

Economic Regulation Group



CAP 749

**The Effect of Liberalisation on Aviation
Employment**

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CAP 749

The Effect of Liberalisation on Aviation Employment

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Executive Summary

Concerns about the possible impact on labour of the liberalisation of air services have been a major feature of the debate about whether an Open Aviation Area between the EU and the US should be introduced. This paper considers the validity of those concerns and examines the evidence of the impact on UK labour of the liberalisation of European aviation markets. The main conclusions are:

- a) *The evidence from the UK experience is that liberalisation has facilitated the growth of the aviation market and has boosted employment in that sector in the UK.* Many more people are now directly employed in airlines, airports and in the ancillary industries that support aviation than before. A similar picture emerges when examining the US domestic industry following deregulation.
- b) *The structure of the passenger airline business acts as a natural constraint on the ability to shift jobs overseas.* Whereas a manufacturer can shift its centre of operations from one part of the world to another, a passenger airline must be near its market with geographic "centres of gravity" at either end of the routes that it serves and needs to employ people in those locations to maintain operational efficiency.
- c) *Pilots in particular are a skilled and scarce resource.* Indeed, the sheer scale of the markets in the US and the EU in comparison to the rest of the world means that the labour supply for skilled jobs in aviation is concentrated in those countries – there are not large numbers of suitably qualified pilots elsewhere that would readily be able to take over jobs from EU or US pilots.
- d) *The phenomenon of "flags of convenience" that has been seen in other industries and led to a loss of jobs from a particular country (such as happened in the US maritime industry) is unlikely to occur in aviation.* This is in part because the international regulatory system in aviation reduces the possibility of regulatory cost savings (particularly when comparing the similarly tough regimes in place in the EU and the US) and in part because the need for skilled labour makes it harder to replace higher cost employees from developed nations with lower cost employees from other parts of the world.
- e) *The perceived threats to labour from liberalisation are not borne out by experience.* The review of the UK's experience in relation to liberalisation within Europe has not provided evidence of any of the following:
 - airlines re-flagging themselves to exploit lax regulatory regimes;
 - UK workers being displaced by cheaper workers from other countries in the EU, or;
 - UK airlines losing market share to airlines from lower-wage EU countries.
- f) *Liberalisation should not be seen as a threat to labour – in fact it should help to create benefits for employees:*
 - in times of financial distress for companies, nationality-based restrictions on ownership and control of companies could in fact be a hindrance to their remaining in business. Consequently, the removal of such restrictions is likely to improve the chances of such companies staying afloat and continuing to provide local jobs;
 - where liberalisation removes restrictions on output (as would be the case under an Open Aviation Area) then as well as driving up competition and efficiency, it is likely simultaneously to facilitate market growth, creating a larger "cake" to be shared out between the various players;

- more players in a market creates more choice of employers for airline employees, and, when combined with greater demand, can create a situation favourable to labour and enhance its bargaining leverage.
- g) *Market access restrictions are not the only protection for labour interests.* Specific employment legislation on both sides of the Atlantic would still apply, providing a more appropriate vehicle for safeguarding employee interests and acting as another constraint on the extent to which a free flow of labour could emerge even within a liberalised environment.
- h) *The situation within the US domestic market reduces the impact of liberalisation on the US industry.* The strength and competitiveness of the US domestic market (which accounts for around 75% of revenues for US airlines) means that the impact of increased competition on international routes for a US carrier in terms of its overall market is likely to be far less, and that the overall effect of new entrant competition will be tempered.

The paper finds that the fears expressed about liberalisation of the EU-US aviation market resulting in jobs being lost would seem to be overstated. These concerns need not therefore stand in the way of reforms that would sweep away much of the outdated regulatory structure that has existed in aviation since 1944. An Open Aviation Area would put EU-US aviation onto the same footing as most other industries, would boost competition, innovation and efficiency and bring benefits to consumers, shareholders and employees alike. As the concept is developed in more detail it will be important that employees and their representatives are engaged in the debate and can bring their knowledge to bear to help in creating a framework designed to further a truly liberalising agreement.

The Effect of Liberalisation on Aviation Employment

1 Introduction

1.1 Purpose of Paper

1.1.1 This paper examines how the liberalisation of the European aviation market in the early 1990s affected employment in the aviation sector within the UK. The proposed introduction of an Open Aviation Area (OAA) between the EU and the US presents enormous possibilities for radical change in the industry, providing new opportunities for airlines, a wide range of benefits for customers and enhanced efficiency and productivity through the removal of anachronistic regulations and stronger competition.

1.1.2 However, there are inevitably also doubts expressed by groups uncertain as to how such reforms may affect them. This paper seeks to analyse those concerns by reviewing the UK's experience over the period since the opening up of the European market, drawing some conclusions to inform the current debate about the risks and benefits of an OAA and, in particular, considering labour's concerns in the light of UK experience.

1.2 Concerns about liberalisation's impact on labour

1.2.1 Concerns about the impact of liberalisation on labour have perhaps been expressed most clearly by the US unions, and in particular by the US Airline Pilots Association (ALPA). ALPA fear that their members may suffer if the transatlantic market is opened up. The main points of concern appear to be that, under an OAA:

- US airlines will decide to lay off US workers and substitute lower wage EU workers, either directly or as a result of moving more operations to a wet-leased¹ basis;
- airlines from EU countries may be able to exploit wage differentials to win business from US airlines (resulting in US employees, in particular pilots, losing jobs or seeing a deterioration in their pay, terms and conditions);
- a US airline which merged with an EU airline could substitute cheaper EU flight crew for its existing US flight crews, and;
- US airlines could adopt "flags of convenience" and operate transatlantic services out of a low-wage EU country.

1.2.2 Some of these same issues existed in the UK in relation to European liberalisation and there are many similarities between the situation then and the one currently facing the EU and US. In the early 1990s, UK-based airlines faced higher wage costs than some other EU airlines. Hence there was a possibility that they would lose market share to those airlines that could take advantage of lower labour costs when the market was opened up. The potential for labour substitution also existed, i.e. that UK employees would lose jobs to aviation workers from lower-wage EU countries who would be more attractive to UK-based airlines. This paper considers what has actually happened in the UK as a result of European liberalisation, and finds that these worries have proved largely unfounded.

1. A "wet lease" refers to a lease of an aircraft including its crew, with the aircraft remaining on the Air Operator's Certificate (AOC) of the lessor.

1.3 This paper has four main sections:

- Section 2 reviews the economics of the relationship between liberalisation and the labour market;
- Section 3 describes the UK's experience of liberalisation since the European "third package", drawing on the available statistical data on employment in the UK and European airline industry and detailed information gathered from a series of interviews with some of the major passenger airlines operating out of the UK;
- Section 4 considers some other factors relevant to the wider debate about an OAA. These include an examination of the differences in the total labour costs and conditions in the US and the EU, a review of the impact of liberalisation in the maritime sector and the differences between maritime and aviation, and a short overview of how a right of establishment approach may affect labour concerns;
- finally, Section 5 draws conclusions from the evidence reviewed.

1.4 Although there is a number of sources of data on airline employment such as national statistics, airline reports, ICAO, IATA, AEA, ATA, ERA and IACA¹, these are not comprehensive, and there is some inconsistency between them. Consequently, the data used below must be viewed with some caution. Other texts have also been reviewed in the course of preparing the paper, including in particular a review of the information published on this topic in chapter 8 of the Brattle report².

1.5 In considering the changes that have occurred in the aviation market over this period it is important to bear in mind that aviation is a complex industry where airlines may perform some functions in-house or may contract them out to third parties, some of which may in fact be other airlines. So an airline may, for example, perform maintenance work for other carriers while contracting out its catering. Over time, airlines may change policy from, say, an in-house approach to one that places an emphasis on outsourcing. A robust comparison of the number of airline jobs and the pay levels and terms and conditions that apply to those jobs is therefore difficult, not only across different airlines at one point in time but also for the same airline at different points in time. Similarly, a general proviso should be made to the effect that it is often difficult to distinguish clearly which effects are caused directly by aviation liberalisation and which should be attributed to more wide-ranging economic, technological or social change which would have affected airlines anyway.

1. Various: International Civil Aviation Organisation, International Air Transport Association, Association of European Airlines, Air Transport Association of America, European Regions Airline Association and International Air Carrier Association.
2. "The Economic Impact of an EU-US Open Aviation Area"; The Brattle Group, December 2002.

