# The economic impact of air taxes in Europe Greece

October 2017



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#### **Executive Summary**

This report is part of a broader set of reports commissioned by Airlines for Europe in which PricewaterhouseCoopers LLP provide an independent overview of the current air passenger taxes in Europe and an assessment of their economic impact. In this report we simulate the scenario of abolishing the Greek Airport Development Charge in January 2018, using a Computable General Equilibrium model.



#### 6.2 million

additional arrivals by 2020



#### 5 million

extra inbound tourist arrivals by 2020



#### €1.2 billion

additional tourism expenditure by 2020



#### €1.3 billion

higher GDP in Greece per year in 2030, rising from €720 million per year in 2020.



#### €5.8 billion

higher GDP across the EEA per year in 2030, rising from €1.7 billion per year in 2020.



#### €380 million

larger air sector in Greece per year in 2030, rising from €310 million per year in 2020.



#### 12,000

additional jobs across the Greek economy in 2030, rising from 5,700 in 2020.



#### 100% fiscal return

We estimate that total passenger taxes will raise €240 million in 2017. Following the abolition of all taxes, our analysis suggests that 100% of this will be recouped in indirect tax income. This means the government could expect to recuperate the entire tax cut through indirect tax income, while also improving the economy in other ways. The Airport Development Charge is higher than any other rate in the EEA for short haul flights besides the UK, making some routes unviable in low season. Therefore, its abolition has the potential to stimulate significant investment, and improve tourism year-round.

#### Background to the study

#### **Background**

PwC have been commissioned by Airlines for Europe, the representative body of various European airlines, to provide an overview of the current aviation taxes in Europe and an assessment of their economic impact. Whilst the consortium commissioned and financed the work, and commented on draft reports, the final reports represent the independent analysis of PwC.

We are producing 7 country reports which summarise the economic impact of a change in the level of air passenger tax, as projected by our multi-regional CGE model. This includes reports on the effect of reducing passenger tax in 6 countries (Austria, France, Germany, Greece, Italy and Norway) and a report on the effect of introducing passenger tax in Sweden in line with the proposal due to be implemented in 2018.

In addition to this we are producing an EEA report, for which we model a universal and multilateral abolition of air passenger taxes across the EEA (which amounts to abolishing passenger taxes in 10 EEA countries). This forward-looking analysis is complemented by 3 case studies (Ireland, Netherlands and Italy) in which we analyse the effects of historic changes in passenger tax.

This analysis builds upon analysis undertaken by PwC in 2013 to assess the economic impact of Air Passenger Duty

(APD) on the UK.¹ This analysis considered the potential positive impact of abolition of APD in order to aid an evidence-based assessment of the policy, and its contribution to UK public finances. This report found that abolishing APD would lead to a net positive gain to public finances through the economic activity it would stimulate, and accordingly concluded that such a tax cut would pay for itself.

# (light pink), and EEA countries with no taxation (dark grey)

Figure 2: Location of the 7 country reports (dark

pink), countries with taxes but not under analysis

#### Air passenger taxes in the European Economic Area

Air passenger taxation varies across Europe, in both the level and method of application. For the purpose of this study we have defined a passenger tax as one which is paid to federal government for revenue-raising purposes, as opposed to offsetting the cost of a service provided, as aligned to the IATA List of Ticket and Airport Taxes and Fees. The 10 countries in the EU/EEA with some form of passenger tax are as follows: <sup>2</sup>

- Austria Air Transport Levy
- Croatia Civil Aviation Authority Tax
- France Civil Aviation Tax, Solidarity Tax, Fiscal Tax (Corsica)
- Germany Air Transport Tax

<sup>&</sup>lt;sup>1</sup> PwC 2013, The Economic Impact of Air Passenger Duty

<sup>&</sup>lt;sup>2</sup> Latvia, Luxembourg, Croatia and the United Kingdom are included in our model but will not have country-level reports.

- Greece Airport Development Charge
- Italy Council City Tax
- Latvia Passenger Service Charge
- Luxembourg Passenger Service Charge
- Norway Air Passenger Tax
- UK Air Passenger Duty

The taxes are not easily compared between countries, as some taxes vary by destination country, others vary by airport, and some include transfers as well as departures. Nevertheless, Figure 3 benchmarks the rates across the countries under analysis against each other by including all different rates, regardless of how the taxes are banded. The pink dashes pick out the tax rates payable in each country, while the grey bars show the range. The full breakdown of taxes in each country can be found in Appendix 2. It is important to note that many countries charge no taxes, however, and so do not feature in the diagram.

