

Hub Airport Slots, Market Exit and Irish Regional Economic Development

by

Sean Barrett

*Department of Economics, Trinity
College, Dublin*

Special Article

in

QUARTERLY
ECONOMIC
COMMENTARY

Winter 2007

**ALAN BARRETT
IDE KEARNEY
MARTIN O'BRIEN**

HUB AIRPORT SLOTS, MARKET EXIT AND IRISH REGIONAL ECONOMIC DEVELOPMENT

*Sean D. Barrett**

1.
Introduction

From January 14 2008 slots previously used on the Shannon-Heathrow air service by Aer Lingus will be transferred to the Belfast-Heathrow route. The case for the transfer is that it will increase the profitability of the airline. The case against the transfer is that it will undermine the economy of the Atlantic coast region of Ireland and that the government should intervene to prevent market exit by Aer Lingus from the Heathrow-Shannon route. This paper examines the economic issues involved in slot allocation in a deregulated aviation market with freedom of market entry and exit. Section 2 deals with airport slots and property rights. Sections 3 and 4 deal with the impacts of airline and airport competition on traffic distribution in the London area and in the Atlantic region of Ireland respectively. Section 5 examines eight market alternatives to the Shannon-Heathrow service. Section 6 examines arguments for government intervention to secure Shannon-Heathrow services on the grounds of business promotion, tourism promotion, regional development and the use of a national airline as an instrument of economic policy. Section 7 deals with the prospect of further Heathrow slot transfers. Section 8 contains a summary and conclusions.

* Author's contact address sbarrett@tcd.ie. The author would like to thank, with the usual disclaimer, an anonymous referee and editors for their helpful comments.

2. Airport Slots and Property Rights

Airport slots or units of capacity at capacity-constrained airports are allocated to airlines in order of seniority that is according to an airline's grandfather rights at the airport. The de facto vesting of slot property rights at airports in airlines rather than in airport management or in an independent regulator is based on the historic allocation of functions at airports. Airport management were responsible for the construction and maintenance of infrastructure and, encouraged by the duty free system, developed significant retailing at airports.

The management of the allocation of the capacity of airports became a function of the airlines with precedence in order of seniority. The property rights of grandfather airlines at slot constrained airports contrast with normal markets in which the customers purchase goods and services from producers rather than from other customers. However, the property rights of grandfather airlines are by now embedded and are likely to remain so. Doganis (2006) states that "...attempts to open up the system of slot allocation by abandoning the grandfather rules are unlikely to be any more successful in generating real competition than they have been in the past. Nevertheless, the European Commission, in a controversial staff working document released in September 2004, put forward a number of proposals including secondary slot trading, slot auctions, and progressive returns of grandfathered slots. It is difficult to see how far these proposals will go but the problem remains. How to ensure greater competition when slots are in short supply will be a key issue for regulators and a key challenge for airlines wishing to expand at hubs other than their own."

Since deregulation in Europe new entrant airlines have concentrated on developing routes at the many underused airports in the region. They thus avoid slot purchase at hubs, the high costs of legacy airports from the era of noncompeting airlines and the congestion costs of slot constrained hubs (Barrett, 2002). The new entrant airlines have also redefined the airport product to meet the requirements of low cost airlines operating point-to-point services rather than interlining at hubs. They do not require expensive terminals, business class lounges, or airbridges (Barrett 2004). Passengers responded favourably to less congested small airports with benefits such as lower fares, less walking and waiting times, fewer lost bags, cheaper car parks, better punctuality and less time spent in aircraft stacking over congested airports. Less congested new airports facilitated quicker turnaround times of 25 minutes compared to as much as 75 minutes at congested hubs. Aircraft serving uncongested airports fly more trips per day per aircraft than at hubs.

Airlines holding slots at hub airports find the price of slots rising due to increased demand while supply is constrained usually due to

environmental and planning objections to expansion proposals. Davy (2006a) noted sales of Heathrow slots at €15 million per pair in 2006 and estimated the value of slots held by Aer Lingus at Heathrow to be €306 million for the twenty-one pairs of slots it held there. In addition, British Midland allocates seven Heathrow slots to its Dublin route. The Republic of Ireland slots at Heathrow thus have a combined value of some €400 million. The price of a slot depends on the time of day to which it applies and the number of airlines seeking to acquire slots. The price of Heathrow slots is likely to rise in 2008 as airlines seek to open new routes in response to the market opportunities arising from the EU/USA open skies agreement.

