

## Proposal for a Frequent Flyer Levy

## Contents

Introduction.....	3
1.1    Background.....	3
1.2    Central objective .....	3
1.3    Outline.....	4
2    Proposal for a Frequent Flyer Levy.....	5
2.1    Introduction.....	5
2.2    The current APD .....	5
2.3    Proposal for a Frequent Flyer Levy.....	6
2.4    Conclusion .....	7
3    Implementation of the FFL.....	8
3.1    Introduction.....	8
3.2    Processes, responsibilities and definitions in the current APD.....	8
3.3    Database requirements.....	9
3.4    Implications for airlines .....	11
3.5    Implications for (international) passengers .....	12
3.6    Implications for business travellers and Small and Medium Enterprises .....	12
3.7    Conclusion .....	13
4    Literature.....	14
Annex A    Required percentages on ticket prices.....	15
A.1    Introduction.....	<b>Error! Bookmark not defined.</b>

## Introduction

### 1.1 Background

Aviation has been responsible for 6% of total greenhouse gas emissions in the UK in 2011 (Committee on Climate Change, 2013). This share is expected to more than quadruple in future (25% in 2050). A relatively small group of passengers is responsible for these emissions. It is estimated that 15% of the population takes 70% of the flights (DFT, 2014), while 55% of the population took no flights (abroad) at all in 2013 (National Travel Survey, 2014).

According to the Committee on Climate Change, demand growth should be limited by 60% in 2050 (compared to 2005) to meet UK's overall reduction target. A demand growth by 60% would imply that other sectors have to cut emissions by 85%, while aviation emission levels remain at 2005 levels. Without limiting demand growth, targets for other sectors would have to be even more ambitious (decreasing emissions by more than 85%). The Committee on Climate Change concludes that there is limited confidence on the scope for this.

Although the increase of passenger demand is a major cause of global warming impacts of aviation, discussion of the potential to limit aviation emissions has focused so far predominantly on increasing fuel efficiency, adopting lower-carbon biofuels and marginal technological substitutes. Up to date, there has been little to no discussion on (fiscal) reforms for actively restraining the number of flights of those groups of passengers who are most responsible for environmental impacts of aviation.

The current differentiation of the Air Passenger Duty (APD) can be rationalized on environmental and social grounds, as higher classes (requiring more space and plane capacity) and larger travel distances are charged more heavily. However, the APD does not provide a progressively increasing incentive to reduce demand for frequent flyers (which are most responsible for the increase in demand and environmental impacts). With the current tax regime, the increase of passenger demand will not be limited to 60%, but will increase by 127% (DFT, 2013).

This paper therefore considers the potential for a fiscal reform that aims to:

- 1 prevent passenger demand from increasing more than 60% by 2050 (in line with Committee on Climate Change recommendation) and obviate the need for a new runway in the South East;
- 2 incentivise a more equitable distribution of those flights across the income spectrum.

### 1.2 Central objective

The central question is what such a tax regime should look like (including implementation practicalities) in order to achieve these goals and to assess its impacts (on passenger demand, runway capacity requirements and distribution of demand).

### **1.3 Outline**

In order to answer the central question the report presents the following outline:

- In chapter 2 we will present a proposal for a Frequent Flyer Levy (FFL).
- In chapter 3 we will describe how such a fiscal reform could be implemented. We will consider practical implementations such as the instance which is responsible for the collection of tax revenues, requirements of data collection, implications for passengers etc.

## 2 Proposal for a Frequent Flyer Levy

### 2.1 Introduction

In this chapter we present a proposal for a tax reform of the APD into a Frequent Flyer Levy. We will first present a brief overview of the current APD in section 2.2. In section 2.3 several options for designing an FFL are discussed before presenting the proposal in section 2.4. Section 2.5 finally concludes.

### 2.2 The current APD

The APD came into effect on 1 November 1994. It is a duty of Excise which is levied on the carriage of passengers on aircrafts from a UK airport. The tax level depends on the final destination and class of travel of the passenger (see Table 1):

- Higher levels apply if the distance of a country's/territory's capital city from London exceeds 2,000 miles;
- Higher levels apply if passengers are carried on aircrafts with an authorised take off weight of 20 tonnes or more and equipped to carry fewer than 19 passengers, standard rates apply where passengers are carried in any class of travel other than the lowest, a reduced rate applies for passenger traveling in the lowest class of an airplane.