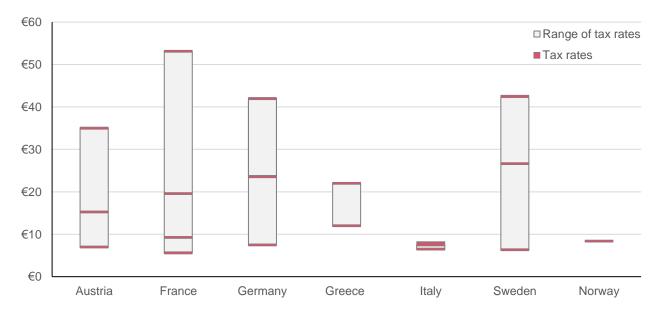


Figure 3: Benchmarking analysis of air passenger tax rates in the 7 countries under analysis

Source: IATA, PwC analysis

This report covers the Greek Airport Development Charge ("spatosimo"). Although it is labelled a charge rather than a tax, the fee has historically been levied by the Hellenic Civil Aviation Authority, a government department. Greek airports are currently in a period of transition, as 14 regional airports are in the process of being privatised. After the privatisation, it is expected that the revenue from the Airport Development Charge will be payable to Fraport Greece (the new owner), and held in the "Airports Development and Modernization Fund" at the Bank of Greece. For all other airports it is expected that the levy will be split between financing operational needs, equipment and infrastructure projects, and providing revenue for the Civil Aviation Authority.<sup>3</sup>

In anticipation of the privatisation, the Greek government has passed an amendment in the law which changes the structure of the Airport Development Charge. The Airport Development Charge has historically been a variable charge: €12 on passengers flying to Schengen countries and up to €22 on passengers flying outside this area. The recent amendment flattens the rate to €12 regardless of the final destination, and will be imposed

<sup>&</sup>lt;sup>3</sup> Keep Talking Greece 2017, New Airport Levy to be imposed to all airports, lowers children age

once the 14 Greek regional airports begin operating under new management.<sup>4</sup> It is then proposed that the fee will drop to a flat rate of €3 euros from November 2024.<sup>5</sup>

In this report we model the macroeconomic and fiscal effects of abolishing the tax entirely. We have initiated our simulations to start in January 2017 and run through to 2030, with the tax reductions taking effect in January 2018. Figure 4 shows the rate of Airport Development Charge under each of the scenarios.

€14 €12 €10 €8 €6 €4 €2 €0 2017 2018 2019 2020 2021 2022 2023 2025 2026 2027 2028 2029 2030 2024 Domestic/EU - Abolition Domestic/EU - Status quo

Figure 4: Greek Airport Development Charge rates under each scenario

Source: IATA, PwC analysis

The implied revenue under both the scenario that the tax is abolished and the status quo is maintained are show below in Figure 4. We have used tax revenue data from the industry, and then modelled the expected income for each of the scenarios, assuming that the reductions in tax rate occur in 2018.<sup>6</sup>

The scenario of full abolition demonstrates the maximum economic benefit which could be unlocked through removal of the charge. Any reduction in the rate of charge from its current level could reasonably be expected to generate some positive economic impact below this level.

<sup>&</sup>lt;sup>4</sup> The amendment states that "the fee should be uniform for all airports, regardless of the final destination of departing passengers, for reasons of equal treatment of passengers who start from different airports, creating healthy competition between airports and for practical reasons of uniformity application."

<sup>&</sup>lt;sup>5</sup> GTP Headlines 2017, 'Spatosimo' Air Passenger Fee Now €12 for All Greek Airports

<sup>&</sup>lt;sup>6</sup> Athens International Airport 2015, Annual Report 2015

€350m €300m €250m €200m €150m €100m €50m €m 2017 2018 2019 2020 2021 2022 2023 2024 2025 2026 2027 2028 2029 2030 Abolition Status quo

Figure 5: Forecast income from the Greek Airport Development Charge under each scenario

Source: PwC analysis

#### Additional taxes and charges

It is important to note that air passenger taxes are not the only fees that airlines in Europe are subject to. Other costs, such as service charges levied by airports, have not been included in the analysis in this report. However, it is important to recognise that these charges nonetheless represent a cost burden to airlines operating in Greece, and reflect the degree to which the aviation industry already contributes towards national infrastructure and assets. As described in the introduction to this report, the air passenger taxes modelled are purely those which are revenue raising, and are distinct from, and additional to, charges which are used to pay for a service.

