

Trade and Sustainable Energy Series



The Inclusion of Aviation in the EU ETS

WTO Law Considerations

By **Dr Lorand Bartels,**

University Senior Lecturer and Fellow of Trinity Hall, University of Cambridge

With a Commentary by **Professor Robert Howse,** NYU School of Law

ICTSD Global Platform on Climate Change, Trade and Sustainable Energy



International Centre for Trade
and Sustainable Development

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FOREWORD

As of 1 January 2012, airlines flying into or departing from the European Union (EU) are subject to the EU Emissions Trading System (EU ETS), irrespective of their country of origin, and are therefore required to surrender carbon permits equalling their GHG emissions. This measure, aimed at curbing aviation emissions, is unique in the sense that imports are - for the first time in the EU ETS - being included together with domestic emitters in the scheme.

The EU deems it necessary to include non-EU airlines in order to prevent carbon leakage: if only EU airlines were to face a carbon cost through the EU ETS, this could result in non-EU airlines taking over market share from EU ones, thereby partly defeating the purpose of the measure as these non-EU airlines would not face the ETS' abatement incentives. The fact that non-EU airlines are subject to the same carbon costs as their EU counterparts may give this measure a resemblance to Border Carbon Adjustments (BCAs).

The issue has already attracted substantial controversy, with officials from opposing countries expressing unease at the forced implementation of unilateral legislation on aviation emissions. For example, several US airlines have - unsuccessfully - pursued proceedings against the legislation at the European Court of Justice. Meanwhile, a group of almost 30 nations has been working together to develop a strategy to counter Brussels' plan, with some governments having already prohibited their airlines from complying with the EU scheme.

Future retaliation could take the form of tit-for-tat taxes, restrictions on traffic rights for European carriers, and discriminatory treatment of European aircraft manufacturers. For example, reports suggest that the Chinese government has already blocked progress on Airbus' sales to Chinese airlines because of the government's opposition to the EU policy.

In terms of effects on trade, and particularly exports to the EU, the inclusion of aviation in the EU-ETS may have considerable consequences for the economies of some countries. This is true particularly for small and remote developing countries that rely on air freight for trade in goods and services, especially in the area of tourism. The economic and environmental effects of the inclusion of aviation into the EU ETS have been analysed in a recent ICTSD Issues Paper*, written by Jasper Faber and Linda Brinke, both leading experts on international transport and climate change.

Consequences for developing countries' economies arising from mitigation efforts are discussed within the UNFCCC under the general heading of 'response measures'. However, a measure like the inclusion of aviation in the ETS, given its potential trade impacts, also raises questions relating to international trade rules at the World Trade Organization (WTO).

This paper builds on the findings of the above-mentioned Faber and Brinke study, providing a good basis for understanding and evaluation of this policy measure. Questions addressed in this paper include the following: is it possible to design a carbon trading scheme that is both administratively feasible and justifiable under WTO law? Does the inclusion of aviation in the EU ETS violate the unconditional most-favoured nation obligation in Article I:1 GATT? Is the scheme exempt from regulation because of the GATS Annex on Air Transport Services? Does the scheme violate the most favoured nation and national treatment obligations under Articles II and XVII GATS? And, finally, can the scheme be justified under the environmental exceptions of Article XX GATT and Article XIV GATS, respectively?

In the absence of a global, comprehensive strategy for addressing climate change, mitigation efforts will need to be undertaken unilaterally. It is therefore crucial that such measures be designed in a way that optimises emission abatement while promoting global sustainable development. These measures are also expected to conform to existing rules and agreements.

That said, these rules should not be seen as written in stone. Instead, unnecessary obstacles to addressing climate change in an equitable, effective, and non-discriminatory manner should be reviewed and, when necessary, changed or removed. It is in this vein that ICTSD has undertaken the current research.

The author of this paper is Dr Lorand Bartels, University Senior Lecturer in Law and Fellow of Trinity Hall at the University of Cambridge and a published author on issues relating to the WTO and trade, and in particular on the linkages between trade, the environment, labour, and human rights.

Notwithstanding the importance of a thorough, technical legal analysis of the measure, it is important to put this analysis in the context of a broader political and strategic landscape. Therefore, this paper also includes a commentary written by Professor Robert Howse of the New York University School of Law.

Professor Howse recalls that, since sometimes the only choice is between *unilateral* action on climate change and no action at all, conflicts can easily arise between countries over sovereignty, extraterritoriality, and equity. In those instances, legal arguments that go beyond rhetoric should be brought into the debate. Professor Howse also discusses why countries opposed to the inclusion of aviation in the EU ETS have not initiated dispute proceedings at the WTO on the subject, which could have been expected from the strongest opponents if they consider the measure to be WTO-illegal.

This paper is part of a series of issue papers produced in the context of ICTSD's Global Platform on Climate Change, Trade and Sustainable Energy. Through the Global Platform, ICTSD promotes action on climate change that is prompt but at the same time equitable, effective, and non-discriminatory. This is part of a continuous endeavour to offer constructive solutions within existing but evolutionary policy frameworks. We hope you will find this paper to be stimulating and informative reading material that is useful for your work.



Ricardo Meléndez-Ortiz
Chief Executive, ICTSD

EXECUTIVE SUMMARY

On 1 January 2012 the EU emissions trading system (ETS) was extended to cover aviation. All airlines must now acquire and “surrender” allowances for the carbon emissions produced by their flights. If the airline fails to do so, they will be fined €100 per allowance and will have to make up the shortfall the following year. The scheme applies to passenger and cargo flights operated by EU - including non-EU members Iceland and Norway - and non-EU airlines. It also applies not only to flights between EU airports, but also - controversially - to the “last leg” of international flights between EU and non-EU airports. This study looks at the legal aspects of the EU’s scheme under WTO law, specifically under both the GATT and the GATS.

One of the basic distinctions made by the GATT is between fiscal measures (duties, taxes, and other charges) and other regulatory measures affecting trade in goods. The study finds that the EU’s scheme is not a tax or other type of fiscal measure. It is notable that the European Court of Justice came to the same conclusion in December 2011. The Court said that the scheme was not a tax or charge because it was “not intended to generate revenue for the public authorities, does not in any way enable the establishment, applying a basis of assessment and a rate defined in advance, of an amount that must be payable per tonne of fuel consumed for all the flights carried out in a calendar year.”

If the EU’s aviation scheme is therefore a non-fiscal measure, the first question is whether the measure might constitute a prohibited quantitative restriction within the meaning of Article XI:1 GATT. This provision applies to non-fiscal measures affecting products before or on importation and prohibits measures with the effect of restricting imports (and exports) of products. The study delves into the issue, concluding that the scheme could amount to a prohibited quantitative restriction within the meaning of Article XI:1 GATT.

The study next looks at the two main non-discrimination obligations contained in the GATT: the most favoured nation obligations (Article I:1 GATT) -, which prohibits measures discriminating in favour of imported products from any given origins - and the national treatment obligation (Article III:4 GATT) - which prohibits measures discriminating in favour of domestic products. The study finds the former problematic, because of differing costs based on distance travelled and its proposed granting of selective exemptions. However the study finds that the EU’s scheme does not discriminate against already-imported products in favour of domestic products.

The study also looks into the legality of the transit aspects of the EU’s measure. It finds that Article V:6 GATT, which requires that WTO Members may not give a preference to one journey over another in relation to products from the same origin, and in respect of products transiting via another WTO Member, presents a problem for the “last leg” aspect of the scheme. For example, a direct flight from Hong Kong to Frankfurt would need to be covered by permits for the full 9,130 km, while an indirect flight via Dubai would need permits for just over half that distance. This may prove legally problematic.

The study next considers whether any violations of the GATT could be justified on the basis that the EU’s scheme is adopted for environmental reasons. Two provisions are of particular importance: Article XX(g) GATT, which permits measures related to the conservation of exhaustible natural resources, and Article XX(b) GATT, which permits measures necessary to the protection of human, animal or plant life or health. In both cases, the measure must additionally not constitute arbitrary or unjustifiable discrimination between countries where the same conditions prevail. The study found that the measure is provisionally justified under Article XX(g) GATT, but that its justification under Article XX(b) GATT is more complicated.

As for whether the measure would also meet the additional requirement that the EU's scheme may not be applied in a manner constituting unjustifiable discrimination or arbitrary discrimination between countries where the same conditions prevail, the study makes two comparisons. The first - looking at countries with regulatory measures (including the EU) - demonstrates that the EU would not only be permitted to exempt such countries from its scheme, but that it would be required to do so.

The second comparison - between countries without regulatory measures - shows that the EU's scheme does, in fact, discriminate between countries with no regulatory measures because it treats countries differently according to their distance from the EU; this, however, is justified on environmental grounds. The scheme's "last leg" application, however, is more problematic because products from equidistant origins could be discriminated against if it is relatively easier for the products of one of these countries to fly to the EU on an indirect flight.

The study also explores the application of the GATS to the EU's scheme, particularly in light of its potential effects on services delivered outside the EU, such as tourism. The GATS applies, in principle, to all measures affecting trade in services. Exceptionally, however, measures affecting air transport services are, to varying degrees, exempted from the scope of the GATS by virtue of the GATS Annex on Air Transport Services (ATS). The question, however, is whether this Annex also has the effect of exempting measures affecting services dependent on air transport services, such as tourism, from the GATS.

It is important to note that the Annex actually contains two carve-outs. Paragraph 2 of the ATS exempts certain measures from GATS obligations. The study concludes that the first of these - measures affecting "traffic rights" - are of very limited importance in the current system of air transport regulation, and the scheme is not closely connected. However, the second carve-out - Paragraph 4 of the ATS, which covers all measures affecting air transport services, and prohibits WTO dispute settlement for such measures prior to the exhaustion of remedies under relevant air transport agreements - is another matter. The study finds that it is likely, though not certain, that the EU's scheme does fall under the scope of the ICAO's Chicago Convention.

The paper then looks at the application of relevant GATS obligations and exceptions, in the event that the GATS is applicable. The first of these is the most favoured nation obligation in Article II:1 GATS, which applies to the EU's scheme insofar as it affects services such as tourism. For reasons similar to those in the context of Article I:1 GATT, the study concludes that there would most likely be a violation. The study also concludes that the scheme does not violate Article XVI GATS concerning market access, but finds that it is likely to violate Article XVII GATS concerning national treatment.

Finally, the study looks at the application of the GATS exceptions. Article XIV(b) GATS replicates the wording of Article XX(b) GATT, including its Chapeau, and for the reasons mentioned above it was concluded that the EU's scheme would be justified on these grounds.

1. INTRODUCTION

Aviation accounts for around three percent of global carbon emissions.¹ In an effort to reduce these emissions, the EU emissions trading system (ETS) was extended to cover aviation on 1 January 2012.² All airlines must now acquire and ‘surrender’ allowances for the carbon emissions produced by their flights, failing which the airline will be fined €100 per allowance and must make up the shortfall the following year.³ The scheme applies to virtually all⁴ passenger and cargo flights operated by EU⁵ and non-EU airlines (subject to a potential exemption), and it applies not only to flights between EU airports, but also - and controversially - to the last leg of international flights between EU and non-EU airports.⁶

The EU’s aviation scheme raises a number of difficult legal questions in several areas of international law. One is whether the EU has the power to regulate airlines in respect of emissions produced outside the EU, given restrictions under international law on the extent to which states are permitted to regulate activities taking place outside their territorial jurisdictions. Another is whether the EU’s scheme is consistent with its obligations under applicable bilateral and multilateral agreements governing air transport service agreements. And a third - the subject of this article - is whether the aviation scheme is compatible with the EU’s WTO obligations.

2. THE EU'S AVIATION SCHEME IN DETAIL

2.1 Structure of the Scheme

The EU ETS - of which the EU's aviation scheme is now a part - is a 'cap and trade' scheme for reducing emissions of carbon dioxide (and some other gases). These schemes set a 'cap' on total overall emissions by establishing a fixed number of emissions 'allowances', distribute these to industries according to a given benchmark, and permit industries to trade these allowances according to their needs. In the case of the EU ETS, the allowances are distributed initially by a combination of free allocation and auction. The EU ETS also envisages agreements for the mutual recognition of allowances issued by other countries participating in the Kyoto Protocol system.⁷

The EU has created emissions allowances for aviation operators corresponding to 97 percent⁸ of a benchmark calculated as the industry's average carbon emissions⁹ during the three years 2004-2006.¹⁰ In 2012, 85 percent of these allowances are allocated for free¹¹ (according to the airlines' respective 2010 market shares),¹² and the remaining 15 percent are available for purchase by auction.¹³ From 2013, when the so called ETS Phase III commences, the total quantity of allowances drops to 95 percent of the 2004-2006 benchmark,¹⁴ and 3 percent of this new total will be reserved for 'new entrants' and rapidly growing airlines.¹⁵ Airlines are also able to purchase a certain number of additional allowances from other industries covered by the EU ETS¹⁶ but this is not reciprocal: operators of stationary installations are not permitted to purchase allowances issued to airlines.¹⁷

Economic impacts of the scheme

The economic impacts of the EU's scheme are somewhat uncertain, and vary according to the actors involved.¹⁸ In theory, airlines can stay within their free allowance by developing greater fuel efficiency, or by using biofuels, these not being counted for purposes of the scheme.¹⁹ In practice, and given the overall growth in the aviation industry of around five

percent annually,²⁰ and projected growth in overall emissions,²¹ this seems unlikely. In fact, it is generally agreed that the EU's scheme will come at a direct cost to the aviation industry. The estimates of costs vary significantly, and are inherently unstable, as they depend on the state of the carbon market. A number of recent academic studies have estimated total annual costs at around €3-4 billion.²² On the other hand, Thomson Reuters Point Carbon estimated in February 2012 that, because of economic stagnation and falling carbon prices, the cost would be €505 million, and only €360 million if the industry makes full use of Kyoto allowances.²³

But even if there are costs, this does not mean that the aviation industry will suffer. It is generally assumed that virtually all of the increased cost will be passed on by airlines to consumers.²⁴ Indeed, it is quite likely that, far from suffering losses to their profitability, individual airlines may make a windfall profit.²⁵ As for consumers, the effects are also small, at around 4 per cent of average passenger ticket prices.²⁶ And, while this may have some impact on demand,²⁷ this is mitigated by expected industry growth. Even taking into account a small reduction in demand, the European Commission estimated that the effect of its scheme would be that instead of growing by 145 percent over this period, the aviation industry would grow instead by 138 percent.²⁸ On these figures, one might wonder why the scheme has proved so controversial.

One economic answer is that these figures conceal certain more significant impacts on particular stakeholders. First of all, the projected reduction in demand is an aggregate figure, and it is likely that its effects on airlines will depend on their business models. There has also been some discussion on whether there will be negative effects on EU airports, which because of the 'last leg' rule become less attractive as hubs, compared to airports in, for example, Switzerland, Turkey or the Middle East.²⁹ Finally, and of particular importance from

the perspective of this article, the reduction in demand is much higher for price-sensitive travel, such as travel for tourism, with estimates ranging from 2.4 to 7 per cent.³⁰ For countries heavily dependent on tourism, such as Barbados,³¹ this is no trivial matter.³² Effectively, the EU's scheme could cost a country like Barbados 1-2 percent of its GDP.

The controversy provoked by the scheme cannot, however, be explained solely in terms of its economic impact. Rather, it has to be understood in the context of more general political considerations and parallel efforts to deal with the climate effects of aviation in other international fora, principally the International Civil Aviation Organization (ICAO).

3. THE EU'S AVIATION SCHEME IN THE INTERNATIONAL CONTEXT

3.1 The ICAO Dimension

The EU's aviation scheme did not emerge out of the blue, but came as a unilateral response to failed efforts to reach international agreement on the issue within the ICAO.³³ In 2007, the ICAO Assembly adopted Resolution A36-22 which '[u]rged Contracting States not to implement an emissions trading system on other Contracting States' aircraft operators except on the basis of mutual agreement between those States'.³⁴ However, in a 2010 Resolution A37-19 the Assembly recognized that 'some States may take more ambitious actions prior to 2020, which may offset an increase in emissions from the growth of air transport in developing States'.³⁵ It also implicitly endorsed unilateral measures, '[u]rg[ing] States to respect the guiding principles listed in the Annex, when designing new and implementing existing MBMs [market-based-measures] for international aviation', even as it also urged them 'to engage in constructive bilateral and/or multilateral consultations and negotiations with other States to reach an agreement'.³⁶

The ICAO heralded Resolution A37-19 as a 'historic breakthrough'.³⁷ However, this is an overstatement. A number of ICAO Contracting States lodged reservations expressly denying that unilateral measures were permitted.³⁸ Perhaps most belligerently, the Russian Federation warned that it 'does not rule out the introduction of adequate retaliatory measures by other Contracting States in respect of the operators of Contracting States which introduce market-based measures unilaterally.' Furthermore, even to the extent that Resolution A37-19 can be said to endorse unilateral measures, it is not clear on the question whether unilateral measures may be applied to non-national airlines. Obviously those countries that do not accept the premise deny that this is possible. But the lack of clarity was evidently sufficiently uncertain to prompt the EU and 44 European states³⁹ to lodge a reservation setting out their view:

The Chicago Convention contains no provision which might be construed as imposing upon the Contracting Parties the obligation to obtain the consent of other Contracting Parties before applying ... market-based measures ... to operators of other States in respect of air services to, from or within their territory.

