MEAs under the WTO Agreement, we should therefore first understand:

- *why* Members have chosen separate trade and environmental agreements; and
- *why* the relationship between these separate agreements is not explicitly addressed in the agreements.

We will draw on the rich economic literature on contracts in order to respond to the two questions asked here. The literature points to several reasons why contractual partners could benefit from having a single agreement that regulates all issues of mutual interest.

4.1 Separate Agreements to Save Contracting Costs

It is tempting to see international negotiations over trade and environmental policies as an antagonistic haggling over how to distribute the costs and the benefits of trade liberalization and environmental protection. Of course, one aspect of negotiations is to divide the benefits that the international cooperation will bring. But because of the complexity of the issues to be negotiated, there is no “cake” of known size and properties lying on the table as negotiators enter into the negotiations. No one knows how to design a single agreement that addresses all relationships between countries with regard to trade and to the environment (as well as any other externalities that may exist); indeed, to design such an agreement would essentially amount to central planning at a global scale. A central role of negotiations is therefore to identify packages of concessions that would benefit all parties. That is, negotiators do not only divide the cake, they also largely “bake” it, and this can be very *costly*. In our view, the conceptual problems with designing and implementing such an agreement provide the main reason why there is not a comprehensive agreement covering trade and the environment. Our approach shares the emphasis on conceptual limitations as a determinant of the structure of trade agreement with Ethier (1998), in his study of

in some respects very similar to monetary transfers. But they are “decentralized” in that the total amount is determined not only by the magnitude of the subsidy, but also by the market reaction.

¹⁷ See e.g. Horstmann et al (2005) for an analysis of linkages between trade negotiations.

the rationale for PTAs. Ethier bases his analysis partly on the assumptions that “[t]he fewer the number of participants in trade negotiations, the easier it is to reach agreement, and “[t]he fewer the number of participants in trade negotiations, the larger the number of issues on which it is possible to reach agreement.” These notions are very similar to those employed here. In the same spirit, Ethier (2004) derives the structure of a trade agreement based on the assumption that voters are assumed to only understand the direct effect of trade liberalization, but not indirect (general equilibrium) effects.

Despite the richness of the contracting literature, there is little theory that can readily be applied to shed light on the role of conceptual problems for the structure of international agreements. A significant amount of research has been devoted to understanding the role of cognitive limitations for e.g. the design of contracts, but there is no generally accepted formal approach to describing this often emphasized phenomenon. Existing attempts are typically highly abstract, and wrought with conceptual problems.^{18 19}

One strand of literature that we believe could be used to illustrate some aspects of how the costs of forming complex agreements may lead to the formation of separate agreements on trade liberalization, and on protection of environment, is the incomplete contracts literature on contracting costs. While this theory does not explicitly model cognitive limitations, it still may give a feeling for possible consequences of similar limitations. The basic idea when applying this approach would be that when the parties decide on what type of agreement(s) to form, they not only take into consideration the benefits that the various possible agreements yield from reduced international externalities. They also have to take account of the fact that *negotiating and implementing agreements is costly*, for the reasons just described. It may therefore be desirable to forego the gains from a very elaborate encompassing agreement if it is very costly to bring about, and instead settle on cruder, but cheaper agreements. To the best of our knowledge, Ethier (1996) was the first to analyze the structure of trade agreements within such a contracting cost framework.

The literature on costly contracting has highlighted several ways through which *contractual incompleteness* may contribute to reduce contracting costs:²⁰ Contractual bindings can be *rigid* rather than conditioned on changes in the economic environment, an example being tariff bindings that apply irrespective of changes in demand and supply conditions. The agreement may also lack bindings, and instead *leave discretion* over certain policies to the parties; for instance, the GATT leaves discretion over domestic instruments to the Members.²¹ In addition, contractual provisions may be expressed *vaguely* in order to save negotiators the time required to draft more

¹⁸ See e.g. Segal (1999).

¹⁹ To illustrate the type of problems that arise, note that we have argued that the countries rationally decide to pursue separate negotiations in order to avoid having to identify different cross-issue coordination gains. But how can they know what they are foregoing due to the separation without already having identified the possible outcomes of a negotiation over a single agreement? The contracting cost approach suggested here shares this fundamental problem with most other attempts to formalize some notion of either bounded rationality, or complexity cost, when the parties take their limited understanding of the situation into account. To quote Tirole (2009, p. 263): “...parties are unaware, but aware that they are unaware.”