2 Economic findings

- 2.1 It is often asserted that the direct effect of more competition (resulting from liberalisation) on wage levels can only be negative. However, the economic theory on this point suggests that this need not be so – much depends on the specific bargaining arrangements in place in a particular firm, or in all firms in a sector or across the economy, and the general availability of suitably skilled labour.¹
- 2.2 Enhanced competition will of course tend to increase pressure on all costs, including labour costs, and where there are efficiency gains to be made competitive pressure will tend to spur firms to make them. This will benefit the economy overall, as imperfect competition in one sector will tend to allow inefficient overuse of resources, including labour, in that sector (and potentially excessive wages), with a negative knock-on effect to the labour market as a whole. And, of course, the particular sector and the economy generally should also gain from the usual benefits of increased competition – greater efficiency, enhanced innovation, and a better deal for consumers in terms of increased choice and lower prices.
- 2.3 Recent OECD work² has suggested that there is an empirical connection between strong competition in markets for goods and services and better productivity and employment outcomes, and indeed that specific regulatory reforms that enhance competition (such as an OAA) would have positive effects on the performance of the sector and the overall economy.
- 2.4 While this work points to the possibility of an outcome where labour and management can both benefit from a more efficient aviation market structure, perhaps an even more important question from a labour perspective is not how liberalisation could affect the interests of workers in relation to wage levels, or terms and conditions, but what the impact on aggregate levels of employment in the sector may be. If the firm goes out of business, the question of whether or not the employees are getting a good pay deal becomes somewhat irrelevant. If it is right that regulatory restrictions on growth in an area of the business (such as exist in transatlantic aviation) make it more difficult for incumbent firms to remain viable, then the possibility of those firms being forced to exit the market must be considered. It follows that the removal of such restrictions, and restrictions on foreign investment, could be the best means of seeking to ensure the continued existence of those firms and the jobs that they provide. Undoubtedly, in an open and competitive market, some firms will respond well to the pressures they face and take advantage of opportunities open to them, while other less efficient firms may fail to do so and hence be forced to exit the market. However, a growing market will provide the best opportunities for good firms to flourish.
- 2.5 Most firms need to respond to the challenge of competition if they are to prosper, or indeed stay in business. This does not mean that firms will automatically start to pay low or lower wages, but it must follow that the wages they do pay should be commensurate with the value the employee adds to the firm. So part of the competitive response must be to ensure high levels of productivity from workers. If this is delivered, then enhanced competition is compatible with maintained or enhanced benefits for employees. Depending on the extent to which employees add value, and the scarcity of their skills within the relevant labour market, a more competitive marketplace could (to a greater or lesser extent) result in an increase in

1. Nickell (1999) argues that an increase in product market competition may primarily change the nature of the bargaining process between unions and management. Depending on other factors, including the scarcity of labour and whether the market is growing, this can in some circumstances be to the ultimate benefit of employees and employers.

2. OECD Economic Outlook No.72 (2002), "Product Market Competition and Economic Performance".

employment and wage levels because of the increased demand for labour. Whether wages can increase will depend to some extent on whether additional revenue is generated by the growth in the market that would be expected as a result of liberalisation. The UK experience is informative in this regard. Between 1976 and 1992 UK airline revenue as a proportion of UK GDP remained static at about 1.2%. After 1993 when the EU market was liberalised, UK airline revenue increased significantly reaching 1.5% of UK GDP by 1996 and remaining at that level until the events of 11 September 2001.¹

- 2.6 This theoretical framework, backed up by the empirical evidence collected by the OECD,² suggests that the likely impact on the labour market in total of the removal of artificial restrictions on trade and enhanced competition will be positive. If a particular sector is opened up, then competition should boost productivity and produce benefits to consumers in terms of keener prices and greater choice, which should in turn stimulate demand (as long as that demand is price sensitive, as is the case for leisure air travel). Higher levels of demand mean that the market as a whole should be able to grow, and with it, levels of employment. This produces a potentially favourable impact on wages. But actual impacts will depend on the relative scarcity of different skills and will therefore differ between sections of the labour force. Where structural change does lead to some workers being pushed out of their current employment, then there may be a need to address this through specific action such as re-skilling programmes. However, given the importance of proximity to the customer in the passenger aviation business, there is less likelihood that jobs will transfer from one location to another, a problem experienced in other sectors, particularly manufacturing.

1. Source: CAA for UK airline revenue and ONS for GDP.

2. See the OECD Report on Regulatory Reform I - II (1997), Chapter IV in OECD Economic Outlook, No. 67 (2000), and the sector-specific papers contained in OECD Economic Studies: Special Issue on Regulatory Reform, No. 32 (2001).

3 The UK's experience of European liberalisation

3.1 The "third package"

- 3.1.1 Between 1987 and 1993, the European Union introduced a series of measures culminating in "the third package", that liberalised European aviation. Once fully implemented, the third package effectively removed all entry barriers, so that European carriers were free to operate on any intra-EU route, and forbade bilateral restrictions on frequency, capacity or prices on such routes.
- 3.1.2 This meant that each Member State was required to grant Operating Licences to carriers whose principal place of business was in that state (and which were majority owned and substantially controlled by EU citizens), and that any air carrier with an Operating Licence from one EU Member State was free to operate throughout the EU. From April 1997, these provisions were extended to domestic routes within any EU country.
- 3.1.3 This process of phased liberalisation changed the nature of competition in European aviation and paved the way for the growth of no-frills operators, in particular the emergence of easyJet and Ryanair as major players in the European market. The removal of restrictions on ownership and freedom of establishment allowed the no-frills business model to thrive within the UK, with Ryanair having a large percentage of its operations in the UK, despite remaining an Irish carrier.
- 3.1.4 Alongside this process, those European flag carrier airlines that remained in state ownership began to be privatised or part-privatised, and all airlines needed explicit permission from the EU authorities to receive any form of public subsidy (the State Aid provisions of the Treaty of Rome).
- 3.1.5 For incumbent UK airlines, the collective impact of the third package was that they were newly exposed to competition from any EU carrier that wished to operate a service on routes between any two points in the EU, including carriers from lower-wage EU countries. For short-haul traffic particularly, this meant existing UK airlines facing a reduction in their market share as new entrants emerged. Such competitive pressure required rationalisation of their cost base, including reviewing workforce size.
- 3.1.6 Similarly, UK aviation employees in principle faced the same potential threat to their jobs and terms and conditions from lower-wage countries elsewhere in the EU that now seems to be a major concern of US labour in relation to the proposals for an OAA. The following paragraphs examine the impact on the UK aviation labour market of the introduction of the third package reforms.

3.2 After the third package – employment in UK airlines since 1992

- 3.2.1 The picture suggested by the economic theory set out in section 2 is compatible with the UK experience over the last decade. The effect of European liberalisation has been to stimulate a huge increase in demand for air travel in the UK. In the rest of the EU there has also been considerable growth, although not at quite the same pace. As a consequence many more people are now employed in the aviation sector in the UK, and this has happened despite the fact that the UK has (and had) generally higher labour costs than a number of southern EU Member States.
- 3.2.2 A large part of this market growth has been a direct result of the removal, from 1992 onwards, of the restrictions on intra-EU aviation activity, eliminating barriers to entry and providing freedom of choice to airlines as to which routes to operate, and how often. This has effectively provided the market conditions for the emergence of the no-frills carriers.

- 3.2.3 While the different position of the transatlantic market in 2004 compared with the intra-EU market in 1992 makes it unlikely that the considerable increases seen in UK aviation employment would be replicated as a result of transatlantic liberalisation, it would seem from the evidence of EU liberalisation that there are benefits for aviation employees from such changes, and that the OAA should not be regarded as having only the potential for negative effects on employees.
- 3.2.4 Table 1 compares total employment in UK-registered airlines at the end of 1991 and 2001 in the major employment categories¹. The total number of employees grew by almost 40% over the decade. The output of airlines registered in the UK increased between 1991 and 2001 by 87% in terms of passengers carried and by 103% in terms of available seat kilometres (ASKs) produced.
- 3.2.5 Table 1 also shows employment figures for the largest UK airline, British Airways (BA). At the end of 1991 BA accounted for 74% of the employees of UK airlines but ten years later its share had fallen to 62%. Nevertheless, despite this loss of share, BA's total staff rose by nearly 7,000 or 15% during this period, although there have been reductions in staff numbers since then.

