IATA ECONOMICS BRIEFING
THE VALUE ADDED BY AIRLINES
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KEY POINTS

- The value added by the global airline industry is estimated to be **$140 to 145 billion** in 2004. On the basis of IATA members accounting for 85% of total global TKPs, the economic value added by IATA members is estimated to be around **$120 billion**. However, little of the value created accrued to financial investors in the industry. Airlines made a net financial loss of $4.2 billion in 2004.
- Value added is a financial accounting term, reflecting the direct contribution made to the national Gross Domestic Product (GDP) accounts. It is an internationally recognised standard of measurement. The importance of value added as a concept is its focus on the wealth directly created by a firm from its activities, rather than simply a measurement of sales or financial profits.
- Network airlines create much higher value added than the leading Low Cost Carriers (LCCs), by virtue of their greater size and employment level. Even network airlines making financial losses in 2004 created a positive and sizeable contribution to GDP through, for example, the salaries they pay and the assets they use.
- Of course, the true value of the airline industry is far greater than its direct value added. Airlines also generate wider economic and social value for users and for the overall economy. The recent ATAG study estimated that the global aviation industry directly and indirectly generates a total of $2,960 billion of economic activity.
- A combined Air France/KLM would be ranked as 63rd largest European company in 2004 in terms of value added. Though only a quarter of the size of the largest company (Daimler Chrysler), it ranks as a similar size to Tesco or AXA insurance and larger than companies such as Arcelor, BAE Systems, Danone and Diageo.

THE DIRECT VALUE ADDED BY AIRLINES

- Value added is a widely recognised measure of direct wealth creation, used to measure the contribution made by individual firms and by industries. It is defined as the total value of sales, net of the cost of bought-in materials, components and services. It focuses on the value created by employing assets in productive use, rather than just on the level of sales or the level of profits.
- In accounting terms, value added can be measured as follows:

  Value Added = Operating Profit plus Employee Costs plus Depreciation and Amortisation

- In other words, value added measures the direct contribution received by the factors of production: labour (employee costs), land and capital (depreciation and amortisation) and entrepreneurship (operating profit).
- The value added by airlines can be measured from their financial reports. The value created by 34 leading airlines – in North America, Europe or Asia-Pacific – is estimated at $90 billion in 2004 (see table 1).

Table 1: The Estimated Value Added by Leading Airlines, 2004

$ millions	Operating Profit	Employee Costs	Depreciation and Amortisation	Total Value Added
10 Major US Airlines	- 4,470	29,343	5,275	30,148
11 Major European Airlines	3,105	24,996	5,761	33,862
13 Major Asia Pacific Airlines	4,969	14,967	5,702	25,638
The 34 Airlines	**3,604**	**69,306**	**16,738**	**89,648**

Source: Company Annual Reports & Accounts

- These 34 airlines account for 65% of total global airline revenues. Therefore, an extrapolation is made for the remaining airlines, to derive a total industry economic value added of $140 to 145 billion. This is similar to the $145 billion estimate of direct value added by airlines included in the ATAG study.
- IATA members account for 85% of total global tonne kilometres performed (incorporating passenger and cargo traffic, domestic and international traffic and scheduled and chartered traffic). On this basis, it can be assumed that IATA members created around $120 billion of value in 2004.
- The value created by a company is used to reward the stakeholders and to sustain and develop the business. It is used in six main ways; to pay interest and dividends on capital used, to pay employees, to pay taxes, to pay for new investment or R&D, to amortise intangible assets or to retain funds for the company. in the
- The relative size of these six uses varies significantly, reflecting differences in corporate strategies and market conditions. It is clear that, on average, shareholders in airlines received little of the $140-45 billion value created in 2004, with airlines making a total global financial loss of $4.2 billion in that year.

THE VALUE ADDED BY LEADING EUROPEAN FIRMS

- The UK Department of Trade and Industry (DTI) produces an annual scoreboard of the value created by leading European firms (i.e. those with a European headquarters or Europe-based subsidiaries or non-European parent companies). This allows for a comparison of the value added by individual firms or sectors.
- The list of the top 20 leading firms in Europe by value added is dominated by major telecoms, oil & gas, banking and industrial firms (see the Appendix). Deutsche Post is the largest (non-financial) services company, while Deutsche Bahn (with a value added of £9.5 billion) is the largest transport firm.
- The fragmented nature of the airline industry means that the value created is spread across a number of airlines. A combined Air France / KLM is the largest European airline in terms of value added, ranking as the 63rd largest European firm in 2004. Nevertheless, it is still larger than several major (and politically sensitive) firms such as Arcelor or BAE Systems.
- Network airlines, by virtue of their size, make a significantly higher total contribution to GDP than low-cost airlines. Network airlines employ more people and use more assets than low-cost airlines. The value created by the level of employment, asset utilisation and network services of the network carriers means that they create significantly higher amounts of economic value added than leading Low Cost Carriers (LCCs) such as Easyjet.

