The Deregulated Airline Industry: Legal Challenges for the Nineties

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THE DEREGULATED AIRLINE INDUSTRY: LEGAL CHALLENGES FOR THE NINETIES

by

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To my wife, Kakoli
for her support, patience and encouragement
and
To my son, Abhajeet
for
being so understanding at so young an age
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CHAPTER 1

INTRODUCTION

Ever since the beginning of commercial air travel, the airlines have been among the most regulated of industries. Aside from extensively regulating aviation safety, technical standards and operational procedures, nations have also traditionally controlled the commercial aspects of the airline business. Most nations have done this by restricting their airline markets to one state owned airline.

The United States is one of the few nations where private ownership and more than one carrier has been permitted since the inception of the industry. However, even then, for over forty years the federal government had strictly controlled the routes, rates and capacity of the airlines. It also severely restricted entry and exit from the market and prohibited acquisitions and mergers of airlines without its prior approval. In addition, domestic routes were reserved for "national" carriers and a clear distinction was maintained between carriers permitted to fly on international flights and those permitted to fly on
domestic routes. Finally, foreign competitors were excluded from the domestic market.

The Airline Deregulation Act of 1978\(^1\) and its international counterpart, The International Air Transportation Competition Act of 1979\(^2\), marked an important departure from this traditional approach to the airline regulation. Almost overnight, it did away with a complex regulatory structure that had existed for over four decades, and left the industry to the indulgence of an untested market. Not only was this type of abrupt reversal of regulatory policy rare in a democracy,\(^3\) it was also the first attempt by any nation to permit airlines to run as normal commercial enterprises and make their own economic decisions. As such, it marked the beginning of a unique experiment. This thesis will review the performance of the deregulated airline industry in order to assess the claim that this experiment has failed and the industry needs to be reregulated.

\(^1\) Pub. L. No 95-504, 92 Stat. 1705 (codified in scattered sections of 49 U.S.C.)


\(^3\) Historical experience as well as political reform theory suggests that proposals to alter regulatory controls by extinguishing the authority of the regulator produce substantial political opposition. See ANTHONY E. BROWN, THE POLITICS OF AIRLINE DeregULATION, 4 (1987); For a review of political theory relating to economic deregulation see DOUGLAS D. ANDERSON, REGULATORY POLITICS, Ch. 1 (1981)
1.1 Clarification of Key Terms

As the expressions "regulation", "deregulation" and "reregulation" will be used quite frequently in the following discussions, it is necessary to clarify at the outset what these expressions mean. Deregulation, intuitively, suggests freedom from regulation. In fact the dictionary meaning is just that. More technically, regulation has been defined as "a process consisting of the intentional restriction of a subject's choice of activity by an entity not directly party to or involved in that activity." Deregulation can be defined as "the removal of such a choice restriction."

This definition, however, does not bring out clearly the manner in which the expression is used in public policy discussions and literature relating to the deregulation of airlines. Deregulation does not mean the complete removal of all government restrictions on private choice so as to leave the industry concerned in a state

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4 For instance, the Webster's New World Dictionary defines "deregulation" as "to remove regulations governing" and further qualifies it as an expression of American origin, which it indeed is. See WEBSTER'S NEW WORLD DICTIONARY OF AMERICAN ENGLISH, 371 (Third College Edition, 1988).

5 BARRY M. MITNICK, THE POLITICAL ECONOMY OF REGULATION: CREATING, DESIGNING AND REMOVING REGULATORY FORMS, 9 (1980). This "entity" could be both a government or a private body. We are concerned with regulation by the government.

6 Id., at 418.

7 Or, for that matter, any other industry.
where no regulation exists. Broadly construed, regulation consists of all controls that define rights, impose duties and articulate the nature and scope of public intervention into the decision making of economic actors. As such, a truly regulation-less state would be impossible to attain.

The expression deregulation, rather, signifies the removal of some specific set of regulatory controls peculiar to the industry or activity being deregulated, which leaves the concerned economic entities with greater discretion in the matter of economic decision making.

To understand the process by which an industry is deregulated, it is helpful to distinguish between "restricting choice" through regulatory control and "influencing choice" through other forms of government intervention.

In the first case, the actual conduct of the commercial enterprise is controlled. Private management is required to take administrative clearance before taking

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8 i.e., producers and consumers.

9 Deregulation may also be defined in other ways. See generally Mitnick, supra note 5. Mitnick notes that the expression has been used with respect to 1) the stated purpose or intended consequences of deregulation, 2) the type of activity which is to be deregulated, and 3) the regulatory instruments or authority which is removed as a result of deregulation; the expression is also sometimes used in situations of "de facto" regulation, where conditions approximating deregulation are attained through lax enforcement of regulations, and not by any formal reduction of regulatory authority of a government agency.
certain actions, and the regulatory agency uses broad discretionary powers to supervise the industry.\textsuperscript{10} Such regulation emphasizes the prevention of potential problems\textsuperscript{11} and are commonly characterized as "classical", "administrative", "direct", positive", "hands-on", "public-utility type", or "command-and-control" regulation.\textsuperscript{12}

"Influencing choice" through regulation, on the other hand, is achieved through less intrusive forms of intervention like antitrust enforcement, information disclosure rules, taxes and subsidies, market based incentives, and liability rules enforceable through private litigation. Such regulations aim to influence conduct by providing a mix of rewards and punishments which are designed to induce a certain kind of desirable conduct. The underlying assumption here is that once the consequences of certain actions are known the course of action which maximizes the awards and minimizes the punishment will be chosen. However, it is private management and not the government which decides what this course of action will be.

These two forms of regulation are by no means mutually exclusive. In the real world various combinations

\textsuperscript{10} BROWN, \textit{supra} note 3, at 25.

\textsuperscript{11} \textit{Id.}, at 24.

\textsuperscript{12} \textit{Id.}
of regulatory instruments may be used to ensure that private conduct conforms to public standards. Deregulation, therefore, can be said to occur when there is a shift from a combination of regulatory controls emphasizing on classical command- and-control type of regulation, to one which relies primarily on indirect, less intrusive forms of government intervention.\(^\text{13}\)

Reregulation is an expression used to signify a return to a former system of direct regulation after a period of deregulation. Though the expression may suggest otherwise, reregulation is not the only alternative to deregulation. A different combination of non-intrusive forms of regulatory controls can be substituted for the same.

Deregulation in the context of the American airline industry meant a change from a system of direct regulation of routes, rates, entry and exit, by the Civil Aeronautics Board (CAB), to one of antitrust scrutiny and safety monitoring which left the economic decisions to the discretion of the airlines. Reregulation, in this context, means a return to a CAB type regulatory regime.

\(^{13}\) This shift has to be significant. Mere incremental change in the structure of regulatory control resulting in marginal increase in private discretion would not be deregulation though it may be labelled as "liberalization". The difference is one of degree and not amenable to precise definition.
1.2 Issues Raised by Airline Deregulation

The U.S. deregulation experience has been the focus of considerable academic study and debate. The proliferation of literature following the dramatic change of regulatory structure has prompted one commentator to remark that "the study of airline deregulation has become almost a cottage industry."\(^\text{14}\) Indeed economists, lawyers, industry insiders and academicians who had earlier debated about the desirability of deregulating the industry have continued to study it to see whether the outcome of the experiment supported the earlier predictions.\(^\text{15}\)

The results of deregulation, however, have not conformed to all of the theoretical projections based on


economic models prepared by pro-deregulation economists.\textsuperscript{16} Nor has it fulfilled completely the prophesy of doom of those opposed to deregulation.\textsuperscript{17} This has prompted some academicians to reappraise the earlier theories and look for explanations for this deviant behavior and the debate about the wisdom of deregulating the industry still continues.

However, all but the most zealous advocates involved in the debate have conceded that though airline deregulation has improved efficiency, reduced costs and, in general, provided consumers with a wider range of service choice, it has been a mixed blessing. In particular, concern has been expressed about the effects of deregulation on airline safety, the post deregulation industry concentration, the evolution of anti-competitive practices in the use of computerized reservation systems, monopoly leverage through the use of hub and spoke routing, and the over stretching of finances leading to excessive debt and bankruptcy.

1.3 Scope and Focus of the Thesis

The importance given to these results of deregulation differs from author to author as do their prescriptions for the problems faced by the deregulated industry. But

\textsuperscript{16} See infra Chapter 4.

\textsuperscript{17} Id.
their study is important for at least three reasons. Firstly, it provides valuable insight about the nature of the airline industry and how airlines compete in the absence of direct government restrictions. Secondly, it is likely to be useful for policy makers and airline executives in the United States when dealing with issues about future policy in the United States. Finally, such a study would provide useful guidance for nations experimenting with or contemplating airline deregulation or privatization. For how other governments perceive the working of the airline industry under deregulation will materially affect their own policies in this regard.

This thesis will review the regulatory regime prior to deregulation, the assumptions and objectives of deregulation, and the actual working of the deregulated airline industry, in order to assess the validity of the claims of some critics that the industry needs to be reregulated.

This review will reveal that the policy makers had relied on economic models based on erroneous assumptions about the nature of airline competition under deregulation. Consequently, the developments in the industry were not anticipated by them.

The Thesis will suggest that the existing regulatory structure is not adequate to deal with the present and potential problems of the deregulated industry. However, a
reversion to a CAB type regulatory system is not justified.

Instead, what seems to be needed is a determined effort to strengthen the existing machinery to tackle the unanticipated problems that have arisen after deregulation. In addition, will be suggested that it is necessary to explore the possibilities of using less intrusive forms of regulatory instruments to supplement the market and fortify the existing structure. It is beyond the scope of this thesis to try to offer "concrete solutions" to the problems. What is intended, instead, is to shift the focus of the present debate from its fruitless "inadequate antitrust enforcement v. imperfect (CAB type) regulation" obsession, with its underlying assumption that "reregulation" is the only alternative to "deregulation".

1.4 Organization of the Thesis

Chapter 1 of the thesis introduces the subject of the thesis. Chapter 2 will provide a background of the regulatory structure which existed in the United States prior to deregulation, while Chapter 3 will deal with the transition to deregulation and the changes in regulatory structure brought about by it. Chapter 4 will deal with the actual outcome of deregulation in the light of the presumptions and predictions of the proponents of
deregulation. Chapter 5 will consider in more detail the problem of ineffectual antitrust enforcement. Finally, Chapter 7 will sum up the findings of the review and briefly touch upon the policy implications of the deregulation experience.
Chapter 2

THE REGULATORY STRUCTURE PRIOR TO Deregulation

This chapter will discuss some of the salient features of the regulatory structure which existed prior to deregulation. In particular it will review the nature of authority exercised by the Civil Aeronautics Board and the limitations of such regulations.

2.1 The Civil Aeronautics Act of 1938 and the formation of CAB

Though the basic features of the regulatory scheme had begun to evolve much earlier, comprehensive government economic regulation of civil aviation in the United States started with the enactment of the Civil Aeronautics Act of 1938. The 1938 Act originally provided for a single agency, the Civil Aeronautics

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18 For an account of the origins of airline regulation in the United States, see Brown, supra note 3 at 5-10; A. T. Wells, Air Transportation: A Management Perspective, Ch. 2 (1984); R.E.G. Davies, Airlines of the United States Since 1914 (1972); Levine, Revisionism Revised? Airline Deregulation and the Public Interest, 44 Law & Contemp. Probs. 179 (1981).

Authority to supervise both the technical and economic aspects of civil aviation. By means of an executive order, the regulatory framework initially set up was reorganized and the Civil Aeronautics Authority was renamed the Civil Aeronautics Board (CAB)\textsuperscript{20}. The CAB was charged with the economic supervision of commercial aviation in the United States, while the regulation of technical matters was turned over to an administrator of civil aeronautics, whose staff was called the Civil Aeronautics Administration.\textsuperscript{21}

2.2 The Powers and Functions of the CAB

The CAB's regulatory authority contained many features found in classical public utility type of legislation.\textsuperscript{22} Some of them are discussed below.

\begin{footnotesize}
\begin{enumerate}
\item Reorganization Plan 12 of 1940, Section 7(a) 54 Section 7(a) 54 STAT. 1235.
\item See Westwood & Bennett, A Footnote to the Civil Aeronautics Act of 1938 and Afterword, 42 Notre Dame Lawyer 309 (1967).
\end{enumerate}
\end{footnotesize}
2.2(i) Carrier Certification Authority

Firstly, no carrier could engage in commercial aviation without certification. The certification requirement was the most important regulatory instrument provided to the CAB.

The certificates granted to an airline stipulated the routes to be served as well the kind of airline service the carrier could provide. Thus it was up to the CAB to classify an airline as a scheduled airline providing passenger services, an all-cargo carrier or a supplemental or charter service which provided passenger services on a demand basis.

Moreover, a certificate granted for a particular "city-pair" could also lay down conditions which the airlines would have to fulfil in order to be allowed to fly on the route for which the certificate was granted.

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23 Civil Aeronautics Act, Section 401(a)-(e), 72 STAT. 754. Under a "grandfather clause" carriers who had been providing continuous and regular service from May 14, 1938, till August 22, 1938, the date on which the Act came into force, were entitled to receive a certificate of "public convenience and necessity". Civil Aeronautics Act, Section 401(e).

24 Brown, supra note 3, at 47; ANDREAS F. LOWENFELD, AVIATION LAW § 1.3.


26 BROWN, supra note 3, at 47-48.

27 Id.
Such conditions could stipulate the minimum number of scheduled flights the airline would have to operate over a particular time period or could direct the airline to stop at specified cities along the route.\textsuperscript{28} The airline thus had no discretion about whether or not it would fly non-stop between a city-pair, nor about the minimum number of flights it would operate in a particular time period.\textsuperscript{29}

Finally, no certificated airline could discontinue its routes without the permission of the CAB.\textsuperscript{30} The CAB was thus given effective control over entry into and exit from the air transport market. The requirement of certification enabled the CAB to control both the total number of airlines in the industry and the total number of airlines on particular routes. Its classification power made it possible for it to control the structure of the industry, i.e. the number of airlines providing passenger, cargo or supplemental services in the industry as a whole and on particular routes.

\textsuperscript{28} \textit{Id.}

\textsuperscript{29} \textit{Id.} However, the Civil Aeronautics Act did reserve some discretion to for the managers of regulated airlines when it stipulated that "no term, condition, or limitation of a certificate shall restrict the right of an air carrier to change schedules, equipment, accomodations, and facilities for performing the authorized service and transportation," (Civil Aeronautics Act, Section 401(j)), a provision which resulted in the non price competition between carriers.

\textsuperscript{30} \textit{Brown, supra} note 3, at 47; \textit{Taneja, supra} note 25.
2.2(ii) **Rate Fixing Authority**

Secondly, the CAB was given extensive authority over the fixing of rates for air services.\(^{31}\) Carriers were required to file tariffs with the Board specifying their rate schedules.\(^{32}\) The CAB could change such rates on its own accord or in response to a complaint from a third party if it ruled that the existing rate was "unjust or unreasonable".\(^{33}\) The CAB could also fix maximum and minimum rates.\(^{34}\)

In addition to this broad rate fixing power, the CAB was also responsible for channelizing direct subsidies to air carriers of government payments for mail transport.\(^{35}\) The Board was authorized to fix mail rates according to the economic needs of each air carrier and to insure the maintenance and continual development of the air transportation system.\(^{36}\) With all these powers, the CAB

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\(^{31}\) Civil Aeronautics Act, Section 1002(d), 72 STAT. 78.

\(^{32}\) Civil Aeronautics Act, Section 1002(d), 72 STAT. 788.

\(^{33}\) Civil Aeronautics Act, Section 1002, 72 STAT. 788; *See* Brown, *supra* note 3, at 49.

\(^{34}\) Civil Aeronautics Act, Section 1002(d), 72 STAT. 788.

\(^{35}\) Brown, *supra* note 3, at 49.

\(^{36}\) Civil Aeronautics Act, Section 406, 72 STAT. 763; *See* Brown, *supra* note 3, at 49.
virtually dictated the nature and amount of revenue a carrier would earn.

2.2(iii) Control Over Economic Relations Of Carriers

Thirdly, the CAB was given extensive control over the economic relations of airlines with other certificated airlines and common carriers like trucking firms.\(^\text{37}\) Such control was exercised in two ways: First, proposals for mergers, acquisitions and consolidations of airlines needed CAB approval.\(^\text{38}\) This requirement included any purchase lease or other contractual arrangement among carriers. Clearance was also needed for interlocking directorates.\(^\text{39}\)

Second, inter-carrier operating agreements and cooperative working arrangements also required CAB’s assent.\(^\text{40}\) Cooperative baggage handling, joint equipment maintenance or ownership, cooperative passenger ticketing facilities, pooling of resources or earnings, sharing of losses and other such features of airline operation required clearance from CAB.

\(^{37}\) Civil Aeronautics Act, Section 408-413, 415, 72 STAT. 767-772, 774.

\(^{38}\) Civil Aeronautics Act, Section 408, 72 STAT. 767.

\(^{39}\) Civil Aeronautics Act, Section 409, 72 STAT. 768.

\(^{40}\) Civil Aeronautics Act, Section 408, 72 STAT. 767.
2.2(iv) Antitrust Exemption Authority

Fourthly, the CAB had the authority to exempt carriers from the operation of its own regulations as well as from prosecution under the Antitrust laws. The CAB could exempt any carrier from the application of a CAB regulation if it felt that doing so was in the public interest.\(^{41}\)

Since many of the inter-carrier agreements approved by the CAB in accordance with the standards of the 1938 Act could raise antitrust issues and entail prosecution under the Antitrust laws, the CAB was empowered to grant the carriers immunity from prosecution under the antitrust laws.\(^{42}\)

2.2(v) Investigations, Inspections And Compliance

Finally, the CAB was authorized to investigate deceptive trade practices and unfair methods of competition as well as enforce its orders and regulations and monitor compliance.\(^{43}\) Carriers were obliged to furnish periodical and special reports to the CAB containing such information about its operations or management as demanded by the CAB. The CAB also had the

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\(^{41}\) Civil Aeronautics Act, Section 416(b), 72 STAT. 775. See BROWN, supra note 3, at 50.