Table 1 Employment by job type of airlines registered in the UK

| Job Type | Year | Number of Employees | Number of Employees (BA) |
|---------------------------|------------|---------------------|--------------------------|
| Flight Crew | 1991 | 6,248 | 3,352 |
| | 2001 | 10,032 | 3,682 |
| | % increase | 61% | 10% |
| Cabin Attendants | 1991 | 14,601 | 9,968 |
| | 2001 | 27,719 | 14,974 |
| | % increase | 90% | 50% |
| Maintenance/Overhaul | 1991 | 12,378 | 9,590 |
| | 2001 | 11,674 | 7,808 |
| | % increase | -6% | -19% |
| Ticketing/Sales Personnel | 1991 | 6,029 | 3,786 |
| | 2001 | 9,907 | 6,996 |
| | % increase | 64% | 85% |
| All Other Personnel | 1991 | 24,893 | 20,907 |
| | 2001 | 28,906 | 21,127 |
| | % increase | 16% | 1% |
| Total | 1991 | 64,149 | 47,603 |
| | 2001 | 88,238 | 54,587 |
| | % increase | 38% | 15% |

Source: ICAO Digest of Statistics - Fleet and Personnel, 1991 and 2001. The 2001 figures therefore take into account the staff reductions at some airlines such as BA which were the immediate result of the impact of 11 September. It should, however, be noted that there have been further cut-backs and that by September 2003 the number of staff in BA had been reduced to 47,702, close to the 1991 level.

Note: End-year figures for commercial air carriers registered in the UK as reported to ICAO.

1. The data includes staff employed by UK registered airlines both inside and outside the UK. However, the vast bulk work in the UK. In 2001 UK airlines reported that only just over 1,000 employees were based outside the UK. Employment of staff within the UK by airlines registered elsewhere (such as Ryanair) is not captured.

- 3.2.6 Changes in the number of BA's employees have a significant impact on the way the UK total changes. For example, looking at UK airlines as a whole, the only employment category to show a decline was the number of maintenance personnel. However, while BA shed nearly 1,800 maintenance jobs over the decade, the rest of the industry employed 1,100 more maintenance staff – 3,866 at the end of in 2001 compared with 2,778 in 1991.
- 3.2.7 Table 2 shows the year-by-year changes in BA's maintenance personnel.

Table 2 BA's maintenance staff numbers

| | Number | Change versus previous year |
|--------|--------|--------------------------------|
| Dec-91 | 9,590 | |
| Dec-92 | 9,603 | +13 |
| Dec-93 | 9,737 | +134 |
| Dec-94 | 9,741 | +4 |
| Dec-95 | 10,029 | +288 |
| Dec-96 | 9,701 | -328 |
| Dec-97 | 9,038 | -663 |
| Dec-98 | 8,309 | -729 |
| Dec-99 | 7,915 | -394 |
| Dec-00 | 7,573 | -342 |
| Dec-01 | 7,808 | +235 |

Source: ICAO Digest of Statistics – Fleet and Personnel, for the relevant years.

Note: End-year figures for commercial air carriers as reported to ICAO.

- 3.2.8 The main changes in BA's maintenance staff appear to flow from decisions in 1997 to streamline BA's Engineering department, disposing of the wheel, brakes, and landing gear overhaul units, and to place the focus on maintaining BA's own aircraft, rather than on "third party" work maintaining aircraft for other airlines. This is one illustration of the difficulties that out-sourcing can cause when seeking to quantify changes in the airline labour market.
- 3.2.9 Nevertheless, the general picture is one of increasing airline employment during a period that saw liberalisation linked to a rapid expansion of airline output¹. The key point to recognise here is that, while increased product market competition may reduce employment at the company level (although this effect is likely to be muted in unionised companies), the effect on sectoral employment will be different. This is especially true where (as in this case) the restrictions on output that the bilateral system imposed were preventing the growth of the market that would otherwise occur – thus creating a bigger "cake" which can be shared between employees and shareholders.²

1. The after-effect of the terrorist attacks of 11 September has not been captured fully in these figures, but most previous shocks have had only a temporary impact and the market should return to trend growth.

2. Nicoletti *et al* (2001) demonstrate the positive effect of deregulatory product market reforms on employment rates across seven network industries, including passenger air transport, suggesting that individual countries' overall employment rates are boosted by an average of 1.5%, rising to over 2.5% in the countries achieving most substantial reform.

3.2.10 With the increase in aviation activity, the benefits in terms of jobs created are not restricted to the airline sector. With more people travelling by air, airports across the UK have grown considerably, and employment in the ancillary industries that support aviation has also risen, correlated with the increase in direct aviation employment.

3.3 Employment in European airlines since 1992

3.3.1 Table 3 shows total airline employment in Western European countries in 1992 and 2001. Because of the differing sources used to collate the data, these figures must be treated with caution. Caution is also needed because of possible structural changes over the period. For example, in the mid 1990s Lufthansa split into four main groups – the passenger airline, the cargo airline, an IT company, and a maintenance company. Following this, only employment in the first two groups is reported as airline employment and Lufthansa's staff numbers fell from 43,491 in 1994 to 33,240 in 1995. The decline in the total employment in other countries such as Switzerland, Portugal, Greece, and Belgium was a result of down-sizing or the collapse of the national carrier.

Table 3 Total employment by airlines registered in Western Europe

| Country | 1992 | 2001 | Change |
|--------------|----------------|----------------|-----------|
| UK | 70,838 | 98,649 | 39% |
| France | 60,583 | 69,235 | 14% |
| Germany | 58,168 | 51,979 | -11% |
| Spain | 30,594 | 34,492 | 13% |
| Netherlands | 28,364 | 31,459 | 11% |
| Italy | 23,790 | 25,219 | 6% |
| Scandinavia | 28,733 | 31,173 | 8% |
| Switzerland | 22,813 | 14,535 | -36% |
| Portugal | 12,019 | 9,809 | -18% |
| Finland | 8,053 | 9,240 | 15% |
| Austria | 5,566 | 7,536 | 35% |
| Ireland | 5,453 | 6,323 | 16% |
| Greece | 10,861 | 5,625 | -48% |
| Luxembourg | 1,966 | 3,472 | 77% |
| Iceland | 1,355 | 2,487 | 84% |
| Belgium | 11,043 | 1,542 | -86% |
| Total | 380,199 | 402,775 | 6% |

Source: CAA Airline Statistics, Air Transport World (June 1993 and June 2002), AEA yearbooks 1993 and 2002, ICAO Digest of Statistics – Fleet and Personnel (various editions), IATA World Air Transport Statistics 1993 and 2002, airline annual reports.

Note: Airlines are categorised by their country of registration and Scandinavia comprises Denmark, Norway and Sweden. The number of airline staff in the UK differs from that shown in Table 1 because (a) Table 1 is restricted to the airlines covered in reports to ICAO, and (b) where available, CAA/AEA data has been used in preference to the ICAO figures.

3.3.2 The data above shows the picture in terms of overall employment levels, and that UK employment has increased more than in most other EU countries, despite the fact that airlines in some other EU Member States would have a natural cost advantage in terms of the salary and wage levels of their staff. This is partly explained by the fact that the UK has the largest demand for air travel within the EU, but it is interesting to note that Scandinavia, a smaller market where salary levels and non-wage costs are amongst the highest in the EU, has seen a growth in employment of around 8%, which compares favourably to the employment figures for Southern European countries, such as Greece, which generally enjoy an advantage in terms of employment costs (see Table 4).

3.4 **Information from UK passenger airlines**

3.4.1 Preparation of this paper included interviews with a range of passenger airlines operating in the UK, including full service carriers, charter operators and no-frills carriers. Those consulted were Britannia Airways (part of the TUI Group), British Airways, easyJet, Ryanair, Thomas Cook Airlines and Virgin Atlantic.

3.4.2 These discussions provided the opportunity to look in more detail at the terms and conditions, the nationality and home base of employees of those airlines, and at what changes may have occurred since 1992. The main themes emerging from these interviews are summarised below.

3.5 **Benefits to labour from allowing free flows of capital**

3.5.1 The benefits of allowing cross-border investment within the EU, which was one consequence of the third package, were mentioned by a number of UK carriers. Virgin Atlantic particularly commented on their experience of setting up Virgin Express (a low-cost airline operating mainly out of Brussels). According to Virgin Atlantic, part of this process had included a take-over of a company called EuroBelgian Airlines, which could otherwise have gone into liquidation. The Virgin Express take-over had therefore been of benefit to the employees of that airline and to the wider Belgian economy, as it saved jobs in Belgium that could otherwise have been lost.

3.5.2 Similar examples can be found in other parts of Europe, and there are parallels that can be drawn as to the potential impact this would have in a transatlantic context, particularly against the backdrop of the recent financial difficulties of many major US airlines. An OAA would remove restrictions on ownership and allow capital to flow freely between the US and Europe as it does in other industries. This could represent a real benefit for US airlines, and their employees, as it would provide the potential for US companies in financial distress to access European capital, and potentially help them to overcome cyclical funding difficulties.

