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ELIMINATING TAX EXEMPTIONS: KEROSENE & TICKET TAX, VAT & CARBON TAX

Flying is virtually tax-free in large parts of the world despite the massive cost aviation causes to the environment and society. While most forms of transport are subject to excise duty, value added tax, and other levies, flying continues to be subsidised with dozens of billions of euro every year through tax exemptions. This chapter will discuss the potential of taxation as an instrument to curb flight traffic, and strategic pathways to achieve this in practice.

For historical reasons, aviation has enjoyed tax benefits that are exceptional compared to other areas of society.¹ This can partly be attributed to the international character of aviation as opposed to the national character of taxation. The 1944 Chicago Convention was the foundational international agreement on aviation, seeking to facilitate and expand aviation. It prohibits the imposition of taxes on fuel already onboard an aircraft when it lands. Over time, this convention gave rise to the practice of exempting all aviation fuel from both taxation (excise duty) and value added tax (VAT), sometimes formalised through bilateral air service/transport agreements. This principle has been upheld in cross-border aviation (if not at the domestic level) to this day. It is important to note that the Chicago Convention does not explicitly prohibit the taxation of all aviation fuel—that is a widespread misconception. The Convention as such only applies to fuel that is already on board at landing, but says nothing about fuel taken on board before departure.²

Introducing adequate taxation in the aviation sector on par with other modes of transport could effectively reduce demand, while generating significant revenue streams

that could be directed towards more sustainable modes of transport. Such taxation could take several forms. Some commonly proposed taxes include: a tax on kerosene comparable to other fuels, the collection of VAT, a general and economy-wide carbon tax, and ticket taxes (passenger taxes) that can be varied according to distance travelled or other factors. The revenues of such taxes depend on many factors. A recent study commissioned by the European Commission³ estimates that introducing a kerosene tax (at 0.33 €/litre) in Europe would generate €17bn in fiscal revenue, while VAT (at 19%) would raise €30bn Europe-wide. It is estimated that due to the increase in cost of flying, such a kerosene tax would reduce CO₂ emissions by 11%, while VAT (at 19%) would do so by 18%.

The landscape of existing aviation taxation is fragmented. About a dozen countries collect a kerosene tax (excise duty) for domestic flights, including the United States, Canada, Australia and Japan. Tax rates are usually very low, such as 0.01€/litre in the US and 0.02€/litre in Australia. In comparison, the agreed minimum for a kerosene tax in Europe—if it were introduced—would be significantly higher, at 0.33 €/litre following the EU Energy Tax

Directive. While no EU member state collects a kerosene tax for domestic flights at this point, the majority raise VAT at effective rates ranging from 3% (Luxembourg) up to 27% (Hungary) of the ticket price.⁴

Given the constraints on collecting a kerosene tax and VAT in cross-border aviation (see above), taxes on international connections are usually levied as ticket taxes, i.e. as a fixed amount per passenger and departure. Such ticket taxes exist in many countries, including a number of EU states. They are often progressive with regard to distance and class, and generally range from below 1 euro (Thailand, all international flights) to more than 170 euro (UK, long distance, any class above lowest).

In light of this fragmented landscape, the best way to compare the aviation tax rates among nations is to use the overall tax rate of each, which combines the various kinds of taxes applied to flights in a given country. This overall tax rate can be calculated as a weighted average for domestic and international flights, taking into account both the difference in taxation and passenger numbers between the two. Such a comparison shows that the level of taxation is particularly high in the United Kingdom (on average ca. 40€ per passenger and flight), with a number of countries lying in the range of 15–20€ (including Canada, the US, and a number of EU states). Comparatively high tax rates, that only apply for international departures, are in effect in Australia (40€), Mexico (30€), and Brazil (30€).

THE ADVANTAGES OF TAXATION

The introduction of meaningful taxation in the aviation sector comes with a range of advantages. Increases in ticket prices are expected to curb demand⁵ and the current expansion of aviation, which could initiate contraction of the aviation sector. At the same time, this addition to air travel cost would immediately boost the competitiveness of alternative forms of transport such as rail and bus, which (in Europe) are generally taxed at standard VAT rates (although some countries apply an exemption or reduced rates). Even merely levelling the VAT playing field with an aviation tax would generate a significant income stream that could be used to fund transformation of the transport sector towards more sustainable modes (and not be ‘ring fenced’ for more spending on aviation). Alternatively, taxes could be redistributed to bolster social justice at national or even global levels (e.g. through the Green Climate Fund). Whether such an earmarking (‘hypothecation’) 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).