²⁰ This is denoted the “writing costs” approach in the literature on the foundations of incomplete contracts, and dates back to Dye (1985), at least.

²¹ Horn, Maggi and Staiger (2010) suggest how rigidity and discretion in the GATT can be understood from a contracting cost perspective.

complete instructions for future adjudicators.²² All these means of saving on contracting costs imply that the agreement becomes incomplete in various ways.²³ A central idea here is that *separation of negotiations offers an additional way of saving on contracting costs*.

4.1.1 Two Sources of Contracting Costs

There are at least two obvious types of costs from international negotiations. First, *administrative resources* are required, both at the negotiating table, as well as in ministries and governmental agencies, in particular in the form of labor time. It is hard to assess the magnitude of the administrative costs that would be required to negotiate a single agreement on trade and the environment. There are good reasons to believe that the costs would be extremely large; already the negotiation of the WTO Agreement during the Uruguay Round stretched the negotiating capacity of many developing countries to the limit, and some claim beyond it.

Second, since it takes a long time to negotiate a large agreement, the fruits of the cooperation come with a *delay*, causing a welfare loss due to the discounting of the future costs and benefits.²⁴ There are of course ample actual examples of extremely protracted negotiations in both the trade and the environment area. These delays stem partly from technological constraints, in the wide sense of the term, such as the time it takes to exchange messages, to travel, etc. But limitations of the human cognitive capacity clearly add to both the time and the administrative resources that are required, since it requires time to draft and to evaluate proposals, to consult with capitals, etc.

The significance of the time factor for the formation of international agreements is vividly illustrated by the experiences in the GATT/WTO negotiation rounds. There has been a marked tendency for the rounds to take increasingly longer time to conclude, and at the same time, the agreements have become more and more complex, both in terms of the issues addressed, as well as the number of participants involved in the negotiations. The Tokyo Round negotiations took six years to complete, the Uruguay Round negotiations took approximately eight years, and now the Doha round negotiations are in their 12th year. Although it can be debated whether each round has been more complex than the preceding round, it seems clear that the overall trend has been towards increasingly more complex negotiations, in terms of both subject matter, the nature of issues discussed, and the number of participants. It seems highly plausible that this general increase in complexity explains the increasing time it takes to conclude the rounds. The increasing time that is required in order to implement the agreement is clearly a significant source of costs for Members.

²² See Maggi and Staiger (2011).

²³ Other reasons why contracts may be incomplete that have been pointed to in the literature on the foundations of incomplete contracts include the difficulty to verify to third parties (such as adjudicators) contingencies that a contract should be conditioned on, and the inability of the parties to foresee all relevant contingencies. The main critique against the “writing costs” approach is that it is sometimes unclear whether the magnitude of the contracting costs are important enough to explain the observed incompleteness of contracts. This critique seems less relevant in the present application.

²⁴ It seems conceivable that areas that are more complex in the sense explained above not only take longer time to negotiate, but may also be associated with higher risk of breakdown. An additional form of benefit from separation of agreements may then be reduced risk of breakdown of negotiations.

4.1.2 Why an Encompassing Agreement is Likely to be Very Costly

There are good reasons to believe that it adds to total contracting costs if an encompassing trade and environmental agreement is negotiated, instead of separate agreements, both with regard to the administrative resources that will be required for the negotiations, as well as the time it takes to reach an agreement. As a simplistic illustration of some of the mechanisms that may be at play, consider the following example: Let there be two countries, A and B. Country A imposes a tariff (denoted t_A) and an environmental abatement level (e_A), and country B similarly controls a tariff t_B and an abatement level e_B . Each of the two tariffs and the two environmental instruments can take on either a high (H) or a low (L) value. As discussed above, we assume that negotiating agreements require administrative resources, as well as calendar time, and that both are costly to countries.

If there are separate negotiations for a TA and a MEA, there are four possible exchanges of concessions in the trade negotiation:

$$(t_{AL}, t_{BL}); (t_{AL}, t_{BH}); (t_{AH}, t_{BL}); (t_{AH}, t_{BH})$$

Similarly, there are four possible exchanges of concessions in the environmental negotiation:

$$(a_{AL}, a_{BL}); (a_{AL}, a_{BH}); (a_{AH}, a_{BL}); (a_{AH}, a_{BH})$$

In an encompassing negotiation over both trade and environment offers, each of the four tariff offers above can be combined with each of the four possible environment offers. Hence, in this case there are a total of 16 possible exchanges of concessions.

