

# The Economic Case for Abolishing APD in the UK

March 2012

# Introduction

- Following the announcement in the November 2011 Budget Statement by the UK Chancellor that planned, above inflation, Air Passenger Duty rises would go ahead in March 2012, the World Travel & Tourism Council (WTTC) commissioned Oxford Economics to undertake an assessment of the impact of the tax on the UK economy – namely the benefits to GDP and jobs if the tax were abolished.
- The research shows that removing Air Passenger Duty would result in an increase of up to £4.2 billion in GDP and the creation of up to 91,000 jobs.

# Channels of Impact (1)

The results are based on 2012 APD bands and the estimated effect of removing APD on 2012 fares.

The channels of impact are:

- 1. Aviation and tourism GVA (Gross Value Added):** Abolishing APD would increase passenger numbers and therefore direct GVA in the aviation industry itself, including activity in airlines, airport operators and retail units within airports . This would lead to further “multiplier” impacts through the supply chain and the consumer spending of additional wage income. UK tourism would also be boosted by higher foreign visitor numbers, raising direct UK tourism GVA, and leading to further (tourism-related) multiplier effects. However, UK tourism would also lose out as cheaper air fares would encourage some people to take holidays abroad instead of in the UK. This would have some negative multiplier impacts.

# Channels of Impact (2)

- 2. Aviation and tourism employment:** Higher GVA in the aviation and tourism industries would increase employment as more workers are required to deliver the higher level of economic activity. Employment would also go up as a result of higher GVA from multiplier effects.
- 3. Additional consumer spending effects:** the APD reduction will increase income available to passengers. Inbound and outbound passengers will likely spend some part of this extra income on goods and services in the UK economy, thus leading to further GVA and employment benefits.

# Summary of results (1)

Aviation and tourism industry impacts vary according to assumptions regarding how sensitive passengers are to changes in fares. This research uses two sets of estimates, one by the Department for Transport (DfT) and another prepared by Intervistas. DfT estimates show a lower sensitivity than estimates by Intervistas. Therefore results show a range of outcomes:

- Abolishing APD would raise UK GVA by between £1.808 billion and £2.944 billion in 2012 accounting for the boost to the aviation and tourism sectors from increased passengers numbers (including multiplier effects).
- The GVA impact above would mean an extra 38,000 to 61,000 jobs in the UK economy.
- The additional income for consumers from lower fares provides a stimulus to consumer spending and could further raise GVA by £1.344 billion and employment by 30,000 jobs.

# Summary of results (2)

		DfT elasticities	Intervistas elasticities
<b>GVA (£m, 2012 prices)</b>	Aviation - direct	407	722
	Aviation - indirect	305	539
	Aviation - induced	244	433
	Tourism	852	1,250
	<b>Total GVA impact</b>	<b>1,808</b>	<b>2,944</b>
<b>Employment (000s)</b>	Aviation - direct	7.9	14.1
	Aviation - indirect	6.2	10.9
	Aviation - induced	4.9	8.6
	Tourism	18.9	27.7
	<b>Total employment impact</b>	<b>37.9</b>	<b>61.3</b>
<b>Consumer spending effect of additional income*</b>	<b>Total GVA impact - central case (£m, 2012 prices)</b>	<b>1,344</b>	
	<b>Total employment impact - central case (000s)</b>	<b>30</b>	

*\*based on assumption that both inbound and outbound passengers spend 50% of additional income at home and 50% on holiday*

# Aviation & Tourism Industry – Results (1)

- Abolishing APD would lead to an increase in direct GVA for the aviation sector of between £407m and £722m depending on the elasticity assumption. The associated direct employment impact is between 7,900 and 14,100 jobs.
- Including multiplier effects arising from the aviation sector, the impact on UK GVA goes up to an estimated £956m to £1,695m, equivalent to 19,000 to 33,600 jobs.
- Tourism impacts from increased international visitors add another £1,000m to £1,730m in GVA (accounting for direct, and multiplier tourism impacts), with an extra 22,200 to 38,300 jobs.

