COMMISSION'S ECONOMIC ANALYSIS SHOOTS DOWN RYANAIR'S PROPOSED ACQUISITION OF AER LINGUS.

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Paper Presented to Competition Press Conference, 30th April 2008.

1. Introduction.

The EU Commission's record in merger cases has been somewhat mixed. In particular, it has been strongly criticised on occasion both by the European Courts and by economists and other observers for inadequacies in its analysis. The *Ryanair/Aer Lingus* decision indicates that such criticisms have been taken on board by the Commission. It also demonstrates that Commission is prepared to subject economic analysis presented by the merging parties to a detailed critical scrutiny.

The Court of First Instance was particularly scathing in its criticism of the Commission's decision in *Air Tours/First*[1] Choice where it concluded that:

> "…the Decision, far from basing its prospective analysis on cogent evidence, is vitiated by a series of errors of assessment as to factors fundamental to any assessment of whether a collective dominant position might be created."[2]

This case and subsequent court judgments have set a high evidentiary burden on the Commission in merger cases. (Botteman, 2006).

Academic criticism has focused on the Commission's failure to apply new more sophisticated economic tools and theories for analysing mergers which emphasise the actual threat to competition rather than structural changes. For example, Ivaldi and Verboven (2001) found that, rather than applying modern analytical methods, EU merger investigations relied on a more traditional approach, involving assessment of market shares and qualitative criteria such as ease of entry and buyer power. Kovacic (2001, p.862) described the EU approach as resembling:

> "… US merger policy in the 1960s and early 1970s, where courts and enforcement agencies distrusted efficiency arguments and believed that greater concentration invariably begat the exercise of market power."

An empirical analysis of Commission merger decisions taken prior to September 2005 found that market shares, changes in market shares, entry barriers and the Commission's

[1] *Airtours plc v. Commission,* case T-342/99, judgment of 6 June 2002.
[2] Para 294.

view on the ease of collusion post-merger were the main determinants of whether or not a merger was cleared. (Bergman et. al., 2005).

2. Community Dimension.

The first issue to be addressed by the Commission was whether or not the merger had a Community Dimension. The combined worldwide turnover of the merging parties was below the €5bn threshold but exceeded the lower €2.5bn threshold. This meant that the issue of whether or not the merger had a Community dimension depended upon whether or not the merging parties each had a turnover of more than €25m in at least three Member States. The answer to this question ultimately depended on how revenue from ticket sales was allocated. The majority of each airline's ticket sales are made via the internet. According to the Commission decision neither airline had records that allowed the location of customers to be identified when they purchased tickets, although somewhat bizarrely later on the Decision states "...on most routes affected by the merger, a majority of customers buy their ticket in Ireland."[3]

In the case of return flights Aer Lingus argued that revenues for the return trip should be allocated to the outward bound country of departure. If this approach had been adopted Aer Lingus would only have exceeded the €25m turnover threshold in two member States, Ireland and the UK so that the transaction could not be deemed to have a Community dimension. In effect this would have meant that the transaction would have fallen to be considered under national law by the Irish Competition Authority (and possibly also by the UK OFT). Ryanair, in contrast, argued that revenues for all tickets should be allocated on a 50/50 basis between the originating and terminating country which would have resulted in the €25m threshold being exceeded in three Member States.

Given that Aer Lingus was publicly opposed to the bid it is interesting that it effectively argued that the transaction did not come within the Commission's jurisdiction. Presumably it believed that it would have a better chance of the merger being prohibited

[3] Para 595.

under national law, perhaps because the transaction might not be seen to raise significant competition issues at an EU wide level. Similar reasoning might explain why Ryanair argued that the transaction had a Community dimension.

The Commission rejected the Aer Lingus submissions on turnover on the grounds that neither airline sold what it described as "traditional return tickets". Rather it argued that both sold the tickets for each leg of a return trip separately. It suggested that one feature of "traditional" return ticket was that the cost of the return trip was generally cheaper than the cost of purchasing a ticket for each leg separately, which it said was not true of Ryanair and Aer Lingus. In point of fact as both airlines typically price each leg independently this would not necessarily appear to be true. The Commission also observed that passengers could buy the two legs of a return trip separately and could even purchase a ticket for on leg of the journey with one airline and the other leg with another. While true the relevance of these observations is hard to fathom. The issue of how revenues for return trips should be allocated, by definition, only arises in those cases where passengers had actually chosen to book the outward and return leg of the trip at the same time in a single transaction. Other passengers may well have chosen to purchase tickets for each leg separately but this does not appear to be a valid reason for not allocating total revenue for a return trip to the original point of departure in those cases where passengers had clearly chosen to book a return flight. The Commission also ignored the fact that the default option on both websites is to purchase a return ticket.

