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LIBERALISING THE CANADIAN
SCHEDULED AVIATION MARKET:
THE GRADUALIST APPROACH TO
DEREGULATION.

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**LIBERALISING THE CANADIAN SCHEDULED AVIATION MARKET: THE
GRADUALIST APPROACH TO DEREGULATION**

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Abstract

This paper looks at the recent developments in Canadian aviation policy and sets them in the context of wider, international trends in transport regulation. It considers the pressures which have led to the changes in both the forms of control exercised by the Canadian government over its aviation industry and the degree of public ownership. While the effects of change take time to be realized, and the liberalization of the Canadian market only dates from the beginning of 1988, some discussion is offered concerning the likely long term implications of the new policy.

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LIBERALISING THE CANADIAN SCHEDULED AVIATION MARKET: THE GRADUALIST APPROACH TO DEREGULATION¹

Kenneth Button

1. Introduction.

The past decade has witnessed a considerable relaxation of traditional, economic regulation of markets². In particular there has been a movement away from direct controls over market entry and exit, output, rates of return, and price setting and towards regimes of quality and social regulation which aim to regulate the standards adopted by those active in the market. This shift in emphasis of policy has been both broad in its international coverage and extensive in the sectors involved³. Accompanying the changes in economic regulation has often been a reduction of public sector involvement more generally. There have been, for example, extensive programmes of privatization in some countries and even in many communists there has been an active encouragement for greater private sector participation in the economy.

The exact nature of the reforms have differed from country to country and within countries has varied across sectors. There are a variety of specific reasons for this which we do not intend to detail here. Suffice it to say that in part these variations must reflect the different starting points in each country - some have a much longer experience of extensive economic regulation and their systems are more entrenched. But also the fact that the actual nature of regulation differs quite significantly between states means that the pressures for change have themselves varied.

¹ The author would like to thank the Canadian High Commission for the grant which made the writing of this paper possible. He would also like to acknowledge the considerable help rendered by Professors W.G. Waters, M.W. Tretheway, W. Stanbury, F.Lazar, I. Savage, W. Jordan and T.D. Heaver and to Mr R.M. Duslos at Transport Canada and Mr.G. Baldwin at Statistics Canada. The responsibility for errors in this paper is entirely the author's.

² For a wide ranging discussion of the nature of these changes see, D. Swann, *The Extent of the State - Deregulation and Privatization in the U.K. and U.S.A.*, (Harvester- Wheatsheaf, London) 1988. On a definitional point, 'economic regulation' is American terminology and is akin to the U.K.'s 'quantity controls' in that it relates to limits on market entry and/or on rates charged. There is also 'social regulation' in American parlance, or 'quality controls' to adopt the U.K. jargon which covers such matters as safety, consumer protection, conditions of work, etc. Additionally, U.S. 'anti-trust policy' has its parallel in the U.K.'s 'monopolies and mergers policy'. Interestingly, the Canadian literature seems to have adopted both sets of terminology and, at times, uses them interchangeably. For consistency, American terms tend to be used throughout in this paper. Similarly all financial data is given in U.S. dollars.

³ Some indication of the scale and breath of the reforms can be seen from the collection of international and sectorial studies contained in, K.J. Button and D. Swann (eds) *The Age of Regulatory Reform*, (Oxford University Press, Oxford), 1988.

he exact nature of the reforms have differed from country to country and within countries has varied across sectors. There are a variety of specific reasons for this which we do not intend to detail here. Suffice it to say that in part these variations must reflect the different starting points in each country - some have a much longer experience of extensive economic regulation and their systems are more entrenched. But also the fact that the actual nature of regulation differs quite significantly between states means that the pressures for change have themselves varied.

Our concern is in many ways a rather narrow one - namely to offer an economic analysis of the process by which recent changes in the regulation of the Canadian aviation industry have been brought about. This is certainly not the first aviation industry to be substantially 'deregulated' (in the sense that entry and fare controls have essentially been removed from a significant part of it) nor is it the largest⁴. Its interest lies in part in the fact that deregulation comes some decade after the *de jure*, and even longer after the *de facto* deregulation of the United States's passenger aviation industry and thus one is concerned with the degree to which legislators learn from the experiences of others. The approach adopted was also, possibly because of what was learned from the others' experiences, much more gradual and phased than that pursued in, for instance, the United States. It also comes at a time when there are moves afoot to liberalize European aviation with the creation of a "Single European Market" in 1992⁵. There may be lessons from Canada from which the European Community can benefit. Further, because of geography, and the nature of the now abandoned regulatory regime, the Canadian situation is one of singular interest in its own right.

Additionally, the literature on the U.S. experience of airline deregulation is now both extensive and widely available. The literature on Canada, while not insignificant in volume nor deficient in quality, is rather less accessible, especially outside of Canada⁶.

⁴ In particular, the U.S. domestic civil aviation industry was theoretically deregulated over a five year period under the 1978 Airline Deregulation Act although, in fact, it was achieved much more rapidly. For details see, S.A. Morrison, 'U.S. domestic aviation' in K.J. Button and D. Swann (eds) *op cit*, pp.141-155; M.E. Levine, 'Airline competition in deregulated markets: theory, firm strategy, and public policy', *Yale Journal of Regulation*, 4, pp. 393-494, 1986; J.R. Meyer and C.V. Oster, *Deregulation and the New Airline Entrepreneurs*; (MIT Press; Cambridge) 1984; and E.E. Bailey, D.R. Graham and D.P. Kaplan, *Deregulating the Airlines*; (MIT Press; Cambridge) 1985. A more general overview of developments in the regulation of aviation across a range of countries is contained in, Organisation for Economic Co-operation and Development, *Deregulation and Airline Competition* (Organisation for Economic Co-operation and Development; Paris) 1988.

⁵ For a discussion of the issues, see, J. Pelkeman, 'Deregulation of European air transport', in H.W. Jong and W.G. Shepherd (eds), *Mainstreams in Industrial Organization* (Martinus Nijhoff; Dordrecht), pp.347-385, 1985; G. Tucci, 'Regulation and "contestability" in formulating an air transport policy for the European Community', *Rivista di Politica Economica*, 19, pp.3-23, 1985; and K.J. Button and D. Swann, 'European Community airlines - deregulation and its problems', *Journal of Common Market Studies* (forthcoming).

⁶ For a good bibliography see, W.T. Stanbury and M.W. Tretheway, 'Airline deregulation: a bibliography', *Logistics and Transportation Review*, 22, pp.449-489, 1986.

Finally, because the debate surrounding the recent reforms has only just been conducted, much of the literature tends to be concerned with arguing the merits of one position or another. One objective of this paper is to try to bring some of this material together and also, as implied by our title, to offer some comments on the general applicability of the Canadian approach.

It should perhaps be emphasized that our primary concern is with the method of deregulation rather than with the merits of deregulation *per se*. The respective merits of free and regulated markets have been well turned over by economists and we have no intention of adding to the arguments. Instead it is the comparatively neglected subject of the process of deregulation which is the main focus of the paper and the implications of the process adopted for the eventual market structure which emerges.

In terms of content, the article looks initially at the rationale behind the system of regulation which existed prior to 1988, tracing out its evolution and implications for the aviation industry. It also sets it in the wider context of Canadian regulatory policy as a whole. It then considers the pressures which developed to change the system and move to a much less restrictive structure of controls which focus primarily on matters such as safety and the provision of services to distant communities. The legal changes which resulted are then considered against the background of the structure of the industry and the experiences which others have had in deregulating their aviation industries. Finally, some general comments are offered about the merits of the Canadian system and the relevance it may have for aviation policy in other countries.

2. The Development of the Regulatory Regime.

The Canadian economy is one in which the government has a tradition of heavy involvement, both in terms of regulation and of public ownership⁷. This is, in the main, due to the geography of the country and, in particular, to the spread of a very small population over a large land mass with east-west boundaries 3,500 miles apart. It really, in economic terms, consists of a set of separate markets which have been brought together under a federal umbrella. Nationhood, is therefore, achieved by a continual process of redistribution and control so that a acceptable

⁷ For an overview of the scale of regulation in the Canadian economy see, W.T. Stanbury, 'Direct regulation and its reform: a Canadian perspective', *English Young University Law Review* 2, pp.467-539, 1987. Figures cited in this study indicate that all tiers of government accounted for the expenditure of 47% of Gross National Product; that in 1989, government regulated industries accounted for 30% of the Canadian Gross Domestic Product; that in 1983 government owned or controlled enterprises account for 26% of fixed assets of all Canadian corporations; and that federal and provincial loans and credits accounted for 13.5% of Gross National Product in 1989.

balance is maintained. Communications have always played a pivotal rôle in helping to maintain this balance. In order to avoid excessive fragmentation and to retain the idea of a single country, the federal government has been particularly active in promoting a national transport system.

By international standards Canadian aviation has, given the comparative youth of the technology, a fairly lengthy history. From 1919 local air services were initiated although, unlike the industry which developed later, but grew more rapidly from 1925 around mail contracts, in the U.S.A., long distance, trans-continental services were very slow to emerge. It was to provide a schedule coast-to-coast service, without the need to go via the United States, that the federally-owned Crown Corporation, Trans Canada Airlines (subsequently from 1964, Air Canada) was founded under the Trans Canadian Airlines Act of 1937⁸. It subsequent became very much a 'preferred vehicle' in the pursuit of the government's transport goals.

Private sector involvement in aviation was mainly on local routes and in the remote areas - Trans Canada Airlines having a protected monopoly on trans-continental routes. In 1933, Canadian Pacific Railways planted the seed for a major second string national airline by buying into the Winnipeg based Canadian Airways and subsequently, by merges and acquisitions of small carriers formed Canadian Pacific Airlines in 1942 (which from 1968 became CP Air). In addition, there were a number of regional carriers (reduced to five major regional by the mid-1970s, i.e. Pacific Western Airlines, Nordair, Eastern Provincial Airlines, Transair and Quebecair) which gradually developed after 1945 through both natural growth and acquisition and merger⁹ to meet local market needs. These were often started to provide services to remote communities ('bush services').

There is a further important component of the Canadian aviation industry. Charter services gradually began to develop in the 1950s and grew considerably in the 1960s. The regional carriers have traditionally been active in this market which is less regulated than scheduled services. Wardair, the largest specialist charter concern, was formed in 1953 to offer services in the Northwest Territories and expanded into international charter operations in 1961. In 1979 it obtained licences to operate domestic, non-schedule intercontinental services.

⁸ The first route was Montreal-Vancouver which was initiated in 1938

⁹ Mergers were particularly common under the regulated regime which existed and the five regional carriers were actually formed as a result of at least 20 mergers between 1947 and 1966, see W.A. Jordan, 'Results of U.S. airline deregulation: evidence from the regulated Canadian airlines', *Logistics and Transportation Review* 22, pp.297-337, 1986

It was against this background of embryonic private sector airlines and the desire to both ensure the orderly growth of the industry while at the same time protecting the national unifying rôle of the Crown corporation, that economic regulation was introduced. It should be noted, however, that for many years (until 1977) the Crown Corporation status of Trans Canada Airlines meant that was in the particularly favourable position that its route authorities were, through the Air Canada Contract, derived directly from Parliament rather than from any regulatory body.

