



IATA ECONOMIC BRIEFING

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THE VALUE OF AN AVERAGE PASSENGER FLIGHT IN THE EU-27

Summary and key points

- An average passenger flight in the EU-27 has three main types of benefits:¹
 - Consumer benefits: the gross economic benefits to air passengers are, on average, EUR 94 thousand per international flight and EUR 8.5 thousand per domestic flight. The net benefits, which are the difference between the gross benefits and the prices paid by the consumers, are EUR 24 thousand and EUR 4.5 thousand, respectively;
 - Producer benefits: total producer benefits of activities carried out by the main sectors along the air transport value chain, excluding fuel and labor, are estimated to be on average EUR 2 thousand for each international flight and EUR 0.8 thousand for each domestic flight;
 - Wider economic benefits: benefits also accrue more broadly in the wider economy, for instance, through enhancing the overall level of long-term productivity. It is estimated that a 10% rise in connectivity, relative to a country's GDP, will boost labor productivity levels by 0.07%.

Consumer benefits

- One of the most important economic benefits generated by air transport is the value created for its consumers, passengers, and shippers. This analysis focuses on quantifying the benefits to passengers in the EU market. Most passengers value air services more than their expenditure. The difference between the consumer's willingness to pay (or the gross consumer benefit) and the price paid constitutes the net consumer benefit.
- We have quantified the economic benefits to air passengers using standard economic tools and accepted methodologies.² The results summarized in Table 1 below show gross, net and per flight consumer benefits in the EU for international and domestic flights.³ The EU-wide consumer benefits are an aggregation of the consumer benefits calculated separately for each of the 27 EU member states based on 2010 and 2011 data.⁴

	International	Domestic
Passengers (inbound and outbound), mil	736	167
Consumer fare (single leg), EUR	267	126
Gross consumer benefit, EUR mil	290,780	29,601
Airline revenues and taxes, EUR mil	196,948	21,045
Net consumer benefit, EUR mil	93,832	8,555
Number of flights, thousands	3,874	1,925
Gross consumer benefit per flight, EUR	75,064	15,376
Net consumer benefit per flight, EUR	24,222	4,444

Table 1. Sources: Oxford Economics-Benefits of Aviation reports 2011 (passenger volumes, consumer fare, demand elasticity), Intervistas/IATA - "Air Travel Demand" 2006 (demand elasticity), PaxIS (passenger volumes, consumer fare), Eurostat (passenger volumes), SRS Analyzer (number of flights).

¹ The approach to quantifying the value from an additional/marginal flight will differ from the approach used for estimating the value from an average flight. The value of a marginal flight would also vary depending on circumstances and operating environment under which the flight is added.

² Brons, Pels, Nijkamp and Rietveld, "Wider Economic Benefits of Air Transport: Estimating Consumer Surplus for Germany" World Conference on Transportation Research, July 11-14, 2010, Lisbon, Portugal.

³ International passengers include all departing international passengers from each member State and inbound passengers from non-EU countries, with only origin-destination passengers counted. Passengers transiting through the EU, with origins and destinations outside the EU, are not taken into account in this analysis. Flights between member States (between Germany and France) are considered as international flights whereas flights within a member State (from Spain to Spain) are classified as domestic flights. The assessment is based on scheduled passenger flights, including scheduled charter operations.

⁴ Croatia has not been included in the analysis.

Producer benefits

- We assess the producer net benefits from an investor perspective. Investors will measure profitability by what that profit represents as a return on invested capital (ROIC). That return is calculated before payments of debt interest and shows the earnings available to pay both debt and equity investors.
- This analysis draws on earlier work undertaken by McKinsey & Company for IATA on profitability and the air transport value chain, which calculates the global return on invested capital over the last business cycle 2004-2011.⁵ The calculated global return on invested capital for each sector in the value chain is based on sample data and represents actual returns earned rather than required and/or desired returns.⁶ Based on these figures we estimate the share of producer net benefits accrued in the EU-27.⁷
- Table 2 summarizes the global producer benefits and the share of the benefits for international and domestic activity in the EU-27 for the airlines and other sectors across the air transport value chain. The global benefits include passenger and other related activities, excluding cargo.⁸ The aggregates of the benefits to all producers are EUR 2,036 and EUR 779 per international and domestic flight, respectively.
- This analysis does not include fuel and labor related net benefits. The estimated profits for the fuel supply chain range from EUR 11-35 billion a year globally, with the vast majority of the profits located upstream with the crude oil suppliers.

	Airlines	Other
<u>International</u>		
Producer surplus, EUR mil	2,818	5,069
Producer surplus/flight, EUR	727	1,309
<u>Domestic</u>		
Producer surplus, EUR mil	252	1,248
Producer surplus/flight, EUR	131	648

Table 2. Sources: McKinsey & Company (ROIC, invested capital), IATA (ROIC, invested capital), SRS Analyzer (number of flights, available seat kilometers), Oxford Economics-Benefits of Aviation reports 2011 (passenger volumes), PaxIS (passenger volumes), Eurostat (passenger volumes). Notes: 'Other' includes airports, ANSPs, manufacturers, lessors, GDS/CRSs, travel agents, ground services, catering, and maintenance.

Wider economic benefits

- In addition, benefits also accrue more broadly in the wider economy and go beyond the direct users of air transport. This may include spill-over impacts within and across economies as a result of increased competition and more efficient movement of capital and labor.
- One of the key economic benefits of increased connectivity comes from its impact on long-term productivity of the wider economy. There are several approaches that may be used to quantify this benefit. One conservative approach that has been developed based on the statistical relationship between air connectivity and labor productivity yields an estimate that a 10% rise in connectivity, relative to a country's GDP, will boost labor productivity levels by 0.07%.⁹

⁵ IATA, "Profitability and the Air Transport Value Chain" 2013, available at <http://www.iata.org/whatwedo/Documents/economics/Profitability-and-the-air-transport-value-chain-final.pdf>

⁶ IATA does not endorse the use of the estimated rates of return on invested capital for purposes of economic regulation or for determining the appropriate or desirable rate of return on invested capital. The figures used are based on a global assessment of the actual prevailing returns on invested capital within the air transport value chain.

⁷ The allocation of producer benefits for airports, GDS/CRS, and travel agents is done based on the share of global passengers flown either domestically (6%) or internationally (18%) from and within the EU-27. This approach treats domestic and international passengers equally in their contribution to the producer benefit. The allocation of producer benefits for airlines, ANSPs, manufactures, lessors, ground services, catering, and maintenance is done based on the share of global available seat kilometers flown either domestically (2%) or internationally (19%) from and within the EU-27. These approaches do not account for structural differences that may exist between the EU and other regions. Nevertheless, these approaches provide a relevant estimation since they are less prone to short and medium-term shocks such as natural disasters and macroeconomic crises that can create temporary distortions in the value chain.

⁸ Over the 2004-2011 business cycle cargo revenues made up 11.5% of total revenues for airlines. This analysis applies this split to determine the non-cargo portion of invested capital for airlines, airports, ANSPs, manufacturers, lessors and others. It is assumed that cargo related activity makes up an insignificant share of the invested capital for GDS/CRS and travel agents.

⁹ IATA, "Aviation Economic Benefits" 2007, available at http://www.iata.org/whatwedo/Documents/economics/aviation_economic_benefits.pdf