The effect of allocating revenues from return bookings to the country of departure for the return leg was to bring Aer Lingus revenue above the €25m threshold in a third Member State – Spain - thus ensuring that the transaction was deemed to have a Community dimension and came within the scope of the Merger Regulation.

3. Market Definition.

A considerable part of the Commission decision is taken up with the issue of market definition. In airline merger cases each individual route is normally regarded as

constituting a relevant market. The obvious question that arises is whether a route should be defined in terms of flights between two specific airports ("airport pairs") or between specific cities ("city pairs"). In newspaper reports around the time that Ryanair had announced its bid, its spokespersons were cited as claiming that overlaps between the two airlines were confined to around 16 routes. This figure was clearly based on routes being defined on the basis of airport pairs. There appear to be much stronger grounds for defining markets on the basis of city pairs rather than airport pairs, a point made by the current author at the time. Massey (2006) suggested that, on that basis, a competitive overlap would arise on 33 routes.

The Commission finding that the relevant routes comprise city pairs was based on a number of different factors.

- Whether both airports were within 100km/1 hour driving time of a city.
- Views of the airport operators.
- Views of other airlines.
- Views of passengers as indicated in response to consumer surveys on 12 of 35 overlap routes.
- Internal documents of the merging parties.
- Price correlations on services between different airports.[4]

In addition the Commission also cited examples of Ryanair's own marketing and advertising as indicating that it viewed certain routes from Dublin to secondary airports as competing with Aer Lingus services to primary airports in the same city. For example, it pointed out that Ryanair marketed its Dublin-Beauvais as being to Paris (Beauvais) denoting that it viewed it as competing with Aer Lingus' Dublin-Paris service. It also noted that in the case of such routes, Ryanair's website included tourist information on the relevant city, indicating that the service was aimed at passengers wishing to visit the city in question. Thus the Commission in its decision notes:

> "Ryanair has consistently positioned its routes as substitutes for routes to adjacent city destination airports. For example Aer Lingus flies to Bologna. On the

[4] Price correlation tests were not run in all cases.

establishment of its Dublin to Forlì (Bologna) route, Ryanair announced that: *"[this] will end Aer Lingus' high fare monopoly...Bologna. Irish customers previously had no alternative to Aer Lingus*".[5] This shows that Ryanair clearly positions Forlì airport vis-à-vis its customers as a substitute for Bologna main airport as regards passenger air transport services to/from Dublin. Similarly Ryanair makes direct price comparisons between routes that fly to adjacent airports (catchment area)."[6]

"Moreover, Ryanair often lists its airport with the destination city in brackets or vice versa. For example by listing "Frankfurt (Hahn)" Ryanair is identifying to the passenger that Hahn airport serves the city of Frankfurt. Further, Ryanair provides a description of the distance and the methods to reach the primary city. For example, it provides a description of how to travel to Frankfurt from Hahn airport. Ryanair also provides a description of activities in "Top 5 things to do" of the city destination since it understands that buyers of flights to adjacent airports intend to visit the city destination. For example, it lists things to do in Frankfurt under its Hahn destination."[7]

4. Competition Analysis.

(i) Commission Approach.

The Commission stated that the case differed from a number of airline mergers that it had considered previously. It pointed out that all previous cases concerned mainly mergers of two carriers which had their main centres of operations at different airports, often in different countries and raised concerns on a relatively limited number of overlapping routes. This contrasted with the present case which "concerns the two main airlines in Ireland with a significant base at the same airport, namely Dublin Airport." Thus it found

[5] See press release of Ryanair "RYANAIR ANNOUNCES BIGGEST EVER EXPANSION AT DUBLIN 12 NEW EUROPEAN ROUTES START FROM DECEMBER" of 09/08/2006. The Commission also noted that in other press releases Ryanair compared its fares with those of Aer Lingus on a number of routes where the two serve different airports.

[6] Para 90.

[7] Para 91.

that merger raised concerns on a significant number of overlap routes, all with a common point of origin. All the affected routes were from or to Ireland.

Bachis and Piga (2006) reported that the acquisitions of Go Fly and Buzz by Easyjet and Ryanair respectively was followed by a drop in fares, although in the latter case Ryanair's late booking fares increased so that the net effect on welfare depended on the relative proportions of early and late bookers. Again this case is probably of limited relevance to the *Ryanair/Aer Lingus* case, although according to the Commission only a minority of bookings on overlapping routes in this case were attributable to late bookers.