Airport slot prices indicate the opportunity cost facing an airline in deciding to either sell, retain, or reallocate slots at a slot constrained airport. The Heathrow experience has been that the slots have been transferred from short-haul to long haul routes both by sale between airlines, and by management decision for transfers within airlines. There have been no purchases of Heathrow slots by low cost airlines. The two largest low cost airlines serving the United Kingdom, Ryanair and easyJet, had a combined total of 65 million passengers in 2006. This is double the number carried by British Airways which has the most slots at Heathrow but neither Ryanair or easyJet has sought to purchase Heathrow slots. Charter airlines, the traditional low cost sector before deregulation, carry the same number of passengers as British Airways but have not purchased Heathrow slots. Ryanair, easyJet, or charter airlines could acquire either the Aer Lingus or the same number of slots from other incumbents' slots at Heathrow for €304 million according to the Davy estimate of slot prices. In addition to this outlay there would be extra costs in landing charges, delays and longer turnaround times at Heathrow. The investment and output policies of the low cost airlines have avoided the Heathrow investment choices and concentrated on other airports. A Ryanair statement in November 2007 criticised easyJet as "...just another high fares airline" and claiming that "...all easyJet have left to do is to start levying fuel surcharges and move to Heathrow."

3. The Impact of Airline and Airport Deregulation on the Ireland- London Market

In a deregulated aviation market, such as Ireland-United Kingdom since 1986, the ability of slot constrained airports such as Heathrow to command a premium fare per passenger on short-haul routes has been reduced by the growth of both airline and airport competition and significant changes in the unbundled deregulated aviation product.

Before deregulation route development outside slot constrained airports typically required the airline developing the new route to give up capacity at hub airports in order to remain within overall market sharing arrangements between the designated national airlines of each state. The deregulated market on the other hand

allowed the development of new routes by new entrant airlines serving new airports.

The pre-deregulation unrestricted return fare between Shannon and Heathrow in 1985 of Ir£240 (€305), is equal to €575 at 2007 prices. Yield revenue per passenger per route by airline is not published and is a closely guarded commercial secret by airlines. However, yield data per passenger over the entire networks of airlines are published. Goodbody estimate that the 2007 one-way fare per short haul passenger on Aer Lingus was €72.80 and on Ryanair it was €46.50. The current Aer Lingus network yield per passenger is 26 per cent of the pre-deregulation unrestricted fare on Shannon-Heathrow while the Ryanair fare is 16 per cent. This indicates the impact of deregulation on price in European aviation. The airport charges per passenger are €15 on Aer Lingus and €8.1 on Ryanair in 2007. The average Aer Lingus airport charge is 85 per cent more than the average Ryanair airport charge indicating a significant degree of passenger savings from competition between airports.

The deregulated market unbundled the traditional airline product for both airlines and airports. No frills service replaced full service airlines between Ireland and the United Kingdom with the exception of the City jet service from Dublin to London City which has only a 1 per cent market share of the Ireland/United Kingdom market of over 12 million passengers. CityJet's business model in 1997 emphasised food, champagne, leather seats and passenger comfort on their London City-Paris service in conjunction with Air France. "They were happy with our performance on the Paris/London City service, which was now, next to Concorde, producing the highest passenger revenue per kilometre yield in the entire Air France global network. It was all business class and passengers were paying Stg£330 per return journey for their fifty-five minute experience" (Byrne, 2004).

Passengers on routes between Ireland and the United Kingdom overwhelmingly chose the lowcost airline model. British Airways exited the Ireland market rather than adapt the low-cost model and transferred its Heathrow slots to other routes. Both Aer Lingus and British Midland adopted the no frills model. The Aer Lingus Initial Public Offering Prospectus (2006) described the airline as "low-cost low-fares" operating a single economy class service on its short-haul network " and a "two-class service on its long haul network." The product was low-cost single fares with seat reservation. Food service is sold separately rather than bundled in high fares. The prospectus in part 3 examined sixteen risk factors relating to the airline industry and twenty-five relating to Aer Lingus but a scenario that the previous first class, business class or premium class would again command a premium fare in a deregulated market was not included. Weldon (2002) notes the commitment of Aer Lingus "...to making over three million cheap seats available in the Irish

market in 2002 at prices up to 60 per cent lower than in the previous year.”