The very fact that the EU and these other states felt it necessary to stress this point in a reservation, of all things, indicates that even within the ICAO the issue is not as straightforward as one might otherwise be led to believe. And this is supported by the fact that, on 2 November 2011, the 36 member ICAO Council - by a vote of 16 to 8 (all EU Member States) and with 2 abstentions⁴⁰ - endorsed a working paper presented by 26 ICAO members, containing a 'New Delhi' Declaration which, inter alia, 'urge[d] the EU and its Member States to refrain from including flights by non-EU carriers to/from an airport in the territory of an EU Member State in its emissions trading system'.⁴¹

3.2 Challenges in Other Fora

There has also been a significant reaction outside of the ICAO. Domestically, China has blocked US\$4 billion worth of orders from Airbus,⁴² and both China and India have prohibited their national carriers from complying with the EU's scheme.⁴³ In the United States, a bipartisan bill to equivalent effect awaits Senate approval, after being passed by the House of Representatives on 24 October 2011.⁴⁴ This bill is supported by the US Secretary of State, who warned the EU, following the CJEU's decision in the *ATAA* case, that the US would be 'compelled to take action' if the EU did not abandon its scheme.⁴⁵ On 16 January 2012 the European Commission wrote back, vowing to retain its scheme.⁴⁶

The airlines have also taken their dispute directly to the EU. In 2010, a consortium of US airlines, supported by the International

Air Transport Association (IATA) and the National Airlines Council of Canada, initiated a legal action⁴⁷ in which they argued that the EU violated its obligations under customary international law and various international agreements, including the Chicago Convention. On 21 December 2011, following an Opinion by Advocate General Kokott,⁴⁸ the EU Court of Justice held that the EU's scheme was consistent with all relevant rules on international law and, in particular, with international legal obligations restricting the power of states to regulate extraterritorially.⁴⁹

Most recently, and against the background of this failed litigation strategy, on 22 February 2012, 23 countries adopted a 'Moscow' Declaration denouncing the EU's aviation scheme, and threatening a range of measures in response. These include litigation under Article 84 of the Chicago Convention, the prohibition of domestic airlines and operators from participating in the EU's scheme, and countermeasures, such as reviewing air transport service agreements, mandating EU carriers to submit flight details and other data, and imposing additional charges on EU carriers and aircraft operators. In addition, and relevantly for this article, the participating states invoked the possibility that the EU's scheme might violate its WTO obligations.⁵⁰

3.3 The WTO Dimension

As mentioned, the EU's aviation scheme may have real economic consequences for WTO Members, especially in the area of services.⁵¹ And this assumes that airlines will comply with the scheme. If they do not, and are either charged a penalty, or cease to operate flights to the EU, the impact will be much more dramatic. But, particularly given the political context, it is perhaps even more important that WTO law may be violated even in the absence of any actual trade effects.⁵² Thus, In

EC - Bananas, the United States won a victory despite the fact that it exported not a single banana to the EU.⁵³

The following assesses the legality of the EU's scheme in terms of the most applicable obligations under the GATT. It begins by considering its character as a fiscal or non-fiscal measure. Next, it looks at whether, at least in part, the EU's scheme might constitute a quantitative restriction on trade in goods in violation of Article XI:1, or a discriminatory internal measure under Article III:4 GATT. It then considers the relevance of the most-favoured-nation obligation in Article I:1, which applies to certain measures affecting the importation and domestic sale of products and Article V, which governs goods in transit. A final section discusses the possible application of Article XX, which provides for certain exceptions to the GATT for measures adopted, among other things, for environmental reasons.

The analysis then turns to the GATS. In this context, the first major issue concerns the applicability of the agreement, given the carve-out in the Annex on Air Transport Services, which purports to carve out a range of measures from the scope of the GATS. On the tentative basis that this Annex does not, in all cases, apply to measures affecting services dependent on air transport services, this section considers various GATS obligations, and then the applicability of available defences.

The overall conclusion is that the EU's scheme is likely to violate a number of GATT and GATS obligations, but that virtually all can be justified on environmental grounds under the general exceptions in these agreements. That there are certain anomalies, interestingly, has more to do with the desirability (and perhaps even correctness) of certain WTO jurisprudence, a point that is addressed in the final remarks concluding the article.

4. THE EU'S AVIATION SCHEME AND THE GENERAL AGREEMENT ON TARIFFS AND TRADE

4.1 Introduction

The following assesses the legality of the EU's scheme in terms of the most applicable obligations under the GATT. It begins by considering its character as a fiscal or non-fiscal measure. Next, it looks at whether, at least in part, the EU's scheme might constitute a quantitative restriction on trade in goods in violation of Article XI:1, or a discriminatory internal measure under Article III:4 GATT. It then considers the relevance of the most-favoured-nation obligation in Article I:1, which applies to certain measures affecting the importation and domestic sale of products and Article V, which governs goods in transit. A final section discusses the possible application of Article XX, which provides for certain exceptions to the GATT for measures adopted, among other things, for environmental reasons.

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4.2 The Character of the EU's Scheme

One of the basic distinctions made by the GATT is between fiscal measures, namely duties,

taxes and other charges, and other regulatory measures affecting trade in goods. In order to determine the EU's WTO obligations regarding its aviation scheme, it is therefore necessary to analyze the legal character of the scheme.

The first question is whether the EU's scheme can be considered a fiscal measure within the meaning of Article III:2 GATT.⁵⁴ On this point, the recent ATAA case is relevant, even though it dealt with provisions of other international agreements.⁵⁵ In this case Advocate General Kokott considered whether the EU's aviation scheme violated Article 15 of the Chicago Convention, which governs the imposition of 'fees, dues or other charges' on transit, entry and exit of aircraft, or persons or property thereon.⁵⁶ She held that the EU's scheme constituted neither a charge nor a tax.

Charges are levied as consideration for a public service used. The amount is set unilaterally by a public body and can be determined in advance. Other charges too, especially taxes, are fixed unilaterally by a public body and laid down according to certain predetermined criteria, such as the tax rate and basis of assessment. ...

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.⁵⁷

Advocate General Kokott also considered whether the EU's scheme constituted a 'duty, tax, fee or charge on fuel consumption' in violation of Article 24 of the Chicago Convention, and also Article 11 of the US-EU Open Skies Agreement. She dismissed the possibility, *inter alia*, referring back to her earlier reasoning.⁵⁸

For its part, the EU Court of Justice did not deal with the first question, but it made similar

comments when dealing with the second. It said:

[U]nlike a duty, tax, fee or charge on fuel consumption, the scheme ... apart from the fact that it is not intended to generate revenue for the public authorities, does not in any way enable the establishment, applying a basis of assessment and a rate defined in advance, of an amount that must be payable per tonne of fuel consumed for all the flights carried out in a calendar year.⁵⁹

While there are some differences of opinion concerning the importance of the fact that auctioned allowances generate revenue accruing to the state,⁶⁰ the central point made by both the Advocate General and the Court is that the EU's scheme does not constitute a duty, charge or tax because the 'price' paid for an allowance is not fixed by the state in advance, but depends on free market forces.⁶¹ This argumentation has direct application to the present case. If a measure cannot be a duty, charge or tax for this reason, then it makes no difference whether the measure is applied to fuel consumption, products, or to some other activity or subject matter.⁶² It would follow, therefore, that the measure should not be considered a fiscal measure for the purposes of the GATT.

Beyond this, there is also another reason for thinking that the EU's aviation scheme does not constitute a tax or a charge, which is that the scheme requires airlines to purchase carbon emission allowances. This is quite different from imposing a fiscal charge on an activity, as the airlines gain a tradable property right in exchange.⁶³ The fact that some of the revenue earned as a result of such a measure flows back to the state is unimportant. The EU's scheme is more similar to a law requiring motorcycle riders to purchase helmets. This is obviously a regulatory measure, and it does not cease to be one just because the state sells an initial quantity of those helmets. The point is that the compulsory purchaser retains something of value - indeed, in the case of emission allowances this is something the value of which could increase significantly on

the open market.⁶⁴ For this reason, too, the EU's aviation scheme (and ETS more generally) should not be considered a tax or a charge within the meaning of GATT, more precisely Article III:2 GATT.⁶⁵

4.3 The EU's Aviation Scheme as a Quantitative Restriction (Article XI:1 GATT)

If the EU's aviation scheme is not a fiscal measure, the first question is whether it might constitute a quantitative restriction within the meaning of Article XI:1 GATT. This provision states, relevantly, as follows:

No prohibitions or restrictions other than duties, taxes or other charges, whether made effective through quotas, import or export licences or other measures, shall be instituted or maintained by any contracting party on the importation of any product of the territory of any other contracting party ...

WTO panels have interpreted the term 'other measures' as a broad residual category covering 'any form of limitation imposed on, or in relation to importation'.⁶⁶ For example, in *Colombia - Ports of Entry*, the Panel considered whether this phrase covered a measure that restricted the ports that could be used by importers. The Panel decided that it would if the measure affected the cost of shipping products from the port of origin to the place of sale;⁶⁷ or if it was applied in an arbitrary manner, thereby increasing the uncertainty of private actors involved in the importation of the product. In other words, what is important is the restrictive *effect* of the measure on the importation of any given product, not whether it concerns a right of importation. This has now been confirmed in *China - Raw Materials*, where the Appellate Body said that 'Article XI of the GATT 1994 covers those prohibitions and restrictions that have a limiting effect on the quantity or amount of a product being imported or exported.'⁶⁸

Insofar as it applies to products prior to import that are being transported on international

flights, the EU's scheme shares certain features with the measure in *Colombia - Ports of Entry*. For airlines complying with the scheme, the result is likely to be increased transportation costs. Furthermore, its impacts on imported products vary, unpredictably, according to the price of allowances. For airlines that do not comply, the costs are far greater, at €100 per missed allowance in addition to the usual compliance costs. In all of these cases, it seems reasonable to conclude that the EU's aviation scheme has restrictive effects - no matter how small - on the importation of products into the EU, within the meaning of Article XI:1 GATT.

Over and above this, the EU's aviation scheme directly regulates the means by which products are imported into the EU. Admittedly, Advocate General Kokott, in her Opinion in the ATAA case, denied that the EU's scheme was '[a] concrete rule regarding [foreign airlines'] conduct within airspace outside the European Union'⁶⁹ and the Court by implication agreed.⁷⁰ But it is difficult to see how a measure that imposes fines of €100 for any allowance not obtained and 'surrendered' to the EU can be seen as anything but just such a 'concrete rule', regardless of whether it might be justified under international law. On this basis, too, one could argue that insofar as it applies to international flights carrying imported products landing in the EU,⁷¹ the EU's scheme amounts to a quantitative restriction contrary to Article XI:1 GATT.

4.4 The EU's Aviation Scheme as an Internal Measure (Article III:4 GATT)

Where Article XI:1 GATT regulates measures (other than fiscal measures) affecting products prior to their importation, or on their importation, Article III:4 regulates measures (than fiscal measures) affecting products once they have been imported. It states, relevantly, that:

The products of the territory of any contracting party imported into the territory of any other contracting party shall be accorded treatment no less favourable than

that accorded to like products of national origin in respect of all laws, regulations and requirements affecting their internal sale, offering for sale, purchase, transportation, distribution or use.

The application of Article III:4 to measures affecting imported products

In accordance with longstanding jurisprudence, Article III:4 is not limited to measures specifically regulating the particular activities (internal sale, purchase, transportation etc) which it mentions, but, rather, it applies to all measures affecting the conditions of competition of imported products on the domestic market.⁷² However, this should not obscure the fact that, overall, Article III:4 is concerned with *internal* measures applicable to products *after* they have been imported. There are other provisions, such as Article XI:1 (quantitative restrictions) and Article V GATT (transit), that protect foreign products prior to their importation. Thus, Article III:4 should be understood as applying to all internal measures affecting products once they are imported except for measures affecting products before they are imported or on importation.

This assessment of the proper scope of Article III:4 is admittedly made against the background of rather limited jurisprudence. In one of the few cases actually to deal with the issue, *US - Malt Beverages*, the GATT Panel said as follows:

[T]he listing and delisting practices here at issue do not affect importation as such into the United States and should be examined under Article III:4 [and] the issue is not whether the practices in the various states affect the right of importation as such, in that they clearly apply to both domestic (out-of-state) and imported wines ...⁷³

Thus, in accordance with the view expressed here, the panel considered Article III:4 only to apply to measures that did not apply to importation 'as such'. It was unnecessary for the panel to state that Article III:4 also does not apply to measures affecting products

before they are imported, but this would seem to follow.

In contrast to this GATT Panel Report, in *EC - Bananas III* the Appellate Body dealt with a similar question in a less satisfactory manner. In this case, the question arose whether a measure allocating import licences to domestic distributors was an internal measure falling under Article III:4.⁷⁴ The Appellate Body said that it was, on the basis that the measure was *intended* to have an effect on the sales of competing domestic products. But ‘intention’ is, at most, useful in characterizing measures according to whether they fulfil a specific purpose, such as sanitary measures;⁷⁵ it has no proper application in the present context. And, indeed, when the Appellate Body came to determine the equivalent question in the context of fiscal measures, it held that taxes and charges are ‘internal’, and therefore subject to Article III:2 GATT, only when they ‘accrue’ on the basis of an internal condition or event.⁷⁶ Intention was ignored, and quite properly so.

Given this, it is suggested that Article III:4 applies to all internal measures affecting competitive conditions in the marketplace for imported products, except for measures which have potentially restrictive effects on the importation of products.⁷⁷ What, then, does this mean for the EU’s scheme? To the extent that the EU’s scheme applies to flights transporting imported products, it would seem to be regulated by Article III:4. This, most obviously, includes intra-EU flights transporting products that have been imported into the EU. But insofar as the EU’s scheme covers international flights transporting products that have yet to be imported, it would be covered by Article XI:1.

The Note Ad Article III

There is however a special rule applicable to measures that, due to their connection with an otherwise internal measure, are imposed at the time or point of importation. By virtue of Note Ad Article III GATT, such measures are to be seen as aspects of internal measures

applicable to imported products, and by implication not as quantitative restrictions subject to Article XI:1 GATT. This distinction makes a tremendous difference, as quantitative restrictions are prohibited while Article III:4 only requires national treatment. The Note states as follows:

Any internal [measure] which applies to an imported product and to the like domestic product and is collected or enforced in the case of the imported product at the time or point of importation, is nevertheless to be regarded as an internal [measure], and is accordingly subject to the provisions of Article III.

There is a certain degree of flexibility in relation to such measures; for example, they do not need to be identical in form to the relevant internal measure.⁷⁸ But they do need to be justified by some administrative rationale if they are to escape classification as quantitative restrictions. In the present case, it would seem that the application of the EU’s scheme to international flights (and hence to products before they have been imported) is neither directly linked nor justified by the system’s application to intra-EU flights (and hence to products once they have been imported). It cannot be said that this represents the enforcement of an otherwise internal measure. However, the Note should apply to intra-EU flights carrying foreign products between an EU hub and an EU destination airport when importation takes place at the destination airport.

Application of Article III:4 to the EU’s scheme

On the assumption that Article III:4 GATT applies to such flights, the next question is whether the EU’s scheme accords ‘less favourable treatment’ to imported products than to ‘like’ domestic products.⁷⁹ It would appear that it does not. There are no differences in treatment of domestic and imported products on intra-EU flights, either formally or, as far as can be imagined, *de facto*. It is true that the EU’s scheme is less favourable to air transport than to other forms

of transport, which are not covered by the ETS, but it is difficult to see that this puts imported products at a disadvantage. It is perfectly possible, and common, for imported products to be offloaded at the airport of entry, and then transported to the final EU destination by road. The result is that the EU's scheme does not appear to violate Article III: 4 GATT to the extent that it applies to foreign non-imported products carried on intra-EU flights.⁸⁰

4.5 The Most Favoured Nation Obligation (Article I:1 GATT)

Both internal measures and measures imposed on importation are subject to the most favoured nation obligation established in Article I:1 GATT. This states, relevantly, that:

With respect to (...) all rules and formalities in connection with importation ..., and with respect to all matters referred to in paragraphs 2 and 4 of Article III, any advantage, favour, privilege or immunity granted by any contracting party to any product originating in or destined for any other country shall be accorded immediately and unconditionally to the like product originating in ... the territories of all other contracting parties.

It is difficult to see how the internal aspects of the EU's scheme (in relation to intra-EU flights) would violate this provision. But it is possible that Article I:1 GATT might apply to the EU's scheme insofar as it affects international aviation, with negative results.⁸¹ The question, interestingly, is one that is fundamental to international trade, and yet rarely addressed: does the most favoured nation obligation, the 'cornerstone' of the GATT, apply to the international transportation of products?

Article I:1 GATT describes the measures to which it applies as, relevantly, 'rules and formalities in connection with importation'. On a narrow reading, this phrase is limited to rules regulating the actual *act* of importation, such as customs formalities. However, it is arguable that Article I:1 GATT should be read

in light of Article XI:1, so that it applies to any measure imposed on but also 'in connection with' importation. If not, a WTO Member could discriminate against products arriving by sea, to the advantage of its neighbours with which it shares a land border.⁸² It is, however, not clear that Article I:1 GATT applies to international transportation, and the following, which is based on this assumption, must be subject to this qualification.

According an 'advantage'

Assuming that Article I:1 GATT does apply to the EU's scheme, the question arises whether the EU's scheme accords an 'advantage' to 'like' products from different WTO members.⁸³ In the first instance, this requires one to identify the 'advantage' at issue. This, in turn, has to be assessed in terms of the conditions of competition between the affected products in the domestic market.⁸⁴ In the present case the effect of the EU's aviation scheme is to impose costs on products from certain origins according to the distance they travel by air to the EU. These costs have the potential to be reflected in the final price of the products, and thus their competitiveness. It is suggested, therefore, that the 'advantage' be defined as the most favourable compliance cost imposed on airlines transporting products to the EU.