From an very early stage, regulation of civil aviation at both the national and provincial level was seen as a federal responsibility¹⁰. Initially, control of aviation was a military responsibility and within the remit of the Ministry of Defense. (In fact it remained under that ministry until the formation of the Department of Transport in 1936). While the Air Transport Board Act of 1919 represented the first major piece of legislation, the basis for subsequent economic regulation was the Aeronautics Act of 1922 which, with subsequent amendments, gives the federal government power over rate setting, entry and route licensing, conditions of service, mergers and acquisitions and route abandonments. However, in the early years it was never generally exercised.

The 1938 Transport Act was important in establishing the Board of Transport Commissioners to oversee rail and air transport. The Board took responsibility for aviation licensing which was to be based on criteria of, "public convenience and necessity". The emphasis was on the co-ordination of activities and the stability of the industry. Within this broad framework, the centrality of the Crown carrier was emphasized with other, smaller airlines operating feeder services.

The Board was independent of the minister and on occasions exercised its independence. (In particular, on one occasion the board went against ministerial preference for the Vancouver-Victoria route to be awarded to Trans Canada Airlines and instead gave it to Canadian Pacific Airlines.) However, entities with such autonomy seldom endure. The Air Transport Board was established in 1944 to replace the Transport Commissioners. The new board was given the remit of advising the minister on matters relating to the issuing of licences and the approval of rates. This type of control was designed to meet the objectives of creating a large, reliable network of scheduled services across Canada. Monopoly positions were protected by licensing to ensure commercial viability of routes and create a system of cross-subsidization for others. Where any relaxation of entry control did take place it was generally very limited. Canadian Pacific Airlines, for example, was allowed to operate one transcontinental flight a day after 1959 (between Vancouver-Toronto/Montreal/Ottawa), and thus break Trans Canada Airlines's monopoly, but further liberalization came slowly with controls over Canadian Pacific's capacity gradually being

¹⁰ This differs from the situation in the U.S.A. where the 1938 Civil Aeronautics Act only applied to inter-state aviation.

expanded in 1967, 1970 and 1974 before being removed in a staggered fashion between 1977 and 1979.

In practice, the regime exercised no small influence over the relatively stable nature of the industry during this period, with only a certain amount of shuffling of routes and services and a limited number of mergers taking place between the incumbent airlines.

The early 1960s, and in particular the appearance of the report of the MacPhearson Royal Commission in 1961,¹¹ saw some changes in attitude towards transport regulation. The main concerns were the problems that the railroads were having in recovering costs in the face of mounting competition from the trucking industry. Although primarily concerned with surface transport, the MacPhearson Commission's view that "most of the ills which beset transportation in Canada are caused by the failure of public and private attitudes to adjust to the realities of competition" led to a more general reassessment of policy.

While there had in fact been some slight *de facto* relaxation of entry controls between 1957 and 1963 when Canada had a Conservative government, these were comparatively minor and short lived. To all intents and purposes, the traditional forms of control continued almost unchanged until 1967 and the enactment of the National Transportation Act which created the Canadian Transport Commission¹². The underlying philosophy of the change was to create a regulatory agency which transcends traditional modal boundaries and thus serves a wider co-ordinating function than the old regime. The stated objective of the act was to provide, "an economic, efficient and adequate transportation system making the best use of all available modes of transportation at the lowest possible cost." The Air Transport Board was replaced by the Air Transport Committee of the commission and this had overlapping membership with boards concerned with other modes. The committee operated under a rather general criteria. The decision on whether to grant a route application, for instance, depended upon whether the service, "is and will be required by the present and future public convenience and necessity". The committee was intended to have more autonomy than the old board but the federal government (Governor-in-Council) could still, under Section 64 of the act, change or rescind its actions. Further a degree of governmental suasion could be exercised in that the Canadian Transport Commission was meant to adhere to government policy statements when making its decisions.

The need for change in the aviation field was brought about by the recognition that the market for discretionary travel was expanding and there was a need to cater for such travellers. The initial

¹¹ *Report of the Royal Commission on Transportation* (Queen's Printer, Ottawa) 1961.

¹² Responsibility for safety matters is the province of Transport Canada.

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response, therefore, was to relax charter licensing while at the same time protecting scheduled services which were dependent on captive travellers paying high fares. Subsequent reforms, in the 1970s, began to reflect an attempt to develop a more liberal regime, with the aim of improving efficiency and reducing costs, while at the same time still offering some protection to scheduled carriers. Domestic charters (Charter Class Canada Fares), for example, were started in 1977. (In fact the first one had been initiated by Sun Tours the previous year but their service between Vancouver and Toronto operate via U.S. airports with connections to Canada being by a bus service!) Subsequently, after 1979, restricted (e.g. by advanced booking requirements, minimum stay conditions, rebooking fees for changes of flight, etc.) charter class fares designed to attract discretionary travellers were permitted on scheduled flights. Even here, however, fares had to be shown to cover variable costs.

At the regional level, the policy of balkanization, which had reached its zenith in the late-1960s with key Ministerial statements in 1965, 1966 and 1969 dividing the market between designated carriers, began to breakdown¹³. The official policy was to divide the country into five regional markets each with a single, regulated regional carrier - the 'preferred vehicle' - to supplement the national networks of Air Canada and CP Air. British Columbia and western Alberta was to be the domain of Pacific Western Airlines; Saskatchewan, Manitoba and northwest Ontario that of Transair; the remainder of Ontario and Quebec that of Nordair; all of the Province of Quebec east of Montreal that of Quebecair; and the Atlantic provinces and Montreal that of Eastern Provincial Airlines.

In an effort to ensure that the system which developed would not require federal subsidies, the policy involved the transfer of some Air Canada and CP Air routes to the regionals and protection for their services¹⁴. The problem with such a policy was that it encouraged the regional airlines to purchase jet aircraft. These proved uneconomical in the absence of the ability both, because of the size of markets, to exploit economies of density on the designated routes and, because of legal constraints, to extend networks beyond the regional domain¹⁵. The merger of the financially ailing Transair with Pacific Western in 1977 effectively meant the beginning of the end of this policy¹⁶.

¹³ These being the 'Statement on Civil Aviation Policy', 'Statement of Principles for Regional Air Carrier Policy' and 'Regional Air Carrier Policy', respectively (all published by the Ministry of Transport, Ottawa). This overall approach became known as the Regional Air Carrier Policy.

¹⁴ See W. T. Stanbury and G.B. Reschenthaler, 'Oligopoly and conscious parallelism: theory, policy and the Canadian cases', *Osgoode Hall Law Journal* 15, pp.617-700, 1977.

¹⁵ D.W. Gillen, W.T. Stanbury and M.W. Tretheway, 'Duopoly in Canada's airline industry: consequences and policy issues', *Canadian Public Policy* 16, pp.15-31, 1988.

¹⁶ S.S. Barone, M. Javidan, G.B. Reschenthaler and D.J.H. Kraft, 'Deregulation in the Canadian airline industry: is there room for a large regional carrier?', *Logistics and Transportation Review* 22, pp.421-448, 1986.

An amendment to the Air Canada Act in 1977 introduced further elements of liberalization to the national market by changing the status of, by then, Air Canada¹⁷. It was placed on a similar footing as the other schedule airlines by putting it under the regulatory control of the Canadian Transport Commission. Its remit was also changed to encourage it to operate in a commercial manner and to become more market oriented. Until this time there is evidence of the existence of considerable cross-subsidization from profitable international and transcontinental routes to support loss making, short haul services (e.g. Toronto-Montreal) and cross-border routes¹⁸.

In contrast to this, there was increasing public sector involvement in the control of the regional carriers¹⁹. While initially private concerns, the regional carriers were the subject of considerable changes in the 1970s and early 1980s. In most cases this involved a degree of either direct or indirect public sector ownership. Often this has been at the provincial level (e.g. Alberta's involvement with Pacific Western Airlines from 1974 and Quebec's control over Quebecair since 1981) but also saw Air Canada acquiring Nordair in 1978²⁰.

Overlapping the evolving regulatory structure of the Canadian domestic aviation market was the official policy with respect to Canada's international aviation industry. International aviation is extremely important in the Canadian context. Some 15% of scheduled and charter revenue ton-miles operated by Canadian jet carriers are cross-border services with the United States and a further 38% is generated by services to other countries²¹. Since this aspect of aviation policy is determined through multi and bilateral negotiations with other governments there are constraints over the power any one country can exercise. The key point about the Canadian stance is the attitude which has been adopted in awarding routes to individual national carriers once an agreement on a service has been reached. Essentially, since 1973 an official approach involving designated 'spheres of influence' had been favoured²². Air Canada, for example, had been awarded routes involving Northern Europe while CP Air had routes over the Pacific. There are even examples, such as when Air Canada was unable to obtain a Pacific route to Korea, when an airline is excluded from the other's sphere even if the latter does not operate the particular service. In terms of efficiency, this has the potential to limit the development of services in certain areas and would seem to offer shelter behind which prices are unlikely to be minimized²³.

¹⁷ The *Estay Report* of 1975 was influential in bringing this change about.

¹⁸ J. Baldwin, *The Regulatory Agency and the Public Corporation* (Pollinger, Cambridge) 1975.

¹⁹ In addition to the national and regional carriers there are also a large number (over 70) third level carriers which provide a wide range of services to smaller communities often acting as feeders for the larger carriers.

²⁰ A summary of changes in airline ownership is to be found in Figure 1 of Gillen, Stanbury and Tretheway, 1988 *op cit*.

²¹ See, W.A. Jordan, 1986 *op cit*.

²² Also in the same year international ABC charters were allowed (in place of the affinity rule) and this allowed for the growth of low costs international charter operations.

²³ See, M. Dresner and M.W. Tretheway, 'Policy Choices for Canada in International Air Transport', Working Paper No. 1229, Faculty of Commerce and Business Administration, University of British Columbia, 1987.

3. The Pressures for More Rapid Liberalization.

The liberalizing measures of the 1970s improved the economic efficiency of the Canadian aviation industry and there is evidence that by the end of the decade the degree of cross-subsidization had been substantially reduced²⁴. The situation was not static, however, and new pressures were building for further change²⁵. Some of these pressures were domestic but there were also the important ripple effects emanating from the deregulation of fares and market entry into the U.S. domestic industry from 1978.

The effects of U.S. deregulation were, in the short term, to offer indirect competition on many routes served by Canadian carriers and in the long term to offer a demonstration effect that, with certain caveats, there are major benefits to be derived from liberalization.

The majority of Canadian air traffic is along a narrow strip of land bordering the United States. Consequently, the fare elasticity of demand for much of the domestic Canadian market is influenced by the possibility of using surface transport across the border and adopting a U.S. carrier for the trunk haul of a journey. The U.S. airports of Buffalo, Burlington and Seattle are viable alternatives to Canadian airports at Toronto, Montreal and Vancouver. They also offer access to the U.S. international aviation networks which are an alternative to Canadian international services. The effects of deregulation in the United States, and in particular the entry of new, low cost carriers such as People Express into the market, was to attract Canadian travellers across the border. Air Canada was particularly adversely affected by this action. Some indication of the dramatic effects on emplanements at Burlington International Airport, for instance, after the initiation of a People Express service to Newark at the end of 1982 are seen in Figure 1. The Canadian airlines were not always passive in the face of the threat of losing traffic across the border and there were periodic sales of seats at up to 75% discount on the economy fares. The reaction was sufficient to cause some U.S. carriers register complaints to their Civil Aeronautics Board.