The 99 per cent share of low-cost airlines between Ireland and the United Kingdom, with only 1 per cent for CityJet’s full service model, considerably exceeds the low cost share of 30.8 per cent for 18 European countries in February 2006 for intra-Europe traffic (Davy, 2006b). The opening of competition between Dublin and London in 1986 makes the Ireland-United Kingdom market the most mature deregulated market in Europe. It is also the market with the highest preference for low-cost airlines and airports. Table 1 shows the numbers of Shannon passengers that have availed of the new airport choices in the London area since deregulation and that the Heathrow monopoly on Shannon-London in 1995 fell to a 38 per cent market share in 2006. Passenger numbers between Shannon and London increased by 521,000 between 1996 and 2006 but fell by 12,000 between Shannon and Heathrow, a decline of 4 per cent in a market which grew by 156 per cent.

Table 1: Shannon-London Air Passenger Numbers (000s)

Route	2006	2005	2000	1995	1990
Heathrow	323	338	304	335	311
Stansted	290	305	234	-	-
Gatwick	160	154	123	-	-
Luton	83	65	-	-	27
Total	856	862	661	335	338
Heathrow share %	38	39	46	100	92

Source: Civil Aviation Authority, International Air Passenger Traffic Series.

In addition to lower fares and increased numbers of flights airport competition in the London area brings benefits such as reduced surface journey access times to local airports. The perceived isolation of the new entrant airports was reduced by the development of car hire services and cheaper car parks, and improved public transport links. In addition, the more widely dispersed pattern of distribution of economic activity in the modern economy makes Stansted, Gatwick and Luton the preferred choice of London airports for 533,000 Shannon passengers or 62 per cent of that market.

The Shannon-London case of airport competition includes competition at both ends of the route. Heathrow was the sole airport served in the London area before deregulation with only Shannon and Cork providing the service in the entire Irish Atlantic coast region. Section 4 examines the impact of deregulation on aviation in the Irish Atlantic region.

4. The Impact of Deregulation on Airlines and Airports in the Irish Atlantic Region

Since deregulation alternatives to Heathrow are available at Stansted, Gatwick, and Luton as shown in Section 3 above. In the Irish Atlantic region five new entrant airports since deregulation compete with Cork and Shannon, the dominant airports before deregulation. These are at Derry, Knock, Galway, Kerry, and Waterford, each with direct services to London. In addition two other new entrant airports, at Donegal and Sligo offer service to London over Dublin.

Table 2 shows the growth in air travel between the Atlantic region and London. This market has increased from 995,000 in 1990 to 2.682 million in 2006. The growth in the market since deregulation is dominated by new entrant airlines and airports. Of the increase of 1.687 million passengers 94 per cent is accounted for by three major developments.

- (i) The new Irish airports at Derry, Knock, Galway, Kerry and Waterford added 554,000 London passengers.
- (ii) Services from Cork to London airports other than Heathrow added 526,000 passengers.
- (iii) Services from Shannon to London airports other than Heathrow added 506,000 passengers.

Table 2: Atlantic Region (Ireland) Air Travel to London, 1990-2006

	2006	2005	1990
Shannon- Heathrow	323	338	311
Shannon-Other London	533	524	27
Cork-Heathrow	426	434	337
Cork-Other London	614	616	88
Knock-London	356	282	88
Derry-London	153	106	n.a.
Kerry-London	149	148	48
Galway-London	65	60	56
Waterford-London	63	55	40
Total	2,682	2,563	995
Shannon-Heathrow share %	12.0	13.2	31.1
Shannon-Other London share %	19.9	20.4	2.7
Cork share %	38.8	41.0	42.7
Knock share %	13.3	11.0	8.8
Derry share %	5.7	4.1	n.a.
Kerry share%	5.6	5.8	4.8
Galway share %	2.4	2.3	5.6
Waterford share %	2.3	2.1	4.0
New Airports share % *	29.3	25.3	23.2

* Combined share of Knock, Derry, Kerry, Galway and Waterford.

Source: Civil Aviation Authority, International Air Passenger Traffic Series. City of Derry Airport.

