

Aviation Tricky Questions

Isn't flying only responsible for 2 per cent of climate change globally?

No. It has been estimated that in 1992 aviation accounted for 2 per cent of worldwide carbon dioxide emissions, but:

- ✦ It is now 2007, and aviation has been one of the fastest growing sources of greenhouse gases in recent years.
- ✦ Aviation makes a much larger contribution to climate change than through CO₂ emissions alone. The release of certain gases at a high altitude has a larger warming effect than at ground level. Aviation also creates contrails and cirrus clouds which trap heat in the atmosphere. Whilst the science is not definite, it is currently estimated that aviation emissions create 2 to 4 times more warming than the warming caused by aviation CO₂ emissions alone.

Taking these factors into account means that globally, aviation accounts for between 4 and 9 per cent of current human induced climate change.

Isn't flying only responsible for 3 per cent of the UK's contribution to climate change?

No. Aviation accounts for over 6 per cent of the UK's CO₂ emissions. As greenhouse gas emissions from planes are so much more damaging than other emissions, aviation currently makes up 10-15 per cent of the UK's contribution to climate change. In 2004, the Department for Transport stated that aviation accounts for "11 per cent of total UK climate change impact".

Moreover, aviation is the fastest growing source of UK greenhouse gas emissions. The Tyndall Centre for Climate Change predicts that under current government policies CO₂ emissions from aviation will more than double by 2030 and treble by 2050. The latest science suggests cuts in UK emissions of 85 to 90 per cent are needed by 2050 in order to reduce global emissions to give a reasonable chance of preventing temperatures increasing by more than 2°C. To make these cuts but allow aviation to keep increasing would mean aviation accounting for almost 50 per cent of UK CO₂ emissions by 2030 and 135 per cent by 2050. And this does not include the extra warming that aviation produces beyond CO₂ alone. Clearly it is impossible to limit climate change unless the UK stops the growth in aviation.

If aviation emissions are rising so quickly, how does the UK government say it is cutting emissions?

The UK government has defined emissions from international transport out of existence. Emissions from international aviation and shipping were not included within the Kyoto protocol, and the UK government has used this as an excuse not to include them within its targets for reducing emissions and the reporting on how those targets are being met. The government's new climate bill also doesn't include international aviation and shipping emissions. Emissions from domestic aviation, flights within the UK, are included in the government's targets and reporting.

Haven't taxes on flying recently been increased?

The recent increase in Air Passenger Duty (APD, of £5 on short-haul economy class flights and £20 on long-haul economy flights) was nowhere near enough to correct for the tax exempt status of aviation. The Treasury's own research shows that these increases will only slightly reduce the rate of increase in CO₂ emissions from aviation. Before the tax increases, carbon emissions from aviation were set to increase by 35 per cent by 2010. They are now predicted to increase by 31 per cent. The aim of the rise in APD is not to halt the growth in emissions from aviation; the Treasury says it remains committed to the expansion of the UK aviation industry.

Ideally, taxes on aviation should be levied directly on emissions. This can be done simply by taxing fuel, which is directly related to emissions. Unfortunately, complex international treaties exist which make it illegal under international law for the UK to impose taxes on fuel used in international aviation. However, taxing fuel used by UK domestic flights is entirely legal, as would be fuel taxes on flights within the EU, if all EU member states agreed.

Whilst a direct tax on fuel use in all UK flights would be difficult, there are other alternative approaches to taxing aviation apart from Air Passenger Duty. One such possibility is to levy a tax on flights rather than passengers, as both Liberal Democrats and the Conservatives have recently proposed. This would tax freight as well as passengers, and a full aircraft would pay less tax per passenger than a half-full one. A tax on flights could also take account of the fuel efficiency of the aircraft and the distance flown – thereby making the tax more closely related to the actual emissions of the plane. Higher





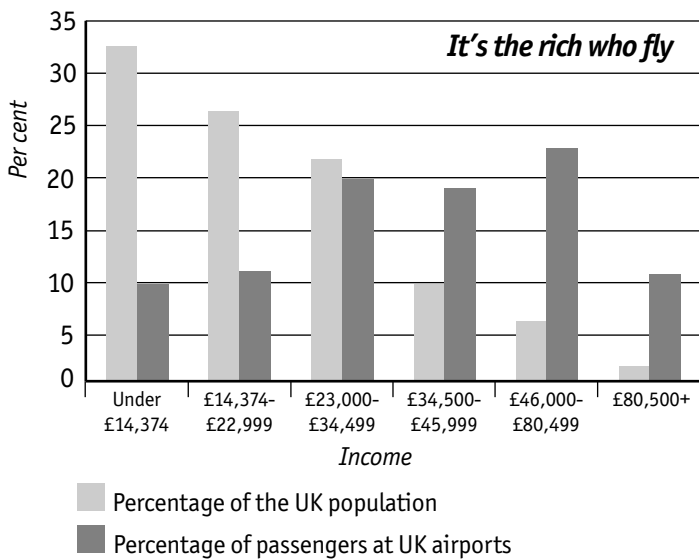
taxes on less fuel efficient planes would give the aviation industry an incentive to develop and use more fuel efficient planes in the future.