²⁴ Evidence given in 1982 indicates that all the major airlines were recovering at least the variable costs of each individual routes operated, see, *Minutes of Proceedings and Evidence of the Standing Committee on Transport Regarding the Government Entitled Proposed Domestic Air Carrier Policy (Unit Toll Services), August 1982*, Parliamentary Session 32, 1st Session, 1982.

²⁵ T.H. Oum and M.W. Tretheway, 'Reforming Canadian airline regulation', *Logistics and Transportation Review* 20, pp.251-264, 1984.

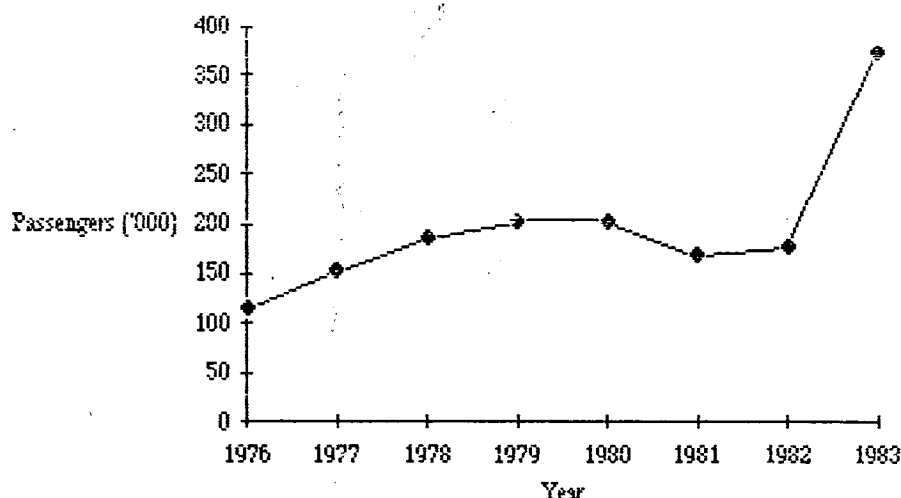


FIGURE 1

Passenger Emplanements at Burlington Vermont²⁶

There were also major fears of shifts of international traffic away from Canadian airports, and hence Canadian carriers, to those in the U.S.A. The Canadian airlines countered this by lowering fares on international routes to keep them in line with U.S. competitors. This meant that on many routes Canadian services were priced in line with deregulated U.S. services - a point subsequently used by those favouring retention of entry controls in Canada.

The liberalization of the U.S. market also offered some guide-lines as to the underlying structure of a free market aviation industry. The early years of U.S. liberalization were clouded by the transitional institutions which still exercised some residual powers, by the nature of transition itself, and by the depressed state of the U.S. economy for several of the years immediately after the enactment of the 1978 Act²⁷. However, despite the difficulties of defining an appropriate counterfactual for comparative purposes, the early evidence from the U.S.A. was encouraging for those supporting liberalization.

Studies were appearing suggesting that fares were lower than they would have been under the old regime (one set of calculations indicating fares in 1980 were on average 76.6% of those suggested by the formula used in the old regime compared with an average of 96.8% in 1975²⁸). The range of fare/service combinations on offer expanded considerably to meet the demands of

²⁶ Derived from, Oum and Tretheway, 1984, *op cit* Table 4.

²⁷ A useful account of the short term effects of the 1978 U.S. Airline Deregulation Act is to be found in J.R. Meyer and C. W. Oster (eds), *Airline Deregulation: The Early Experiences*, (Auburn House: Boston) 1984.

²⁸ E.E. Bailey and J.C. Panzar, 'The contestability of airline markets during the transition to deregulation', *Law and Contemporary Problems*, 44, pp.125-145, 1981.

different market segments. Overall, it was estimated that the benefits to air travellers of having more services tailored to their needs and their particular financial position generated savings of about \$6 billion (in 1977 prices)²⁹. Further, accident rates, and these are particularly difficult to evaluate in the short term, showed no significant deviation from the generally falling, historical pattern³⁰. There was also evidence that smaller communities, despite significant changes in the types of service being offered, were not seriously adversely affected by the change³¹.

While the impact of regulatory reform provided encouragement for those in Canada favouring similar moves - these being most notably consumer groups (e.g. the Consumers' Association of Canada), Consumer and Corporate Affairs Canada, the majority of the academic community and, from 1983, the Liberal Minister of Transport³² - others were less enthusiastic. They suggested some caution was appropriate in taking the U.S. experience too completely. It was, after all, only the short term effects which had materialized by this time.

Further, significant differences existed between the U.S. and Canadian aviation markets. The former was much larger and the market much more diverse. In particular, the Canadian route structure is largely linear (East-West) and there is only one major hub on a par with the large ones in the U.S.A., namely Toronto. Linked to this is the limited number of high density routes in Canada - for example, in 1985 45.4% of all domestic air travel was concentrated on 25 markets.

Additionally, the airlines differ in scale. An estimate of the combined revenues of the main U.S. carriers in 1982, for example, was \$35.6 billion compared with \$3.1 billion for Canadian airlines³³. There are also, relatively, far more 'thin' routes in Canada than in the U.S.A. The Canadian airlines are themselves small relative to the main U.S. carriers and the Canadian aviation industry is much more concentrated³⁴. The U.S. industry has also always been entirely privately owned and not been the subject of public ownership at either the national level (as with Air Canada) or the provincial/state level (as with many of the regional carriers). Public

²⁹ S.A. Morrison and C. Winston, *The Economic Effects of Airline Deregulation* (Brookings Institution; Washington) 1986.

³⁰ W.J. Jordan, 'Economic deregulation and airline safety', in *Proceedings of the 21st Annual Meeting of the Canadian Transportation Research Forum*, (CTRF; Vancouver) 1986.

³¹ Bailey, Graham, and Kaplan, 1985, *op cit*.

³² Oum and Tretheway, 1984, *op cit*, especially pp. 276-277.

³³ D.W. Gillen, T.H. Oum and M.W. Tretheway, *Canadian Airline Deregulation and Privatization: Assessing Effects and Prospects*, (Centre for Transportation Studies, University of British Columbia; Vancouver) 1985.

³⁴ Gillen, Oum and Tretheway, 1985, *op cit*, for example, point to the fact that in 1982, the largest U.S. carrier, United Airlines accounted for 13% of the industry's revenues and 14% of its revenue tonne kilometres whereas Air Canada accounted for 56% and 53% respectively.

ownership in Canada extends to all the major airports whilst in the U.S.A. there is considerable local government involvement.

Adding to these external forces were the problems being encountered by the Canadian carriers as a result of macroeconomic conditions within the country and changes in factor costs.

Central to the situation was the fact that the Canadian economy, like most others, went into recession in the early 1980s. Economic growth slowed in 1981 and real Gross Domestic Product fell in 1982 (see Figure 2) before recovery was initiated. This put pressure on Canadian airlines as demand for air travel declined; the revenue passenger kilometres of level-1 Canadian carriers fell from 36.1 billion in 1980, to 35.4 billion in 1981, to 32.1 billion in 1982 and bottomed out at 31.3 billion in 1983. The corresponding passenger figures were (in terms of emplaned passengers), 55.1 million (1980), 55.0 million (1981), 49.4 million (1982), and 47.8 million (1983).

The impact of depressed demand was compounded by the fact that from 1979 there had been a dramatic rise in fuel prices which hit the aviation industry particularly severely. The price of aviation fuel rose by nearly 240% between November 1978 and March 1981.

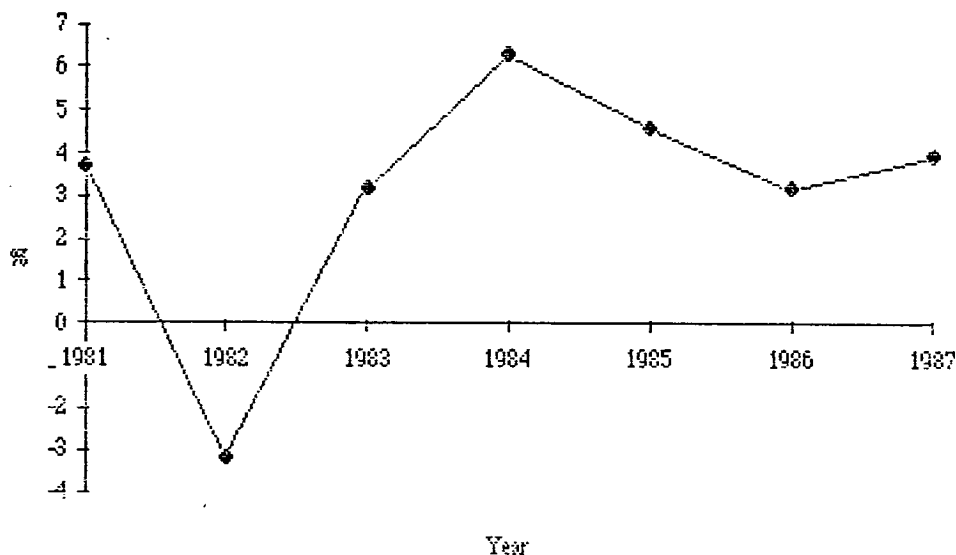


FIGURE 2

Annual Percentage Growth in Real Canadian Gross Domestic Product, 1981-1987.

The profits of the major airlines declined dramatically, see Figure 3. The smaller carriers encountered similar problems as was clear from the financial difficulties experienced by

Quebecair in 1980 and the subsequent injection of \$15 million that the Quebec government put into the company after an offer of acquisition by Air Canada had been rejected. The charter carriers also had problems as illustrated by the bankruptcy of Sun Charters.