By contrast only 12,000 or 0.7 per cent of the increase in passengers was on the Shannon-Heathrow route. The share of Shannon-Heathrow in the Atlantic Region traffic to London fell from 31.1 per cent in 1990 to 12.0 per cent in 2006. Table 3 shows the decline of the Shannon-Heathrow route in the total aviation

market between the Republic of Ireland and the United Kingdom from 7 per cent in 1990 to 2.6 per cent in 2006.

Table 3: Passenger Numbers on Shannon-Heathrow and Ireland-United Kingdom Routes, 1990-2006 (000s)

	2006	1990
Shannon-Heathrow	323	311
Ireland-United Kingdom	12,356	4,429
Shannon-Heathrow Share %	2.6	7.0
Civil Aviation Authority, op. cit		

Table 4 shows the routes served from airports in the Atlantic region in summer 2007. The routes served directly from Shannon and Cork have increased to 47 and 40 respectively since Aer Lingus chose Cork and Ryanair chose Shannon as bases. The new regional airports have developed 61 routes giving a total of 148 routes from the Atlantic region's nine airports in the summer of 2007. This compares with 150 routes at Dublin Airport. Each direct route offers a lower cost quicker journey than the previous routing of passengers through a hub such as Heathrow. This development of some 300 air routes gives more direct access to final destinations than a system based on feeder routes to hubs such as Heathrow. Passengers using the new local airports in Ireland save time and other journey costs to Dublin, Cork and Shannon which were the only international airports prior to deregulation. Airline deregulation in Ireland thus replicates the success of the precedent set by US airline deregulation some eight years previously. "The consumer benefits have taken the form not only of huge monetary savings but also more convenient access to a greater number of origins and destinations." (Kahn, 2005.)

Table 4: Number of Routes Served from Irish Atlantic Region Airports, Summer 2007

Shannon	47
Cork	40
Knock	18
Galway	16
Derry	12
Kerry	6
Waterford	5
Donegal	2
Sligo	2
Total	148

Source: Airport websites.

**5.
Market
Alternatives
Following
Shannon-
Heathrow
Market Exit**

The Aer Lingus decision to leave the Shannon-Heathrow route opens up a market of 323,000 extra passengers for other airlines and other airports in the region. The market adjustment is relatively easy since the share of Shannon-Heathrow in total traffic from the Atlantic region has fallen to 12 per cent in 2006, as shown in Table 2.

The market alternatives include:-

- (a) Increased services by Ryanair on its London services from Shannon. These were announced within days of the Aer Lingus withdrawal announcement "...in order to ensure Shannon Airport's capacity and traffic does not fall as a result of the Aer Lingus closure". The increased services announced by Ryanair are a fourth daily service to Stansted, a second daily service to Gatwick and a daily service to Luton. The seven daily departures on these services from Shannon to London are at 06.30, 10.35, 12.25, 13.05, 16.20, 19.50 and 20.00. The Aer Lingus departure times are shown in Table 5, column 1.

The development of the Shannon-Gatwick route offers new options to passengers who used Heathrow as a hub. The Shannon-Gatwick route in 2006 provided connections to US Points not served from Heathrow such as Atlanta, Charlotte, Dallas/Forth Worth, Minneapolis/St Paul, Las Vegas and Orlando, with a total of 2.2 million passengers. In addition Gatwick offers connections to points also served from Heathrow such as Detroit, Newark, and Philadelphia with 38 per cent of the 1.7 million passengers on these routes using Gatwick and 62 per cent using Heathrow. Gatwick's connecting airports in the Irish Atlantic region are Shannon, Cork and Knock. Gatwick in 2006 had 84 daily long-distance departures (Civil Aviation Authority, 2007).

- (b) Increased services by Ryanair on direct services from Shannon. In addition to the Luton service at (a) above the new Shannon routes announced on November 7, 2007 were Birmingham, Fuerteventura, Kaunas, Leeds-Bradford, Riga, Tenerife and Dublin. Suspended services from Shannon to Madrid and Rome might be reopened to attract passengers now routed over Shannon-Heathrow.
- (c) Increased service on routes from Cork, Kerry, Galway and Knock to London. The new route from Kerry to Luton will seek to serve some of the area's passengers who previously used the Shannon-Heathrow route.
- (d) Transfer of Heathrow "captive" traffic from Shannon to the Cork-Heathrow route. Shannon and Cork are eighty miles apart. Passengers located between Cork and Limerick face

marginal increases in travel times to Cork should they wish to retain access to Heathrow. All of the Shannon flights have parallel flight times from Cork as shown in Table 5 so that little disruption of travel schedules is required. In addition Cork has an extra flight at 14.40.