Consider first the direct benefit from separation of negotiations in the form of a *faster implementation of cooperation*. To this end, suppose each possible exchange of concessions takes one month to identify and to evaluate. With a single agreement, 16 man-months would have to be spent negotiating, in order to identify and evaluate the 16 possible trade-*cum*-environment offers. It is not clear to what extent these man-months have to be spent sequentially. But it seems plausible that it would require longer calendar time than the 8 months that the parallel negotiations of the two separate agreements would need. Hence, the separate negotiations should be concluded more rapidly than the encompassing negotiation.

Turning to *savings of administrative resources* with separation, note that with a single negotiation there are 16 different exchanges of concessions that need to be identified and evaluated in order to completely characterize the options available to the parties. But with separate negotiations there only four exchanges of concessions in each of the negotiations, or eight in total. This reduction stems from the assumption that in the case of parallel negotiations, the tariff offers and the environment offers are evaluated independently of each other.

There are thus gains in terms of both quicker implementation, and reduced expenditures on administrative resources from the separation. But as noted above, this comes at the cost having of

having to forego the benefits from an encompassing agreement that were pointed to in Section 3.1.²⁵

4.1.3 The Trade/Environment Divide

There are clearly many ways in which negotiations could be separated. For instance, one could have one agreement on the most important issues on the trade side for some parties, combined with the most important issues on the environmental side for other parties, in order to have a “high stake” agreement, and then let remaining issues be addressed in other agreements. In order for our theory to be plausible, it should also propose a plausible reason why there is a trade-environment divide. What then explains the particular form of separation that has been chosen?

One important factor is the possibility to *save fixed costs by merging certain categories of bindings*. For instance, a tariff agreement requires a significant amount of supportive obligations concerning customs valuation procedures, import licensing etc. But since the same set of rules are likely to apply to most tariff lines, it would save efforts and time to just negotiate one set of such rules, and then apply these rules to a range of tariff commitment that are brought in under the same agreement. But these rules would for the most part not be useful in an environmental agreement. Similarly, each agreement that binds e.g. the use of ozone-depleting substances requires rules concerning measurement, verification, etc., but these rules could be applied with little adjustment to a large number of different substances. But they would not be of much use for a tariff agreement.

Another factor that plausibly adds to explaining the trade/environment divide is the fact that *the costs for negotiating exchanges of concessions are likely to be lower, the more similar they are*, since this seems to ease the comparability of potential concessions (although it should be said that the exact mechanism is unclear).²⁶ To illustrate, let us return to the two country example in the previous section, where each country pursues a trade policy, represented by the determination of a tariff level, and an environmental policy, captured by an abatement level. Consider two parallel negotiations, A and B, in which the following pair of offers are made:

Offer in A: “We will lower the tariff on motor vehicle seats by 13% if you lower the tariff on snow skis by 15%.”

Offer in B: “We will reduce emissions of the substance CH₂FCI₄ by 80% if you reduce emissions of the substance C₂H₂F₃Cl by 75%.”

²⁵ An example of how the benefits of parallel negotiations are exploited is the Doha Round negotiations, some 30 different negotiations run more or less in parallel. It would quite obviously take significantly longer to conclude the round if these different issues had to be negotiated sequentially. But this does not mean that the parallel negotiations are entirely separated: in the WTO, once the parallel negotiations have been gone far enough to crystallize the core points of disagreement, negotiations move to a higher level and are then conducted *across* issues. Ultimately, there is a single undertaking that specifies all the legal significance of all parts of the agreement. The parties can then make trade-offs between areas, allowing them to at least partly exploit the type of coordination gains that were pointed to above.

²⁶ The example is not entirely artificial: the two products are defined at the 6-digit Harmonized System level -- motor vehicle seats being HS 9401.20 and snow skis being HS 9505.11 -- which is the level at which tariff bindings are bound in the WTO Agreement. And the two substances are among the ozone-depleting substances that are controlled through the Montreal Protocol (Annex C).

Compare these negotiations with two parallel negotiations where the following pair of offers are made:

Offer in A: “We will lower the tariff on motor vehicle seats by 13% if you reduce emissions of the substance C₂H₂F₃Cl by 75%.

Offer in B: “We will lower the tariff on snow skis by 15% if you reduce emissions of the substance CH₂FCl₄ by 80%.”