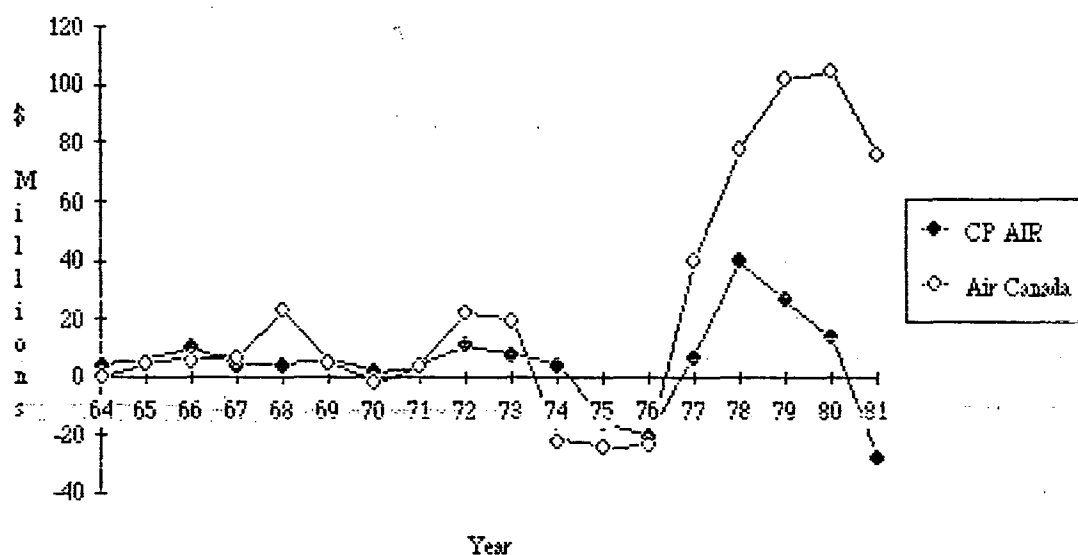


FIGURE 3
Reported Profits for Air Canada and Canadian Pacific Airlines (CP Air)
1964-1981

4 *De Facto to De Jure Deregulation*

The initial moves in the early 1980s by the, then, Conservative government were to further relax controls over the charter operators (especially allowing Wardair greater penetration of the transcontinental market) and to permit scheduled operators greater freedom to match the fares of the charter carriers. In particular, last minute one-third, top-off sales were allowed. It was in effect, however, an effort at fine tuning the existing regime of regulation rather than any major shift in the thrust of policy³⁵.

³⁵ A point made in, House of Commons Standing Committee on Transport, *Domestic Air Carrier Policy*, Ninth Report of the House of Commons Standing Committee on Transport, 1982.

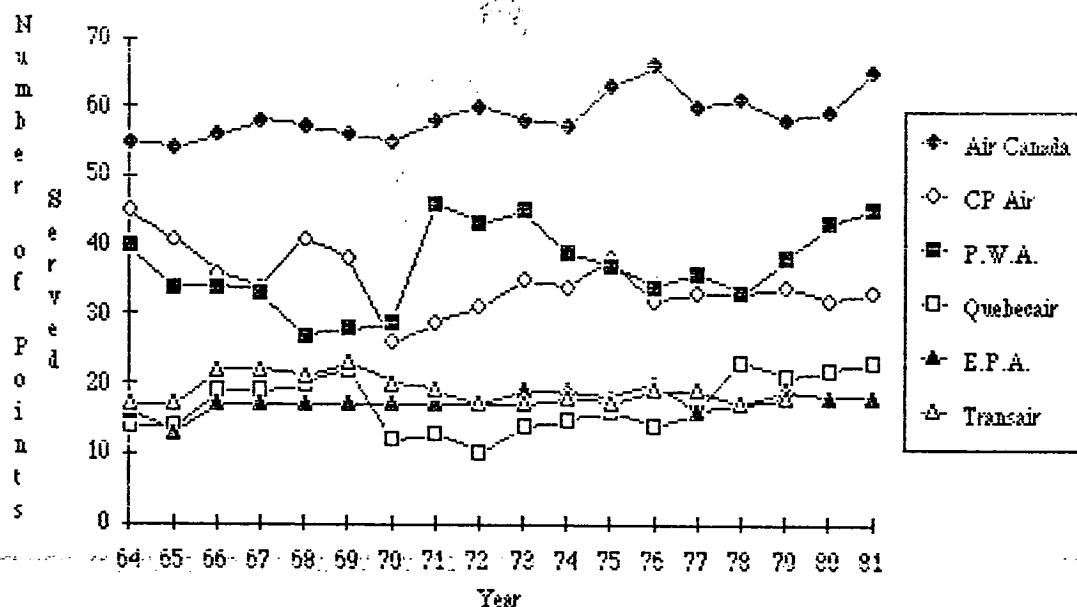


FIGURE 4

Points Served by Scheduled Flights by Airline, 1964-1981

The airlines themselves responded to the depressed market situation by attempting to develop more services, i.e. rather than to reduce costs and concentrate on core operations they, in general tried to expand their revenue base. Given constraints over fare levels, there is a natural tendency to compete in terms of service and hence this becomes important when the expansion of revenue is a central objective. The number of points served, for example, rose during the early years of the 1980s (see Figure 4). The airlines also made use of what flexibility in fare setting they enjoyed. Air Canada, with a better timed service, tried to capture traffic from the charters by undercutting Wardair fares with seat sales (at up to 35% discount) on such routes as Vancouver-Toronto. In fact, according to some commentators³⁶, Air Canada had always enjoyed some advantages over the charter operators even prior to the change in its regulatory control in 1977. In particular, it enjoyed fewer administrative delays in gaining acceptance of fare changes or for the provision of part charters on scheduled services.

These moves, both by government and the airlines, did little to remedy the mounting problems of the industry or reduce the pressures for further reform. The depressed aviation industry was slow to recover from the recession of the early 1980s. As we saw above, the fall in revenue passenger kilometres did not bottom out until 1983 and this picture is reinforced by Figure 5 which offers some indication of the temporal pattern of aircraft movements in Canada. The scheduled Canadian airlines also still faced severe competition from an increasingly efficient U.S.

³⁶ See T.L. Spalding, 'Civil aviation policy in Canada and its effects on international and domestic charter services', in G.B. Reschenthaler and B. Roberts (eds), *Perspectives on Canadian Airline Regulation* (Institute for Research on Public Policy, Montreal) 1979.

industry over certain routes and the charter carriers had grown in importance, despite the institutional constraints confronting them, throughout the late 1970s.

There were other, less easily quantifiable problems. In particular, consumer groups expressed concern about the rather arbitrary form fare discounting was taking. Equally, the regulators were concerned with some of the practices being adopted to capture passengers. The Air Transport Committee, for instance, was concerned with the proclivity of carriers to advertise and book passengers at low fares immediately these were filed. This made rejection of the new fare politically more difficult.

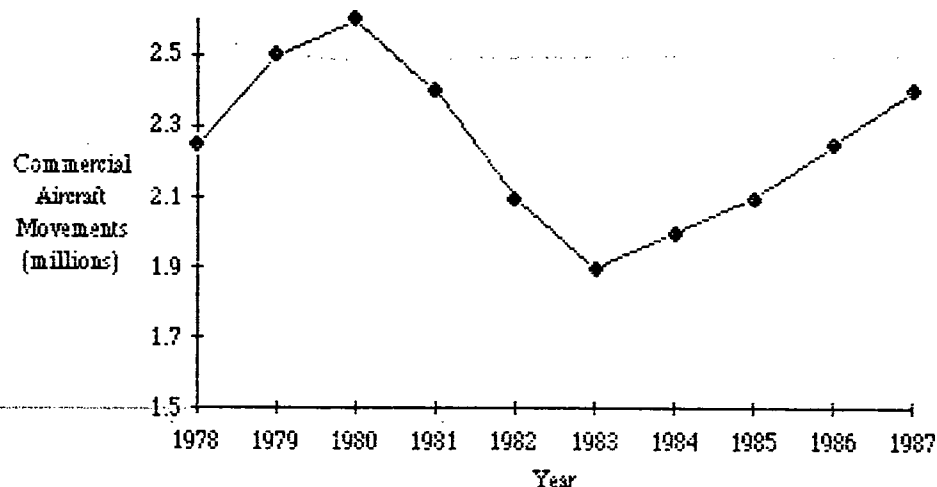


FIGURE 5

Commercial Aircraft Movements at Airports with Transport Canada Air Traffic Control Towers³⁷

The major shift in policy towards the current very liberal regime over most of the system can be traced to the appointment of Mr. Lloyd Axworthy as Minister of Transport in 1983. In order to distance the arm of government and its regulators from the airlines, and hence reduce the potential for regulatory capture³⁸, one of his first acts was to cause employees of Transport Canada and the Air Transport Committee to give up their passes entitling them to free air travel. He also quickly set in train two courses of action designed to gain more direct information on to the prospects for liberalizing Canada's domestic aviation industry. Firstly, the Air Transport Committee was asked to conduct public hearings on air fares policy (in the very widest sense, including questions of market entry/exit where relevant). Secondly, and concurrently, an

³⁷ Taken from, *Aircraft Movement Statistics: Annual Report 1987* (Aviation Statistics Centre, Statistics Canada, Ottawa) 1988. The data refers to itinerant movements by commercial carriers.

³⁸ For an account of the theory of regulatory capture see, G. Stigler, 'The theory of economic regulation', *Bell Journal of Economics*, 2, pp.3-21, 1971.

independent task force was given the remit to examine the ways of adapting the U.S. regime of deregulation to meet the specifics of the Canadian market³⁹.

As one may anticipate, no consensus emerged from these deliberations. In general the major airlines favoured some relaxation of constraints but still advocated the retention of fare floors, controls over discounting and restraints on market entry. This stance was, in broad terms, not dissimilar to that of the Air Transport Committee. This position differed from that of most user organizations and went against the main body of available academic research.

The outcome was, to a large extent determined by the change of Prime Minister in early 1984 and the subsequent calling of an election. The Transport Minister, given the impossibility of legislative change, initiated a 'New Canadian Air Transport Policy' in May aimed at introducing a degree of flexibility into the existing legislation through *de facto* means⁴⁰. Moral suasion, for example, through government statements was exercised to loosen the Air Transport Committee's policies on entry and pricing. The legal position was such that conditions of "public convenience and necessity" still had to be met if a new licence was to be authorized, but the intention was to modify the Committee's interpretation of the condition. Ministerial powers of granting appeals against Air Transport Committee rulings were also exercised⁴¹.

The Air Transport Committee published its own findings favouring a policy aimed, in the long term at 'controlled competition'⁴². Regulations needed relaxing but only in a limited fashion. For example, it argued for mandatory restrictions on deep discounts and for the continuation of the Regional Air Carrier Policy.

The new policy was seen as part of a longer term process which would, over two years, give airlines freedom to reduce prices but limit rises to increases in an input price index. At the same time restrictions over discount fares would be removed. Entry to the charter markets in the south of Canada would be freed whilst at the same time exit would be easier for carriers unable to compete in the new environment. New entrants to the scheduled market were to be treated on equal terms with incumbents when it came to the allocation of airport slots. At the more local level, it was envisaged that the Regional Air Carrier Policy would be repealed although services in the north - the more remote parts of the country broadly corresponding to the area above a line

³⁹ For a contextual background set against Canadian transport policy at the time, see, A.P. Ellison, 'Regulatory reform in transport: a Canadian perspective', *Transportation Journal* 23, pp. 4-19, 1984.

⁴⁰ Minister of Transport, *New Canadian Air Policy* (Department of Transport; Ottawa) 1984.

⁴¹ Some pending appeals were granted almost at once, especially some running counter to the Regional Air Carrier policy, both as an illustration of intent and as liberalizing actions in themselves.

⁴² See Canadian Transport Commission, *Interim Report of the Air Transport Committee of the Canadian Transport Commission on Domestic Charter and Airfare Issues*, (Canadian Transport Commission, Air Transport Committee; Ottawa) 1984.

stretching from the 55th parallel on the Pacific coast to the 50th parallel on the Atlantic coast - would remain regulated for social reasons. Finally, Air Canada was to relinquish Nordair (which it had acquired in 1978) and it was not to engage in deliberate competitive practices unless private carriers initiated such actions.