Table 1 Tax levels from 1 April 2015 (from 1 April 2016 between brackets)

Distance from London (miles)	Reduced rate	Standard rate	Higher rate
Band A (0 to 2,000 miles)	£13 (£13)	£26 (£26)	£78 (£78)
Band B (over 2,000 miles)	£71 (£73)	£142 (£146)	£426 (£438)

Source: HM Revenue and Customs (2015)

The table shows that tax levels range between £13 and £426 (£ 438 from 1 April 2016). The rate of Band B is roughly 5,5 times higher than the tax rate in Band A. The rate also depends on the ticket class: the standard rate is twice as high as the reduced rate, while the higher rate is respectively three and six times higher than the standard and reduced rate.

The APD revenue from passengers is collected by airlines, while HM revenue and customs is responsible for collecting the tax revenues from the airlines, overseeing the process and providing information to airlines. The primary law on APD is stated in the Finance Act 1994 (sections 28 to 44 inclusive and schedules 5A and 6).

Since 1 May 2015, passengers under the age of 12 and flying in the lowest class of travel, are exempted from the APD.<sup>1</sup> Airlines are obliged to keep (electronic) records proving that such passengers are not chargeable. HMRC audits these records by requesting insight in the electronic booking systems of the airline companies. The airline companies are responsible for checking if passengers have submitted correct ages during their check-in or boarding. HM revenue and customs relies on the airlines that such checks have been carried out properly.<sup>2</sup>

## 2.4 Options for an Frequent Flyer Levy

There are several options for introducing a progressive element in the tax system. Options are for example:

- 1 introducing a single tax rate increasing for each subsequent flight;
- 2 add a percentage on the current APD which increases for each subsequent flight;
- 3 add a percentage on ticket prices which increases for each subsequent flight;
- 4 the same tax increase for all flights and exempt the first flight from tax.

Each of the options carries their own advantages and disadvantages. Although a single progressive rate (option 1) would decrease the complexity of the current APD system (apart from the progressive element)<sup>3</sup>, a drawback is that the more socially and environmentally desirable higher taxation of higher classes and larger travel distances in the current APD will be abandoned. The second option would overcome this disadvantage, although the tax system would be more complex compared to the first option. The complexity would also increase in the third option while the fourth option is least desirable in terms of progressively reducing incentives, but is administratively most easy to implement.

Option 3 is taken forward in this study. The main advantage of this option is that it allows for most differentiation of taxes and is therefore potentially most effective from a social and environmental perspective. The rationale behind this option is that ticket prices are correlated with environmental impacts (mainly because of fuel costs) and income of passengers (passenger with higher income purchase more expensive tickets). Adding a percentage on ticket prices would therefore provide a larger price incentive for tickets of flights with larger environmental impacts and for passengers with larger incomes.

A disadvantage of the third option (which is also the case for option 1 and 2) is that it is administratively rather complex to implement (see chapter 3). Although less sophisticated, the fourth option is therefore taken into consideration as well in chapter 3 of this report as a 'fall-back option' for option 3.

## 2.5 Frequent Flyer Levy proposal based on ticket prices

An indicative scheme for the FFL (based on ticket prices) is presented in Table 2. The table shows that the tax level ranges from 0% of a single journey ticket price in the first flight to 239% in the ninth

---

<sup>1</sup> Other examples of exempted passengers are children below the age of 2 years who are not allocated a separate seat and from 1 May 2016, passengers under the age of 16 years and flying in the lowest class of travel.

<sup>2</sup> Source: interview Ian Barry, HMRC, June 5th 2015.

<sup>3</sup> by abandoning travel classes and distance bands

flight. As there are a multitude of tax rate combinations that would result in a decrease of 60%, this table just serves as an example and should not be interpreted as the only possible scheme. The calculations behind the figures in Table 2 are presented in Annex A.

**Table 2 Required percentages on current one ticket prices for single one-way journeys excluding APD (indicative)**

Flight rank	1 <sup>st</sup>	2nd	3 <sup>rd</sup>	4th	5th	6th	7th	8th	9 <sup>th</sup>
Percentage on current APD	0%	9%	24%	46%	74%	109%	149%	193%	240%

Source: own calculation

With such a scheme demand would be limited to a 60% increase in 2050, the need for new runway capacity will be obviated and it would result in demand which is distributed more evenly across the income spectrum.