If this is the advantage, is it accorded equally to products from all WTO members? It seems that it will not be so accorded, so long as there is a correlation between the origin of a product and distance travelled by such a product by air to the EU, and assuming that it would be disadvantageous for a given product to be transported in some other way (e.g. by ship). In this scenario, there is little doubt that products from one origin (e.g. Hong Kong) are not 'accorded' the same 'advantage' (the lowest possible compliance costs) that is 'accorded' to products from another origin (e.g. Dubai). Indeed, in its reliance on geographical facts (distance from the EU), the EU's scheme is similar to the 'classic' case of *de facto* discrimination: that of the 1904 German measure granting market access for all cows that grazed at Alpine altitudes.⁸⁵ Just

as, in reality, the ‘advantage’ of market access was not accorded to Danish or Dutch cows,⁸⁶ here the ‘advantage’ of the lowest possible airline compliance cost is not accorded to products from Hong Kong. Likewise, in *EC - Tariff Preferences*, a panel rejected a measure according to which products were charged different duties depending on whether their country of origin had difficulties in regulating drugs.⁸⁷ And in *EC - Fasteners*, a panel rejected a measure applying different duties to products according to whether their country of origin had a ‘market economy’.⁸⁸ The geographical factor underlying the discrimination also undermines any argument that the ‘detrimental effect [of the measure] is explained by factors or circumstances unrelated to the foreign origin of the product.’⁸⁹

There is, of course, a difference between the EU’s scheme and these other cases, insofar as the effects of the EU’s scheme depend upon business decisions made by private actors. It is conceivable that some airlines will choose to absorb the cost of complying with the EU’s scheme, in which case there will be no disadvantage to products carried on this airline. In turn, this would mean that any disadvantage would be due to decisions taken by airlines rather than the EU’s measure. However, as mentioned above, it is unlikely that airlines will or can absorb these costs. Moreover, even if they did, this would make no difference in legal terms. It is sufficient under WTO law that a regulatory measure gives an incentive to a private actor to act in a manner negative affecting conditions of competition in the marketplace. It is not necessary that the private actor be compelled to act in that manner.⁹⁰ On this basis, it appears that the EU’s scheme fails to accord an ‘advantage’ to products from all WTO members.⁹¹ The fact that the effects of this treatment might be minor, even trivial, does not matter. It is the potential negative effect that is important.

This problem could be further amplified by the selective exemption of certain airlines. The EU Directive provides that airlines from ‘third countries [that adopt] measures for reducing

the climate change impact of flights departing from that country which land in the Community’ shall be exempted from the ETS.⁹² No such exemption has yet been granted, but if it does, this would clearly violate the requirement in Article I:1 GATT that an advantage be accorded ‘immediately and unconditionally’ to products from all WTO members.⁹³ It is no answer to say that products from other countries might be entitled to the same ‘advantage’ if these other countries adopt ‘equivalent measures’: this is precisely what the ‘unconditionality’ requirement in Article I:1 is designed to prevent.

4.6 Freedom of Transit (Article V GATT)

Further questions arise as to the transit aspects of the EU’s measure. The EU’s scheme also involves goods in transit, in two ways: first in relation to products that transit across the EU, and second in relation to products that have been in transit before they arrive in the EU as a final destination. Article V GATT sets out obligations in relation to both scenarios.

A carve-out for air transport?

Before engaging in a discussion on Article V, it is appropriate to comment on the carve-out set out in Article V:7. This paragraph states that ‘[t]he provisions of this Article shall not apply to the operation of aircraft in transit’. However, it goes on to stipulate that it ‘shall apply to air transit of goods (including baggage)’. Goods carried on air transport are therefore fully covered.⁹⁴

The EU as a transit territory

Article V applies in the first instance to the EU in its capacity as a transit territory.⁹⁵ Article V:3 states, relevantly, that:

... traffic coming from or going to the territory of other contracting parties shall not be subject to any unnecessary delays or restrictions and shall be exempt from ... all transit duties or other charges imposed in respect of transit, except charges for transportation ...

If the EU's scheme is considered a transportation 'charge', it is then subject to Article V:4, which specifies that '[a]ll charges and regulations imposed by contracting parties on traffic in transit ... shall be reasonable, having regard to the conditions of the traffic.' However, for the reasons given above, it is difficult to conceive of the EU's scheme as a 'charge' at all, whether on transportation or otherwise. It is better seen as a regulatory scheme which imposes compliance costs on airlines, and therefore on their customers.⁹⁶

The question is then whether or not the scheme constitutes an 'unnecessary restriction' (Article V:3) or 'unreasonable regulation' (Article V:4). There remains some ambiguity as to the exact meaning of these terms, in particular because there is no benchmark against which the 'necessity' or 'reasonableness' of the measure could be assessed. The argument, presumably, would be that the EU's scheme is 'necessary' to implement the 'polluter pays' principle in connection with transport and a 'reasonable' regulation for the same reason.⁹⁷ Some support for this approach might be found in the second sentence of Article III:4, which permits differential charges on internal transportation corresponding to its real economic costs. If so, the EU's scheme would appear consistent with Article V:3 and Article V:4.

The EU as destination

The obligations just discussed are imposed on WTO members through whose territory products are in transit to (or from) other WTO members. This is complemented by Article V:6, which offers a certain degree of protection to the same products against regulation by the WTO member of final destination.⁹⁸ Article V:6 prevents WTO members from discriminating against products because they have transited via the territory of another WTO member, rather than using some other route.⁹⁹ It states:

Each contracting party shall accord to products which have been in transit through the territory of any other contracting party treatment no less favourable than that which would have been accorded to such

products had they been transported from their place of origin to their destination without going through the territory of such other contracting party.

Article V:6 only protects products that travel to the EU via the territory of another WTO member. As such, it does not cover products from neighbouring countries, or products that travel to the EU only via the high seas or a non-WTO member such as the Ukraine. It does however cover products that arrive in the EU having transited via a WTO member's airspace, such as Singapore.

For these products, Article V:6 mandates that they must be accorded no less favourable treatment than if they had been transported on another route (regardless of whether that other route is via another WTO member). The EU scheme could be inconsistent with this obligation if the same products from the same origin would be subject to lower compliance costs if they transited via another country. For example, a direct flight from Hong Kong to Frankfurt would need to be covered by permits for the full 9,130 km. an indirect flight via Dubai, on the other hand, would only need permits for approximately 4,800 km. This disadvantage, one could argue, translates into a violation of Article V:6.¹⁰⁰

4.7 The Justification of the EU's Aviation Scheme on the Basis of its Climate Change Objectives (Article XX GATT)

The foregoing analysis indicates that the EU's scheme may be inconsistent with some of its obligations under the GATT, principally Article XI:1 GATT (insofar as the EU's scheme applies outside of EU airspace), Article I:1 (if the EU grants a selective exemption to certain airlines) and to some extent Article V:6 (depending on the journey). Whether it is non-discriminatory in other ways depends on the facts. But regardless of any such violations, it is possible that the scheme might be justified under Article XX GATT. This is a general exceptions clause that permits WTO Members to adopt measures for a variety of policy reasons, subject to various conditions.

There are two exceptions that need to be considered. The first is Article XX(g), which permits WTO members to take measures 'in relation to the conservation of exhaustible natural resources', provided that such measures are 'made effective in conjunction with restrictions on domestic production or consumption'. The second is Article XX(b) GATT, which permits WTO members to adopt measures necessary for the protection of human or animal or plant life or health. Generally speaking, measures that can fall under both of these provisions are defended under Article XX(g), because it is easier to defend a measure as being 'in relation to' the objective in this subparagraph than it is to defend a measure as being 'necessary' to the objective in the latter. Nonetheless, both exceptions will be analysed here.

The conservation of exhaustible natural resources (Article XX(g) GATT)

The present measure is adopted to reduce aviation emissions and thereby to mitigate climate change. The Appellate Body has thus far not been confronted with the question whether climate change mitigation measures could be justified as measures related to the conservation of natural resources. It is, however noteworthy that In *US - Gasoline* the Appellate Body had no difficulty with the Panel's finding that 'clean air' was an exhaustible natural resource.¹⁰¹ The atmosphere is not synonymous with air, but it would seem consistent with this to consider the atmosphere also as an exhaustible natural resource.¹⁰² In addition, the EU's aviation scheme also seeks to protect the living and non-living resources that would be affected by climate change, and in this respect also is concerned with the conservation of exhaustible natural resources.

The other conditions of Article XX(g) are also easily satisfied. The EU's measure is clearly 'in relation to' the conservation of the respective resources, in the sense that there is 'a close and genuine relationship between ends and means'.¹⁰³ And it is also 'made effective in

conjunction with similar domestic measures', in the sense that it 'work[s] together with restrictions on domestic production or consumption, which operate so as to conserve an exhaustible natural resource': *in casu*, the EU's ETS in its entirety.¹⁰⁴

Nor do the extraterritorial aspects of the measure present any problem.¹⁰⁵ In *US - Shrimp*, the Appellate Body held that turtles, as a species, were an essentially migratory species, and therefore sufficiently within US territory to provide a 'jurisdictional nexus' for the regulation.¹⁰⁶ The 'atmosphere' that the EU seeks to protect has, if anything, an even closer 'jurisdictional nexus' to the EU. As Advocate General Kokott said in the her Opinion in the *ATAA* case, '[i]t is well known that air pollution knows no boundaries and that greenhouse gases contribute towards climate change worldwide irrespective of where they are emitted; they can have effects on the environment and climate in every State and association of States, including the European Union.'¹⁰⁷

It seems safe to conclude that the EU's aviation scheme can be provisionally justified under Article XX(g).

Measures necessary to protect human, animal or plant life or health (Article XX(b) GATT)

It needs also to be considered whether the EU's aviation scheme is 'necessary' to the protection of human, animal or plant life or health within the meaning of Article XX(b) GATT. The first question that arises is whether the EU's aviation scheme measure makes or is 'apt' to make a 'material contribution' to the protection of 'human, animal or plant life or health'.¹⁰⁸ In this regard, it is relevant to note that, on current carbon prices, and with full pass-through of costs to consumers, there appears to be very little effect at all on the aviation industry, and, correspondingly, it is not entirely certain that the scheme will have its desired effects. However, as the Appellate Body said in *Brazil - Retreaded Tyres* that:

[T]he results obtained from certain actions—for instance, measures adopted in order to attenuate global warming and climate change, or certain preventive actions to reduce the incidence of diseases that may manifest themselves only after a certain period of time—can only be evaluated with the benefit of time.¹⁰⁹

Taking the long term view, it is possible to say that the EU's aviation scheme is at least 'apt' to make a material contribution to its objectives. This hurdle would seem therefore to be passed.

Beyond this, it would also need to be shown that the EU could not achieve the same objective by an alternative measure that is both reasonably available and less trade restrictive than the measure adopted. This is notoriously difficult to assess in the abstract. Indeed, in *US - Gambling*, the Appellate Body said that:

[A] responding party need not identify the universe of less trade-restrictive alternative measures and then show that none of those measures achieves the desired objective. The WTO agreements do not contemplate such an impracticable and, indeed, often impossible burden.¹¹⁰

Nor can such an exercise be attempted here. At most, it is possible to say that excluding international flights, or non-EU airlines, would not meet the EU's objectives, as too few emissions would be captured. As for alternative measures, some have mooted, such as an international air passenger (or travel) adaptation levy (IAPAL, or IATAL),¹¹¹ but it is not possible to consider these alternatives within the confines of this article. The result is that it is difficult to know whether there is another measure reasonably available that can achieve the EU's objectives with less of an impact on trade. It does however seem plausible that the EU's aviation scheme will survive this hurdle as well.

The Chapeau of Article XX

A somewhat more difficult question is whether the measure would also meet the additional requirements set out in the Chapeau of Article XX. There are three such conditions: a measure may not be applied in a manner constituting unjustifiable discrimination or arbitrary discrimination between countries where the same conditions prevail, or a disguised restriction on trade. The last of these is not an issue: the EU's scheme is not adopted for protectionist reasons.¹¹² But does it amount to arbitrary or unjustified discrimination?

Preliminary points

The Appellate Body has described the Chapeau as designed to prevent the abuse of the exceptions,¹¹³ and as an expression of the principle of good faith.¹¹⁴ More concretely, the practice of the WTO Appellate Body and panels - discussed shortly - shows that the point of the discrimination conditions is to spread the burden of a provisionally justified regulation, so that the products of the complainant WTO member suffer no greater burden than their competitors. Thus it is possible to understand the Appellate Body's statement that the Chapeau is concerned with the *application* of a measure.¹¹⁵ The Chapeau ensures that measures that there are no unexplained gaps in the application of a measure in situations in which it should be applied. One might say that the Chapeau is concerned with *under*-regulation, where the subparagraphs of Article XX are concerned with *over*-regulation.

Practice has however been less of a useful guide as to the order in which the different elements should be analysed. In *US - Shrimp*, The Appellate Body said that one should first determine discrimination, then whether it is unjustified, and then whether it is applied to countries in which the same conditions prevail.¹¹⁶ But this suggestion, regularly followed, is not logical. The problem is that discrimination does not exist in the abstract; it depends on

comparators between which discrimination is alleged to occur. It seems inevitable, therefore, that one must first identify the relevant comparators; then discrimination between these comparators (according to a given standard); and finally, where relevant, whether any such discrimination is justified.¹¹⁷ Accordingly, and contrary to the Appellate Body's suggestion, the following will identify these comparators - the 'countries' where the same 'conditions' prevail - before considering whether there is discrimination, and, if so, whether any such discrimination is justified.¹¹⁸

The relevant comparators: 'countries' in which the same 'conditions' prevail

Textually, the Chapeau's reference to 'countries' is delinked from the subject matter of the agreement. But it is clear from the jurisprudence on the issue that the potential 'countries' to be compared are those with products in competition with the product at issue.¹¹⁹ Thus, in *US - Shrimp*, the Appellate Body identified the relevant set of countries in the Chapeau as 'exporting countries desiring certification in order to gain access to the United States shrimp market',¹²⁰ and in *US - Gasoline* the Appellate Body defined the relevant 'countries' to include the regulating importing member, where the competing products were to be found.¹²¹ The panels in *EC - Asbestos* and *Argentina - Hides and Leather* did the same.¹²² This appears consistent with the purpose of the Chapeau, which is to ensure that the products of the complainant's competitors are not unfairly exempted from the application of a given measure.

Importantly, it is not competitor products from *all* countries that are compared, but only those from countries in which the same conditions prevail. As practice has demonstrated, these 'conditions' are to be assessed in terms of the policy underlying the measure.¹²³ In *US - Shrimp*, the relevant 'conditions' concerned the overall risks posed to turtles resulting from shrimp fishing in different locations, taking into account the relevant regulatory frameworks governing these activities. In

this respect, conditions in the complainant countries and in the United States were the 'same'.¹²⁴ As the Appellate Body said, 'shrimp caught using methods identical to those employed in the United States have been excluded from the United States market solely because they have been caught in waters of countries that have not been certified by the United States'.¹²⁵ As between the complainants and other competitor countries, the conditions were also the same, and this led to a second discrimination finding (discussed below). In *US - Gasoline*, the objective of the US measure was to protect domestic air quality, but this, in turn, depended on 'enforcement conditions' in the place of production. The United States argued that, in this respect, conditions in Venezuela were not the same as in the United States;¹²⁶ The Appellate Body disagreed.¹²⁷

These cases are somewhat atypical. Normally, it is assumed that the same conditions prevail between the countries concerned, and this is for the simple reason that the disputes do not involve any factors outside of the jurisdiction of the regulating state. So, in *US - Gambling*, it was not suggested that there was any difference in relevant 'conditions' in Antigua and the United States: Antiguan online gambling services were not more dangerous to US public morals than domestic online gambling services. And in *Brazil - Retreaded Tyres*, there was no difference in any relevant conditions between Brazil and other WTO members, or between these members: each country's retreaded tyres presented the same dangers to public health in Brazil.¹²⁸

Discrimination

For different reasons, there is a paucity of jurisprudence on the meaning of 'discrimination' under the Chapeau. Sometimes this is because discrimination is assumed: thus, in *US - Gasoline*, once it was determined that the relevant conditions in the United States and Venezuela were the same, the Appellate Body considered it obvious that there was discrimination, and the same can be said of *Brazil - Retreaded Tyres* and *US - Gambling*. At other times, the question of discrimination has

been bundled with an assessment of ‘arbitrary or unjustifiable’ discrimination.¹²⁹

However, based on the overall practice of the Appellate Body, it is suggested that there is discrimination under the Chapeau when a measure detrimentally affects conditions of competition between products from countries where the same conditions prevail.¹³⁰ This was implicit in those Appellate Body reports in which discrimination was assumed, without being discussed. But it is also implicit in *US - Shrimp*, where the issue was considered, at some length. In this case, the measure was discriminatory for essentially two reasons: first, it banned imports of the complainants’ products;¹³¹ second, it imposed burdens on the complainants’ products, such as short phase-in periods and an absence of technical assistance, that were not imposed on competitive products from countries where the same ‘conditions’ prevailed.¹³² The effect, in both cases, was that conditions of competition for the complainants’ products were detrimentally affected, and there was discrimination – the *reasons* for discrimination, an issue now to be discussed, is a separate issue.

Justification

The jurisprudence is also rather meager, and inconsistent, when it comes to assessing whether any discrimination is arbitrary or unjustified. One thing, however, is clear: the key question concerns the *reason* for the discrimination, not the *process* by which a discriminatory measure is implemented. In *Brazil - Retreaded Tyres*, the Appellate Body said:

[D]iscrimination can result from a rational decision or behaviour, and still be ‘arbitrary or unjustifiable’, because it is explained by a rationale that bears no relationship to the objective of a measure provisionally justified under one of the paragraphs of Article XX, or goes against that objective.¹³³

This may be glossed as follows. First, if there is no reason for the discriminatory aspects of

a measure, it will be arbitrary and therefore also unjustifiable. Second, if there is a reason for the discriminatory aspects of a measure, but it bears *no* relationship to the objective of the measure, it will also be arbitrary and therefore unjustifiable. Third, if there is a reason for the discriminatory aspects of a measure, and it bears some relationship to the objective of the measure, it is perhaps not arbitrary, but it may still be unjustifiable. In other words, it seems, it is only when there is a reason for the discriminatory aspects of a measure that bears a rational relationship to the objective of the measure that it will not be arbitrary and unjustifiable. By way of comment, it may be said that, up to a point, this is consistent with the Appellate Body’s previous jurisprudence. However, for reasons to be explained, there is one point on which some refinement is desirable.