Greece levies three other main fees against passengers departing from its airports: the HCAA Passenger Fee, which is levied for the purpose of providing services to passengers, the Passenger Security Charge, and the Passenger Terminal Facilities fee. The table below outlines the rates and how they vary for the different destination of flights. These charges vary depending upon the destination of the flight. It is important to acknowledge that in the presence of this charge, abolishing air taxes would not prevent the maintenance and upgrade of airport infrastructure.

Table 1: Outline of main taxes/charges and the rates

Main Taxes/Charges	Flight Category	Rate
HCAA Passenger Fee	Domestic or International	€0.30
Passenger Security Charge	Domestic or Within EU	€6.15
Passenger Security Charge	International	€5
Passenger Terminal Facilities	Domestic or Schengen area	€12.89
Passenger Terminal Facilities	Non-Schengen area	€16.19

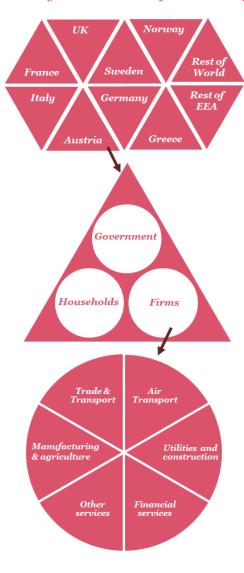
Source: IATA List of Taxes and Fees

#### Modelling Approach

To assess the economic impact of passenger taxes in Europe, we have built a multi-regional Computable General Equilibrium (CGE) model which captures the net economic impact of policy changes. This net analysis accounts for changes and displacements in the economy as it moves to a new equilibrium following the policy intervention.

CGE models are used by institutions such as the IMF, World Bank, OECD and several national governments to quantify the economic impact of policy changes. In essence, a CGE model captures the economic behaviours and interactions of all agents (consumers, producers, government, investors, etc.) in the economy. After a policy change (such as the abolition of air passenger taxes), these economic agents adjust to price changes until equilibrium is restored. A CGE model can be used to compare the differences between the baseline and policy shock scenarios to evaluate the economic impact.

Figure 6: High level structure of our multi-regional CGE model



#### Global level

We have developed a multi-regional, dynamic CGE model for Europe. Each country of interest is captured individually within the model, with all other countries combined into "Rest of EEA" and "Rest of World" regions.

#### Country level

Within each country there is a Government sector, a household sector, and an industry sector. In CGE models, government, households and businesses engage in repeated local microeconomic interactions. These in turn give rise to macroeconomic relationships affecting variables such as employment, investment and GDP growth.

#### Industry level

In order to apply a tax change to the aviation specifically, we have separated this sector from the general Trade & Transport sector. The sectors we have chosen to model for these preliminary results are listed to the right. Underlying each sector is GTAP data regarding the extent to which each sector in each country trades with each other sector.

Table 2: Types of impact captured by the CGE model

Impact type	Description
Direct	GVA and employment directly attributable to changes in output in the aviation sector
Indirect	GVA and employment contribution attributable to any upstream business activities directly associated with the aviation sector
Induced	GVA generated through consumer spending by those directly or indirectly employed by the aviation sector and connected businesses.
Catalytic	The broader economic contribution of the aviation sector through stimulating changes in tourism expenditure and international connectivity

The model allows us to capture different types of impact. As the CGE model captures all changes in the economy simultaneously, these impact types cannot be broken out individually. We refer to economic impacts through changes in the level of Gross Value Added (GVA) at both a sectoral and national level. GVA is a measure of the value of goods and services produced which, at a national level, is broadly comparable to GDP. The model has been calibrated with Eurostat data to create a baseline view of the European economy.

