

# REGULATION AND DEREGULATION OF THE DOMESTIC AVIATION INDUSTRY IN AUSTRALIA

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## Abstract

The domestic aviation industry in Australia was deregulated in November, 1990 ending Australia's two airline policy which was in effect for nearly forty years. This paper explores the economic impacts of regulation and argues that for the most part, the industry behaved like a monopoly under regulation. The paper also looks at the deregulatory experience in Australia and compares it with the US experience. The relevance of the theory of the theory of contestable markets is also discussed. Overall, it is argued that deregulation has brought favourable results for the consumers.

## Introduction

From 31 October 1990, interstate domestic aviation industry was deregulated in Australia, thus ending the two-airline policy. Deregulation was introduced through the passage of the Airline Agreement (Termination) Act 1990. This Act repealed legislation introduced by the Airlines Agreement Act (1981), the Airlines Equipment Act (1958), and the Independent Air Fares Committee Act (1981). This follows the deregulation in the USA and partial deregulation in Canada. This paper aims to analyse the effects of interstate aviation regulation and deregulation experience so far and anticipate what may be in store for the future.

## Theory of Contestable Markets

There is no doubt that the favourable effects of airline deregulation in USA gave a positive impetus for deregulation in Australia. Theoretically, the contestable market theory as proposed by Baumol, Willig and Panzar (Baumol et al. 1982) gave an impetus to airline deregulation. Contestable markets are less restrictive than perfectly competitive markets but are supposed to give us the same results. A contestable market may be defined as a market into which entry is absolutely free and exit from which is absolutely costless. A firm can enter such a market, earn a profit and then exit without incurring any costs. Three characteristics of such markets are noteworthy. First, Baumol, Willig and Panzar have shown that in equilibrium, economic profit in such markets would be reduced to zero. Any positive profit would induce entry and result in undercutting incumbents' prices by entrants. Such a process will continue until all profits are reduced to zero. Second, such markets are characterised by lowest cost of production. Otherwise, new entrants will undercut incumbents' prices forcing incumbents either to exit or to reduce costs of production. Third, in a contestable market with two or more sellers, price in equilibrium will be equal to marginal cost.

Morrison and Winston (Morrison and Winston 1986) distinguish between perfect contestability, as developed by Baumol, Panzar and Willig and imperfect contestability, as developed by Bain (Bain 1949). Bain recognised long ago that potential competition would influence the conduct and performance of sellers in a market. Imperfect contestability means that actual as well as potential competition matter. Baumol, Panzar and Willig went a step further. They showed that when entry and exit are costless, potential competition can generate welfare maximising performance. This basically means that under perfect contestability, potential competition by itself can give us perfectly competitive outcome.

Since the theory of contestable market was propounded, there have been a number of empirical studies to test the theory in the case of airline markets using US data. Important among the studies are that of Bailey and Panzar (Bailey and Panzar 1981), Bailey, Graham and Kaplan (Bailey, Graham and Kaplan 1985), Graham, Kaplan and Sibley (Graham, Kaplan and Sibley 1983), Moore (Moore 1986) and Morrison and Winston. A perusal of the literature on the subject points to the diversity of opinions among the economists on the subject. In general, the early studies, carried out mostly by the proponents of the theory of contestable markets, seemed to have been more optimistic about the applicability of the theory to the airline industry. The study by Panzar and Bailey is a case in point. However, doubts on the applicability were cast first probably by Graham, Kaplan and Sibley. The later writers have been less enthusiastic about it. A new dimension was added to the controversy by Morrison and Winston who, as pointed out earlier, distinguish between perfect and imperfect contestability. This has important policy implications. If imperfect contestability holds, then potential as well as actual competition need to be encouraged. In fact, the empirical tests by Morrison and Winston found that actual competition mattered more than potential competition.

Most economists now agree that although contestability theory is a valuable contribution to the industrial economics literature, airline markets are certainly not perfectly contestable. First, all the airlines do not have the same cost structure as the contestability theory requires. Second, sunk costs at airports impede contestability. Third, slot or noise constraints restrict new entry.