This period also saw changes in the regulation of trans-border aviation. As we have seen above this is a very important element of the Canadian industry. The trans-border aviation market is, like most international aviation in the world, regulated through a bilateral agreement with the U.S. The major agreement in this case was that signed in 1966⁴³. This agreed route schedules for both nations' carriers with one carrier from each on most routes unless mutually agreed otherwise. Fares had to be agreed by both countries but the airlines were left to determine their own capacities on each route and the aircraft they would deploy. Charter operations came under a separate, later agreement⁴⁴. This allowed considerable flexibility in the way charters operated (e.g. over fares, frequency, type of aircraft, etc) but reserved powers to call for negotiations should their actions interfere excessively with scheduled services or the charter operators from the other country. The stated policy was to have broad compatibility between the number of passengers carried by each country's charter air services and the level of traffic originating from that country. Since the majority of traffic was Canadian (i.e. trips for recreational purposes to the "Sun" destinations in the U.S.A.) this meant that the Canadian charter companies would enjoy the largest share of the market.

Rather perversely, the agreement also required the U.S.A. carriers to have between 25% and 40% of the market by 1978 - a figure which was never even approached and in the early 1980s the Canadian charter airlines accounted for something over 90% of all trans-border traffic. This contrasts to the 40% of scheduled trans-border traffic which, because of the power of the hubbed U.S. carriers, the Canadian airlines managed to capture⁴⁵.

The changes to this regime in 1984 reflected the gradual liberalization policy which the U.S., in particular, had been pursuing in international aviation more generally. Two new agreements were signed. The first of these related to commuter and local services and allowed for the greater ease of obtaining approval to operate new services. Automatic procedures were agreed for most

⁴³ Department of External Affairs, 'Air agreement between Canada and the United States of America', *Canada Treaty Series, No.2*, (Department of External Affairs; Ottawa) 1966. For a review of the details of the earlier agreements see, P.P.C. Haanapel, 'Bilateral air transport agreements between Canada and the United States', *Annals of Air and Space Law* 5, pp.133-153, 1980.

⁴⁴ Department of External Affairs, 'Non-scheduled air service agreements between the Government of Canada and the Government of the United States of America', *Canada Treaty Series, No.16*, (Department of External Affairs; Ottawa) 1975.

⁴⁵ See, M. Dresner, C. Hadrovic and M.W. Tretheway, 'The Canadian-U.S. air transport bilateral: will it be freed?', paper presented to the Canadian Transportation Research Forum, Ottawa, 1988 and reproduced in a shorter form in *Air Transport Management*, March/April, pp.9-12, 1988.

types of service. Secondly, there was the initiation of an experimental trans-border programme aimed at developing new services and testing the viability of new pricing systems. Access to Mirabel Airport by designated carriers operating from all but seven U.S. airports was to be unrestricted and any number of the designated carriers could offer these services. Fares were not controlled unless both countries objected. As a balance, the U.S. airport of San Jose was subsequently designated as an experimental U.S. airport with similar rules applying⁴⁶.

Subsequent discussions between the U.S.A. and Canada to further liberalize trans-border services have failed to achieve any consensus. Indeed, while free trade in aviation services was one area included in the U.S./Canadian Free Trade Agreement reached at the Shamrock Summit Declaration in March 1985, inability to reach final agreement has meant its exclusion from the subsequent treaty. While both parties submitted proposals which would have considerably liberalize the market, they differed in philosophy. The Canadian 'Concept Paper' favoured a common market approach covering both countries while that of the U.S. was concerned simply with deregulation of trans-border traffic and adjusting the rights of Canadian airlines operating services to the U.S. to correct for their structural disadvantages. Clearly the passenger would have benefited from either scheme but the airlines on both sides of the border feared for their position - U.S. carriers for example arguing that other countries may demand cabotage rights if Canadian airlines were granted them as under the Canadian proposals.

The return of a Conservative administration to power in late 1984 ensured the continuation of the movement towards greater liberalization⁴⁷. In the following year, *Freedom to Move* was published setting out the general philosophy behind the government's transport policy⁴⁸. The policy was to be based on, "the principles of greater reliance on competition and market forces, a reduction of government interference and regulation, and the creation of a regulatory process that is open and accessible". While covering all modes of transport, the document had particular implications for domestic aviation⁴⁹.

The proposals contained in the policy statement advocated almost complete deregulation of Canadian aviation with the U.S.A. Subsequent pressure from the airlines and other interested parties, led to a somewhat more restrictive piece of legislation subsequently being drawn up in

⁴⁶ For an account of the problems being met see, Dresner, Hadrovic and Tratheway, 1988, *op cit* and D.W. Gillen, T.H. Oum and M.W. Tratheway, 'Survival under free skies', *Air Transport Management* 1, pp.10-13, 1988.

⁴⁷ For example *Wairair* began operating domestic schedule services in May 1986.

⁴⁸ Transport Canada, *Freedom to Move: A Movement for Transportation Reform* (Transport Canada; Ottawa) 1985.

⁴⁹ For a more general review see, T.D. Heaver, 'Transport regulation and privatization in Canada', paper presented to the *Canada-U.K. Colloquium on Privatization and Deregulation in Britain and Canada*, (Glasgow) 1987.

1986 and being passed into law as the National Transportation Act the following year⁵⁰. Enactment was from January 1st 1988. In addition to this, in 1987 the former 'spheres of influence' division of international markets between Air Canada and CP Air was ended and route trading took place allowing, for instances Air Canada to operate Pacific routes. There was also a liberal agreement reached with the United Kingdom over trans-Atlantic services.

This retained some degree of economic regulation in the sparsely populated northern part of Canada where services were to be provided based on a "fit, willing and able" test but subject to the caveat that new services would not, "lead to a significant decrease or instability in the level of domestic service". In 1986 there were 25 airlines operating in the north although all but four routes were monopolized by a single carrier. The new regime is intended to introduce considerably more competition. The onus of proof has been switched from the airlines needing to justify a service to objectors having to demonstrate serious potential adverse consequences. The new National Transportation Agency still has the power to control the routes to be followed, the areas to be served, schedules, fares, insurance requirements, etc. and market exit must be preceded by a period of notice. Subsidies are provided for essential services although, in an effort to maximize efficiency these are allocated through a tendering system⁵¹.

Southern Canada was to enjoy a much more liberal regime although still subject to some controls. The "fit, willing and able" criteria still applies but any service can be provided on condition that the carrier has an operators licence, there is adequate insurance cover and there is proof of 75% Canadian ownership of the airline. In most senses, therefore, the Act introduced an environment in southern Canadian markets akin to that existing in the U.S.A. since 1978 - it abolished entry, exit and fare controls as did the Airline Deregulation Act and also the regulation of flight frequencies and aircraft types used which were never controlled in the U.S.A. There are, though, some differences. While fares are not controlled there is provision for the national Transportation Agency to disallow "unreasonable" fare increases on routes where "there is no other alternative effective, adequate and competitive transportation service". Interestingly, Alfred Kahn who, as chairman of the Civil Aeronautics Board, was responsible for carrying through the U.S. reforms, would seem to have some sympathy with such a policy, *viz* "I hope I do not shock anybody by observing that I probably would have been very reluctant to abandon price ceilings entirely had I the choice. All [U.S.] studies of airline pricing since deregulation confirm

⁵⁰ The Act is multi-modal and its Part II which applies to air transport.

⁵¹ Oum and Tretheway, 1984, *op cit* had earlier expressed some concern that without a clear plan of compensation, subsidies for remote services could be open to abuse. Airlines running services in both the north and south might try to cross-subsidize the latter by obtaining funding for the former. Tendering should offer at least a partial solution to this.

that reluctance: market concentration does matter, and their general trend over time has been towards the conclusion that it matters a great deal"⁵²

The rules on mergers were also modified to require due notice of change of ownership and, if there are objections, the National Transportation Agency is left to determine whether the merger or acquisition is in the public interest. The new general Competition Act 1986 is less strict than this but because of the earlier decision of the Supreme Court of Canada in *B.C. Law Society v. Jabour* in 1982 there is some ambiguity as to the applicability of the Act to aviation⁵³. The Act has, however, been invoked in the context of computer reservation systems

A final strand in the deregulation process has been the privatization of Air Canada. The objective of such a move is effectively to remove any real or supposed advantage a Crown Corporation may have in the market place over its privately owned rivals⁵⁴. In addition, it is worth noting that privatization is also taking place at a time when Air Canada wishes to replace its aging fleet of Boeing 727s and DC9s and private finance may, from a macroeconomic perspective, be an attractive way of financing some of the cost. The programme of privatization, with a 10% limit on individual share holdings (but with the State retaining, at least in the short term, a majority, 55% holding) is aimed at ensuring a spread of equity with no dominant, controlling interest. Counter to this, of course, is the power exercised by the so-called 'technostructure'⁵⁵ in companies with such diversified ownership. Whether the airline has sufficient market power to survive operating at less than maximum efficiency for any length of time will depend upon the degree to which it can shelter itself from the full forces of competition.

5. Pre-1988 Changes in the Canadian Aviation Industry

Since airlines were given considerable warning of the impending legal deregulation of Canadian aviation markets, and indeed a phased *de facto* liberalization preceded it, there was time for them to adjust to what they thought the new conditions would require from them. The airlines

⁵² A.E. Kahn, 'Surprises of airline deregulation', *American Economic Review, Papers and Proceedings*, 79, pp.315-322, 1989.

⁵³ See W.T. Stanbury and M. W. Tretheway, 'Analysis of the Changes in Airline regulation proposed in Bill C-18', *Minutes of Proceedings and Evidence of the Standing Committee on Transport*, Issue 17, 1987.

⁵⁴ It has been suggested, for example, that government ownership may mean a lower cost of capital and that this in turn may make the costs of predatory behaviour lower, see D.W. Gillan, T.H. Oum and M.W. Tretheway, 'Entry barriers and anti-competitive behaviour in a deregulated airline market: the case of Canada', *International Journal of Transport Economics*, 15, pp.29-41, 1988.

⁵⁵ The term applies to the management and advisers in a company who are freed from the rigours of the market place and hence able to pursue their own, not necessarily commercially optimal, objectives because of the lack of effective control which accompanies dispersion of ownership. See K.J. Galbraith, *The New Industrial State* (Houghton Mifflin; Boston) 1967

essentially adopted proactive strategies in an effort to gain the best position when the market became fully deregulated.

There was increased concern from the established scheduled carriers over the effects of the expanding competition on the high-density routes being offered by Wardair. The spate of mergers which also occurred during the mid-1980s (see below) added to this competitive environment. As a result, and in an effort to maintain market share, an increasing amount of traffic began to be carried on discount fares. In 1978 less than 15% of the two major carriers' revenue came from discount fares but by 1985 this had risen to 60%. Figure 6 provides some indication of the recent trends, allowing for seasonal variations but note that the above trend increase in discount travel in the third quarter of 1986 is mainly due to EXPO in Vancouver rather than any dramatic shift in the airlines's strategies at that time.