#### Results

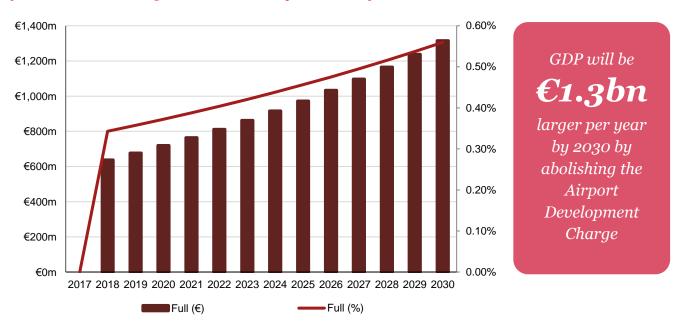
We have modelled the impact of the abolition scenario on key macroeconomic indicators, both nationally and internationally, the results of which are outlined in this section. This section is intended to provide an overview of the key results from our analysis. For a deeper look into the mechanisms driving the results we refer the reader to PwC's UK APD study.<sup>7</sup>

Our results are underpinned by a number of assumptions, and rely upon a long run growth rate in the European Economic Area of 2%. A growth rate lower than this could lead to different results in absolute terms, but we would not expect the overall conclusions of the study to be materially affected.

#### Impact on national real GDP

Real GDP increases by €640 million in the year after the tax cut relative to the baseline scenario. This uplift over the baseline is sustained over the following years, growing from 0.34% per year in 2018 to 0.56% by 2030.

Figure 7: Impact on real GDP compared to base level from the abolition of air taxes in Greece (percent change from the base case on right-hand axis, and impact in € on left-hand axis)



This increase in GDP is reflected across all sectors of the Greek economy, with all expecting a positive impact. The aviation sector experiences the most pronounced uplift in output, reaching 11.8% or €380m higher per year than our forecast baseline in 2030. Other sectors also experience changes related to interaction effects with the aviation sector.

Although all sectors experience a positive impact in 2030, there is some variation in the magnitude of this positive effect. For example, increases in output range from €19 million in the utilities and construction sector to €238 million in the wider transport sector. Typically, the sectors which benefit most substantially from the tax cut, beyond those directly affected, will be those which are the biggest consumers of air transport as a share of their total purchases. Following the tax change, one would typically expect the market price of air transport to fall, and hence those businesses for whom air transport makes up a substantial share of their spending will stand to benefit most materially.

<sup>7</sup> PwC 2013, The Economic Impact of Air Passenger Duty

Table 3: Impact on real GDP by sector compared to base level from the full abolition of air taxes in Greece (change from the base case)

	2030
Agriculture & manufacturing	€175m
Utilities & construction	€19m
Transport	€238m
Aviation	€380m
Financial Services	€34m
Other services	€470m
Total	€1,315m

Tourism does not fit neatly alongside the other sectors in our model as it is a category of passenger rather than a sector. If a tourist purchases a bus ticket this would contribute to the Transport sector, if a tourist paid a fee on money exchange this would contribute to Financial Services. However, Tourist Satellite Account data suggests that approximately 80% of tourist expenditure would fall into Other Services, in the form of accommodation, cultural and leisure activities, cafes and restaurants etc. The remaining 20% is mostly split between various modes of travel, including aeroplanes.

We estimate that the abolition of Greek passenger tax would induce a net increase in tourist expenditure of €511m per year in 2030. This is relatively high compared to other countries due to the fact that 79% of the additional passengers are inbound tourists. This is the one of the highest proportion of inbound to outbound tourists in Europe.



Increasing tourism expenditure along with an improving economy contribute to higher consumption, which is a major component of GDP. In 2020 we estimate that consumption will increase by €483 million per year, rising to €868 million in 2030.

The change in GDP presented above and increase in consumption is driven by changes in income from both capital and households (i.e. increased profits and wages). Household income increases more than capital, and is nearly €500 million larger than the baseline scenario in the first year, while capital income increases by around €150 million.