## 2.6 Conclusion

In this chapter an option for a Frequent Flyer Levy (FFL) has been proposed. The FFL is based on a percentage of the ticket price and meets the objectives mentioned in the introduction. A fall-back option is the same tax increase for all flights and exempt the first flight from tax. In the next chapter we will present how such reforms could be implemented in practice.

## 3 Implementation of the FFL

### 3.1 Introduction

In this chapter we present how the FFL could be implemented in practice. Important criteria for implementation are that the administrative burden is as low as possible, security of information is guaranteed, there is limited requirement of new information (use of existing information), immigrants and firms are not unduly burdened, the reliability of the data is sufficient for tax purposes, the levy is collected by a logical and reliable instance/institute and minimal opportunities for tax fraud.

For the implementation, we propose to adhere as much as possible to the current processes and responsibilities of parties currently involved in the APD. A short overview of the processes, responsibilities and definitions of the current APD is presented in section 3.2. In section 3.3, we present the additional steps that are required for transforming the APD into the progressive tax regime. In section 3.4, 3.5 and 3.6 we respectively discuss the implications for airlines, international (passengers) and business travellers and SME's. Section 3.7 concludes.

### 3.2 Processes, responsibilities and definitions in the current APD

In the current tax system there are basically two important players in the process of collecting the tax revenues:

- airlines are responsible for collecting tax revenues from passengers;
- HM revenue and customs is responsible for collecting the tax revenues from the airlines, overseeing the process, auditing and providing information to the airlines. If airlines have not declared the tax correctly there may be an assessment for under declared taxes and airlines are liable to penalties.

By adhering to these current processes and responsibilities, we believe that an implementation would be most cost efficient as it requires lowest administrative and organisational changes and it would make optimal use of the current infrastructure for collecting tax revenues. To avoid confusion, we also propose to adhere as much as possible to the current definitions of the APD.

The definitions of the APD on chargeable passengers and aircrafts are:

- A chargeable passenger is anyone carried on a chargeable aircraft who is not covered by an exemption. Exempted passengers are flight crew, cabin attendants, persons escorting a passenger or goods, persons undertaking repair, maintenance, safety or security work or ensuring the hygienic preparation and handling of food and drink, children below the age of 2 years who are not allocated a separate seat, children who are under the age of 12 years and in the lowest class of travel, persons who are carried free of charge under a statutory obligation and passengers on connecting flights. From 1 May 2016, passengers under the age of 16 years and flying in the lowest class of travel will be exempted as well.
- Chargeable flights are fixed wing aircraft with an authorised take off weight of 5.7 tonnes or more, fuelled by Avtur. Exemptions are emergency/ public service flights, short pleasure flights, flights departing from Scottish Highlands and Islands and NATO flights.

There will be no changes in the registration process either. Airlines operating chargeable aircrafts used for the carriage of chargeable passengers from any UK airport, including Northern Ireland, should register for the tax and are required to notify changes registration details, keep records and accounts, submit returns and make payments of the tax.

### 3.3 Database requirements

In comparison to the current process for collecting the APD there are additional steps required for the implementation of an FFL. As the tax is progressive, there will be an extra data requirement to make sure that passenger are taxed properly based on the number of flights they have taken.

The most straightforward way to implement this is creating a database with information on the number of flights each passenger has taken. Such a database could be created by requesting passengers to submit their passport number to airline companies before they purchase a ticket. Airline companies could send the passport number to the central database operator who can provide airlines with the required information on the number of flights the passenger has taken and the level of the tax they have to charge. Once a ticket has been sold, airlines should send a notification to the operator of the central database, in order to make sure that the submission of the passport number by the passenger did result in a payment and an actual flight.

An important requirement is that the system is able to verify the passport numbers and make sure that the numbers are valid and current. Such an audit can be carried out by the airlines during check-in or boarding of passengers, by comparing the submitted numbers with the official document of the passenger (passport, driving licence). This procedure would be similar to the current procedures on verifying age exemptions of the APD (see section 2.2). The verification of passport numbers is already common practice, as airlines are obliged under many foreign laws to verify that passengers have submitted correct travel documents. For instance, airlines can receive penalties by foreign authorities if travel documents are incorrect.<sup>4</sup> In case of fraud, airline companies could send the correct passport numbers to the central database.