\(^{42}\) Civil Aeronautics Act, Section 415, 72 STAT. 764.

\(^{43}\) Civil Aeronautical Act, Section 415, 72 STAT. 774.
statutory authority to inspect carrier records and facilities.

2.3 CAB Ambivalence Towards Competition

The declaration of policy contained in the Civil Aeronautics Act of 1938 laid down that:

"Section 2. In exercise of its powers and duties under this Act the Authority shall consider the following among other things as being in the Public interest, and in accordance with the public convenience and necessity-

a) The encouragement and development of an air transportation system properly adapted to the present and future needs of the foreign and domestic commerce of the United States, of the Postal Service and of the National defence;

b) The regulation of air transportation in such a manner as to recognize and preserve the inherent advantages of, assure the highest degree of safety in, and foster sound economic conditions in, such transportation, and improve relations between and coordinate transportation by, air carriers;

c) The promotion of adequate, economical and efficient service by air carriers at reasonable charges, without unjust discriminations, undue preferences or advantages, or unfair or destructive competitive practices;

Referring to the Civil Aeronautics Authority which was replaced by the CAB in 1940. See supra note 21 and accompanying text.
d) Competition to the extent necessary to assure the sound development of an air transportation system properly adapted to the needs of the foreign and domestic commerce of the United States, of the Postal Service, and the national defence;

e) The regulation of air commerce in such manner as to best promote its development and safety; and

f) The encouragement and development of Civil Aeronautics.  

This multiple and potentially discordant list of policy goals had a marked influence on the nature of CAB regulation and development of the industry prior to deregulation. In formulating its policy the CAB had to balance the two primary statutory objectives: the promotion of the industry and its regulation.  

In this regulatory scheme competition had a complicated role. The legislative requirement of fostering "competition to the extent necessary to assure the sound development of an air transportation system", suggested that the airline industry was expected to benefit from

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45 Civil Aeronautics Act, Section 102, 72 STAT. 740, as originally passed. Subsequent amendments to the Act till the passage of the Airline Deregulation Act of 1978 and the International Air Transportation Competition Act of 1979 continued with the same policy statement except for minor changes.

46 See generally, RICHARD CAVES, AIR TRANSPORT AND ITS REGULATORS (1962).

47 See BROWN, supra note 3, at 51-54.

48 See supra note 45 and accompanying text.
competition. However, the caveat against "unfair or destructive competitive practices", the recognition of the advantages of "improving the relations between, and coordinating transportation by air carriers", and the mandate to encourage and develop air transport, reflected the view that mere reliance on competition would not be desirable.

Consequently the CAB's attitude towards competition was ambivalent at best. Competition was okay so long as it was controlled and regulated by the CAB. Or else it was to be discouraged. This attitude prompted the CAB to extend its regulatory reach to any unregulated section of the aviation industry which posed a competitive threat to the CAB certificated air carriers. By using its classification authority the CAB pursued a policy of carrier segregation and prevented them from directly competing with the certificated trunk airlines.

The Civil Aeronautics Act of 1938 had "grandfathered" into the regulatory framework 16 carriers which had been operating when the Act was passed. These carriers, classified as trunk carriers, were primarily engaged in

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49 Id.
50 BROWN, supra note 3, at 53-54.
51 Id., at 55.
52 See supra note 23.
scheduled passenger transport but were also authorized to transport cargo and provide charter service.\textsuperscript{53}

The CAB created six additional carrier classes for the continental United States: Local Service, Supplemental (or Chartered) Service, All Cargo, Commuter, Air Taxi and Helicopter\textsuperscript{54}. In addition, special classifications were created for carriers operating exclusively in Hawaii and Alaska, and for international carriers who were not permitted to fly on domestic routes.\textsuperscript{55} By this classification system, the CAB not only influenced the structural development of the industry, but it also protected the trunk airlines from competition by not granting trunk classification to any new airline.\textsuperscript{56}

\textsuperscript{53} BROWN, supra note 3, at 54.

\textsuperscript{54} Id., at 55.

\textsuperscript{55} Id.

\textsuperscript{56} Id., at 54-59. As a result the original trunk airlines (whose number had reduced to 10 from 16 in the intervening years) accounted for approximately 90\% of the domestic passenger market at the time of deregulation. Moreover, the CAB was also very restrictive about granting any of the other classifications to new airlines. Due to this, by 1970 the eleven trunk airlines earned 86.5\% of the total industry revenue, while the nine local and thirteen supplemental airlines earned 10.3\% and 1.3\% respectively. The CAB certified only two all cargo carriers and their share of the total industry revenue was a paltry 0.7\%. The three helicopter services, two intra-Hawaii carriers and the four intra-Alaska airlines certified by it accounted for a meager 0.1\%, 0.6\% and 0.4\% respectively. Though obtaining classification as a commuter airline or an air taxi service was relatively easy, severe restrictions on the type of aircraft and the routes made them practically non competitive with the rest of the industry. See also DOUGLAS & MILLER III, supra note
The CAB was more open to the idea of permitting entry of existing carriers into new city pair markets than of new carriers into the industry.\textsuperscript{57} However, its policies in this regard were still very restrictive.\textsuperscript{58} Though an established airline usually did not have the problem of showing that it was "fit, willing and able" to provide air transportation, it still had to demonstrate that there was a "public need" for the new route authority. If the concerned route was already served by another carrier the CAB would normally not grant the necessary certificate if the incumbent objected on the ground that the new entry would divert traffic and cause financial hardship for it.\textsuperscript{59} Consequently, competitive routes were awarded only if they did not significantly affect the profitability of the incumbent airline.

Obviously the CAB gave greater stress on the policy objective of fostering "sound economic conditions" and improving relations between, and coordinating transportation by air carriers, than it did to promote "competition" among the carriers. The resulting relationship between the CAB and the industry was

\textsuperscript{22}, at 121-122; \textit{BAILEY et all, supra} note 15, at 13.

\textsuperscript{57} \textit{DOUGLAS \& MILLER, supra} note 22, at 113; \textit{BAILEY et all, supra} note 15, at 14.

\textsuperscript{58} \textit{MEYER \& OSTER et all (1981), supra} note 15, at 6.

\textsuperscript{59} \textit{Id.}
paternalistic: the CAB "provided the industry with parental support and protection, while exercising in turn, a strong measure of parental control."  

Monopoly route awards were often given to the applicant in the weakest financial position in an attempt to strengthen that carrier and maintain stability in the industry. Profitable routes were also awarded to compensate airlines which flew on uneconomic routes like those serving small communities. The CAB's pricing policy also reflected its focus on overall industry profitability rather than on the relationship between fares and costs in particular markets. Price competition was generally discouraged.


61 MEYER & OSTER et al., supra note 15, at 6.

62 Id.; BROWN, supra note 3, at 71.

63 This was prompted largely by the need to reduce payment of subsidies on unprofitable routes. The Board relied on "internal subsidization" of a carrier's route system for this purpose. Revenue from a carrier's more profitable routes was used to subsidize losses on unprofitable routes. The internal subsidy strategy eliminated the possibility of a carrier making an excess profit on one route while requiring government subsidy on another route, a practice which had the potential of becoming a political liability. BROWN, supra note 3, at 71.

64 Under Section 902(d) of the Civil Aeronautics Act (72 STAT. 784), tariff violations were criminal offences and there were very few instances of "illegal" price cutting. Indeed, the CAB's across-the-board fare authorization provided a mechanism through which the
2.4 Limitations to CAB Regulation

In spite of its vast authority to regulate almost all facets of the airline industry, the CAB had to function under certain limitations.\(^{65}\) Firstly, the due process requirements stipulated by the regulations for changing routes were time consuming, especially in contested cases. Additions to the route system were required to be dealt with on a case by case basis and the CAB rules did not provide for a general overhaul of the route system. As a result it had to rely on a piecemeal approach to rectify shortcomings in the route system.\(^{66}\)

Secondly, so long as a permanently certified carrier observed the conditions of its certificates, the CAB could not unilaterally revoke or substantially reduce the authorization granted to it on economic grounds alone.\(^{67}\) This meant, in effect, that any increase in route authorization became a permanent feature of the system.\(^{68}\)

Thirdly, though the CAB could compel a carrier to provide a minimum number of flights between a city pair or airlines could act as members of a price-fixing cartel. Once the price was approved it became binding on all and the CAB assumed the role of enforcer of the agreement. See JORDON, supra note 25, at 62-72; DOUGLAS & MILLER, supra note 22, at 140.

\(^{65}\) BAILEY et all, supra note 15, at 11-14.

\(^{66}\) Id.

\(^{67}\) Id.

\(^{68}\) Id.
to halt at one or more intermediate stops, it could not prevent an airline from providing more service than the CAB thought "adequate". The carriers could do this by either increasing the frequency of flights or by using bigger aircraft or by both.\(^{69}\) The CAB, thus had no effective means of controlling the total capacity of the airlines.

The above features of the regulatory system, coupled with the CAB’s policy of discouraging price competition led airlines to compete by offering greater frequency of flights\(^{70}\) and on flight facilities like gourmet food and wine and entertainment.\(^{71}\) In order to attract passengers, airlines also acquired the latest models of airlines in preference to older models, even if the latter were more suitable.\(^{72}\) The existing aircraft were also replaced much sooner than was probably necessary. The new aircraft were

\(^{69}\) Id.; BROWN, supra note 3, at 92-93.

\(^{70}\) By offering more convenient schedules than its rivals, a carrier tried to obtain a greater than proportional market share. See PAUL BIEDERMAN, THE U.S. AIRLINE INDUSTRY, END OF AN ERA (1982) 131.

\(^{71}\) BROWN, supra note 3, at 67, 92-93.

\(^{72}\) An example of this was the acquisition of wide bodied jets. Biederman’s study shows that the older narrow bodied aircrafts did not suffer from any disadvantage due to the introduction of the wide bodied aircrafts. On the contrary, in the case studied by him the operator of the narrow bodied aircraft effectively counteracted the introduction of the new aircrafts by offering a more convenient (and higher level of) service frequency, another form of nonprice competition device. See BIEDERMAN, supra note 70, at 126-130.
generally more expensive and had larger seating capacity. As a result, airline costs and capacity increased. But due to the CAB's pricing policy which provided the industry with an assured rate of profit, the airlines' profits were not significantly affected.

Even where the new technology resulted in lower operational costs, the consumers of the air services did not benefit through lower fares. Instead the savings were used by the airlines for financing further non-price competition strategies. The increased capacity of the

73 "(T)he carriers ... were driven to keep adding aircraft until they were constrained by the inability to finance new equipment or the inability of manufacturers to supply more planes." JONATHAN L.S. BYRNES, DIVERSIFICATION STRATEGIES FOR REGULATED AND Deregulated Industries: Lessons from the Airlines, 31 (1985); BROWN, supra note 3, at 93.

74 BYRNES, supra note 73, at 31, 58. This practice did encourage the development of the U.S. aircraft manufacturing industry and lead to technological innovations which allowed it to remain a leader in the field. However the costs were fully borne by the consumers of the U.S. airline industry.

75 The CAB considered selection of equipment, like scheduling of aircraft, to be an "inviolate management prerogative" and the use of new and more modern aircraft "a legitimate method of management" for differentiating an airline product from that of its competitors. BROWN, supra note 3, at 93, referring to Gellman, The Regulation Of Competition In United States Domestic Air Transportation: A Judicial Survey And Analysis, 28 JOURNAL OF AIR LAW AND COMMERCE, 148, 161.

76 Since the rates for air services was controlled, there was little scope for individual airlines reducing the same. Nor was it in the interest of the airlines to show exceptionally high profits as that would invite attention of the regulators and raise accusations of "unreasonably high levels of profits".
airlines posed no problems when the industry was experiencing growth. But during times of economic adversity and low demand, excess capacity could lead to severe problems unless the CAB stepped in to bail them out.

2.5 The Cyclic Nature Of CAB Regulation

The airlines industry is particularly sensitive to general economic conditions and the swings in the business cycle. In times of economic adversity the demand for air travel falls; during periods of economic prosperity there is a surge in air travel. In order to fulfil its paternalistic role and "protect" the industry, CAB policy during periods of economic decline was deliberately anticompetitive. However, when the industry went through periods of high profits and passenger demands, it was more liberal towards competition. Consequently, the CAB's regulation of route, price and service competition during the 1938-1970 period tended to assume alternatively an anticompetitive and procompetitive character. These

77 In fact it permitted the airlines to take advantage of increased demand for air services in the short run. Since the price could not be increased in response to the increased demand, the airlines could increase their revenue only by carrying more traffic.

78 BROWN, supra note 3, at 67.

79 Id.

80 Id.
cyclical swings in the CAB's policy roughly corresponded with the general financial cycles in the industry. 81

In part, the CAB's policy swings were also in response to the increased political pressures from various groups affected by airline regulation. 82 Some of these groups, like the major trunk carriers, financial institutions and other entities with a large stake in the financial security of the major airlines, adopted a pro-industry approach to the question of airline regulation. 83 They argued that the CAB's role was to insure the financial health of the industry and ensure that it was self sufficient and not dependant on government subsidy. 84 Pressure from these groups was likely to be the strongest during periods of economic difficulties. 85

In contrast, other groups, like consumer organizations and small businesses, argued that CAB should promote low cost air services that were widely available to the public. 86 Interest in air travel was heightened

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81 Id.
82 Id., at 67-94.
83 Id., at 60-61.
84 Id.
85 Id., at 62.
86 Id., at 63.
when the economy was doing well and the demand for air travel was high.\textsuperscript{87}

Each position advocated its own distinct set of policies. In general, the first group emphasized strict regulation while the second favored more competition.\textsuperscript{88} Thus the cyclical turns in its regulatory policy also reflected the CAB's attempt to manage the two competing sets of expectations about its regulatory role.\textsuperscript{89} However, the CAB's institutional constraints permitted it to deal with these political and economic problems only to a limited extent. When the economy really took a plunge, it could no longer act as the "safety valve" which stabilized commercial air transport.\textsuperscript{90} As will be seen in the next chapter, the CAB's unsuccessful attempt to play its role during times of extreme adversity provided the necessary opportunity for the critics of regulation to bring about its ultimate demise.

\textsuperscript{87} \textit{Id.}, at 62.

\textsuperscript{88} \textit{Id.}, at 62-64.

\textsuperscript{89} \textit{Id.}, at 62.

\textsuperscript{90} \textit{See infra} Chapter 3.
CHAPTER 3

THE TRANSITION TO DEREGULATION

3.1 RATIONALE FOR REGULATION

Economic regulation of the airlines was justified on the ground that air transportation was a strategic public utility which required special regulatory treatment. This claim rested on three basic assumptions:

1) That it was necessary for a regulatory agency to design aviation route networks in order to ensure the development of an integrated and socially desirable service network.

Without such route making, it was argued, the airlines would fly only on the more profitable routes and neglect routes with thin traffic. Public interest required that the benefits of air travel be uniformly distributed geographically.


92 BAILEY et all, supra note 15, at 1-2.

93 Id.
2) That to promote the development of the desired air service network it was necessary to provide incentives for carriers to operate on uneconomic routes. This could be achieved either through direct subsidies or by allowing the airlines to cross subsidize the uneconomic routes by charging higher rates on more busy routes.

To enable them to do this, price competition had to be avoided and the number of airlines on a particular route had to be restricted. Rate and route regulation was thus considered essential.

3) That unregulated competition in the airline industry leads to duplication of services and facilities without a corresponding increase in the demand for such services. Further, it prevents the realization of economies of system integration. To ensure optimal utilization of resources, airlines must be strictly regulated.

For these reasons it was considered necessary to grant monopoly or near monopoly rights to carriers on certain parallel routes or within particular regions. Since the number of such routes or regions in a country was necessarily limited, this meant that entry into the industry had to be severely restricted.
The grant of monopoly rights on routes in turn also necessitated regulation of rates. To protect consumers, it became essential to prevent airlines from exploiting their monopoly position by charging too high a rate. At the same time the rates had to be fixed at a level which would ensure that the airlines covered their costs and earned a "reasonable profit". The scope for competition in such a regulatory scheme was obviously limited.

The report of the Federal Aviation Commission of 1935 aptly summed up the consensus in official and academic circles about the role of competition in the airline industry when it recommended that:

"It should be the general policy to promote competition in the interest of improved service and technological development, while avoiding uneconomical paralleling of routes or duplication of facilities ... On the other hand, too much competition can be as bad as too little. To allow half a dozen airlines to eke out a hand-to-mouth existence where there is enough traffic to support one really first class service and one alone, would be a piece of folly."

3.2 Theoretical Challenge to the Basis for Regulation

While the CAB's regulatory policy till the beginning of the 1970's was largely in line with the this attitude

98 Id.

towards airline competition, doubts began to be expressed in academic circles about the justification of such regulation. As far back as 1951, Lucile Keyes asserted that there was no evidence available to show the need for governmental control over entry into the aviation industry. But this was greeted with skepticism.

Eleven years later, Richard Caves, on the basis of more empirical evidence argued that the economies of scale at a system level were insignificant and predicted that competition would permit rational route choices.

