Introduction

Aviation and climate change

Aviation is the fastest growing contributor to climate change. The industry expects to grow massively in the next thirty years, continuing the trend of previous decades. In the UK, passenger numbers are expected to grow from 200 million a year now to 500 million a year by 2030, with a doubling of carbon emissions. Every other sector – the power sector, domestic, industrial, commercial and surface transport - are expected to decrease their emissions. The aviation industry plans a massive increase.

This scenario is increasingly untenable – climate change is upon us, and aviation’s contribution has to be addressed. As Mike Clasper, Chief Executive of BAA, said in April 2005: “I don’t believe that a future exists in which aviation can get away, scot-free, without fully accounting for our growing impacts on climate change”. 
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The cause of aviation’s planned expansion

Aviation’s expansion is fuelled by its exemption from taxes. It does not pay tax on fuel. It does not pay VAT. Aviation in the UK alone is getting a £9 billion a year tax-break[^1]. These tax breaks are a large contributor to the predictions of falling costs of flying; these falling costs are what drive the huge demand increases. If this £9 billion tax break were gradually removed over 15 years, according to the Government’s models the overall cost of flying would stay the same, rather than fall, and according to the Government’s models, aviation would only expand to 315 million passengers a year by 2030, not 500 million.

Aviation’s growth is fuelled by cheap prices: the urgent task is to introduce mechanisms which would increase those prices. There is growing political momentum for such mechanisms – emissions charges, emissions trading, departure taxes and fuel taxes. For example, recently EU finance ministers have been calling for a European Aviation Fuel Tax with the aim of raising billions a year to fund the Millennium Development goals. This tax would also help slow the massive unsustainable growth of the aviation industry, and heavily reduce its planned contribution to climate change.

However, tax breaks are at the heart of aviation’s planned expansion, and so the aviation industry lobbies hard and so far successfully to stop them being taken away. Faced with calls in particular for aviation taxes, the aviation industry is hitting back, making four main arguments against being taxed, centred around the economy and competitiveness.

Industry claims:

- Aviation would be put at a competitive disadvantage compared with other transport sectors;
- EU airlines would be put at a competitive disadvantage compared with US and other countries’ airlines;
- Aviation is a powerhouse and vital cog of the global economy and so shouldn’t be taxed; and,
- Taxation would not deliver any environmental benefits, so why bother.

This briefing examines these claims, and concludes that they are all heavily flawed. In reality, aviation taxes are needed for more efficient global and national economies, and also to reduce the gross environmental damage from aviation and hence protect global economies, people and the environment from the effects of climate change. Such taxes would also not break the aviation industry, contrary to their claims.

The briefing focuses mainly on the claims the industry make on tax and charges. In general, they do not make as many attacks on emissions trading – the preferred choice of those in the industry who do recognise that action on climate change is necessary. We analyse the effects of these different mechanisms and argue that a combination of taxes, charges and trading will be needed. A trading system has the potential to be environmentally effective, but in the meantime other mechanisms such as taxes and charges will be necessary. In the longer term it is likely that the most effective strategy will be a combination of taxation and trading.

[^1]: Source: [Oxford Institute of Economic Studies](https://www.oxinst.org.uk)
The briefing concludes that the aviation industry should stop stalling and hiding behind what are essentially spurious claims. Instead of seeing climate change as something to evade responsibility for, it should see action on climate change as an inevitability which gives it an opportunity to adapt for the long term and develop in a way which is more economically and environmentally sustainable.

1\textsuperscript{st} and 2\textsuperscript{nd} claims: Aviation and competitiveness

The aviation industry argues that aviation taxes would damage the aviation industry (compared with other transport sectors) and the EU airlines (compared with USA airlines, if taxes are only applied to the EU). As a consequence, they argue that aviation taxes should not be brought in. There are three main arguments against this position.

- They ignore the wider benefits of aviation taxation to the environment and to people, which would also benefit the economy.

