Planes, Trains, and Automobiles:
The EU Legislation on Climate Change and the Question of Consistency with WTO Law

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Abstract

The European Trading System (EU ETS) for carbon emissions has been extended to apply to aviation as well, including planes of foreign companies flying between, into and out of European Union (EU) airports: this extension has entailed extensive discussions, especially (but not only) across the legal community. Recently, the EU decided to postpone the application of the EU ETS for flights to and from Europe, but not within, for one year in order to facilitate attempts to look for a global solution under the aegis of the International Civil Aviation Organization (ICAO). In this paper, we discuss the consistency of the regime with the multilateral trading rules. In our view, there are good arguments to support the thesis that the regime adopted by the EU does not run afoul of the relevant rules established by the World Trade Organization (WTO). We stop short of assessing the EU’s policy-decision to postpone the ETS application, and the ensuing question of whether a global solution is feasible, since this paper is confined to a pure legal evaluation of the EU ETS using WTO law as a benchmark.

JEL Classification: K40

Keywords

WTO, ICAO, ETS (European Trading System), climate change, BTA (border tax adjustment)
1. Introduction

There is considerable discussion among economists and policy-makers as to what extent carbon pricing through cap and trade schemes is the best policy response to address climate change, and whether such carbon pricing should be accompanied by border tax adjustments.\(^1\) The EU, for reasons outside the consideration of this paper, has opted for a cap and trade scheme and does not seek to provide for border tax adjustments. To the extent that the cap and trade scheme respects the jurisdictional clause, there is nothing to reproach the EU about from a purely legal perspective. There are no common environmental policies that must be observed by nations, and the EU is free to enact the policies it deems best. The argument has been made, though, that the EU policies apply in an extra-territorial manner, and thus are in violation of public international law. This claim has been put forward before the European Court of Justice (ECJ),\(^2\) albeit in less than clear-cut terms, and the Court has had the opportunity to address it. We discuss this issue in the context of our overall discussion regarding the rationale and objectives of the EU ETS in Section 2. In Section 3, we revert to a discussion of the measure under the relevant rules of the World Trade Organization (WTO). Although no complaint has been lodged against the EU measure in this context, some preliminary discussions have taken place in several WTO fora, as the EU measure undeniably has the potential to affect international trade. Section 4 recaps our main conclusions.

2. The EU System

2.1. Cap and Trade: The EU ETS

The EU Emissions Trading Scheme (EU ETS) was launched in 2005\(^3\) as one pillar of the EU’s policies for reducing greenhouse (GHG) emissions.

Emissions trading in the EU is based on the so-called ‘cap-and-trade’ principle: the total quantity of emissions is fixed, i.e. ‘capped’, and translated into allowances that need to be surrendered every year to cover emissions.
The system then leaves flexibility to operators to decide on how best to comply with their obligation to respect the cap: operators have the choice to either reduce their emissions and sell any additional allowances or, in the case that their emissions exceed the number of allowances they hold, to acquire additional allowances in a market in which these allowances are traded. The price of the allowances on the market is the ‘carbon price’, reflecting the marginal abatement cost of emission reductions.

In a nutshell, by introducing a market for carbon emissions, the EU regulation achieves a double objective:

(a) the cap guarantees the environmental outcome, that is, the maximum quantity of GHG emissions that will be released into the atmosphere; and

(b) the trading of allowances ensures that abatement options are implemented in a cost-effective manner: the (polluting) companies are best informed about the cost of ‘green’ policies and it is only natural that the price for trading the right to emit will be fixed in a de-centralized, market-friendly manner, rather than in centralized manner through regulatory intervention.

The scheme today forms the world’s largest carbon market, currently covering trading in 30 countries. Around 11,000 stationary installations, power generators and industrial installations, which are responsible for about half of the EU’s total annual CO₂ emissions, are thus required to submit allowances for each ton of CO₂ they emit. While the system is well established with regard to such stationary installations (which represent 90% of the system), the hottest topic of the debate (in terms of scope) in recent times has revolved around the inclusion of aviation.

2.2. Aviation in the EU ETS: Up Where We Belong?

Since 1 January 2012, the EU ETS has applied to all flights arriving to and departing from airports in the EU, including those of a large number of airlines of non-European origin; airlines operating such flights are thus required to cover their emissions with a sufficient number of quotas or international credits.