#### **Gathering passport numbers during payment of tickets?**

An alternative option could be that information on passport numbers and flight frequency is gathered during the payment of airline tickets. This would imply that the tax needs to be collected separately after the payment of tickets. Disadvantages of this approach are that additional transactions (and thus transaction costs) are required and that the tax incentive for passengers may be reduced by this option. This is due to the fact that tax is not included in the ticket price and as a result, passengers could be less aware of the tax costs in their purchase. Because of these disadvantages we would recommend to collect passport numbers before the purchase of tickets and not at the stage of the actual transaction.

Given the current roles and responsibilities in the process of collecting the APD, HM revenues and customs seems to be the most logical instance for maintaining the database and gathering the information on passport number and flight frequencies. The institute is equipped for managing

---

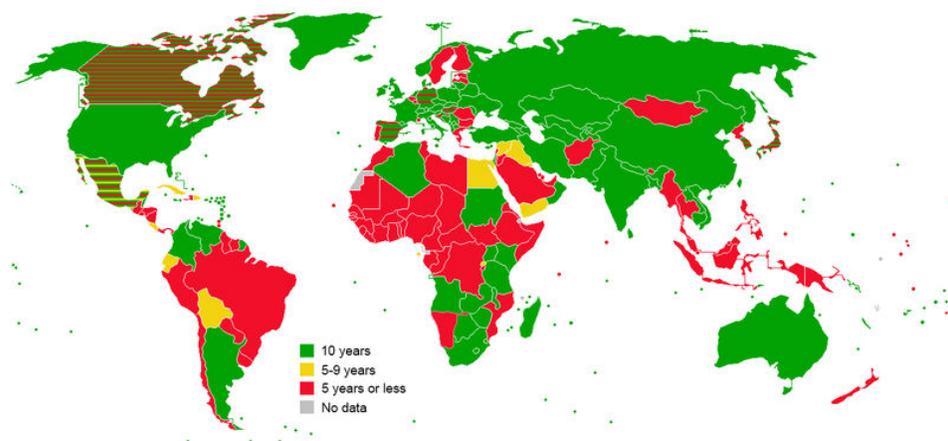
<sup>4</sup> Source: Interview Ian Barry, HMRC, June 5th 2015.

(market) sensitive information, as airlines already need to submit sensitive information such as flight coupons, number of passengers, certificates etc. In addition, HM revenues and customs will need these data for their audits (make sure that taxes have been collected properly). If a third instance would gather data and maintain the database, the data would have to be shared anyhow with HM revenues and customs in order to audit the airlines.

Maintaining a database on flight numbers could however become quite complicated. As citizens within the UK are not obliged to have a passport or identity card and may fly domestically by submitting driving licence numbers, the database should also contain driving licence numbers.

An additional issue is that passports (and their numbers) are replaced each 10 years in the UK (in many countries such as Belgium even every 5 years, see Figure 1), which means that the database should also keep records on previous numbers and replacements by new numbers. In particular keeping records of international passengers could become complicated.

**Figure 1** Validity period of passports



Source: Timatic database

However, if such a record for international passengers would not be available, the amount of passengers benefiting from this shortcoming of the system would probably be relatively low. The most recent CAA Passenger survey report (CAA, 2014) shows that approximately 32% of the terminating air passengers in the UK are foreigners. If these passengers would replace their passports every 5 to 10 years, approximately 3% to 6%<sup>5</sup> of all passengers could potentially benefit from the fact that there is no flight history of the renewed number in the database.

This range of 3% to 6% could however be an overestimation. The total amount of beneficiaries could be lower, as there will be passengers renewing their number after having booked a flight to the UK in the respective calendar year. Additionally, international passengers that do not visit the UK more frequently than once a year are exempted from tax anyhow and do not benefit from the renewal. The amount of passengers benefiting will therefore probably be (much) lower than the 3% to 6%.

<sup>5</sup> 32% divided by respectively 5 and 10 years results in 3% to 6% (rounded).

On the other hand, a potential relevant problem could be that international passengers will strategically renew their passports if they know they are exempted. For instance, in the Netherlands passports can be renewed anytime without restrictions on frequency as long as the previous passport is handed in. Costs for renewing passports in the Netherlands are £ 48 . With an average ticket price of £ 161 and the indicative scheme in Table 2, such a strategy could be profitable from the fourth flight and onwards. Additional research is required to determine the potential impacts of this potential limitation.

