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THE REGULATION OF DOMESTIC AIRFARES - A RECORD

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ABSTRACT: *Domestic airfares in Australia are regulated by the Commonwealth Government. Until 23 November 1981, the Minister of Transport had to approve changes in fares, including discount fares, but since that date, the Independent Airfares Committee (IAFC) will make formal determinations of airfares.*

The revealed objectives of past regulation of airfares are discussed. These objectives, in the last decade, have had little to do with the presumed objectives, of controlling airline profitability, (which has been affected most by the level of discounting). Fare regulation has in fact, resulted in the subsidization of peak period travel and multi-stage travel.

The report of the independent committee of inquiry into domestic airfares (the Holcroft Inquiry) is considered, together with comment on the newly established Independent Airfares Committee.

Introduction

There is a substantial and interesting history associated with the regulation of domestic airlines; and many issues of relevance to economists, engineers and other professionals. The approach taken in this paper is not to provide an economic treatise of airline regulation, but rather to provide useful insights into the effects of government regulation on the industry by highlighting the response of the domestic airlines to past and current government regulation of airfares.

The development of the domestic airfare system, since the early 1950s, falls easily into four main phases. Each phase reflects, as pricing systems should, the changes in the underlying economic and technical characteristics of the industry. By and large, government intervention has been essentially irrelevant, and could possibly have been harmful. In this paper we discuss why that might be so.

The matter of discounting is of major importance as a response to government regulation of airfares, and a section of this paper is therefore devoted to its consideration.

Following the discussion on discounting, specific consideration is given in the paper to government fare setting procedures and the effect of this intervention on the pricing structure of the airlines.

The paper concludes with a brief consideration of the Holcroft Inquiry and the newly formed Independent Airfares Committee.

Deveopment of Domestic Airfare Systems - an Overview

The first,development phase of the domestic airfare pricing system covered the 1950s and most of the 1960s. This was the period of establishment of the domestic air network. During this time airfares were set by rough and ready methods.

The second phase began in the late 1960s, with the introduction of jet aircraft, and extended to the mid 1970s. In the 1960s and early 1970s, fare setting was responsive to market pressures, as the industry reacted to the significant technological change and the very rapid growth in demand. The price of air travel, in real terms fell rapidly.

During this second phase, the fares charged by the main domestic airlines were established directly by the stages actually flown; (where a stage reflects the operation of an aircraft from one airport to the next airport). Fares were therefore related, or capable of being related, to the costs actually incurred in carriage. Fares also reflected anticipated loadings.

The fare structure in the early seventies was relatively chaotic. There was no simple relationship between fares and distance travelled throughout the network; multi-stage passengers were unhappy with the use of additive fares; new aircraft were introduced using the fares developed from the cost structures of smaller and more expensive aircraft and so on. It was a classic picture of a free market pricing system and could, and possibly should, have been left alone.

The third phase was quite short. It commenced in August 1974 when the formula system for calculating airfares was introduced. This provided for sector fares based on uniform flagfall and distance charges. (A sector is determined by origin and destination points only, so that the sector fare is not influenced by the number of stages flown).

It was a dramatic change in pricing concept, and removed the possibility for competitive processes to relate stage fares to stage costs or stage demands. Rather than compete in full fares which were determined by the formula, the airlines were forced to compete in discounted fares.

This phase which ended sometime in 1979 was associated with a major and prolonged recession which adversely affected demand for air travel. There was an absolute fall in demand in 1975 and very slow rates of growth in most other years. The phase ended when the introduction of jet aircraft was completed on all major routes. It was characterised by the adjustment of the domestic airlines to the constraints of a regulated formula fare system.

The fourth phase commenced in 1979, coincidentially with the introduction of parity pricing for petroleum fuels, but independent of it. This phase was characterised by a virtual free market in discount fares. The airlines had worked out how to bypass the formula fare system; by offering extensive discount fares. These resulted in increased load factors on services. In 1980, over 60% of passengers travelled on a fare lower than the full fare.

Recently (1981) the situation has changed again with the formation of the Independent Airfares Committee. This event is discussed later in the paper.

Discounting

Until the mid 1970's, discounting of fares was relatively uncommon, except for childrens' concessions and discretionary discount fares offered to groups travelling together.

TAA, for example, introduced its first discount fare in 1955, when tourist class fares were made available on flights between Brisbane, Sydney and Melbourne. The discount was 15%; it was subsequently increased to 25% in 1958 and also extended to Adelaide and Perth.

