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Regulating CO₂ Emissions from Aviation in the EU

By Joshua Meltzer



Introduction

The EU recently extended the scope of its cap and trade system to cover all airlines' CO₂ emissions.[1] This has led to significant international condemnation, diplomatic interventions, and threats of a trade war. U.S. airlines have also challenged the legality of the Aviation

Directive before competent courts in the EU. This *Insight* provides an overview of the Aviation Directive, explains why the EU extended it to non-EU airlines—the most controversial element—and outlines how the Aviation Directive could be challenged under the rules of the World Trade Organization (“WTO”).

Why Target Aviation?

According to the Intergovernmental Panel on Climate Change (“IPCC”), aviation represents approximately 2.5% of global greenhouse gas emissions and 13% of all CO₂ emissions from the transportation sector.[2] In addition, CO₂ emissions from aviation are growing at approximately 3 to 4% annually.[3] Airlines also emit NO_x,[4] which can encourage the formation of ozone, an important contributor to global warming. Moreover, aircraft produce contrails, which can diffuse into cirrus-like clouds that contribute to global warming. The combination of these effects could be two to four times the impact of CO₂ emissions alone.[5]

Why Now?

The Kyoto Protocol Article 2.2 requires states to find ways to reduce CO₂ emissions from aviation by working through the International Civil Aviation Organization (“ICAO”). In 2001, ICAO called on states to promote scientific research to address the contribution of the aviation industry to climate change. And in 2007, ICAO established a climate change group, which recommended improving the average fuel efficiency of airplanes by 2% per annum. However, given annual growth in aviation traffic of 4 to 5%, this would not reduce the

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growth of CO₂ emissions from aviation. The EU has claimed that it acted alone due to the difficulty of making progress internationally.

How Does the Aviation Directive Work?

The Aviation Directive includes CO₂ emissions from aviation within its broader cap and trade framework, but with its own set of targets. For the period 2004-2006 (the baseline), CO₂ emissions are to be reduced by 3%, and from 2013-2020, CO₂ emissions will need to be 5% below the baseline. A significant number of permits are allocated free to airlines. In 2012, 85% of allowances are allocated free, and 15% are offered for sale; in 2013-2020, 82% of allowances are allocated free, 15% will be sold, and 3% set aside for new airlines and new flights to Europe.

Each year on April 30, aircraft operators are required to render allowances equal to their total CO₂ emissions during the preceding calendar year. Airlines that fail to reduce their emissions in line with the cap will need to purchase allowances to cover their CO₂ emissions. Failure to do so incurs a fine of €100 per ton of CO₂ in addition to the ongoing obligation to purchase permits to cover CO₂ emissions.

Airlines will be able to use certified emission reduction units (“CERs”) and emission reduction units (“ERUs”) to satisfy up to 15% of the allowances they must surrender in a given year. The Aviation Directive exhorts EU member states to use revenues from the scheme for climate change purposes, but the EU cannot require members to use these funds for any particular purpose. The EU can exempt from the Aviation Directive airlines from other countries that are also regulating CO₂ emissions from aviation.

International Criticism of the Aviation Directive

The EU’s decision to include non-EU airlines under its cap and trade system has been controversial. For instance, U.S. Secretary of State Hillary Clinton and U.S. Secretary of Transportation Ray LaHood have stated that they “strongly object on legal and policy grounds” to the application of the Aviation Directive to U.S. airlines. They have urged the EU to halt, suspend, or delay application of the Directive.^[6] And China and India have prohibited their airlines from complying with the EU Aviation scheme, stating that it violates the United Nations Framework Convention on Climate Change principle of common but differentiated responsibility, the notion that developed and developing countries should not be expected to make the same efforts in reducing their CO₂ emissions.^[7]

The Carbon Leakage and Competitiveness Impacts

The EU scheme is being applied to EU and non-EU airlines to limit so-called carbon leakage and competitiveness issues. Carbon leakage arises when a carbon price causes domestic businesses to relocate to countries not pricing carbon or to increase imports of goods from countries not pricing carbon, resulting in no net reduction in global CO₂ emissions. Competitiveness issues occur when a carbon price increases the price of domestically produced goods, causing consumers to substitute cheaper imports from countries not pricing carbon, ultimately harming domestic industry and undermining support for these policies. The EU also hopes that extending the scheme to non-EU airlines will incentivize other countries to regulate CO₂ emissions from their aviation sector and to engage more fully in the efforts in ICAO to reach agreement on this issue.