In particular, the inclusion of non-European airline flights arriving to and departing from airports in the EU has triggered strong reactions from the countries of origin, including the US, and the sector itself. Legally, the argument was made that the EU had no competence to regulate non-European airlines through the EU ETS. It was also claimed that the EU had illegally extended the application of the EU ETS to include the total emissions of flights landing at or departing from EU airports, i.e. emissions occurring in sections of flights in other States’ airspace or over the high seas.

The ECJ, brought into the arena by the UK’s High Court of Justice which was seeking a preliminary ruling in a case launched by the American Air Transport Association and some airlines, however, denied any extraterritoriality of the EU ETS legislation: being founded on the arrivals and departures of both EU and non-EU airlines’ flights at airports situated in EU territory, and thus falling under EU

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4 It is not the purpose of this paper to discuss multilateral obligations and/or aspirations that the EU might have when it comes to adopting policies aiming to address climate change. We are looking at the EU policies per se, and asking the question of their consistency with the WTO rules.


6 See, for example, the Joint Declaration of the Moscow meeting on the inclusion of aviation in the EU ETS of 22 February 2012, adopted by representatives from 23 countries, calling for response measures, including prohibiting airlines from participating in the EU ETS and assessing WTO law consistency; available at: http://www.greenaironline.com/photos/Moscow_Declaration.pdf

7 Case C-366/10 of 21 December 2011, Air Transport Association of America and Others, not yet published.
jurisdiction, the scheme was found to be consistent with all relevant international obligations in this respect. Indirect incentives to adopt certain (less emitting) conduct outside the EU’s jurisdiction were not regarded as sufficient to establish the extraterritoriality of the EU ETS.\(^8\)

There can be no doubt that EU legislation may be applied to aircraft operators when their aircraft are within the territory of the EU. Clearly, the EU ETS does not regulate how airlines operate within or outside European airspace. A plane flying from the US to India over Europe is not subject to the EU ETS. Interestingly, cap-and-trade legislation proposed in the US (H.R. 2454 Waxman-Markey Bill and S.1733 Kerry-Boxer Bill) would also have applied to international flights of foreign airlines which uplift fuel in the US and these would have been charged for carbon emitted outside US airspace, but this was never claimed to be illegal.

Also, the EU ETS qualifies as a non-fiscal measure and as such cannot be considered as constituting “fees, dues or other charges” prohibited \textit{inter alia} by Article 15 of the Chicago Convention\(^9\). Both Advocate General Kokott and the ECJ underlined the non-fiscal nature of an ETS as a market-based instrument. The Advocate General writes:

"It would be unusual, to put it mildly, to describe as a charge or tax the purchase price paid for an emission allowance, which is based on supply and demand according to free market forces, notwithstanding the fact that the Member States do have a certain discretion regarding the use to be made of revenues generated (Article 3d(4) of Directive 2003/87)." (Opinion of the Advocate General, Case C-366/10, point 216)

This finding clearly has no immediate bearing under WTO-rules, the ECJ not being competent; however, it seems difficult to reach a different conclusion under the GATT. Charges and taxes generally are determined by state authority and not by the market; they do not provide title while the holding of emission allowances does.

2.3. The EU’s Proposal to ‘Stop the Clock’

The debate on how best to tackle emissions from aviation continues yet outside the courtroom in other fora. In particular, in ICAO, having already endorsed the application of emissions trading for international aviation\(^10\) in 2001, initiated a process scrutinizing the possible options for global market-based measures for international aviation in January 2012.

In this regard, the EU anticipated any issues of potential contention and demonstrated good faith towards this multilateral process. On 12 November 2012, shortly before the US House of Representatives passed a bill allowing the transportation secretary to direct US airlines not to participate in the EU’s scheme if deemed necessary (S.1956 Thune Bill), the European Commission proposed to “stop the clock”: to temporarily freeze the enforcement of the EU ETS obligations for international flights while continuing to cover intra-EU flights and those to closely connected areas\(^11\).

It should be noted that, at the time of writing, the proposal has not yet been agreed between the European Parliament and Council, but it seems safe to assume that it will be. The "stopping of the clock" essentially gives time to facilitate a global agreement: in September, the 2013 ICAO Assembly

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\(^8\) see in this respect the opinion by Advocate General Kokott, point 147.

\(^9\) The EU not being a party to the Chicago Convention, the ECJ refused to examine the validity of Directive 2008/101 in light of the Chicago Convention. It did, however, consider that the provisions in the Open Skies Agreement between the EU and the US were similar in content and these were adjudicated upon; see for further details Mayer (2012).