Intuitively, it seems highly plausible that the offers in the first pair of negotiations would be more easily evaluated than the offers in the second pair of negotiations. The reason is that the suggested concessions in the tariff reduction offer can be evaluated in terms of e.g. how much export sales of skis will increase compared to how much import-competing producers of motor vehicle seats will reduce their sales. Similarly, the costs and benefits of the two proposed reductions of emissions of the ozone-depleting substances in offer can be compared. However, it is much less clear how to compare the market access gains in say skis and the costs and benefits of having to reduce C₂H₂F₃Cl.

The illustrated feature is likely to be accentuated the more specialized is the knowledge that is required for the negotiations. In terms of the example, a negotiator, or more plausibly, the negotiator’s Ministry of Commerce, may have a certain understanding of the economic and political trade-offs that are involved if market access in motor vehicle seats is exchanged for market access for skis. But they will have little idea about the nature of trade-offs that are involved with regard to the substances C₂H₂F₃Cl and CH₂FCl₄. Similarly, the experts negotiating bindings of these substances, or their backing agencies, may understand their national environmental impact, and the costs that concessions would involve. But they have no understanding of the considerations determining the evaluation of tariff proposals. Hence, it will be particularly costly to evaluate proposals for “cross-cutting” concessions, when the respective areas are highly complex scientifically, or politically.

To conclude, although formal models are still largely missing, it seems highly plausible that the costs in terms of administrative resources and delays, of negotiating and implementing an agreement that encompasses both trade and the environment, are too large for such a grand agreement to be viable.

4.2 Separation for Strategic Reasons

We have thus far argued that contracting costs provide a plausible explanation of the separation of trade and environmental agreements. It is tempting to think that this separation could also be driven by the strategic advantages that this agreement structure yields to some countries. A typical finding in the literature is that such, perhaps seemingly small, differences in bargaining format may have profound impact on the outcome, in terms of e.g. the distribution of the surplus from an agreement.²⁷ The mechanisms involved are often rather subtle. As an example, suppose

²⁷ Busch and Horstmann (1997, 2002) show how a party may benefit strategically from negotiating one area before another, when the bargaining friction is discounting, and the areas differ in that one area is potentially more important than the other to the party. For other analyses of the role of bargaining formats, see e.g. Conconi and Perroni (2002), Fershtman (1990), Horn and Wolinsky (1988), Horstmann, Markusen and Robles (2005), In and Serrano (2004), and Inderst (2000).

that in a situation where two countries are to negotiate separate trade and environmental agreements, and where one of them stands to gain a lot from a trade agreement, and therefore is anxious to see it implemented as soon as possible; this country would be rather weak in the environmental negotiations in a case where implementation of the trade agreements awaits an agreement on the environment. The other party will therefore have an incentive to try to enforce such bargaining format. Or, to take another example, countries for which environmental commitments are costly may prefer to keep environment outside the trade agreement, in order to avoid having their environmental concessions being enforced through potent trade countermeasures. More generally, since countries are likely to have diverging preferences over bargaining and agreement structures, it is possible that the separation between the WTO and MEAs should be viewed as the result of some countries being able to enforce a structure that yields strategic benefits. For instance, it is sometimes alleged that developing countries benefit from keeping environmental commitments outside of the WTO.

But even if the separation of agreements may yield strategic gains to certain countries, the gains come at a cost to the parties as a whole, since the benefits from having a single agreement are foregone. The separate agreements could therefore, at least in principle, be replaced with a single agreement that would be better for the parties as a group. If nothing else, such an agreement could mimic the undertakings in the two separate agreements, and at the same time avoid duplication of some fixed costs, or the parties could reap the benefits from a more ambitious agreement with an exchange of trade and environmental concessions, and compensate the parties that are able to enforce a separate structure that they benefit from. For instance, why do not environmentally ambitious, richer WTO Members offer polluting developing countries WTO Members enough compensation to accept to commit to less pollution?