Table 5: Departure Times from Shannon and Cork to London, Autumn 2007

Shannon	Cork
08.45	07.30
12.55	12.10
17.15	16.15
21.30	20.20
	14.40
	(no matching Shannon service)

Source: Aer Lingus timetable, October 2007.

- (e) Transfer of some Heathrow captive traffic through Dublin. The high frequency Cork-Dublin service by Ryanair and Aer Arann, with twelve services per day, has increased from 238,000 passengers in 2005, to 400,000 in 2006 and the monthly increase in June 2007 was 25.3 per cent over June 2006, indicating an estimated 600,000 passengers in 2007.

The Shannon-Dublin service which commenced in November 2007, if it replicates the success of the Cork-Dublin route, will give the Shannon region a faster connectivity to the Dublin hub of 150 routes than experienced now by many passengers based in Dublin itself.

- (f) Transfer of Shannon's 80,000 connecting passengers at Heathrow to Frankfurt, Paris and Amsterdam. The Shannon-Paris service by CityJet, commencing in February 2008, will be the first market test of these options. Table 6 shows passenger numbers at these hubs. Paris has almost 80 per cent of the Heathrow passenger numbers while Frankfurt and Amsterdam have respectively 77 per cent and 65 per cent of the Heathrow passenger numbers. These airports, unlike Heathrow, are designed as hubs. The business model chosen by the hub airlines at Paris, Frankfurt and Amsterdam has been to feed short haul passengers to their own long haul services. The Civil Aviation Authority (2007) noted that KLM feeds its Amsterdam hub with nearly 50 flights a day from twelve regional UK airports with Air France linking six UK airports to its Paris hub and Lufthansa operating eighteen flights a day to Frankfurt, Munich, and Hamburg from UK regional airports. The problem for Shannon-Heathrow connecting passengers is that long haul airlines at Heathrow have not adopted the Paris/Frankfurt/Amsterdam feeder model. The Heathrow long haul airlines are unwilling to rebalance the Aer Lingus share of the through ticket price. Aer Lingus no longer wishes to perform this role because of

its low yields from feeder passengers and withdrew from the One World Alliance in May 2007.

It is also possible that the interline point for Irish traffic to the Middle East, Asia and Australasia will be further east than Heathrow, Paris, Frankfurt or Amsterdam. The Civil Aviation Authority (2007) notes that "...an interesting development has been Emirates' expansion into the UK regions from its Dubai hub. It started a Birmingham service in 2001, having gradually built up its Heathrow, Gatwick, and Manchester services during the 1990s. By 2004 both Birmingham and Manchester were twice-daily, the same year that a new Glasgow service began." Newcastle was added in September 2007 and Emirates serves 88 destinations in 59 countries.

Table 6: Passenger Numbers at Major Hub Airports in Western Europe, 2005

	Passengers (m)
Heathrow	67.9
Paris CDG	53.6
Frankfurt	52.2
Amsterdam	44.2

Source: Davy (2006a).

- (g) Transfer of Shannon's connecting North America traffic at Heathrow to direct services from Shannon under the EU/USA Open Skies regime from 2008. Many new routes are planned under this liberalisation. For example, Shannon passengers currently interlining at Heathrow might, after the open skies agreement, interline at Atlanta, Chicago or Dallas. Shannon offers advantages such as being the first European airport on the main transatlantic routes, lack of congestion, and connectivity to the Ryanair hub for onward destinations on 31 routes, including 8 launched in November 2007. The nine biggest US routes from Heathrow in 2006 were New York, Chicago, Los Angeles, Washington, San Francisco, Boston, Miami, and Philadelphia with a total of 4.3 million passengers. All of these US points, plus Atlanta, are scheduled to have direct service from Ireland under Open Skies.
- (h) It is open for any EU airline to replace Aer Lingus on the Shannon-Heathrow route by acquiring slots to commence operations there. The extra costs involved at Heathrow over starting other routes and the overwhelming preference of the deregulated market for low-cost airlines and airports make this alternative an unlikely one. Indeed many supporters of the Shannon-Heathrow service seek government intervention to compel Aer Lingus to operate the service. This option is examined in Section 6 below.