VALUE ADDED AND PRODUCTIVITY

- The nature of an industry will have a strong influence on the level of value created per unit employed. Therefore, a capital-intensive industry such as oil & gas will create much higher value added per employee than a labour-intensive industry such as retailing.
- Nevertheless, value added per unit can provide some guide on productivity differences within the same industry. As such, though Easyjet creates less value added than the major network airlines, it does so at a much higher rate per employee than most of the network airlines.
- Another useful guide is to assess value added as a percentage of total employee and depreciation costs, in other words the value added beyond the cost of merely employing labour and capital. Easyjet is the most efficient of the large European airlines in terms of generating value added on this measure (Ryanair is not included in the DTI scorecard, but we estimate it would have a slightly higher ratio than Easyjet).
- These measures highlight that, though the size of network airlines means they create higher amounts of value added than the leading LCCs, there are still gaps in relation to LCCs in terms of the productivity and efficiency of generating value. Major cost-restructuring measures – as well as IATA campaigns such as StB and the Fuel Action campaign – provide a positive step in this direction.

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APPENDIX: THE VALUE ADDED BY LEADING EUROPEAN COMPANIES, 2004

Rank	Company	Sector	Value Added 2004 (£m)	VA per Employee (£ 000)	VA as % of Labour and Depr Costs
1	DaimlerChrysler	Automobiles & Parts	24,098	65.0	113.0
2	Siemens	Engineering	22,496	53.7	115.0
3	Deutsche Telekom	Telecoms	21,855	87.0	139.6
4	France Telecom	Telecoms	21,603	97.5	184.4
5	Shell	Oil & Gas	21,180	178.0	206.7
6	BP	Oil & Gas	18,854	174.3	198.8
7	Vodafone	Telecoms	17,552	292.0	262.2
8	Total	Oil & Gas	17,218	155.4	218.5
9	Volkswagen	Automobiles & Parts	16,978	53.9	117.5
10	Allianz	Insurance	15,805	91.0	200.9
11	HSBC	Banks	14,556	66.4	207.1
12	Electricite de France	Electricity	13,295	79.5	142.9
13	UBS	Banks	12,699	192.6	149.2
14	GlaxoSmithKline	Pharmaceuticals	12,538	121.5	212.5
15	Nestle	Food Producers	12,494	49.4	169.0
16	ENI	Oil & Gas	12,457	162.8	249.6
17	Royal Bank of Scotland	Banks	12,392	103.7	227.9
18	Deutsche Post	Support Services	12,191	32.5	118.9
19	Telecom Italia	Telecoms	11,964	124.9	212.0
20	Robert Bosch	Automobiles & Parts	10,738	46.8	119.4
82	Lufthansa	Airline	4,310	45.5	107.6
92	Air France	Airline	3,860	53.9	104.3
120	British Airways	Airline	2,994	57.6	119.6
210	SAS	Airline	1,778	51.5	95.4
215	KLM	Airline	1,748	56.1	105.9
286	Iberia	Airline	1,251	47.7	114.3
418	Alitalia	Airline	778	35.0	74.6
531	Austrian Airlines	Airline	557	77.7	111.4
830	Easyjet	Airline	204	63.4	139.9
68	Arcelor	Steel	5,212	52.4	111.8
85	BAE Systems	Aerospace & Defence	4,133	60.0	129.6
99	L'Oreal	Personal Care	3,751	74.3	178.8
108	Diageo	Beverages	3,383	142.6	302.6
125	Danone	Food Producers	2,864	32.3	173.6
204	ICI	Chemicals	1,799	49.7	114.9
301	BBC	Media	1,191	43.1	80.5
309	PwC	Accountancy	1,144	79.4	146.3
423	Deutsche Borse	Finance	764	250.7	292.8

Source: UK Department of Trade and Industry

Note: 1. A combined Air France / KLM would rank as the 63rd largest company by Value Added
2. Ryanair is missing from the list, but on our assumptions would be 668th, with a VA of £390 million.