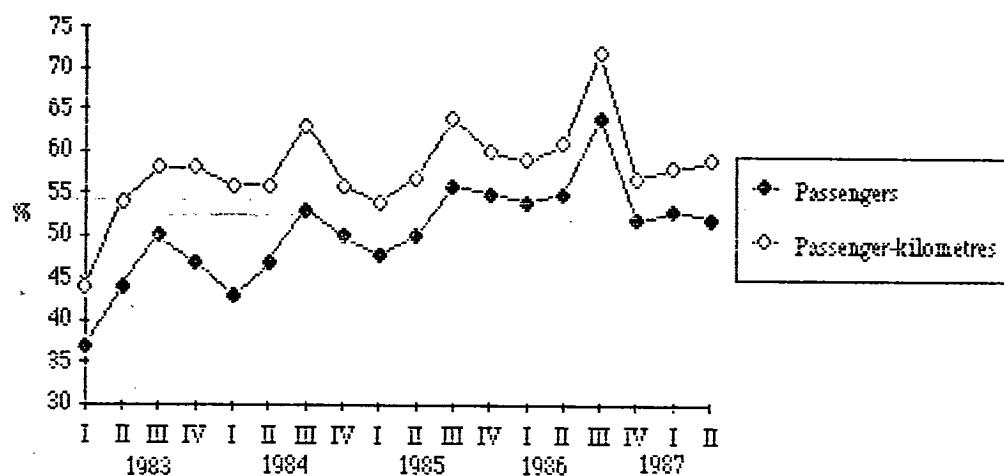


FIGURE 6

Trends in Percentage of Traffic using Discount Fares (1983-1987)⁵⁶

One of the important features of the longer term effects of U.S. deregulation has been the large number of mergers and acquisitions which have taken place. This trend only emerged some time after the market liberalization - the initial response being more in terms of the creation of new airlines and the expansion of existing (especially intra-state) carriers. Mergers in Canada have a somewhat longer tradition than in the U.S. and were employed as a means of handling problems when airlines encountered financial difficulties under the regulatory system but could not exit from loss making routes. Since 1984, however, there have been major changes in the nature of these mergers, with the market share of the two largest carriers considerably enhanced (see Table

⁵⁶ Taken from Statistics Canada, *Airline Statistics Centre - Service Bulletin* 2(8), p. 11, 1988.

1)⁵⁷. In particular, the formation of Canadian Airlines International through mergers has meant a genuine competitor to Air Canada exists on all major routes.

In more detail, the important mergers and acquisitions in recent years were CP Air's acquisition of Eastern Provincial Airways Inc. in 1984 and the subsequent merging of the two to become Canadian Pacific Air Lines two years later. The company then acquired a 99% holding in Nordair by the middle of 1986 with a formal merger resulting the following year. In turn, Canadian Pacific Airlines Ltd was purchased by the Pacific Western Airlines Corporation and the undertakings merged in 1987. As a product of the earlier merger with Nordair, this also gives Canadian Airlines International Ltd. a 35% share in Quebecair, now conducting business as Inter-Canadien with links to Nordair-Metro and Quebec Aviation. *En route* to this conglomerate of airlines, a number of third-level carriers were also taken over, e.g. Canadian Pacific Air Lines acquired Air Atlantic in 1986, while Air Canada acquired Air B.C., and a majority shareholding in Air Ontario and Austin Airways in 1986.

Airline	Domestic Market Share (% Revenue)
Air Canada	50-55
Canadian Airlines International	35
Wairdair	7
Small Regionals	Remainder

TABLE 1
Share of the Domestic Canadian Aviation Market (1987)

The airlines anticipating the ultimate liberalization of markets, and with the benefit of hindsight from the U.S. experiences, attempted to form themselves into hub-and-spoke style operations similar to those which now dominate American domestic aviation operations. Essentially, the aim of the mergers was to ensure a powerful market position with good feeder services to their main hubs. The objective was, therefore, to try to exploit economies of density to the maximum. In particular, acquisition of local airlines was seen as a quick means of attaining control over the vital feeder services - see Table 2 for details of the resultant ties between the two largest scheduled operators and their affiliates.

⁵⁷ E.g. see, Gillen, Stanbury and Tretloway, 1988, *op cit*.

Much of the empirical evidence on the costs structure of the Canadian industry conforms to that of the U.S.A.⁵⁸. It is found that there are very few economies of scale in terms of the size of network served, but that there are marked economies of density up to quite large traffic volumes. There are indications that Air Canada was at about the minimum efficient traffic density prior to the mergers in the mid-1980s but that CP Air still had scope for expansion of traffic density - its subsequent mergers effectively enabled it to achieve them on this scenario.

Air Canada		Canadian Airlines International	
Affiliates	Relationship	Affiliates	Relationship
Air Ontario	75% Ownership	Inter-Canadian	35% Ownership
Air BC	100% Ownership	(includes: <i>Quebecair</i>	
Air Nova	49% Ownership	<i>Quebecair Inter</i>	
Air Alliance	75% Ownership	<i>Nordair Metro</i>)	
Northwest Territorial	90% Ownership	Ontario Express	49% Ownership
Air Toronto		Time Air	46% Ownership
(<i>Commuter Express</i>)	codesharing	(includes: <i>Norcanair</i>)	
		Air Atlantic	45% Ownership
		Calm Air International	5% Ownership
		Air St Pierre	codesharing

TABLE 2
Major Airline Affiliations (1988)⁵⁹

Whether the mergers have proved successful is a difficult question to answer given both the on-going process of change which is taking place and the comparatively recent incidents of the unions. The evidence from the U.S. is that many of the mergers which have occurred there, albeit after deregulation rather than in an intervening period of gradual liberalization, have been misguided⁶⁰. Basically, the argument is that there are few economies associated with diversification and that the successful mergers have involved combining airlines with similar operation features, and even here short term problems arise and a high degree of rationalization is often required to reduce operating costs to pre-merger levels⁶¹. Many of the demand side

⁵⁸ See D.W. Gillen, T.H. Oum and M.W. Tretheway, *Airline and Performance Implications for Public and Industrial Policies* (Centre for Transportation Studies, University of British Columbia: Vancouver) 1986.

⁵⁹ From Table 3 of *Airline Industry Review: Second Quarter 1988* (Air Statistics and Forecasting Branch, Economic Analysis Directorate, Policy and Co-ordination Group, Transport Canada, Ontario) 1988.

⁶⁰ For example, Jordan, 1989, *op cit*, and W.A. Jordan, *Comparative Analysis of Airline Performance in Canada and the United States*, Report for Transport Canada Submitted to the Standing Committee on Transport, House of Commons, March 1987.

⁶¹ This is also very much in line with the recent findings relating to the economic rent enjoyed by U.S. carriers (see E.E. Bailey and J.R. Williams, 'Sources of economic rent in the deregulated airline industry', *Journal of Law and Economics*, 31, pp.173-202, 1988) although the conclusions stem from a different starting position.

advantages of mergers (e.g. common identity, economies of information dissemination, etc) can be obtained in scheduled aviation where there is diversity in the services provided by means of the use of shared designation codes, linked frequent flyer programmes, integrated timetabling, etc without actual merger. (Indeed, there is evidence of this already happening in Table 2 above.) Hence the merger between Pacific Western and Transair - two regional carriers with similar types of operation - in 1979 only saw a slight and temporary fall in profits ~~and~~ other carriers (see Figure 7). However, the resultant network of the points served by the combined airlines had, by 1980 been reduced by eleven points compared to the 1977 figure. Similarly, and here the time covered is much shorter, the acquisition of Eastern Provincial by Canadian Pacific and their subsequent merger has done little to improve the latter's financial position (see Figure 8) which declined from a small profit in 1986 to losses immediately after the acquisition.

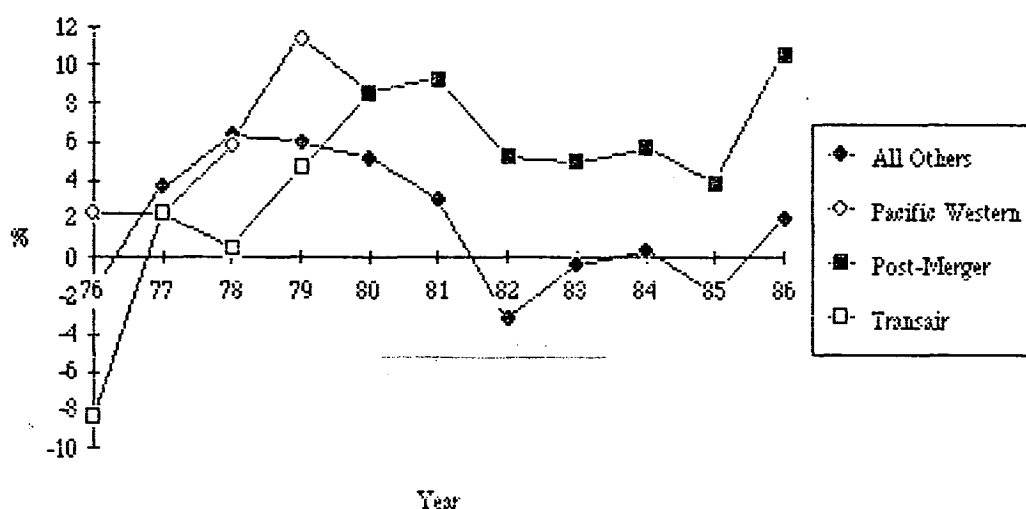


FIGURE 7

Before Tax Profits (as % of Operating Revenue) of Pacific Western and Transair, Pre and Post Merger⁶²

An interesting question arising from this phenomena is whether the gradualism of the deregulation in Canada has permitted necessary rationalizations after mergers to be completed with less disruption. In the U.S.A. case the mergers occurred after deregulation when the shelter enjoyed by airlines had been removed. The Canadian situation is different in that the major mergers took place during the transitional phase and, while rationalizations have resulted, the subsequent period has not seen the financial difficulties emerge some merged U.S. carriers experienced. There has been time for errors and mistakes to be at least partly rectified.

They essentially, using the competitive-spectrum approach, break down a seemingly oligopolistic market and consider the possibility of earning local monopoly rents by exercising, for example, regional monopoly power. In the case of airlines, product differentiation permits limit pricing and is akin to local monopoly power in special markets. Diversification, therefore, is unlikely to generate additional profits.

⁶² Derived from data in W.A. Jordan, 'Problems stemming from airline mergers and acquisitions', *Transportation Journal* 27, pp. 9-30, 1983.