Won't making flying more expensive stop the poor from flying?

It is primarily the rich who fly. The richest 18 per cent of the UK population are responsible for 54 per cent of flights, whilst the poorest 18 per cent are responsible for just 5 per cent. The average salary of passengers at UK airports is £48,000.

The growth in flying has been due to rich people flying more, whilst those on the lowest incomes are actually flying less. In 2000, over eight million leisure trips were taken from UK airports by passengers earning less than £14,374 a year. In 2004, the same group of people flew less, with just over seven million trips. In contrast, people earning over £28,750 a year made 28.8 million leisure trips in 2000, and this rose to 36.5 million in 2004.

WDM is calling for a halt to the growth in emissions from aviation. This does not mean that all flying has to stop.



What do you mean when you say the aviation industry is subsidised by the UK government?

Through not having to pay tax on fuel and not paying VAT, unlike other sectors of the economy, the aviation industry receives an effective subsidy of over £10 billion a year. This is a subsidy for rich people - £5.6 billion pounds a year to the richest 18 per cent of the British population. If this subsidy were meant to help the poor, then it should be given directly to poor people or spent on services which the poor primarily use. The IPPR, a New Labour think tank, has said: "Any tax on aviation would be relatively progressive."

As it's the rich who fly, will increased taxes stop them flying?

As lower air fares have resulted in richer people flying more, in the same way, higher air fares will result in richer people flying less. Research suggests that a 10 per cent increase in



price will lower the number of passengers flying by between 5 and 15 per cent. It is currently estimated that to halt the growth in air travel for the next five years would require tax increases in each of these years of between £3-£8 on flights currently costing £50, rising to £7 to £32 for flights costing £200. As fares would be falling without the tax increases (flying has tended to be 1.5 per cent cheaper per year), the actual price of tickets would rise by less.

Won't restricting aviation put poor farmers in developing countries out of business?

The initial impacts of increased taxes on flights from the UK would not affect farmers exporting goods to the UK. Even if taxation were expanded to include freight, it would only be on flights leaving the UK, not on flights from developing countries bringing goods to the UK. Furthermore, WDM is calling for the growth in aviation emissions to be halted, not the ending of all flights.

Ideally all fuel used in international transport would be taxed. International taxation would be introduced gradually,



ANDREW W. SEIBER/FLICCR

so would not have a sudden impact, and would allow for diversification.

The effects of climate change on poor farmers around the world will be far greater than any impact of higher transportation costs. If climate change causes global temperatures to rise by more than 2°C, large areas of Kenya currently suited to growing tea – its largest export – would become unsuitable. At present, 400,000 smallholders grow 60 per cent of the country's tea, and do not have the money to invest in irrigation systems to cope with the effects of climate change. Similarly, if temperatures rise by more than 2°C, the vast majority of land in Uganda currently suitable for growing robusta coffee will become unsuitable.

But haven't many developing countries been using the export of agricultural goods as the way to develop?

Where developing countries have depended on the export of agricultural products there has actually been a process of de-development. The prices for agricultural goods show a continuing decline in world markets, including perishable

goods which are flown around the world. If governments had intervened effectively during the 1980s and 1990s so that prices for the top ten tropical commodities exported from developing countries had increased only in line with inflation, this could have yielded a staggering £125 billion annually by 2002 – over three times the current global aid budget.

Using the export of agricultural goods as a means to develop is a policy which has been pushed on developing countries by the International Monetary Fund and World Bank, in order for those countries to earn foreign exchange and pay their debts. This has reduced their food security as crops are produced for export rather than the local market.

Certain agricultural goods flown by plane also have damaging effects locally, such as flowers. In recent years, there has been a boom in flowers grown in Kenya for sale in Europe. But the flower industry uses huge amounts of water, affecting the supply of local people. The head of Kenya's water authority says that the 12 largest flower companies take up to 25 per cent of the water from the River Ng'iro, which would normally be available for more than 100,000 small farmers. Furthermore, climate change is also causing Kenya to become drier, leading to an even worse water crisis for Kenyans in the future.