\(^10\) Resolution A36-22, Appendix L

\(^11\) According to the proposal this includes the EFTA states, countries which have signed a Treaty of Accession with the Union and the dependencies and territories of EEA Member States.
will convene and could agree upon a global market-based measure for the reduction of international aviation emissions. The scheme being limited to intra-EU flights while the clock is stopped, the EU is also temporarily avoiding the economic consequences for WTO Members and condemning the issues discussed in this paper to be of rather academic interest for another while yet. Will this time of suspension simply lapse and the EU ETS be enforced in 2014, or will the ICAO Assembly reach an adequate agreement on a global market-based measure in September? One would need to gaze deeply into a crystal ball to know. Under WTO law, however, good faith efforts to negotiate an international agreement are relevant in the context of Art. XX GATT.

3. Miles and More: The EU ETS in Light of the Relevant WTO Disciplines

3.1. The Relevant WTO Disciplines

The ‘cap and trade’ regime in theory might be scrutinized under the disciplines of both the GATT (General Agreement on Tariffs and Trade), which focuses on trade in goods, and the GATS (General Agreement on Trade in Services), which focuses on trade in services. The argument could be made, for example, that the regime affects the costs of products imported by air transport (as the airlines transporting them must hold emission allowances and are expected to factor this additional cost into the air freight rates). On the other hand, the inclusion of aviation in the EU ETS could be viewed as affecting trade in services: without doubt air transport has substantial importance in delivering services internationally, not least in the sector of tourism. It follows that both the GATT and the GATS are in principle applicable to the EU ETS.

There is however a notable difference between the two regimes: the GATS will become largely irrelevant if the EU does not enter commitments to accord national treatment to foreign airlines. This is so because national treatment is a ‘specific commitment’ in GATS-parlance, that is, it binds only those WTO Members that have agreed to enter a similar commitment. The EU must respect the MFN (most-favored-nation) clause embedded in GATS anyway (i.e. even in the absence of a specific commitment); by virtue of this clause, it must treat all foreign airlines in a similar manner but can still treat European airlines better. The EU has broad commitments on trading in all sorts of instruments under Mode 3 (commercial presence), but has no commitments under Mode 1 (cross-border supply). Its commitments concern the granting of non-discriminatory treatment to foreign companies established within the EU. There is no claim, nevertheless, that the EU treats foreign service providers in a discriminatory manner, and no similar claim could ever survive judicial scrutiny in light of the wording of the relevant EU legislation, as discussed above. As a result, the discussion regarding the consistency of the EU ETS with the GATS can stop here and now. In the remaining part of the paper, we focus on the issue of consistency of the EU ETS with the GATT and its many Annexes. In this context, particular attention will be paid to the disciplines embedded in the Agreement on Subsidies and Countervailing Measures (SCM), for the reasons that are detailed infra.

3.2. Planes to and from the EU

We note once more that, at the time of writing i.e. while the suspension of the application of the EU ETS is ongoing, there are no issues under WTO law to discuss, since the system applies to intra-EU flights only. If any, it is domestic companies and the goods they produce that are less favorably treated than their foreign counterparts, some of which might even enjoy a ‘license to pollute’. Our analysis below is relevant to the extent that foreign companies come under the purview of the EU ETS, we assume thus that the time of suspension has lapsed.

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12 In the rest of the paper, we will refer to GATS only to the extent necessary to flesh out our stylized scenarios.
For the purposes of this paper we will imagine two pairs of identical flights: Brussels-Frankfurt (flights 1 and 2), and New York City-Frankfurt (flights 3 and 4). We will differentiate the facts in the following manner:

<table>
<thead>
<tr>
<th></th>
<th>Distance</th>
<th>Aircraft Used</th>
<th>Nationality of Airline</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Flight One</td>
<td>300km</td>
<td>Boeing</td>
</tr>
<tr>
<td>2</td>
<td>Flight Two</td>
<td>300km</td>
<td>Airbus</td>
</tr>
<tr>
<td>3</td>
<td>Flight Three</td>
<td>6,200km</td>
<td>Boeing</td>
</tr>
<tr>
<td>4</td>
<td>Flight Four</td>
<td>6,200km</td>
<td>Airbus</td>
</tr>
</tbody>
</table>

Assuming that the emission of gases per mile travelled is constant, distance should be quite relevant in explaining the identity of buyers and sellers of allowances in the EU ETS. The type of aircraft used as well as the nationality of airliner would be relevant in deciding whether the EU ETS addresses competitiveness concerns or conversely, whether it is meant to address climate change.\(^\text{13}\) We will make two additional assumptions:

(a) Airbus produces ‘clean’ planes, whereas Boeing produces planes that emit substantially more than Airbuses do;\(^\text{14}\)

(b) The EU allows ‘cabotage’ so that foreign airlines can fly between destinations located inside the EU.\(^\text{15}\) For the purposes of this paper it is worthwhile noting that no similar obligation exists under the GATS.\(^\text{16}\)

3.2.1. Jurisdiction

There is a threshold issue here: can the EU regulate the environmental behavior of airlines for all four flights? Flight Two is not problematic: it is an EU carrier flying between two EU airports. Flights One, Three and Four all include a domestic as well as an international element and thus, the question will be whether the EU can exercise jurisdiction on its own under the circumstances.\(^\text{17}\)

In Horn and Mavroidis (2008), it was concluded that in an exchange-of-goods setting, the exporting country clearly always has jurisdiction, under both the WTO Agreement and the default rules of public

\(^{13}\) As will be explained in more detail below, while regulating in order to address domestic companies’ competitiveness concerns is outright impermissible under the GATT, there is absolutely nothing wrong with regulating in order to protect the environment, provided that the relevant GATT disciplines have been observed.

\(^{14}\) We do not use the term here in a derogatory sense; we simply want to capture two distinct production processes, whereby Airbus produces airliners that release fewer GHG emissions per kilometre/mile flown than Boeing, other factors (speed, weight etc.) being equal.

\(^{15}\) Foreign carriers do indeed operate flights within the EU.

\(^{16}\) In fact, air traffic rights are excluded altogether from the scope of GATS under Art. I.2 GATS.

\(^{17}\) There are probably gains to be made from cooperation here. A discussion along these lines nevertheless escapes the purposes of this paper, since here we concentrate on the consistency of the EU unilateral behavior with WTO rules.
international law (e.g., the territoriality and nationality principles)\textsuperscript{18} delineating the permissible scope of national rules of jurisdiction. The pertinent question in the trade setting is, hence, whether the importing country also has jurisdiction. The results of this paper could here be summarized as saying that in general, both the WTO Agreement and the default rules would allow the importing country jurisdiction when the trans-boundary effects of the environmental hazard are physical (or possibly even moral), but not when they are strictly commercial.\textsuperscript{19}

In the case of the EU ETS, there should be no doubt that we are dealing with tangible, physical trans-boundary effects: ample scientific evidence supports the view that GHG emissions are a nuisance to the environment, and the policy questions focus on whether action (and what type of action) is warranted in light of the ensuing damage. Further, there should be no doubt that the EU can exercise its jurisdiction to protect the environment to the extent that the damage is not self-contained in a different (geographical) location. This condition is also satisfied when we refer to gas emissions released into the atmosphere.

The remaining question is thus whether the action by the EU (enactment of the ETS) is, from a WTO law perspective, consistent with its obligations under the multilateral rules. We will turn to this question in what immediately follows.

3.2.2. EU ETS in the GATT-Ring

The EU ETS is a domestic instrument, in the sense that it applies, in principle (and in cases before and after the suspension occurred) to both domestic and imported goods. The WTO is a negative integration contract with respect to domestic (as opposed to border, i.e., tariffs and quotas) policies: they are defined unilaterally and must observe the obligation not to discriminate between foreign and domestic goods.\textsuperscript{20} The relevant discipline is Art. III GATT, which requests WTO Members to ensure that, with respect to domestic instruments, they do not treat imported goods less favorably than like and/or directly competitive or substitutable (DCS) domestic goods.

Standing case law suggests that:

(a) Two goods must be considered alike/DCS, and the imported good must not be treated less favorably than the domestic good;

(b) In Philippines-Distilled Spirits, the most recent report that the WTO Appellate Body (AB) has issued in this regard, two goods are considered alike if they are in a strong competitive relationship, from a consumer’s perspective, with each other. DCS goods are defined as good which are substitutable, from a consumer’s perspective, but also as goods that are in a ‘lower’ competitive relationship (when compared to like goods) with each other. It is unclear as to whether the difference in terms of the strength of the competitive relationship should be measured through econometric indicators, e.g. cross-price elasticity. Although this usually should be the case, the AB in Korea-Alcoholic Beverages has held that likeness/DCS relationship can be the outcome of an analysis using econometric or even non-econometric indicators, the two methods being equivalent. Although it is not easy to see how one could measure anything without non-econometric indicators such as abstract consumer preferences, this is where WTO law is at the moment of writing;

\textsuperscript{18} See on this score various contributions in Francioni (2001), Meessen (1990), as well as Pauwelyn (2003). These rules have not always been understood in the same way in literature; compare the contrasting views of Kramer (1995), Kleverick and Sykes (2007) on the one hand, and Lowenfeld (1995), Colangelo (2007), and Vagts (2003) on the other, for example.