In analysing the potential effect on competition the Commission focused on a number of factors:

- Market shares (Section 7.2);
- Closeness of competition between the two airlines (Section 7.3);
- Whether both actually competed with each other in practice (Section 7.4);
- Impact of merger on actual competition (Section 7.5):
- Consequences for routes where they are potential competitors (Section 7.6);
- Switching possibility and buyer power of customers (Section 7.7);
- Barriers to entry and potential for existing competitors to offset anti-competitive effects (Section 7.8).

The Commission also analysed the effects of the merger on each individual route-pair (Section 7.9) and whether efficiencies were likely to outweigh any competitive harm (Section 7.10).

(ii) Overall Impact.

According to the Commission, Ryanair operated 400 routes across 24 different countries. 75 of these routes were to/from Ireland with most of these being to/from Dublin. It operated 120 aircraft with a further 161 ordered over the following six years and had 20 bases throughout Europe of which Stansted and Dublin were the most important. Aer Lingus had 28 short-haul aircraft operating 70 routes between Ireland and European

destinations.[8] Aer Lingus had 23 of these aircraft based at Dublin compared with 20 for Ryanair. Despite the significant difference in size of the two airlines, the Commission noted that, according to the Association of European Airlines, Ryanair and Aer Lingus ranked number one and number three respectively in terms of weekly "no-frills" seats sold in summer 2006.

The Decision notes that those routes where the Merging Parties' activities overlap included 8 out of the 10 most important routes to/from Dublin (one of the remaining two most important routes was the long-haul route to New York). The parties combined market shares are very high in all those eight markets. The Commission pointed out that:

> "These figures further illustrate the effects of the transaction on short-haul air traffic to/from Dublin as the Merging Parties' activities overlap not only on a large number of routes, but these routes include a number of the most important routes to/from Dublin."

It also pointed to the fact that passenger numbers in 2006 on the 32 "overlap routes" to/from Dublin accounted for around 70% of all passengers carried on intra-European routes to/from Dublin.

According to the Decision Ryanair and Aer Lingus accounted for the largest share of passenger traffic at the airports of Dublin, Shannon and Cork. Ryanair and Aer Lingus each accounted for [30-40]% of all passengers ex-Dublin in 2005, whereas British Midlands and Lufthansa accounted for [less than 5]%. Taking into account only intra-European traffic, the market shares of Ryanair and Aer Lingus amount to [40-50]% and [30-40]% respectively. Ryanair and Aer Lingus serve the largest number of destinations ex-Dublin with over 110 destination airports in Europe for both airlines together and 80% of all intra-European traffic. The combined entity would be the largest short-haul carrier at Cork and Shannon airports. From both airports, they operate in total to around 20 destination airports, being by far the largest operator.

(iii) Specific Routes.

[8] It had a further 7 long-haul aircraft.

The Commission found that the two airlines overlapped on 35 routes. In the case of 22 of those routes, Ryanair and Aer Lingus were the only operators giving them a combined market share of 100%. The Commission found therefore that the merger would create a monopoly on those routes. In the case of the remaining 13 routes, Aer Lingus and Ryanair had a combined market share in excess of 60%. Details of the parties market shares and their main competitors on all 35 overlap routes are given in Table 1.

Ryanair had argued strongly that it did not compete with Aer Lingus.

> "On the contrary, Ryanair argues that it behaves independently of Aer Lingus (and any other competitor) when setting prices and deciding on frequencies for its routes and does not consider the prices of its competitors[459]. Ryanair claims that it is constrained only by the price sensitivity of its customers and not by the pricing behaviour of its competitors."[9]

These claims were strongly refuted by the Commission.

In particular, the Commission noted that both Aer Lingus and Ryanair monitored each other's fares and reacted regularly to changes in fares. It referred to the fact that both airlines used specific software to adjust their capacities and prices on a daily basis in response to competitive actions by the other. It also found that the advertising strategy pursued by the two airlines indicated that each considered the other to be its closest competitor noting that they both routinely publish advertisements in which they compare fares and services offered by the other. Both carefully monitor and seek to react to each other's promotional fares.

(iv) Entry Barriers and Efficiencies.