3.6 **Employment of lower-wage foreign nationals**

3.6.1 Although the experience of European liberalisation differed between the various types of carrier, there was no real evidence from any interviews of any shift towards employing non-UK staff at lower wage levels than UK employees.

3.6.2 Many carriers commented that there would be little to gain from trying to adopt such a policy, as for the most part they still need their core employees to be based in the UK. Consequently, any non-UK employees would still tend to be based in the UK, and would expect to earn salaries commensurate with their colleagues as they would face the same cost of living as UK-born employees, and be subject to UK employment law. At this point they cease to be "non-UK" in any sense that makes a difference to the company that employs them – their place of birth does not dictate the terms and conditions they work under, nor the employment rights they can enjoy.

- 3.6.3 easyJet explained that it employed a large number of non-UK EU nationals, particularly as cabin crew, but that they are based at its centres of operations, which for now are predominantly within the UK, and that for the reasons set out above it employs them on the same terms and conditions as its British nationality staff. Where it does have a centre of operations elsewhere in Europe, such as in Geneva, it may base its staff in that location.
- 3.6.4 So, it seems that a foreign-born employee working as cabin or flight crew for a UK airline and based in the UK ceases to be any different to a UK-born employee working in the UK. The same would seem likely to be true in the US context. Virgin Atlantic explained that if it were to employ EU nationals in the US (it primarily employs US staff for its US operations in any case, for the reasons set out in section 3.8.3 below) they would be employed on terms and conditions commensurate with those in place for US nationals.
- 3.6.5 However, it is also worth considering whether it would be possible for carriers to employ cheaper foreign labour as flight and cabin crew, by employing those staff from a base in a lower-wage country and so avoiding the need to match UK salaries. While this is feasible in principle, what emerges from discussions on this issue (and the same points were made by all types of carrier) is that airline decisions on where to locate core staff are driven by operational requirements and efficiency, which tend to outweigh any benefits that could be gained through lower wage costs achieved by basing crews in a third country but using them to operate services between two other countries. It is also worth noting that an airline could in principle do this now for transatlantic services.
- 3.6.6 It is therefore important to consider how the “centres of gravity” of an airline’s operations on a route (i.e. at either end of the route) will to a considerable extent dictate the location of its staff. This would seem to mark out the airline industry as different to other sectors. For a European manufacturing company, a producer of vehicle parts for example, it is easier to see that it could decide to move its centre of operations from a high-wage country (such as the UK) to a lower-wage country (say Slovakia) as a means of cutting costs without that having any detrimental effect on its sales or operational efficiency. Its customers are likely to be spread across Europe, the commodity it is producing can be easily distributed to those customers wherever they are, and the customer is likely to be largely indifferent as to whether the vehicle parts are produced in Birmingham or Bratislava.
- 3.6.7 This is not the case for an airline, because the product it delivers must be offered from a location near to its customers. If an airline wants to offer air travel to passengers living in the London area then it really needs to have a centre of operations somewhere nearby, and this tends to drive the location of its staff. For flight crew the airline does have greater flexibility, but there is still a general operational preference to base those crew at either end of the routes they serve (so it would be likely that a UK carrier would base its transatlantic crew either in London or in the US, and in all likelihood in London, rather than trying to operate the service with crews based, say, in China).
- 3.6.8 The experience of charter operators in the wake of consolidation and merger activity illustrates this point. The new freedoms in terms of ownership structures that were created by the third package have perhaps been taken up most vigorously within this part of the airline sector, and the flexibility afforded by the new regime has enabled the charter market in general to take management decisions based on the best way to respond to the realities of the market. However, these freedoms do not seem to have worked to the detriment of the charter airline workforce.

- 3.6.9 For charter carriers, the question of where to base operations (and hence their core employees) is determined primarily by the location of demand for air travel. This overrides other considerations. Where there is a choice of geographical location, without negative impact on business operations, the determining factors tend to be the degree of flexibility of the labour laws that apply, rather than the raw cost of labour. UK charter operators do not, for example, have pilots or cabin crew based in Spain or Greece.
- 3.6.10 For Thomas Cook Airlines (a charter operator) the picture over the last ten years in terms of location of airline employees has remained fairly constant. The bulk of its employees are in the same locations as before the consolidation of its business into a larger European group that occurred in the 1990s. So employees of the German airline are still based in Germany, and for the UK airline they are still in the UK. Some corporate centre functions have been merged and are now based in Frankfurt, with some savings achieved as part of this restructuring, and other common services such as IT have been centralised. The focus of effort has been not on relocating staff, but on changing working practices and enhancing harmonisation to provide for greater flexibility and a freer transfer of pilots within the group where necessary.
- 3.6.11 Despite this effort to increase flexibility, it is interesting to note that the transfer of staff between EU Member States has not actually happened to any significant extent within the Thomas Cook group, even though the conditions to enable this to happen are in principle already in place.
- 3.6.12 This suggests that the chances of such transfers happening in a transatlantic context are extremely remote. Even with an OAA there would be no true common market, labour law differences would subsist, and the different centres of gravity of the various airline businesses would seem likely to ensure that US employees would not lose out to cheaper EU counterparts on any major scale – even without taking into account the difficulties that any airline would face from unions if they attempted to adopt such a policy. It is also revealing to note that Britannia (another UK charter carrier), despite its operating in one of the most competitive parts of the aviation industry and having a very strong focus on cost consciousness, has not changed its terms and conditions for employment, nor its recruiting practices, despite liberalisation and changes to its ultimate ownership (it is now part of the TUI group, which has its headquarters in Germany).

3.7 **Outsourcing**

- 3.7.1 There is some evidence of a small amount of outsourcing within UK airlines. This tends to be outsourcing of “common service” functions, such as complaints handling, call centre operations, or IT support. These functions have usually been outsourced to Asia, and represent only a tiny percentage of the total employee base of UK companies. This trend is not an aviation-specific phenomenon and has been apparent across different service industries in Europe and North America. It would therefore seem to be a development largely unconnected with aviation liberalisation.
- 3.7.2 BA, for example, has outsourced some of its IT support functions to India, but this is very much the exception to the general trend within the company, which has maintained its core employee base within the UK. For the vast majority of staff this means they are still located in and around the main BA operational centres, in particular Heathrow and Gatwick. These two locations account for around two thirds of BA’s total employee base. Since 1992, the main changes in terms of location of BA employees has been a shift within the UK of some non-core activities such as call centre operations (to the North East region of England) and some engineering functions (to South Wales). These changes were driven by a number of factors, including the potential for cost savings, the skills available amongst the workforce in

those areas and the ability to embrace new working patterns and different reward structures through new operational centres.

- 3.7.3 In the charter sector, there has been more activity in terms of restructuring and outsourcing, largely as a consequence of merger activity and the ability to take advantage of the synergies gained from bringing together a number of companies. Britannia noted that the direct result of the TUI merger (where six airlines were brought together under common ownership) was to reduce its headcount by around 20, as some functions such as finance, engineering and central operations systems were brought together in a single group location to avoid duplication. However, Britannia's source market remains the UK: they have 13 UK bases, 32 UK-registered aircraft and more than 3,330 staff, of whom only 3 are based outside of the UK.
- 3.7.4 Finally, a number of airlines made the point that, although for back office work and other subsidiary functions such as complaints handling, the labour supply may be available elsewhere in the world, this is not the case with pilots. Pilots are a highly skilled and scarce resource, particularly those pilots trained to a sufficient level and with the right licences to be able to fly aircraft on the transatlantic routes. The pilot labour supply tends to be concentrated in the major aviation countries, and there is consequently limited opportunity to recruit from countries outside the EU and the US, particularly against a backdrop of a generally expanding aviation market worldwide, which remains the general trend despite the recent demand shocks. This accords with the findings in the Brattle Report.¹