Won't restricting aviation hurt poor people in developing countries dependent on tourism?

Poor people around the world are going to suffer far more from the effects of climate change than from any reduction in tourism. Global increases in temperature of 3°C will cause up to 170 million more people to be affected by coastal flooding each year, many of them in coastal tourist areas. Preventing such catastrophic consequences requires limiting the average global temperature increase to 2°C, but this will be impossible if the UK's planned expansion in aviation happens.

Mass tourism often has negative impacts on poor people in affected communities. For example, in the Indian state of Kerala, the fishing town of Kovalam was destroyed to make way for mass hotels. The hotels pushed up land prices, forcing more locals to relocate, and also created water pollution and coastal erosion problems. Tourism has now expanded beyond Kovalam and other communities have been dislocated, including people originally forced out of Kovalam.

Rapid and unsustainable growth in tourism can also cause acute water shortages:

- ✦ In Kendwa Village, Zanzibar, local people now have to get up at 4am to collect water from a very deep well because it runs dry when guests at the luxury hotel nearby have their long showers.
- ✦ In Trinidad and Tobago, the population doubles over the tourist season and local people often go without water.





WDM is calling for an end to the growth in emissions from UK aviation. This means tourism will not increase, but it does not mean tourism will be taken away from communities who are currently dependent on it.

What about the impact on British jobs?

The aviation industry employs 200,000 people in the UK. Given that the industry receives an effective tax subsidy of £10.4 billion a year as it pays no tax on fuel or VAT, this means that each job is subsidised to the tune of £52,000 a year. A proper tax rate on aviation could generate more jobs than would be lost in the aviation industry, whether through increased government spending or tax cuts. Furthermore, the key outcome which is initially needed is a halt in the growth of the aviation industry – which would not result in any net job losses.

Can't aviation emissions be limited through greater aircraft efficiency and new technology?

The fuel efficiency of the aviation industry is currently improving at 1 per cent a year. In other words, every year it takes 1 per cent less fuel to carry the same number of passengers the same distance. This is nowhere near enough to stop the growth in greenhouse gas emissions from aviation. The emissions from UK aviation are currently growing at between 5 and 10 per cent a year.

Unfortunately there is no technological alternative to using oil on the horizon. Flying requires fuel containing huge amounts of energy at a low weight, in order for it to be carried in flight. There are no other alternative fuels available. Substantially different plane designs may prove to be more fuel efficient, but these are many years away, and the average length of service of a plane is currently 40 years.

Are you saying people should never fly?

No. We are saying that the government has to stop the increase in greenhouse gas emissions from aviation – they are currently rising at between 5 and 10 per cent a year. As there is no technological alternative to flying than burning fossil fuels, UK aviation needs to be halted at its current level.

The only way this will happen is through strong government action; to cancel the planned expansion of UK airports, and introduce taxation on the aviation industry at a high enough rate to stop the growth in flying.

Isn't aviation already being dealt with through the European Emissions Trading Scheme?

The UK government says the way it wants to tackle emissions from aviation is through including them within the European Emissions Trading Scheme (ETS), but this is unlikely to happen until 2012 and action needs to be taken now.

In any case, the European Commission estimates that including aviation will only increase prices for air travel by between €1.80 (£1.20) and €9 (£6) on a return ticket, which will have little impact on the growth in aviation. By 2012, a €9 increase in fares will be offset by the continuing decline in air fares of 1.5 per cent a year. In addition, the ETS only addresses CO₂ emissions, so does not cover the other warming effects of aviation, currently estimated to be 2 to 4 times greater than CO₂ alone.

Airlines such as British Airways promote the ETS because they know it will have little impact on their ability to keep growing. If all the UK government does to tackle the growth in emissions from aviation is to include them within the ETS, it will be too little, too late.

The European Emissions Trading Scheme (ETS)

The ETS works across the EU to attempt to lower CO₂ emissions in line with the Kyoto protocol. It currently covers emissions from large industrial plants such as power stations and factories, accounting for just under 50 per cent of the EU's CO₂ emissions. Each country is given a yearly allocation of permits to emit from such installations. Individual countries choose how to divide the permits up. If a company wants to emit more than its permit allocation, it can buy more permits from elsewhere. If it emits less, it can sell the permits.

UK companies covered by the scheme will only be required to make cuts in emissions of 4 per cent between 2005 and 2012; 0.6 per cent a year. Under the first two years of the scheme, the ETS has not required any cuts in emissions.

The issuing of too many permits along with corporate lobbying, have allowed some large emitters to make money out of the scheme.