**6.
Economic
Aspects of
Seeking
Government
Intervention in
the Shannon-
Heathrow Slots
Issue**

The theory of contestable markets, which underpins the policy of deregulation, is based on freedom of entry and exit (Baumol, 1981). On market entry the theory of contestable markets "...merely reinforces the view that a barrier to entry must start off with a heavy presumption against its adoption." The removal of entry barriers in aviation has had a more dramatic impact in Ireland than in any other EU country or in the USA after deregulation in 1978.

In 1985/6, the last year before deregulation in May 1986, the protected airline, Aer Lingus, carried 2.3 million passengers. In 2007 four Irish international scheduled airlines, Ryanair, Aer Lingus, CityJet and Aer Arann, will carry over 60 million passengers. Sections 3 and 4 above showed how, since deregulation, fares have fallen, services have increased and new airports in the Atlantic region of Ireland have commenced services. Nostalgia for a return to an era when the Government might have ordered Aer Lingus to serve routes against its commercial judgement ignores the large gains from deregulation in 1986. The Atlantic region in Ireland has been a particular beneficiary of airline and airport competition, including much enhanced services to the London region.

On the removal of exit barriers in a deregulated market Baumol states that "...perhaps a bit newer is the emphasis on the importance of freedom of exit which is as crucial a requirement of contestability as is freedom of entry. Thus we must reject as perverse the propensity of regulators to resist the closing down of unprofitable lines of activity."

The removal of exit barriers has been important in the growth of aviation in Ireland such as the market exit of British Airways from the Republic, and the exits of Aer Lingus from Kerry, Galway, Waterford, Knock, and Sligo and from the Dublin-Cork route. New entrants such as Aer Arann and Ryanair developed these routes after the British Airways and Aer Lingus market exits.

In Section 5 above eight market responses to the Heathrow-Shannon route cessation were examined. Some were announced within days of the Aer Lingus withdrawal statement and are already in operation with the objective of ensuring no loss of traffic on the London routes. In addition, eight new routes from Shannon were launched in November and show initial positive market reactions. Market entry and exit and market efficiency rather than market failure characterise Irish aviation. Nonetheless, there have been regional and political reasons advanced in the case for government intervention in this case.

Four main reasons have been advanced for government intervention to retain the Shannon-Heathrow services. These are the promotion of business, tourism and regional development in the Atlantic region and the wider benefit of political intervention to

compel Aer Lingus to comply with government orders to operate services in a restoration of the pre-deregulation “national airline” model. These reasons are examined below.

(i) THE PROMOTION OF BUSINESS CASE

This case that the government should intervene to require Aer Lingus to remain on the Shannon-Heathrow route in order to promote business in the area and that even if other airlines increase the total number of passengers at Shannon airport they will not adequately serve the business community in the area.

Aer Lingus does not have business class and it has a policy not to reintroduce it. The Ireland-United Kingdom market has adopted the low cost airline model apart from a single route from Dublin to London City. The business community in Ireland has not chosen the full-service airline product on the London City-Paris route described above. The market option for any airline to purchase slots at Heathrow and operate a business class service from Shannon remains open and unlikely. The record is that high value business travellers did not support in sufficient numbers the cost of full service provision on Irish routes whether on British Airways club class, British Midland diamond class, Aer Lingus business class or the shortlived Ryanair business class. Business class before deregulation delivered some inflight services for business passengers curtailed off from the remainder of the aircraft while charging fares which could not be sustained in a deregulated market such as £650(€825) from Dublin to Brussels, a fare of over €1,200 at 2007 prices.

Davy (2006b) found that 23.15 per cent of Ryanair passengers were on business trips. This is higher than the 14 per cent of all visitors to Ireland and the 12 per cent of visits by Irish residents abroad who cited business as the reason for their trips according to CSO data for 2005.

Ryanair passengers who had travelled on the airline before totalled 83.17 per cent. Just under 4 per cent rated their overall flight experience as poor or very poor. Food was purchased on board by 24 per cent of Ryanair passengers and 36 per cent bought it at the airport. Under 6 per cent of Ryanair passengers would pay more for an extra legroom seat.