A number of disputes have involved the first scenario, involving a failure to give reasons for the discriminatory aspects of a measure. This was perhaps most obvious in *US - Gambling*, but it was also the case in *US - Shrimp*, where the discrimination (lack of equal market access) was the result of the US applying its measure in a ‘rigid’ manner¹³⁴ and failing to negotiate with the complainants.¹³⁵ The United States offered no reason for having conducted itself in this way, or for the resulting discrimination. An example of the second scenario is *Brazil - Retreaded Tyres*, where there was a reason for the discriminatory aspects of the measure, but it was unrelated to its objective. This was also seen in *US - Gasoline*, where the US offered, as a reason for not imposing a standard baseline on all gasoline, the physical and financial costs to domestic producers. The Appellate Body rejected this out of hand.¹³⁶ There have not, apparently, been any cases involving the third scenario, where there is a reason for the discrimination, and it is somewhat but insufficiently related to the objective of the measure. This explains why there has not yet been a determination that a measure resulted in non-arbitrary but still unjustifiable discrimination.

But, as mentioned, there is a difficulty with the formulation in *Brazil - Retreaded Tyres*, and this has to do with its insistence that the discriminatory aspects of a measure can only be justified in terms of the rationale of the measure. The difficulty is that this fails to account for those cases in which discrimination is explained by administrative constraints. Thus, in *US - Gasoline*, the United States argued that it was not possible to give all producers the option of individual baselines because of a lack of data and control (i.e. administrative constraints). The Appellate Body rejected this contention, on the basis that in some cases data was available, and in any event data could be obtained by agreement with the complainants.¹³⁷ But in considering the argument, the Appellate Body also left the door open to the possibility that the discriminatory aspects of a measure could be justified on the basis of valid administrative constraints. Indeed, in a footnote, the Appellate Body said that 'it is not for the Appellate Body to speculate where the limits of effective international cooperation are to be found'.¹³⁸ Later, in *US - Shrimp (Article 21.5 - Malaysia)*, the Appellate Body picked up this theme when it denied that a failure to conclude an agreement would amount to discrimination under the Chapeau.¹³⁹ Again, this indicates that there is room for justifying discrimination under the Chapeau on the basis of genuine administrative constraints.

It is therefore suggested that *Brazil - Retreaded Tyres* should not exclude the possibility that the discriminatory aspects of a measure may be not arbitrary or unjustifiable if these are explained by reference to valid administrative constraints. At the same time, the jurisprudence on the issue gives certain indications as to invalid administrative constraints: these include domestic and international legal obligations, failures to obtain domestic funding, and failures to attempt to negotiate a solution. Beyond this, however, the question remains open.

Application to the EU's scheme

How, then, does this reading of the Chapeau apply to the EU's scheme? Applying the order of analysis identified above, it may be said, firstly, that the 'countries' at issue are those whose imports are affected by the EU's scheme. This is, to all intents and purposes, all WTO members. For purposes of determining discrimination, it is necessary to draw from this pool of 'countries' those in which the same 'conditions' prevail. In line with the considerations expressed above, these 'conditions' are too identified by reference to the policy underlying the measure. In the present case, the policy underlying the measure can be understood as the reduction of carbon emissions produced by flights or, more narrowly, carbon emissions on flights to, from and within the EU. Accordingly, the relevant 'conditions' would seem to be of two types: the emissions produced by the relevant flights and the existence of any regulatory 'equivalent measures' targeting these omissions.

The first of these conditions may be considered to be equal for all affected countries. The fact that the affected countries all have flights producing emissions makes them relevantly the 'same' for these purposes, even if some produce greater emissions than others. Likewise, in *US - Shrimp*, the Appellate Body did not quantify the number of turtles that might be protected by the US measure; it was sufficient that they existed in relevantly affected countries.¹⁴⁰ Beyond this, however one can draw a distinction between countries with regulatory measures targeting these emissions, and countries without such measures. Accordingly, if the key difference is the existence of regulatory measures targeting climate change, then the result is that countries with regulatory measures are, relevantly, countries in which the 'same' conditions prevail. Likewise, countries without any regulatory measures are, relevantly, countries in which the 'same' conditions

prevail. However, countries with regulatory measures are not, relevantly, the same as countries without regulatory measures.

Discrimination between countries with regulatory measures

As for countries with regulatory measures (including the EU), it follows that, if the EU were to impose regulatory costs on products that are already bearing regulatory costs, the effect would be ‘double counting’ (contrary to express ICAO Guidelines) and therefore discriminatory.¹⁴¹ In other words, not only is the EU’s exemption for flights from countries that adopt ‘equivalent measures’ not discriminatory, the absence of any such exemption *would* be discriminatory. But there is more to be said on this point: the EU’s exemption only applies to states of departure. Seen in the light of the above discussion, this appears to be only a partial solution, because state may also choose to regulate aircraft on the grounds of nationality, or possibly even on the grounds of overflight.¹⁴² In these instances, it might be necessary for The EU also to exempt flights regulated on these jurisdictional bases.

Discrimination between countries without regulatory measures

By contrast, it seems that the EU’s scheme produces discrimination between exporting countries without regulatory measures. The reason is simple: products from these countries are burdened with regulatory costs according to the distance they must travel to the EU.

This does not mean that there is always discrimination between these countries. For example, it is difficult to see that there is any discrimination between products from the same origin (both Hong Kong), even if they travel by different routes to the EU.¹⁴³ Nor is there discrimination in scenarios in which competing products are subject to the same regulatory costs: this would include products travelling on direct flights to the EU from roughly equidistant origins (e.g. Hong Kong and Guangzhou), as well as products travelling

directly to the EU from a certain origin (e.g. Hong Kong) and products travelling indirectly to the EU from a more distant origin (e.g. Sydney) but stopping on the way in the first location (Hong Kong).

But this leaves two cases in which there may still be discrimination. First, there may be discrimination between products from two countries that are not equidistant from the EU (e.g. Hong Kong and Dubai). Second, there may be discrimination between products from equidistant origins (e.g. Hong Kong and Guangzhou) if it is relatively easier for the products of one of these countries (Hong Kong) to fly to the EU on an indirect flight (or via a hub closer to the EU), thereby incurring lower compliance costs. Depending on air services and air service agreements, this is not an unforeseeable scenario, although it would be unwise to overstate its likelihood.

Justification

Even if there is discrimination, it is not necessarily arbitrary or unjustified. Indeed, the first instance of discrimination identified here is easily justified in terms of the policy underlying the measure. There is both a direct and rational relationship between the regulatory cost and the policy of reducing carbon emissions. There is a rational justification for the fact that products from Hong Kong are subject to higher compliance costs than products from Dubai, and the fact that both are subject to higher compliance costs than EU products.

The same cannot be said, however, of the second type of discrimination - between direct and indirect (or between different indirect) travel for products of roughly equidistant origins, in which it is relatively easier for a product to travel on an indirect than a direct flight to the EU. The immediate cause of this type of discrimination is that the EU’s aviation scheme does not apply to any ‘leg’ of a flight that does not terminate in the EU. So a product from Hong Kong transiting in Dubai is subject to lower compliance costs than a product from (equidistant) Guangzhou that flies directly to

the EU. As mentioned above, this is the result of a Commission Decision defining the term 'flight', in the EU's Directive, in these narrow terms.¹⁴⁴ So what are the possible rationales?

One rationale is that the EU is unable, by reason of its international obligations, to regulate such flights. This may seem reasonable, but on the current state of the law it is, perhaps surprisingly, no defence. As mentioned, the Appellate Body has made it clear that adopting a measure to comply with international obligations, without any reference to the purposes of the measure, amounts to arbitrary discrimination.¹⁴⁵ Nor does it help the EU's case that the EU Court of Justice itself took the view that its scheme was entirely unconstrained by any such obligations. As the Court said:

[T]he fact that, in the context of applying European Union environmental legislation, certain matters contributing to the pollution of the air, sea or land territory of the Member States originate in an event which occurs partly outside that territory is not such as to call into question, in the light of the principles of customary international law capable of being relied upon in the main proceedings, the full applicability of European Union law in that territory.¹⁴⁶

If this is correct (and this is not entirely certain), the EU should be able to extend its scheme to all flights - and indeed all emissions producing activities - in the world, on the basis that they have 'effects' in the EU. It barely needs to be said that this ruling has

implications well beyond the narrow confines of this article.

But this is not the only justification for the discriminatory aspects of the measure: it is also possible that these aspects could also be justified on the grounds that the EU cannot obtain data relevant to flights without a terminal point in the EU. In the abstract, it is difficult to assess such a claim, but the omens of *US - Gasoline* are not positive. But even if this were a valid reason for the discrimination, the EU's aviation scheme faces another hurdle. In *Brazil - Retreaded Tyres*, the Appellate Body criticized the discriminatory aspects of Brazil's measure not only because these were not related to the objective of the measure, but also because these aspects of the measure had the effect of *worsening* the risk to public health, due to potential increases in imports of retreaded tyres from Uruguay (even if only to a 'small degree').¹⁴⁷ The present case is similar. There is a risk that the EU's aviation scheme will, at least in individual cases, have a negative effect on aviation emissions. As Lufthansa has pointed out, an indirect flight, which requires fewer carbon emissions, may actually emit more carbon than the equivalent direct flight.¹⁴⁸ In such cases, the EU's aviation scheme establishes an incentive to create carbon emissions.

The result of this analysis is somewhat negative for certain aspects of the EU's scheme. However, it must be borne in mind that the facts underlying these aspects of the scheme may be largely hypothetical, and therefore of little real consequence. The important point is that the core of the EU's aviation scheme appears to be justified under Article XX GATT.

5. THE LEGALITY OF THE EU'S AVIATION SCHEME UNDER THE GATS

A second issue raised by the EU's scheme, and one of more economic importance, concerns its effects on trade in services, especially services delivered outside the EU. The question arises whether the EU's scheme raises any issues under the GATS, which applies, in principle, to all measures affecting trade in services.¹⁴⁹

5.1 The Annex on Air Transport Services

The first, and most obvious, question concerns the application of the GATS Annex on Air Transport Services, which purports to exempt air transport services from regulation under the GATS. The following will consider the extent to which this means that the GATS does not protect services dependent on air transport, such as tourism.

Scope of the Annex

Paragraph 1 of the Annex states that it applies to 'all measures affecting trade in air transport services, whether scheduled or non-scheduled, and ancillary services'. The language used is reminiscent of the phrase 'measures affecting trade in services' in Article I:1 GATS, which the Appellate Body has described as a broad term covering any measures which have an effect on trade in services.¹⁵⁰ It seems appropriate to interpret both in a similar way.¹⁵¹

But does this phrase also cover all measures affecting trade?¹⁵² It is more common to see the phrase as covering only those measures affecting conditions of competition for foreign services and service suppliers. This narrower view is adopted even by complainants in litigation.¹⁵³ But this cannot be correct. This would lead to the duplication of an inquiry properly conducted in the context of relevant non-discrimination obligations.¹⁵⁴ In addition, the GATS contains provisions, such as those on domestic regulation in Article VI, which are not related to discrimination. The answer must therefore be that Article I:1 GATS applies also to measures that have no effect on conditions of competition, or - to put it another way - non-discriminatory measures.

This has a direct bearing on paragraph 1, where similar considerations also apply. As will be seen, the Annex contains provisions that apply also to non-discriminatory measures. The phrase 'measures affecting trade in air transport services' must therefore also be understood to mean measures affecting the quantity and type of services provided by foreign service suppliers, not just measures affecting their conditions of competition, which might exclude non-discriminatory measures.

Paragraph 2 ATS

The main substantive carveout for measures affecting trade in air transport services is set out in paragraph 2 ATS. This paragraph states as follows:

2. The Agreement [GATS], including its dispute settlement procedures, shall not apply to measures affecting:
 - (a) traffic rights, however granted, or
 - (b) services directly related to the exercise of traffic rights, except as provided in paragraph 3 of this Annex

Both of these paragraphs are relevant to the EU's scheme.

Paragraph 2(a) ATS

Paragraph 2(a) exempts 'measures affecting traffic rights' from GATS obligations. 'Traffic rights' are defined in paragraph 6(d) as follows:

'Traffic rights' mean the right for scheduled and non-scheduled services to operate and/or to carry passengers, cargo and mail for remuneration or hire from, to, within, or over the territory of a Member, including points to be served, routes to be operated, types of traffic to be carried, capacity to be provided, tariffs to be charged and their conditions, and criteria for designation of airlines, including such criteria as number, ownership, and control.¹⁵⁵

The most likely way in which the EU scheme might be deemed a ‘measure affecting traffic rights’, as per the definition of such measures in paragraph 6(d), is if the scheme affects ‘tariffs to be charged and their conditions’. It is important to note that the phrase ‘tariffs and their conditions’ refers to negotiated tariffs, not to all forms of air service pricing. The negotiations to which the phrase refers are those undertaken by states, (usually within the International Air Transport Association (IATA)) on tariffs to be charged on given international flights. In practice, however, tariff negotiations have, in almost all cases, been superseded by fares set unilaterally by the airlines themselves.¹⁵⁶ Indeed, the UK Civil Aviation Authority no longer even require airlines to notify their tariffs.¹⁵⁷ While it is, therefore, theoretically possible that the EU’s scheme could affect a negotiated tariff that is still in effect between an EU Member State and a third country, in practice this is highly unlikely. It is therefore also no surprise that this issue has not arisen in any of the many ICAO based challenges to the EU’s scheme to date. Indeed, the claimants in the ATAA case did not even claim that the EU’s scheme affected their ability to set prices under Article 11 of the US-EU Open Skies Agreement.¹⁵⁸

The conclusion must be that the EU’s scheme does not affect ‘tariffs to be charged or their conditions’ within the meaning of paragraph 6(b), and consequently that it is not a measure covered by the exemption in paragraph 2(a).¹⁵⁹

Paragraph 2(b) ATS

Paragraph 2(b) ATS establishes another substantive carveout for ‘measures affecting services directly related to the exercise of traffic rights’. These services are undefined, but correlate broadly to the so-called ‘soft rights’ involving currency exchanges, ground and baggage handling, catering, marketing, and airport usage.¹⁶⁰ It is possible that the EU’s scheme might affect these services, as a result of airlines changing routes to minimise their compliance costs under the EU’s scheme. To the extent that it does, paragraph 2(b) would be applicable and the EU’s scheme would be

exempt from scrutiny under the GATS. However, this is by no means certain, and it is therefore still appropriate to pursue an analysis under the GATS.

Paragraph 4 ATS

Paragraph 4 of the Annex establishes a procedural carve-out for measures affecting trade in air transport services. It states that, in relation to the measures defined in paragraph 1, WTO dispute settlement is only available ‘where ... dispute settlement procedures in bilateral and other multilateral agreements or arrangements have been exhausted.’

When, then, are the conditions in paragraph 4 satisfied? The point of this paragraph, and the point of the Annex more generally, is to ensure the primacy of the ICAO system over the WTO system in cases of regulatory overlap,¹⁶¹ and perhaps also to prevent true conditions of competition in the market for air transport services. But primacy can be applied in different ways. On a narrow view, primacy would apply in relation to matters prohibited by an ICAO agreement. More generally, it might be thought that paragraph 4 applies also to matters governed by the ICAO, including by positive authorization. But at least the matter would have to fall within ICAO competence to some degree.

In the case at hand, there is good reason to believe that the EU’s scheme does not violate any ICAO obligations. There is no definitive ICAO ruling on the matter, but the EU Court of Justice has decided that the EU’s scheme does not violate any relevant ICAO obligations,¹⁶² and this echoes decisions to similar effect by the UK High Court¹⁶³ and the Dutch Supreme Court¹⁶⁴ with respect to ‘ticket taxes’. In practical terms, it is also unlikely that the EU, the UK, the Netherlands and perhaps other governments would argue in WTO dispute settlement proceedings that the EU’s scheme does (or even *might*) violate their ICAO obligations. This is particularly true for the UK, which has argued (successfully) that the Chicago Convention does not even have any ‘application’ to its Air Passenger Duty.¹⁶⁵ If the

narrow view is taken, the result would be that the conditions in paragraph 4 are not satisfied, and the EU's scheme can be challenged in WTO dispute settlement proceedings.

However, the answer is likely to be different if the broader view is taken that paragraph 4 applies if a matter is 'governed' by the ICAO. In Resolution A37/19, in a paragraph not subject to reservations,¹⁶⁶ the ICAO Assembly 'request[ed] the Council to ensure that ICAO exercise continuous leadership on environmental issues relating to international civil aviation, including GHG emissions'.¹⁶⁷ It is true that some countries have claimed that the ICAO should cede this primary role to the United Nations Framework Convention on Climate Change (UNFCCC).¹⁶⁸ However, on the present state of affairs, this should not change the conclusion that the ICAO has competence of the issue. The result is that, on the broad view, for purposes of paragraph 4, the ICAO continues to govern the matter, and the issue would not be justiciable in the WTO.