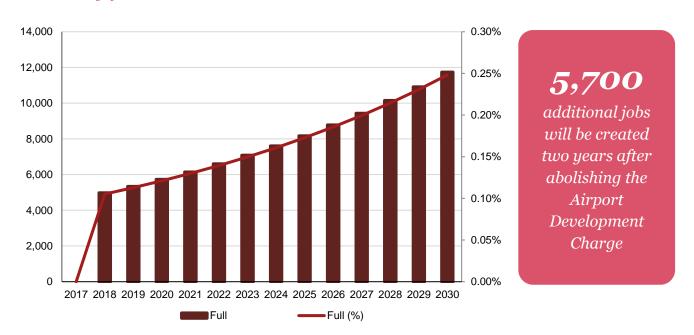
€1,400m €1,200m €1,000m €800m €600m €400m €200m €0m 2019 2020 2021 2022 2023 2024 2025 2026 2027 2028 2029 2030 2017 2018 ■ Labour - Full (€) ■ Capital - Full (€)

Figure 8: Impact on capital and household income compared to base level from the full abolition of air taxes in Greece (absolute change from the base case)

#### Impact on national employment

Under the scenario where the Airport Development Charge is fully abolished, more than 5,000 jobs will be created over the baseline in the year following the implementation, and a total of 12,000 jobs will be created by 2030.

Figure 9: Impact on total national employment compared to base level from the abolition of air taxes in Greece (change from the base case)

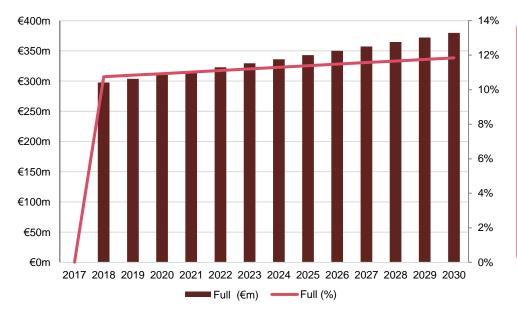


#### Impact on national aviation sector GVA

The value of goods and services produced in Greece's aviation industry is forecast to be around 11% larger than the baseline forecast in 2018 following the abolition of the Airport Development Charge, adding nearly €300m

to the sector. By 2030, the sector is forecast to be nearly 12% larger than the baseline scenario, equal to around €380 million.<sup>8</sup>

Figure 10: Impact on aviation GVA compared to base level from the abolition of air taxes in Greece (percent change from the base case on right-hand axis, and impact in  $\mathfrak{C}$  on left-hand axis)



The aviation sector would grow **€310m**in 2020 following the abolition of the Airport

Development

Charge

#### Impacts on passengers and tourism

The CGE modelling approach captures the wider macroeconomic effects of the changes in tax rate. It is not able to provide a route-level analysis of the aviation sector, and accordingly it captures demand and capacity constraints only at an industry-wide level. However, if it is assumed that an increase in economic output of the aviation sector manifests itself in an increase in passenger numbers, then full abolition of all air passenger taxes could add an additional 2.2 million arrivals in 2020 over a baseline of 19.2 million (an increase of 8.9%). The impact of halving all air passenger tax rates would be an increase of roughly 6.2 million arrivals.

Of these passengers, we estimate that there will be an additional 1.7 million tourists flying into Greece in 2020, and a total of 5 million additional tourists in the period to 2020. Inbound tourism is recorded as an export as money from other countries flows into the Greek economy, which supports GDP growth. However, it is important to recognise that abolishing the aviation tax will impact both inbound and outbound tourism. Outbound tourism is likely to increase as, among other factors, some Greek citizens will be priced into taking overseas trips and substitute domestic travel with overseas travel. This is treated as an import and will lead to money flowing out of the Greek economy which will offset some of the increase in expenditure by inbound tourists. As such, we forecast that the net increase to tourism expenditure (increase in exports minus the increase in imports) will be around €1.2 billion in the three year period to 2020.

We can extend this analysis, as shown in Figure 11, to give a breakdown of additional passenger numbers by class, distance and purpose. The chart reveals that the vast majority of passengers travel economy class on flights within the European Union. Approximately 92% of the additional passengers would come to Greece for leisure

#### 6.2m

additional
arrivals between
2018 and 2020 by
abolishing the
Airport
Development
Charge

#### 5m

additional tourists between 2018 and 2020 by abolishing the Airport Development Charge

<sup>&</sup>lt;sup>8</sup> Note, we are using GTAP's definition of the aviation sector, which may be broader than other definitions.

purposes versus 8% for business purposes, with the level and type of expenditure differing between these two groups.

Figure 11: Additional passengers (arrivals) that would result from the tax cut, broken down by class, distance and purpose. Each segment is a proportion of the total increase in arrivals.



#### Impact on national tax income

Whilst direct income from the Airport Development Charge will decline as the result of its abolition, government income from other taxes will increase. These indirect increases in government income are derived from labour taxes, social security contributions, product taxes, and profit taxes, and are a result of wider improvements in macroeconomic performance, including increases in employment, productivity, wages, and consumption.