3.8 **Maintaining a level playing field**

- 3.8.1 A number of UK carriers commented that the removal of restrictions on ownership and control could be of benefit to employees in the US as it would allow for new entrants to come into the market and provide alternative employment options.
- 3.8.2 Many of the concerns from US labour about allowing this to happen are that an EU-owned carrier could have an unfair advantage through being able to exploit a less rigid regulatory system in terms of employment or safety rules. In fact, there are significant practical barriers that would prevent this, as any company operating in the US would be bound by the same safety regulations as a US company (see paragraph 3.8.4). A change to ownership and control rules which allowed for a right of establishment for non-US investors would even more clearly seem to put the owners of the business in the same position as US owners – US labour and immigration laws would apply to any start-up company, regardless of the nationality of its owners, and employees of that firm would be afforded the same rights as their colleagues working for US-owned airlines. Any start-up would also need to offer terms and conditions that would be competitive with the prevailing market rates in the US.
- 3.8.3 Virgin Atlantic commented that it already employs a number of US-based staff, who tend to be US citizens. This is partly through choice, and partly because obtaining authorisation for a non-US citizen to work in the US is difficult. Short-term work visas are available for only a few categories of specialist graduate jobs (not many airline jobs fall within the descriptions) and immigrant visas take a very long time to obtain. An immigrant visa is generally not as restrictive as a work visa in terms of the type of position to be filled. However, the employer must generally demonstrate that it has tried to recruit a qualified US worker and failed. Virgin commented that it was currently taking from two to four years, or longer, to obtain an immigrant visa.
- 3.8.4 The Virgin experience would tend to suggest that the impact of allowing a right of establishment in the US as part of an OAA would be that any EU entity setting up a

1. Brattle Report, 8-6

US airline would be recruiting almost wholly from the US labour market, and that it would be difficult to exploit any regulatory imbalance. Similarly, because ICAO safety standards exist it would be unlikely that this would be an area where an unfair advantage could be gained (a fuller discussion of this point is provided below in the section on comparisons with maritime). Even where EU nationals were employed in the US, working for an EU-owned airline, they would expect salaries commensurate with US nationals. So it is unlikely that, where there is an operational need for US-based staff, there would be any advantage in trying to fill these posts with non-US citizens, and indeed US immigration law would seem to make that particularly difficult in any case.

- 3.8.5 Should any residual labour concerns remain, even under a right of establishment, then these could be explicitly dealt with as part of any deal implementing an OAA, rather than being a reason to resist changes to ownership rules. This issue is returned to in the section below on right of establishment.

3.9 **Constraints on cross-border labour**

- 3.9.1 The extent to which an OAA would allow for free flow of labour between the EU and the US seems questionable. Even within the single market of the EU (with a common labour market) there are many constraints. For example, Britannia Airways now belongs to a pan-European company (TUI) but the legal issues revolving around EU employment directives and their interpretation into member state law currently prevents full integration within the group. The two main Member States for TUI are the UK and Germany, but even between these two large European players there are many legal employment issues. Maternity rights, pension schemes, salary structure and dismissal rights are all areas that differ between the two states, and will not be affected by any changes in the aviation arena.

- 3.9.2 Within the EU, there is clearly some way to go before sufficient commonality of regulations could exist to facilitate the creation of a truly pan-European airline. By extension it would seem to be the case that, even under an OAA (which would not include the setting up of a common EU-US labour market), the likelihood of a transatlantic airline with a truly integrated labour force must be even further off, given the differing employment and other laws that will continue to have effect within the US and EU.

3.10 **Benefits to the wider economy**

- 3.10.1 European liberalisation has facilitated the considerable expansion of the European aviation market over the last decade – driven primarily by the growth in the low cost carrier market. Growth in the UK market has been faster than in any other country in the EU, with the two largest low cost carriers, Ryanair and easyJet, at the forefront.
- 3.10.2 One factor that many commentators have remarked upon is that low cost carriers, and Ryanair in particular, have succeeded not just in competing on routes to existing markets, but also in the creation of entirely new markets to destinations that previously had no air services at all, or had very infrequent services.
- 3.10.3 Low cost carriers have been able to enter the market and grow only because of the new freedoms offered by the creation of a single EU aviation market and their entry into the market has changed aviation considerably. This includes increasing employment in the sector itself (Ryanair now have around 2,000 employees based mainly in Dublin or at Stansted, easyJet have around 3,100 staff, nearly all based in the UK) and ancillary services, but their success in creating new markets has also had a positive effect on labour opportunities in a range of sectors beyond aviation. Tourism is an obvious example, where regions that previously had no air service have seen the number of international visitors increasing substantially. In addition, an

airport that is utilised rather than standing empty also acts to boost employment in a range of other sectors (retail, new business parks etc.).

3.11 **Liberalisation's impact on jobs, salaries, terms and conditions**

- 3.11.1 For the most part, UK carriers commented that the terms and conditions and salaries they offer to their staff had been little changed as a result of liberalisation. BA, the largest employer of airline staff in the UK, noted that its core employees have remained on similar types of contracts over the last 10 years, although there has been some modest introduction of a greater element of profit-related pay.
- 3.11.2 Some commentators have suggested that BA has been forced to lay people off as a result of EU liberalisation. This has clearly accentuated pressures on some areas of its business. But BA believes that the changes it has made have been in response to global changes and pressures, and that it has achieved its Future Size and Shape programme by voluntary redundancy, to allow for a more flexible business approach in the changing market that it must compete in.
- 3.11.3 Indeed, most airlines tended to consider that technological change, or the more general impact of globalisation, were the prime forces behind the changes they had made to their employment practices over recent years – increased competition as a result of the third package may have accelerated that process of change, but it would have been an inevitable step in any case – and the main effect of liberalisation has been to create more jobs overall in the airline sector and related industries.
- 3.11.4 Other airlines have done more to change the weighting within the overall pay package so that there is now a greater element that is productivity-related. For example, Ryanair employees tend to be employed on flexible contracts, with large productivity incentives and performance-related pay making up a considerable part of the remuneration package. Ryanair pilots' salaries are at competitive levels, but their pilots tend to fly longer hours than is the case in most other airlines (around 60 hours a month).
- 3.11.5 Some new ventures in the airline sector have also been set up with different labour contracts than exist in the traditional scheduled carrier package. These include changes to arrangements regarding pension provision for example, as has happened across all sectors in the UK economy. However, the broad conclusion is that there has not been a notable reduction in the total value of the remuneration package for airline employees as a result of liberalisation.
- 3.11.6 As discussed in the section on economic theory, the impact of liberalisation on the bargaining position of airline employees can be positive. The general view from the carriers of how this has played out in the European market since liberalisation is that the growth in the market generally has also stimulated the demand for skilled labour. Virgin Atlantic, for example, commented that this demand stimulation is of benefit to airline employees, especially pilots, as their bargaining power has increased through the existence of a more dynamic market for their services. By contrast, if an airline had a near monopoly of jobs in one region, then this would make it easier for the company to hold its employees to ransom as they would have no alternative employer to turn to.
- 3.11.7 As most respondents observed, it is very difficult to discern exactly to what extent the effects on employment discussed above stem from the third package liberalisation as opposed to being attributable to other factors that would have been present with or without that particular regulatory reform.

4 Other factors relevant to an EU-US Open Aviation Area

4.1 Comparing US and EU labour costs and conditions

Table 4 Average salary of flight crew at selected airlines in 2001

| Airline | Average annual remuneration (US\$) | |
|----------------|------------------------------------|------------|
| | Pilots/Co-pilots | Cabin crew |
| Delta | 185,980 | 40,483 |
| Continental | 163,624 | 40,694 |
| US Airways | 161,888 | 49,576 |
| United | 151,989 | 33,428 |
| Alaska | 141,808 | 29,627 |
| Northwest | 138,427 | 34,218 |
| American | 126,191 | 35,071 |
| Southwest | 112,259 | 30,514 |
| America West | 96,646 | 24,328 |
| Aloha | 93,953 | 29,308 |
| AirTran | 73,785 | 17,881 |
| JetBlue | 60,483 | 21,986 |
| Air Wisconsin | 40,824 | 25,422 |
| Lufthansa | 181,848 | 42,870 |
| SAS | 161,777 | 62,076 |
| KLM (a) | 159,542 | 40,157 |
| Air France (a) | 155,076 | 47,152 |
| Iberia | 150,407 | 50,373 |
| Air Portugal | 138,270 | 42,039 |
| BA | 111,320 | 35,519 |
| Virgin | 90,935 | 21,507 |
| easyJet | 78,493 | 21,904 |
| Olympic (a) | 62,328 | 25,104 |
| Cathay Pacific | 192,771 | 40,575 |
| JAL | 180,235 | 71,606 |
| Singapore | 118,798 | 32,152 |
| Air India | 65,076 | 12,888 |
| Malaysian | 57,041 | 20,002 |
| Korean | 54,003 | 24,149 |
| PIA | 25,399 | 5,364 |
| THY – Turkish | 61,131 | 24,868 |
| Czech | 24,213 | 8,755 |
| Croatia | 57,529 | 8,832 |
| LOT (a) | 54,078 | 14,857 |
| Aeromexico | 161,598 | 37,322 |
| Air Canada | 97,637 | 28,694 |
| Avianca | 79,491 | 23,136 |
| Varig | 43,942 | 14,611 |

Source: ICAO Digest of Statistics – Fleet and Personnel, 2000 and 2001.