\textsuperscript{19} Charnovitz (1994) in agreement.

\textsuperscript{20} It bears repetition that the same obligation can exist in the GATS context as well, if the relevant commitments have been entered into.
The distinction between like and DCS goods is irrelevant for this paper. EU ETS should be qualified as a non-fiscal instrument in GATT-lingo, and consequently, the dominant discipline is Art. III.4 GATT. This provision does not distinguish between like and DCS goods, mentioning only ‘like’ goods in the body of the text. In EC-Asbestos, the AB held that the term ‘like’ here should, for all practical purposes, be understood as co-extensive to the term ‘DCS’ goods. In this scenario, the antitrust market segmentation across airplanes (long, medium, short haul) will probably be relevant in the GATT context as well;

If two goods are like as per Art. III.4 GATT, then the regulating state should not afford imported goods less favorable treatment than that afforded to like domestic goods. In Thailand – Cigarettes (Philippines), the AB clarified that for a finding of less favorable treatment under Art. III.4 to occur, ‘there must be in every case a genuine relationship between the measure at issue and its adverse impact on competitive opportunities for imported versus like domestic products to support a finding that imported products are treated less favourably’;

This should mean that WTO Members cannot regulate based on competitiveness concerns, because they would then be motivated by their desire to help domestic producers, i.e., by origin. In principle, though, there is no origin-based regulation in cases when the EU regulates in order to address climate change, as is the case of the EU ETS. This brings us squarely to the question of burden of proof;

The question of whether it will be the EU or the (eventual) complainant who will carry the burden of proof to show whether or not the rationale for intervention is based in competitiveness concerns is not an easy one to respond to. It is clear that, following the WTO AB report on US-Shirts and Blouses, it is the complainant that must make a prima facie case that a violation has occurred. In footnote 372 of its report on US-Clove Cigarettes, the AB attempted to shed some light in this regard, and, for the sake of clarity, we quote from this footnote extensively: ‘Dominican Republic – Import and Sale of Cigarettes stands for the proposition that, under Article III:4, panels should inquire further whether “the detrimental effect is unrelated to the foreign origin of the product”. (United States’ appellant’s submission, para. 101 (referring to Appellate Body Report, Dominican Republic – Import and Sale of Cigarettes, para. 96))’.

Although the statement referred to by the United States, when read in isolation, could be viewed as suggesting that further inquiry into the rationale for the detrimental impact is necessary, in that dispute the Appellate Body rejected Honduras’ claim under Article III:4 because:

“... the difference between the per-unit costs of the bond requirement alleged by Honduras is explained by the fact that the importer of Honduran cigarettes has a smaller market share than two domestic producers (the per-unit cost of the bond requirement being the result of dividing the cost of the bond by the number of cigarettes sold on the Dominican Republic market).” (Appellate Body Report, Dominican Republic – Import and Sale of Cigarettes, para. 96)

Thus, in that dispute, the Appellate Body merely held that the higher per unit costs of the bond requirement for imported cigarettes did not conclusively demonstrate less favorable treatment, because it was not attributable to the specific measure at issue but rather was a function of sales volumes. In Thailand – Cigarettes (Philippines), the Appellate Body further clarified that for a finding of less favorable treatment under Article III:4, "there must be in every case a genuine relationship between the measure at issue and its adverse impact on competitive opportunities for imported versus like domestic products to support a finding that imported products are treated less favourably” (Appellate Body Report, Thailand – Cigarettes (Philippines), para. 134). The Appellate Body eschewed an additional inquiry into whether such detrimental impact was related to the foreign origin of the products or explained by other factors or circumstances. We understand this statement as being akin to an obligation imposed on the complainant to show a genuine relationship between the measure and its adverse impact on equality of competitive
conditions between domestic and imported like goods, without being obliged to show that origin was the rationale for regulatory intervention as well;

(g) Non-discrimination should not be equated with efficiency: WTO Members can be inefficient WTO-consistent regulators as long as they do not discriminate between domestic and foreign goods. 21

It bears repeating that the burden of proof to demonstrate violation of the non-discrimination obligation lies with the complainant, and not with the defendant. 22 This is quite important, since many cases stand or fall on the allocation of the burden of proof: the EU, in our examples, does not have to justify that its intervention is WTO-consistent; the US or any other country, assuming they want to complain against the EU measure, must show that there is a ‘genuine relationship’ between the EU ETS and its impact on the equality of competitive conditions between domestic and foreign carriers.