However, when Michael Levine, in a 1965 article, brought out the dramatic difference in the performance of the regulated interstate airlines in the U.S.A., and the largely unregulated California intra-state airlines, the basic assumptions for regulating the airline industry

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100 See generally, BROWN, supra note 3, at 42-93.
104 Constitutionally and statutorily, the CAB had no authority over purely intrastate airlines which could be regulated only by the state concerned. The Californian airlines operated profitably at prices less than half of those fixed by the CAB, without any governmental assistance, and effectively competed with the CAB certified carriers. Likewise, the Texas intrastate carriers, had lower fares. See MEYER & OSTER DEREGULATION AND THE NEW AIRLINE ENTREPRENEURS 121-122 (1984).
came under serious and widespread scrutiny by the academic community. A 1970 study by William Jordon further strengthened Levine's finding.¹⁰⁵

Based on these empirical observations, economists like George Douglas and James Miller built sophisticated models of airline competition in which they characterized the airline industry as naturally competitive and suggested that economic regulation should be discontinued.¹⁰⁶

Finally, in a study published in 1975¹⁰⁷, George Eads demonstrated that in spite of CAB subsidies, regulated U.S. carriers had abandoned large numbers of small communities. At the same time many of these communities were being served by a commuter carrier industry that had no rate or route regulation and received no subsidies. Further, he found that the scheduling of service at the communities still served by certificated carriers, was based more on carrier convenience than on consumer demand. These findings effectively discredited one of the basic premises for regulation, that regulation was necessary to serve small communities with "thin traffic".

¹⁰⁵ W.A. JORDON, supra note 25.
¹⁰⁶ DOUGLAS & MILLER, supra note 22.
Due to these and other works, by mid 1970's an academic consensus had emerged favoring deregulation. However it is doubtful whether mere academic consensus without simultaneous and adequate political support would have been sufficient to dismantle the CAB's regulatory structure.\textsuperscript{108} As a result of certain opportune circumstances this political support was forthcoming.

3.3 \textbf{Political Support for Deregulation.}

3.3(i) \textbf{Unpopular CAB Policies}

The airline industry had experienced unprecedented traffic demand from the mid 1960's till 1969.\textsuperscript{109} In response, the CAB pursued a pro-competitive policy and liberalized route and rate regulation and allowed multiple carriers on some routes.\textsuperscript{110} Due to increased airline profits the CAB also permitted discount pricing within certain limits.\textsuperscript{111}

\textsuperscript{108} Even though it is often stated that deregulation was a triumph of academics, the political climate had to be correct for the policy makers to heed this academic consensus.

\textsuperscript{109} During this "golden age" of air travel passenger demand increased dramatically as the recreational travel industry developed and jet equipment provided more efficient and economical operations. See BROWN, supra note 3, at 84.

\textsuperscript{110} Id.

\textsuperscript{111} Id., at 89-90; DOUGLAS & MILLER, supra note 22, at 97-98.
By 1969, however, the economic conditions had worsened and the carriers incurred substantial financial losses.\textsuperscript{112} The excess capacity which had been building up all these years caused severe problems as passenger traffic dwindled.\textsuperscript{113} As in earlier periods of industry stress, the CAB reacted by reversing its procompetitive policies and resorting to several restrictive measures.\textsuperscript{114}

Firstly it imposed a "route moratorium" with a view to discourage airlines from expanding their operations.\textsuperscript{115}

Secondly, it used its antitrust exemption authority to encourage the airlines to negotiate mutual flight schedule reductions.\textsuperscript{116}

Thirdly, following the Domestic Passenger Fare Investigations,\textsuperscript{117} various rate hikes and restrictions on discount pricing were approved. As a result, average

\textsuperscript{112} BROWN, supra note 3, at 99.

\textsuperscript{113} Id.

\textsuperscript{114} Id., at 99-101.

\textsuperscript{115} Id., at 99-101.

\textsuperscript{116} Id., at 100.

\textsuperscript{117} The Investigations, which lasted from 1970 to 1974, were started after an industry fare hike approved by the CAB was challenged in court by Rep. John E. Moss and other Congressmen. Their primary purpose was to establish standards for future rate decisions. See Lucile Keyes, \textit{Policy Innovation in the Domestic Passenger Fare Investigation} 41 J. AIR L. & COM. 75-100 (1975).
industry fares increased by 20% in 1974.\textsuperscript{118} Certain popular schemes like youth and family discount fares were discontinued.\textsuperscript{119}

Fourthly, the CAB stepped up enforcement of charter regulations in order to prevent charter carriers from diverting passengers from scheduled operations.\textsuperscript{120} It also took the unprecedented step of proposing minimum charter rates so as to make them less competitive.\textsuperscript{121}

Finally, the CAB sought to increase profitability by mandating airline performance and efficiency standards.\textsuperscript{122} It discouraged management practices which increased operational costs.\textsuperscript{123} In a significant departure from its traditional laissez faire policy towards service competition, it sought to put an end to offering amenities like free movies and beverages, and mandated more efficient (and less spacious) seating configurations.\textsuperscript{124}

\begin{itemize}
\item \textsuperscript{118} BROWN, supra note 3, at 100, MEYER et al., supra note 15, at 42.
\item \textsuperscript{119} BROWN, supra note 3, at 101.
\item \textsuperscript{120} Id., at 100-101.
\item \textsuperscript{121} Id.
\item \textsuperscript{122} Id., at 101.
\item \textsuperscript{123} Id.
\item \textsuperscript{124} Id.
\end{itemize}
3.3(ii) **Coalition of Interest Groups Opposed to Regulation**

These policies of the CAB proved to be highly unpopular and met with widespread opposition from various quarters.\(^{125}\) Smaller and financially more sound carriers objected to the route moratoriums.\(^{126}\) Airline executives accused the CAB of overstepping its authority by interfering with airline management functions, and by restraining their ability to provide ancillary services to passengers.\(^{127}\)

The departments of Transportation and Justice had initially not objected to the CAB’s approval of schedule reduction agreements.\(^{128}\) But when the number of such inter-carrier agreements increased they were challenged by the Antitrust Division on the ground that the CAB was abusing its antitrust exemption authority.\(^{129}\)

\(^{125}\) *Brown*, supra note 3, at 101-102; *Meyer et al.* supra note 15, at 31-41.

\(^{126}\) *Brown*, supra note 3, at 101; *Meyer et al.* supra note 15, at 41.

\(^{127}\) *Brown*, supra note 3, at 101.

\(^{128}\) *Id.*

\(^{129}\) *Id.*; In addition, by 1974 the list of opponents to the CAB policies had extended to include the Postal Service, the City of Chicago, the State of Maryland, and the then Chairman of the Federal Trade Commission (FTC), Lewis A. Engman. *Meyer et al.* supra note 15, at 41-42 & n1.
Consumer groups protested about rate hikes, drop in flight frequencies, reduction in flight amenities, and discontinuance of popular discount fares. Supplemental carriers charged the CAB of conspiring with the trunk airlines to eliminate low cost air travel.

This universal unhappiness with the policies of the CAB did not mean that its every critic favored deregulation. Deregulation had its fair share of opponents, the major opposition coming from the airline labor unions, political groups representing the small towns with thin traffic then being served by a special program, and most of the CAB certified airlines who had a strong vested interest in the perpetuation of the regulatory structure.

Basically, the opponents of deregulation advanced the age old arguments for regulating the industry and predicted financial chaos, deterioration of the quality of services, loss of services to smaller communities and drop in safety standards. They were in favor of changes in policy within the framework of CAB.

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\(\text{\textsuperscript{130}}\) BROWN, supra note 3, at 101.

\(\text{\textsuperscript{131}}\) Id.

\(\text{\textsuperscript{132}}\) Id., at 104-105.
3.3(iii) Political Scandal

However the opponents soon lost ground as the disillusionment with CAB grew and respected scholars, influential politicians and powerful interest groups rallied around the call for deregulation. On top of this, the then chairman of CAB, Robert Timm, got involved in a political scandal in 1974 owing to his connections with the Nixon Administration. The Watergate investigations brought out that two major airlines had illegally contributed to Nixon's reelection campaign and it was alleged that Timm was instrumental in thwarting a CAB inquiry into this. To make matters worse, it was revealed that Timm had accepted airline hospitality on trips to Florida, Bermuda and several European countries.

3.3(iv) Congressional Scrutiny

The combination of political scandal and unpopular policies drew the attention of Congress to the functioning of the CAB. In early 1975, Senator Edward Kennedy, Chairman of the Senate Judiciary Sub Committee on Administrative Practices initiated an oversight
investigation into CAB policies.\textsuperscript{136} The Committee hearings provided a public forum for those advocating deregulation of the industry. Soon Senator Kennedy lent his support for the move towards deregulation.\textsuperscript{137} This was followed by Senator Howard Cannon, Chairman of the Senate Commerce Sub Committee on Aviation.\textsuperscript{138}

Various bills for reform of the regulatory system including one jointly sponsored by Senators Canon and Kennedy were introduced.\textsuperscript{139} The bill contained provisions which were designed to mollify two politically influential groups opposed to deregulation: airline labor and small communities. The proposed bill included an airline labor compensation program and guaranteed service to small communities.\textsuperscript{140}

3.3(v) \textbf{Presidential Endorsement}

At the same time, regulatory reform was given top priority by both the Ford and Carter administrations. Shortly after becoming President, Carter endorsed the Cannon-Kennedy bill and galvanized various groups in favor

\textsuperscript{136} Committee on the Judiciary, U.S. Senate, 94th Congress, First Session "Oversight of the CAB Practices and Procedures.

\textsuperscript{137} BROWN, supra note 3, at 101-102, 107.

\textsuperscript{138} Id., at 110-114.

\textsuperscript{139} Id., at 114-115.

\textsuperscript{140} Id., at 115.
of deregulation to form an alliance. This snow-balled into an unprecedented political consensus on the matter as a diverse coalition of influential individuals and interest groups joined forces to support legislation for deregulating the industry.

3.3(vi) Administrative Deregulation

In the meanwhile, the CAB, under the stewardship of Cornell University Professor of Economics, Alfred Kahn, itself led the movement towards deregulation. In a manner most uncharacteristic of a regulatory agency facing its extinction, the CAB zealously implemented policies approximating rate and route deregulation even before Congress had passed a reform bill.

By the middle of 1978 the CAB, on its own accord, had implemented most of the provisions of the pending legislation, thereby giving policy makers and legislators

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141 Id.

142 Id., at 102, 115.

143 Kahn's predecessor John Robson had also proposed a deregulation experiment but it was not accepted. As CAB Chairman, Robson had also testified before the Cannon hearings in favor of reducing CAB authority and placing more reliance on market forces. See, Brown, supra note 3, at 117.

144 Id., at 116-119; Meyer et al, supra note 15, at 49-52.
a preview of how a deregulated airline industry was likely to function.145

3.4 **Deregulation**

Fortunately for the deregulators, the CAB's return to competitive policies coincided with a general improvement in the economy and the airline industry.146 As a result airline profits soared in 1977 and 1978, thereby dispelling fears about adverse consequences of deregulation.147 Finally, by June 1978, major opposition from the airlines had also ended148 and the Airline Deregulation Act of 1978 received Presidential assent in October 1978.149

A natural extension to deregulation of domestic commercial aviation was the liberalization of international aviation. Indeed the proponents of deregulation were also in favor of a competitive international airline industry.150 The International Air

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145 Brown, supra note 3, at 126.

146 Id., at 126.

147 Id., at 118.

148 Id.

149 Id., at 123.

Transportation Act of 1979\textsuperscript{151} was the international counterpart of the Airline Deregulation Act.\textsuperscript{152}

The Act envisaged the integration of domestic and international air transportation.\textsuperscript{153} The segregation of "international" carriers and "domestic" carriers enforced under CAB regulation was done away with and all U.S. airlines could now seek permission to fly on U.S. international routes. Due to the nature of the international system however, which is based on bilateral exchange of air traffic rights, the Act contemplated increased access by foreign carriers to the U.S. markets only if benefits of a similar magnitude were afforded by the concerned foreign governments to U.S. carriers.\textsuperscript{154} The International Act, thus, though professing to open up the market and promote competition, did so only for the U.S. carriers. Competition from foreign airlines was to be tolerated only to the extent U.S. airlines could get similar advantages in the foreign country concerned.

\textsuperscript{151} Pub. L. No 96-192, 94 Stat. 35 (codified in scattered sections of 49 U.S.C.)

\textsuperscript{152} It is beyond the scope of this thesis to discuss the International Air Transportation Act or the international repercussions of deregulation of the American airline industry. For a discussion of the same see DE MURIAS, supra note 150, 147-193, and sources cited therein.

\textsuperscript{153} International Air Transportation Competition Act, Section 17, amending Section 1102 of the Federal Aviation Act. \textit{See} DE MURIAS, supra note 150, at 166.

\textsuperscript{154} \textit{Id.}, at 166-175.
3.5 Changes brought about by "Deregulation" to the Regulatory Structure

3.5(i) Phased Termination of CAB

The Airline Deregulation Act of 1978 contemplated a phased termination of direct economic control of the domestic airline industry with the eventual abolition of the CAB itself on January 1, 1985. During the transition period the CAB was directed to prevent anticompetitive airline practices and to place the highest reliance on competitive market forces.\[^{155}\] Termination of route regulation was to be accomplished by December 31, 1981. Regulation of carrier fares, mergers, and inter-carrier agreements was to end by January 1, 1983. The CAB was required to report to Congress by January 1, 1984 "as to whether the public interest require(d) continuation of the Board and its functions beyond January 1, 1985."\[^{156}\]

\[^{155}\] See Brown supra note 3, at 123.

\[^{156}\] Id., at 125.
On its termination on January 1, 1985, the CAB’s residual powers and responsibilities were to be transferred to the Departments of Transportation, Justice, State and the Postal Service. The administration of the small-community service program was to go to Transportation, which was to also work with the State department on international air service agreements. The Postal Service was to get the CAB’s responsibilities regarding mail transport.\footnote{157}

The 1978 Act provided for the transfer of the CAB’s residual antitrust exemption authority to the department of Justice. However the CAB Sunset Act\footnote{158} passed in September 1984 transferred this authority to the department of Transportation too. This authority, however, was to end on January 1, 1989, when the airline industry would be subject to the antitrust laws in the same manner as any other industry. The CAB Sunset Act also allocated the CAB’s residual consumer protection functions like regulation of baggage handling and booking rules to the department of Transportation.\footnote{159}

\footnote{157} Id.


\footnote{159} This aspect of CAB’s responsibilities had been omitted through oversight in the 1978 Act leading to a jurisdictional struggle between the department of Transportation and the Federal Trade Commission. The
3.5(iii) Regulation of Safety and Technical Matters

Unchanged

No change was made by either Act to the regulation of airline safety or to the technical aspects of aviation. The authority for this purpose remained with the Federal Aviation Administration. (F.A.A.)

Thus "deregulation" did not mean that the airline industry was now freed of all regulation. It essentially meant that the airlines would no longer be subject to direct economic regulation, but were left to make their own economic decisions like other industries. In the course of such decision making the airlines would no doubt be influenced by the remaining regulations. But such influence would be indirect. The airlines would also be subject to the general antitrust laws though they could be granted exemption from prosecution under the same by getting approval of the Department of Transportation till the "sunset" date.

3.6 The Theoretical Basis of Deregulation

The regulatory scheme substituted by deregulation was based on certain basic assumptions about the nature of airline competition. Based on these assumptions it was expected that the market would perform a better job of

Sunset Act ended the controversy in favor of the Dept. of Transportation. BROWN, supra note 3 at 125.
regulating the industry than was possible under the CAB's regulatory structure.

3.6(i) **Airline Markets Are Highly Competitive**

The justification for doing away with rate, route and entry regulation was based on economic theory which characterized the airline industry as highly competitive and suggested that its performance without regulatory control would approach that under perfect competition.\(^{160}\)

These theories based their predictions on certain inferences drawn from empirically observed characteristics of existing airline markets.

3.6(i)(a) **Cost-less Entry And Exit**

First, the ability of airlines to lease aircraft, rent ground facilities and equipment, and to contract out major maintenance repairs and services suggested that they could expand or reduce the size of their operations without significant sunk costs.\(^{161}\) Since aircraft were obviously mobile, operations were not bound by geographical constraints. Moreover as airlines used public airports and airways, there were no substantial infra-

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\(^{160}\) See e.g., S. BRYER, REGULATION AND ITS REFORM, 317-318 (1981); Levine (1965) supra note 103; DOUGLAS & MILLER, supra note 22; JORDON, supra note 25; CAVES supra note 46; Keeler, Airline Regulation and Market Performance, 3 BELL J. ECON & MGT. SCI, 399 (1972).

\(^{161}\) See e.g., CAVES, supra note 46.
structural expenses. From this it was concluded that entry into and exit from the industry was easy and virtually costless.

3.6(i)(b) No Economies Of Scale

Second, studies by some authors\textsuperscript{162} had suggested that there were no significant economies of scale in the airline industry, and all airlines had equal access to technology.\textsuperscript{163} This led to the conclusion that new entrants to the industry were at no disadvantage merely on account of their size.

3.6(i)(c) Lower Prices, Lower Costs And Higher Capacity Utilization

Third, actual performance of relatively unregulated markets such as the California and Texas interstate markets, as well as the less regulated markets like the chartered markets seemed to suggest that competition among airlines resulted in reduction of excess capacity leading

\textsuperscript{162} See e.g., Id., at 56; M. STRASHEIM, THE INTERNATIONAL AIRLINE INDUSTRY 90-101 (1969); Gordon, Airline Costs and Managerial Efficiency, in TRANSPORTATION ECONOMICS (National Bureau of Econ. Research, 1965); White, Economics of Scale and the Question of "Natural Monopoly" in the Airline Industry, 44 J. AIR L. & COM. 545 (1979).