For the fall-back option presented in section 2.3 a more simple implementation would be possible. Under this option passengers could for instance submit a declaration to HM revenue and customs that they did not book a flight in the previous calendar year (for instance based on their passport or driving licence number). In response to the submission, passenger could receive a code which can be submitted to airlines in the booking process. Airlines in return can exempt passengers from the levy. Under this option, there are no requirements for maintaining a database with the number of flights for each passenger. Tax authorities could make cross-checks if passengers have not submitted multiple declarations in a calendar year and there is no loophole in terms of passport renewals.

### 3.4 Implications for airlines

For airlines, the progressive rate will add some complexity to the collection of tax revenues. The current information HM requires from airlines (to keep in their records and accounts) is presented in Table 3.

Table 3 Current required information for APD (not exhaustive)

Category	Information required
APD account	Monthly summary of passengers carried and calculation of APD due
Passengers	Total number of passengers carried at reduced, standard or higher rate for each destination band Number of passengers not chargeable
Duty declaration	Total amount of duty due at each rate, total amount of duty due and amount, date and payment method (credit transfer, direct debit, cheque) of any duty paid
Other records	All documents that prove passengers are not chargeable for any reason
	Copies of any returns made to CAA and airport authorities relating to number of flights operated or number of passengers carried
	Voyage reports, load sheets, passenger manifests
	Flight interruption manifests
	CAA certificate of airworthiness
	Documents relating to any contractual arrangement for the leasing, hiring or chartering of aircraft by or to yourself
	Invoices relating to ‘Time-saver Chequebook’ type tickets
	Flight coupons

Source: HM revenue and customs

Airlines will need to add information on the flight frequency of the flyers and keep records on ticket prices for the passengers to make a calculation of the FFL due. However, airlines will not be required anymore to keep records on the total passengers carried at reduced, standard or higher rate for each destination band.

For the fall-back option, changes compared to the current situation are relatively low. Airlines will need to keep a record of documents that prove that passengers have submitted a declaration to HM revenue and customs that they did not book a flight in the calendar year. As airlines already have to keep records of passengers that are not chargeable for any reason, changes are relatively limited.

### **Possible conflicts with Regulation (EC) No 1008/2008**

A potential conflict of the FFL may arise with the European Regulation on common rules for the operation of air services (EC 2008). This European Regulation states in article 23 that “air fares available to the public include the applicable air fare or air rate as well as all applicable taxes, and charges, surcharges and fees which are unavoidable and foreseeable at the time of publication.” A potential disadvantage of the FFL is that airline companies are not able anymore to include all taxes in their advertisements, as the amount of taxes is not foreseeable yet for airlines. The Regulation does not seem to be a legal showstopper, although a more in-depth assessment is required to determine if, and to what extent, an FFL would conflict with this Regulation.<sup>6</sup>

### **3.5 Implications for (international) passengers**

For passengers a progressive tax rate would imply that passport numbers would have to be submitted before buying a ticket. Although passport numbers already have to be provided for checking in, submitting these details before purchasing a ticket will require a (small) change in routine in the purchase process. In case of the fall-back option the process would be a bit more complex for passengers, as they will have to submit a declaration first (and enter a code) before purchasing the ticket. It will be therefore important to set up a clear system and provide sufficient information to facilitate this process.

### **3.6 Implications for business travellers and Small and Medium Enterprises**

The FFL may impact business travellers and SME's, in particular those who do not have alternatives for their flights (such as alternative transport modes). Negative impacts could be mitigated by recycling increased tax revenues of a FFL to companies that are disproportionately impacted by the FFL, for instance by allowing to deduct a certain percentage of ticket prices from corporation taxes. An alternative option could be to introduce a system in which companies instead of passengers are taken as the central entity for levying business flights. In such a system, the flights of the company's individual employees are added in order to determine the levy instead of adding the flights of one single employee. This system should be designed in such a way that negative impacts on SME's are reduced. Further research is required for designing such options in more detail.

---

<sup>6</sup> Source: M. Siermans. Policy officer aviation Dutch Ministry of Transport.

### **3.7 Conclusion**

In this chapter the practical implementation of a FFL has been discussed. We would recommend to adhere as much as possible to the current definitions, roles and responsibilities of instances in the APD. For adding a progressive element, a central database is required to record passport numbers and flight frequencies, preferably including international passengers although not strictly necessary. HM revenue and customs seems to be the most logical instance to collect the information and manage the database.

