Journal of Environmental Economics and Management 62 (2011) 15–29

Contents lists available at ScienceDirect

Journal of Environmental Economics and Management

journal homepage: www.elsevier.com/locate/jeem

The burden of proof in trade disputes and the environment

Henrik Horn [a,b,c,*]

[a] The Research Institute of Industrial Economics (IFN), Stockholm, Sweden
[b] Bruegel, Brussels, Belgium
[c] Centre for Economic Policy Research, London, United Kingdom

ARTICLE INFO

Article history:
Received 14 April 2009
Available online 9 April 2011

Keywords:
National Treatment
Burden of proof
Environment
GATT
WTO
Trade agreements

ABSTRACT

The WTO leaves discretion over environmental policies to its members, but requests that a fundamental non-discrimination principle is respected: National Treatment (NT). The provision seeks to prevent protectionist use of domestic policy instruments, requesting that when an imported product is sufficiently similar to a domestic product, they are treated identically. WTO adjudicators will often face severe informational problems in environmental disputes. Important for the practical implementation of NT is therefore the allocation of the burden of proof (BoP). This paper highlights basic implications of the BoP for the occurrence of judicial errors, for the environment and for welfare, using a setting where NT serves its intended role of supporting negotiated tariff liberalization. The paper suggests that NT may indeed constrain environmental policies, but that this may be desirable from an efficiency point of view. Also, BoP rules that benefit the environment may not benefit global welfare, and conversely.

1. Introduction

A basic restriction imposed by the World Trade Organization (WTO) on members' environmental policies is the *National Treatment* (NT) clause in Art. III of the General Agreement on Tariffs and Trade (GATT). Similar provisions can also be found in a number of other agreements in the WTO. Art. III GATT covers virtually all domestic policies, environmental policies included, that "directly or indirectly" affect trade in goods, outlawing policies that treat imported products worse than "like" or "directly competitive or substitutable" domestic products. NT bans both policies that explicitly discriminate on the basis of origin, but also origin-neutral measures that for protectionist reasons fall more heavily on imported goods.[1] The ambit of NT is therefore potentially, depending on interpretation, extremely wide.

The basic problem with regard to domestic instruments for the formation of a trade agreement is that they can substitute for border instruments. For instance, an environmental tax that is levied only on an imported product can largely replace an import tariff, rendering a tariff binding pointless. One possible solution would of course be to negotiate all internal instruments just like border instruments. But internal instruments can take an endless variety of forms, they can be applied in a huge number of different and changing circumstances, sometimes for what members would generally

* Correspondence address: The Research Institute of Industrial Economics (IFN), Stockholm, Sweden. Fax: +46 8 6654599.
E-mail address: henrik.horn@ifn.se

[1] NT disputes in the WTO almost always concern the latter, *de facto* type of discrimination. For instance, the ban on asbestos-containing products at issue in *EC – Asbestos* applied equally to domestic and imported products. The panel still found it to violate NT, since its effect fell more heavily on imported, asbestos-containing goods than on local, non-asbestos-containing "like" products. (The Appellate Body reversed this determination based on the controversial finding that the products were not "like".) Environmental measures were also found to be *de facto* discriminatory in *US – Gasoline* and *Brazil – Re-treaded Tyres.*

0095-0696/$ - see front matter © 2011 Elsevier Inc. All rights reserved.
doi:10.1016/j.jeem.2010.10.008

consider as legitimate purposes, such as to protect the environment and sometimes for protectionist purposes. It would therefore be prohibitively costly to directly negotiate all internal instruments, if at all possible.

The GATT has chosen an alternative path. Members have discretion over domestic instruments, but these must be set in *non-discriminatory* fashion—they have to respect NT. The practical implementation of this principle has turned out to be difficult for at least two related reasons. One is the vagueness of the provision. For instance, it does not define central concepts such as "protection" and "like." Fifty years of case law has failed to give any reasonable precision to such terms.[2] A second difficulty is that adjudicators cannot directly observe the objectives that are being pursued through the contested policies; if they could, the agreement could stipulate that members should set internal policies so as to achieve some common goal. Adjudicators in the WTO thus typically face considerable uncertainty regarding both factual circumstances and the requirements of the law. They have significant investigative powers in principle, but they are restrained by the (*non-ultra petita*) norm that the judge should not make the case for the parties, and therefore must generally rely on evidence presented by the parties. Central to the evaluation of such evidence, and hence to the practical ambit of the provision, is the distribution of the *burden of proof* (BoP) between complainants and respondents. The allocation of the BoP is likely to affect the probability that measures will be deemed illegal. For instance, it is likely to make a considerable difference to the expected outcome of environmental disputes if complainants have to show that trade-restricting environmental measures are protectionist, or if importing countries have to prove that their measures do *not* amount to protection.

