Briefing paper: Kerosene & ticket tax

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1 Short summary of strategy/measure

For historical reasons, aviation has enjoyed tax benefits that are unheard of in most other areas of society. This can partly be attributed to the international character of aviation as opposed to the national character of taxation. The 1944 Chicago convention as the foundational international agreement on aviation primarily sought to facilitate and expand international aviation. The Convention has given rise to a practice of exempting aviation fuel from taxation (excise duty) and value added tax (VAT), formalised through a series of bilateral air service/transport agreements. This principle has been upheld in cross-border aviation (if not at the domestic level). However, the Chicago Convention as such does not explicitly prohibit the taxation of aviation fuel, only for fuel that is already on board at landing.

By introducing adequate taxation in the aviation sector on par with other transport modes, demand could effectively be reduced, while at the same time generating significant revenue streams. Such taxation could take on several forms. Some of the most commonly envisioned taxes include a tax on kerosene comparable to other fuels, the collection of VAT, or ticket taxes (passenger taxes) that can be varied according to distance travelled and other factors (see also briefing paper on frequent flyer levy). The envisioned revenues of such taxes depends on many factors, but in order to provide some perspective, a recent study commissioned by the European Commission (CE Delft 2019) estimates that introducing a kerosene tax in Europe (at 33cts, the agreed EU minimum) would generate €17bn in fiscal revenue, while VAT (at 19%) would raise another €30bn Europe-wide. At the same time, emissions would be reduced by 11% (kerosene tax) and 18% (VAT), respectively.

It is important to consider aviation taxes in the context of other approaches to levy charges in this sector, including the EU Emissions Trading Scheme (ETS) and other envisioned carbon pricing measures. However, these measures are outside the scope of this briefing paper.

2 State of the art: Does this measure already exist somewhere?

The landscape of aviation taxation is generally very fragmented. Kerosene tax and/or VAT are collected for domestic aviation in many national contexts, including the United States, Brazil, China, and 17 European states. However, tax rates outside the EU are often significantly lower than the agreed (hypothetical) minimum in Europe at 0.33 Euro per liter as per EU Energy Tax Directive (e.g. 0.01€t/ltr. in the US, 0.02€/ltr. in Australia). Given the constraints in collecting kerosene and VAT in cross-border aviation (see above), taxes on international connections are generally levied as ticket taxes, i.e. as a fixed amount per passenger and departure. Such ticket taxes exist in many countries, including ten EU states. In light of this fragmented approach, the most meaningful parameter for comparison is the overall tax rate for aviation, which may consist of a combination of the aforementioned taxes. This average rate (weighted for domestic and international flights, which are often taxed differently) is particularly high in the United Kingdom (ca. 40€ per passenger and flight), with a number of countries are lying in the range of 15-20€ (including Canada, the US, and a number of EU states). Comparatively high tax rates for international departures are in effect in Australia (40€), Mexico (30€), and Brazil (30€).

3 Advantages

The introduction of meaningful taxation in the aviation sector comes with a range of advantages. Aviation taxes would generate a significant income stream that could be levied for the transformation of the transport sector towards more sustainable modes of transport, or could be redistributed. Whether such an earmarking (hypothetication) of tax revenues can be legally anchored depends on the national context, but the general practice is not unheard of in many countries (e.g. for road upkeep). It is also a highly realistic and feasible measure: aviation taxes already exist in many domestic contexts, hence the instrument is well-known and -studied. The measure can also be expected to enjoy somewhat broad backing among the public and even parties, as taxing aviation effectively amounts to bringing the sector in line with existing practice in other sectors (i.e. removing some subsidies). Increasing ticket prices are expected to curb demand (TU Delft 2019) and hence equally the current expansion of aviation, which could even be the start of a reverse dynamic in a sector that is generally built around optimistic growth scenarios. At the same time, it would give an immediate boost to the competitiveness of alternative transport forms such as rail and bus, which is often taxed at standard rate (although some countries apply exemption or reduced rate - see briefing paper on "fostering alternatives). Specifically on the matter of kerosene taxation, a key advantage is that it in principle could cover all forms of aviation (including goods transport), and increase proportionally to travelling distance. While taxes in principle apply equally to all citizens, there is a social justice aspect in that flying (frequently) is still largely practiced by middle- and higher-income households, as opposed to other forms of transport already being taxed in full. The 'Yellow Vests' protests in France are a case in point, arguing for kerosene taxes as a more socially just alternative to further motor fuel tax increases.

4 Disadvantages

The disadvantages of a tax-based approach fundamentally tie in with the limits of market-based approaches more generally. Expanding taxation in the aviation sector represents a one-off measure with **no inherent mechanism** to respond to the increasing urgency of the climate crisis, besides the (notoriously unpopular) option of raising tax rates. At the relatively low rates that are currently discussed and applied, the level of ambition is rather modest, as taxation amounts to a removal of subsidies at best. Although aviation taxes are not regressive as such, given the increasing prevalence of flying among higher-income households, individual low-income households may still be adversely affected (i.e. migrant workers) unless addressed through balancing measures, like full or partial redistribution. From a strategic point of view, introducing a kerosene tax and VAT in aviation fall short of offering a more profound critique of current forms of mobility both in regards to environmental sustainability and social justice, compared with e.g. the idea of a frequent flyer levy (see briefing paper on progressive ticket taxes). Finally, currently envisioned levels of taxation for kerosene do not account for the significant non-CO2-effects of burning kerosene as opposed to the use of fossil fuels in other forms of transport. Similarly, such a tax must not exempt biofuels, which could create a dangerous incentive for their increased use. Also such a tax should not fully exempt synfuels (electrofuels) that would still generate other GHGs and contrails. Also the price signal of any tax can be swept by a drop of the barrel price!

5 Possible questions for discussion

• What to do with tax revenues? Should they be used at national or supra-national (e.g. EU) level? How to expand to global level?

- How to ensure they are not just used to balance budgets (even at supranational level)?
 How to avoid "lowest common denominator"/lack of ambition? How to reinforce the work of the countries taking action?
- How does kerosene/VAT taxation compare to ticket taxes/passenger duties? What are the advantages/disadvantages?
- How does it combine with a progressive ticket tax/frequent flyer levy?
- Are there any quick wins possible (countries which could incorporate such a tax with little or no effort from our part)?
- What about carbon taxes?

6 Literature

- CE Delft (2019), Taxes in the Field of Aviation and their impact. Study commissioned by the European Commission.
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- CE Delft (2018), A study on aviation ticket taxes. Study commissioned by Transport and Environment.
 - https://www.transportenvironment.org/sites/te/files/publications/2018_12_CE_Delft_7L14_A study on aviation ticket taxes DEF.pdf
- European Citizens Initiative on taxing kerosene (2019), Ending the kerosene tax exemption in Europe.
 - https://www.endingaviationfueltaxexemption.eu/wp-content/uploads/2019/05/Fairosene-Annex.pdf
- An Italian ex-prime minister, an ex-WTO head, a former finance minister of Germany and 14 other economists urge the EU to impose a VAT on airline tickets and tax aviation kerosene:
 - https://www.transportenvironment.org/press/enrico-letta-pascal-lamy-and-hans-eichel-urge-european-leaders-use-green-tax-shift-fix-eu
- CE Delft (2018), Taxing aviation fuels in the EU, Study commissioned by Transport and Environment.
 - https://cedelft.org/en/publications/download/2693 (summarised below)
- Climate Policy *19* (2019) International and national climate policies for aviation: a review. https://www.tandfonline.com/doi/full/10.1080/14693062.2018.1562871