Completely abolishing the air passenger tax leads to increases in all categories of tax. Labour taxes increase the most, followed by social security contributions, while profit taxes rise the least. In the full scenario, the fiscal return on abolishing Aviation Tax is 1.00 in 2020, implying a €1.00 cut results in a €1.00 increase in indirect tax income. This means the government could expect to recuperate the entire tax cut through indirect tax income, while also improving the economy in other ways. The Airport Development Charge is higher than any other rate in the EEA for short haul flights besides the UK, making some routes unviable in low season. Therefore, its abolition has the potential to stimulate significant investment, and improve tourism year-round. This is likely to cause a larger increase in GDP than in other European markets, and a more substantial effect on tax income than by cutting other taxes. It is important to note that this is our central case and is subject to a number of assumptions around the impact of tax on the wider economy. As such it is possible that the abolition of the aviation tax may have a differing impact on productivity, trade, and tourism than our analysis suggests, which would result in a different level of recuperation and economic impact.

€400m €350m €300m €250m €200m €150m €100m €50m €0m 2030 2017 2018 2019 2020 2021 2022 2023 2024 2025 2026 2027 2028 2029 ■ Labour Taxes ■ Social security contributions ■ Product taxes (exc. Imports) ■ Profit taxes

Figure 12: Impact on tax income compared to base level from the full abolition of air taxes in Greece (absolute change from the base case)

97% of tax cut is recouped, mainly from labour taxes, social security & product taxes

#### Impact of Greek tax abolition on global GDP

As shown in Table 4, the abolition of the Greek Airport Development Charge improves the real GDP of all of the countries we have analysed over the entire period. Austria and France are subject to the largest uplift over the next decade in relative terms, and Great Britain the greatest uplift in absolute terms. Smaller countries within the EEA, shown in Table 4 as "Rest of EEA," also perform well as a result of the abolition, with the aggregate of these countries growing by nearly 0.03% in 2030, up from a little under 0.01% in 2020. The aggregate of the rest of the world also performs well, suggesting that abolishing the tax introduces additional and increased trade flows with countries outside the EEA.

These improvements in the economic position of other countries are due to the reduced cost of flying allowing, among other things, knowledge to be transferred more freely between countries and Greek residents to spend their money on goods and services in other countries. In addition, residents and businesses in countries outside of Greece will benefit from being able to make trips to Greece for a lower price.

Table 4: Impact on real GDP by country compared to base level from the full abolition of air taxes in Greece (change from the base case)

	2	030
Austria	0.02%	€112m
France	0.02%	€704m
Germany	0.02%	€753m
Greece	0.56%	€1,315m
Sweden	0.01%	€78m
Great Britain	0.02%	€556m
Rest of EEA	0.03%	€2,303m
Rest of World	0.01%	€8,235m
Total		€14,056m

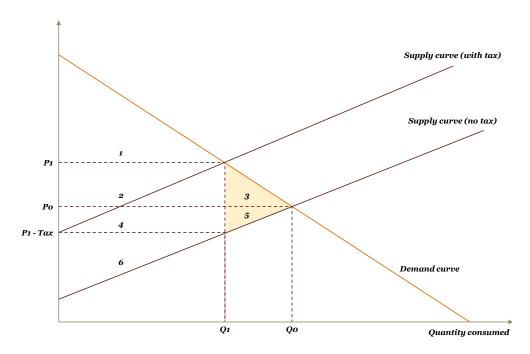
### Appendix 1: Economic theory of indirect taxes

The tax system plays a crucial role in influencing the rate of short and long-term economic growth in the economy. In aggregate, the amount of tax raised, the type of tax raised, and its interaction with public spending will affect the long-term growth rate of the economy. However, individual tax policy measures are less likely to augment the rate of economic growth for any sustained period as they are smaller in scale, but they can affect the level of GDP.

Indirect taxes, such as air passenger taxes, create distortions in the market by increasing the price of the good or service to which the tax is charged (in this case, flights), leading businesses and households to adjust their behaviour to avoid paying the tax, resulting in a lower quantity sold. By reducing the amount purchased, consumers are worse off – the extent to which is defined as a deadweight loss of taxation. We explain this concept with use of a supply and demand curve framework (see Figure 13 below).

