

Quantitative Techniques in Practice Coursework

Instructions:

You may form a team of two people to do the coursework. In any case, each team needs to submit a single report, with the acknowledgement sheet filled in, by Tuesday April 18th.

There are various roles to adopt. Choose one initially and let me know your team and preferred role by email as soon as possible. I may ask some teams to change so that we can hold an interesting mock hearing on [date to be confirmed].¹ On that day, each team will need to give a five-minute presentation to the “Competition Commission”. This will be an open meeting and all the parties’ representatives will be there to present their case. Participation in the hearing is worth up to 10 points out of 100.

Initial briefing:

General Introduction

It is January 2010. UK low-cost airline Easytrip announces its plan to merge its interests with that of Royalair, another airline providing cheap flights to European destinations. The European Commission has determined that the merger has a significant European dimension and the Merger Task Force is investigating.

The output data in the “market” for flights between airports of the South-East of England and the top five major European destinations is as follows:

Table 1: Market Shares in low-cost airlines

Company	Average fare 2009	Number of passenger flights 2009 (million)	Revenue (£ million)
UpUGo	£45	2.7	122
Easytrip	£52.40	2.6	136
Royalair	£36.21	2.3	83
BMG	£65	1.9	124
Other Companies	£70	0.5	35
Total		10	500

The European Commission believes the merger is probably against the public interest and has hired consultancy A (exercise: find a corporate name) to give some quantification to the damage the merger is likely to cause (Team/Rôle A).

¹ In principle it should be two or three days after your last exam.

The chief executive of Easytrip has hired consultancy B (exercise: find a corporate name) to help to get the merger through. (Team/Rôle B)

The chief executive of UpUGo has hired C (exercise: find a corporate name) to help to stop the merger. (Team/Rôle C)

The demand for airlines depends not only on price but also the departing airport, frequency of service and aspects of marketing including the quality of the airline's website. Easytrip and Royalair operate to a large extent from different UK airports. The growth in low cost airlines means that take-off and landing rights at UK airports now create a constraint on new entry.

The views of the parties

The Commission has come to a preliminary view that the merger may be against the public interest. (There is some political pressure from member states to turn the merger down, but this is not acknowledged.)

The Chief executives of Easytrip and RoyalAir have issued a joint statement to the effect that, "This merger provides a good opportunity to create a new stronger airline which will continue to provide passengers with very good flight deals. Rationalisation of our operations are expected to give costs savings of 5-10% which will benefit customers and investors alike."

The Chairman of UpUGo said, "This is a very interesting development and shows how competitive the world of low cost airlines has become. We are taking advice on what this merger means for us and will be submitting our evidence in due course."

Data

The Association of Low-Cost Airlines, to which all the aforementioned companies belong, collects monthly data on average prices and number of passengers of routes between the South-East of England and the top five European destinations. The data corresponding to the merging companies for the period September 2001-December 2009 can be found in the spreadsheet Coursework.dta.²

Your Report:

Having chosen role A, B or C decide what you would need to do to support your client in the best possible way. Remember that you need to write and present a report, and include the details of how you obtained your quantitative results in an appendix.

You may wish to consider the following:

- What does the merger do to dominance in this industry (taking account of entry barriers)?
- How does this merger affect the business prospects for your client? (Roles B and C)
- What are the likely effects of the merger on competition and price levels?

² You may also need the Stata do file of the lab on merger simulation. Remember that in order to use this file, the market share variables need to be defined as s_1 , s_2 and s_0 .

- How would the merger fare under the US DoJ Merger guidelines?
- What is the likely price rise or fall under different assumptions about cost synergies?
- What are you imposing on the shape of the demand function? Is it reasonable?
- Does it matter whether you take a Cournot or a Bertrand view of this merger? Which is more reasonable?
- Is the definition of the market appropriate?
- Does it matter if you define the market shares by quantities or by revenues?
- What are your strongest arguments?
- What are the strongest arguments of the other side(s) for which you will need to find a refutation?