There is no way of knowing whether a broad or narrow approach to paragraph 4 is correct. The matter is essentially one of comity between international tribunals, on which there is very little by way of a common approach. At a minimum, though, it is to be expected that a WTO panel would have to be established to examine the issue whether it has jurisdiction over the matter, and it is at this point that this question would be addressed.¹⁶⁹

Summary

If this analysis is correct, then even if one of the substantive carveouts in paragraph 2 does not apply, it is possible that a WTO Panel would lack jurisdiction to determine whether there is a GATS violation until ICAO remedies have been exhausted. However, this does not mean that the WTO member would be complying with its WTO obligations. It just means that dispute settlement is not available. For this reason, and also in the event that the preceding analysis is incorrect, the following considers the applicable GATS obligations and exceptions.

5.2 The Most Favoured Nation Obligation (Article II:1 GATS)

Article II:1 GATS, inspired by Article I:1 GATT, requires that any 'advantage' accorded by the EU to any service or service provider must be accorded immediately and unconditionally to the like service or service provider of any other WTO member.¹⁷⁰

Unlike Article I:1 GATT, there is no doubt that Article II:1 GATS applies to the EU's scheme. By virtue of Article I:1 GATS, Article II:1 applies to all measures with an effect on services. Clearly this measure has such an effect, most notably on services supplied to EU consumers travelling outside the EU, such as tourism. It seems also relatively clear that the EU's scheme has a disproportionate effect on services and service suppliers in certain countries; tourism in Barbados will be proportionately more affected than tourism in Israel. Nor is there any possibility of arguing that the reasons for this situation are unconnected with the origin of the service: clearly, it is linked directly to geographical factors. For the reasons mentioned in the context of Article I:1 GATT, this would seem to be sufficient for there to be a failure to accord an 'advantage' to all 'like services' and 'service suppliers'. Furthermore, as in that context, if the EU granted an 'equivalent measures' exception to some countries only, there would also be a violation of the requirement to grant such an advantage 'immediately' and 'unconditionally' to all WTO members.

5.3 Obligations Applicable to Commitments on Service Sectors

Unlike Article II:1, most of the other obligations under the GATS only apply to the extent that a WTO member has made specific commitments in relation to those services. The EU has made full commitments in Mode 2 (consumption abroad) in relevant tourism and recreational services.¹⁷¹ The question arises whether the EU's scheme violates any obligations with respect to these service sectors.¹⁷²

Market access (Article XVI GATS)

In the first place, one might consider whether the scheme violates Article XVI GATS. In respect of scheduled services, this forbids the measures described in Article XVI:2 GATS.¹⁷³ Relevantly, these require that the measure set a maximum number of suppliers or various elements of services, whether in their form or (according to the Appellate Body, in cases of a zero quota) in their effect.¹⁷⁴ The EU's scheme does not, however, set any maximum limits, even if it has a restrictive effect on the supply of services. Article XVI GATS does not therefore apply.

National treatment (Article XVII GATS)

The remaining question, then, is whether the EU's scheme discriminates in favour of domestic services and service suppliers in these (and other) sectors, contrary to Article XVII:1 of GATS.¹⁷⁵ This provision reads as follows:¹⁷⁶

In the sectors inscribed in its Schedule, and subject to any conditions and qualifications set out therein, each Member shall accord to services and service suppliers of any other Member, in respect of all measures affecting the supply of services, treatment no less favourable than that it accords to its own like services and service suppliers.

It seems that the EU's scheme could have the effect of modifying the conditions of competition in favour of EU services and service suppliers, compared to those of other WTO Members. As tickets become more expensive, it is foreseeable that EU residents will prefer to holiday at home. But does the disproportionate impact of the EU's scheme may not be sufficient for the scheme to amount to 'no less favourable treatment' for those services and service suppliers? Arguably, it does, for the same reasons mentioned in the context of Article II:1 GATS, and Article I:1 GATT. Among other things, the reasons for discrimination are not independent of the origin of the service or service provider.¹⁷⁷ They could hardly be more connected.

Footnote 10

This is not quite the end of the analysis. Article XVII is subject to a footnote 10, which states that:

[s]pecific commitments assumed under this Article shall not be construed to require any Member to compensate for any inherent competitive disadvantages which result from the foreign character of the relevant services or service suppliers.

It might appear that footnote 10 protects the EU's scheme. However, as the Panel in *Canada - Automobiles* said, footnote 10 'does not provide cover for actions which might modify the conditions of competition against services and service suppliers which are already disadvantaged due to their foreign character'.¹⁷⁸ In the context of Mode 2 services, footnote 10 protects the EU from having to subsidise the costs of international transportation of consumers. However, it does not, of itself, permit the EU to add to these costs. On this issue it is neutral.

5.4 Exceptions for Environmental Reasons (Article XIV(b) GATS)

Even if the EU's scheme encounters the legal difficulties described, there is a possibility that its GATS-illegal aspects may be justified under Article XIV GATS. While This provision does not include an equivalent to Article XX(g) GATT, Article XIV(b) is exactly the same as Article XX(b) GATT. Correspondingly the analysis of the legality of the EU's aviation scheme under Article XIV GATS follows that already undertaken in the context of Article XX(b) GATT, with the result that (alternative measures aside) the EU's aviation scheme should be justifiable, except perhaps for the scenario in which services and service providers are located in a country which, compared to a country equidistant from the EU, is more easily accessible by direct flights than indirect flights. Concretely this would mean that there might be arbitrary or unjustified discrimination if, for example,

Barbados were serviced mainly by direct flights to the EU, while a neighbouring equidistant island were serviced mainly by indirect flights to the EU, and as a result services and service providers in Barbados would be burdened by higher regulatory costs than their competitors. However, this is probably a hypothetical scenario.

In short, even if the EU's aviation scheme is covered by the GATS, and even if it is justiciable, in all of its essential aspects it would most likely be justified under Article XIV(b) GATS - so long as there is no reasonably available alternative measure that meets the EU's objectives in a less trade restrictive manner.

6. FINAL REMARKS

The foregoing analysis has illustrated the complexities of the WTO aspects of the EU's aviation scheme, with the result that, except in certain limited cases, any discriminatory effects of the measure are likely to be justified on environmental grounds. However, this analysis has also shown up some more long-term structural issues for the WTO, which are of particular relevance to climate change issues, but not limited to these. One of the more surprising points to emerge from this case study is the fact that a WTO member cannot justify discrimination under the Chapeau to Article XX GATT and Article XIV GATT on the basis that it

needs to comply with its international obligations. This rule, which was stated in *Brazil - Retreaded Tyres*, has one obvious merit, which is to prevent WTO members from seeking to circumvent their WTO obligations by entering into contradictory international agreements. However, it also has less than salutary effects on the coherence of WTO law with the remainder of the international legal system. One wonders whether perhaps another solution might not be found such that WTO members are able to avail themselves fully of the general exceptions in the WTO Agreements while still remaining in compliance with their international obligations.

COMMENTARY: THE POLITICAL AND LEGAL UNDERPINNINGS OF INCLUDING AVIATION IN THE EU ETS¹⁷⁹

By Professor Robert Howse, New York University School of Law

A fundamental question of principle

What is at stake in the EU's Emissions Trading Scheme (ETS) aviation dispute is a fundamental question of principle, with implications that extend far beyond aviation. The question is as follows: is it legal or legitimate to take unilateral measures against global carbon emissions as a response to the collective action problems that are frustrating multilateral efforts at climate mitigation? Everyone agrees that unilateral action is a second best to a comprehensive multilateral approach. However, leading economists, such as Joseph Stiglitz, have suggested it is far better than doing nothing in the presence of a critical and urgent global challenge. The prospect of unilateral action creates a new set of costs for states that are holding out in multilateral fora and thus increases the incentives on these states to work toward a cooperative outcome. For the states taking unilateral action on the other hand, the incentives nevertheless remain strong to favor cooperation. Unilateral approaches, while significantly contributing to reductions in emissions, do not reach those emissions unconnected to goods and services traded with the countries taking unilateral measures, whereas a multilateral approach would do so, leading to far greater reductions.

Unilateral action makes it less advantageous to adopt a hold-out strategy in multilateral fora dealing with climate mitigation and counters free riding on the efforts of others. Hence, not surprisingly, hold-out states have attempted to draw a line in the sand concerning unilateralism, relying on various arguments and concepts that are assumed to have a legal foundation. The basic claim is that states may not unilaterally regulate global environmental externalities, except to the extent that these externalities are also local ones, occurring within their territorial boundaries.

Sovereignty and equity

Internalizing global externalities means requiring through tax or other "border adjustment" measures that the environmental costs in question are attributed to goods and services produced in whole or in part elsewhere. This can be economically rational and environmentally desirable (as a second best option), but is it fair? Such measures could undermine the contrary policies of countries that have chosen to "subsidize" economic growth and development by not making producers pay for the global environmental externalities that their economic activities generate. The countries in question often characterize such policies as their sovereign right, balancing environmental and growth concerns as they think is best for that society. But of course it is one thing to subsidize domestic economic development: it is another thing to do so at the expense of the global commons, imposing a large part of the costs on the rest of the world and distorting the allocation of productive resources not only domestically but globally.

At this point, the argument moves from sovereignty to historical equity: it is claimed that today's developed countries achieved economic progress for over a century by doing just this. Therefore, it is a matter of fairness now to allow today's developing countries to pursue such policies, despite the cost to the global public good. This argument is in part reflected in the concept of differentiated responsibilities in the Kyoto climate regime, although it is more often used to excuse holding out from responsibilities altogether. But how sound is the argument? Today's developed countries also built their economies in prior centuries through military aggression, colonial oppression and slavery. Yet, one does not hear arguments that historical equity means permitting such practices today so that

developing countries can catch up. This is *not* by any means to dismiss arguments in global justice that developing countries may be entitled to measures to assist them in *meeting* climate mitigation responsibilities, such as climate finance, technology transfer, and so on.

By applying its ETS to emissions at least partly generated by activity outside the territorial boundaries of the EU, the EU has engaged in a frontal assault on the line in the sand concerning unilateralism that the climate hold-out countries (and not all of them are developing countries) have sought to draw. These countries have an enormous interest in attempting to get the EU to step back, for the fundamental principle that facilitates their hold-out strategy is in jeopardy. They have already moved to threaten and undertake retaliatory action against the EU. But even if the EU were to compromise under such threats, this would not re-establish the legitimacy of the principle on which the hold-outs rely. The basic difficulty that the hold-outs face is that - now that the EU has shaken the status quo in a highly visible way - legal justifications are required. Relying simply on rhetoric about sovereignty, extraterritoriality, and equity is not longer sufficient.

Legal regimes at hand: ICAO, international law, and the WTO

There are three legal regimes to which one might turn for guidance on whether the hold-outs' line in the sand is sustainable in law. First of all, there is the specialized aviation regime, the International Civil Aviation Organization (ICAO), where multilateral agreement on controlling aviation emissions has proven elusive. As Dr. Bartels notes, in the wake of the impasse in multilateral efforts, ICAO has itself acted to open the door to unilateral approaches as a second best.

Second, there is customary or general international law. Many people think that customary or general international law supports a clear prohibition on "extraterritoriality." But there is no clear agreed meaning to "extraterritoriality" in general international

law, beyond the prohibition of the exercise of police power or use of military force on the territory of another state without its consent (of course with certain narrow exceptions such as self-defense). There is no question that there are intra-European effects from the emissions in question, at a minimum to the extent that climate change is a global problem with effects everywhere. In addition, as pointed out by the Advocate General Kokott and the European Court of Justice, the EU clearly has jurisdiction over aircraft taking off and landing in its territory and the implementation of its scheme in no way requires the assertion of regulatory authority on the territory of other states. In other words, there is no question of "long arm" jurisdiction here.

This leaves the World Trade Organization (WTO), which is the central focus of Professor Bartels' article. The WTO is the one international regime that has addressed specifically in its jurisprudence the legality of unilateral measures to protect the environmental commons. In the landmark *Shrimp/Turtle* ruling the Appellate Body held that such measures are in principle compatible with the legal framework of the World Trade Organization; in practice, to be legal, they must be applied in a non-arbitrary, non-discriminatory and non-protectionist manner¹⁸⁰. Thus, I cannot but agree with the ultimate conclusion¹⁸¹ of Dr. Bartels' article that the coverage of non-European carriers under the ETS is compatible with WTO law, assuming that its application to those carriers is operated in an even-handed and non-protectionist fashion. Dr Bartels points to a number of issues regarding how the ETS aviation rules operate in practice, which could lead to concerns about even-handedness in particular cases. For now, these are hypothetical as the scheme is not fully operational.

The possibility of dispute settlement at the WTO

In understanding why no dispute has been brought so far, it is important to be aware of a significant distinction in WTO law that affects "standing" to bring a case to the dispute settlement organs. A general legislative scheme,

as opposed to particular applications of it, may only be challenged in a WTO complaint where the scheme “as such,” i.e. on its face, violates WTO rules. This notion has become somewhat more flexible, beginning with the *US-Section 301* panel, which suggests that there could be circumstances where it would be enough to show that the scheme on its face creates a serious threat of violation. In such a case, the defending Member might be held to persuading a panel that the law can and will be applied in fact in a WTO consistent manner.

To file a complaint at this early juncture in the operation of the EU scheme on non-EU carriers would require, in essence, framing the claim as one of “as such” violation. An “as such” claim would almost certainly be rejected by the WTO dispute settlement organs, based on the principles of *Shrimp/Turtle*. Not to repeat unnecessarily Dr. Bartels’ own analysis, but both the GATS and the GATT permit measures “in relation to the conservation of exhaustible natural resources.” These include resources that have a global commons character, and there is no question that the EU scheme, on basic economic principles, makes a contribution to the conservation of the global commons through making the harmful activity more costly. To pass muster under the exhaustible natural resources exception, the measure at issue does not have to be shown to be the least trade restrictive capable of achieving the conservation objective. Nor, to invoke these kinds of exceptions, does a Member have to first exhaust the possibilities of a negotiated alternative to unilateralism (this was clarified by the Appellate Body in the *US-Gambling* case).

Perhaps most revealing, though, of how the Appellate Body would view its role in adjudicating such a case, is a seemingly offhand remark in its *Brazil-Retreated Tyres* decision. There the Appellate Body observed: “the results obtained from certain actions—for instance, measures adopted in order to attenuate global warming and climate change, or certain preventive actions to reduce the incidence of diseases that may manifest themselves only after a certain

period of time—can only be evaluated with the benefit of time.”

Here, in a dispute *not* concerning climate change, the AB used climate change to illustrate why it was appropriate to give considerable deference to a Member’s selection of environmental policy instruments. I cannot believe that the reference to climate change was casual. My sense is that the AB was sending a message that it would not be inclined to second guess lightly the choices of WTO Members on how to regulate in the area of climate change, given the complexity of policy design, the evolving nature of the problem and our understanding of it, and the multiple interactions of any particular policy with other policies. Recently, in the *US-Clove Cigarettes* report, the Appellate Body has affirmed that WTO Agreements such as the GATT and the Technical Barriers to Trade Agreement must be interpreted so as to protect a Member’s legitimate right to regulate. These Agreements (including the general exceptions provisions) “strike a balance between, on the one hand, the objective of trade liberalization and, on the other hand, the right of Members’ to regulate” and “should not be interpreted as prohibiting any detrimental impact on competitive opportunities for imports in cases where such detrimental impact on imports stems exclusively from legitimate regulatory distinctions.”(paragraph 174; see also paragraph 96).

This being said, I would perhaps give more attention to one dimension of the EU scheme that Dr. Bartels mentions but does not discuss in much detail. This is the provision for exemption from the ETS where the carrier in question is subject to an equivalent scheme that satisfies the EU’s environmental objectives. The fact that the EU is not simply imposing its own choice of policy instruments on other WTO Members, but rather is prepared to recognize their own choices - where well-designed to achieve the objective in question - should make the dispute settlement organs more comfortable that the EU approach is compatible with the spirit, as well as the letter, of WTO law. Of course, the

EU would have to apply this flexibility in a non-discriminatory way. But here, in order for a challenge to be brought, a WTO Member would need to have already developed an alternative scheme that the EU then rejected as not being comparable or equivalent to its own measure. Considered on its face, the flexibility in the EU scheme only enhances the likelihood that it would be upheld in any “as such” challenge.

The countries opposing the EU scheme thus face few options with respect to the WTO. If they bring an “as such” case now, they are, as explained above and as is implicit in Dr. Bartels’ own analysis, very likely to lose. This would be a big loss because the WTO would have explicitly rejected the line in the sand that they are trying to preserve concerning unilateralism (as it did already in *Shrimp/Turtle* in a different context). Alternatively, if the hold-outs wait, and bring a challenge or series of challenges to the operation of the scheme in practice, they may well be seen to have conceded the larger issue of principle concerning multilateralism. If the WTO dispute settlement organs find in favor of the challengers because of some detailed aspect of the application of the EU scheme that the EU could easily tweak, then they would have won the battle but lost the war, as it were.

This goes a long way to explaining why the hold-out countries have so quickly resorted to threats of retaliation, rather than moving in the direction of a WTO challenge. I doubt retaliation will succeed for several reasons. First of all, WTO law itself limits the kind of retaliatory measures that can be taken without provoking a challenge in dispute settlement to the retaliatory actions themselves. Second, access to Europe’s airports is a very significant matter for the countries in question. Third, Europe is a significant enough economic power to play credibly tit-for-tat. Fourth, Europe has much to lose through acquiring a reputation for early surrender in trade warfare. In this sense, it was probably not shrewd to have moved so quickly to the retaliatory option: on the one hand it expands the number of constituencies in the EU who might now want to oppose the

EU scheme, but on the other hand there are many interests also that would not want to have Europe appear to be easily intimidated by trade threats, and these extend well beyond the environmentalist community.