Entry into and exit from the airline market are not

certainly costless. Now, most economists seem to agree that transportation by trucking, barges and buses are more contestable than passenger air transport, because of their lower sunk costs.

It must be pointed out that contestability was one of the arguments in favour of deregulation but there were a host of others. Also, airline deregulation has given rise to a number of pricing and service distortions in the US (Brenner 1988 and 1989).

### Domestic Airline Regulation in Australia

The two airline policy in Australia dates back to 1952 when the Civil Aviation Agreement Act was passed. The Menzies government did not want monopoly to prevail in the provision of the domestic airline service. At the same time, it was believed that Australia could not support more than two domestic airlines and still maintain efficient operations. Implicit in the policy was the belief that there were substantial economies of scale in the operation of the air service. However, empirical evidence did not seem to support this view. The Treasury, for example, argued that once the minimum efficient scale of operations was achieved, there were hardly any further economies of scale (Independent Review of Economic Regulation of Domestic Aviation, Volume I, p. 238). The minimum efficient scale was only around five aircraft. Economies of vehicle scale is a different matter altogether. Evidence strongly suggests that the larger the aircraft, other things like load factor being equal, the lower is the unit cost especially for the long haul (Bailey, Graham and Kaplan 1985). Also, empirical evidence suggests the existence of economies of density whereby unit cost is reduced when airlines add flights or add seats to existing flights if load factors remain the same (Caves, Christensen and Tretheway 1984).

Under the two airline policy, two carriers, Trans Australian Airlines (TAA), a government firm, operated side by side with Australian National Airways (ANA). During the early years of TAA, public servants could travel only by TAA. However, ANA was the weaker airline and later given part of the government business. ANA faced financial difficulties and was taken over by Ansett Airlines in 1957. The passage of the Civil Aviation Agreement Act in 1957 further strengthened the two airline policy by declaring that one of the objectives of the commonwealth government was to secure and maintain a position in which there are two and not more than two operators of trunk airline services. The regulatory legislation which exercised economic control before deregulation were the Airline Agreement Act (1981), Independent Air Fares Committee Act (1981) and Airlines Equipment Amendment Act (1981). The "no entry" policy of the government was implemented by refusing to grant import licences to potential competitors. Only Ansett

Airlines and Australian Airlines were granted such licences. In the absence of manufacturers of large aircrafts in Australia, potential competitors were basically barred from entering the markets. Besides, the entry control, capacity was tightly controlled as well to prevent "wasteful competition". Fares were tightly controlled also to ensure stability. Independent Air Fares Committee (IAFC) determined and approved all fares. Fares were to be set by the IAFC in such a way which minimised cross subsidisation. Fares were to be cost-based and to be consistent for routes with similar characteristics. Discount fares were also to be approved by the IAFC.

### Consequences of Economic Regulation

Australian two airline policy was dubbed as success by many who argued that it was a stable situation and the safety record was quite good. The airlines did enjoy financial stability and consistent profits. However, Australians who travelled to the US after the passage of the U.S. Airline Deregulation Act of 1978 bitterly complained about the higher air fares at home. Although Australian two airline policy was apparently a duopoly, in practice, it acted like a monopoly in some ways where the two carriers had a tacit collusion. However, there were symptoms of competition as well. For example, Hocking and Forsyth (1981) argue that parallel scheduling whereby the two airlines had flights to same destinations that were taking off at almost the same time was a sign of competition rather than of monopoly. There have been some concerns among the economists as to whether Australian experience can be compared with the US experience because of the enormous differences between the two countries, the most important one being the fact that population in Australia is so much smaller than that of the US. But in the context of air transport, the relevant market is the city-pair market. Thus, Melbourne/Sydney is a city-pair market. However, it is true that traffic generated on the densest route in Australia will be much less than the traffic generated on the densest route in the US.