\textsuperscript{163} Id. In fact the evidence seemed to suggest that after remaining constant for a wide range of airline sizes, the unit cost per available seat mile actually rose for the largest airlines.
to lower costs, lower prices and higher volume of air travel.\textsuperscript{164}

Cumulatively ease of entry, lack of economies of scale, lower prices and better utilization of capacity led economists\textsuperscript{166} to predict that deregulation of the airline industry would result in cost based pricing, survival of low cost producers, disappearance of wasteful service competition\textsuperscript{166}, and an absence of opportunity for successful predation\textsuperscript{167}: in short, a replication of a perfectly competitive market.

3.6(ii) Airline Competition And The Theory Of Contestability

One problem with this theoretical framework was the reconciliation of the perfect competition model with the observed phenomena that even "unregulated" airline markets had only a handful of firms. As per conventional orthodox theory, this suggested the possession of market power, a result incompatible with perfect competition. This awkward

\textsuperscript{164} See Levine(1965) supra note 103; JORDON, supra note 25.

\textsuperscript{166} See e.g., DOUGLAS & MILLER supra note 22; Levine (1965), supra note 103.

\textsuperscript{166} Encouraged by CAB regulation.

\textsuperscript{167} Because of few start up or sunk costs.
fact was generally ignored by or glossed over by these writers.\textsuperscript{168}

After the formulation of the theory of contestability,\textsuperscript{169} this problem seemed to be resolved. Unlike orthodox competition theory, contestability theory did not require a large number of competitors. It also allowed for economies of scale. All that the theory required was that

1) firms could enter and exit without costs,
2) all firms had equal access to economies of scale and to technology,
3) there was no scope for operating losses due to predation or other forms of "strategic" conduct, and
4) there was a set of prices that could occur after the entry of at least one firm which would support profitable operation, i.e., the condition of sustainability.

If these conditions existed, potential entrants would be able to offer an immediate supply response whenever the

\textsuperscript{168} Keyes, for instance, used the "monopolistic competition" model to characterize the airline market but predicted behavior that was competitive. See Keyes, supra note 102; Levine used the perfect competition model but predicted, on the basis of observed reality, that deregulated airline markets would have a limited number of competitors. See Levine (1965) supra note 103.

incumbent producers attempted to charge higher than competitive prices or produce lower than competitive output. The threat of such potential competition would compel incumbent producers to maintain price and output at levels approximating those to be expected in competitive markets.

The characteristics observed in pre-deregulation studies of the airline industry seemed to fit perfectly with the requirements of contestability theory. Consequently, some economists used the contestability theory to predict that deregulation would lead to competitive equilibrium in the airline industry.\textsuperscript{170}

Events in the years immediately following deregulation seemed to further confirm these predictions.

The dramatic fall in fares, entry into the industry of numerous new carriers and the resulting boom in air travel seemed to vindicate the stand of the pro-deregulators. The few deviations from their earlier projections were shortly attributed to "transitional problems" faced by airlines trying to adjust to deregulation or to external factors. However, as more time went by it became increasingly clear that many of the assumptions about the nature of the deregulated airline

industry were contrary to reality. The next chapter will examine some of these assumptions and how the deregulated airline industry has actually fared in the absence of CAB regulation.
Chapter 4

The Functioning Of The Airlines After Deregulation

Deregulation had a profound effect on the airline industry. As administrative action and legislation demolished the former regulatory restraints, the airlines had to alter their competitive strategy fundamentally. The old, time-tested methods were of little utility now. As the established carriers grew familiar with the changed circumstances they evolved strategies to remain in dominance.

While some of these strategies failed, by and large the major airlines were remarkably successful in meeting the challenge posed by the low costs and prices of the new entrants to the industry. As these much publicized low priced carriers left the arena one by one, bankrupt or swallowed up by a bigger firm, the euphoria of the early days of deregulation gave way to a solemn realization that there was something essentially wrong with the theoretical projections of the advocates of deregulation.

Most of these projections were based on the characterization of the airline industry as "naturally"
competitive or contestable. But, as will be seen below, subsequent events have cast serious doubts on the accuracy of such characterization. This chapter will examine some of the major assumptions and expected results of deregulation and the manner in which the airline industry has actually functioned. It will then discuss some of the major impediments to contestability which have developed or come into focus after deregulation.

4.1 Key Assumptions and Actual Outcome

4.1(i) CAB Certificated Carriers Would Be Compelled To Bring Down Costs And Prices To New Entrant Levels Or Perish

Firstly, it had been assumed that new entrants with lower costs and higher flexibility would soon overtake the established carriers and reduce their dominance of the market unless the latter brought down costs to new entrant levels.\(^{171}\) The CAB certificated airlines had entered the

\(^{171}\) See e.g., MEYER & OSTER supra note 45, at 136-137 ("(t)he pressures placed on the established carriers to reduce their costs ... (have) come from the realization that with deregulation very low fares based on very low costs are no longer confined to the intra state markets and are certain to spread to many or even most markets ... Not only are new entrants likely to grow and expand, but ... established carriers (will have to) lower their costs in response to new entrant pressures." See also, BAILEY et all, supra note 15, at 91-110; Keeler, supra note 171; Levine, Financial Implications of Regulatory Change in the Airline Industry, 49 S. CAL. L. R. 645, 655-57 (1976).
deregulation era improperly equipped for a world of free competition. Most established carriers had entrenched labor unions and high labor costs.\textsuperscript{172} Almost all their routes, designed under CAB regulation, were high density linear routes which were highly vulnerable to low priced competition.\textsuperscript{173}

Several established carriers found themselves with aircraft and equipment suitable for long haul routes, whereas new entrants had the option of choosing equipment in accordance with emerging needs. This disadvantage was compounded by the steep rise in fuel prices which made several older aircraft obsolete.\textsuperscript{174} Together they placed a costly re-equipment cost on the established carriers. Previous contractual commitments raised costs further.

Finally, these airlines also inherited a management and corporate culture conditioned by the protective luxury of CAB regulation. On account of the CAB's policy of ensuring a fixed rate of profits, the CAB certificated airlines had got used to employing strategies which promoted growth rather than profits\textsuperscript{175}. Such a management

\textsuperscript{172} MEYER & OSTER \textit{supra} note 104, at 201-202.

\textsuperscript{173} BYRNES, \textit{supra} note 73, at 56 (1985).

\textsuperscript{174} MEYER et all, \textit{supra} note 15, at 161-188 (the fare increases made almost one quarter of the nation's jet fleet capacity economically obsolete).

\textsuperscript{175} BYRNES \textit{supra} note 73, at 62.
style was likely to be inappropriate in the new set up. With all these handicaps, these carriers were expected to fare miserably unless they could adapt quickly to the changed circumstances and bring prices to the level of new entrants.

Many of these carriers, however, while adapting substantially to the new conditions continued to survive in spite of above market costs.\textsuperscript{176} On the other hand, practically all of the new entrants, not with standing their advantages in terms of costs, equipment and internal organization, failed to survive for long. Sooner or later they either went bankrupt or merged with one of the former CAB certificated carriers.

\textbf{4.1(ii) No Incentives For Mergers And Vertical Integration Of Air Services}

Secondly, it was believed that since there were no significant economies of scale in the airline industry there would be no incentive for mergers and consolidations.\textsuperscript{177} It was also posited that there would be no incentive for vertical integration of air services.\textsuperscript{178} Rather, it was asserted that integration of

\textsuperscript{176} Levine(1987), \textit{supra} note 14, at 407.

\textsuperscript{177} See \textit{e.g.}, CAVES, \textit{supra} note 46, at 56-61.

\textsuperscript{178} The term "vertical network integration" in the context of airlines has a somewhat different meaning than the traditional use of the expression "vertical
higher density, longer haul operations with shorter haul, lower density operations would be inefficient as such combinations would impose the higher overheads and labor costs of the former on the latter. Indeed, one of the expected benefits of deregulation was believed to be the reallocation of resources from the less profitable airlines of the CAB era to independent specialized carriers having cost structures suitable for each segment of the industry.179

Both these expectations have been belied. The years following deregulation have witnessed several major consolidations and mergers. There has also been a strong tendency towards integration of international, domestic trunk line and regional/commuter services, normally through contractual arrangements which entail code integration. Traditionally, vertical integration refers to the common administration by ownership or contract of different stages of production and/or distribution. The different stages of the transportation of an airline passenger from a small town through a connecting hub to another destination, whether a major metropolitan city or another small town or to an international destination, are regarded as the different stages of the transportation process as each has very different technical and administrative features. Due to the technical and administrative differences such a journey is similar to journey using a multi-modal means of transportation. Vertical network integration occurs when these different stages of transportation are carried on under a common administration either through common ownership or through contractual arrangements. See Levine (1987) supra note 14, at 437 & n 151.

sharing, coordinated scheduling and shared market identity.\textsuperscript{180}

4.1(iii) \textbf{Linear Route Structure Prevalent Under CAB Would Continue After Deregulation}

Thirdly, an underlying assumption of the proponents of deregulation was that the linear route structure prevalent under the CAB, as well as in the intrastate markets, would be the dominant structure under deregulation too.\textsuperscript{181} In other words, the basic venue for competition was believed to be discrete city pairs. Contrary to this expectation deregulated airlines have more or less abandoned the linear route system, and instead have relied almost exclusively on "hub and spoke" systems.\textsuperscript{182}

4.1(iv) \textbf{Deregulated Markets Would Have Simple, Uniform Fare Structures Based On Costs}

Fourthly, the highly complex fare structure which resulted after deregulation could not be reconciled with

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\textsuperscript{181} Levine (1987) \textit{supra} note 14, at 411.

\textsuperscript{182} Id. "Hub and spoke" systems concentrates most of an airlines operations at one or very few "hub" cities serving all other cities non stop from the hub. The cities on the spoke are provided connecting service through the hub.
either the perfectly competitive market model or the contestable market model of the airline industry. These models visualized simple, uniform pricing based on the costs of the new entrant airlines.\textsuperscript{183} "Discount" fares and other types of restricted discriminatory pricing were considered to be a result of market power created by the artificial entry controls imposed by regulation.\textsuperscript{184} Since entry into and exit from the airline industry was believed to be more or less costless, no such market power was expected to remain after deregulation. Another underlying assumption with regard to this pricing model was that the demand for air travel was similar among most travellers, i.e., all travellers were equally sensitive to changes in price.\textsuperscript{185}

Together, these two factors were expected to produce a relatively simple and unrestricted price system.\textsuperscript{186}


\textsuperscript{184} A limited amount of cost based price discrimination, like higher peak time rates was however visualized.

\textsuperscript{185} MEYER et all, supra note 15, at 56. (Congressional study based on assumption that unrestricted regular fares would prevail after deregulation; Carstensen, supra note 88, at 109-110.

\textsuperscript{186} See Hearings on the Oversight of Civil Aeronautics Board Practices Before the Subcommittee on Administrative Practice and Procedure of the Senate Committee on the Judiciary, 94th Congress 1st Session (1975) (Kennedy
This conclusion was further fortified by observations of the intra state markets in Texas and California as well as the charter market.\textsuperscript{187}

The unrestricted low fares introduced by airlines such as Peoples Express immediately after deregulation seemed to support this analysis. When discount pricing persisted in spite of the rock bottom prices of these new entrants, they were regarded as part of the adjustment process by which residual market power was being competed away.\textsuperscript{188} It was predicted that the complex price structure would eventually disappear as the airlines would be forced to lower their costs and simplify their fare structure or perish.\textsuperscript{189} However not only is the highly complex fare structure very much in vogue today but contrary to what was anticipated, it is the new entrants offering the unrestricted low fares which have ceased to exist.

\textsuperscript{187} See, Levine (1965) \textit{supra} note 103; MEYER & OSTER, \textit{supra} note 104, at 21-24.

\textsuperscript{188} Or, in the terminology of economists the "tatonement" process whereby prices are adjusted mutually over time to reach equilibria. Levine (1987) \textit{supra} note 14, at 414.

4.1(v) **Insignificant Role Of Frequent Flyer Programs, Travel Agents And Computerized Reservation Systems**

Another development which the pro-deregulation analyst had not anticipated was the central role frequent flyer programs, travel agents and computerized reservation systems (CRS's) would play in the deregulated airline industry.\(^{190}\)

4.1(v)(a) **Frequent Flyer Programs**

When American Airlines introduced the frequent flyer program in 1980 many observers considered it to be a marketing incentive of no particular significance.\(^{191}\) Such bonuses should not have been necessary had the airline industry been really competitive or contestable. Nor should it have been required if an airline enjoyed a monopolistic position in the market. However, these programs have become an integral feature of the industry. In spite of some initial reluctance, virtually every carrier has been compelled to offer such programs irrespective of whether it has a large proportion of monopoly routes due to its hub and spoke systems, or whether it offers a relatively low and non-discriminatory fare structure. And, in general, the benefits of the


\(^{191}\) *Id.*, at 414.
program are available regardless of whether passengers purchase full fare or discounted tickets.\footnote{192}

\section*{4.1(V)(b) Role of Travel Agents}

Deregulation was also expected to diminish the role of travel agents in the distribution system. Since the airlines were expected to adopt simplified non-discriminatory fare structures at the lowest feasible cost, it was anticipated that they would also adopt alternative methods of distribution\footnote{193} which emphasized on direct marketing and dispensed with "middle men".

However, the constantly and rapidly changing fares, the enormous range of fares for the same journey and frequent changes in routes and services has made the task of evaluating the "best bargains" available at a particular time very complex for the lay traveller. As a result, the need for travel agents has grown and there has been a tremendous increase in the percentage of air ticket sales through travel agents.\footnote{194}

\footnote{192} Which excludes any simple explanation which would justify the benefit on the basis of the cost of the ticket.

\footnote{193} Levine(1985) \textit{supra} note 14, at 414.

\footnote{194} See BRENNER et al\textit{ supra} note 15, at 62 (travel agents' share of total domestic and international air travel sales rose from 47\% in 1973 to 57\% in 1978 to 74\% in 1983. The total commissions paid increased from \$732 million in 1978 to \$2.4 billion in 1983.)
4.1(v)(c) **Computerized Reservation Systems**

Finally, though Computerized Reservation Systems (CRS's) had started operations even before deregulation, the deregulators apparently never anticipated the pivotal role the airline owned CRS's would play after deregulation and the various ways in which they could be manipulated to "bias" the system in favor of the airline owning the CRS.\(^{195}\) The frequent changes to a complex system of airline fares, flight schedules and ticketing procedures has made the CRS's indispensable.

However CRS's have been used to distort information received by travel agents and consumers about service offered by rival airlines as well as for providing over rides and other incentives to induce travel agents to sell the tickets of the airline owning the CRS.\(^{196}\) If an airline is the owner of the dominant CRS in its own hub city it can place its competitors in a very disadvantageous position.

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\(^{195}\) Levine(1987) *supra* note 14, at 415. The travel agents use the CRS to get flight and fare information for its customers, issue tickets and boarding passes and provide ancillary services such as rental car and hotel reservations. Either due to economies of scale or due to contractual terms, the agency usually uses only one system.

\(^{196}\) See United Airlines v. Civil Aeronautics Board, 766 F. 2d 1107, 1110 (1985). The issues raised by the CRS's is discussed in the next chapter.
4.1(vi) Predatory Conduct Under Deregulation

Standard deregulation analysis had assumed that predation would not be of concern in the airline market. It was believed that an airline targeted for predation could simply withdraw from the market and refuse to operate below cost, and then resume service once the predator raised fares to compensatory levels. However, the post deregulation period abounds with cases of higher cost airlines reducing their fares to a level apparently lower than its costs and then refusing to raise the same till the new entrant is financially exhausted or withdraws from the route. This sort of behavior strongly suggests that, contrary to what was expected, predatory practices are prevalent in the airline industry and periodical rate wars followed by increase in fares are a reflection of this fact.

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198 Id. This belief was based on the assumption that entry and exit were costless.

199 Id.; BRENNER et al., supra note 15, at 33-50; Newspaper reports also periodically feature stories about fare wars. See e.g., When does a Competitor Cross the Line to Predator? Investors Business Daily, June 17, 1992 (reporting the filing of suits by Continental Airlines and Northwest Airlines claiming that American Airlines had engaged in predatory pricing in order to drive them out of business); Fare Wars Are Becoming A Way Of Life, Bus. Week Jan 13, 1986, at 102; The Airlines' Dangerous Games With Fares, Bus. Week Mar 5, 1984 at 33.
4.1(vii) Deregulation And Antitrust Enforcement

The proponents of deregulation had assumed that the existing antitrust laws and procedures would be sufficient to deal with any antitrust issue that could arise under deregulation. To begin with, it was asserted that exclusionary or exploitative conduct would be rare. If at all it occurred it would necessarily (and transparently) fall within the categories of conduct prohibited by the antitrust laws. Moreover, it was assumed that such conduct, if and when it occurred, would be dealt with by the antitrust enforcement machinery.200

The actual experience after deregulation seems contrary to these expectations. The tendency towards mergers, consolidations and contractual integration has been very strong in the deregulation era. The resulting concentration coupled with the evolution of hub and spoke route systems, frequent flyer programs, instances of apparent predatory conduct and the dominance of the CRS’s have raised serious concerns about the possession of market power by the airlines and the antitrust

implications of the same. The antitrust machinery, however, has proved largely ineffectual in dealing with these matters. 201

4.1(viii) Bankruptcies, Debts And Leveraged Buyouts

The high levels of debts and the remarkable stream of bankruptcies witnessed by the airline industry since deregulation have been beyond the expectations of the pro-deregulators. Bankruptcy, in itself, when it is caused through inefficient management of operations, might not be a matter of grave concern for the overall health of the industry. More competitive and advantageously positioned firms may be expected to take over the assets and put them to better use.