The way forward

While standing firm, it is important that the EU does not yield to the temptation to make this all about a contest of wills. The focus needs to remain on climate mitigation and how best to achieve that in the aviation sector. In the long run, cooperation between government and industry is needed if dramatic progress is to be made here. The industry does not deserve to be demonized as climate outlaws; they are being forced by governments not to play ball with the EU, and until governments decided to go down the road of confrontation there were signs that a constructive attitude was emerging in some quarters in the industry. And, as discussed, the governments are less concerned with the future of aviation than standing on a point of principle.

A comprehensive approach to the challenge of aircraft emissions requires acting on a number of fronts: shifting to more fuel-efficient engines and aircraft designs (in which the industry has an economic interest given rising fuel costs and the effect on competitiveness); moving to the use of “green” fuels such as biowaste (which is requiring some changes to technical standards); and better management of airspace and airports to avoid waste of fuel due to congestion in air traffic. The ETS provides one additional impetus to the industry to act on these fronts, but getting optimal results demands effective collaboration between governments, individually and collectively in ICAO, and the private sector. Thus, despite rising trade tensions, the EU should remain openly and constructively engaged with the industry and ICAO to the extent possible.

What about the WTO? We have just been coming through a period of economic and financial crisis where, arguably, the legitimacy of the basic WTO rules and the dispute system have played an important role in avoiding a protectionist

spiral in response to severe economic and social pressures. To continue to be effective in that crucial role, the WTO needs to guard against becoming a battleground for policy conflicts in areas like the environment. In an ideal world, it would do so by spearheading a comprehensive agreement on trade and climate change, which would harness positive synergies (liberalization of green goods and services) and contain negative ones (through clearer and more precise agreement on the boundary between protectionism and positive action on climate). Given the level of dissension

and tension we are witnessing at the moment, such an accord does not seem a realistic possibility. So, while remaining a hedge against protectionism, the WTO needs to protect *itself* through a restrained approach, which leaves individual states and regional groupings like the EU ample room to regulate for climate mitigation purposes, while shifting to other fora the challenge of reconciling or balancing unilateral regulation with global environmental governance. Fortunately, as Dr. Bartels and I agree, the *Shrimp/Turtle* doctrine provides a firm legal basis for such prudence.

ENDNOTES

- 1 According to 2005 figures, aviation is responsible for around 2.5 percent of global carbon emissions. Taking into account other emissions and effects (eg on clouds), aviation is responsible for 4.9 percent of total anthropogenic climate effects: David Lee et al, 'Aviation and global climate change in the 21st century' (2009) 43 *Atmospheric Environment* 3520. A commonly quoted but now out-of-date figure, deriving from a 1999 IPCC Report, is 3.5 percent of global carbon emissions: Joyce Penner, et al (eds), *Aviation and the Global Atmosphere: Summary for Policymakers* (Intergovernmental Panel on Climate Change (IPCC), 1999), 8.
- 2 Directive 2008/101/EC amending Directive 2003/87/EC so as to include aviation activities in the scheme for greenhouse gas emission allowance trading within the Community [2008] OJ L8/3. A consolidated version of Directive 2003/87/EC ('the Directive') is available at <http://eur-lex.europa.eu/LexUriServ/LexUriServ.do?uri=CONSLEG:2003L0087:20090625:EN:PDF>.
- 3 Article 16(3) of the Directive.
- 4 There are exceptions for special flights, listed in Annex I of the Directive.
- 5 In fact, the scheme extends beyond the EU to the EEA EFTA countries (Iceland, Norway, and Liechtenstein): EEA Joint Committee Decision No 6/2011 [2011] OJ L93/35 and Decision No 43/2011 [2011] OJ L171/44; see also Decision No 87/2011 and Decision No 93/2011 (not yet published), and it is envisaged that, following its accession to the EU in 2013, Croatia will also participate in the scheme from 1 January 2014: http://ec.europa.eu/clima/policies/transport/aviation/croatia_en.htm. Switzerland is reportedly negotiating an agreement on aviation emissions: 'Second round of Swiss-EU negotiations on linking emissions trading systems', Swiss Federal Office for the Environment, Press Release, 20 September 2011, <http://www.bafu.admin.ch/dokumentation/medieninformation/00962/index.html?lang=en&msg-id=41297>.
- 6 Annex I of the Directive refers to '[f]lights which depart from or arrive in an aerodrome situated in the territory of a Member State to which the Treaty applies.' Commission Decision 2009/450/EC [2009] L149/69, giving a detailed interpretation of Annex I, states '[t]he term 'flight' means one flight sector that is a flight or one of a series of flights which commences at a parking place of the aircraft and terminates at a parking place of the aircraft'. The Directive itself apparently leaves it open to consider 'flights' more broadly, perhaps based on the total journal taken by a single airplane with a single flight code.
- 7 Article 25 of the Directive.
- 8 Article 3c(1) of the Directive.
- 9 Emissions are calculated according to tonne-kilometres, calculated by multiplying the payload transported (cargo, mail, and passengers) by the mission distance (great-circle-distance plus an additional fixed factor of 95 km): Annex IV Part B of the Directive.
- 10 The total number of these allowances was determined by Commission Decision 2011/389/EU [2011] OJ L173/13.
- 11 Article 3e of the Directive.
- 12 The benchmarks used to calculate the freely allocated allowances are set out in Commission Decision 2011/638/EU [2011] OJ L252/20. EU Member States were obligated to calculate the actual free allowances allocated to each operator, based on their reported and verified tonne-kilometre figures, by the end of 2011. These figures are available at http://ec.europa.eu/clima/policies/transport/aviation/allowances/links_en.htm.

- 13 Article 3d of the Directive.
- 14 Article 3c(2) of the Directive.
- 15 Article 3f of the Directive. Rapidly growing means growth at a rate of more than 18 percent annually: *ibid*.
- 16 Article 11a of the Directive.
- 17 Article 12(3) of the Directive. This is because allowances issued for airlines are not considered within the Kyoto Protocol allowances nor included within Kyoto targets: Annela Anger, 'Including aviation in the European emissions trading scheme: Impacts on the industry, CO₂ emissions and macroeconomic activity in the EU' (2010) 16 *Journal of Air Transport Management* 100, 101.
- 18 The European Commission's assessment is contained in its Proposal for a Directive of the European Parliament and of the Council amending Directive 2003/87/EC so as to include aviation activities in the scheme for greenhouse gas emission allowance trading within the Community, Brussels, COM(2006) 818 final, 20 December 2006, 5, and the accompanying impact assessment of the inclusion of aviation activities in the scheme for greenhouse gas emission allowance trading within the Community, SEC(2006) 1684, 20 December 2006. Academic studies include Anger, *ibid*, and Laurel Pentelov and Daniel Scott, 'Aviation's inclusion in international climate policy regimes: implications for the Caribbean tourism industry' (2011) 17 *Journal of Air Transport Management* 199. See also PricewaterhouseCoopers, *Aviation Emissions and Policy Instruments*, 23 September 2005, 43, Ernst & Young, *Inclusion of Aviation in the EU ETS: Cases for Carbon Leakage*, 31 October 2008, 72 and Jasper Faber and Linda Brinke, *The Inclusion of Aviation in the EU Emissions Trading Scheme: An Economic and Environmental Assessment*, Trade and Sustainable Energy Series, Issue Paper 5 (Geneva: ICTSD, September 2011).
- 19 Part B of Annex IV of the Directive.
- 20 IATA, '2011 Ends on a Positive Note - Capacity, Economy Loom as Issues in 2012', 1 February 2012, http://www.iata.org/pressroom/facts_figures/traffic_results/Pages/2012-02-01-01.aspx. This is an aggregate figure. It does not correspond exactly to flights subject to the EU's aviation scheme.
- 21 Standard & Poor's, 'Airline Carbon Costs Take Off As EU Emissions Regulations Reach For The Skies', 18 February 2011, 6 (Chart 3).
- 22 Jan Vespermann and Andreas Wald, 'Much Ado about Nothing? - An Analysis of Economic Impacts and Ecologic Effects of the EU-Emission Trading Scheme in the Aviation Industry' (2011) 45 *Transportation Research Part A: Policy and Practice* 1066, 1072 (€2.98 billion); Standard & Poor's, *ibid*, 2 (€2.6-€3.9 billion), both assuming a carbon price of €25/tCO₂. Similar costs are estimated by Janina Scheelhaase and Wolfgang Grimme, 'Emissions trading for international aviation - an estimation of the economic impact on selected European airlines' (2007) 13 *Journal of Air Transport Management* 253, 262.
- 23 John McGarrity, 'Airlines to save up to 150 mln euros through EU offset concession', Point Carbon, Thomson Reuters, 14 February 2012, available at <http://www.pointcarbon.com/news/1.1753718>.
- 24 CAPA, Centre for Aviation, 'Like dominos: Airlines globally raise fares after EU Emissions Trading Scheme starts', <http://www.centreforaviation.com/blogs/aviation-blog/like-dominos-airlines-globally-raise-fares-after-eu-emission-trading-scheme-starts-65856>, 10 January 2012.

- 25 Robert Malina et al, 'The impact of the European Union Emissions Trading Scheme on US aviation' (2012) 19 *Journal of Air Transport Management* 36. Andrew Charlton has calculated that in 2012 Ryanair will make a profit of €10.8 million: 'Green taxes - a nice little earner for some', *Economist Blog*, 6 February 2012, available at <http://www.economist.com/blogs/gulliver/2012/02/airlines-and-emissions-permits>.
- 26 This figure is estimated by Faber and Brinke, above at note 18, 7. See also the European Commission's impact assessment, SEC(2006) 1684, above at note 18, and Pentelow and Scott, above at note 18, 204, who put the additional cost of a ticket from the UK to the British Virgin Islands at between \$US6 and \$US23, depending on carbon allowance prices.
- 27 COM(2006) 818 final, above at note 18, 5, and SEC(2006) 1684, *ibid*, para 20, which states '[f]or an allowance price of €30 and a geographic coverage of all departing flights, by 2020 revenue tonne kilometres decrease by 1.7% for domestic flights, 1.9% for flights between Member States, and 1.5% for flights to and from third countries compared to business as usual levels. This breaks down into reductions of 1.6%, 1.9% and 1.6% respectively for passenger demand, and 3.1%, 2.0% and 1.4% respectively for cargo demand'. For a clear explanation of price elasticities in passenger travel, see Brian Pierce, 'What Is Driving Travel Demand? Managing Travel's Climate Impacts' in Jennifer Blanke and Thea Chiesa (eds), *The Travel & Tourism Competitiveness Report 2008: Balancing Economic Development and Environmental Sustainability* (Geneva: World Economic Forum, 2008).
- 28 COM(2006) 818 final, *ibid*, 5.
- 29 See Sascha Albers, Jan-André Böhne and Heiko Peters, 'Will the EU-ETS instigate airline network reconfigurations?' (2009) 15 *Journal of Air Transport Management* 1.
- 30 Pentelow and Scott, above at note 18, 203 (flights to the Caribbean based on a hypothetical EU-style ETS operated by the EU, the US and Canada). Faber and Brinke estimate a decrease in tourist travel of 2.4%, *ibid*, at 14-15. Even the European Commission, in its impact assessment, considered that inbound tourism to the EU would decrease by up to 5 percent: SEC(2006) 1684, above at note 18.
- 31 Tourism has been estimated to contribute 59 percent of Barbados's GDP: Pentelow and Scott, *ibid*, 202.
- 32 Pentelow and Scott, *ibid*, 203, estimate total revenue losses to the Caribbean region at US\$1.3 billion from 2012 to 2020, based on a 7 per cent reduction (though based on a much more general hypothetical ETS: see above at note 18).
- 33 Steven Truxal, 'The ICAO Assembly Resolutions on International Aviation and Climate Change: An Historic Agreement, a Breakthrough Deal and the Cancun Effect' (2011) 36 *Air and Space Law* 217.
- 34 Consolidated Statement of Continuing ICAO Policies and Practices Related to Environmental Protection, ICAO Assembly Resolution A36-22, 28 September 2007, para 1(b)(1), at http://www.icao.int/env/A36_Res22_Prov.pdf.
- 35 Consolidated Statement of Continuing ICAO Policies and Practices Related to Environmental Protection, ICAO Assembly Resolution A37-19, 8 October 2010, para 6(c), http://www.icao.int/icao/en/assembl/A37-Docs/a37_res_prov_en.pdf.
- 36 *ibid*, para 14.

- 37 'ICAO Member States agree to historic agreement on aviation and climate change', ICAO News Release PIO 14/10, 8 October 2010, <http://www2.icao.int/en/Assembly37newsroom-public/Documents/ICAO%20Member%20States%20Agree%20To%20Historic%20Agreement%20On%20Aviation%20And%20Climate%20Change.pdf>. See Truxal, above at note 33, and, more skeptically, Michel Adam, 'ICAO Assembly's Resolution on Climate Change: A 'Historic' Agreement?' (2011) 36 Air and Space Law 23.
- 38 Reservations to the EU's scheme were lodged by the Russian Federation, the United States, China, and Argentina on behalf of a number of other countries. The reservations available in an untitled compilation document at http://www.icao.int/icao/en/assembl/A37-Docs/10_reservations_en.pdf.
- 39 The 44 states comprise the 27 EU Member States and an additional 17 other states members of the European Civil Aviation Conference (ECAC): *ibid*.
- 40 The votes were 26 in favour (Argentina, Brazil, Cameroon, China, Dominican Republic, Ecuador, Egypt, El Salvador, Ghana, India, Japan, Malaysia, Mexico, Namibia, Nigeria, Republic of Korea, Russian Federation, Saudi Arabia, Singapore, South Africa, Switzerland, Tunisia, Uganda, United States, Uruguay, Venezuela), 8 against (Austria, France, Germany, Iceland, Italy, Romania, Spain, United Kingdom), and 2 abstentions (Australia and Canada): see 'States opposed to Europe's emissions trading scheme win ICAO Council backing but EU remains defiant', <http://www.greenaironline.com/news.php?viewStory=1366> (states' votes have been calculated based on the ICAO Council membership).
- 41 ICAO Working Paper, 'Inclusion of International Civil Aviation in the European Union Emissions Trading Scheme (EU ETS) and its Impact' (Presented by Argentina, Brazil, Burkina Faso, Cameroon, China, Colombia, Cuba, Egypt, Guatemala, India, Japan, Malaysia, Mexico, Morocco, Nigeria, Paraguay, Peru, Republic of Korea, Russian Federation, Saudi Arabia, Singapore, South Africa, Swaziland, Uganda, the United Arab Emirates and the United States), C-WP/13790, 17 October 2011. The New Delhi Declaration itself, annexed to the Working Paper, was adopted by 23 countries, including those presenting the paper plus Chile and Qatar but minus Burkina Faso, Cameroon, Guatemala, Morocco, and Peru.
- 42 Robert Wall, 'China's Objection To EU ETS Hits A380 Order', Aviation Week, 28 June 2011, http://www.aviationweek.com/aw/generic/story_generic.jsp?channel=comm&id=news/avd/2011/06/28/08.xml&headline=China%27s%20Objection%20To%20EU%20ETS%20Hits%20A380%20Order.
- 43 Anurag Kotoky, 'India joins China in boycott of EU carbon scheme', Reuters, 22 March 2012, <http://www.reuters.com/article/2012/03/22/uk-india-eu-emissions-idUSLNE82L02220120322>.
- 44 HR 2594 'European Union Emissions Trading Scheme Prohibition Act of 2011', details available at <http://hdl.loc.gov/loc.uscongress/legislation.112hr2594>. The bill is currently being considered by the Senate Committee on Commerce, Science, and Transportation.
- 45 'EU Tells Clinton It Won't Abandon Carbon Limits for Airlines', Bloomberg Businessweek, 17 January 2012, <http://news.businessweek.com/article.asp?documentKey=1376-LXXZVY1A74E801-7RN4RU7HKN5492BA60E0BF88HF>.
- 46 *ibid*.
- 47 Case C-366/10, *Air Transport Association of America, American Airlines, Inc, Continental Airlines, Inc, United Airlines, Inc v The Secretary of State for Energy and Climate Change* [2010] OJ C260/9 (including the claims). The reference was made in *R (Air Transport*