The primary purpose of the paper is to highlight some basic implications of the allocation of the BoP in environmental Art. III GATT disputes, in a setting where NT serves its intended role of supporting negotiated tariff liberalization. But the analysis may also shed light on other similar regulations of environmental instruments in the WTO Agreement, where the allocation of the BoP affects importing countries' discretion over environmental policies. In particular, the *Agreement on the Application of Sanitary and Phytosanitary* (SPS) *Measures* requests members to use scientific evidence when making risk assessments in the SPS area; such issues were discussed in e.g. *EC – Hormones*, dealing with a ban on hormone-treated beef, and in *EC – Approval and Marketing of Biotech Products*, addressing a ban on genetically modified products. The SPS Agreement is in this respect an application of the NT principle, since the purpose of relying on scientific evidence is to prevent the use of protectionist measures that are motivated by flimsy claims that imported and domestic products should for SPS reasons be treated differently.

The paper develops a two-country, partial equilibrium trade model. In a first stage, governments negotiate a contractually incomplete agreement that binds tariffs and imposes a NT-type restriction on taxes. Importing country governments may then privately observe environmental shocks associated with imports, after which they unilaterally determine their internal taxes on imported and locally produced goods; for instance, they may observe the detrimental environmental effects of the imported product, or the public's understanding of such effects. Governments have standard reasons for restricting trade, but an environmental shock would add a reason for imposing a higher total tax on imports. If the shock is sufficiently severe, this will be desirable also from a global perspective. The unilaterally set taxes may in a final stage be challenged in a trade dispute, in which case an adjudicator determines their legality. The adjudicator cannot determine with certainty whether the measure is desirable from a global efficiency point of view, but the adjudicator is more likely to accept a measure when the importing country has been environmentally affected. Judicial mistakes will be committed in that governments will sometimes be allowed to differentiate their internal taxation between domestic and imported products, despite the fact that this reduces welfare from an international perspective, and in other instances governments have to remove differential taxation schemes even though they are globally desirable by protecting the environment. A central determinant of the propensity to make such mistakes is the allocation of the BoP. The paper analyzes how it affects negotiated tariffs, the nature of judicial mistakes, global welfare and environmental damage from imports.

Two general conclusions emerge from the analysis. First, the model suggests a tension between NT, at least as interpreted here, and environmental concerns. For instance, environmentally affected governments have stronger reasons to differentiate their taxation, since they have both environmental and protectionist reasons for doing this. As tariffs are reduced, NT will therefore first apply to governments facing environmental shocks, but not necessarily to purely protectionist governments. In this sense, NT tends to bind from the wrong side of the spectrum of government types.

Second, because of its rather intricate implications, the BoP is a rather blunt instrument to use for improving the environment and welfare. For instance, shifting the BoP toward complaining (exporting) countries will have a positive direct effect on the environment by reducing the number of disputes in which NT is wrongfully imposed. But it will also affect the negotiated tariff—this is indeed the purpose of NT in the first place. The direction of this change is not clear *a priori*. But if it lowers the tariff, imports will increase, thus at least partly offsetting the direct environmental gain. In addition, since the shift of the BoP also will affect complainants in disputes against purely protectionist governments, its welfare consequences are ambiguous.

Turning to the related literature, several studies consider the impact of some form of NT provision for the use of environmental standards, assuming that tariff levels are exogenous; recent examples are [4,5]. But there are very few

[2] See [1,2]. As an illustration, the main obstacle to Border Tax Adjustments is Art. III.2 GATT. But despite having been discussed by GATT members since the 1970s, their Art. III compatibility remains unclear (see [3]).