If the number of firms are small, however, the resulting concentration of the industry can legitimately raise apprehensions of abuse of economic power and may also warrant an investigation to find out whether the bankrupt company's plight was a result of inept management or was the consequence of predatory tactics employed by the "bigger fish", or of any other feature of the deregulated industry.

Indeed part of the financial problems of airlines seems to have originated from the frequent rate wars that have erupted ever since deregulation. The financial over-

201 See infra Chapter 5.
reaching by some of the rapidly growing new entrants may also have contributed to some of the bankruptcies. External factors like increase in fuel prices, adverse economic conditions, increased re-equipment costs and the like, are also partly responsible for this state of affairs.

While a certain amount of financial instability was to be expected as the industry sought to adjust to an unregulated environment, the precarious financial health in which the industry finds itself today was certainly not contemplated. The assumptions of mobility of capital and costless entry and exit ought to have permitted airlines to pull out before they reached the stage of bankruptcy.

The bankruptcies, aside from causing distress to the shareholders and creditors, has also dissuaded investors from funding new airlines. Thus potential competition from such new entrants, on which the contestability theory was based, seems more and more unlikely. Instead, a different type of investor - the corporate raider - has been attracted to the industry. Encouraged by the high levels of concentration in the industry and the depressed value of airline stocks, and lured by the prospect of

\[ ^{202} \text{As airline earnings are subject to cyclical swings stocks normally sell at a discounted price as compared to the stock markets normal price-to-earnings ratio. See Michele M. Jochner, The Detrimental Effects of Hostile Takeovers, Leveraged Buyouts, and Excessive Debt on the Airline Industry, 19 TRANSP. L. J. 219, 225 (1990). At} \]
profitable liquidation of the airlines undervalued assets like aircraft, spare part inventories, delivery dates on aircraft, deposits on airplanes and real estate, and assured by its hub and spoke systems, computerized reservation system, and landing slots at crowded airports, of earning monopoly rents, these raiders have attempted leveraged buyouts of several major airlines.

Since these attempts are financed through heavy debt, a successful takeover means that the debt has to be serviced by the targeted airline. Even where a takeover bid is unsuccessful, the incumbent management is left to bear substantial expenses in order to repel the takeover bid. In either event the airline ends up with a mountain of debt. This in turn forces it to take such undesirable steps as cutting down or postponing essential re-equipment expenditure, changing the company's capital structure by times of financial uncertainty in the industry, the stock prices are likely to be further depressed.

See Id., at 225; Paul Stephen Dempsey, Robber Barons in the Cockpit: The Airline Industry in Turbulent Skies, 18 TRANSP. L. J. 133-34 (1990). Dempsey also attributes the power and glamour of owning an airline as a motivating factor for the takeovers.

See generally, Dempsey, supra note 203; Jochner, supra note 202. During 1989, three of the four largest airlines in the United States, Northwest, United and American, became targets for leveraged buyouts, loading them with enormous debts. Four others which had become victims of leveraged buyouts, Continental, Eastern, Pan Am and TWA ended up with negative net worth. Eastern and Pan Am have gone bankrupt while TWA and Continental are on the verge of bankruptcy.
expenditure, changing the company’s capital structure by reducing equity and increasing debt, liquidating fixed assets like buildings and taking them on rent, selling air crafts and equipment and then taking them on lease.

The problems created by hostile take overs and leveraged buy outs are not confined to the airline industry and has been the subject of much controversy and debate. But the effects of such attempts on the airline industry has been particularly disturbing. Unlike the earlier airline entrepreneurs and the "new entrants" attracted by deregulation, the corporate raiders are not interested in the airline business. Quite often, the corporate raider launches a hostile tender offer merely to shake up the market and drive up the airlines’ stock price.


206 As one observer notes "the aviation industry right now is being run and acquired by financiers - not aviation people" Blum, So Is It Really Safe To Fly ? Nat’L L. J Oct 2, 1989 at 26 (comments of Richard F. Schaden)
stock.\textsuperscript{207} Their primary (and often sole) purpose is to make quick personal profits at the expense of the airline. As such they are not concerned with the long term viability of the airline and their actions are designed to extract as much as possible from the company in the shortest possible time.\textsuperscript{208}

Even if the targeted airline can momentarily avert bankruptcy and manages to limp along with its unproductive

\textsuperscript{207} Jochner, \textit{supra} note 202, at 226; \textit{See generally} Dempsey, \textit{supra} note 203. Dempsey cites a two instances: Denver oil king Marvin Davis launched a $ 2.7 billion bid for Northwest Airlines. Northwest ultimately fell victim to a $ 3.7 billion bid by Alfred Checchi while Davis enjoyed a $ 30 million profit on the Northwest raid. Similarly, Francisco Lorenzo collected $ 46 million as "loser's compensation" after he had launched a hostile take over attempt of National Airlines in 1979. (Pan Am ultimately acquired National for $ 400 million through a "white knight" non hostile acquisition.) Lorenzo then launched a take over bid to acquire Continental which he finally did in 1982. This was followed by acquisitions of Peoples Express and Eastern Airlines.

\textsuperscript{208} For an account of the manner in which these corporate raiders have ransacked the airlines they acquired through leveraged buy outs see \textit{generally} Dempsey \textit{supra} note 203; Jochener, \textit{supra} note 202. Francisco Lorenzo, who entered the airline industry via Texas Air rapidly acquired several airlines through hostile takeovers and promptly went about the task of bleeding them to bankruptcy. Philip Baggeley, Vice President of Standard and Poors Corp. describes Lorenzo's modus operendi thus: "Mr. Lorenzo has built one of the most leveraged major corporations in the nation while insulating Texas Air - and himself - for most of the cost and much of the risk ... Mr. Lorenzo presides over some of the nations sickest airlines. All are losing money at some of the fastest rates in aviation history and rank as the industry's biggest debtors." \textit{Hearing on Leveraged Buyouts and Foreign Ownership of Airlines Before the Aviation Subcommittee on Public Works and Transportation, 101st Cong., 1st Sess (1989)} (statement of Philip Baggeley).
and back breaking burden of debt, it can hardly be expected to regain its former competitive strength. Starved of funds it is compelled to cut down on essential maintenance and re-equipment expenses which further reduces its competitiveness and compromises safety. At the same time it becomes extremely vulnerable to aggressive competition as well to changes in economic climate or technology.

It is doubtful whether the proponents of deregulation visualized the disastrous effects of leveraged buyouts by corporate raiders. At least the possibility was not addressed in the deregulation literature. However, in view of the affiliation of many of them to the Chicago School of economic thought, it seems likely that many of them would have subscribed to the view that hostile take overs are a significant means of displacing inefficient management and attain better allocation of resources and should, therefore, be encouraged. Resistance to the take over bid by the incumbent management would be regarded as signs of an inefficient management wishing to entrench itself.  

However sufficient evidence exists today to discredit the theory that hostile take overs invariably lead to a better allocation of resources and the result of a successful bid is to substitute a more efficient and

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209 See e.g., Easterbrook & Fischel, supra note 205.
productive management in place of the (presumably) inefficient and unproductive incumbent. 210 It certainly does not seem to be the case in the airline industry. 211

4.1(ix)  Airline Safety

Another major assumption of the deregulators was that economic deregulation would not affect airline safety. For almost two decades safety regulation had been the prerogative of the Federal Aviation Agency (FAA). As the CAB had no direct responsibility for aviation safety, its abolition was considered inconsequential. Since the deregulators did not admit of the likelihood of any change in the safety equations which would warrant additional safeguards in the deregulated era, it was not considered necessary to supplement the powers or resources available to the FAA.

While considerable controversy still exists as to the extent to which developments after deregulation have affected airline safety, there is a growing consensus that the deregulators handicapped the FAA considerably by not

210 See e.g., Lipton(1980), supra note 205; Lipton(1987) supra note 205.

211 As Jochner notes "(t)he service of needless debt, brought about solely because of takeover speculation and individual greed, surely is not the optimum use of society's capital. These transactions serve merely to rearrange capital; they do not create capital." Jochner, supra note 202 at 222.
enhancing the resources available to it for performing its tasks.\textsuperscript{212}

4.1(x) \textbf{Scarcity Of Gates And Slots Will Not Impede Contestability}

The proponents of deregulation realized the importance of availability and transferability of airline slots, gates and other airport facilities to the functioning of a competitive airline system.\textsuperscript{213} Mere scarcity of a factor of production (i.e., the scarce airport facility), however, was not considered an impediment to contestability. It was believed that in a contestable market the firms which could make the most efficient use of the scarce slots and gates would be able

\textsuperscript{212} See generally, J. NANCE, BLIND TRUST: THE HUMAN CRISIS IN AIRLINE SAFETY (1986); Carstensen, supra note 88; See also Safety and Reregulation of the Airline Industry, Hearings Before the Committee on Commerce, Science and Transportation, 100th Congress 2d Sess (1987) at 33 (statement of T. Allen Mc Arbor). However statistical studies based on airline accident rates show no increase in accident rates. In fact the rates have declined, a result attributed to better technology and not to deregulation. See e.g., Clinton V. Oster, Jr. and C. Kurt Zorn, Is It Still Safe To Fly, in TRANSPORTATION SAFETY IN AN AGE OF DEREGULATION (Leon N. Moses & Ian Savage Ed., 1989), 128.

to purchase it by paying the "market" price to the owner.\textsuperscript{214} Even the vertical integration between airline owners and slot owners, it was argued, would not impede entry.\textsuperscript{215} If a slot or gate was more valuable to another airline than to its present user the first airline was supposed to be able to obtain it by paying its present user the "market price". So what mattered was not that the slot was scarce but whether it was freely transferable.\textsuperscript{216}

The possibility of an airline not selling its underutilized or unused airport slot to another airline which needed it to enter the market was considered irrational and not admitted.\textsuperscript{217} But although buying and selling of slots was permitted for some time in 1983 and has been legal since April 1986, the airlines have been extremely reluctant to share its airport facilities with their

\begin{quote}
\textsuperscript{214} Levine(1987) supra note 14, at 465-466.
\end{quote}

\begin{quote}
\textsuperscript{215} Id. (referring to R. BORK, THE ANTITRUST PARADOX, 228-31, 240-42 (1978) : vertically integrated firm maximizes overall profit by selling output at each level as though the units were independent of each other)
\end{quote}

\begin{quote}
\textsuperscript{216} Since airport facilities are controlled by local public authorities, rules about subleasing or transferring varied. The solution suggested for the access problem was to make airport facilities easily transferable and avoid long term leases. See BAILEY et all supra note 15, at 184.
\end{quote}

\begin{quote}
\textsuperscript{217} See BORK, supra note 215, 228-31, 240-42 (vertical integration for the purpose of blocking entry was irrational as it incurred diseconomies.)
\end{quote}
competitors\(^{218}\). The airlines have held on to their ticket counters, gates, ramps and hangar space and have often avoided making them available to other airlines even when they were not using them and had no plans of using them in the future.\(^{219}\)

### 4.2 Airline Competition and the "New Industrial Organization Theory"

The deregulation experiment has attracted an exceptional degree of academic and policy interest. These surprises of deregulation has led to a reevaluation of the nature of airline competition. In general, there is a growing consensus that airline markets are not "naturally" contestable\(^{220}\). Contrary to what was believed previously, there are certain characteristics of the airline markets which set up or enable an established airline to set up substantial barriers to contestability. These

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\(^{218}\) Levine(1987) *supra* note 14, at 466.

\(^{219}\) *Id.*; *See also* BAILEY et al, *supra* note 15, at 192-193 (cites two cases: a) Laker Airways inability to get a gate or terminus space at JFK Airport even though National Airlines had unused space suitable for this purpose and b) TWA's reluctance to sublease space to Eastern at Los Angeles.)

characteristics have been highlighted by Levine\textsuperscript{221} who has used the "new industrial organization theory"\textsuperscript{222} to identify several of these barriers. Most of them arise on account of the economies of scale and scope\textsuperscript{223} created by the ability of airlines to exploit factors such as the economics of information, principle-agent effects and production indivisibilities which were ignored by conventional perfect market and contestability models of the airline industry.

Some of these factors are discussed below.

4.2(i) \textbf{Costs Of Developing And Communicating Information Exhibit Economies Of Scale And Scope} 

First, the cost of developing and communicating information about routes, schedules, seat availability,

\begin{itemize}
\item \textsuperscript{221} Levine(1987), supra note 14 at 444-480.
\item \textsuperscript{222} The new industrial organization theory has developed from the works of economists like Frank Knight [F. Knight, The Economic Organization (1951); F. Knight, Risk Uncertainty and Profit (1921)], Ronald Coase [R. Coase, The Nature of the Firm, 4 Economica 386 (1937); R. Coase, The Problem of Social Cost, 3 J.L & Econ, 1 (1960)], and in a more modern context, Oliver Williamson [Oliver Williamson, The Economic Institutions of Capitalism (1985)]. It focuses on the relationships between the firm and the various economic actors interacting with it, and on the strategies employed by them to achieve their respective objectives at the minimum cost.
\item \textsuperscript{223} Economies of scale refer to advantages resulting from the gross size of the airline. Economies of scope refer to advantages enjoyed by an airline from a wide variety of airline products offered in a large number of markets.
\end{itemize}
service features and prices are considerable in the airline industry.\textsuperscript{224} While any new business enterprise has to incur expenses for packaging and disseminating such information,\textsuperscript{225} the investment required for this purpose is exceptionally high for a new airline. These costs are also non-recoverable or "sunk" costs.

An airline must make consumers aware not only that it exists and of the package of prices and services it offers, but also of such service characteristics as schedule reliability, probable longevity in the market place and an acceptable level of safety. "Each contact with the customer is cumulative, creating memory and awareness. The repetition of communication over time serves as reassurance of reliability and durability in a business where the customer generally pays before delivery. The investment in communication is highly brand specific, so that advertising by one airline does not significantly benefit another."\textsuperscript{226}

Airlines sell under the same brand name many different products, such as different fare and service

\footnotetext{224}{These information costs are not the only costs which an airline has to meet. A new airline, even one which intends to run its operations with leased aircraft and facilities, must incur certain non-recoverable "ramp up" costs. See Levine, Airline Deregulation: A Perspective, 60 ANTITRUST L. J. 687, 688 (1992).}

\footnotetext{225}{See Stigler, The Economics Of Information, 69 J. POL. ECON. 213 (1961).}

\footnotetext{226}{Levine(1987), supra note 14, at 427.}
types, in different city pair markets. These products are sold to many customers in many different locations. Filling the seats requires communicating simultaneously with geographically dispersed customers with diverse travel needs using a common medium. The indivisibilities associated with the most efficient of public media, large metropolitan newspapers and network television, make it much more efficient to offer more than one airline product to the widest possible audience.\footnote{Id., at 429.}

Thus, though the cost of physically providing the service may not display economies of scale, the costs of communicating information do exhibit economies of scale. From this, it follows that a big airline with a large network of routes and a wide variety of products, is at a distinct advantage over one offering a limited number of destinations and fare types, for it can spread its communication costs over a much larger range of services.

In addition to these economies of scale the economics of information also makes it cheaper for an established, well known airline to offer increments to its service as the public already associates it with broadly acceptable standards of service. These "economies of scope" also makes it easier for an airline to offer an additional product to a person who has already used it. The same customer who buys a business ticket between Atlanta and
New York may want to travel later on a leisure ticket from Atlanta to Orlando or on an international excursion ticket from Atlanta to Paris. Once the consumer has become familiar with an airline she can economize on search costs by using it for more than one service.

In such a situation an established airline with a wide network is again at a decisive advantage as the likelihood of it being able to offer the service which the customer subsequently wants is much greater. To counteract, even partially, such advantages, a new entrant must make a disproportionally large amount of non recoverable investment in information generation. Thus these economies of scale and scope act as a considerable impediment to contestability.

4.2(ii) Principal-Agent Effects

The second major factor which has shaped developments in the post deregulation period is the attempt by the airlines to exploit the "principal-agent" problems created due to the difficulty on the part of principals (in this case the employers of persons travelling on business, and the customer of air tickets,) to monitor the opportunistic behavior of their agents (the employee flying on business, and the travel agent booking the ticket on behalf of the
customer). The extremely complicated and ever changing fare structures of the deregulated airlines has made it practically impossible for employers to monitor whether their employees always use the most efficient and cost effective mode of transportation when they travel on business. Likewise, it is difficult for an average airline customer to check with certainty whether her travel agent is in fact giving her the least expensive ticket available for the journey. This provides possibilities for these "agents" (i.e., the employee and the travel agent) to reduce their search efforts (i.e., shirk) or, when possible, to even profit at the expense of their principals (i.e., indulge in opportunistic behavior).

The airlines have successfully taken advantage of this situation by designing frequent flyer programs and travel agent incentive programs with non linear reward structures, in which the value of the award per mile increases as the total number of miles flown increases. In addition, they also provide higher

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228 The principal-agent problem is not specific to air transportation. The problem was identified by Knight in 1921. See KNIGHT (1921) supra note 222, Ch 8. For a modern treatment of the problem see Ross, The Economic Theory Of Agency: The Principals Problem, 63 AM. ECON. REV. 134 (1973); See also, Alchian & Demsetz, Production, Information, Information Costs and Economic Organization, 62 AM. ECON. REV. 777 (1972); For a general survey of principal agent literature see Rees, The Theory of Principal and Agent (Parts 1 & 2), 37 BULL. ECON. RES. 3 (1985), 37 BULL. ECON. RES. 37 (1985).

rewards for more expensive classes of tickets. These programs exploit the principal agent problem by giving the agents an incentive to "cheat" or "shirk" while the "artificial" economies of scale presented by the non linear reward structure enables the airline to benefit from economies of scope.\textsuperscript{230} The larger the number of destinations offered by an airline the easier it becomes for the participants of these programs to earn the more desirable awards\textsuperscript{231}, and the more attractive\textsuperscript{232}.