# Aviation & Tourism Industry – Results (2)

- However, as the price of an airline ticket decreases, some domestic tourists will choose to substitute their domestic trip to go abroad.
- Not only will some UK residents substitute a domestic trip to go abroad, some passengers travelling abroad by other modes of transport (rail, ferry) will also switch to air transport as the relative cost decreases.
- Tourism impacts from a fall in UK residents choosing the UK as their holiday destination will lead to a fall in the total tourism GVA of £150m to £480m, equivalent to 3,300 to 10,600 jobs, giving a total tourism impact of an estimated £852m to 1,250m and 18,900 to 27,700 jobs.
- Together, aviation and tourism sector benefits for the UK economy are estimated to be between £1.808 billion and £2.944 billion in GVA, and an additional 37,900 to 61,300 jobs.

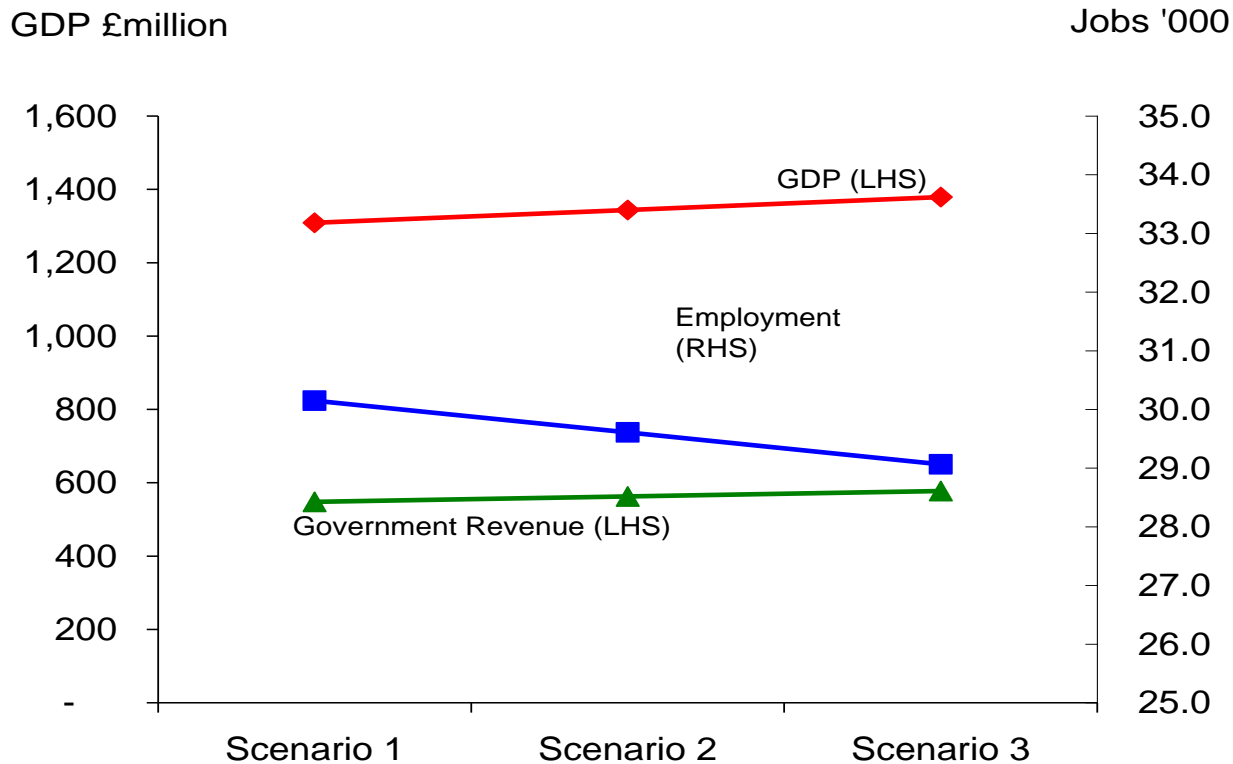


# Consumer spending effects - Results (1)

- The UK Office of Budgetary Responsibility forecasts APD revenues of £2.8 billion in 2011/12.
- In the absence of APD, this revenue would be transferred to passengers disposable income through cheaper air fares.
- It is likely that a proportion of this will flow into the UK economy through consumer expenditure.
- Oxford Economics explored 3 different spending profiles to model this impact:
  - Scenario 1: Passengers (inbound and outbound) spend 25% of the additional income at home and 75% abroad
  - Scenario 2: Passengers split expenditure between home and abroad 50/50
  - Scenario 3: Passengers spend 75% at home and 25% abroad

# Consumer spending effects - Results (2)

- The UK could expect up to £1.4bn increase in GDP and 30,000 jobs through this channel.