- Association of America Inc) v Secretary of State for Energy and Climate Change* [2010] EWHC 1554 (Admin), 27 May 2010. For a transcript of the proceedings, see <http://www.casetrack.com/ct4plc.nsf/items/8-503-3384>.
- 48 Case C-366/10, *Air Transport Association of America, American Airlines, Inc, Continental Airlines, Inc, United Airlines, Inc v The Secretary of State for Energy and Climate Change*, (AG Opinion), 6 October 2011, at <http://curia.europa.eu/>. Advocate General Kokott found that only certain provisions in the Open Skies Agreement had direct effect in EU law, such that the applicants could rely on it. She also found, in the alternative, that the EU's scheme would not violate these obligations in any case.
- 49 Case C-366/10, *Air Transport Association of America, American Airlines, Inc, Continental Airlines, Inc, United Airlines, Inc v The Secretary of State for Energy and Climate Change*, 21 December 2011 [2011] ECR I-0000.
- 50 Joint Declaration of the Moscow meeting on inclusion of international civil aviation in the EU-ETS, 22 February 2012, adopted by Armenia, Argentina, Republic of Belarus, Brazil, Cameroon, Chile, China, Cuba, Guatemala, India, Japan, Republic of Korea, Mexico, Nigeria, Paraguay, Russian Federation, Saudi Arabia, Seychelles, Singapore, South Africa, Thailand, Uganda and United States of America, available at <http://images.politico.com/global/2012/02/120222.pdf>.
- 51 There is trade in services under Mode 2 (consumption abroad) when a service consumer travels to a service supplier in another WTO Member's territory: Article I:2 GATS. In her Opinion in ATAA, above at note 48, para 229, Advocate General Kokott said that 'the purpose [of the EU emissions trading scheme] is environmental and climate protection and it has nothing to do with the importing or exporting of goods'. This does not of course mean that the scheme has no effects on imports or exports of goods (or services).
- 52 See WTO Panel Report, *Argentina - Hides and Leather*, WT/DS155/R, adopted 16 February, 2001, para 11.20, for a concise statement that 'Article XI:1, like Articles I, II and III of the GATT 1994, protects competitive opportunities of imported products not trade flows.' Further statements to similar effect are found in WTO Appellate Body Report, *Korea - Beef*, WT/DS161/AB/R, adopted 10 January 2001, para 146 (on Article III:4 GATT), and see the statements of the parties in WTO Appellate Body Report, *China - Raw Materials*, WT/DS394/AB/R, adopted 22 February 2012, paras 59, 97, 192 (on Article XI:1 GATT). The Appellate Body has interpreted the scope of GATS in a similar way: see WTO Appellate Body Report, *EC - Bananas III*, adopted 25 September 1997, para 220.
- 53 WTO Appellate Body Report, *EC - Bananas III*, *ibid*, para 136, where the Appellate Body even stated that the US had standing not only because it might be a future exporter of bananas but also because '[t]he internal market of the United States for bananas could be affected by the EC banana regime, in particular, by the effects of that regime on world supplies and world prices of bananas.' See also WTO Appellate Body Report, *US - Bananas III (Article 21.5 - US)*, WT/DS27/AB/RW/USA, adopted 22 December 2008, para 469. Trade effects do, however, have an effect on the value of retaliatory measures than may be adopted by a complainant against an unsuccessful recalcitrant defendant: Article 22.4 of the WTO Dispute Settlement Understanding (DSU).
- 54 For a recent analysis of this issue, and a different conclusion, see Joshua Meltzer, 'Climate Change and Trade - The EU Aviation Directive and the WTO' (2012) 15 *Journal of International Economic Law* 111. Earlier general discussions are found in Joost Pauwelyn, *US Federal Climate Policy and Competitiveness Concerns: The Limits and Options of International Trade Law*,

Nicholas Institute for Environmental Policy Solutions, Working Paper 02/07, April 2007, 21; Javier de Cendra, 'Can Emissions Trading Schemes be Coupled with Border Tax Adjustments? An Analysis vis-à-vis WTO Law' (2006) 15 *Review of European Community & International Environmental Law* 131, 136; and Roland Ismer and Karsten Neuhoff, *Border Tax Adjustments: A Feasible Way to Address Non-Participation in Emission Trading*, Cambridge Working Papers in Economics (CMI Working Paper 36, 2004), 11, William Maruyama, 'Climate Change and the WTO: Cap and Trade versus Carbon Tax' (2011) 45 *Journal of World Trade* 679, 695 and Reinhard Quick, "'Border Tax Adjustment" in the Context of Emission Trading: Climate Protection or 'Naked' Protectionism?' (2008) 3 *Global Trade and Customs Journal* 163, 166.

- 55 Case C-366/10, ATAA, above at note 49, concerned obligations under the Chicago Convention and the EU-US Open Skies Agreement. However, for reasons to be explained, the description of the EU's aviation scheme is still relevant to its characterization under the GATT.
- 56 On this sentence, see Andrew Macintosh, 'Overcoming the Barriers to International Aviation Greenhouse Gas Emissions Abatement' (2008) 33 *Air and Space Law* 403, 415. See also *Federation of Tour Operators v HM Treasury* [2007] EWHC 2062 (Admin), which was appealed to the Court of Appeal on another issue.
- 57 Case C-366/10, ATAA (AG Opinion), above at note 48, paras 214 and 216.
- 58 *ibid*, para 227. Meltzer, above at note 54, at 130, points out that Advocate General Kokott should not at this stage have addressed the question whether the scheme constituted a 'tax' in applying Article 15 of the Convention, although he does not mention the rulings of Advocate General Kokott on Article 24, where the term is relevant.
- 59 Case C-366/10, ATAA, above at note 49, para 143.
- 60 For Meltzer, above at note 54, at 130, this is conclusive. See also Maruyama, above at note 54, 695.
- 61 Meltzer, *ibid*, does not address this point.
- 62 Note also that Australia describes the first phase of its Clean Energy Act, which sets a fixed price for carbon emissions, but not its second phase, which is a 'cap and trade' scheme, 'carbon tax': Clean Energy Bill 2011, Explanatory Memorandum, 29, <http://parlinfo.aph.gov.au/parlInfo/search/display/display.w3p;query=Id%3A%22legislation%2Fbillhome%2Fr4653%22>.
- 63 Erich Vranes, 'Climate Change and the WTO: EU Emission Trading and the WTO Disciplines on Trade in Goods, Services and Investment Protection' (2009) 43 *Journal of World Trade* 707, concludes that certificates may constitute both goods, 717-8, and financial instruments, 719-20. For the view that EU emissions allowances may constitute property under the European Convention on Human Rights, see Anatole Boute, 'The Protection of Property Rights under the European Convention on Human Rights and the Promotion of Low-Carbon Investments' (2010) 1 *Climate Law* 93, 111.
- 64 For a similar view, though expressed somewhat differently, see Quick, above at note 54, 166.
- 65 For the view that it does, most likely, constitute a tax, see Meltzer, above at note 54.
- 66 WTO Panel Report, *Colombia - Ports of Entry*, WT/DS366/R, adopted 20 May 2009, para 7.227, referring to WTO Panel Report, *India - Automobiles*, WT/DS146/R, adopted as modified by the Appellate Body Report, 5 April 2002, paras 7.254-7.263 and 7.265 and WTO Panel Report, *Brazil - Retreaded Tyres*, WT/DS332/R, adopted as modified by the Appellate Body Report, 17 December 2007, para 7.371.

- 67 WTO Panel Report, *Colombia - Ports of Entry*, *ibid*, paras 7.258-7.275.
- 68 WTO Appellate Body Report, *China - Raw Materials*, WT/DS394/AB/R, above at note 52, para 320. It is significant that the defendant did not dispute that the focus should be on effects: see para 57.
- 69 Case C-366/10, *ATAA (AG Opinion)*, above at note 48, para 147.
- 70 The EU Court of Justice addressed this issue with a *non sequitur*. It said: ‘As for the fact that the operator of an aircraft in such a situation is required to surrender allowances calculated in the light of the whole of the international flight that its aircraft has performed or is going to perform from or to such an aerodrome, it must be pointed out that, as European Union policy on the environment seeks to ensure a high level of protection in accordance with Article 191(2) TFEU, the European Union legislature may in principle choose to permit a commercial activity, in this instance air transport, to be carried out in the territory of the European Union only on condition that operators comply with the criteria that have been established by the European Union and are designed to fulfil the environmental protection objectives which it has set for itself, in particular where those objectives follow on from an international agreement to which the European Union is a signatory, such as the Framework Convention and the Kyoto Protocol.’ See Case C-366/10, *ATAA*, above at note 49, para 128.
- 71 The case of intra-EU flights carrying products prior to import is considered below.
- 72 GATT Panel Report, *Italy - Agricultural Machinery*, L/833, adopted 23 October 1958. Robert Howse and Don Regan, ‘The Product/Process Distinction - An Illusory Basis for Disciplining ‘Unilateralism’ in Trade Policy’ (2000) 11 EJIL 249, 254-5, argue that all process-based measures fall under Article III:4 because they affect the sale of products. They dismiss a reading of Article III:4 that focuses on the acts specifically mentioned in this provision, on the grounds that this would exclude regulations affecting internal acts not listed there, such as possession, storage, advertising, and so on.
- 73 GATT Panel Report, *US - Malt Beverages*, DS23/R, adopted 19 June 1992, para 5.63, emphasis added.
- 74 WTO Appellate Body Report, *EC - Bananas III*, above at note 52, para 211.
- 75 WTO Panel Report, *US - Poultry (China)*, WT/DS392/R, adopted 25 October 2010, para 7.102.
- 76 Cf WTO Appellate Body Report, *China - Auto Parts*, WT/DS339/AB/R, adopted 12 January 2009, paras 161-162.
- 77 Cf GATT Panel Report, *US - Tuna (Mexico)*, DS21, unadopted, circulated 3 September 1991, which concerned a measure with two aspects. The first was a prohibition on the harvesting of tuna by persons and vessels subject to US jurisdiction in a manner that harmed dolphins; the second was a prohibition on the importation of commercial fish and fish products harvested in the same manner (see para 2.4). The GATT Panel held that Article III:4 did not apply because the measure did not affect tuna ‘as such’ (paras 5.1 and 5.14). This is obviously incorrect, due to the fact that Article III:4 covers measures indirectly affecting products: Howse and Regan, above at note 72, 255. However, the result was correct. While the prohibition on production by persons within US jurisdiction fell within Article III:4, the prohibition on importation fell under Article XI:1. Only if the latter aspect of the measure was designed to enforce the former (which does not seem to have been the case) could it have been legal.

- 78 Such ‘enforcement’ measures need not have any formal correlation to the internal measure being enforced: WTO Panel Report, *EC - Asbestos*, WT/DS135/R, adopted as modified by the Appellate Body Report on 5 April 2001, paras 8.94-8.95. Indeed, it seems permissible for an internal charge to be enforced by an administrative requirement imposed at the border. In WTO Panel Report, *Argentina - Hides and Leather*, above at note 52, paras 11.143-11.145, the Panel held that a charge enforcing an internal tax fell under the Note Ad Article III. Cf WTO Panel Report, *China - Auto Parts*, WT/DS339/R, adopted 12 January 2009, para 7.249-7.258, in which the Panel considered administrative measures enforcing a tax to be internal measures because they affected the conditions of competition of the relevant products once they had been imported. For the reasons suggested here, it is suggested that the result was correct, but the reasoning flawed. It would have been more correct to consider these internal because they were enforcing an internal charge within the meaning of the Note Ad Article III. This issue was not appealed, and the Appellate Body seems to have thought that the Panel’s approach was appropriate: WTO Appellate Body, *China - Auto Parts*, above at note 76, para 196.
- 79 This is independent of whether the measure discriminates against a particular airline, a question answered in the negative by Advocate General Kokott in Case C-366/10, *ATAA* (AG Opinion), above at note 48, paras 195-201.
- 80 Meltzer, above at note 54, at 135, considers Article III:4 applicable to all flights covered by the EU’s scheme, and finds a violation on this basis.
- 81 Article XIII:1 GATT requires quantitative restrictions to be applied in a non-discriminatory manner. A number of panels (eg WTO Panel Report, *EC - Bananas III*, WT/DS27/R, adopted as modified by the Appellate Body Report, 25 September 1997, para 7.68) and academic commentators (eg Petros Mavroidis, *Trade in Goods* (Oxford: OUP, 2007), 64), limit this to permitted quantitative restrictions.
- 82 Such situations are not covered by Article V:6 GATT (discussed below), which requires non-discrimination between different routes from the same origin.
- 83 Cf WTO Appellate Body Report, *Canada - Automobiles*, WT/DS139/AB/R, adopted 19 June 2000, para 78.
- 84 Sometimes, this involves a duty tax rate, or a regulatory procedure that is not available.
- 85 League of Nations, Economic and Financial Section, Memorandum on Discriminatory Classifications (Ser LoNP 1927.11.27), p 8, quoted in Second Report on the Most-Favoured-Nation Clause, by Mr Endre Ustor, Special Rapporteur, A/CN.4/228 and Add.1 (1970) II Yearbook of the International Law Commission 199, para 148. Note however the comment of the Food and Agriculture Organization (FAO) that ‘it would seem that the specialized tariff may have been technically justified because of the genetic improvement programme which was carried out in Southern Germany at that time. At present, this specialized tariff would presumably have been worded in a different way, but in 1904 terms like Simmental or Brown Swiss were probably not recognized as legally valid characteristics [...]’ (undated, quoted *ibid*).
- 86 Though see ‘Peak of Insanity? Dutch Dream of Building Artificial Mountain,’ www.spiegel.de/international/zeitgeist/0,1518,784085,00.html (2 September 2011), and <http://www.cyclingthealps.com/tour/NederlandseBerg.html>.
- 87 WTO Panel Report, *EC - Tariff Preferences*, WT/DS246/R, adopted as modified by the Appellate Body Report, 20 April 2004, para 7.60.

- 88 WTO Panel Report, *EC - Fasteners*, WT/DS397/R, adopted as modified by the Appellate Body Report, 28 July 2011, paras 7.124-7.127. This latter finding was declared moot by the Appellate Body on other grounds, in WTO Appellate Body Report, *EC - Fasteners*, WTO/DS397/AB/R, adopted 28 July 2011, paras 397-398.
- 89 WTO Appellate Body Report, *Dominican Republic - Cigarettes*, WT/DS302/AB/R, adopted 19 May 2005, para 96. See also WTO Appellate Body Report, *US - Clove Cigarettes*, WT/DS406/AB/R, circulated 4 April 2012, para 179 n 372, casting doubt on this test.
- 90 WTO Appellate Body Report, *Korea - Beef*, above at note 52, para 146 (Article III:4 GATT); WTO Appellate Body Report, *US - FSC (Article 21.5 - EC)*, WT/DS108/AB/RW, adopted 29 January 2002, paras 219-220 (Article III:4 GATT); WTO Panel Report, *US - COOL*, WT/DS384/R, circulated 18 November 2011, para 7.391.
- 91 There are other cases on Article I:1 which appear to be of relevance. However, these are of limited analytical value, as they are based on the erroneous assumption that the requirement in Article I:1 GATT to accord such advantages ‘immediately and unconditionally’ applies to conditions which private actors must meet in order to obtain an advantage: see WTO Panel Report, *Indonesia - Automobiles*, WT/DS54/R, adopted 23 July 1998, para 14.145 and WTO Panel Report, *Canada - Automobiles*, adopted as modified by the Appellate Body report 19 June 2000, paras 10.24-10.26. Following this, some panels have even analysed straightforward cases of de jure discrimination in light of this requirement: WTO Panel Report, *EC - Bananas (Article 21.5 - Ecuador II)*, WT/DS27/RW2/ECU, adopted as modified by the Appellate Body Report, 11 December 2008, paras 7.158-7.159 and WTO Panel Report, *EC - Bananas (Article 21.5 - US)*, WT/DS27/RW2/USA, adopted as modified by the Appellate Body Report, 11 December 2008, paras 7.565-7.566; WTO Panel Report, *Colombia - Ports of Entry*, above at note 66, para 7.366; WTO Panel Report, *US - Poultry (China)*, WT/DS392/R, adopted 25 October 2010, para 7.437. In fact, the requirement of unconditional most favoured nation treatment, historically an alternative to *conditional* most favoured treatment (on which see Stephan Schill, *The Multilateralization of International Investment Law* (Cambridge: CUP, 2009), 129-139), is concerned with conditions addressed to WTO Members, not to private actors. It precludes WTO Members from according an advantage to products on condition that the other WTO Member act in a certain, for example, by adopting a certain regulatory system, or entering into a treaty: GATT Panel Report, *Belgian Family Allowances*, GATT Doc G/32, adopted 7 November 1952, para 3; *Report of the Working Party on the Accession of Hungary*, adopted 30 July 1973, BISD 20S/34, para 12; WTO Panel Report, *EC - Trademarks and Geographical Indications (US)*, WT/DS174/R, adopted 20 April 2005, para 7.704 (on Article 4 TRIPS); and see also WTO Panel Report, *Canada - Automobiles*, WT/DS139/R, para 10.25. It does not, however, preclude WTO Members from according advantages requiring private actors to comply with certain conditions. This depends on whether the advantage is, in reality, accorded to products from all WTO Members.
- 92 Art 25(a) of the Directive. The European Commission is reportedly in discussions with Russia, China, and the US on ‘equivalent measures’: ‘US, China, Russia try to fly free of EU aviation emissions cap’, 14 July 2011, Carbon Finance, at www.carbon-financeonline.com/index.cfm?section=lead&action=view&id=13817; but at this stage, it is not known what such measures might involve: E-005387/2011 Answer given by Ms Hedegaard on behalf of the Commission, to written question P-005387/2011 by Holger Krahmer (ALDE) on ‘Aviation in the European Union Emissions Trading Scheme (ETS)’, 15 July 2011.
- 93 Meltzer, above at note 54, 138, is of the same opinion.