While smaller or "specialist" airlines can, and do, offer frequent flyer programs or travel agency overrides, due to the economies of scope these programs generate, they are at a big disadvantage as compared to a large airline with a wide network. So by designing travel agents incentive schemes and inventing frequent flyer programs, big airlines have created "artificial" economies of scale and scope which further impede the contestability of the markets.

\begin{footnotesize}
\begin{itemize}
\item \textsuperscript{230} Id. at 432-433, 452-458.
\item \textsuperscript{231} Incentive programs for travel agencies are designed to reward travel agents both for increase in market share in particular city pairs and for increase in total business generated by the agency. Due to the non linear award structure a travel agent would find it more advantageous to book passengers on airlines offering a wider variety and larger volume of services.
\item \textsuperscript{232} A wide array of destinations not only enables customers to accumulate sufficient miles to get a desired award faster it also gives her greater choice regarding which city to fly to. This flexibility adds to the attractiveness of the scheme.
\end{itemize}
\end{footnotesize}
4.2(iii) **Production Indivisibilities**

A third barrier to contestability is the indivisibilities involved in serving particular city pairs.\(^{233}\) An airline must be able to offer at least 2 or 3 flights a day in a market to achieve minimal market acceptance. More frequent service often gives a competitive edge to an airline as it allows customers to economize on search efforts. At the same time it must also provide an aircraft of a minimum "acceptable" (or available) size. The central problem of traffic scheduling in the industry is how to fill all these seats so that the airline generates sufficient revenue to make its services viable.

The hub and spoke system is an efficient and useful technique of overcoming these indivisibilities so as to allow frequent service in many city pairs whose traffic density would not otherwise support it. Hub and Spoke systems create genuine benefits.\(^{234}\) But they also impede contestability.

Due to these indivisibilities airlines need to sell seats on the same flight in a number of markets and at different prices. While doing this the airline aims to extract the highest possible revenue from the different customer groups it combines on the same flight. To do this


\(^{234}\) *Id.*, at 441-444.
the airline must be able to do two things. First, it must be able to develop a sufficiently large hub operation (or better still a system of multiple hubs) to be able to tap customers wishing to travel to different destinations from the same spoke city and to reap the advantages of the "economics of information."

Second, it must be able to efficiently exploit the principal-agent problems in order to attract high yield traffic, i.e., customers like business travelers who are not price sensitive. Attracting high yield traffic means that frequent flights can be supported with fewer passengers. It also means that the airline will be able to attract more passengers in the price sensitive segments by offering them cheaper fares.

Thus, the existence and size of an airline's hub and spoke system, in conjunction with its ability to effectively exploit economies of scope and scale described above, determines the degree of success it has in reducing the indivisibilities of production inherent in the airline business. This means that if a new entrant wishes to enter in a position of competitive strength, it must do so on a very large scale.235 Obviously this implies that a new

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235 As Levine observes, "(an) airline large enough to exhaust production indivisibilities at even a medium sized city hub is already a pretty big airline. None of the (medium sized) cities being used as a hub ... supports more than two such airlines, and most support only one. A would be entrant at a hub city must therefore be prepared to displace an incumbent. At the other end of the scale,
entrant is placed at a major disadvantage by these production divisibilities.

4.2(iv) The Need For Vertical Network Integration and Code Sharing

Traffic originating at or destined for small towns typically have to fly the short haul leg of their journey as part of a much longer journey. As a matter of convenience passengers normally prefer to travel on the same airline for both the short and the long haul part of their journey. Since the incremental cost of adding such passengers to an already functioning hub system is low it made sense for the major airlines operating hub and spoke systems to try to tap this major source of feed by adding the small towns to the hub and spoke system.\(^{236}\)

But the small number of passengers in individual towns and the "production indivisibilities" in this case made it totally uneconomical to provide jet service to these towns.\(^{237}\) Technologically, these towns were more efficiently served by the commuter airlines using their

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the same situation is created with respect to entry into a spoke market large enough to support only one airline offering the minimum level of service in jet aircraft of minimum size for any given set of traffic flows. An entrant in such markets must completely displace the incumbent." Levine(1987), supra note 14, at 444-445.

\(^{236}\) \textit{Id.}, at 437-441.

\(^{237}\) \textit{Id.}, at 439.
small propeller driven aircraft and non-unionized labor. Vertical integration through long term contract seemed to be good way of getting this valuable feed traffic and not compromising on operating efficiency. But the biggest advantage of such integration came from the same economies of scale and scope described above.

The vertical integration involved sharing of a common reservation code which identified the services offered by the commuter as part of the service network of its major partner, adopting common marketing strategies and also making some changes in the set up of the commuter to make it more visibly identifiable as an associate of the major airline.

Such an arrangement worked well for every one. It allowed the major airline to take advantage of the economies of scope arising from adding the smaller towns to its route network. The airline was also assured of an important source of feed traffic. The passengers benefitted by economizing costs involved in looking for a "convenient" connection, by getting the short haul portion of the journey also credited to their frequent flyers account with the major airline, and by getting easier

\[\text{Id.} \text{, at 440.}\]

\[\text{By retaining their separate legal status the airlines could take advantage of the lower labor costs of the commuter airlines and avoid the complications of merging union and nonunion staff.}\]
connections to cities served by it. The travel agents gained as they also received commission overrides from the major airline for bookings made on the short haul portion of the journey. And the commuter airline could also take advantage of the economies arising from marketing under a national brand and being part of a major route network. With such obvious advantages there was a scramble on the part of the major airlines to get commuter partners and soon virtually every major commuter airlines was tightly tied to one of the major national airlines and the same position continues till today.

However, this process of vertical integration, while producing efficiencies for the parties involved, also raised considerable barriers to entry. The arrangements took away or preempted feed from the commuters to other airlines, existing or potential, thereby affecting their ability to set up or maintain a competitive hub and spoke system at the same location as the acquiring firm’s own hub or at a hub positioned so that it served the same traffic flows.

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240 See generally, PICKEREL & OSTER, supra note 180.

4.2(v) Complex Fare Structure

As the major airlines grew more sophisticated in dealing with the information intensive environment of the deregulated era, they devised methods to maximize revenue by following a policy of targeted pricing or "yield management". Their frequent flyer programs tied the most attractive awards to the use of less discounted fares. Computerized inventory management programs enabled them to divide aircraft capacity into sub units and sell them on different terms to different market segments.

When faced with price competition from new entrants on any route, they took advantage of their economies of information to match the fare levels of their new entrant but offered them on more restrictive terms. At the same price the customer was likely to choose the bigger and better known airline. They also introduced hidden capacity controls on apparently "unrestricted" discount tickets which were priced at or below the new entrant's prices. Such capacity controls enabled them to sell only that many

242 This type of pricing structure which is the result of price discrimination according to the differences in customers' elasticity of demand, is known as "Ramsey Pricing". See generally, Ramsey, A Contribution to the Theory of Taxation, 37 Econ. J. (1927). For a journalistic account of how discriminatory prices are used by airlines to maximize revenue see Off Course, The New York Times, Sept 1, 1991.

tickets at discounted rates as could not be sold at higher rates within a certain black out time. It also allowed them to vary the ratio of tickets sold at different prices on different terms for each flight.

To be effective such a strategy required computerized inventory controls and market segmentation based on substantial and real time informational capabilities. The major airlines, with their computerized reservation systems, frequent flyer programs and travel agents incentive schemes had both of these. While the new entrant and smaller airlines could and did also follow suit and have their own "discriminatory" price structure, the lack of immediate access to the databases of the computerized reservation systems prevented them from obtaining similar market intelligence. As the rivals could not be sure of how many discounted tickets would be sold by the incumbent on a particular flight, it had to sell a disproportionately higher number of discounted tickets just to ensure that it did not lose any price sensitive customer. What emerged were complicated and ever changing fare structures which allowed the major airlines to achieve a relatively higher total revenue while pricing fewer passengers out of the market.

Such a price structure constitutes a major obstacle to the contestability of airline markets as they enable

\textsuperscript{244} Id., at 451-452.
the incumbent airlines to respond quickly, cheaply and selectively to the prices and outputs of new entrants without conferring a similar advantage to the latter\textsuperscript{245}. The new entrant, already burdened with the costs imposed by the economics of information, has to rely on guess work and incomplete information to react to the incumbents prices.

Moreover, as an incumbent with an established hub and spoke system can spread its overheads and costs of operation over routes where it does not face competition, it becomes relatively easier for it to earn sufficient revenue to increase the frequency of its flights in markets where it faces competition from the new entrant. The incumbent can use this ability to maintain frequent flights in the face of vigorous price competition and to use that frequency to attract passengers, with further deleterious effect on its competitor.\textsuperscript{246}

The cumulative effect of all the above factors has been to reduce the number of airlines in the industry to a handful of mega carriers who dominate the U.S. skies and are in a position to repel the challenge of any small new entrant. Even among them, the extensive route networks and computer reservation systems of the largest three along with their ownership of the majority of airport slots in

\textsuperscript{245} Id.

\textsuperscript{246} Id.
the country has placed them a very strong position as compared to the rest of the industry. These airlines have been accused time and again of indulging in anticompetitive conduct with a view to oust the relatively smaller carriers.

This situation has led to demands for strong antitrust enforcement but the record of the enforcement machinery has not been encouraging. The next chapter will discuss some of the antitrust concerns which have arisen in the wake of deregulation and try to analyze the reasons for the ineffectiveness of the antitrust enforcement machinery.
CHAPTER 5

ANTITRUST ENFORCEMENT AND THE DEREGULATED AIRLINE INDUSTRY

The widespread concern about inadequate antitrust enforcement was brought out in a recent newspaper article in the following words:

"When airline deregulation was enacted there were 23 domestic airlines. Within six years they were joined by three intrastate and 14 start-ups of significant size. The result was 40 carriers ... Today ... (t)he number of airlines in operation has dwindled to 11 and three are operating in bankruptcy ... The government’s policy of not enforcing antitrust laws has permitted the development of three glaring barriers to competition: the dominance of computerized reservation systems by the very largest carriers, the growth of frequent flyer programs that lock customers into using only the largest carriers, the unfair allocation of landing rights at capacity-constrained airports ... If the federal government continues to abandon its responsibility to enforce antitrust laws, eventually the flying public may be left with just three mega carriers - American, Delta and United."247

247 Perspective On Air Travel; Deregulation: An Idea Gone Wrong - The New Fares Will Create Hardships For Many Passengers And Make It Hard For All But A Few Huge
This popular perception of the desperate need for antitrust enforcement is shared by many academicians.\textsuperscript{248} The proponents of deregulation had assumed that the existing antitrust laws and enforcement machinery would adequately take care of any antitrust issues which might arise after deregulation.\textsuperscript{249} The actual experience after deregulation has been contrary to these expectations.

The tendency towards mergers, consolidations and contractual integration has been very strong in the deregulation era. In addition, several airlines have exited the market via bankruptcy. As a result the industry has become highly concentrated.

The antitrust implications of this concentration has been voiced in various forums. Other major concerns in the antitrust arena have been about the frequent instances of apparently predatory practices, the misuse of computerized reservation systems, and the problems created by the major airlines possessing most of the nations scarce airport facilities like airport slots and gates.


\textsuperscript{249} See supra note 200 and accompanying text.
The antitrust enforcement machinery, however, has failed to adequately address these concerns. This chapter will discuss these problems and attempt to analyze this failure.

5.1 Consolidations, Mergers And Acquisitions

Antitrust law does not prohibit every kind of merger or acquisition which increases industry concentration. What is pertinent is the competitive impact of the merger or acquisition. It is only when the transaction substantially reduces competition in the market or tends to create a monopoly that it is proscribed by the antitrust laws. 250

The assessment of the competitive impact of a merger, however, is complex. A court doing traditional analysis has to first define the relevant market, measure the shares of the merging companies before and after the merger, and draw inferences from these facts as well as from other factors such as barriers to competition, the strength of other competitors, the likelihood of potential competition and the competitive style and history of the parties to the merger. Since a transaction may have both procompetitive and anticompetitive effects, the court has to further decide whether the procompetitive effects offset the anticompetitive effects.

250 Section 7, Clayton Act.
In the case of the airline industry, the compelling drive towards mergers and vertical network integration can be partly attributed to the economies of scale and scope discussed in the last chapter. As observed there, size and reputation are crucial for survival in the airline industry. If two new entrant airlines merged, the resulting airline would undoubtedly benefit from the economies of scope which the larger route network would provide. But it would still have to reckon with the superior technological and informational advantages of a major carrier with an established brand.251

An easier method to obtain the same advantages would be by merging with a established carrier. Many of the mergers in the earlier days of deregulation were probably prompted by such considerations. However, in several cases these efficiency justifications probably masked the real intention of the larger of the merger partners - to get rid of a bothersome competitor.252

When determining whether the transaction should be allowed because of its procompetitive effects a valid line of inquiry is whether the same efficiencies could be

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251 This would include such factors as the major carrier's goodwill and brand name, CRS, existing frequent flyer programs, possession of scarce airport facilities, and an operating hub and spoke system.

252 Kahn, supra note 248, at 1064 ("It is not merely - probably not even primarily - the ability to offer better services that motivates the linkage of route systems; rather it is the ability to control traffic.")
obtained in some other manner. Some of the efficiencies
brought about by such consolidations could probably have
been attained through cooperative marketing ventures using
a common brand name. However, such joint ventures to
exploit economies of scope suffered from some serious
disadvantages.

To begin with, they raised problems of monitoring the
services offered under it to counteract interfirm
principal-agent, free riding, and other problems created
by opportunistic behavior of the parties to the joint
venture. 253 Moreover, the effects of such interdependence
was likely to be long lasting, making the need for joint
effort more or less permanent. 254 Finally, such joint
ventures would have been indistinguishable from horizontal
division of markets and could have resulted in prosecution
under the antitrust laws. 255 So, ironically, the
antitrust laws themselves may have been partly responsible
for the spate of airline mergers observed in the eighties.

Whether a court would have considered such mergers as
anticompetitive in balance, however, has become academic
today because the agencies responsible for scrutinizing
such mergers for most of the last decade simply approved
them.

254 Id.
255 Id.
The residual authority to review airline mergers and acquisitions, originally vested in the CAB, was transferred to the Department of Transportation (DOT) by the Civil Aeronautics Board Sunset Act of 1984\textsuperscript{256}. This authority ended on Jan 1, 1989, from which date the responsibility of antitrust scrutiny devolved on the Antitrust Division of the Justice Department. During the intervening years between the passage of the Airline Deregulation Act and the assumption of this function by the Justice Department, practically all of the proposals for mergers and consolidations were approved by the CAB and the Department of Transportation (DOT).\textsuperscript{257} At times, approval was given in spite of opposition by the Department of Justice.\textsuperscript{258}

Using a "functional" approach to merger analysis which focused "on factors that affect competitive performance (and) not on concentration statistics," the

\textsuperscript{256} See supra note 159 and accompanying text.

\textsuperscript{257} See Levine(1987) supra note 14, at 409, \& n 77.; Hawk, supra note 248, at 280-82.

\textsuperscript{258} Id. For example, the DOT unconditionally approved Northwest's acquisition of Republic, TWA's acquisition of Ozark, and United's acquisition of Pan Am's Pacific Division.; See also Donald T. Bliss \& Jacob M. Lewis, Overseeing Competition in the Airline Industry: Will the Transfer to Justice Department Make a Difference? 34 Fed B. News J. 293, n. 13 (Sept, 1987) referring to D.O.T. orders - NWA-Republic Acquisition Case, Order No 86-7-81 at 1 (July 31, 1986); TWA-Ozark Acquisition Case, Order No. 86-9-29 at 2, (Sept 12, 1986); Pacific Division Transfer Case, Order No 85-11-67, at 16-17 (Oct 31, 1985). See also Kahn, supra note 248, at 1062-63.
DOT concluded that none of the mergers or acquisitions were anticompetitive as the participants did not have market power.\textsuperscript{259}

As a result of these approvals industry concentration rose significantly,\textsuperscript{260} bringing forth strong criticism about the DOT's permissive attitude from both proponents and opponents of deregulation.\textsuperscript{261} This perception of

\textsuperscript{259} Bliss & Lewis, supra note 258. Apparently the analysis was based on two rather questionable assumptions. The first was about lack of market power, a result of characterizing the airline industry as perfectly contestable. The second was that mergers inevitably increase efficiencies. The DOT's analysis thus boiled down to two unsupported propositions: 1) that potential competition was a sufficient safeguard against antitrust violations; and 2) that all mergers were presumptively procompetitive.

\textsuperscript{260} The exact estimates vary but there is a broad agreement that concentration has increased significantly. See Hawk, supra note 248, at 275-280; Federal Trade Commission, The Deregulated Airline Industry: A Review of the Evidence, 18 (1988) In 1978, there were 36 certified carriers and the four largest carriers accounted for 57.4\% of total revenue passenger miles, while the eight largest airlines accounted for 80.9\%. By 1987, the number of carriers had fallen to 25, and the four largest carriers accounted for 66.4\% of total passenger revenue miles, while the eight largest carriers accounted for 90.3\%. Since then several other airlines have gone bankrupt and left the market so the industry is even more concentrated today.