The tourist fare was introduced to increase revenue yield by attracting passengers from the railways. They filled seats which would otherwise be unoccupied on the new and large (for their time) Electra and Viscount aircraft. Tourist fares were originally described as a concession fare and were restricted in their availability to selected routes.

Nowadays, of course, the base fare is the tourist or economy fare. The premium for first class travel reflects the additional space on the aircraft allocated to these passengers. There are even suggestions that first class fares should be abolished.

The significance of discount fares cannot be overlooked. With regulated maximum fare, the airline can still vary the average fare by increasing or reducing the number of seats sold at a discount. The airlines have responded to the regulated pricing structure, by gaining control over the settling of the average fare.

Average fare can have two definitions; either based on available seats or based on number of passengers. As a rough approximation, average fares per available seat have been about 50% of the maximum fare for quite some years; or about 65% of the maximum fare on a per passenger basis.

One of the most curious features of air fare pricing structure was introduced in 1968. This was the 25% discount fare for older students. It had little economic justification when introduced and has none, now that standby fares exist. The original concept of student's discount fares both on railways and airlines was to enable students studying in the cities to return home at vacation. This desirable social objective has been overwhelmed by both the extension of the education system into country areas and by the extension of the discount fare throughout the year.

In summary then, under a regulated fare situation the airlines had control over the revenue yield for each flight by the availability of discounted seats. The average fare paid by passengers on a flight was adjustable in this way, and it still is.

Off peak fare

It was certainly significant that in the unstructured fare system prior to 1974, a differential between peak and off-peak fares did not develop. What the airlines seemed to have done was to recognise the low avoidable cost of off-peak operations by assigning low load factor flights to off-peak time slots. The schedule seemed to have required the arrival of peak period connecting flights before the low density flight departed.

The absence of significant off-peak pricing in the Australian domestic air network is one of the most economically significant characteristics of the fare structures, both pre-1974 and post. Subsequent to 1974, the airlines experimented with a 15% off peak fare. This was available on designated flights but had to be used as a return flight. It is still available, but its value as a fare discount has been overwhelmed by the introduction, in September 1978 of standby fares, initially on a limited number of routes.

As will be seen, a sort of Greshams law applies in airfares with the discounted fare rapidly becoming the base fare. This helps to explain considerably the recent developments in international airfares.

Government Fare Setting Procedure : Revealed Objectives.

So far as one can gather, the regulatory processes in the sixties and early seventies were simply to test the reasonableness of fares. They were designed to prevent monopolistic (or more correctly duopolistic) price setting on specific routes and the making of excessive profits by the airlines. There was a fairly cosy relationship, between the two domestic airlines and the regulatory authority, the Department of Civil Aviation.

Since 1974, government regulation of air fares has been exercised by ministerial approval of the formula fare consisting of a flag fall charge and distance rate. The new 'neat and tidy' nationally consistent air fare system of August 1974, provided initially for a flag fall of $6 and a distance rate of 4.2 cents per kilometre for all economy fares. First class fares were then set at 25% greater than economy, previously they had been 33% greater than tourist. (In June 1980, the first class differential was increased to 37.5%, and since April 1981, the differential has been 40%).

Between August 1974 and November 1981, there had been fifteen adjustments to the basic formula; of these, six adjustments had resulted in the flag fall charge increasing by a greater percentage than the distance rate. There was a major structural change in the formula in April 1981 when the flag fall was increased from $21.80 to $40.00 and the distance rate was actually reduced from 7.888 c/km to 6.848 c/km.

In 1974, the bureaucratic distaste for the untidyness of the free market structure of airfares succeeded in proposing a formula system, which effectively subsidised (and still does) low density transport routes at the expense of routes with consistently high density. This is the inevitable result of a fare formula that enables price to vary only with distance travelled. Fares cannot therefore reflect any other pertinent market factor such as differences in demand. Since the low density routes are primarily those serving country towns, the persuasive influences of the rural lobby could be presumed.

Another effect (and therefore revealed objective) of the new fare system was (and is) to provide a substantial cross-subsidy for passengers making multi-stage journeys. Where previously these passengers had been charged the sum of the stage fares, made up of the flag fall and distance components in them; they were now charged only one flagfall, and a distance charge which normally was the distance actually flown. Passengers on single stage journeys were therefore having to subsidize those making multistage trips. The size of this cross subsidy to multistage passengers can be better appreciated when it is remembered that currently (August 1981) the flag fall charge is $43.20.