Taxing aviation is a realistic and feasible measure: aviation taxes already exist in many domestic contexts, and the instrument is well-known and well-studied. It can also be expected to have relatively broad backing among the public and even political parties, as taxing aviation

effectively amounts to bringing the sector in line with existing practice in other sectors (creating a ‘level playing field’). One potential downside to consider is that this notion may undermine the idea that states should actively support more sustainable modes of transport, especially rail transport. A kerosene tax has the particular advantage that, in principle, it could cover all forms of aviation (including freight, private as well as commercial aircraft, and the military) and its effect increases proportionally to the distance travelled. Taxing kerosene would give aircraft manufacturers an incentive to improve fuel efficiency, which would not be the case with other types of taxes or a frequent flyer levy (see next chapter).

While aviation taxes generally apply equally to any citizen who flies, one social justice argument claims that frequent flyers mainly consist of middle and high income households. Considering that in many countries most of the population flies rarely or never, as opposed to a minority who are frequent flyers, aviation taxes are socially progressive in practice. The ‘Yellow Vests’ protests in France are a case in point: in the context of their protests, it has been argued that kerosene taxes represent a more socially just alternative to motor fuel tax increases.

CARBON TAX: THE DIFFERENCE TO AVIATION SPECIFIC TAXES

Carbon taxes are widely discussed and agreed upon by mainstream economists as an efficient and effective climate mitigation measure. The original idea of a carbon tax was to put a price on greenhouse gases emitted by sectors such as industry and transport, in order to internalise the social costs—or the so-called ‘negative externalities’—that CO₂ causes. The tax hence serves as an economic incentive for companies and consumers to opt for low carbon alternatives.

The approach has several problems. One is the difficulty of considering and pricing all of the damage caused by burning fossil fuels—like biodiversity loss, negative social consequences, health impacts and in general a very insecure future. There is also the ethical question surrounding whether or not to put a price on for example human life or the ‘damage’ of species extinction. But most importantly, should we not rather avoid the damage overall?

Due to the rapid progress of the climate crisis, there has been a move away from focusing on internalising the externalities, and instead a debate about how high the carbon price must be in order to achieve the necessary reductions (as defined by the scientists). Today, carbon prices are often way too low to have a significant emission reduction effect. To be effective, the price needs to be high—120 € per tonne or more.⁶

In practice, carbon taxes are often levied on fossil fuel products, sometimes as one element of several that together constitute the total tax rate. The CO₂ tax can be

explicit or implicit (i.e. used as an argument for the tax in the first place). Therefore, it often not easy to distinguish between CO₂ taxes on fuel and other fuel taxes. Sometimes it might even give a better picture to consider the two together (see **Diagram 2**).

For aviation, one kind of carbon tax could be on jet fuel, if it distinguishes between the differing CO₂ emissions resulting from the production and use of various kinds of fuels—kerosene, several kinds of biofuels, and electro-fuels. But as the impacts of flying are more than just the emitted CO₂, a carbon tax for aviation would have to take into account the impact of burning kerosene high up in the air (see above). If not, the tax implemented throughout all transport sectors could lead to an indirect subsidising of planes in comparison to means of transport on the ground. A carbon tax applied to tickets could also include a share of the operational and surface passenger transport CO₂ emissions of the departure and arrival airports.

Diagram 2: Average Fuel Excise / Carbon Tax

Source: OECD (2019)

The figure shows tax rates as of 1 July 2018. The numbers are emission-weighted averages calculated across 44 OECD countries and Selected Partner Economies. They include international aviation. The effective carbon tax is the sum of fuel excise taxes (of which the statutory rates are usually expressed in common commercial units, such as litres of gasoline) and explicit carbon taxes (understood as taxes called carbon taxes where statutory rates are typically also expressed in common commercial units or per unit of CO₂ emissions).



Pricing carbon cannot be the sole mechanism, replacing other possible measures like cutting short haul flights or frequent flyer levies. A properly implemented carbon tax might, in principle, have advantages in comparison to a kerosene tax, as it could also tackle the climate impact from burning biofuels or synthetic fuels, which are by no means carbon-neutral. However, even this is not straightforward: generally carbon taxes are not applied to biofuel because carbon taxation schemes are set up mainly with the purpose of facing out fossil fuels, and also because the emissions from biofuels do not fall under the UNFCCC reporting rules (see **chapter 8**).