The Civil Aviation Authority study on “No Frills Carriers; Revolution or Evolution?” (2006) found that “no-frills carriers have had a noticeable impact on the profile of business passengers. Passengers travelling on business have lower incomes overall now than ten years ago, and this is true across all airline types. This suggests that no-frills carriers have had a beneficial effect here, as the factors which have made trips more viable for lower income business passengers, in particular the removal of fare restrictions and the availability of lower fares to and from more destinations,

particularly from the UK regions, have resulted from the entry of no-frills carriers.” (5-26).

The Irish and UK evidence is that low cost airlines and airports improve the competitiveness of the business sector and that their services are heavily used by business travellers who have overwhelmingly chosen the low cost model for air travel between the two countries. Should the market change against the low cost model in favour of the traditional business class airline product in the future there will be no requirement for government intervention. There is no market obstacle to the provision of full service business class flights between Heathrow and any Irish airport. Costs would be higher because slots at Heathrow are in limited supply and an entrepreneur wishing to operate such services would require yields per passenger correspondingly greater than on other routes.

(ii) THE TOURISM PROMOTION CASE

The case for government intervention to retain the Shannon-Heathrow route in order to promote tourism is a variation on the high value business travellers theme above. High spending tourists will be less inclined to travel on low cost airlines and average spending per tourist will fall according to this argument. Deregulated aviation is, therefore, claimed to be detrimental to luxury hotels and golf courses.

Lower air fares have two possible impacts on the income distribution of air travellers. Lower fares both increase the ability of low income people to fly at all and the ability of high income people to fly more frequently. The UK evidence is that the latter impact is greater than the former. The Civil Aviation Authority (2006) found that “...in relation to the leisure market, the advent of low cost carriers does not appear to have had a notable effect in terms of the income profile of passengers. In fact, the profile of UK leisure passengers in terms of income profile is similar between no-frills carriers and full service carriers, and has changed little over the last decade, and although numbers of leisure passengers from all income groups has increased, the majority of the absolute increase has come from those in higher and middle income and socio-economic groups.” (5-16). Fears that the passengers on low cost airlines might reduce average tourism spending are not supported either in the comparison of inflight spending by passengers. Goodbody (2007) found ancillary expenditure per passenger on Ryanair at €9.40 to be 90 per cent of the expenditure per passenger on Aer Lingus at €10.20.

The case that the government should intervene to increase the supply of a higher cost product (Heathrow-Shannon air services) because the deregulated market produces a lower cost product (Shannon-other London airports services) which is used by low income passengers is regressive. The policy implication is that that

governments should never deregulate a market in which low income persons would benefit from the resulting price reductions.

(iii) THE REGIONAL DEVELOPMENT CASE

The case that the entire Atlantic region of Ireland requires government intervention to retain the Shannon-Heathrow services is not supported by the data in Table 2 above. The nine counties on the Atlantic coast are served by nine airports, seven with direct service to London and two with service over Dublin. Government intervention to require Aer Lingus to retain the Shannon-Heathrow services risks undermining the new services and routes developed since deregulation and the development of alternatives to Shannon-Heathrow services examined in Section 4 above.

In regard to fears concerning the regional impact of low cost carriers the CAA stated that "...for the UK regions, there has been a marked change in the availability of flights for leisure and business purposes. This again is a consequence of deregulation, but it is primarily the no-frills carriers that recognised that there was significant demand for travel from regional airports, and exploited these opportunities, creating benefits for passengers in the regions, for the airports in question and for the regional economy".

In the absence of origin and destination surveys it is not possible to say how many Shannon-Heathrow passengers work or live near these airports. The deregulated market has opened up many new air services and airports both in the Atlantic region of Ireland and in the greater London area. Air travel between the Atlantic region and London grew 2.7 fold between 1990 and 2006. As shown in Section 4 above new airlines and airports accounted for 94 per cent of that increase while Shannon-Heathrow traffic has been static and its market share has declined.