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Legal Challenges to the Aviation Directive

The airline industry has challenged the legality of the Aviation Directive before the UK High Court. The High Court gave permission for the complainants to seek a preliminary ruling from the Court of Justice of the European Union (“ECJ”) on whether the action of the EU in regulating CO₂ emissions from aviation is consistent with principles of customary law, the Chicago Convention,^[8] the Kyoto Protocol, and the 2007 U.S.-EU Open Skies Agreement. On December 21, 2011, the ECJ ruled as follows:^[9]

- The EU is not a party to, and therefore not bound by, the Chicago Convention.^[10]
- The Kyoto Protocol does not provide a legal basis for challenging EU action.^[11]
- The Aviation Directive does not breach the obligation in the Open Skies Agreement to exempt fuel from taxes and other fees, as no direct or inseverable link exists between the cost of the Aviation Directive and fuel used.^[12]
- The Aviation Directive does not breach customary international law principles of state sovereignty as it applies only to aircraft that choose to operate in EU airspace. Using events that take place outside EU airspace in calculating emission allowances does not breach state sovereignty.^[13]

Agreement in ICAO?

The EU has stated that it is prepared to review its Aviation Directive should there be agreement in ICAO on market-based measures for reducing CO₂ emissions from aviation.^[14] However, the EU has said that any ICAO agreement must include the following:

- a global solution that delivers more emissions reduction than under current measures;
- non-discrimination amongst airlines; and
- CO₂ emissions reduction targets for all ICAO member countries.^[15]

Work is progressing in ICAO but no outcome is expected until 2013 at the earliest.

WTO Implications

Requiring non-EU airlines to purchase emission allowances affects services trade and could therefore also be challenged under the WTO General Agreement on Trade in Services (“GATS”). Requiring non-EU airlines to purchase emissions allowances could also indirectly affect trade in goods, where airlines pass through the cost of the Aviation Directive in their cargo rates. Indeed, approximately 50% of air cargo is still carried on passenger flights.^[16] This could raise questions about the consistency of the Directive with the General Agreement on Tariffs and Trade 1994 (“GATT”). That the same regulatory scheme can affect trade in goods and services has been confirmed by the Appellate Body in for example *EC—Bananas*.^[17]

A threshold question regarding GATS is whether the Aviation Directive falls within the GATS Annex on Air Transport Services (“AATS”), which excludes “traffic rights” from GATS. The AATS definition of “traffic rights” may be affected by the scope of traffic rights regulated under the Chicago Convention and more recent bilateral air services agreements such as the U.S.-EU Open Skies Agreement. The European Court of Justice 2011 decision that the

Aviation Directive is not a tax or charge on fuel indicates that the Aviation Directive does not regulate matters subject to the Open Skies Agreement. Accordingly, the Aviation Directive does not deal with traffic rights as defined in the AATS and is subject to GATS.[18]

The key GATS and GATT obligations at issue are 1) that members not accord less favorable treatment to goods, services or service suppliers from one WTO member than to like goods, services or service suppliers from any other country (the most-favored nation (“MFN”) commitment); and 2) that WTO members not accord less favorable treatment to imported goods, services or service suppliers than to like domestic goods, services or service suppliers (the national treatment commitment).

The EU Aviation Directive is a cost to airlines based on their CO₂ emissions, and the cost varies directly with the distance flown. Although the Directive applies equally to all airlines arriving in and departing EU airspace, it imposes a higher cost on goods and services coming from countries that are further away from the EU than on like goods and services from within the EU or countries closer to the EU. This is a form of *de facto* discrimination, which could violate the EU’s MFN and national treatment commitments under the GATS and the GATT.

The EU could seek to justify the Aviation Directive under the general exceptions provisions in GATS Article XIV and GATT Article XX for measures that relate to the conservation of exhaustible natural resources (GATT Article XX(g)) or are necessary for the protection of human, animal or plant life or health (GATT Article XX(b) and GATS Article XIV(b)). The EU would have little difficulty in showing that the Aviation Directive *prima facie* falls within these paragraphs because of the environmental objective of the measure and its contribution to that objective.