Notes: a) Data for 2001 is not available and data for 2000 has been used.

b) "Remuneration" comprises gross salaries, overtime pay, flying pay and subsistence allowances.

c) The data represents average values for the year. Remuneration levels during 2001 will have changed at a number of airlines as a consequence of the events of 11 September 2001.

- 4.2 Table 4 above compares the average salary of flight crew across airlines in 2001. The data on the sample of US airlines shows the wide variation that can occur across the airlines in one country where the types of operation and the size and type of aircraft operated by different airlines can differ greatly.
- 4.3 It could be argued from Table 4 that the UK's success in the liberalised European market is simply the result of lower labour costs. However, a much more potent factor is likely to have been the degree of competition in the UK market which predated the third package. The UK had long encouraged entry to both the industry and particular routes. It was the only member state where, before EU liberalisation, the "flag carrier" faced head-to-head competition from other airlines of the same nationality on major routes in the domestic, short-haul and long-haul arenas. This experience conditioned the UK airlines and gave them a competitive advantage. In the context of an OAA, it is likely that US airlines are in an analogous position with their competitive edge tempered by 25 years of unfettered domestic rivalry.
- 4.4 In 2000 the flight crew of UK airlines received a significantly lower average salary than the crew of equivalent airlines in Germany, Scandinavia, the Netherlands, France, and Spain. However, despite these intra-regional differences in pay there is no evidence that there has been a marked shift in the location of crew employment.¹ Airlines from Eastern European countries generally pay much less than those airlines from Western Europe. High-salary European airlines, such as Lufthansa, are comparable with high-salary US airlines, such as Delta. In terms of current remuneration levels the higher US, European and Asia/Pacific carriers are all broadly at the same level and, in terms of the larger airlines, there would seem to be a broadly similar range in each region.
- 4.5 These wage differences will give, the practical difficulties of relocation aside, incentives for pilots to move from low-salary countries to high-salary countries but there are other influences such as different tax regimes, costs of living, and social benefits. In addition, it should be noted that there is a limit to the extent to which pilots from, say, the EU accession countries could be used to replace higher wage pilots from EU countries or the US, not least because there is not a large pool of sufficiently trained pilots from which to draw.² The higher costs of training a pilot in Europe are another factor that would limit the feasibility of direct labour substitution. Given that there are already quite wide differences between the various US carriers, it would seem difficult to draw firm conclusions from this data that suggest a new problem would be created under an OAA.
- 4.6 **Non-wage costs and other factors**
- 4.6.1 From the point of view of an airline, it should be noted that Table 4 does not account for social costs, which can be a significant addition to an employer's costs. All airlines included here have the same definition of average remuneration, defined in the notes to Table 4, but each country has a different average proportion of non-wage labour costs.³ Figure 1 below shows US Bureau of Labor statistics on the average labour costs (in dollars per hour) for the G7 countries in 2001. The total cost is split into wage and non-wage elements and the non-wage element is much higher in countries such

1. There were reports in the 1990s that Sabena was, because of its financial difficulties, seeking to re-base its staff in Luxembourg rather than Belgium because the social costs were lower there.

2. The Brattle report noted that the European Cockpit Association estimated that Central and Eastern Europe could provide only around 3,000 to 4,000 fully licensed pilots who were trained on Western aircraft.

3. Non-wage labour costs are defined as employers' actual and imputed social contributions, unfunded employee social benefits and any taxes payable by the employer (Eurostat 2002).

as France and Germany than in the UK, Canada and, to a lesser extent, the US. These figures relate to labour costs in all industry and services, not just in aviation.

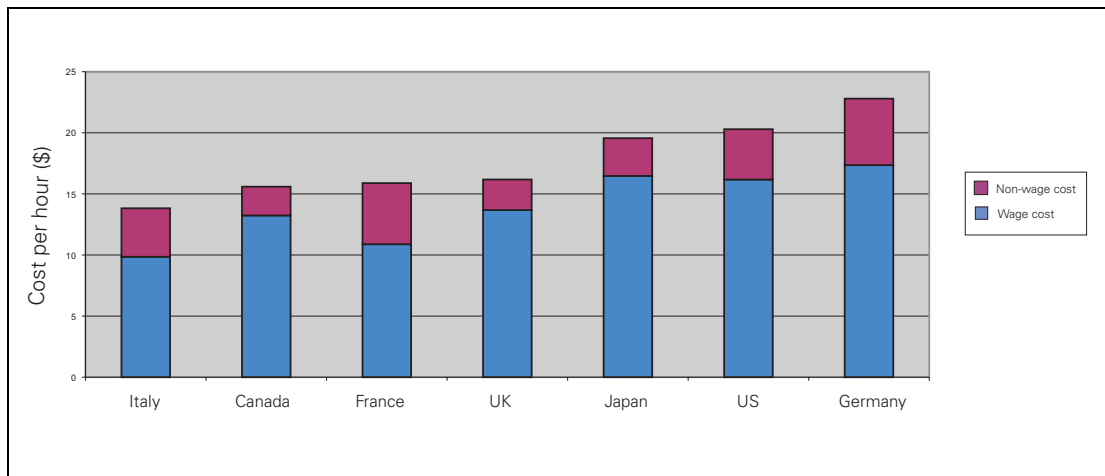


Figure 1 Non-wage labour costs per hour in 2001

Source: US Bureau of Labor Statistics

4.6.2 The US data on non-wage costs are expressed in proportional terms in Table 5 and is compared to data from the EU for 2000. There are differences between the two sources for particular countries such as the UK but the broad conclusions to be drawn are similar:

- the EU data shows a wide variation across countries;
- non-wage costs are a higher proportion of the total labour costs in Sweden than in France or Germany and over twice the level of those in the Irish Republic;
- the US lies towards the lower end of the European spectrum although its non-wage proportion is significantly higher than Canada.

Table 5 Non-wage costs as a proportion of total labour costs

| | US data | EU data |
|---------|---------|---------|
| France | 31.3% | 32% |
| Italy | 28.7% | 32% |
| Germany | 24.2% | 24% |
| US | 20.6% | N/a |
| Japan | 16.0% | N/a |
| Canada | 15.8% | N/a |
| UK | 15.5% | 19% |
| Sweden | N/a | 34% |
| Spain | N/a | 26% |
| Eire | N/a | 15% |

Source: US data for 2001 from Bureau of Labor Statistics

Note: EU data for 2000 derived from "Employment in Europe 2003", European Commission

4.7 Overall costs

- 4.7.1 For an airline, the crucial parameter is the impact which labour costs have on its overall costs. This is affected not only by the unit labour cost (including non-wage costs) but also by its productivity. Conditions which may restrict productivity are therefore important in the comparison and these are perhaps most relevant for flight crew.
- 4.7.2 Aeronautical authorities have established limits on the workload of the pilots that they license. The FAA in the US, for example, has set yearly, monthly, weekly, and daily scheduling limits. In particular, FAA regulations state that: *"A certificate holder conducting flag (i.e. international) operations may schedule a pilot to fly in an airplane that has a crew of one or two pilots for eight hours or less during any 24 hours without a rest period during those eight hours."* This restriction is important in scheduling flight crews across the Atlantic since many sectors are greater than eight hours and hence require additional crew.
- 4.7.3 UK regulations state that the maximum flying hours for flight crew are 100 hours in any 28 consecutive days and 900 in any period of 12 months. The maximum length of a Flight Duty Period (FDP) for UK pilots is 14 hours¹ but this applies only under particular circumstances. The permitted length of the Flight Duty Period for a given operation depends on the start time of the duty period, the number of pilots in the crew, the sector length, whether the pilots are acclimatised or not, and the length of the preceding rest period. For example, for a two-pilot crew flying a sector more than 11 hours, the FDP falls to 11.75 hours. Given this complexity, it is difficult to compare the limitations which apply in different countries. A recent report which attempted to do so² indicated that at present there is a considerable variation even across European countries. The differences between the EU and the US on flight time is often raised as a problem by commentators on both sides of the Atlantic but this is simply one element within an overall package of cost advantages and disadvantages. While the EU may gain in some areas it will lose in others, so this should not be considered to be an overriding concern. Also, with the development of both EU and ICAO standards, it is likely that, in the future, these variations in flight time limitations will tend towards a common standard based on a greater understanding of human physiology.
- 4.7.4 The combined impact of the absolute labour costs and limitations on airline productivity could be measured as the percentage which labour costs form of total costs or, in terms of unit costs, as the labour cost per unit of output such as per ASK, per revenue passenger kilometre (RPK) or per passenger. Wage costs and non-wage costs clearly have a role in determining the unit cost as do operational limitations and terms and conditions more generally. Higher wage rates do not necessarily mean higher output costs if they are compensated by higher productivity levels. There is greater incentive on management to achieve higher productivity, possibly by greater investment in labour-saving equipment, when labour costs are high. Figure 2 shows ICAO data³ on the total passenger costs and "aircraft" unit costs across world regions in 1999 expressed on a per-passenger basis. "Aircraft" unit costs comprise flight and cabin crew costs, maintenance, depreciation and rental charges but exclude fuel costs.