In what follows, we take all the analysis above and apply it to the facts of the case. Bearing in mind that the EU ETS is kept as it is, stylized examples are constructed using distance, product characteristics, and nationality of aircraft as benchmarks to decide on the consistency of EU ETS with the WTO.

**Distance:** assume that the EU taxes flights by mile travelled (assume constant pollution levels per mile travelled). In this scenario, flights 3 and 4 would be taxed more heavily than flights 1 and 2. Is there anything wrong with that? Let us start with the GATS. For the EU to violate its obligations, it must have entered into a commitment of national treatment to this effect. This is not the case: the EU has entered into commitments only with respect to the maintenance and reparation of airplanes, sales and marketing, and computer reservation systems. 23 The EU is willing to bring more air transport-related services under the ambit of the WTO, 24 nevertheless at this stage, it is under no similar obligation.

Take the case of a transaction coming under the aegis of the GATT. Let us assume that airlines pass on costs to consumers (a safe assumption). Consequently, we take the example of a US-made TV screen that is imported into Frankfurt from New York City and is ‘taxed’ more heavily than a TV screen from the EU that is transported from Brussels to Frankfurt. Would this be impermissible under GATT rules? Assuming -with the Panel report in US-COOL- that the ‘pass-through’ of the costs incurred by the EU ETS for action of private actors, i.e. airlines, is the responsibility of the EU at all, the AB report on Dominican Republic-Import and Sale of Cigarettes clearly says no: the rationale for differential treatment must be the origin of the goods, and here it is ostensibly the distance covered because of the its environmental impact. And in Thailand-Cigarettes (Philippines), as noted above, the US (complainant) must demonstrate a genuine relationship between the EU ETS and any negative impact on competitive conditions. 25 The US carrier could be carrying European goods for all we know, or elements of what might eventually qualify as final goods of EU origin. The measure has not been designed to address the transportation of goods, but rather to address atmosphere-polluting planes. Based on this evidence, it is highly unlikely that a WTO Panel will ever accept that a genuine relationship between the EU ETS and the cost of transporting foreign goods has been demonstrated.

21 Horn and Mavroidis (2011); Mavroidis (2012).
22 Horn and Mavroidis (2009).
25 Recital 16 of the Aviation Directive (‘to avoid distortions of competition and improve environmental effectiveness, emissions from all flights arriving at and departing from Community aerodromes should be included’) would not be of much help; it merely addresses domestic carbon leakage concerns.
Is the inclusion of aviation in the EU ETS de facto protectionism, i.e. a measure aimed at promoting intra-EU trade? Complainants will have a hard time attempting to show how this can be the case when milk transported from Tirana to Vienna will be burdened with a fraction of the cost imposed on Greek milk transported to Stockholm or Umeå.\textsuperscript{26}

Even if these arguments were not withheld, the EU could always invoke Art. XX(g) GATT.\textsuperscript{27} This is how the argument could be phrased: it is the EU that carries the burden of proof in this context, as per standing WTO case law (see, e.g. US-Shrimp, AB report); the EU ETS serves to address climate change, it thus contributes to cleaning the air; clean air is an ‘exhaustible natural resource’ as per the AB report on US-Reformulated Gasoline; the EU must further show that the measure ‘relates’ to the protection of clean air, that is, that there is a rational connection between the measure (EU ETS), and the objective sought (clean air), as the AB has explained (US-Shrimp): reducing the amount of CO\textsubscript{2} emissions almost by definition amounts to cleaner air.

**Product/Nationality:** similar reasoning is warranted here as well. Flights 1 and 3 will be ‘taxed’ more heavily than flights 2 and 4, but not because of the origin of the carrier: let us assume that Airbus planes pollute less per mile than Boeings because of the technology embedded therein. In the eyes of consumers (the marketplace being the relevant criterion in the AB’s case law), the two goods could be alike. This would be so either because consumers are not informed about the properties of the two carriers, or simply because they do not want to observe the government function in this respect. Nevertheless, the test for non-discrimination does not stop at market-likeness; the plaintiff will also have to show that the regulatory distinction confers less favorable treatment onto imported goods. As mentioned above, the complainant will have to show a genuine relationship between the EU ETS and the impact on the carriers: the best proof that this relationship does not exist is the fact that the EU ETS does ‘tax’ domestic carriers more heavily in instances where these carriers produce more emissions. It would also be worthwhile to recall our discussion about Art. XX(g) GATT supra, which finds application here as well.