The equilibrium price and quantity that prevails in the market for the product or service in question (i.e. a flight ticket) is determined by the intersection of the market demand and supply curves. However, with the application of an indirect tax (i.e. the respective air passenger tax), the quantity consumed in the market is represented by point Q1 in Figure 13: Illustrative deadweight loss (as marked in yellow) caused through application of indirect tax. Once the tax is removed, the market supply curve shifts downwards by the amount of the tax. The equilibrium price for consumers is now lower (Po), so they demand more of the product and as a result, the consumer surplus (a measure of consumer welfare) grows from Area 1 to Areas 1, 2 and 3. At the same time, the price received by the producer rises to Po from P1-tax and the producer surplus (a measure of producer welfare) increases from Area 6 to Areas 4, 5 and 6. The Government loses some revenue as its portion of the consumer and producer surplus is removed (Areas 2 and 3), however the overall level of welfare in the economy grows – represented by Areas 3 and 5 and known as the deadweight loss.





<sup>9 &#</sup>x27;Intermediate Microeconomics: A Modern Approach', 8th Edition, Hal. R. Varian (2010).

A common measure of the deadweight loss is the amount of GDP forgone per unit of revenue raised. As an example, if the deadweight loss were to be 0.5, this would be as 50 cents of GDP lost per €1 of tax revenue raised. Governments set tax policy to balance the need to minimize the deadweight loss to society with the imperative to use the proceeds of taxation to provide goods that would otherwise be underprovided by a free market and to correct other market failures.

The size of this deadweight loss is determined by both static and dynamics factors. In terms of static determinants, the absolute level of the tax imposed and the steepness of the supply and demand curves. In the case of the former, the higher the tax rate the further the supply curve shifts up in response and the associated deadweight loss becomes larger. For the latter, a steeper demand or supply curve reflects more inelastic supply and demand conditions in the market, and means that supply or demand is relatively insensitive to changes in price. Dynamic determinants include the extent to which air passenger tax acts as a tax on business inputs and the extent to which improving business air usage has a positive impact on GDP by boosting productivity.

## Appendix 2: Aviation tax rates in the European Economic Area

Country	Tax	Rate		Notes for Figure 3
		Short haul	€7	
Austria	Air Transport Levy	Medium haul	€ 15	
		Long haul	€ 35	
	Civil Aviation Tax	EU	€4.48	Pink dashes within Figure 3 are shown as the sum of the Civil
		Non-EU	€8.06	
		EU	Economy: €1.13	
France	Colidonity Toy	EU	Business: €11.27	Aviation Tax and Solidarity Tax.
	Solidarity Tax	Non - EU	Economy: €4.51	Fiscal Tax (Corsica) is excluded from Figure 3.
			Business: €45.07	
	Fiscal Tax (Corsica)	€ 4.57		
Germany	German Air Transport Tax	EU and EFTA	€7.47	
		Countries not included in the EU and with a distance of not more than 6,000km	€23.32	
		Other countries	€41.99	
Greece	Airport Development Charge	$\mathop{\mathfrak{C}}$ 12 to Hellenic Civil Aviation Authority		
Italy	Council City Tax	Rome airport	€ 7.50	
		Other airports	€ 6.50	
Norway	Air Passenger Tax	NOK 82		
Sweden	N/A	Proposal for 1st of January 2018)		
		Within EU	SEK 60	Figure 3 shows the proposed rates from January 2018.
		Less than 6000km	SEK 250	
		More than 6000km	SEK 400	

#### Glossary

Computable General Equilibrium model	A model used by governments and international organisations to simulate the effect of changes in policy or other external factors.
Gross Value Added	The total value of goods and services produced in a specific sector or area of the economy
Deadweight Loss	The loss in the level of welfare/efficiency in the economy when the equilibrium for a good or service is not achieved.
Passenger tax	We have defined a passenger tax, as opposed to a charge, as being raised by a government body for the purpose of raising revenue, rather than covering a specific cost
Passenger charge	A charge is a fee levied by a private body and charged on a per passenger basis
Producer Surplus	The difference in the price between the amount a producer is willing to receive for a unit (e.g. a seat on a plane) and the amount the producer does in fact receive
Consumer Surplus	The difference between a consumer's willingness to pay and the amount the consumer actually paid

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