The Commission Decision found that any anti-competitive effects of the merger on air routes to and from Ireland were unlikely to be offset by new entry or expansion by other existing operators. It accepted that there were no significant regulatory barriers in the market but, according to the Commission, "the strength of both airlines at the same

[9] Para 432.

airports combined with their low frills/low cost business model would increase the already high barriers to entry or expansion for actual and potential competitors."

The Decision noted that there had been numerous unsuccessful attempts at entry on routes, and numerous examples of other airlines pulling out of routes, in and out of Ireland. It also highlighted the fact that there was no example of entry by a third carrier on a Dublin route where Ryanair already operated. The Commission also pointed out that:

> "In contrast to other competitors, Aer Lingus has "survived" on a number of routes against Ryanair."[10]

(v) Commission Conclusions on Competition.

The Commission's conclusions regarding the impact of the proposed merger on competition are summarised in para 491.

> "…Aer Lingus and Ryanair are in competition with each other and constrain each other when it comes to determining fares for flights on the overlap routes. The proposed merger would eliminate this actual competition between the Merging Parties, giving the merged entity significantly increased market power with the likely consequence of increased fares and/or a reduction of the number flights for passengers wishing to travel to or from Ireland. Indeed, post-merger, as predicted by standard 'non-coordinated effects' analysis…both carriers would internalise the effects of setting higher fares on each other. In particular, the merged entity would have the incentive to set higher fares for Aer Lingus since most of the customers lost would be captured by Ryanair."

In addition to finding that the merger would lead to higher prices, the Commission also found that it was likely to lead to lower quality service and less consumer choice. It also found that it would lead to a reduction in potential competition with less pressure on the merged entity to establish new routes. The Commission argued that Ryanair had established a number of new routes out of Dublin since 2001 in response to expansion by

[10] Para 512.

Aer Lingus. As a result the number of routes on which the two airlines competed had increased from six in 2001 to 35.

5. Econometric Evidence Will be Treated with Caution.

Econometric analysis has come to play an increasingly important role in merger analysis in recent years, particularly in unilateral effects cases. This reflects the development of new sophisticated analytical tools, along with greater availability and potential for analysing data due to increases in computer power. It is now common for parties to commission such analysis prior to notifying a merger to the relevant authorities and such analysis can certainly assist the merging parties in identifying whether there are any potential competition problems that might need to be addressed and may help strengthen the case in favour of a merger if it indicates that the merger is unlikely to have an adverse effect on competition. The Commission's assessment of the econometric analysis undertaken on behalf of the parties in the present case illustrates, however, that such analysis has its limitations. In particular it is important to ensure that the right questions are addressed and that the appropriate analytical tools are applied and properly specified.

Ryanair submitted econometric evidence to support its contention that Aer Lingus did not constitute a competitive constraint on its activities. The Commission rejected this evidence on several counts.

1. The results were not robust to small changes in model specification.
2. The cross-section technique used could not control for unobserved or unmeasured factors that influence prices but vary between routes leading to likely bias in results.
3. The analysis was not confined to routes out of Dublin or even Ireland but covered some 300 Ryanair routes across Europe, on the vast majority of which Aer Lingus was not a competitor.

The Commission then went on to observe:

> "A regression can either establish a statistical link between two parameters (say, simultaneous presence of Ryanair/ Aer Lingus and price levels) or it can fail to do so. However, failure to prove a statistical link is not equivalent to proving that no such link exists. Alternative explanations for an 'unsuccessful' regression include, in particular, unsuitable data sets or misspecified regression equations. It would appear that Ryanair, by choosing a complex two-stage stage approach and a data set with routes outside Ireland, increased the likelihood that its regression would not yield statistically significant results. Because Ryanair had a vested interest in seeing its regressions 'fail', the probative value of such an outcome is low and cannot be taken as evidence that Ryanair is not constrained by Aer Lingus on routes out of Ireland."[11]

Aer Lingus also provided econometric evidence to support its contention that the acquisition would be anti-competitive using three different specifications to capture the impact of Ryanair's presence on a route. Ryanair objected, and the Commission agreed, that two of the approaches used were flawed as they used capacity shares as an explanatory variable and could thus (a) yield biased results and (b) imposed strong restrictions on the model results. The Commission noted that the third approach, which applied a "presence dummy" to capture the impact of Ryanair's presence on a route, was not subject to such criticisms. The results of this model indicated that Ryanair's presence on a route resulted in Aer Lingus fares being [5-10%] lower than they would otherwise be.