However, the key challenge for the EU would be demonstrating that the Aviation Directive complies with the *chapeau* to GATS Article XIV and GATT Article XX. The *chapeau* ensures that trade measures are not exempt from compliance with GATT/GATS obligations if they are applied in ways that constitute arbitrary or unjustifiable discrimination or a disguised restriction on trade, raising the following issues:

- Is the price signal from the Aviation Directive consistent with the policy justification of reducing CO₂ emissions? Arbitrary and unjustifiable discrimination could arise by applying the Aviation Directive to goods from outside the EU that have a lower CO₂ lifecycle than like domestic goods.
- The Aviation Directive could create an incentive for long-haul flights to land in countries close to the EU to limit their liability under the Directive to the final flight into the EU. Arbitrary and unjustifiable discrimination could arise if using these transit points leads to longer flights and increased CO₂ emissions.[19]
- The EU cannot condition application of the Directive to non-EU airlines based on whether the other country has adopted the same policies to reduce emissions from aviation.[20] The EU will instead need to demonstrate that it takes into account the different situations that exist in different countries.

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Endnotes:

[1] Council Directive 2008/101/EC, 2009 O.J. (L 8/3) (EC) (amending Council Directive 2003/87/EC so as to include aviation activities in the scheme for greenhouse gas emission allowance trading within the community) [hereinafter Aviation Directive].

[2] David S. Lee, *The Impact of Aviation on Climate*, 20 *Envtl. Sci. & Tech.* 13 (2004).

[3] Contribution of Working Group III to the Fourth Assessment Report of the Intergovernmental Panel on Climate Change 49 (Bert Metz et al. eds., 2007).

[4] NO_x is a generic term for mono-nitrogen oxides NO and NO₂, and it is produced from the reaction of nitrogen and oxygen gases in the air during combustion.

[5] Lee, *supra* note 2, at 20.

[6] U.S. Dept. of State Letter by Sec'y of State, Hillary Clinton, and Sec'y of Transp., Ray LaHood (Dec. 16, 2011), *available at* <http://www.nbaa.org/ops/environment/eu-ets/20111216-eu-ets-us-state-department-clinton.pdf>.

[7] See Statement by the China Air Transport Association (CATA) on the EU ETS (Mar. 10, 2011).

[8] Convention on International Civil Aviation, Dec. 7, 1944, 15 U.N.T.S. 295 (1994), *available at* <http://www.unhcr.org/refworld/publisher,ICAO,,,3ddca0dd4,0.html> [hereinafter Chicago Convention].

[9] Case C-366/10, *Air Transp. Ass'n of Am. v. Sec'y of State for Energy & Climate Change of the United Kingdom of Great Britain & N. Ireland*, E.C.R. ¶¶ 52-55 (Dec. 21, 2011), *available at* <http://curia.europa.eu/juris/documents.jsf?num=C-366/10>.

[10] *Id.* ¶ 71.

[11] *Id.* ¶ 78.

[12] *Id.* ¶¶ 142–43.

[13] *Id.* ¶¶ 125–30.

[14] Jos Delbeke, Keynote Address: A New Flightplan – Getting Global Aviation Climate Measures Off the Ground, Keynote Address Presented at the Conference, A New Flightplan - Getting Global Aviation Climate Measures Off the Ground (Feb. 7, 2012), http://ec.europa.eu/clima/news/docs/speech_en.pdf.

[15] *Id.*

[16] Peter Morrell, Dept. of Air Transp., Cranfield Univ., *The Environmental Impact of Air Cargo* (May 13, 2008), *available at* <http://www.tiaca.org/images/tiaca/PDF/The%20Environmental%20Impact%20of%20Air%20Cargo%20-%20Peter%20Morrell.pdf>.

[17] Appellate Body Report, *European Communities—Regime for the Importation, Sale and Distribution of Bananas*, ¶ 211, WT/DS27/AB/R (Sept. 9, 1997).

[18] Joshua Meltzer, *Climate Change and Trade-The EU Aviation Directive and the WTO*, 15 *J. Int'l Econ. L.* 13–18 (2012).

[19] Appellate Body Report, *Brazil—Measures Affecting Imports of Retreaded Tyres*, ¶ 228, WTDS332/AB/R (Dec. 17, 2007).

[20] Appellate Body Report, *United States—Import Prohibition of Certain Shrimp and Shrimp Products: Recourse to Article 21.5 of the DSU by Malaysia*, ¶ 144, WT/DS58/AB/RW (Oct. 22, 2001).