For example, if measures are not taken to reduce the environmental damage from aviation, then there will be more damage to the world’s people and environment from climate change: more sea-level rise, flooding, storms, crop-damage and drought. This will also affect the UK and world economies – as Gordon Brown said in a speech to EU finance ministers on 15\textsuperscript{th} March 2005: "climate change will come to threaten our economic development and growth…if our economies are to flourish we must make sure we take care of the natural environment on which our economic activity depends". In the 2005 Budget, the Treasury cites the world’s second largest insurer Swiss Re, saying: “the economic costs of global warming could double to $150 billion per year in 10 years”. On this view, action to address aviation’s tax-exemption should not be seen as a narrow issue just affecting that industry. It has wider benefits.

- They ignore the wider effects on other sectors of the economy, so giving a partial view of the economic effects of the tax.

There are competitiveness issues across the wider economy also. Aviation is just one sector of the economy – there are no good reasons why it and no other sector should be exempt from fuel taxation. Its £9 billion tax break is money which has to be found elsewhere – for example from income taxes, national insurance contributions or car fuel taxes. Other sectors and individuals pay more, because aviation does not pay its way. Aviation is just engaging in special pleading for continued extremely favourable treatment compared with other polluting sectors and other sectors trading in consumer goods and services. Taxing aviation would either raise extra money for, say, investing in sustainable transport, funding the Millennium Development goals, building more hospitals and schools, or tackling climate change. Or it could be used to reduce other taxes. Doing so would mean that aviation would lose out (in reality, stop receiving a free ride) but other sectors of the economy would gain from lower taxes. A further advantage of aviation taxation is that it is progressive taxation – the overwhelming majority of flights are taken by richer people.

A further point is that the industry does not mention a major economic downside of aviation expansion - that flying takes billions out of the UK economy each year. For example, the UK has a net tourism deficit of £11 billion\textsuperscript{2} a year, because far more people go on holiday from the UK than to the UK. If aviation expands, this deficit will increase. This is billions of pounds
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which would have been spent on UK tourism, UK shops, UK businesses. A balanced picture would include all effects on the UK economy, not just those that affect the aviation industry directly.

- They routinely exaggerate the competitiveness impacts of the tax on and within their own industry.

There are two elements to this claim:

- Claims it would be unfair compared with other transport sectors

First, they like to argue that taxes would be unfair to them compared with other transport sectors. For example, Ronan Anderson from Airports Council International Europe argues against aviation taxes, saying that: “To single out aviation, it does put us at a competitive disadvantage to other forms of transport”, and Ulrich Schulte-Strathaus from Association of European Airlines saying: “We keep telling national governments in Europe that the airline sector is not an endless source of taxable revenue” (both 16th Feb 2005)

This however is not the case. Aviation is being singled out precisely because it is a sector which pays very little tax. For example, a UK holiday maker debating whether to take their family by car to Cornwall, or fly to Brittany will face far higher costs to travel within the UK because of this differential treatment (motorists pay tax and VAT on fuel) – an unfair competitive advantage which aviation taxation would start to address. Indeed, there are strong arguments that aviation taxation should be higher than taxation for other forms of transport, because most other forms are for journeys which are necessary rather than for leisure (like many car journeys to work) or which justify subsidy because of their social need (buses and trains for people who are unable to drive) or to overcome market failures (to ease congestion). In addition, for many international journeys, even at European level, the distances are so large that there is no alternative to flying, and hence no competitiveness issue with other modes of transport.

Overall, aviation gets a general economic advantage because it does not pay for the environmental damage it causes – its so-called “external costs”. Governments are agreed that efficient markets require that external costs are internalised into prices – otherwise society loses out. The aviation industry is getting an advantage because it is cheaply dumping its pollution problem onto the rest of society. Measures which increased the cost of fuel would be – in economic parlance – correcting market failure, internalising external costs, and moving towards optimum economic outcomes. From an economic perspective, exempting one sector of an economy from taxation leads to sub-optimal allocation of resources.