Source : Oxford Economics

# Annex - Assumptions

# Aviation & tourism industry – assumptions (1)

The above effects have been modelled from three key elements:

1. Estimates of the current total size of the UK aviation and tourism industries and their multiplier (i.e. supply-chain and consumer spending) impacts on the UK economy:
  - The current size of the UK aviation industry is based on recent work done for IATA by Oxford Economics
  - Tourism sector estimates are based on WTTC's Travel & Tourism Economic Impact models

# Aviation & tourism industry – assumptions (2)

2. The elasticity of demand for passenger travel with respect to fares:
  - Intervistas elasticities are higher with an average of between 1 and 1.2 considering passenger traffic on all routes. That is a 1% fall in fares leads to a 1% to 1.2% increase in passengers. Note these are elasticities estimated for Europe as a whole. (Source: “Estimating Air Travel Demand Elasticities”, Intervistas, 2007)
  - DfT elasticities estimated specifically for the UK are lower – average of between 0.5 to 0.6 considering passenger traffic on all routes. That is a 1% fall in fares lead to a 0.5% to 0.6% increase in passengers. (Source: “UK Aviation Forecasts”, Department for Transport, 2011)

# Aviation & tourism industry – assumptions (3)

3. Estimates of the increase in UK outbound passengers, leading to a fall in domestic tourism in the UK:
  - The increase in the number of UK outbound passengers implied by the two different sets of elasticities are assumed to substitute a domestic trip for a trip abroad.
  - The average level of expenditure on a domestic holiday in the UK is based on figures from the UK Tourism Survey (2010), scaled up to 2012. All other tourism sector estimates are based on WTTC's Travel & Tourism Economic Impact models.
  - An allowance for a shift in the mode of transport, from rail/ferry to air transport has been made, using data from the International Passenger Survey and an estimate of the cross-price elasticity between rail and air transport

# Consumer spending effects - assumptions (1)

- 100% pass-through. As APD is generally included separately under additional taxes and surcharges, it is reasonable to assume 100% pass-through on the price of a ticket.
- Zero savings rate. The reduction in air fares will translate into consumer expenditure either at home or abroad.
- Identical expenditure patterns (split between share of spending at home and abroad) for outbound and inbound passengers.
- Estimates are based on total impacts, to include supply chain activity (indirect) and employee expenditure (induced) impacts.
- Tax revenue is approximated by applying an economy wide average tax figure (as a proportion of UK GDP), using data from the Oxford Economics Global Macroeconomic Model.

# Consumer spending effects - assumptions (2)

The table below summarises the consumer spending affects based on the three scenarios outlined above.

Scenario 1: Passengers spend 25% at home and 75% abroad	GDP (£m) - Total (Direct, Indirect, Induced)	Employment (000) - Total (Direct, Indirect, Induced)	Tax (£m) - Total (Direct, Indirect, Induced)
<b>Domestic</b>	238	5	100
<b>Inbound</b>	776	19	325
<b>Outbound</b>	294	6	123
	<b>1,309</b>	<b>30</b>	<b>548</b>

Scenario 2: Passengers spend 50% at home and 50% abroad	GDP (£m) - Total (Direct, Indirect, Induced)	Employment (000) - Total (Direct, Indirect, Induced)	Tax (£m) - Total (Direct, Indirect, Induced)
<b>Domestic</b>	238	5	100
<b>Inbound</b>	518	13	217
<b>Outbound</b>	588	12	246
	<b>1,344</b>	<b>30</b>	<b>563</b>

Scenario 3: Passengers spend 75% at home and 25% abroad	GDP (£m) - Total (Direct, Indirect, Induced)	Employment (000) - Total (Direct, Indirect, Induced)	Tax (£m) - Total (Direct, Indirect, Induced)
<b>Domestic</b>	238	5	100
<b>Inbound</b>	259	6	108
<b>Outbound</b>	882	18	369
	<b>1,379</b>	<b>29</b>	<b>577</b>