



ANALYST VIEWPOINT

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THE COMPETITION EFFECTS OF AIRLINE MERGERS AND ALLIANCES: THE ROLE OF PRICE DISCRIMINATION

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Introduction

Airline mergers and alliances typically come under scrutiny by competition authorities, often across multiple jurisdictions. If a merger or alliance is expected to substantially reduce competition, then it will either not be approved or the competition authority will seek some remedy, such as requiring the partners to surrender slots.

While there are a number of types of analysis that can be used to assess the potential anti-competitive effects of mergers or alliances, these days two techniques are quite common:

- i) an analysis of historical data concerning the effect of past mergers or alliances on average fares paid by consumers; and
- ii) the development of a 'game theory model' of the airline market and drawing conclusions.

Both of these approaches are fundamentally flawed and can lead competition authorities to draw the wrong conclusions and make incorrect decisions. The source of the flaw is simple: both assume that airlines follow the textbook approach that there is one and only one price charged in the market, a uniform price. The trouble is that airlines do not charge a uniform price. Rather they offer a multiplicity of prices in the market. Traditional textbook analysis no longer applies when more than one price is in the market. In this article I will discuss the analysis of an airline merger, but the same points apply to the evaluation of alliances, pricing agreements, scheduling practices, etc. I also defer the discussion of using game theory models to evaluate mergers for another day.

The Objective: No Loss in Economic Efficiency

For most jurisdictions the object of a merger assessment is to determine whether the merger will reduce 'economic efficiency'. Essentially, a market achieves economic efficiency if the resources deployed within the market are used to create the greatest possible economic value. A market where €1000 worth of high quality steel is used to produce paper clips which consumers are only willing to purchase for €250 is not efficient. The steel resources are being wasted. Similarly, if additional heart defibrillators can be produced for €400 each, but buyers have to pay €1300 for a unit, then the market is inefficient. Greater economic value can be obtained by allocating more resources to produce defibrillators which are even more highly valued.

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Merger analysis tends to focus on the last type of economic inefficiency. The fear is that a merger will result in market power such that carriers charge all consumers a price higher than it costs the carrier to provide, even after allowing for an acceptable return on the capital invested. The claim often made by many opponents of a merger is that the merger would reduce economic efficiency by allowing the merged airline to increase fare prices.

Rates of Return Should Be Considered

One of the reasons this type of conclusion might be wrong is that before the merger the carriers may be losing money, or at least not making an acceptable rate of return on invested capital which allows the carrier to sustain itself for the medium to long term. If returns are dismal before the merger, and if the merger raises the fare the consumer pays, it may actually be moving the market towards greater efficiency. It would be equivalent to increasing the price on paper clips closer to the cost of production. While this seems to be common sense, surprisingly few airline merger evaluations look at the evidence on actual rates of return and compare those to industries with similar capital intensities and business risks.

Price Discrimination Must Be Recognised

More importantly, at least to an economist evaluating mergers, is the presence of price discrimination in airline markets. Price discrimination is another technical term in economics, indicating that different consumers pay different prices. Under the law, some types of price discrimination are illegal per se – consumers with blonde straight hair cannot be charged different prices than consumers with curly black hair. But the charging of different prices to different consumers is a common practice in many industries. Children's and senior's haircuts may be less expensive than mine. The price one pays for a hotel room may be different today than tomorrow, or even for different guests in the hotel on the same date. A restaurant will have menu items with different prices, even though a similar amount of labour and supplies is used for each meal.

It is a similar story for airlines. Different airline consumers pay different prices. The fare prices can differ on different days and for different travellers on the same day, even in the same cabin.

Merger analysts know that price discrimination exists in airline markets but, typically, only look at an analysis of average fares paid. Such an analysis seeks to determine whether average fares are likely to go up after the merger. If higher fares are likely, then the merger is deemed to reduce economic efficiency and thus be detrimental.

Analysing Only Fares Can be Misleading

However, an economist's concept of economic efficiency is a 'marginal' concept. This means that a market will be judged to be economically efficient if, on the margin, the most price sensitive consumers are able to buy the goods or services at a price which just covers the cost of production. Prices below cost are still undesirable but, in the case of defibrillators, if the most price sensitive buyers can procure the devices at production cost (including an adequate return on invested capital), then the market is efficient. It may be that hospitals, public institutions and major industrial sites are willing to pay €1300 for defibrillators, but homeless shelters and other charitable organisation perhaps can only pay €400 for a unit. If the manufacturer sells €400 units to these price sensitive consumers, then even if the other units are sold for €1300, €900 and €625, the market is economically efficient. A surprisingly large share of our goods and services are sold in markets without uniform prices.

What Does This Mean In Practice?

This may all seem a bit abstract, but it has important implications for the assessment of a merger. Suppose two airlines use price discrimination (i.e. charge different fares to different consumers). In

addition, suppose that each airline sells an adequate number of seats at fares roughly equal to the cost of providing additional capacity. These air carriers are economically efficient. If after a merger the combined carrier still sells an adequate number of seats at fares roughly equal to the cost of providing additional capacity, then the merger does not result in the loss of economic efficiency.

This is true even if the average fare paid goes up after the merger. The merged carrier might raise the price of some fare classes but so long as it is making enough seats available at roughly the cost of providing additional capacity, then there is no loss of economic efficiency with the merger.

Consider this example. It may be that before a merger neither carrier has sufficient traffic volume to launch a non-stop service on some routes, but after the merger such service is possible. Market research shows that a non-stop service is more highly valued by travellers. The consequence may be that new non-stop routes become viable both because of the combined market size and the somewhat higher yield consumers are willing to pay for new non-stop service. After the merger the average fare may have increased somewhat, but due to the willingness of consumers to buy the new, higher quality non-stop services. Consumers on all the other routes may still be paying the same fares (hence no loss of economic efficiency), but to an analyst evaluating the merger only using average fares the merger must be bad – because average fares increased. Therefore, if the average fare analysis led to the prevention of the merger it would be detrimental, as the greater value of the new package of services would be denied to consumers with no loss of value for the old services.

Evaluating the Next Airline Mergers

There is considerable expectation that the airline industry may experience a number of merger proposals in the coming months. Evaluation of the likely competitive effects of those mergers should be done carefully. Claims as to what might happen to average fares are not sufficient evidence of competition impacts. Attention needs to be focused on whether the merger will result in new services which consumers value highly (raising average fares with no loss of economic efficiency), and whether the merger will still result in the most price sensitive consumers being able to purchase seats at fares roughly equal to the cost of incremental capacity. Such an approach recognises the actual pricing practice of the industry and would lead to a more accurate appraisal of merger effects.

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