(iv) THE CASE FOR RESTORATION OF THE PRE-DEREGULATION NATIONAL AIRLINE

The benefit claimed in this case for government intervention to retain the Shannon-Heathrow services stresses the political benefits of governments' ability to use a national airline as a policy instrument, including ordering Aer Lingus to run services against its commercial judgement. In a deregulated market this interventionist policy would undermine an airline's commercial freedom and harm its finances and viability. Before deregulation in Europe the national airline policy seriously reduced the efficiency of state-owned airlines and required a virtual ban on new entrants on trunk routes in order to generate the excess revenues to support the resulting inefficiency. The result throughout Europe was the highest air fares in the world, low productivity and distressed state airline syndrome (Doganis, 2001). The elements of distressed state airline syndrome were substantial losses, overpoliticisation, strong unions, overstaffing, no clear development strategy, bureaucratic management and poor

service quality. Privatisation of Aer Lingus in 2006 was intended to reduce political interference in its business decisions but within months politicians overlooked their sale of the airline and called for government intervention in its commercial decisions. Goldman Sachs (2004) indicates that only small financially troubled airlines in Europe still remain in state control such as Air Malta, Czech, Malev, Olympic and TAP.

**7.
The Outlook
for Further
Heathrow Slot
Transfers**

A prospect raised in the public debate over the Shannon slots at Heathrow is that further slot transfers could take place from the Cork and Dublin routes. There is also the prospect that the Belfast International-Heathrow route might fail to cover the cost of slots and the extra operating costs at Heathrow.

The passenger data in Table 7 show that, from a monopoly start, the decline in the Heathrow market share of its London traffic has been faster at Shannon than at Dublin by 9 points and than at Cork by 3 points. The allocation of 20 Heathrow slots to the Dublin route, 13 held by Aer Lingus and 7 held by British Midland, gives 100,000 passengers per slot in 2006 compared to 106,000 per slot used on the Cork-Heathrow route. The number of passengers per slot used on the Shannon-Heathrow route varies between 81,000 and 107,000, depending on whether three or four slots are used on the route. The Heathrow-Ireland market in 2006 had 2.7 million passengers, 73 per cent on the Dublin route, 16 per cent on the Cork route and 12 per cent on the Shannon route.

Table 7: London Airport Shares of Passengers on Dublin, Cork and Shannon Routes, 2006

London Airport	Dublin %	Cork %	Shannon %
Heathrow	46.7	40.9	37.7
Gatwick	17.5	31.1	18.7
Stansted	24.2	27.9	33.9
Luton	8.5	-	9.7
London City	3.3	-	-
Passengers 000s	4,268	1,038	856

Source: Civil Aviation Authority.

**8.
Summary and
Conclusions**

Slots at Heathrow have acquired a scarcity value due to unsatisfied demand for access to the airport by new entrants and by incumbents wishing to increase their flight numbers.

The slots were allocated by grandfather rights. Aer Lingus and British Midland are beneficiaries of that allocation of property rights at Heathrow and in 2007 allocated slots worth over €400 million to their services to Dublin, Cork and Shannon. Yields on Heathrow services to Ireland must cover this outlay and the other additional costs of serving a high cost airport. In the deregulated aviation market on Ireland-United Kingdom routes since 1986, passengers

have transferred the majority of their London trips to London airports other than Heathrow such as Stansted, Gatwick, Luton, and London City. The decline in the Heathrow share of Ireland-London traffic has been faster at Shannon than the declines at Dublin and Cork. Shannon passengers to the other London airports in 2006 outnumbered those on Shannon-Heathrow by 65 per cent.

Passenger numbers between the seven Atlantic region airports with direct service, and London in 2006 were 270 per cent of the 1990 number. Of the 1.687 million extra passengers in this market 94 per cent used new entrant airports and airlines. The deregulated market has not isolated the Atlantic coast of Ireland. Airports such as Stansted, Gatwick, Luton, Knock, Derry, Kerry, Galway and Waterford, with new airlines, have increased connectivity, almost trebled the market size and reduced fares and costs.

Arguments favouring government intervention to retain the Shannon-Heathrow service on the grounds of promotion of businesses, tourism and regional development are shown to be weak as is the case made that Ireland needs a “national airline” policy with government powers to order Aer Lingus to serve routes such as Shannon-Heathrow. Airline deregulation has been a major success in the Irish economy and alternatives to the Shannon-Heathrow services are already attracting consumer support. The market failure arguments for government intervention do not apply. Successful deregulation requires the removal of both barriers to entry *and* barriers to exit.

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