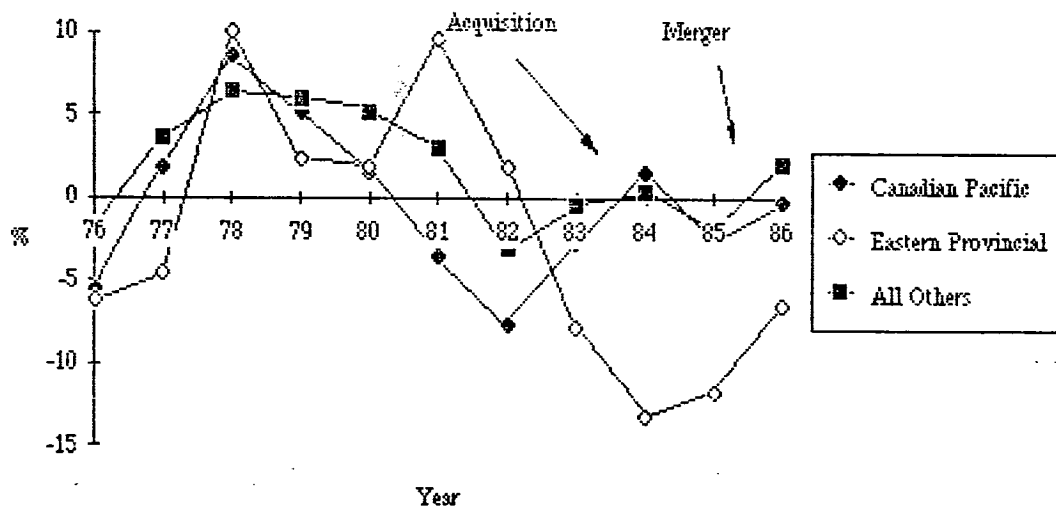


FIGURE 8

Before Tax Profits (as % of Operating Revenue) of CP Air and Eastern Provincial, Pre and Post Acquisition⁶³

In operational terms the mergers have resulted in a duopoly situation on most major routes with Wardair gradually building up as a third force. The evidence from the U.S.A. is that the existence of actual competition on a route tends to be preferable to the weaker forces of the existence of only potential competition. These findings suggest, however, that competition limited to two carriers (or three where Wardair is active) is still not a strong force for low fares⁶⁴. The duopoly in this case, however, has been reinforced by the actions of the airlines involved and this may well reduce the benefits of actual 'competition' compared with the U.S. experience.

Airport capacity problems in Canada, with the marginal exception of Toronto's L.B. Pearson Airport, are not severe. There are, however, peaks in demand and slot allocation can be important at these times. In all cases there are Schedule Co-ordinating Committees consisting of representatives of the main users and these allocate slots. Normally, either Air Canada or Canadian Airlines International take a "strong leadership" position in these Committees⁶⁵. There is thus scope for incumbents to limit the availability of prime take-off/landing slots to potential entrants.

⁶³ Derived from data in Jordan, 1988, *op cit*.

⁶⁴ S. Morrison and C. Winston, ('Empirical implications and tests of the contestability hypothesis', *Journal of Law and Economics*, 30, pp.53-56, 1987), for instance found that the existence of an actual competitor was three time more powerful in influencing a carriers behaviour than cases where free entry was possible but not being exercised. T.G. Moore, ('Airline deregulation: its effects on passengers, capital and labor', *Journal of Law and Economics*, 29, pp.1-28, 1986) found that markets with five or more carriers enjoyed lower coach fares than those with fewer while Bailey, Graham and Kaplan, 1985, *op cit* found that there was a 5% fare differential between routes with two equal sized carriers and those with four.

⁶⁵ Gillen, Oum and Tretheway, 1988, *op cit*, p.38.

Equally, the major airlines often have enjoyed 'grandfather' rights to particularly favourable terminal gates or even (as at Vancouver International Airport) to allocate gates. Again, entrants are confronted with the prospect of finding difficulty in gaining the use of adequate and suitable gates. Finally, the dominant airline at a terminal usually provides ground facilities (fueling, baggage handling, aircraft maintenance, etc.) and sells these services to other users and there is the potential for a high price to be extracted.

The airlines have also attempted to protect their individual markets by use of frequent flyer programmes designed to push up the cost of entry for new rivals and protect market share from encroachments by rival incumbents. These programmes, which were started by American Airlines in the U.S.A., offer bonus flights or up-gradings on flights after traveling with an airline for certain mileages. Frequent flyer programmes instil brand loyalty in customers but to attract them in the first place it is necessary to have a good network over which collectors can use their coupons and to have the resources to fund the administration of the scheme⁶⁶. The Canadian programmes began in 1967 but now virtually all airlines operate one either in their own right or, on payment of a fee, as a member of one of the majors' schemes.

Linked with this has been the increase in designator code sharing which both helps to protect the flow of feed traffic to the majors and at the same time ties the smaller airlines to them⁶⁷. As mentioned above this gives a major advantages on the demand side without the managerial difficulties of controlling a heavily diversified airline. It does mean, however, that potential entrants are confronted with incumbents which can offer a wide network of services. Building up threshold levels of traffic is difficult in these cases for potential entrants and the option is often to engage in designation code sharing with an incumbent. This will normal involve a payment of a subscription fee which must eventually be passed on in higher fares.

While these practices are adopted in many countries by airlines to protect their individual positions, in Canada Air Canada and Canadian Airlines International have, in addition, combined in a fashion which appears to offer mutual protection of their duopoly. They joined in 1967 to establish a single computer reservation system. The vast majority of air tickets (some 80%) are sold through travel agents in Canada and most of these agents make use of computerized reservation systems. The airlines actually own the system and the agents subscribe. The systems make reservations simpler and allow the airlines to fine tune capacities, availability of discounts

⁶⁶ A fuller discussion of their importance in aviation is contained in Levine, 1986, *op cit*.

⁶⁷ For a thorough discussion of the implications for code sharing, albeit based on the U.S. situation, see C.V. Oster and D.H. Pickrell, 'Code sharing, joint fares, and competition in the regional airline industry', *Transportation Research*, 22A, pp 405-417, 1988.

etc. as seats are taken up. They are open, however, to abuse in several ways⁶⁸. For instance, explicitly, the system can present information in such a way that the parent airline's services are favoured. Implicitly, the parent airline can glean information on the demands for rivals' services which are being booked through the system. There are also 'halo' effects which are rather vague in their nature but embrace such things as agent loyalty induced by vendor training programmes, back-up services, etc.

Air Canada's 'Reservec' system had formerly dominated the market, with 85% of automated travel agents linked to it, while Canadian Airlines International's 'Pegasus' had 15%. Many Canadian Airlines International tickets, therefore, were sold through Air Canada's system giving the latter advantages in information collection but also the Reservec system was bias against Canadian Airlines International's services in the sense that its information on the latter's flights was 48 hours old.

When in 1987 the two airlines combined their systems they formed 'Gemini' which is now used by about 90% of agents. The remaining 10% share is dominated by American Airline's 'Sabre' system which is used by a number of large travel agents, especially those with substantive trans-border traffic. Because Gemini does not provide Sabre with details of Air Canada's and Canadian Airlines International's last minute seat availability many travel agents must subscribe to both systems. Rather perversely, American Airlines, while in conflict with Air Canada over this matter, is cooperating with the Canadian airline in terms of developing interlining connections at the new terminal being completed at L.B. Pearson Airport.

The merging actually took place despite the fact that the Canadian government had implicitly assumed two competing computer reservation systems would remain when accepting the creation of Canadian Airlines International. In the early part of 1988, hearings were called before the federal Competition Tribunal, initiated by the Director of Investigations and Research of the Department of Consumer Protection and Corporate Affairs who is seeking to dissolve the Gemini system.

Wardair was offered the chance to join the Gemini system but declined, possibly because of unfavorable terms. Instead it is a 'participating carrier' in the system and a hosted carrier in the American System One of the Texas Air Corporation. This puts the operator at a serious competitive disadvantage in the market for scheduled services.

⁶⁸ For a detailed analysis see, U.S. Department of Transportation, *Study of Airline Computer Reservation Systems* (General Accounting Office: Washington), 1988.

The importance of controlling computer reservation systems is, therefore, not simply that they provide an important source of revenue to the vendor - it is anticipated, for example, that Gemini will generate about \$150 million per annum in revenue to its parent companies - but that there is the opportunity for protecting the vendor's operations from market entry or from the full rigours of competition of incumbent carriers. Even where, as in the Canadian case, measures are adopted to remove the most obvious forms of bias that can be incorporated in a system, there still remain the 'halo' effects which, it has been suggested, can be quite substantial. The computerized reservation system vendors themselves in the U.S.A. estimated that in 1986 some 15% of airline revenue from the American Airlines' Sabre system was due to the halo effect and 9.1% of Texas Air's System One, although subsequent calculations, based on a modified definition, by the Department of Transportation suggest the figures are respectively, 39.9% and 12.1%⁶⁹.

6 After the National Transportation Act

Evaluation of the long term effects of the 1988 deregulation of the domestic Canadian market must be speculative at this early stage⁷⁰. Some indication of the types of change which have taken place in the first six months of liberalization are to be seen in Tables 3 and 4. In the twelve months up to mid-May 1988, Canadian carriers increased their total number of departures by 24% while the number of seats offered rose by only 12.1% reflecting a continued shift towards smaller aircraft.

This is a similar pattern to that experienced in the U.S.A. where, after an initial adjustment period, operators focused on improving the frequency of services and on providing adequate feeder services - all of which required fleets of smaller aircraft. Part of the improved service quality in Canada has come about increased concentration on major markets. Indeed, the data shows Canadian Airlines International contracted the number of points formerly served (from 65 to 55 in the period), but added services to some key markets and the discontinued services have all been taken up by affiliates. A similar expansion has taken place in the services offered by affiliates of Air Canada⁷¹.

⁶⁹ See U.S. Department of Transportation, 1988 *op cit*

⁷⁰ The Northern and remote areas of the country retain higher levels of regulation but since they only account for about 2% of the total airline revenue, it is not unreasonable to describe the Canadian market as 'deregulated' in the U.S. sense.

⁷¹ Air Canada also acquired a 90% share in Northwest Territorial Airways during this period to improve access to Arctic communities.

The nature and role of the affiliates have also develop somewhat during this time, mainly in anticipation of deregulation rather than following it. In several cases, affiliates are former independents which have, in various ways, been brought under the umbrella of a major carrier to meet the needs of the evolving market - hence the sharp decline observed in the tables of the independents' share of both departures and seats offered. Additionally, many of the affiliates are acquiring small jets and expanding into longer-haul routes, especially those formerly served by majors using turbo-prop equipment. The affiliates have also significantly increased the trans-border services offered, both in terms of their capacity and the routes served. These types of change should all be seen in the light of developments by the major carriers and are effectively complements to them.

Carrier	Domestic (South)		Domestic (North)		Transborder		International	
	1988	% change	1988	% change	1988	% change	1988	% change
Air Canada	2342	-1.1	10	0.0	246	-2.0	72	-6.5
Affiliates	2143	32.9	631	32.3	184	102.2	0	NA
<i>Total</i>	<i>4485</i>	<i>12.7</i>	<i>641</i>	<i>31.6</i>	<i>430</i>	<i>25.7</i>	<i>72</i>	<i>-6.5</i>
Canadian	2438	4.8	363	-5.5	68	-9.3	46	24.3
Affiliates	2771	168.5	743	167.3	54	500.0	0	NA
<i>Total</i>	<i>5209</i>	<i>55.1</i>	<i>1106</i>	<i>67.1</i>	<i>122</i>	<i>45.2</i>	<i>46</i>	<i>24.3</i>
Wardair	230	113.0	0	NA	0	NA	35	118.8
Independents	3337	-14.7	1090	-11.8	123	-24.1	7	75.0
Total	22955	22.7	4584	29.7	1227	21.0	278	12.1

TABLE 3

Second Quarter 1988 Changes in Total Scheduled Flights per Week Compared with Second Quarter 1987⁷²

The former charter airline, Wardair has engaged in a programme of expansion both domestically (where it has increased its share of scheduled seat miles from 3% in 1987 to 6% in 1988) and internationally. The airline has engaged in a massive investment programme (at an estimated cost of \$1 billion) to expand its fleet from 18 aircraft (it was 7 in 1987) to 56 aircraft by 1992. It is also proposing to initiate innovative fare schemes (the Wardair Premier Pass 2000) for regular business travellers on trans-Atlantic services. In the domestic market the expansion has been

⁷² From Table 3A of *Airline Industry Review: Second Quarter 1988*, *op cit*.

either in the form of enhanced frequency in markets already served or entry into markets where it has to compete directly with both Air Canada and Canadian Airlines International.