A possible explanation for why the more ambitious type of agreement would not be realized is a lack of means for side payments. There are indeed some limitations on what can be done in this regard. For instance, developing countries already facing very low trade barriers in richer countries for many goods, partly due to the generally low trade barriers in these countries, and partly due to various preferential trade schemes that offer zero or very low tariffs to developing countries. On the other hand, it would still be possible to offer compensation through other means, such as monetary transfers. As argued above, trade agreements where one party makes a monetary payment to get increased market access to another country are almost unheard of. However, when it comes to developed/developing country agreements, there are prominent examples of monetary transfer schemes. Witness for instance the huge promised transfers to developing countries both through the aid-for-trade program in connection with the WTO Doha Round negotiations, and for environmental investments through the 2009 Copenhagen Accord. It therefore seems as if some other factor would have to be at work for a strategic explanation for the separation of agreements to make sense.

To conclude, the separation of trade and environmental agreements could, as a matter of theory, result from the strategic behavior by certain countries. But this explanation would probably rest on empirically questionable assumptions concerning the lack of side payments.²⁸ Also, it is unclear how such a theory could explain the structure of the agreements, including why there are

²⁸ An alternative might be to derive separation within an incomplete information context, although we doubt the robustness of findings from using such an approach.

gaps in the agreements, and the trade/environment divide. We are therefore reluctant to rely on this explanation for the separation of agreements.

5 How Should MEAs Be Viewed in WTO Disputes?

In the above we have identified contracting costs as a plausible reason why countries have separate agreements in the trade and the environment areas, despite the advantages that a single agreement would yield. We would now like to explore, in light of the suggested explanation for the separation of the agreements, how an MEA should be used in WTO adjudication. Unfortunately, this second step is much harder to take than the first. We therefore have to be (even more) speculative.

We believe that it is here useful to make a distinction between two possible ways in which the climate agreement could be treated under the trade agreement: one is as a source of law, which would mean that the environmental agreement could impose *obligations* on members of the trade agreement. The other is to serve as *tools for the interpretation* of the trade agreement. The theory we have sketched out to explain the separation of the agreements strongly suggests in our view that the WTO adjudicator should *not* let the MEA impose obligations under the WTO Agreement. Because of the contracting costs, WTO Members refrained from working out their desired relationship between obligations in the two policy areas, despite the possibilities to do so—MEAs could be brought into the WTO in a number of ways (as we saw in Section 2)—and despite the likely gains from a single encompassing agreement (pointed to in Section 3). But if the Members themselves do not know (or cannot agree) how to think about these matters, the likelihood that a WTO panel would succeed to solve the issue in appropriate fashion, is very small. The conclusion is thus that in light of the suggested reason for the separation of agreements, MEAs should not be interpreted to impose obligations on WTO Members. This does not mean however, that MEAs should be treated as completely irrelevant in WTO disputes, since *MEAs could be used as sources of factual information*.

To illustrate, consider an example where Home imports a chemical from Foreign. Home and Foreign have a trade agreement that imposes a general prohibition on the use of import quotas, and the countries have also negotiated a zero tariff on the chemical. Home is also a member of a MEA that prohibits production and trade in chemicals that are hazardous to the climate. Suppose that Home imposes an import ban on the chemical that Foreign exports, referring to its adverse impact for the climate, and the Foreign in response complains before the WTO. To defend its import prohibition of the chemical, Home invokes the general exceptions clause in Art. XX(b) GATT, arguing that the measure is “necessary to protect human, animal or plant health or life,” and that it does not constitute “disguised restriction on international trade”. Foreign claims however that the imported chemical is actually harmless, and that the alleged climate impact is simply used as a pretext to restrict imports.

The WTO judge would here be confronted with a gap in the WTO Agreement, since it does not specify anything about chemicals specifically. But the MEA may contain useful information on this, since it is a specialized agreement that much more directly addresses the question of the danger of various substances (even though formally it is not *lex specialis*). If the MEA lists the chemical among substances that are hazardous from a climate point of view, the complaining

country's claim would seem much less warranted. Conversely, if the chemical is not listed, the question arises as to why the MEA does not cover the chemical. Or, the judge could use another MEA to determine whether a particular animal or plant that is harmed by the chemical should be viewed as an "exhaustible natural resource" for the purpose of Art. XX(g) GATT. Note that the WTO judge is here not *applying obligations* the MEAs in the WTO dispute, it uses the MEA to help determine whether the conditions for an Art. XX GATT exception are fulfilled.²⁹

The limitation of the role of MEAs to serve only as sources of information helps shed light on two related questions concerning the appropriate role of MEAs in the WTO. One question is whether there has to be a complete overlap between the membership of the WTO and the membership of the MEA in order for the MEA to be used in adjudication in the WTO, as argued by the Panel in *EC—Approval and Marketing of Biotech Products* (as discussed in Section 2). This would indeed be a serious issue if obligations in MEAs could become sources of WTO law. But as long as the role of MEAs is confined to be a source of information, as suggested here, this is less of a problem; in the example, it is not necessary that the complaining country is a member of the MEA for it to provide information concerning the properties of the chemical.