6. Postscript: Is Ryanair Dominant?

It is also interesting to note from the decision that Ryanair claimed in its submissions to the Commission that its business model was unique and that therefore it was not subject to any competitive constraint from other airlines. In other words, Ryanair argued that it was in a market of its own. Such an argument would appear to constitute something of a double edged sword. If Ryanair and Aer Lingus were in different markets, then this

[11] Para 476.

would mean that the merger would have no impact on competition. At the same time, the logic of such a market definition is that Ryanair would effectively enjoy a dominant position in such a market. Indeed it would have an absolute monopoly if the market is defined so as to include only Ryanair. This would obviously have implications for how Ryanair could behave. It is certainly unusual to see a firm arguing for a market definition that would effectively identify it is a monopolist.

7: Conclusions.

The Commission's Decision in *Ryanair/Aer Lingus* is based on a detailed economic analysis of the merger. Whereas in the past the Commission was criticised for poor reasoning by the courts and for a failure to adopt modern sophisticated analytical tools, in this case it has undertaken a detailed analysis and its decision would appear to be based largely on quantitative rather than qualitative analysis. The Decision also highlights that, while parties may bring forward econometric evidence, such evidence is likely to be subject to rigorous examination by the Commission.

Table 1: Routes where Aer Lingus and Ryanair Services Overlap.

Route	Ryanair	Aer Lingus	Combined	Existing Competitors	
Dublin to	% Share			**Airline**	**% Share**
Alicante	[50-60%]	[40-50%]	100% [95-100%]	Charter	[0-5%]
Barcelona	[40-50%]	[30-40%]	[70-80%] [65-70%]	Iberia Clickair Charter	[20=30%] [0-5%]
Berlin	[50-60%]	[40-59%]	100%		
Bilbao-Vitoria	[50-60%]	[40-59%]	100%		
Birmingham	[60-70%]	[30-40%]	100%		
Bologna	[50-60%]	[40-59%]	100%		
Brussels	[50-60%]	[40-59%]	100%		
Edinburgh	[70-80%]	[20-30%]	100%		
Faro	[50-60%]	[40-59%]	100% [95-100%]	Charter	[0-5%]
Frankfurt	[40-50%]	[40-50%]	[80-90%]	Lufthansa	[20-30%]
Glasgow	[50-60%]	[30-40%]	[90-100%]	Loganair	[0-10%]
Hamburg-Lubeck	[60-70%]	[30-40%]	100%		
Krakow	[30-40%]	[40-50%]	[70-80%]	Sky Europe	[20-30%]
London	[40-50%]	[30-40%]	[70-80%]	BMI British Airways Cityjet	[10=20%] [0-10%] [0-10%]
Lyon	[30-40%]	[60-70%]	100% [95-100%]	Charter	[0-5%]
Madrid	[20-30%]	[30-40%]	[70-70%]	Iberia	[30-40%]
Malaga	[30-40%]	[60-70%]	[95-100%] [85-95%]	Spanair Charter	[0-10%] [0-5%]
Manchester	[70-80%]	[20-30%]	[90- 100%]	Luxair	[0-10%]
Marseille	[50-60%]	[40-50%]	100%		
Milan	[30-40%]	[60-70%]	100% [95-100%]	Charter	[0-5%]
Newcastle	[70-80%]	[20-30%]	100%		
Paris	[40-50%]	[30-40%]	[80-90%]	AF Cityjet	[10-20%]
Poznan	[60-70%]	[30-40%]	100%		
Riga	[40-50%]	[20-30%]	[70-80%]	Air Baltic	[20-30%]
Rome	[40-50%]	[50-60%]	100%		
Salzburg	[50-60%]	[40-50%]	100% [95-100%]	Charter	[0-5%]
Seville	[50-60%]	[40-50%]	100%		
Tenerife	[50-60%]	[40-50%]	100% [95-100%]	Charter	[0-5%]
Toulouse-Carcassone	[60-70%]	[30-40%]	100%		
Venice	[40-50%]	[50-60%]	100%		
Vienna-Bratislava	[20-30%]	[50-60%]	[70-80%]	Sky Europe Austrian Airlines	[20-30%] [0-10%]
Warsaw	[30-40%]	[30-40%]	[60-70%]	LOT Norwegian Airline Shuttle	[10-20%] [10-20%]
Cork to					
London	[50-60%]	[40-50%]	100%		
Manchester	[40-50%]	[10-20%]	[60-70%]	BMI Baby Aer Arann	[30-40%] [0-10%]
Shannon to					
London	[50-60%]	[40-50%]	100%		

For confidentiality reasons, the Commission decision includes market shares as ranges in square brackets.

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