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1. "The avoidance of fatigue in aircrews," CAP 371, Civil Aviation Authority, January 2004. The FDP may be extended to 18 hours where an additional crew member is carried and where this permits a pilot to have an in-flight rest period in a bunk. This enables that pilot to extend his or her FDP by half the period of bunk rest up to the 18 hour absolute maximum.
 2. "Flight Time Limitations in Civil Aviation: a comparative analysis of 26 national regulations," P. Cabon et al, Fourth International Conference on Fatigue and Transportation, IATA Flight Time Limitations Task Force website. The FDPs in this study appear to be the maximum that can be achieved under the optimal circumstances and where in-flight rest is possible.
 3. "Regional differences in International Airline Operating Economics: 1998 and 1999," ICAO, January 2003.

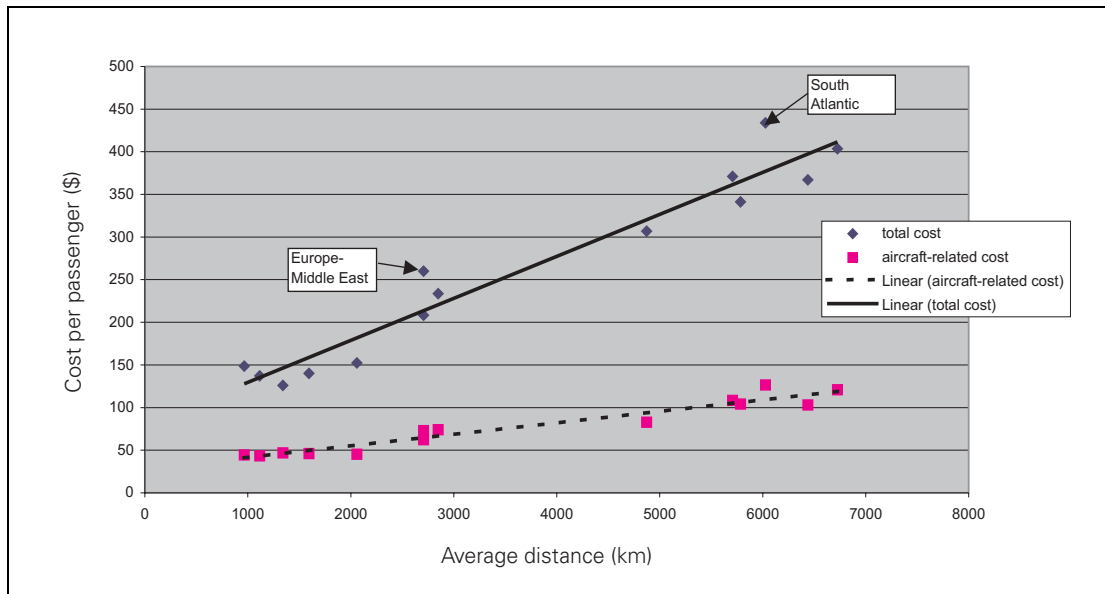


Figure 2 Unit costs of operations by world region

4.7.5 Because airline cost data is not usually available on a route or even a regional basis, it is difficult to make a detailed inter-airline comparison of unit costs. The ICAO data does allow a limited insight even though the category “aircraft unit costs (excluding fuel)” goes wider than flight crew costs. Figure 2 suggests that stage length is an important determinant of the unit costs of airlines. When expressed on a passenger-kilometre basis, the highest unit costs (15.4 cents per passenger-kilometre) are on intra-Europe routes where the average stage length is the shortest (at 966 km). The lowest costs per passenger-kilometre are on routes in the South Pacific region where the average stage length of 6,438 km is among the longest of all the world regions. However, Figure 2 indicates that, making allowance for the stage-length effect, there would appear to be only a relatively small variation in unit costs between regions. The regions that are noticeably above the trend line are Europe-Middle East (with an average stage length of 2,707 km) and South Atlantic (6,207 km). These areas are likely to contain relatively low-density routes which suggests that the thinness of the routes may play a greater role in airline unit costs than labour costs.

4.8 Comparison with maritime

4.8.1 The experience of liberalisation of the maritime sector, and the loss of jobs from the US shipping industry, has been cited by some observers as a portent if aviation were opened up in the same way. Liberalisation in the US maritime sector led to companies which were formerly registered under the US flag moving their registration to other countries in order to take advantage of less strict regulations, cheaper labour costs, and lower tax rates – the process known as adopting “flags of convenience”. As this process accelerated, employment in the maritime sector within the US and Europe reduced considerably and those positions formerly filled by Americans and Europeans were filled by Asian or African crew.

4.8.2 Union representatives¹ point out that if a similar effect were to be seen in aviation this could be of concern from a social and safety viewpoint, and attention should be given to ensuring this does not happen. However, whilst this is a legitimate concern, such a scenario seems unlikely to be replicated in the aviation sector, not least because

1. Remarks made by Peter Sorensen, European Cockpit Association, at European Aviation Conference, Strategy and Structure, Amsterdam 2004.

there are a number of key differences between aviation (particularly passenger aviation) and shipping that mitigate against the re-flagging of airlines on the scale that occurred in maritime. These points are detailed below:

- *People cannot be treated in the same way as goods*

Unlike shipping of cargo, where there is no need for customer interface, there is a far more important interface between passenger airline employees and the paying customer. Airlines need to service their passengers at their points of origin and departure, and need to provide good customer service (which includes language skills) during the flight. In addition, there is a far greater safety imperative for passenger carriage, and there is nothing worse for a passenger airline business than to have a major accident. This means that cutting corners on safety measures for a passenger airline is not only prevented by regulation (and is morally objectionable), it is also commercially short-sighted, and so is much less likely to be a problem in aviation than in maritime.

- *The importance of the US domestic market*

The US passenger airline industry relies heavily on domestic traffic¹, whereas shipping is almost entirely international. US immigration law requires that US airlines have to employ US flight crew for their domestic services.

- *Aviation has an international regulatory framework*

There are overarching ICAO and international safety standards that apply to aviation and which are enforced by national agencies and subject to scrutiny by ICAO. This means that the large regulatory cost advantage that is available to shippers by switching flags is not available in aviation, particularly between the US and the EU where regulatory standards are high. The experience of the maritime sector has been that US and European shipping companies have re-flagged their ships to the registers of countries like Panama in order to exempt themselves from tough regulations in their original countries. In the context of an OAA, this is far less likely to be a problem. The FAA, the national safety regulators of EU Member States and EASA would between them work to ensure that every US or EU carrier is operating to an acceptable level of safety so there would be no real regulatory gain from re-flagging (as indeed they already do to a large extent). In addition, because countries retain sovereignty over their airspace, even if an airline tried to re-flag to a different country to take advantage of a lax safety regime, then they could find themselves refused permission to land in the destination country.

- *Airline pilots are a skilled and scarce resource*

Whereas shipping companies were able fairly easily to recruit cheap labour from other countries to work as shipping crew, the much higher level of skills and training needed (and in particular for pilots) and the fact that high skilled employees represent a much higher proportion of the total workforce in aviation would make it very unlikely that such a process could be successfully undertaken in the aviation sector.

4.9 **Right of establishment**

- 4.9.1 Relaxation of ownership and control restrictions as part of an OAA could provide a right of establishment for an EU-owned airline in the US, or vice versa. This may be narrowly defined as allowing EU airlines to establish a subsidiary in the US, but not to acquire a controlling interest in an existing US carrier, with equivalent rights for US airlines in the EU. This would seem most demonstrably to allay the union concerns

1. In 2002 the domestic services of US airlines represented 90% of their total output measured in passenger terms and 72% measured in RPKs.

discussed above. However, as has been pointed out earlier in this paper, there are many other factors that would seem to make it unlikely that these concerns would prove valid, even under a full liberalisation of ownership and control.