- Claims it would be unfair within the aviation sector

This claim is that there would be competitiveness benefits to airlines from countries which did not introduce taxes. It is difficult to introduce international taxes. First steps towards this would be taxation at a national or European level. As a stalling tactic, the industry argue that any unilateral action (on the way to an international system) should be resisted as: “if we introduce a tax only on the European scale it can result in a deterioration in competitiveness for the EU countries’ airlines” (Ronan Anderson, ACIE). Applied internationally there would
be no internal competitiveness argument, but in the years before it could be expanded to such an agreement, the industry argues that adverse effects on the first countries to take action are sufficient to justify not taking this initial step. In effect this is an argument not to do anything, ever. It is also an argument that the intra-aviation industry competitiveness issues should outweigh the other economic and environmental benefits of action. Neither of these claims should have any purchase, but any validity they might have is diminished because the claims that there are genuine intra-aviation competitiveness issues are exaggerated.

For example, for an intra-EU fuel tax, it is only a competitiveness benefit for non-EU airlines who, say, fly into London from outside the EU, and then go on to, say, Rome. Under existing rules, the non-EU airline could not be charged aviation fuel charges for the London-Rome leg, but EU carriers could – creating a “competitive advantage” for the non-EU airlines. However, this advantage will not affect the majority of intra-EU flights. The European Commission stated recently\(^3\) that non-EU carriers operate less than 5% of intra-EU flights, mainly for freight. And for those very few flights where there is an EU and non-EU choice, there is no evidence that this differential would be a major factor in the decisions about which carrier to choose. There is only assertion that it would have any negative effect on EU airlines. Also, if it were a major problem, it could be dealt with in a number of ways. For example, either by rescinding the bilateral agreements (the UK just needs to give one year’s notice for the Bermuda 2 agreement with the USA), or by implementing a different tool – for example under an emissions charging system it would be possible to charge the EU and non-EU airlines the same under existing rules.

\(^3\)rd claim: Aviation and the global economy

Beyond competitiveness issues, the third claim used against aviation taxes is their alleged negative effect on the global economy. For example, “air transport is the backbone of global tourism. Tourist dollars provide jobs and livelihoods to millions across the world. The tax schemes being discussed will be a disincentive to travel” (IATA, 16\(^{th}\) Feb 2005). These taxes are indeed a disincentive to travel, however the aviation industry will still expand, just nowhere near as fast. A taxed aviation industry will still provide jobs and still allow people to go on holiday. Moreover, tourism is simply one way people spend their surplus cash. If people spend less on flying they will spend it in other ways, stimulating jobs there.

A further argument from the industry is “If ministers were sincere about helping developing countries, they would be asking themselves how they could encourage, and not discourage, travel and tourism”. (Ulrich Schulte-Strathaus, Association of European Airlines, 16th Feb 2005).

However, aviation is the fastest growing source of carbon emissions. Climate change will hit developing countries hardest. Developing countries are also far less able to pay for preventative measures like sea defences. Tourism in developing countries will not flourish if there are dangerous levels of climate change. Taxing aviation - to make the sector grow more slowly - is an essential step towards protecting developing countries from climate change.

Moreover, the industry’s claims that it is such an essential powerhouse are undermined by its results being based on heavily preferential treatment. The £9 billion annual tax break it receives amounts to an annual subsidy of £45,000 for each of the 200,000 jobs in the aviation industry. Any industry would be strong with that level of help. There are no
economic benefits from subsidising aviation in this way – all it is doing is transferring resources into the aviation sector from the rest of the economy, leading to sub-optimal allocation of resources. Subsidy would be justified if it corrected failures in the economy – like regressive impacts, or environmental damage: however subsidy of the aviation industry achieves the opposite of this.