A two tier distance rate was introduced into the formula in February 1980 which reduced the cost of journeys over 2,200 kilometres. This provides a subsidy to only few centers and suggests therefore an objective of favouring those located in Darwin, Perth and other parts of Western Australia.

Since the introduction of the formula system, the regulatory process has been the approval of the formula components; that is the flagfall and distance charges. More recently with the establishment of the Independent Airfares Committees there is the possibility of regulating also the average fare. Approval is required for all discount fares and discounting procedures of the domestic airlines. Discounts must be shown, not to be disadvantageous to full fare paying passengers. It is yet to be seen how readily and on what basis discount fares will be approved.

This control on discount fares extends even to supervision of the free of charge (FOC) procedures of the airlines, since it is possible to give discounts by, for example, issuing one in five FOC tickets for a group which pays full fares for the other members.

As with international fares the government has found it necessary to intervene to support its regulatory system by increasingly complex controls over discounting. These controls proved unworkable for international fares. It remains to be seen whether the government will persist with them for domestic travel. The economic characteristics of the industry suggest that the controls are doomed, if they seek to limit the practice of discounting.

Basis for Government Regulation

When a government appears to be having trouble with its regulation of an industry the first question to ask is; why is it bothering? That is, what economic or social disaster does it seek to prevent by its intervention.

This simple and powerful method of analysis of the need for regulation can be applied to the airline industry. What would happen in the absence of regulation? It is necessary to define a starting point for deregulation. For this illustration we will assume a single pre-existing monolithic nationalised airline operating both domestic and international services, which after deregulation is allowed to keep its international services but must sell surplus aircraft to the highest bidder.

The result of the deregulation postulated is that two, three or more companies would be formed to purchase the aircraft or even new aircraft and operate services in the unregulated market. Some of these companies will be efficient and others will be inefficient, or even just unlucky. In that event they will be taken over by one of the others. Even three independent, unregulated domestic airlines would be unstable in the Australian system, because one of the three would constantly seek to absorb the third.

Airline operations are intrinsically financially unstable, costs are relatively fixed in the short term and budgeted profit margins quite small (between 2% and 3% of turnover). Unexpected falls in demand can generate substantial short term losses. In an unregulated industry, the incompetent, or even unlucky airline will always be vulnerable to take over.

In the end there will be two big airlines and each will constantly seek to take over the other; or will they? In fact they will not, because if they did, they open the way for another competitor to come in and operate in their most profitable markets, and achieve growth quite rapidly. Hotelling's principle, which says that the two icecream sellers on a beach will ultimately sell back to back, also implies that if there is only one seller, then there will soon be two.

It is possible that in the past, there would have been room for only one major domestic airline. In the present environment, one domestic airline could not prevent a second from emerging and growing rapidly while two domestic airlines can easily prevent a third major airline from existing. This does not mean that a third airline could not displace one of two pre-existing airlines; rather that the outcome of a competitive battle between three airlines would be two airlines, while the outcome of a competitive battle between two airlines would also be two airlines. The Bizjets experience is confirmation that this analysis of the market is correct. The two major domestic airlines were able to compete ruthlessly in the market Bizjets sought to enter and prevent Bizjets from becoming a third major domestic airline.

The main regulatory instrument then, as now, was the control over the capacity offered on the domestic routes. This control then, and probably still is of critical importance since it prevents a too rapid introduction of larger new aircraft. The additional cost of this would have been passed on to the passengers.

The instrument of capacity control can clearly and correctly be assigned to control of aggregate costs of the airlines. There has never been a clear definition of the target of regulation of fares, but in practice it established the extent by which the airlines could discount regulated fares. The extent to which the regulated maximum fare exceeds average costs per passenger kilometre sets the feasible limits on discounting.

The regulation of airfares therefore resembles in many ways the present government control of petrol prices, which clearly has established the regulated price at an amount greater than the average cost of production and distribution, thus permitting sales of petrol at a discount.

This revealed target of regulation of airfares was institutionalized in 1974; was realized by the airlines towards the end of the 1970's when demand picked up from the depressed levels of the mid 1970's, and carried over into the new fare structure in 1981.