- 4.9.2 A right of establishment would mean that the EU-owned subsidiary would operate as a US company, and that the US regulatory framework would apply to the EU-owned new entrant carrier in the same way it would to any US carrier.
- 4.9.3 A more liberal variant on this approach would be to extend the right of establishment to allow an EU airline to take over an existing US airline, but to require the new company to remain incorporated in the US.
- 4.9.4 The effect of this would be to ensure that the new entrant would simply be another US company, subject to the usual FAA regulations on safety, flight duty time and other issues. US immigration law would apply to the company, meaning that it would have to employ US-based staff on US-style labour contracts, and the disciplines of the market would mean that it would probably have to offer contracts that were competitive with the terms and conditions and salary levels that were available elsewhere in the US airline sector. US labour law would also apply and so the interests of employees would be protected.
- 4.9.5 Many of these same factors would apply even if the new establishment was an EU takeover of an existing US operation (as long as it had to be incorporated in the US) and so the regulatory level playing field would be maintained. However, if the right of establishment were instead limited to the setting up of a new company, then it would seem clearer that the new company's employees would overwhelmingly be US nationals, whereas a takeover could in theory allow for some replacement of US pilots with EU pilots on transatlantic routes. The downside of adopting a narrow approach on right of establishment would be that it would fall short of securing the economic value of full liberalisation of ownership and control rules, which would allow for transatlantic mergers and the efficiency gains they could bring.
- 4.9.6 Turning to other worries expressed by unions, it would seem that there is little risk of any of these proving to be a major threat to US employment in a more liberalised environment:
- *the threat of a foreign carrier setting up in the US to fly domestic routes and bringing cheap labour with them.* This would seem to be prohibited by a combination of US immigration and labour law. Even if not the case, employees brought into the US on such a basis would soon demand US-level wages and conditions;
 - *the fear that US carriers start to operate transatlantic flights with crews based in Europe.* This concern would seem to be no different with or without an OAA. Carriers do already base staff overseas if they operate services to that country. And, in theory a US airline could do this already, and the factors that prevent it from doing so would remain in place even with an OAA, i.e. that it would offend the scope agreement they have with their own pilots. Also, because the bulk of US carriers' operations are domestic and need to be operated by US pilots, trying to have a "transatlantic only" cadre would probably reduce operational flexibility, even if they could square this with their own unions.
 - *the threat of re-flagging.* The evidence suggests that this is unlikely to happen between the US and the EU, as regulatory standards in both areas are at similar levels. So the advantages in taking such a step are not clear-cut. Although the bilateral system has in the past, and may continue to have, a constraining effect on re-flagging, even if this were removed, the adverse public relations impact of re-flagging would also have to be considered. It is likely that any airline seeking to take

such a step would have to deal with a backlash from its unions, from politicians, and from the public (which could thus affect passenger numbers) all of which would make it unlikely that this would be a sensible step for EU or US airlines to take.

4.10 **Wet-leasing**

- 4.10.1 Proponents of an unrestricted OAA would advocate the complete removal of restrictions on wet-leasing of foreign-registered aircraft. There is currently an imbalance in favour of US airlines as they are able to wet-lease their aircraft to European airlines, but European airlines are prevented by the US authorities from wet-leasing their aircraft to US airlines. The grounds for the US restrictions are likely to be partly rooted in the social consequences of allowing a US airline to lease aircraft operated by a non-US company. It may be that US concerns would be alleviated if, as an interim step, the OAA included more limited restrictions that allowed the wet-leasing of aircraft across national borders but only within the OAA states, and not from beyond, and perhaps only up to certain numeric limits. US airlines would be likely to welcome any move that increased their flexibility to lease in aircraft to cover a requirement that their own fleet cannot meet. Lifting the restrictions on wet-leasing within the OAA would also give those US companies which wet-lease aircraft complete freedom in Europe. While it is true that wet-leasing in either direction may threaten local jobs, particularly in specialist areas, the impact seems likely to be marginal in terms of the overall industry, as there is a limit to the extent to which it would be feasible or desirable for a major airline to outsource large parts of its business in this way. Wet-leasing may be a logical solution to problems of short term supply or demand peaks, but it would not appear to be a good model for running large parts of an airline business over the longer term. To wet-lease on a large scale would be to outsource the very core of the business, amounting in effect to ceding control of the airline's operations to a considerable extent. However, given the huge size of the US freight operators compared with their EU counterparts, wet-leasing may be more of a threat to European carriers, even though US companies currently have more freedom in Europe than European carriers have in the US. Conversely, the size of the US domestic freight market means that, if it were opened up for wet-leasing, this would present significant opportunities for European carriers.

5 Conclusions

- 5.1 This review of the experience of the UK in relation to European liberalisation suggests that labour has benefited from the opening up of new markets, and that many of the concerns about the possible negative impact of transatlantic liberalisation may be overstated.
- 5.2 In particular, the evidence from the UK is that liberalisation has facilitated the growth of the aviation market and has in fact created more jobs. In crude terms, the “pie” is now bigger, and so the slice that goes to labour is bigger than it was. The situation in relation to US domestic deregulation is similar, where the total number employed by US airlines grew by 73% between 1982 and 1992, a period when the effects of the deregulation of the US domestic industry in 1978 were working through¹.
- 5.3 Liberalisation is a dynamic process that will bring change and some turbulence to the market, which may be a concern for employees. However, it can also lead to a greater choice of employers for airline staff, and an increased demand for labour creates a situation where labour (and particularly skilled and scarce labour) may have greater bargaining leverage.
- 5.4 There would also appear to be some “natural” restrictions on labour substitutability that apply to aviation that may not apply in other industries – including the operational benefits that are attached to having the core of staff located in the same place as the base country of that airline’s operations.
- 5.5 Fears that the US would be overrun by a sudden influx of cheap pilots from Europe are unlikely to materialise, partly because of the natural restrictions mentioned above, but also because pilots that are trained to a sufficient level to enable them to operate US aircraft are a scarce resource, and there is a limited pool available from the lower-wage countries of Central and Eastern Europe. Moreover, the imbalance in market size means that the US pilot labour force will continue to dwarf that of the Central and Eastern European countries for the foreseeable future. It is also important to recognise that non-wage costs are likely to have as much bearing on airline management decisions on location decisions as direct wage costs.
- 5.6 The review of the UK’s experience in relation to liberalisation within Europe has not provided evidence of any of the following phenomena:
- airlines re-flagging themselves to exploit lax regulatory regimes;
 - UK workers being displaced by cheaper workers from other countries in the EU, or;
 - UK airlines losing market share to airlines from lower-wage EU countries.
- 5.7 The strength and competitiveness of the US domestic market (which accounts for around 75% of revenues for US airlines) means that the impact of increased competition on international routes for a US carrier in terms of its overall market is likely to be far less, and that the overall effect on US airlines of new entrant competition will be tempered.
- 5.8 The growth in the airline market in the UK has also provided a boost to employment in other parts of the aviation industry, and in ancillary industries. Similar effects might be expected under an OAA, as airports on both sides of the Atlantic would gain from liberalisation, and more traffic would lead to more jobs within the airport, in businesses that supply airlines and airports and at businesses that grow up around the airport.

1. Air Transport Association of America using data from US Bureau of Transportation Statistics.

- 5.9 The impact of US and EU domestic deregulation means that the pressures of competition from newer entrants such as Southwest Airlines and Ryanair already exists. Consequently, it would seem that preventing the setting up of an OAA will not protect incumbent carriers or isolate them from competitive pressures. Instead, the best chance for incumbent scheduled carriers to recover and improve their position would seem to lie in securing the removal of remaining bilateral restrictions on their long haul traffic growth, and providing the greater access to foreign investment capital that is currently prevented by ownership restrictions.
- 5.10 The conclusion of this paper is that full liberalisation of ownership and control rules should benefit labour, rather than disadvantage it. This is for a number of reasons, including the comparable safety regulatory regimes between the EU and the US, the dominance of the EU and US aviation markets in terms of labour-supply, and the fact that employment legislation would continue to safeguard labour interests regardless of changes to the ownership of airlines. The right of establishment approach could represent a step forward from the current situation, but would be less economically and commercially valuable. However, it would most demonstrably allay the concerns of labour – although questions around the impact of wet-leasing may need further detailed consideration – and this approach could be developed further in consultation with unions and other stakeholders.
- 5.11 An Open Aviation Area between the US and the EU would represent a huge step forward in attempts to liberalise aviation, and would provide real opportunities for a more efficient and better-performing industry in the future. The people who work in the aviation sector are absolutely crucial to that process, and this paper suggests that they should embrace the benefits that can flow from liberalisation. What will be important as the OAA concept is developed in more detail is that employees and their representatives are fully involved and can bring their knowledge to bear in framing an agreement that is both liberalising and practicable.