Carrier	Domestic (South)		Domestic (North)		Transborder		International	
	1988	% change	1988	% change	1988	% change	1988	% change
Air Canada	297653	-1.4	1000	0.0	33525	1.9	16520	-4.3
Affiliates	80328	37.4	18242	92.2	5727	73.3	0	NA
<i>Total</i>	<i>377981</i>	<i>12.2</i>	<i>19242</i>	<i>83.4</i>	<i>39252</i>	<i>8.4</i>	<i>16520</i>	<i>-4.3</i>
Canadian	287715	4.6	37598	-8.8	8216	-13.7	11415	22.9
Affiliates	103682	142.7	28413	96.1	1738	282.0	0	NA
<i>Total</i>	<i>391397</i>	<i>23.1</i>	<i>66011</i>	<i>18.4</i>	<i>9954</i>	<i>-0.3</i>	<i>11415</i>	<i>22.9</i>
Wardair	58862	107.7	0	NA	0	NA	11295	109.7
Independents	50284	-31.3	24164	-27.1	3365	9.2	1555	94.6
Total	87524	12.7	109417	10.1	52571	6.7	40785	24.6

TABLE 4

Second Quarter 1988 Changes in Total Scheduled Departing Seat per Week Compared with Second Quarter 1987⁷³

7 The Possible Lessons of Gradualism

The changes in Canadian aviation policy, at least in the southern part of the country, have created a deregulated domestic industry akin to that found in post-1978 U.A.S. and similar to that some parties advocate for Europe⁷⁴. There are still differences but the main difference was in the way the deregulation was achieved. It was by gradualism. Whether this is in the longer term to be preferred to the more dramatic shift in U.S. policy is not easy to assess, after all the Canadian reforms were enacted with the experiences of the U.S.A. as guide-lines. Some general points do seem, however, to emerge and to indicate differences in both the short and long term effects of the two strategies.

Gradualism has given the opportunity for the Canadian airlines to adjust their fleets in a systematic fashion rather than be confronted with the types of shortage of suitable aircraft which

⁷³ From Table 4A of *Aviation Industry Review: Second Quarter 1988*, op cit.

⁷⁴ For instance, D. Sawers, *Competition in the Air - What Europe Can Learn from the U.S.A.*, (Institute of Economic Affairs Research Monograph 41; London, 1987).

many U.S. airlines encountered after 1978. The hub-and-spoke style of operations which have emerged as the most efficient form of providing aviation services necessitated a change from the wide-bodied jets being used on the linear routing structures which the Civil Aeronautics Board had imposed on the regulated U.S. industry. Many airlines (e.g. Braniff) misjudged this and met with difficulties in keeping their costs down. Others had serious problems acquiring sufficient narrow bodied jets to their operate hub-and-spoke style operations efficiently. The mergers and changes in Canada, in contrast have been exploited to free aircraft to meet the needs of a gradually liberalized market with purchases of additional equipment used to complement the process⁷⁵.

~~When airlines have encountered financial problems the distribution of that impact has differed between the deregulated U.S. carriers and those operating under Canada's gradualist approach. Essentially, the U.S. airlines have either declared bankruptcy and passed the incidence of the failure onto share holders or forced concessions from workers who consequently bear the burden. In Canada there has either been direct subsidization of ailing carriers (witness the Quebecair case) or they have been taken over to be stripped of their profitable services (e.g. Eastern Provincial in 1984). The tax-payer or air traveller, therefore, bears the cost⁷⁶. The desirability of the options is a normative judgement but certainly the impacts of the two policies differ.~~

It has been suggested that one of the main benefits of deregulation in the U.S.A. was the entry of new carriers into the market. These have provided innovated services (e.g. the low cost, no-frill services of Southwest, People Express, etc) and have stimulated response from the incumbent carriers. In Canada there has been no such entry⁷⁷. The incumbent carriers have modified their activities in response to the reforms but it is difficult to speculate what the outcome may have been with a significant new entrant to the market. Wardair in some ways represents a scheduled new carriers, albeit from a base of established charter operations, and, if its actions are indicative of the impact a new carrier would have exercised on the market, the implications are of a conservative kind. Rather than initiate new domestic types of operations, Wardair has begun to act like the two majors, and to purchase aircraft to operate similar types of services. It has, however, as mentioned above, been more innovative in its international operations.

⁷⁵ See the evidence cited from the Canadian Airlines International case cited in Gillen, Stanbury and Trathway, 1988, *op cit* p.25.

⁷⁶ For a more detailed argument along these lines see, Jordan, 1986, *op cit*.

⁷⁷ It has been argued that even with sudden regulatory reforms only a temporary window is opened for new entrants which is soon closed both by the response of incumbents and the services offered by the new-comers - see, J.L.S. Byrnes, *Diversification Strategies for Regulated and Deregulated Industries: Lessons from the Airlines* (Heath Lexington; Toronto), 1985. In effect this window was kept closed in Canada as incumbents had time to adjust to the evolving regulatory environment.

New entrants have also been instrumental in undercutting the foundations of many existing high cost practices in the U.S.A.⁷⁸. Labour agreements, in particular, were circumvented by new carriers after 1978 and have acted to restrict the power of unions in the post deregulation phase. There has, therefore, been less subsequent disruption to seriously affect customers.⁷⁹ Many of the new U.S. airlines, for example, were not unionized. In many cases the incumbents have responded by negotiating pay cuts, taking on part time labour or, following American Airlines example from 1982, have entered into two tier pay agreements (i.e. the adoption of lower pay scales for new employees) all in order to reduce costs to compete. In some cases, such as Pan Am, the unions have negotiated board membership as a *quid-pro-quo*. The situation in Canada during the move to deregulation has been less clear-cut. The Canadian aviation industry is heavily unionized and in the period 1979-1985 while the number of strikes per annum fell compared to the period 1975-1978, they were of considerably longer duration (i.e. 64.9 days compared with 19.5)⁸⁰. Whether air travellers have benefitted is, therefore, really a question of judgement.

What does all this tell us about the success of the Canadian approach to deregulation of domestic aviation?

Certainly it would appear that some of the innovative energies which burst forth after the U.S. reforms of 1978 are missing but this may not be a serious criticism. The U.S. aviation industry had no one to mimic when it was deregulated and was, in effect, forced to experiment. Equally, there was really little point in a more gradualist approach than that it adopted - it would only have led to a longer period of uncertain adjustment in U.S. aviation markets. In a sense, therefore, Canadian domestic aviation benefited from the U.S. industry bearing the 'Research and Development' costs of operating in a deregulation environment. In consequence, it has been able to move up the learning curve quite rapidly and without much less of the friction that was experienced in the U.S.A.

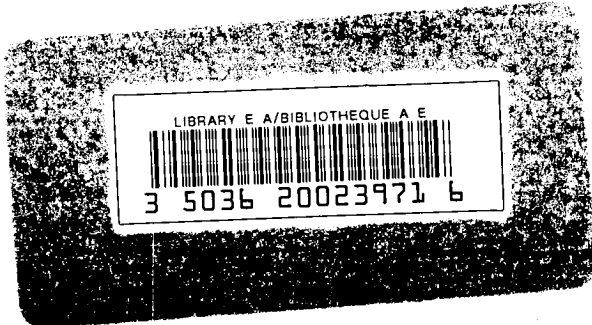
Its remaining problems are, however, interestingly, similar to those in the U.S.A. namely the efforts of airlines to extract economic rent through mergers, the use of computerized reservation systems, and the deployment of frequent flier programmes. They are also problems which are confronting those concerned with European aviation policy.

⁷⁸ E.g. Bailey and Williams, 1988, *op cit*.

⁷⁹ Jordan 1987, *op cit*. provides data that leads him to conclude, "The U.S. experience implies that strikes/lockouts play a lesser role in a deregulated industry than under regulation"

⁸⁰ Although as Jordan, 1987, *op cit* points out the ability of airlines to continue functioning during a strike improved considerably during the later period, mainly due to generally high levels of unemployment, and this may have stiffened the resolve of management in the industrial conflicts.

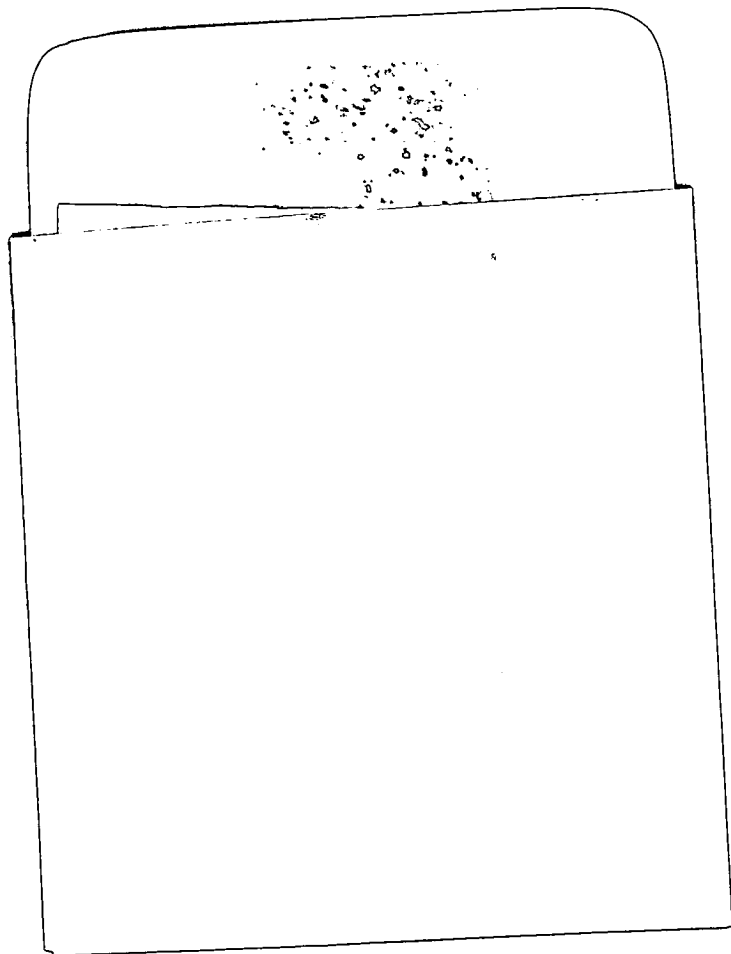
There would seem, therefore, a case for supporting the gradualist approach in the context of such reforms as that of the European aviation industry but equally, gradualism is no panacea for the frictions and problems which are inevitably going to arise as deregulation progresses.



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