Holcroft Inquiry

An inquiry under the chairmanship of Warwick Holcroft was set up to analyse airline costs and derive a standardized cost based formula. The Committee reported in February 1981 some months earlier than was expected, and prior to proper completion of the inquiry.

The terms of the inquiry, which was limited to the derivation of a new nationally consistent cost based formula reflects the government's preoccupation with regulation of airfares into a tidy formula. Fundamental issues were not addressed in the inquiry and the relevance of a cost based fare formula in terms of theoretical rigor and practicality were not considered.

To even the casual observer it is obvious that airline costs cannot be expressed properly by just two components: a fixed cost per passenger plus a cost varying directly with distance travelled. Distance travelled and number of passenger journeys are not the only factors affecting cost, and a fare formula consisting solely of these components cannot possibly reflect accurately, airline costs. Average cost per passenger journey also varies with other factors including:

- o number of stages to a journey
- o time of journey, within the day and year
- o port of origin and destination
- o typical passenger loadings

The Holcroft Inquiry into domestic airfares failed to recognise the elementary principle of transport economics, that the costs of peak services are different from the costs of off-peak services. This was a fundamental weakness of its methodology, and is the principal reason why the findings of the Committee may be treated lightly, and many may be ignored.

It is essentially because influences on airline costs, other than distance cannot be incorporated into a simple formula that it is imperative that the formula fare be set sufficiently high to allow discount fares to be offered. Only in this way can passenger movements be adjusted to reflect avoidable costs incurred, and thereby enable the airlines to implement an economically rational pricing policy.

The preoccupation of the Holcroft Inquiry was with the relativity between the flag fall component and the distance component in the formula, other matters were largely ignored. This is not to suggest that the allocation of categories of cost between flag fall and distance is a simple matter. This is certainly not the case. However, even on this matter the Inquiry did not present a satisfactory analysis.

The basis for allocation between flag fall and distance components should be in terms of whether costs are avoidable or non-avoidable, as well as whether they are related to distance. This, however, was not the approach taken in the Holcroft Inquiry. Most costs were allocated into the flag fall, provided they were not related to distance, regardless of whether they were avoidable, resulting in more overhead costs being allocated into the flag fall then should have been the case. This does not allow overhead costs to be recovered from those markets where the elasticity of demand relative to price is low, which is more likely to be the longer journeys and therefore more closely linked to passenger kilometres, (the distance component of the formula).

Obviously the fare formula developed from a procedure of allocating airline costs to flag fall and distance components is very sensative to the basis for that distribution. The allocation is a most contencious exercise, and the formula that emerges is therefore far from robust.

As a result of the Inquiry a fare formula was esablished, but without a straight forward basis for revision of the formula in response to changing cost levels. In addition there was, not surprisingly, considerable argument concerning the allocation of costs between the flag fall and distance components. A new study was therefore set up by the government soon after the Report of the Holcroft Inquiry was received. The terms of reference for this study required a reassessment of the Holcroft report in the light of more recent cost data provided by the airlines, and also a more careful consideration of the appropriate basis for allocating costs between the flag fall and distance components.

The recommendations of this study have not yet been accepted and have not been incorporated into the current (August 1981) fare formula.

The Independent Airfares Committee (IAFC)

In June 1981, legislation to establish the Independent Airfares Committee was passed, and responsibility for fare setting was transferred from the federal Ministry of Transport to this Committee a few months later.

The formation of the Independent Airfares Committee marks a new phase in regulation of the domestic air industry. As the Committee has only just commenced operations (in November 1981) the nature of its influence is not yet clear.

The main difference in its charter compared with previous regulation is its role in approving discount fares, which must be shown to be self financing. The IAFC has therefore the potential to be highly restrictive of airline pricing options. Alternatively it may feasibly promote a more rational pricing strategy. It all depends on the reaction of the IAFC to requests for discount fares.

For all the reasons outlined above, it is vital that the IAFC does not use its charter to make the formula fare the minimum as well as the maximum fare. As already explained the offering of discount fares is necessary if the airlines are to achieve maximum loadings and an appropriate spread of air travel demand. Discount fares are the main tool for increasing demand levels and for shifting demand from peak routes and time slots to the off peak.

It is plausible that the IAFC may promote a better pricing structure, if its requirement for justification of discounts encourages the airlines to approach their pricing strategy in a more rigorous way.

Only time will tell whether the IAFC will promote competition and rational pricing within the domestic air industry or stifle it.

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