\textsuperscript{261} See, e.g., Testimony of C.F. Hitchcock, Aviation Consumer Action Project, Proceedings before the Subcomm. on Antitrust, Monopolies and Business Rights of the Senate Judiciary Comm. (March 25, 1987) at 8 ("merger proposals that would have been laughed out of the room a few years ago will sail through today."); Testimony of A.E. Kahn, former Chairman of CAB, Proceedings before the Subcomm. on Antitrust, Monopolies and Business Rights of the Senate Judiciary Comm. (March 25, 1987) at 2 (criticizing D.O.T.'s "inadequate appreciation of the importance of aggressive antitrust policy in keeping the airline
inadequate federal antitrust enforcement was echoed by the state governments as evidenced by the frequent participation of their State Attorney Generals in aviation merger cases to express concern about the impact of the increasing concentration in the industry on the air services in their states. 262

The criticism and resultant calls for expedited transfer of antitrust review authority to the Justice Department, 263 as well as the subsequent assumption of this function by the Antitrust Division, however, has made little difference to this situation. The experience with the other antitrust issues that have arisen after deregulation shows that the antitrust enforcement machinery has been equally inept at handling them. Three

industry competitive and so continuing the promise of deregulation." ) See also Kahn, supra note 248, at 1062. Though Kahn still felt at that time that airline markets were sufficiently contestable he emphasized on the need to preserve competition through the antitrust laws. ( "In my opinion, the contestability of airline markets does not afford sufficient protection ... a competitor in the market is worth six potential contestors in the bush." )

262 See e.g. Comments of the Attorney Generals of New York and West Virginia, USAir-Piedmont Acquisition Case, Docket No 44719 at 3 (March 28, 1987) (pointing out that the "share of the largest five airlines measured by revenue passenger miles skyrocketed from 54.7% in January 1986 to 71.8% in 1987").

of these issues are briefly examined to illustrate this ineffectiveness.

5.2 Computerized Reservation Systems

The immense complexity and volume of information generated by the airline industry after deregulation has made electronic data processing indispensable. The Computerized Reservation Systems (CRS)\textsuperscript{264}, developed by some of the major airlines has automated the booking and ticket writing functions of travel agents and enabled them to keep track of the constantly changing routes, flights and the availability of different kinds of tickets on different flights. Due to the exorbitant cost of developing a CRS only five airlines had been able to acquire their own CRS systems.\textsuperscript{265} The remaining airlines


\textsuperscript{265} American (SABRE), United (APOLLO), Eastern (SYSTEMONE), TWA and Northwestern(jointly) (PARS), and Delta (DATAS II) Of these SABRE and APOLLO together have more than 75% of the CRS market, while the remaining three shared the balance 25%. See U.S. DEP'T OF TRANSPORTATION, STUDY OF AIRLINE COMPUTER RESERVATION SYSTEMS, 159-169. Systemone is currently owned by a partnership between Texas Air Corp subsidiary and a General Motor subsidiary. See Note, supra note 264 at n. 10. Through a merger blessed by the Antitrust Division Delta, Northwest and TWA merged their CRS's to form Worldspan in February 1990.
have had to use these CRS by paying fees to these airlines.

5.2(i) **Competitive Advantage Conferred by CRS Ownership**

The ownership of a CRS gives the major airlines several advantages. While a large part of this gets translated into more efficient operations, the technological and strategic advantages the CRS’s offer poses a major impediment to competition. In addition, they also enable the airlines to indulge in certain kinds of activity which affect their non-CRS owning rival’s ability to compete effectively.

5.2(i)(a) **Enhanced Management And Market Monitoring Capabilities**

The extremely sophisticated CRS technology has given the major airlines a distinct advantage over the non-CRS-owner airlines by allowing it

1) to improve management techniques by enabling it to manage the complicated, layered\textsuperscript{266} inventories of seats on different flights in a much more efficient manner than their non-CRS owning rivals;

2) to monitor more effectively the agents for whose loyalty they compete, i.e., frequent flyers and

\textsuperscript{266} The practice of charging different types of customers different prices for the same journey on the same flight.
travel agents, and use that information to segment markets more efficiently by designing awards that would present customers with the requisite scale and scope incentives to ensure loyalty; and

3) to obtain market intelligence about the users of the CRS including its rivals and, thereby, device better and faster competitive strategies.

As a result of this market intelligence and enhanced information monitoring and processing capability, the CRS owning airlines are able to keep tabs on their travel agents and check the effectiveness of their efforts to induce travel agents to divert customers to their flights.267 They are also better able to monitor the success of new incentive schemes or discount fares in attracting greater traffic or revenue. If the airline controls the system on which the majority of bookings are made, as is usually the case with the dominant airline in a hub, it gets the additional advantage of obtaining a very accurate picture of both its own and its rival's business patterns. In contrast, an airline without access to the information generated by the CRS knows only the travel patterns of its own customers. It has no way to effectively monitor its frequent flyer programs or travel agents incentive schemes. It is also unable to get a

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complete picture of the success or failure of a marketing initiative, advertising campaign or service change.\textsuperscript{268}

Due to this advantage, the CRS owner can not only operate more efficiently, but it can also use the market intelligence gained from the system to distort market signals to its rivals and lead them to make wrong inferences from the market\textsuperscript{269}. If the CRS owner finds that a rival's strategy is becoming successful, it can counteract that through targeted secret incentive programs, or by selective measures aimed at nullifying the rival's gains. Not only does this enhance the owner airlines' ability to respond rapidly and selectively (and therefore cheaply), it also can give the rival airline the wrong impression about the appropriateness of its strategy.

5.2(i)(b) \textbf{Ability Raise Rivals Costs Or Bias The Distribution Channel}

The CRS's also provided their airline owners the opportunity to exploit their technological capabilities to impair their competitors competitiveness. One practice, which was fairly common till it was outlawed by a DOT rule making, was to bias the primary display screens of the computer terminals so that the flights of the CRS owner

\textsuperscript{268} \textit{Id.}, at 461-62.

\textsuperscript{269} \textit{Id.}, at 462.
would get a preferential treatment from the travel agents using it. Another practice was to charge the non owner airline excessively high rates for using the system. Several regulations have also been made to address these types of problems. \footnote{Carrier-Owned Computer Reservation Systems, 49 Fed. Reg. 32,540, 32,562-4 (1984). For a description of some of these abusive practices, see Republic Airlines, Inc. v. United Airlines Inc., 796 F.2d 526 (DC Cir. 1986); United Airlines v. Civil Aeronautic Board, 766 F.2d 1107, 1115 (7th Cir. 1985) (upholding regulations)} Allegations about more subtle forms of bias are still leveled and a bill has been introduced in Congress for dealing with them\footnote{See Air Competition Bill Reaches Key Juncture, States News Service (On Line Lexis) June 30, 1992, (referring to H.R. 5466, Airline Competition Enhancement Act, 1992)}.

5.2(i)(c) Ability to Earn Incremental Income

Finally, even if the terminals are not biased and the CRS user charges are not exclusionary, the CRS owner still earns a hefty revenue from booking fees and user charges. \footnote{Id. American Airlines earned more than $100 million from its CRS, SABRE, in 1991.} This "incremental revenue" places the major airlines in a superior competitive position and also acts as significant barrier to contestability.
5.2(ii) Antitrust Challenges against CRS Owners:
Limitations of Conventional Antitrust Laws

The lack of equal access to technology and the incremental income earned from the CRS seriously inhibits the competitive strength of their non-owner rivals who have labeled these practices unfair and anticompetitive. A number of challenges against CRS owners have been brought by the non-CRS-owning airlines, including claims of monopolization and attempted monopolization under Section 2 of the Sherman Act. CRS litigants have also claimed that CRS's are essential facilities to which non CRS owners have been denied reasonable access.

Although the Supreme Court has never precisely explained the "essential facilities" doctrine, courts have relied on it to require a monopolist to provide its competitors reasonable access to a facility deemed essential for continued competition. A court may declare a facility essential if competitors cannot

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reasonably duplicate it without experiencing a severe handicap and if rivals cannot meaningfully compete without access to it.\textsuperscript{276} An essential facility claim need not show that the plaintiff has been totally excluded from access to the facility; it may also allege that the terms on which access has been given access are highly unreasonable.\textsuperscript{277}

The CRS owners have never denied non-owners the use of CRS facility for booking tickets and, therefore, the complaints have been about allegedly exclusionary practices like biasing of screens, unreasonably high user charges and discriminatory contracts with travel agents. Most of these have been taken care of by regulations framed in recent years.\textsuperscript{278}

\textsuperscript{276} See e.g., Hecht, 570 F. 2d at 992; Tye, Competitive Access: A Comparative Industry Approach to the Essential Facility Doctrine, 8 ENERGY L. J. 337, 346 (1987); Note, Rethinking the Monopolist's Duty To Deal: A Legal and Economic Critique of the Doctrine of "Essential Facilities" 74 VA. L. REV. 1069, 1072 (1988).

\textsuperscript{277} See e.g., Consolidated Gas Co. v. City Gas Co. 665 F. Supp. 1493, 1534 (S.D. Fla. 1987) (upholding an essential facility claim where the defendant's terms were unreasonable)., aff'd 880 F.2d 297, reh'g en banc granted, 889 F.2d 264 (11th Cir. 1989).

That still leaves the very real barriers to contestability posed by the superior technological capabilities and market intelligence that the CRS confers on its owner. Indeed, it effectively upsets another condition for contestability, that of equal access to technology. The scope of removing these remaining barriers through the use of the antitrust laws seems limited. Technical superiority and rents attained through investment in technology development, even if it "unfairly"\textsuperscript{279} disadvantages a firm's competitors, are not considered the proper target of the antitrust laws.\textsuperscript{280} Even if a court holds that the CRS is an essential facility, the CRS owner can be required to provide reasonable access to other airlines only to the extent necessary to book tickets through it. The CRS owner would

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\textsuperscript{279} Merely because a competitor would find it unprofitable to invest heavily on developing a new CRS does not give him a right ask one who has made such an investment to forego all its benefits and play on a "level playing field". Indeed the charge of unfairness could also be leveled by the CRS owner who has invested such a substantial amount in developing the system if it is not allowed to benefit by the superior efficiencies it permits.

\textsuperscript{280} See e.g., Berkey Photo, Inc. v. Eastman Kodak Co 603 F.2d 253 (2d Cir. 1979) \textit{cert. denied} 444 U.S. 1093 (1980) ("a large firm does not violate § 2 simply by reaping the competitive rewards attributable to its efficient size nor does an integrated business offend the Sherman Act whenever one of its departments benefits from association with a division possessing monopoly in its own market")
not be obliged to give its competitor full access to the other facilities (like market intelligence and management programs) the CRS offers.\textsuperscript{281}

The situation is not much different if the basis of the challenge is the offence of monopolization. To prove monopolization a plaintiff in such a case would have to demonstrate both market power in the relevant geographic and product markets and the "wilful acquisition of that power as distinguished from growth or development as a consequence of a superior product, business acumen, or historic accident."\textsuperscript{282} The showing of market power should not be very difficult, especially if a hub on which the CRS owner operates is chosen as the relevant market. But the problem of establishing that the market dominance was not a result of a superior product, business acumen or historic accident would be extremely difficult to solve.

These difficulties probably explain why, in spite of so much regulatory interest in the CRS problem, the regulators have confined their efforts to remove bias and

\textsuperscript{281} The CRS owners do supply the other airlines with raw data tapes on a slightly delayed basis. The receiving airline has duplicate software already in existence to extract the information from the raw data tapes as the CRS owner does not supply the software. Aside from the delay which might inhibit immediate response to competitors actions, the cost of extracting the information also impedes contestability. See Levine(1987) \textit{supra} note 14, at 463, n.197.

other such exclusionary practices relating to the actual operations of the computerized reservation system, rather than trying to deal with the problems raised by the vertical integration of CRS owners and airline owners.

While several persons have suggested that divestiture is the correct solution to this vexed problem, others have considered such a remedy too extreme. \(^{283}\) The matter remains unresolved.

5.3 **Control Of Airport Slots And Facilities**

Airline obsession with acquiring and holding on to airport assets like airport slots and gates, and their reluctance to part with them even when they are not in use, might partly be due to a fear on their part that airport operators would impose rules which would make it more difficult to acquire airport assets in the future. Holding on to these scarce resources could also be a strategy to preempt competition or raise rivals costs. Whatever be the motive, the principal effect of controlling large amounts of unused or under-utilized airport assets is to reduce the possibility of successful entry into the market by airlines not owning such assets and restricting the growth of airlines with limited number of airline assets.

Depending on the extent of facilities the incumbent keeps out of circulation, its actions may inhibit the ability of other airlines to organize a new hub, establish a specialized geographic or customer service, or even make a spoke entry in the airport concerned. Moreover, by controlling airport services the incumbent can frustrate a new entrant's efforts to attract traffic to its service. For example, by forcing it to adjust its schedule to the availability of a gate, the incumbent may be able to disrupt the new entrant's connections at a distant hub. Finally, by not allowing the new entrant to use its under-utilized gate, the incumbent might force it to use a less conveniently located gate or share a gate with some other airline.

Holding on to scarce airport resources also creates leverage possibilities for the incumbent airline. It can use such opportunities to raise the costs of the new entrant rival. For instance, it may charge a very high rate for the subleases of unused gate space or if the sublease prices are controlled by the airport authority, as they sometimes are, tie the use of the gates to a contract for ground handling even if the new entrant does not need that service. 284

While this type of conduct can be a subject of an antitrust action, that is not a very efficacious remedy.

Aside from increasing its costs further, it defeats the purpose of the new entrant: to enter the market quickly. In addition, the incumbent can make it difficult to prove that a particular airport slot was in fact under-utilized and therefore available for use by using a very simple strategy: using it. Finally, many of the airports are operated by local government authorities who have long term agreements with the dominant airline. Airport leases/licenses may be granted on such locally pertinent considerations as the ability of the carrier to provide frequent and sustained service. This complicates matters further as issues such as state immunity may also arise. The fact that the carrier concerned may be just a licensee of the airport authority could also affect the outcome of the claim because a technical minded court may not consider such a license as an essential facility over which the incumbent airline has any property rights which would enable it to "exclude" any one from its use.

The apparently "obvious" solution, to increase the infrastructure available, is also troublesome. Aside from the perineal shortage of public funds for such purposes, state and local legislation on matters such as aircraft sound pollution or airport zoning requirements make such alternatives unrealistic in the short run.
5.4 Predatory Conduct

The various developments in the airline industry after deregulation - the impact of the "economics of information", the frequent flyer programs and travel agent incentive schemes, the ability of the airlines to design complex fare structures with hidden capacity controls, the evolution of the hub and route systems and the indispensability of the computerized reservation systems - has permitted incumbent airlines to indulge in "strategic conduct" to exclude or oust competitors from the market. Levine explains such conduct in the following manner.

"The essence of the strategy is simple. Match, or better yet beat, the new entrant’s lowest fares with a low fare restricted to confine its attractiveness to the leisure-oriented, price sensitive sector of the market. Match business-oriented fares and offer extra benefits to retain the loyalties of travel agents and frequent flyers. Add frequency where possible, to "sandwich" the new entrants departures between one’s own departures. Make sure enough seats are available on your flight to accommodate increases in traffic caused by the fare war. In short, leave no traveller with either a price or a schedule incentive to fly with the new entrant ... The object is to reduce trial and to subject the new entrant to a prolonged period of operation at low load factors while inhibiting trials that would disseminate favorable information about the new entrant. If the new entrant tries to reduce capacity, it will suffer from reduced schedule convenience and will reach the indivisibility
"floor", of frequency required to maintain presence. If the new entrant ceases service in the market, its investment in information, including the information it generates by actually operating, will largely be lost and reentry will be almost as expensive as initial penetration. While some residual familiarity with the airlines name and service may persist, the public perception that the airline cannot be relied on to keep operating - a disadvantage created by the new comer's attempt to defend itself from these predatory tactics - could offset the benefits of temporarily ceasing operations.\(^{285}\)

No doubt, the incumbent will not operate profitably under such conditions, especially if it has higher costs than its new entrant competitor. Its losses will however, be subsidized by the hub traffic not subject to the new entrant's price competition, and its information and principal-agent advantages will tend to keep passengers as long as there is price parity.\(^{286}\)

The complex fare structures and computerized capacity controls of a CRS owning incumbent airline to vary the number of seats allocated to different fares on a flight by flight basis. Due to this, the incumbent can always advertise fares that meet or beat those of the competition with minor changes to its basic fare structure. By keeping the number of lowest priced seats offered flexible, the

\(^{285}\) Id., at 476-477.

\(^{286}\) Id.
incumbent can inundate the market with low priced seats and withdraw them almost imperceptibly at peak hours or when competitive conditions allow it to do so without losing customers.

Such strategic conduct also has the additional advantage of generating a reputation for fierce competitive behavior among the airlines' actual or potential competitors. This reputation of being an aggressive fighter is not confined to the new entrant route but extends to the entire industry and acts as a deterrent for future challengers.\(^{287}\)

Although this type of conduct is expensive on any individual route, the fact that the airline is a multiproduct firm which operates in several markets and charges different prices in different market segments, permits it to spread out its costs over its total operations.\(^{288}\)

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Intuitively, such strategic behavior immediately suggests predatory conduct. However dealing with it under the existing state of the law is no simple matter.

Predation claims are normally asserted as a violation of Section 2 of the Sherman Act, which prohibits attempts to monopolize. Attempted monopolization requires proof of three elements\(^{289}\): 1) specific intent of the defendant to gain monopoly power; 2) improper conduct by the defendant directed to gain monopoly power; and 3) likelihood of success, i.e., a dangerous probability that if the conduct is left unchecked it would lead to a monopoly of the market. In addition some courts also require proof of a relevant market so as to assess the danger of actual monopolization.\(^{290}\)

While the requirement of intent has been dispensed with by some courts\(^{291}\) and is not likely to be any more


\(^{290}\) But see Lessig v. Tidewater Oil Co., 327 F. 2d 459, 474 (9th Cir 1964), rehearing denied, 327 F 2d 478, cert. denied, 377 U.S. 993 (1964) (holding that it is unnecessary to prove the relevant market in an attempt to monopolize case.)