- 94 See also WTO Secretariat, *Air Transport Services - Background Note by the Secretariat*, WTO Doc S/C/W/59, 5 November 1998, para 6.
- 95 The commercial significance of this traffic is uncertain, as the EU does not keep statistics of transited goods. It may nonetheless be assumed sufficient to warrant a discussion.
- 96 For the same conclusion, for different reasons, see Meltzer, above at note 54, 139.
- 97 Meltzer, *ibid*, is of the opposite opinion.
- 98 WTO Panel Report, *Colombia - Ports of Entry*, above at note 66, para 7.475. This interpretation was foreshadowed and strongly supported by Lothar Ehring, 'Freedom of Transit under Article V of the General Agreement on Tariffs and Trade: A Sleeping Beauty of the Multilateral Trading System', draft on file with author, 16. John Jackson, *World Trade and the Law of GATT* (Indianapolis: Bobbs-Merrill, 1969), 510-11, calls this paragraph 'perplexing'.
- 99 See WTO Panel Report, *Colombia - Ports of Entry*, *ibid*, para 7.477, fn 783.
- 100 Meltzer, above at note 54, disagrees.
- 101 WTO Appellate Body Report, *US - Gasoline*, WT/DS2/AB/R, adopted 20 May 1996, pp 14-15. Technically the issue was not appealed: see pp 9-12.
- 102 For the same opinion see Meltzer, above at note 54, 141-2; Pauwelyn, above at note 54, 35; Robert Howse and Antonia Eliason, 'Domestic and International Strategies to address Climate Change: An Overview of the WTO Legal Issues' in Thomas Cottier, Olga Nartova and Sadeq Bigdeli (eds), *International Trade Regulation and the Mitigation of Climate Change* (Cambridge: CUP, 2009), 61.
- 103 WTO Appellate Body Report, *US - Shrimp*, WT/DS58/AB/R, adopted 6 November 1998, para 136, quoted with approval in WTO Appellate Body Report, *China - Raw Materials*, above at note 52, para 355.
- 104 WTO Appellate Body Report, *China - Raw Materials*, *ibid*, para 360.
- 105 See above.
- 106 WTO Appellate Body Report, *US - Shrimp*, above at note 103, para 133.
- 107 Case C-366/10, *ATAA* (AG Opinion), above at note 48, para 154. See also the Court judgment, above at note 49, para 129.
- 108 WTO Appellate Body Report, *Brazil - Retreaded Tyres*, WT/DS332/AB/R, adopted 17 December 2007, paras 143-151.
- 109 *ibid*, para 151.
- 110 WTO Appellate Body Report, *US - Gambling*, WT/DS285/AB/R, adopted 20 April 2005, para 309.
- 111 Eg Cameron Hepburn and Benito Müller, 'International Air Travel and Greenhouse Gas Emissions: A Proposal for an Adaptation Levy' (2010) 33 *World Economy* 830.
- 112 Quite what amounts to a 'disguised restriction' remains unclear, although it has been clarified that the measure need not be 'concealed' or 'unannounced': WTO Appellate Body Report, *US - Gasoline*, above at note 101, 24 and WTO Panel Report, *Brazil - Retreaded Tyres*, above at note 108, paras 7.315-7.323. It seems to be a synonym for protectionism. This is supported by the Appellate Body's reference to 'warning signals' in WTO Appellate

Body Report, *Australia - Salmon*, WT/DS18/AB/R, adopted 6 November 1998, para 177, when considering 'disguised discrimination' under Article 5.5 of the SPS Agreement.

- 113 WTO Appellate Body Report, *US - Gasoline*, *ibid*, p 22.
- 114 WTO Appellate Body Report, *US - Shrimp*, above at note 103, para 158. Somewhat questionably, the Appellate Body went on to say that the Chapeau marks a 'line of equilibrium' between one Member's rights under the exceptions and other Members' rights under the substantive obligations of the GATT, at para 159. An exception cannot logically be restricted by an obligation to which it is an exception.
- 115 WTO Appellate Body Report, *US - Gasoline*, above at note 101, p 22, *US - Shrimp*, *ibid*, para 116; WTO Appellate Body Report, *US - Gambling*, above at note 110, para 339. This does not mean that the policy underlying a measure is irrelevant to a Chapeau analysis, as the Appellate Body wrongly said in *US - Shrimp*, para 149. For an early and convincing criticism, see Sanford Gaines, 'The WTO's Reading of the GATT Article XX Chapeau: A Disguised Restriction on Environmental Measures' (2001) 22 *University of Pennsylvania Journal of International Economic Law* 739, 778. Arwel Davies, 'Interpreting the Chapeau of GATT Article XX in Light of the 'New' Approach in *Brazil-Tyres*' (2009) 43 *Journal of World Trade* 507, 519, notes that the Appellate Body ignores its own test a few paragraphs later, at para 165 of the Report. The Appellate Body now agrees: *Brazil - Retreaded Tyres*, above at note 108, para 227, citing *US - Shrimp*, para 165.
- 116 WTO Appellate Body Report, *US - Shrimp*, above at note 103, para 150.
- 117 Davies, above at note 115, 514-5, also criticizes the usual three stage approach, however, his own alternative is also not without difficulties: he would first determine discrimination, then identify the comparators, and then deal with justification.
- 118 Something should be said about methodology. The reading of the Chapeau offered here combines economic tests, in identifying the relevant pool of 'countries' to be compared, and in determining discrimination, with policy-based tests, in narrowing down the countries to be compared to those with the same 'conditions', and considering the reasons for any discrimination. This may appear to be inconsistent with the occasional statements made by Appellate Body which give the impression that neither policy nor economics have any role in the application of the Chapeau. However, it is submitted that this model, based on an oscillation between competitive effects and regulatory purpose, is supported by the jurisprudence on the issue, and also makes doctrinal sense.
- 119 Davies, above at note 115, 513, recognizes that competition is the core issue in determining the comparators, but asks the question of the 'conditions' prevailing, not the 'countries' where these conditions prevail. As argued here, the 'conditions' are determined by reference to the policy of the measure.
- 120 WTO Appellate Body Report, *US - Shrimp*, above at note 103, para 176.
- 121 WTO Appellate Body Report, *US - Gasoline*, above at note 101, p 23.
- 122 WTO Panel Report, *EC - Asbestos*, above at note 78, para 8.227; WTO Report, *Argentina - Hides and Leather*, above at note 52, para 11.314. In WTO Panel Report, *EC - Tariff Preferences*, above at note 87, para 7.235, the Panel considered Iran to be a relevant 'country' and a failure to grant Iranian products the same treatment as Indian products as discriminatory. This is a somewhat peculiar finding, given that Iran, a non-WTO Member, was not entitled to any treatment whatsoever.

- 123 Gaines, above at note 115, 779.
- 124 WTO Appellate Body Report, *US - Shrimp*, above at note 103, para 149.
- 125 *ibid*, para 165. There is admittedly a way of understanding *US - Shrimp* as prohibiting the *same* treatment of countries where *different* conditions prevail. Some of the language of the Report supports this, eg at para 164. Gaines, above at note 115, 784-786, analyses the case on this basis. However, one can also say that the imposition of a certification requirement was simply an unnecessary burden on products in similar situations.
- 126 WTO Appellate Body Report, *US - Gasoline*, above at note 101, pp 25-26.
- 127 *ibid*, p 26.
- 128 WTO Panel Report, *Brazil - Retreaded Tyres*, above at note 66, para 7.307.
- 129 See, eg, WTO Panel Report, *Argentina - Hides and Leather*, above at note 52, para 11.315 fn 570. This did not prevent the Panel from dealing with the question of justification later, after all.
- 130 *ibid*, para 11.314. Cf also Article 5.5 of the SPS Agreement.
- 131 WTO Appellate Body Report, *US - Shrimp*, above at note 103, para 165.
- 132 *ibid*, paras 174-5.
- 133 WTO Appellate Body Report, *Brazil - Retreaded Tyres*, above at note 108, para 232.
- 134 WTO Appellate Body Report, *US - Shrimp*, above at note 103, para 184. This aspect of the measure was subsequently amended by providing for an investigation of the 'conditions' in other countries. While no such investigation was commenced, the mechanism alone was held to be sufficient in WTO Appellate Body Report, *US - Shrimp (Article 21.5 - Malaysia)*, WT/DS58/AB/RW, adopted 21 November 2001, para 148-150.
- 135 WTO Appellate Body Report, *US - Shrimp*, *ibid*, para 176. In WTO Appellate Body Report, *US - Shrimp (Article 21.5 - Malaysia)*, *ibid*, para 134, the Appellate Body determined that, due to subsequent negotiations, the measure was no longer being applied in a manner constituting unjustified or arbitrary discrimination.
- 136 WTO Appellate Body Report, *US - Gasoline*, above at note 101, *ibid*, p28. The Appellate Body also said that this solution would have avoided any discrimination at all: at p25.
- 137 *ibid*, p27.
- 138 *ibid*, p27.
- 139 WTO Appellate Body Report, *US - Shrimp (Article 21.5 - Malaysia)*, above at note 134, para 123-4. In fact, this was an *obiter dictum*, as the Appellate Body had already found that there was no discrimination in the first place.
- 140 Arguably, one could treat the different degrees of risk in affected countries as rendering them not the 'same' for these purposes. Such an analysis would achieve a similar outcome to that proposed here.
- 141 Guideline (f) of the Guidelines on market-based measures (MBMs) in the Annex to ICAO Resolution A37-19, above at note 35, states that 'MBMs [market-based measures] should not be duplicative and international aviation CO2 emissions should be accounted for only once'.

- 142 Activities occurring on aircraft are subject to the jurisdiction of the flag state over the high seas, and a concurrent jurisdiction between the flag state and any state over whose territory the aircraft is flying at the time of the activity, with priority granted to the flag state. This applies, for example, to questions of the nationality of children born while on an aircraft: Shabtai Rosenne, 'The Perplexities of Modern International Law: General Course on Public International Law' (2001) 291 *Receuil des Cours* 9, 336-7.
- 143 See above.
- 144 See above at note 6.
- 145 WTO Appellate Body Report, *Brazil - Retreaded Tyres*, above at note 108, para 227. The same point was argued by the EU in the case: see *ibid*, para 31.
- 146 Case C-366/10, ATAA, above at note 49, para 129; see also the Advocate General's Opinion, above at note 48, para 154.
- 147 WTO Appellate Body Report, *Brazil - Retreaded Tyres*, above at note 108, para 228; see also WTO Panel Report, *Brazil - Retreaded Tyres*, above at note 66, para 7.288, quoted in WTO Appellate Body Report, *Brazil - Retreaded Tyres*, para 219 and note 417.
- 148 Lufthansa calculates that a Hong Kong-Dubai-Frankfurt flight would result in emissions of 296t of carbon, 18 percent more than a direct Hong-Kong Frankfurt flight: Lufthansa, EU emissions trading: Europe headed down a dead end', Policy Brief, December 2009, at http://presse.lufthansa.com/fileadmin/downloads/en/policy-brief/12_2009/LH-Policy-Brief-December-Emissions-trading.pdf.
- 149 Article I:1 GATS.
- 150 WTO Appellate Body Report, EC - Bananas III, above at note 52, para 220; WTO Appellate Body Report, *Canada - Automobiles*, above at note 83, paras 160-167.
- 151 Michael Koebele, 'Commentary on the Air Transport Services Annex' in R Wolfrum et al (eds), *WTO - Trade in Services* (The Hague, Brill: 2008), 611, note 67.
- 152 This would be equivalent to what has been termed the 'market access' test in EU law: see Catherine Barnard, *The Substantive Law of the EU: The Four Freedoms*, (OUP: Oxford, 2010), 19-20.
- 153 See eg the EU argument as reported in WTO Panel Report, *US - Gambling*, WT/DS285/R, adopted as modified by the Appellate Body Report, 20 April 2005, para 4.16.
- 154 See also Werner Zdouc, 'WTO Dispute Settlement Practice Relating to the General Agreement on Trade in Services' in Federico Ortino and Ernst-Ulrich Petersmann (eds), *The WTO Dispute Settlement System, 1995-2003* (The Hague: Kluwer, 2004), 394.
- 155 In the 'Dunkel Draft' of GATS, GATT Doc MTN.TNC/W/FA, 20 Dec 1991, this paragraph referred expressly to the ICAO agreements: '[e]xcept as set out in paragraph 3, no provision of the Agreement shall apply to measures affecting: (a) traffic rights covered by the Chicago Convention, including the five freedoms of the air, and by bilateral air services agreements.'
- 156 IATA still sets a base rate, but it is of minor importance. For example, in 2002 it was estimated that as little as 5 per cent of British Airways freight was carried at published IATA rates. Rigas Doganis, *Flying Off Course: The Economics of International Airlines*, 3rd ed (London: Routledge, 2002), 325.

- 157 The UK Civil Aviation Authority (CAA) no longer even requires airlines to file their fares. In its view, 'the interests of users will be best served if airlines are free to set their own prices without regulatory intervention, subject only to the application of normal competition policy': Civil Aviation Authority, *CAA Statement of Policies on Route and Air Transport Licensing*, available at <http://www.caa.co.uk/default.aspx?catid=589&pagetype=90&pageid=7228>.
- 158 See complainants' arguments, above at note 48. Article 11 of the Open Skies Agreement guarantees, inter alia, that '[p]rices for air transportation services operated pursuant to this Agreement shall be established freely'.
- 159 Meltzer, above at note 54, at 125-7, comes to the same conclusion, though via a different route. Meltzer's argument is that a measure comes within the scope of paragraph 2(a) of the Annex if it does not violate the Chicago Convention. Historically, there is much to be said for this view, particularly in light of the drafting history of paragraph 2(a), as per note 177, but it is probably overstating the connection to imply that there is mutual exclusivity between the Chicago Convention and the GATS. Among other things, it renders paragraph 4 of the Annex redundant.
- 160 Koebele, above at note 151, 613-4.
- 161 Ibid, 610. Air services agreements are concluded as a result of the principle of national sovereignty over airspace (Art 1 Chicago Convention) and the requirement for special permission or other authorization to operate a scheduled international air service into or over another Contracting State and in accordance with the terms of that permission or authorization (Art 6 Chicago Convention): see, eg, GATT Doc MTN.GNS/W/36, 16 May 1988, 5.
- 162 Case C-366/10, *ATAA*, above at note 49.
- 163 *Federation of Tour Operators v HM Treasury* [2007] EWHC 2062 (Admin), para 84.
- 164 *Board of Airline Representatives in The Netherlands (BARIN) v The Netherlands, Ministry of Finance*, LJN: BI3450, Hoge Raad, 08/04121, 10 July 2009 (applying the relevant test of 'manifest incompatibility'). For an English translation see L A note M Barnhoorn, 'Netherlands Judicial Decisions Involving Questions of Public International Law, 2008-2009' (2010) *Netherlands Yearbook of International Law* 379, 432. The case is discussed by B Havel and Niels van Antwerpen, 'The Dutch Ticket Tax and Article 15 of the Chicago Convention' (2009) 34 *Air and Space Law* 141 and 'The Dutch Ticket Tax and Article 15 of the Chicago Convention (continued)' (2009) 34 *Air and Space Law* 449.
- 165 See above at note 163, para 3.
- 166 ICAO Assembly Resolution A37-19, above at note 35 and Reservations, above at note 38.
- 167 *ibid*, para 2(a).
- 168 This is discussed in Truxal, above at note 33, 219-222.
- 169 The Appellate Body has said that panels have *Kompetenz-Kompetenz*, and this is a perfect example of when that power would need to be exercised: WTO Appellate Body Report, *Mexico - Corn Syrup (Article 21.5 - US)*, WT/DS132/AB/RW, adopted 21 Nov 2001, para 36. For the same conclusion, see Meltzer, above at note 54, at 127.
- 170 It is possible for WTO Members to schedule exemptions from Article II:1 GATS, but the EU has not listed any relevant exemptions: *European Communities and their Member States - Final List of Article II (MFN) Exemptions*, GATS/EL/31, 15 April 1994.

- 171 European Communities and their Member States, Schedule of Specific Commitments, GATS/SC/31, 15 April 1994.
- 172 Meltzer, above at note 54, 147-50, mentions tourism but focuses on the impacts of the EU's aviation scheme on the aviation transport sector. This, however, is obviously excluded by paragraph 2(a) of the Annex, which excludes measure affecting 'traffic rights', defined to include 'the right for scheduled and non-scheduled services to operate and/or to carry passengers.'
- 173 WTO Panel Report, *US - Gambling*, WT/DS285/R, above at note 153, para 6.298.
- 174 WTO Appellate Body Report, *US - Gambling*, above at note 110, para 232.
- 175 It is not necessary to consider the application of Article VI GATS, on domestic regulation of services.
- 176 Article XVII:2 and 3 add some interpretive gloss.
- 177 See above at note 89.
- 178 WTO Panel Report, *Canada - Automobiles*, above at note 91, para 10.300.
- 179 This comment draws on my earlier work on trade and climate change, especially Howse and Eliason, 'Domestic and international strategies to address climate change: an overview of the WTO legal issues', in T. Cottier, et al., eds., *International Trade and the Mitigation of Climate Change* (New York and Cambridge: Cambridge University Press, 2009)
- 180 I have discussed the wide-ranging consequences of these rulings in 'The Appellate Body Rulings in the Shrimp/Turtle Case: A New Legal Baseline for the Trade and Environment Debate', (2002) 27 *Columbia Journal of Environmental Law* at 489.
- 181 It should be noted that the provision interpreted in *Shrimp/Turtle* was an exception, allowing the maintenance of otherwise non-compliant WTO measures. Where I do not necessarily agree with Dr Bartels is in some of his assertions suggesting that there could be a prima facie violation of WTO rules that would need to be justified under the relevant exceptions provision in the GATT or GATS. Dr Bartels sometimes relies on provisions that have not been applied often in dispute settlement and only in very different policy contexts (the GATT provisions on freedom of transit, for instance).

On National Treatment and MFN I read the case law differently than Dr Bartels. Briefly, the ETS aviation scheme determines the allowances a carrier must present solely on the basis of the size of the environmental externality it creates - an objective, economically-justified criterion neither directly nor indirectly linked to the nationality of the carrier. In the circumstances, it would be very difficult to establish that there is 'less favorable' treatment, either under National Treatment or MFN. With respect to National Treatment, in the *Dominican Republic-Cigarettes* case, the Appellate Body noted 'the existence of a detrimental effect on a given imported product resulting from a measure does not necessarily imply that this measure accords less favourable treatment to imports if the detrimental effect is explained by factors or circumstances unrelated to the foreign origin of the product, such as the market share'. (paragraph 96). As the Appellate Body more recently noted in the *US-Clove Cigarettes* report, in *Dominican Republic-Cigarettes*, the higher cost imposed on importers 'did not conclusively demonstrate less favourable treatment, because it was... a function of sales volumes'. (footnote 372). Similarly, in the case of the aviation ETS, to the extent that foreign carriers or foreign products face a greater burden, this is solely attributable to the greater volume of the environmental externality attributable to the air transport in question.

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- Generate policy-oriented and solutions-focused knowledge on the interface between the multilateral trading system and various regimes and initiatives promoting the transition to a sustainable energy future;
- Expand the knowledge community on trade and sustainable energy by including nontraditional actors and view-points in the debate, including oil producers, climate scientists, agricultural economists, specialists in services trade, labour and consumer organisations; and
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