

Analysis Summary – Consultation - SOU 2016:83 "A Swedish Aviation Tax"

The Inquiry's report shows that an aviation tax would only marginally contribute to the overall goal of a reduced climate impact.

The Inquiry's report shows that an aviation tax would have a number of negative consequences, including on domestic and international air connectivity and on Sweden's competitiveness.

Consequently, the Inquiry's report demonstrates that a Swedish aviation tax would not fulfil the Inquiry's Terms of Reference and one conclusion is that a Swedish aviation tax should not be introduced.

The Inquiry's Terms of Reference are clear that the purpose of an aviation tax is to have a meaningful climate benefit but without adversely affecting the goals of industry and regional development, etc...

The Inquiry's report demonstrates that an aviation tax would have only a marginal impact on Sweden's carbon dioxide emissions and that the tax would mean Sweden exports emissions to those countries where airlines subsequently move parts of their operations.

The Inquiry's report shows that the aviation tax would have a negative impact in a number of areas, including air connectivity, Sweden's competitiveness, regional development and the willingness of airlines to establish routes to and from Sweden.

Given the three points outlined above, one conclusion is that a Swedish aviation tax should not be introduced. This is primarily based on the fact that the tax would not fulfil the main purpose behind its introduction.

A Swedish aviation tax would hamper development of the transport sector and achieving the Swedish Parliament's transport policy goals. An aviation tax would also counteract the government's export strategy objectives.

The Inquiry assumes that it is the number of individual flights that would be reduced and not emissions. The Inquiry's report clearly demonstrates that a national aviation tax is a meaningless instrument where the goal is reduced climate impact. Sweden should instead support and contribute to international, effective and market-based mechanisms such as the EU ETS and the aviation industry's global climate agreement, CORSIA, as well as working for large-scale investments in aviation bio-fuels which would result in an immediate and significant reduction in emissions without having a negative impact on air connectivity and other industry development goals.

The Inquiry's report does not contain anything that supports the Inquiry's assumption that the impacts on Swedish air connectivity would be limited. The Inquiry's own review of other European countries that have introduced (and scrapped) aviation taxes clearly demonstrates that these taxes have far-reaching negative socio-economic impacts.

The cost to airlines for each kilogram reduction in carbon dioxide emissions would be SEK 18.00. This is, for example, several times the Swedish Transport Administration's socio-economic cost-benefit ratio for the transport sector and the level of Sweden's carbon tax (SEK 1.12/kg). These costs clearly demonstrate that the tax is inefficient from a climate perspective.

In the sections dealing with the consequences of an aviation tax, the model is based partly on incomplete and, in some cases, incorrect facts which in turn leads to misleading conclusions.

According to the Inquiry's Terms of Reference, the overall aim is that the aviation industry's climate impact should be reduced. In addition, according to the Terms of Reference, the tax should complement other industrial, transport and regional policies throughout Sweden including employment, connectivity and competitiveness.

The Inquiry concludes that the tax would make only a marginal contribution to the overall aim of a reduced climate impact.

The Inquiry also shows that the aviation tax would have a negative impact on air connectivity, Sweden's competitiveness, regional development and the willingness of airlines to establish connections to and from Sweden. Without providing sources or analysis, the Inquiry outlines that there would not be significant socio-economic impacts. This is despite the fact that this conclusion does not match the facts presented in the Inquiry's report, which actually shows that there would be negative socio-economic consequences, that Sweden's competitive position against neighbouring countries would worsen and that the tax would risk reduced air connectivity within Sweden.

If introduced, the tax would not achieve its aims and the tax would not support the government's employment, connectivity and competitiveness goals. Based on evidence and conclusions presented by the Inquiry and the Inquiry's Terms of Reference, there is no basis for the introduction of an aviation tax.

The Inquiry shows that in a best-case scenario, an aviation tax would reduce Sweden's climate impact by 0.07-0.18 tons per year. This includes a calculation for emissions at high-altitudes. There is no sound scientific basis for this calculation and, according to the UN's Climate Panel, these emissions should be dealt with separately. According to the Inquiry, the aviation tax's impact on Sweden's carbon dioxide emissions would amount to a reduction of 0.04-0.11 tons. To put these figures in perspective, the Swedish Transport Administration estimates that incorrect care-tyre pressure contributes to an additional 0.3 tons of carbon emissions in Sweden each year.

Based on the figures above, the Inquiry itself concludes that a Swedish aviation tax would have a barely measurable effect on Sweden's climate influencing carbon emissions and consequently would be an almost meaningless measure for the reduction of emissions. Therefore, a Swedish aviation tax would not achieve its main purpose of reduced climate impact.