THE LIMITS OF TAXATION

The disadvantages of a tax-based approach fundamentally tie in with the limits of market-based approaches more generally. As airlines will likely pass the additional cost on to passengers, wealthy frequent flyers can afford to maintain their habits, while the mobility of others will effectively be reduced. Given the general political unpopularity of raising tax rates, expanding taxation in the aviation sector represents a relatively one-off measure with limited scope for successive increases to respond to the increasing urgency of the climate crisis. At the low rates that are currently discussed in Europe, a kerosene tax, a carbon tax or VAT may do little more than cancel out some of aviation's subsidies. It is unknown how flyers will react to such a modest price increase; that is, whether demand will be notably reduced. Also, the price signal of any tax can be counterbalanced by declining oil prices, due to oil price fluctuations. Although aviation taxes are not regressive as such, given that flying continues to be more widespread among higher-income households, individual low-income households (e.g. migrant workers) may still be adversely affected unless addressed through balancing measures like full or partial redistribution.

From a strategic point of view, introducing taxation for aviation falls short of offering a more profound critique of current forms of mobility both in regards to environmental sustainability and social justice, compared with, for example, the idea of a frequent flyer levy (see **chapter 8** on progressive ticket taxes). At the same time, the complexity of national and international taxation regulations make pursuing a kerosene tax a challenging target for effective grassroots activism, and risks tying up activist energy. There is also the risk that such taxes could exempt biofuels, which produce similar high-altitude climate impacts, potentially creating a dangerous incentive for their increased use. The same argument can be made for synthetic fuels (electro-fuels) that would continue to generate other greenhouse gases and contrails when used in aviation.

HOW TO ACHIEVE TAXATION OF AVIATION?

At this point in time, a consensus is emerging even among more mainstream actors that the aviation sector is undertaxed. Including a justice argument in campaigns against aviation expansion can be an important and promising strategy. While the vast number of mechanisms and models for taxation at national and international levels may be overwhelming at the outset, it is important to remember that currently there is no or very little taxation on aviation, anywhere in the world. Therefore, any form of new taxation is preferable to the status quo. With profit margins in the sector becoming ever slimmer, even modest tax rates can potentially cause a crisis and market consolidation in the sector after decades of aggressive expansion.

The undertaxation of aviation suggests merit in pursuing whatever tax schemes may be within reach in a given jurisdiction in order to create momentum. The situation in Europe shows the potential for such momentum. After aviation taxes became a key issue in recent European election debates, a coalition of like-minded states (Finland, Sweden, France, Netherlands, Luxembourg) is now advocating aviation taxes at the European level, and a European Citizen Initiative is under way.⁷ A promising strategy could be to pursue ticket taxes at a national level, while building coalitions for action at regional and global levels. The advantage of ticket taxes is that they can be introduced at the national level without significant legal hurdles, and with freedom to design rates, distance bands, and other features such as including a frequent flyer levy or air miles levy. Networks between stakeholders or activists, like Stay Grounded, could play a role in this effort by facilitating the exchange of knowledge, best practices and key arguments.

This chapter illustrates that there is no silver bullet among the taxation models currently discussed—all taxation instruments are subject to trade-offs. This calls for a pragmatic approach, where the overall aim should be to pursue what is feasible and seek to create a mix of instruments. While a radical tax reform towards carbon taxation has recently received increased attention as an alternative to more widespread instruments, its effects and side effects will equally depend on the concrete implementation. Either way, it will be particularly important to ensure the inclusion of non-CO₂ emissions caused by aviation, as this factor is currently sidelined in the discourse. In a similar vein, any suggested tax exemptions for biofuels or synthetic fuels must be challenged. Unless these points are taken into account, a simple carbon tax model will achieve far less than targeted measures to address flying as a high-emission activity.

Overall, aviation taxes are an important opportunity to connect the struggle against the expansion of the sector with the broader movement for tax justice. Adjusting tax systems to the reality of the climate crisis both at national and global levels is vital for social justice and climate

justice. The right framing is critical when discussing this strategy, e.g. by speaking about ending unfair subsidies and tax exemptions rather than discussing an additional tax burden. The industry is addressing this question with sudden concern for the mobility of less affluent segments of the population, arguing that higher ticket prices would amount to curtailing their mobility. While tax proposals should take social justice into consideration as much as possible (e.g. through a frequent flyer levy), it is advisable to put negative side effects into perspective by underlining the social injustice of the climate crisis at large. The ‘social washing’ strategy deployed by the airline industry can also be countered by unmasking the vast differences in flying behaviour between a minority of frequent flyers and a majority that hardly flies, which is conveniently concealed behind average figures.

FURTHER READING

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¹ Transport & Environment (2019a)

² Transport & Environment (2019b), CE Delft (2018b)

³ CE Delft (2019)

⁴ CE Delft (2019)

⁵ CE Delft (2019)

⁶ Grebenjak (2019)

⁷ European Citizen Initiative (2019)