The second question is whether the *multilateral* feature of the MEA is important. On our suggested interpretation, what is important is that the MEA has *general acceptance*; it must not build on scientifically disputed views about the dangers of the chemical at stake. The more signatories there are, the more likely it seems that whatever is agreed upon, reflect a general understanding. This is an extra reason why the multilateral feature of MEAs is likely to be important.

Finally, it might be argued that our suggested interpretation of the role of MEAs in the WTO is unsatisfactory since it de facto allows for the laws in the two policy areas to remain in conflict with each other. This is obviously the consequence of the suggested interpretation. The point is however, that this conflict goes too deep to be resolved by WTO judges, it is for WTO Members to work out how they want their obligations in the trade area and in the environment area to be related.

6 Conclusions

The paper has sought to highlight the widespread view among the legal profession that awaiting action by WTO Members, MEAs should be made part of WTO law through adjudication. We first pointed to the lacunae of WTO law and case-law (except for *US—Shrimps*) on MEAs. This lacunae is in our view all the more telling in light of the willingness that WTO Members have

²⁹ MEAs could also be used to establish whether obligations of the WTO Agreement have been violated. For instance, necessary for a measure to violate Art. III.2 GATT is that an imported product is given a less favorable treatment than a "like" (or "directly substitutable or competitive") domestic product. A common approach is to claim that likeness is "determined in the market place." An alternative approach, discussed at length in Grossman, Horn and Mavroidis (2013), would be to consider likeness from a policy point of view, as has also been hinted at by the AB report in *Dominican Republic – Import and Sale of Cigarettes*. Central for an investigation following such an approach would be whether an imported product warrants a stricter treatment than a competing domestic product would be the physical and physiological effects of the products from a policy point of view, and a MEA may provide useful information on this.

shown to allow for other forms of arrangements that involve subsets of WTO Members, such as plurilateral agreements, preferential trade agreements, and recognition agreements.

Turning to the question of how MEAs should be viewed, we argued that this question should be answered in light of the *reason(s)* for the separation of agreements, and for the contractual incompleteness of these agreements. We have here taken a first step toward such an analysis, drawing on ideas in the contracting cost literature to sketch a theory of why parties may choose to have parallel (and incomplete) agreements, rather than a single encompassing agreement. This approach has led to the following main conclusions:

- A single agreement allows exchange of concessions across trade and environment areas; it allows for the saving of fixed costs; and it may enhance enforcement possibilities. There must therefore be significant benefits from separation for the parties not to form a single agreement.
- Contracting costs may provide plausible explanations of both the separation of agreements in general, and of the trade/environment divide. They may also explain incompleteness of agreements, although as far as we know, the theory does not shed direct light on how to view the relationship between parallel incomplete agreements. In cases where countries have failed to sort out the relationship between obligations in the trade and the environment areas, judges cannot be trusted to be able to identify solutions that would be in the long run interest of all countries. Consequently, obligations from MEAs should not be imported by WTO judges into WTO law.³⁰
- Recourse to MEAs could still be warranted, however. But it should then be restricted to obtaining factual information that will help the judge better evaluate the legal canons embedded in WTO law.

That is, with regard to the role of MEAs for adjudication under the WTO Agreement, *legislators' silence should speak volumes to WTO judges*.

³⁰ We expressed some reservation concerning using strategic considerations to explain why the agreements are separated. However, should the separation have such an explanation, there is a clear risk of affecting the balance of rights and obligations that these separate negotiations have resulted in, should adjudicating bodies let obligations in the MEAs affect the outcome of WTO disputes.