Analysis from other countries (partly included in the Inquiry's report) points to the fact that with the introduction of a national tax, airlines will move parts of their operations to other countries. Therefore, the tax means that Sweden may become an exporter of emissions to other countries and that the total volume of emissions will not be reduced.

The Inquiry itself raises the possibility that a Swedish aviation tax could lead to a total overall increase in carbon dioxide emissions.

As aviation within the EU/EES is covered by an emissions trading scheme (EU ETS), a reduction in emissions from flights departing Swedish airports means that emission permits will be released into the emissions trading system. According to the Inquiry, these permits may represent a total equivalent of between 0.03 and 0.09 million tonnes of carbon dioxide being released into the emissions trading

system, which could then be used for flights within and between other countries. The environmental impact of these permits depends on how they will be used.

One possible scenario is that all emission trading permits that are released in Sweden will be used in aviation in other countries under the EU ETS. In this case, the tax leads to increased emissions as the emissions from aviation are merely moved from Sweden to another country at the same time as some of the reduction in flights in Sweden results in increased emissions from road traffic as travellers move from one form of transport to another.

The introduction of a Swedish aviation tax is an ineffective tool for the reduction of aviation emissions. As a small, export dependent country, it is important that Sweden works proactively for international mechanisms to deal with environmental and climate challenges, including getting the EU ETS to function more effectively and providing support for effective market based mechanisms such as the aviation industry's global CORSIA climate agreement (adopted by the ICAO in October 2016). These offer the greatest potential for reduced emissions at the lowest socio-economic cost.

Above all, international aviation requires flying at altitudes where there can be an increased climate impact through what is known as high altitude effects. The nature of this impact is not yet fully understood by researchers. However, researchers are clear that a simple multiplier does not accurately reflect altitude effects as the underlying mechanisms differ from standard combustion. Climate impact at altitude varies depending on altitude, temperature, time of day, time of year, place on earth, etc... Climate impact from emissions at altitude should be dealt with separately through initiatives that have a direct influence on reducing high altitude effects.

The Inquiry's report shows that an aviation tax would have negative socio-economic effects, reduce air connectivity both within as well as to and from Sweden and impact competitiveness negatively. This runs counter to the government's goals in other areas and also means that the tax would not meet the requirements of the Inquiry's Terms of Reference.

In 2015, the government adopted an export strategy that will contribute to the government's overall aim of having the EU's lowest unemployment rate by 2020. The objectives of the strategy are to increase exports, both in absolute terms and as a share of GDP, increase Sweden's attractiveness for investors, expertise and tourists, increase the share of exporting companies and increase participation by Swedish companies in the global economy.

It is of concern that a Swedish aviation tax would directly counteract all the objectives in the government's export strategy outlined above and that the introduction of an aviation tax would also conflict with Sweden's export strategy.

There is a demonstrated link between air connectivity, employment and GDP. Based on these links as well as an analysis by WSP, the reduction in passenger volumes that the Inquiry identifies as a result of the tax would mean up to 7,000 fewer jobs within the first year and a reduction in GDP of up to SEK 6 million. This is in line with the experience of other countries that have introduced a national aviation tax.

Reduced connectivity relative to other countries and the accumulated effects of fewer jobs and lower GDP over time would place strains on the Swedish economy that would clearly exceed the limited government revenues that the tax is expected to generate. The long-term negative effect on Sweden's connectivity would make it more difficult for the government to be successful in its nation-wide focus on hospitality as an export and job engine.

The Inquiry's own proposals to introduce state subsidies to compensate those regions impacted by reduced air connectivity as a result of the tax clearly shows that the Inquiry expects negative impacts on Swedish air connectivity.

In November 2016, Sweden signed a bi-lateral agreement with the US on the introduction of US border controls at Stockholm Arlanda Airport, also known as US pre-clearance. An aviation tax and its negative effect on airlines' willingness to establish direct flights would have a directly adverse impact on potential investment in such facilities at Stockholm Arlanda Airport and may make them unprofitable.

Part of the Inquiry's role includes examining other measures to limit aviation's climate impact. Based on the fact that there are several other measures that would have a significantly greater climate effect, it is disappointing that the Inquiry deals with these issues in such a general and standardised way.

Investments in bio-fuels for aviation is the singularly most effective national measure to reduce the climate impact which results from air traffic both within and to and from Sweden. This is because an increased use of bio-fuels would mean a direct and absolute reduction in carbon dioxide emissions at source without a negative effect on connectivity and other industry policy goals.

The inquiry's report shows that an aviation tax in the form proposed lacks a direct link to the volume of greenhouse gas emissions, does not in any way incentivise the aviation industry to use more efficient aircraft, to develop aircraft or to take other environmentally friendly actions.