The charging for emissions could, of course, take other forms as well, and this discussion does not purport to be exhaustive. The EU could be taxing the fleet, for example, meaning that pollution (and hence participation in the ETS) could depend on fleet-wide pollution (e.g. EU authorities taking into account total pollution by US carriers worldwide). This and many other similar scenarios would present challenges for judges in relation to the jurisdictional issue, and would not affect our analysis regarding consistency with Art. III GATT, as presented above. Our discussion of the jurisdictional issue above finds application.

### 3.2.3. Free Allocation of Emission Rights

The EU ETS not only puts a price on carbon but, in order to avoid leakage, also allows for the free allocation of allowances. This could be seen as an advantage for domestic production over imported products or services trade. Should this be an issue under the GATT or the GATS?

With respect to the GATS, this should not be an issue: Art. XV GATS provides for the establishment of a ‘Working Group on GATS Rules’, which is supposed to negotiate disciplines on subsidies, but so far has not reached any conclusions.

In many countries, air transport services are subsidized, often with a view to supporting a national flag carrier. In the maritime sector, some governments provide operating subsidies as well as support for

\textsuperscript{26} Ehring (2002) correctly points out that in the past, case law condemned practices by focusing on the (adverse) trade impact (for imported goods) resulting from one transaction only, without asking the question of what explained the differentiated impact. The AB report on Dominican Republic-Import and Sale of Cigarettes seems to have turned the page in this regard.

\textsuperscript{27} See also Bartels (2012).
the non-service activity of shipbuilding. The public railway systems in many countries receive significant levels of subsidy. In the telecommunications sector, and to a degree in respect of other utilities such as water and electricity, governments may sanction or encourage cross-subsidization among product lines or categories of consumers, rather than providing direct injections of additional resources.\(^{28}\)

So why have negotiators not managed to arrive at an agreement so far? In part this is due to difficulties in tackling this issue in the context of services, and the following difficulties have been acknowledged:

First, the absence of detailed statistics on trade in services greatly complicates any efforts to identify the impact of subsidies. Second, no detailed and internationally agreed nomenclature exists for service activities, to permit a common understanding of how specific service activities are to be categorized in international services trade. Third, the “invisibility” of many service activities makes it difficult to monitor transactions. Fourth, the “customized” nature of many transactions, involving direct contact between producers and consumers, makes the identification of specific products and the unit prices of such products problematic. Assessing quality differences among “like” services is similarly difficult. More generally, the concept of likeness of products, which is essential for adequate subsidy rules, is more elusive in services than in goods. All of these factors will need to be taken into account in the design of subsidy disciplines and in consideration of the possibility of developing countervailing remedies.\(^{29}\)

In part, this is also due to the fact that Art. XV GATS functions in a similar manner to Art. III.8 GATT: subsidies are excluded from the obligation to afford national treatment and hence those interested in subsidizing have little incentive to engage in multilateral negotiations to this effect.

Finally, subsidies should not be confused with differential taxation of services, an issue that comes under the disciplines of Art. XVII GATS: a WTO Member wishing to make specific commitments must schedule differential taxation in the national treatment-column, otherwise it will have to eliminate it (if it has filled in ‘none’ in the relevant column).\(^{30}\)

Now what about the GATT disciplines? Under the WTO SCM Agreement, a scheme is a subsidy if a government provides specific individuals with financial contributions that amount to benefits, i.e., to something that they cannot obtain under market conditions. There should be no doubt that in the case discussed the government (EU) does provide enterprises with a similar advantage. The EU ETS allows for both auctioning and free allocation of emission allowances. The fact that a market price is established (by those exchanging permissions to pollute) provides \textit{ipso facto} the benchmark for calculating the benefit to those receiving allocations for free. The fact of the government (EU) forgoing the money that it could have charged for the allowances constitutes a financial contribution. The requirements of Art. 1 SCM are thus met. The question will be whether the EU ETS also meets the specificity requirement, as provided for in Art. 2 SCM.