4th claim: Environmental effects of aviation taxes

The final category of claims against aviation taxes is that they wouldn’t deliver environmental gains. “European airports strongly oppose taxation which is viewed as a crude, blunt and unacceptable way of tackling the climate change challenge with no appreciable gain for the environment. Taxes, aimed simply at reducing demand and pricing people out of air travel, destroy aviation’s economic and social benefits.” (Airports Council International Europe, 16th Feb). The “no appreciable gain to the environment” argument is a standard, often-repeated claim against taxes. It has no basis. Taxes would reduce demand which would have a clear gain for the environment – less climate change emissions. The Department for Transport’s modelling shows this – the difference between prices falling and prices staying the same is as much as 200 million passengers a year by 2030.

In addition, a kerosene tax would give the industry a direct incentive to improve the energy efficiency of its operations.

Instead, some of the industry has recently given its support to emissions trading as their preferred mechanism for dealing with its environmental impacts, in an attempt to divert attention away from taxation. There are two strong reasons why they prefer this to taxation. First, it will take longer to implement. Even 2008 is now an extremely unlikely starting date; 2012 is more realistic. Second, they think it would have a much smaller impact on them than taxation. They believe they would get, and are lobbying for, emissions permits for all of their emissions (so-called “grand-fathering”), and in future years even greater numbers of permits, in line with predicted growth, thus meaning they would have to do very little to tackle their emissions, in complete contradiction of the polluter pays principle. The new EU Emissions Trading Scheme has started with a grand-fathered rather than an auctioned allocation system – a system heavily biased in favour of the worst polluters, so it is likely that aviation will be accommodated into the scheme in the same way. Overall, the industry prefers trading because it thinks it will not have to pay much for its pollution; it dislikes a tax because it will. The suspicion is that the argument that aviation taxes are “blunt” is really to do with them being not “blunt” but “effective” – which is why they are resisted so heavily.

In the short to medium term, taxation is a more effective response than trading. Emissions trading may well possibly work in the future for aviation, but in the meantime taxation will be needed. It will also be necessary to tackle unequal taxation rates even if an economy-wide trading system is in operation. This is because if aviation is within a trading system where every other sector is paying fuel taxes, then aviation would be getting an extreme and economy-distorting competitive advantage over other sectors. A further argument for taxation or charges is that without them it will be even harder to negotiate an environmentally effective emissions trading system. Continued tax exemptions and permission for airport capacity to expand will heavily increase the lobbying hand of the aviation sector for bigger carbon allocations. If action on tax or charges is not taken in the next couple of years, further aviation emissions increases will be harder to prevent.
Finally, if aviation does not play its part in reducing its emissions, this means that other sectors will have to make greater reductions. And for every year that the industry successfully stalls on taxation, it makes climate damage greater and the costs of future action on climate change more expensive. As Tony Blair said in 2004: “There is no doubt that the time to act is now. It is now that timely action can avert disaster”.

**Conclusion**

Aviation is not going to go away. However its spiralling contribution to climate change also cannot continue. The aviation industry believes it should be free to continue to expand unabated – this should only be the case if it can keep its carbon emissions in check. Without major technological advances (which are not even on the horizon at present) passenger numbers cannot continue to increase so rapidly. Passenger number growth is currently fuelled by long-standing exemptions from taxation – a free lunch which must be addressed.

This is however an opportunity for the aviation industry. They need to accept that their sector is not going to stay exempt from climate change measures. They need to adapt for the long-term and develop in a way that is more sustainable. Their current development model – based on cheap fares giving rapid expansion of passenger numbers – is terrible for people and the environment and also for long-term global economic prospects, because of the economic costs of climate change. But this current model is also not delivering profits for many of the world’s airlines. The industry’s response to climate change should be to seek profits without growth in passenger numbers. Relying on bogus arguments on competitiveness to buy it a few more years is not an acceptable or adequate response – either for them, or for the rest of society.

**References**