Aviation is the only industry with a globally recognised climate plan for 2050. As aviation is by definition a global industry, the climate impact of the industry should to be dealt with in a global context to the greatest extent possible. The roadmap means that the aviation industry's emissions will not exceed 2020 levels and be halved in absolute terms by 2050. This objective is in line with the emissions required for the aviation industry to meet the UN's 2050 emission targets.

At the beginning of October, the UN's aviation agency, ICAO, adopted a global market-based system for aviation emissions, CORSIA, an historic agreement that within a few years will cap, as well as manage, emissions from all international air traffic. This will mean the largest possible emissions reduction with the lowest socio-economic cost and without significant competition distorting effects. This system has been highlighted by the UN as one of the most effective solutions for other industries to follow.

The Environmental Objectives Council's final report released in the autumn of 2016 recommends that all forms of double taxation for industries involved in trade should be avoided. A national aviation tax would mean a form of double taxation of the aviation industry's emissions.

The Inquiry's Terms of Reference state that the form of the proposed aviation tax should take into account the diversion of traffic to airports in other countries. Based on the evidence, the Inquiry cannot credibly have dealt with this issue. Travellers already choose to book flights using sophisticated booking services to find the best combination of timings and price. An aviation tax would in all likelihood mean that travellers choose to book a short flight to airports just outside Sweden and then book a long-haul flight and so avoid the higher level of tax. The savings for a family of four travelling from Sweden to the USA would be approximately SEK 1,400. This would mean even longer flights and that the tax contributes to higher carbon dioxide emissions than if the tax had not been in place. This

type of tax induced behaviour risks undermining the current customer base for both current and future direct flights to and from Swedish airports.

The tax would also create regional inequities for which there is no compensation. Swedavia is unable to envision why a family of four people from northern or central Sweden would, for example, pay SEK 1,720 more for a journey to the US compared for a family from southern Sweden that can depart from Copenhagen Airport. The same risks apply for visitors to Sweden and the tourist industry and there is a risk that the competitiveness of international businesses relative to neighbouring countries will be reduced if a tax is introduced.

The Inquiry makes a simplistic analysis of southern Sweden's proximity to Denmark. Based on the lowest tax level, airlines departing on international routes from Malmö Airport would face a total additional cost of approximately SEK 80 million per year compared to airlines using Copenhagen Airport. As charter operators have operations at both airports and there are no regular foreign airlines operating from Malmö Airport, these companies can quickly move their operations to Copenhagen Airport.

The points above highlight the problem of mixing different measures that have different geographical coverage. Within a few years, Sweden could have at least three overlapping measures for aviation with the same objectives:

- National aviation tax
 - National, with only a marginal climate effect and with competition distorting effects
- EU-ETS
 - European, clear climate effects, geographical demarcation issues, some competition distorting effects
- CORSIA
 - Global, clear climate effect, without significant competition distorting effects

The Inquiry uses the argument that the aviation industry should pay more for its climate impact based on the fact that airlines do not pay taxes in the same way as other modes of transport. It is very difficult to compare taxation between different modes of transport. This is because each mode of transport is financed in different ways. Air traffic uses ticket prices to pay for its infrastructure in the form of airports, maintenance, investments, emergency services, snow ploughing, security, air traffic control etc..

The financing of roads and rail is primarily through state budgets. As the financing of infrastructure is different, it is not possible to tax different modes of transport in the same way. This would mean substantial subsidies for road and rail compared to air traffic. The Inquiry's analysis of these connections is flawed, which leads in turn to incorrect conclusions regarding the need for further taxation of aviation.

According to the Inquiry, the proposed tax would cost airlines approximately SEK 1.8 billion annually and would lead to a reduction in Swedish carbon dioxide emissions of approximately 0.1 million tons each year. The cost to airlines (which would most likely be passed on to travellers at basically the same amount) would be equivalent to SEK 18 per kilogram of carbon dioxide. This compares to the

general Swedish carbon tax of SEK 1.12 per kg of carbon dioxide. These are the figures used by the Inquiry. In this context, it is not explained how the Inquiry justifies the SEK 18 per kilogram cost to airlines for the reduction in carbon dioxide emissions.

The 2006 proposal for an aviation tax does not differ significantly from the proposal presented by the Inquiry. The total tax level is somewhat higher in the current proposal compared with the 2006 proposal. According to the 2006 consultation summary, 92 per cent of consultation submissions were negative to the introduction of an aviation tax and the remaining 8 per cent were neutral. None of the submissions believed that a Swedish aviation tax should be introduced. The argument was that a Swedish aviation tax would have no clear climate benefit, but rather the tax would have far-reaching negative socio-economic impacts and that the aviation industry's emissions should be dealt with through international agreements. These are in many respects the same conclusions contained in the current Inquiry.