The EU ETS is not \textit{de jure} specific, because the allocation of quotas is not by law confined to EU companies only. Free allocation in particular is available to all aircraft operators required to participate in the system, regardless of their nationality. In Australia-Leather though, the AB accepted that a \textit{de facto} specific scheme met the specificity-requirements as established in Art. 2 SCM. The question of \textit{de facto} specificity is one of the most hotly debated issues in WTO case law.\(^{31}\)

To determine whether a subsidy is specific to an ‘industry’, ‘enterprise’ or group of enterprises, an


\(^{29}\) WTO Doc. S/WPGR/W/9 of March 6, 1996.

\(^{30}\) Because differential taxation at the sub-federal level had not been properly recorded in national schedules, extra time was accorded to interested WTO Members, see WTO Doc. S/C/W/13 of January 30, 1996.

\(^{31}\) For a comprehensive discussion, see Mavroidis et al. (2008).
Investigating Authority must review whether the challenged scheme is (Art. 2.1(c) SCM):

(a) used by a limited number of certain enterprises;
(b) predominantly used by certain enterprises;
(c) granting disproportionately large amounts to certain enterprises;
(d) specific because of the manner in which discretion has been exercised by the granting authority in the decision to grant a subsidy.

There is no obligation to examine all four factors in each case, as the Panel on US—Softwood Lumber IV made clear (§7.123). In this case, Canada had argued that the Canadian government had never intentionally limited access to the stumpage programs for lumber producers. In its view, the predominant use of the stumpage programs by lumber producers could be explained by the fact that the alleged financial contribution consisted of the provision of trees which, thanks to their inherent characteristics, are of interest mainly to a limited number of log and lumber producers. The Panel was of the view that there was no need to show intent in order to satisfy the de facto specificity requirement, although deliberate action by the government might be revealing (§7.116). What mattered was that (at least) one of the four criteria mentioned in Art. 2.1(c) SCM had been met.

The Panel on EC and Certain Member States—Large Civil Aircraft understood the phrase ‘explicitly limits’, appearing in Art. 2.1(a) SCM, as equivalent to the establishment of the existence of a limitation that expressly and unambiguously restricts the availability of a subsidy to certain enterprises and thus does not make the subsidy sufficiently broadly available throughout an economy. The AB confirmed this view in §949 of its report on the same dispute. In US—Antidumping and Countervailing Duties (China), the AB held that a subsidy will be specific if access is limited to either the financial contribution or the benefit (§378).

The EU ETS does not limit access to the financial contribution or benefit to any particular enterprise. In fact, the opposite is true: it is all-encompassing, since free allocation is broadly provided to energy-intensive industries and airlines on the basis of harmonised rules.

This conclusion would be even stronger were one to adopt an intent-criterion here (as we believe should be the case) and ask the question whether the EU’s intention was to subsidize specific individuals: in this case, one would most probably have a hard time mounting a convincing argument against the EU law in this respect. ‘Company’ is a concept that the EU ETS does not use, addressing installation and aircraft operators. It is of course an awesome task to establish intent in an asymmetry of information-context, all the more so since the party withholding private information has an incentive to cheat (i.e. to act in a non-cooperative manner). There are, nevertheless, some proxies that could help us to find a response here: it is ex ante unknown who the polluters will be (the amount of information required beyond industry-level is an issue in and of itself); moreover, because of technological changes and macroeconomic circumstances, the identity of polluters may change; finally, because of liberalized investment in the EU, it could be the case that foreign companies profit as much or more from free allowances. Airlines, for example, receive the majority of allowances free of charge. Some foreign airlines, however, will receive a relatively higher share of free allowances than some EU airlines, since long-haul flights are relatively more fuel-efficient. All this leads to the belief that (eventual) complainants will have a hard time mounting legal challenges against the consistency of the EU ETS with the relevant WTO rules.

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32 the exception being the electricity generation sector;
4. Conclusions: Good Citizen Kane

In this paper we have examined the consistency of the EU ETS with the relevant rules of the WTO. It is our view that the EU regime, as it now stands, does not violate any of the relevant provisions. Potential complainants might still consider lodging a Non-violation complaint (NVC). To be successful, they will have to show that the value of a concession has been annihilated through subsequent (to the exchange of concessions) action by the EU that they could not anticipate. Assuming that they can satisfy all other requirements, they will have a hard time demonstrating that they could not have expected that the EU, an entity that has been demonstrably particularly sensitive to environmental protection, would not adopt legislation to combat climate change.
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