References

- Abrego, L., C. Perroni, J. Whalley, and R. M. Wigle (2001), "Trade and Environment: Bargaining Outcomes from Linked Negotiations," *Review of International Economics* 9, 414-428.
- Barrett, S. (1997), "The strategy of trade sanctions in international environmental agreements," *Resource and Energy Economics* 19, 345-361.
- Bernheim, B. D. and M. D. Whinston (1990), "Multimarket Contact and Collusive Behavior," *Rand Journal of Economics* 21, 1-26.
- Busch, L.-A. and I. Horstmann (1997), "Bargaining Frictions, Bargaining Procedures and Implied Costs in Multiple-Issue Bargaining," *Economica* 64, 669-80.
- Busch, L.-A. and I. Horstmann (2002), "The Game of Negotiations, Ordering Issues and Implementing Agreements," *Games and Economic Behavior* 41, 169-191.
- Charnovitz, S. (2007), "The WTO's Environmental Progress," *Journal of International Economic Law* 10, 685-706.
- Conconi, P. and C. Perroni (2002), "Issue linkage and issue tie-in in multilateral negotiations," *Journal of International Economics* 57, 423-447.
- Copeland, B. R. and S. M. Taylor (1995), "Trade and Transboundary Pollution," *American Economic Review* 85, 716-37.
- Dye, R. A. (1985), "Costly Contract Contingencies," *International Economic Review* 26, 233-50.
- Ederington, J. (2001), "International Coordination of Trade and Domestic Policies," *American Economic Review* 91, 1580-1593.
- Ethier, W. J. (1998), "The New Regionalism," *Economic Journal* 108, 1149-1161.
- Ethier, W. J. (2004), "Political Externalities, Nondiscrimination, and a Multilateral World," *Review of International Economics* 12, 303-320.
- Fershtman, C. (1990), "The Importance of the Agenda in Bargaining," *Games and Economic Behavior* 2, 224-238.
- Grossman, G. M., H. Horn and P. C. Mavroidis (2013), "National Treatment," in Horn, H. and P. C. Mavroidis eds., *Legal and Economic Principles of World Trade Law*, Cambridge University Press.
- Horn, H. and P. C. Mavroidis (2009), "Burden of Proof in Environmental Disputes in the WTO: Legal Aspects," *European Energy and Environmental Law Review* 18, 112-140.
- Horn, H., P. C. Mavroidis, and A. Sapir (2010), "Beyond the WTO? An Anatomy of the US and EU Preferential Trade Agreements," *The World Economy* 33, 1565-1588.

- Horn, H., G. Maggi and R. W. Staiger (2010), "Trade Agreements as Endogenously Incomplete Contracts," *American Economic Review* 100, 394-419.
- Horn, H. and A. Wolinsky (2008), "Worker Substitutability and Patterns of Unionisation," *Economic Journal* 98, 484-97.
- Horstmann, I., J. Markusen and J. Robles (2005), "Issue Linking in Trade Negotiations, Ricardo Revisited or No Pain No Gain," *Review of International Economics* 13, 185-204.
- Howse, R. and M. Busch (2003), "A (Genetically Modified) Food Fight, Canada's WTO Challenge to Europe's Ban on GM Products," *C.D. Howe Institute Commentary*, No. 186.
- Howse, R. and D. J. Neven (2007), "US – Shrimp," in Horn, H. and P. C. Mavroidis eds., *The American Law Institute Reporters' Studies on WTO Case Law*, Cambridge University Press, New York, 54-84.
- In, Y. and R. Serrano (2004), "Agenda Restrictions in Multi-issue Bargaining," *Journal of Economic Behavior & Organization* 53, 385-399.
- Inderst, R. (2000), "Multi-issue Bargaining with Endogenous Agenda," *Games and Economic Behavior* 30, 64-82.
- Irwin, D. A., P. C. Mavroidis, and A. O. Sykes (2008), *The Genesis of the GATT*, Cambridge University Press, New York.
- Limão, N. (2005), "Trade Policy, Cross-border Externalities and Lobbies, Do Linked Agreements Enforce More Cooperative Outcomes?," *Journal of International Economics* 67, 175-199.
- Maggi, G. (1999), "The Role of Multilateral Institutions in International Cooperation," *American Economic Review* 89, 190-214.
- Maggi, G. and R. W. Staiger (2011), "On the Role and Design of Dispute Settlement Procedures in International Trade Agreements," *The Quarterly Journal of Economics* 126, 475-515.
- Mavroidis, P. C., G. A. Bermann, and M. Wu (2010), *The Law of the World Trade Organization (WTO)*, American Casebook Series, West, St. Paul, MN.
- Segal, I. (1999), "Complexity and Renegotiation, A Foundation for Incomplete Contracts," *Review of Economic Studies* 66, 57-82.
- Tirole, J. (2009), "Cognition and Incomplete Contracts," *American Economic Review* 99, 265-294.