There will be negative implications for airlines, (international) passengers, business travellers and SME's. But a good implementation and supporting policies could minimize impacts. A potential conflict of the FFL may arise with the European Regulation on common rules for the operation of air services (EC 2008). Although beforehand the Regulation does not seem to be a legal showstopper, a more in depth assessment is required to determine if and to what extent the FFL would conflict with this Regulation.

## 4 Literature

### **CAA (2014)**

CAA Passenger Survey Report 2013. A survey of passengers at Aberdeen, Birmingham, East Midlands, Edinburgh, Gatwick, Glasgow, Heathrow, Inverness, London City, Luton, Manchester, Newcastle and Stansted Airports. Civil Aviation Authority.

### **Committee on Climate Change (2013)**

Factsheet: Aviation. Retrieved from <http://www.theccc.org.uk/wp-content/uploads/2013/04/Aviation-factsheet.pdf>

Committee on Climate Change (2015).

Letter in response to consultation on increasing the UK's long-term aviation capacity. 3rd February 2015

### **Department for Transport (2013)**

UK Aviation Forecasts. Retrieved from

[https://www.gov.uk/government/uploads/system/uploads/attachment\\_data/file/223839/aviation-forecasts.pdf](https://www.gov.uk/government/uploads/system/uploads/attachment_data/file/223839/aviation-forecasts.pdf), p66

### **Department for Transport (2014)**

Public experiences of and attitudes towards air travel: 2014. Retrieved from

<https://www.gov.uk/government/statistics/public-experiences-of-and-attitudes-towards-air-travel-2014>

### **EC (2008)**

REGULATION (EC) No 1008/2008 OF THE EUROPEAN PARLIAMENT AND OF THE COUNCIL of 24 September 2008 on common rules for the operation of air services in the Community (Recast).

### **National Travel Survey (2014)**

Published:30 July 2013Updated:29 July 2014 <https://www.gov.uk/government/statistical-data-sets/nts03-modal-comparisons>

### **NEF (2014)**

Managing aviation passenger demand with a Frequent Flyer Levy. S. Devlin, S. Bernick, New Economics Foundation, 2014.

## Annex A Calculation of percentages and robustness of results

The calculation of the required percentages of ticket prices have been based on NEF (2014). An indicative scheme of a FFL has been calculated in this study to limit demand to 60% increase in 2050. The scheme is presented in Table 4. For the details of this calculation we refer to NEF (2014).

**Table 4 Example of a single progressive tax rate to limit demand under 60% (£)**

Flight rank	1 <sup>st</sup>	2 <sup>nd</sup>	3 <sup>rd</sup>	4 <sup>th</sup>	5 <sup>th</sup>	6 <sup>th</sup>	7 <sup>th</sup>	8 <sup>th</sup>	9 <sup>th</sup>
Tax rate	0	14	39	74	119	174	239	309	384

Source NEF (2014)

The required percentage of the ticket price has been calculated based on this scheme. In DFT (2013) average ticket prices have been presented (approximately £160 excluding APD). This price remains fairly constant between 2015 and 2050. The required percentage has been calculated by dividing the numbers in Table 4 by this amount of £160.

**Table 5 Required percentages on current one ticket prices for single one-way journeys excluding APD**

Flight rank	1 <sup>st</sup>	2 <sup>nd</sup>	3 <sup>rd</sup>	4 <sup>th</sup>	5 <sup>th</sup>	6 <sup>th</sup>	7 <sup>th</sup>	8 <sup>th</sup>	9 <sup>th</sup>
Percentage on current APD	0%	9%	24%	46%	74%	109%	149%	193%	240%

Source: own calculation

The presented figures are indicative to provide insight in the order of magnitude of percentages. However, these should not be interpreted as absolute figures. The most important reasons are:

- there are multiple combinations possible which could result in limitation of increase by 60% in 2050. The presented scheme is not the only possible option;
- Calculations in NEF (2014) of the single progressive tax rate are based on assumptions on elasticity of demand depending on flight rank and household income. Indicative figures have been used which could be somewhat arbitrary (as already stated by the authors). If no differentiation is applied and one single elasticity of demand of -0.6 for all flights and income groups is assumed, the results do not differ significantly: demand increases by 57.4% instead of 59.7%. However, the unavailability of specific elasticities and flight rank and income groups creates some uncertainty in the results.