### Deregulatory Experience

The passage of the Airline Agreements (Termination) Act (1990) signalled the end of the two airline policy in Australia. As of November 1990, interstate airlines are free to enter any airline market, set their own fares and choose their own capacity. The government also announced its plan to privatise Australian Airlines. According to the Department of Transport and Communications (1990-91), deregulation was "expected to (a) stimulate growth in the market (b) provide a wide range of airfares and more discounts (c) provide greater incentives for the incumbent and new entrant airlines to become more efficient and more responsive to consumer needs (d) make available a greater variety in the

type, standard, and frequency of services" (Department of Transport and Communications 1990-91, p. 19). As before, airlines have to meet the operational and safety standards of the Civil Aviation Authority (CAA).

Since the introduction of deregulation, we have seen the entry (and subsequent exit) of Compass Airlines. Compass Airlines engaged in deep discounting and finally went bankrupt. There were complaints from Compass Airlines that Ansett Airlines and Australian Airlines did not play fair with Compass. Compass complained that Compass was not given adequate terminal facilities -- a charge which the government denies. Recently, it has been purchased by Southern Cross Airlines which is promising to resume services soon. The number of passengers carried domestically since deregulation has surpassed all previous records despite the recession in the country.

An argument in favour of continued regulation was that the safety might be sacrificed under deregulation. The existing evidence in the US and Australia does not seem to support this position.

There is also the question of service quality. Regulation restricts price competition and thus result in non-price competition which take the form of competition in service quality. Deregulation, it is argued, leads to inferior quality of service. This argument is valid in the sense that there may be a trade-off between service quality and fare. In fact, the US evidence suggests that service quality declined in the post-deregulation period in that the quality of meals on an average basis deteriorated and there was less leg-room available in the coach seats (Rose 1981). But polls have shown that in such a trade-off, the majority of the customers prefer lower fares (Douglas 1990).

Another argument advocated in support of regulation is that regulation ensures a stable environment which is beneficial to the customers. However, this argument is not very valid if it implies aiding the inefficient airline operations. Also, the same argument could be applied to other sectors of the economy. The government would thus face an enormous and unachievable task.

One important difference of the Australian experience with the deregulatory experience in the US is that deregulation encouraged the development of the hub-and-spoke operation on the part of the airlines. Under such a system, passengers are first flown to a big airport (a hub) from a smaller airport (a spoke) and then carried to their ultimate destinations. This helps better capacity utilisation and thus reduces cost. Consequently, the number of direct flights to smaller places has declined in the US after deregulation. However, given the smaller population of Australia, it is not very relevant in the Australian context.

The theory of contestable markets is quite relevant to the analysis. Much of the empirical work has been done in this respect with US data. Sufficient time has not elapsed since deregulation in Australia to allow us to test the theory using Australian data. Lack of data is a problem. Testing is further complicated by the fact that the number of airlines involved is quite small. However, the studies using US data can help us to draw valuable conclusions. As we noted earlier, Morrison and Winston find imperfect contestability to hold in the airline markets in the US which mean that actual competition also matters along with potential competition. In this sense, the exit of Compass Airlines is a blow to the welfare of the consumers. Indeed, fare competition from which the consumers were the most important beneficiaries, was reduced somewhat with the exit of the Compass Airlines.

### Conclusions

If the experience so far in Australia and the US is any guide, consumers are going to gain in the form of lower fares. In both countries, standard economy fares are mattering much less than before. The percentage of travellers using discount fares has gone up sharply after deregulation in both US and Australia. The average load factor, that is, the number of filled seats as a percentage of total seats has gone up as well. There were calls for re-regulation of the domestic airlines immediately following the deregulation in USA from some quarters as the airline industry was adjusting to a new environment. However, with the passage of time, such cries were not heard anymore as the real average fares fell. Realistically, it would probably be unwise to expect the types of unbelievable low fares that followed after deregulation in the USA in the Australian context although one can expect the average consumer to benefit from deregulation. The consumers' efforts to restore Compass testify to the benefits in the form of lower air fares they received while Compass was in operation.

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