\(^{291}\) The courts are divided on how relevant a showing of intent is to predation claims. The First, Seventh and Eighth Circuits have held that intent is irrelevant. See Barry Wright Corp. v. ITT Grinnel Corp., 724 F. 2d 227, 232 (1st Cir. 1983); AA Poultry Farms, Inc. v. Rose Acre Farms, Inc., 881 F.2d 1396, 1402-03 (7th Cir.), cert. denied, 110 S. Ct. 1326 (1990); Morgan v. Ponder, 892 F.2d 1355, 1359 (8th Cir. 1989). The Third, Sixth, Ninth, and Eleventh Circuits, however, have held that intent is relevant. See Indian Coffee Corp. v. Procter & Gamble Co.,
difficult to prove than in cases of predation in other
industries, the requirements of establishing predatory
conduct, dangerous probability of success and relevant
market is especially troublesome in the context of the
sort of strategic conduct observed in the airline
industry.

The conduct element requires evidence of unfair
competition or activities which are "without legitimate
business purpose" or which "makes sense only because it
eliminates competition" and does not enhance the quality
or attractiveness of the product, reduce its costs or
alter the demand function that all competitors
confront." In the case of fare wars in the airline
industry it is extremely difficult to determine whether an
incumbent airline is engaging in the pricing behavior only
to "eliminate competition" or genuinely to meet the
competition.

The discriminatory price structure and the flexible
capacity controls can be explained as legitimate business
practices as they are primarily designed to sell as many
seats on the aircraft as is possible. An airline's

752 F.2d 891 (3d Cir), cert denied, 474 U.S. 863 (1985);
Arthur S. Langenderfer, Inc. v. S.E. Johnson Co., 729 F.2d
1050 (6th Cir.), cert. denied, 469 U.S. 1036 (1984);
William Inglis & Sons Baking Co., 668 F.2d 1014, 1027-28
(9th Cir. 1981), cert. denied, 459 U.S. 825 (1982);
McGahee v. Northern Propane Gas Co., 858 F.2d 1487, 1504

William Inglis & Sons Co 668 F.2d 1014, 1030-31.
products are similar in some respects to perishable commodities like agricultural produce. A producer of fresh vegetables may sell part of his produce at a discounted price before the crop is ready; he may then sell the same product at a higher price while it is still fresh; finally, when the product’s shelf life is coming to an end, he may sell it at a cheaper price so that he does not end up with a total loss on his remaining stock. An airline could also offer a similar business justification for its pricing policy.

Due to the difficulty in identifying a low price which is "competitive" and therefore legitimate, and one which is "without legitimate business purpose", Phillip Areeda and Donald Turner have argued that predatory pricing should be judged by considering the relationship between prices and costs. They suggest that to determine whether a firm possessing monopoly power was engaging in predatory pricing, the court should compare its prices with its short run marginal costs. If the prices are higher than or equal to the marginal cost, they should be presumed. On the other hand, if they are lower they should be presumed to be predatory. Due to practical difficulties in estimating the short run marginal costs

they have suggested that average variable costs may be used as a proxy.

Though the Areeda-Turner test has its fair share of critiques,\(^\text{294}\) it has been generally recognized as a valid basis for proceeding in predatory cases and some courts have explicitly compared prices with average costs to determine their legality.\(^\text{295}\)

The Supreme Court, in Matsushita Electric Industrial Co. v. Zenith Radio Corp\(^\text{296}\) seems to have accepted this analysis by observing that a firm engaging in predatory pricing necessarily incurs losses. It then goes even further and states that a firm would indulge in such pricing only if it had a reasonable expectation of recouping its profits in the future.\(^\text{297}\) Arguably, the


\(^{295}\) See e.g., In re IBM Peripheral EDP Devices, 481 F. Supp. 965, 989-91 (N.D. Cal. 1979).

\(^{296}\) 475 U.S. 574 (1986)

\(^{297}\) Id., at 588-589. ("the success of such (predatory) schemes is uncertain: the short run loss is definite, but the long-run gain depends on successfully neutralizing the competition. Moreover, it is not enough simply to achieve monopoly power, as monopoly pricing may breed quick entry by new competitors eager to share in the excess profits. The success of any predatory scheme depends on maintaining monopoly power for long enough both to recoup the predator's losses and to harvest some additional gain ... For this reason, there is a consensus among commentators ...)
result of this decision would be to require the plaintiff to show that not only has the defendant priced below average cost but it also has a reasonable expectation of recouping its losses in the future.

Neither the Areeda-Turner test, nor the Matsushita test, is very helpful for dealing with the kind of strategic pricing observed in the airline industry. Firstly, there is the difficulty of determining the "marginal cost" of the airline. Does it mean the cost of filling an additional seat? If it does, then the marginal cost is probably nothing. Once the flight has been scheduled it costs more or less the same whether it carries only one passenger or carries a plane load.

The determination of "average cost" also has its difficulties. Is the average to be computed by dividing the cost of operating a flight by the total number of seats, or are all flights to be taken into account? Would it be necessary for the airline to cover the costs of each flight solely from the fares realized from the passengers travelling on it? Or would the average costs of all flights on the route be the correct figure? The airline may also convincingly argue that what is really relevant is its costs spread over its entire network and not just

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\text{that predatory pricing schemes are rarely tried, and even more rarely successfully.} \)
on the individual routes on which it faces competition from the plaintiff.

The second problem would be to define the relevant price. With the great diversity of prices in vogue that would be a formidable problem. Average price could, of course, be considered but that would not be too helpful. Even if the average price was found to be below the airlines' average cost, the airline could quite conceivably offer a procompetitive justification for it. Since an airline has to maintain its flight schedules irrespective of the number of seats booked, it could claim that it was compelled to sell its tickets at lower than "average" costs so as to at least earn some revenue from a committed flight. Such an argument could well pass the test of "legitimate business purpose." In any case, an inquiry about whether on a particular day the airline did not have enough passengers willing to travel at a fare higher than the one offered would be quite impossible.

Finally, using the pricing strategy described above might not even entail pricing below cost. The traditional legal and economic notions about predatory pricing are based on the simplistic assumption that the dominant firm faces effective competition in all markets and market segments. As discussed above, the airline can generate sufficient revenue to not incur losses by appropriately pricing the less price elastic segments of its markets. At
the same time, it can match or even beat the new entrants prices in the more price sensitive segments of the market and force the new entrant to suffer losses in spite of its lower cost structure.\textsuperscript{298}

Determining the relevant market and proving possession of market power, would also be problematic. Since airlines operate in numerous markets, and services are constantly changing, the defendant may well insist on a broader definition of the market. An additional hurdle which a plaintiff would have to cross in a civil antitrust case is the need to demonstrate antitrust injury.\textsuperscript{299} The Ninth Circuit in a recent case has held that anticompetitive intent, even if shown, did not relieve the plaintiff from showing its losses were the result of the alleged predatory conduct of the major airline and not caused by anything other than increased competition.\textsuperscript{300} In view of these problems it is not surprising that very few cases involving predatory pricing have reached court.

\textsuperscript{298} See Sievers & Albery, supra note 288. An airline can be characterized as a multiproduct firm because of its ability to segment its markets.

\textsuperscript{299} Antitrust injuries are injuries flowing from the defendant’s anticompetitive acts and are not losses resulting from the increase in competition in the market. The plaintiff must establish that the defendant’s conduct was intended to or actually did have an anticompetitive effect beyond the plaintiff’s own loss of business or the market’s loss of a competitor. Brunswick Corp. v. Pueblo Bowl-O-Mat Inc., 429 U.S. 477 (1977).

\textsuperscript{300} Pacific Express Inc. v. United Airlines Inc., 1992-1 CCH Trade Cas. Par. 69,770.
Aside from the difficulty in establishing a claim of predatory pricing, a very relevant consideration is the efficacy of the relief. Antitrust suits are notoriously expensive. Before a small airline embarks on the highly uncertain venture of filing suit, it must evaluate the utility of the same. The normal relief granted by a court, after a long and protracted procedure is the grant of an injunction against future conduct. The delay might mean that the airline goes out of business in the meanwhile. Moreover, there is no device to ensure that similar practices will not be indulged in spite of the injunction. Enforcing the order may mean going back to court and repeating the whole process once again. Action by the Antitrust Division of the Department of Justice may relieve a new entrant of the additional burden of financing a law suit, due to the problems of proving such claims as well as factors discussed below, the Antitrust Division has been unable to do much about such practices.

5.5 Reasons for the ineffectiveness of the Antitrust Machinery

The inability of the Antitrust Division to dispel the antitrust concerns caused by the above developments can be pinned down to several reasons.
5.(5)(i) Shortcoming of existing tests

The Department's inability to effectively deal with the antitrust issues can be partly attributed to the shortcomings of the present tests to determine whether enforcement action is necessary. When the antitrust oversight of the airline industry was transferred to the Justice Department, the airlines were to be treated as "any other industry" in the matter of antitrust enforcement. Unlike the DOT's "functional" approach the Department of Justice places more emphasis on market share analysis embodied in its Merger Guidelines.

Unfortunately, such an analysis becomes quite problematic when applied to the airline industry. First, there is the difficulty of defining a relevant market. Airlines compete in several geographical and product markets. Geographically they may compete for traffic on international routes, at a national level, at a regional level, over different hubs, between two cities, and finally, between two airports. On every route airlines may also compete for different airline "products" like economy or business class, morning or evening flights, peak or non peak time flights, or direct or connecting flights. To complicate matters further, the variety of "products" change almost daily. Finally, the continued existence of potential or existing competitors in a particular market

\[301\] See supra note 259 and accompanying text.
is also uncertain. In such a situation the natural
tendency is to consider the broader markets as the
relevant market and ignore apparent instances of monopoly
power in the narrower markets.

Second, conventional tests for ascertaining the
existence of market power are difficult to apply. One of
the major indices of market power employed by enforcement
agencies and courts is the degree of price discretion a
firm enjoys in the market. But the ability of all airlines
to indulge in discriminatory pricing, and the development
of the computerized system of hidden capacity controls,
makes it virtually impossible to use such a test in any
meaningful way.

Third, the incorrect belief that the airline markets
were highly contestable shared by most economists and
policy makers for the most of the eighties, also affected
the Departments assessment of the competitive effects of
transactions scrutinized by it.

5.5(ii) The Policy of Minimal Enforcement

The "policy of minimal enforcement" adopted by
the Reagan Administration has continued without
significant change under the Bush Administration. As a
result even cases in other industries where

302 See Robert Pitofsky, Antitrust in the Next 100
anticompetitive effects were more apparent and the market and industry practices were more amenable to standard merger analysis were left alone by the Department. A large number of judicial appointments during the Reagan Presidency were from the ranks of Chicago economists. Their well known preference for relying on the market rather than on the Antitrust Division for protecting competition may have also influenced the Department to conserve its limited resources for cases in which it would be easier to present evidence.

5.5(iii) Legacy of the DOT’s Permissive Regime

In spite of the Justice Department’s objections, the Department of Transportation had permitted several major consolidations. The airline industry was already considerably consolidated by the time the Justice Department was seized of the matter. The mass scale merger activities of the early eighty’s was no longer there, leaving the Department little scope to take much action. Similarly, the number of new entrants declined dramatically by the end of the eighties, reducing the need to check other types of exclusionary behavior.

5.5(iv) Exit Through Bankruptcy

A serious handicap that the Department faces after the transfer of antitrust scrutiny authority to it is that
further consolidations and concentrations have been through the mechanism of bankruptcy over which the antitrust laws have no control. The Justice Department has been a helpless bystander while the less fortunate carriers have disintegrated in bankruptcy court. The only buyers interested in the assets of these defunct airlines are the handful of still solvent airlines who are dominating the U.S. skies.

While the Department has been appearing in these bankruptcy proceedings and trying to see that further acquisitions by the airlines has the least anticompetitive effect, its options are limited. In a bankruptcy proceeding the final consideration is the interests of the creditors though the bankruptcy judge can and does take into account the views of the Antitrust Division. In that situation, the availability of an alternative suitor for the bankrupt airline's assets with a realistic offer becomes very important.\textsuperscript{303} The Bankruptcy Code provides that when disposition of the debtor's assets requires

\textsuperscript{303} For example in a recent case before the Bankruptcy Court for the Southern District of New York, the Bankruptcy Court could accommodate the views of the Antitrust Division that a sale of Eastern Airlines' assets should be sold to Northwest Airlines, the second highest bidder, as that would be more competitive because, firstly there was a second bidder, and secondly Northwest increased its bid to match that of United Airlines, the highest bidder. See 60 Antitrust & Trade Reg. Rep. (BNA) No. 1486, at 541; Helene D. Jaffe, Developments in Merger Law and Enforcement in 1990-91, 60 ANTITRUST L. J. 667, 672 (1992).
Hart-Scott-Rodino notification the required period shall end on the tenth day after receipt of the filing unless the court, after notice and hearing, orders otherwise. This means that the enforcement agency also has to act very fast and satisfy the Bankruptcy Court about its claim.

5.6 Attempts to Increase Competitiveness in the Airline Industry

Contrary to the public impression, the Antitrust Division has not been entirely passive regarding the ills of the airline industry. In spite of its constraints, it has successfully averted the merger of the computer systems owned by American Airlines and Delta Airlines, the sale of Eastern’s gates and slots at National Airport to United Airlines, the acquisitions by American Airlines of all Trans World Airlines routes between London and the United States, and Eastern’s sale of its assets at the Philadelphia airport to USAir.

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The Antitrust Division has also initiated investigations involving the alleged restrictive practices of hub carriers with respect to airport expansion, alleged misuse of CRS's and the effect of excessively concentrated hubs.\textsuperscript{306} In addition, the Division has been urging the DOT to make it easier for foreign carriers to enter the U.S. markets so that there could be more intense competition in these markets.\textsuperscript{307} However, due to the prevailing atmosphere of protectionism, these efforts are unlikely to be fruitful unless Congress steps in or the next Administration is more committed to ensuring competitiveness in the industry.

Though the developments in the deregulated airline industry has disappointed many of its supporters, not all the results of deregulating the industry have been negative. The next chapter will briefly discuss some of these gains of deregulation. It will then broadly consider the policy implications of the deregulation experience.

\textsuperscript{306} \textit{Id.}, at 696.

\textsuperscript{307} \textit{Id.}
CHAPTER 6

ASSESSMENT AND POLICY IMPLICATIONS

The above discussion about the outcome of deregulation shows that several key assumptions regarding the behavior of the deregulated market has been proved wrong by actual developments. Serious doubt has been cast on others. At the same time antitrust enforcement, airline bankruptcies and debt, and airline safety, have become subjects of considerable concern. However, these developments have often obscured the positive results of deregulation. Before discussing the policy implications of the deregulation experience it is necessary to note these beneficial consequences of deregulating the industry.

This chapter will briefly mention these gains of deregulation and assess the overall impact of deregulation. In the light of this assessment, a few observations will be made about the implications of the deregulation experience for future policy in the U.S.A.

6.1 The Gains of Deregulation

Deregulation has brought about significant improvements in certain aspects of airline operations. For
one, airline efficiency has gone up and costs have gone down.\textsuperscript{308} In spite of their complexity, fares today appear to be much lower on an average than what they would have been had the pricing system under CAB not been discontinued.\textsuperscript{309} They certainly are far below those in other developed countries.\textsuperscript{310} Finally, though there has been loss of service to some smaller communities\textsuperscript{311}, and air travel no longer offers the comfort it used to in the


\textsuperscript{309} Econometric estimates of fare reduction vary but on the whole they seem to have reduced. See e.g., Pickrell, supra note 308, at 29 (estimating that on an average fares are around 15% lower); Morrisson & Winston, The Dynamics of Airline Pricing and Competition, Paper presented to the Annual Meeting of the American Economics Association, Atlanta, U.S.A. (December 1989)( On an average fares 18% lower during 1977-86 and 13-15% lower subsequently); See also, BAILEY supra note 15, at 60-66; MORRISON & WINSTON, supra note 15, at 19-36; SAWYERS, supra note 308, at 27; Moore, U.S. Airline Deregulation: Its Effects on Passenger Capital and Labor, 29 J. L. & Econ 6, 8-9 (1986).

\textsuperscript{310} See SAWYERS supra note 213, at 55 (fares of European airlines for comparable distances and markets are almost double those of U.S. airlines; with some exceptions European airlines also offer less discounted fares.); Recent newspaper reports suggest that this trend has continued and U.S. domestic fares are much less than those in Europe. See e.g., Europe Apt to see Merger of its Airlines, page 3, Column 1, Los Angeles Times, March 15, 1992.

hey days of the CAB, airline customers do have a much wider choice of destinations and schedules than would have been possible before deregulation. Today, thanks to the hub and spoke system, virtually every airport has daily connections to every other airport in the country with one, or at most two, stop overs.

The lower fares and vastly expanded network of services, in turn, has generated and sustained much larger amounts of air travel with the consequential gains of increased earnings and employment in the travel and tourism industry, and increased economic development of regions surrounding new hubs and major spokes. Interestingly, though the deregulated market has substantially conformed to the predictions of the proponents of deregulation regarding improvements in airline efficiency, lower costs and fares, and consumer responsive routing and scheduling, the market has achieved this in ways not anticipated by them: primarily through the hub and spoke system.

However, the problems which have arisen after deregulation have clouded these improvements. Views differ

312 See S. Wheatcroft & G. Lipman, Air Transport in a Competitive European Market 87-89 (1986); Hawk, supra note 248, at 271.

313 Welfare gains to travelers from fare reductions and service improvements are estimated at six billion dollars per year. Service is also better suited to consumer needs. See Morrisson & Winston, supra note 15 at 2, 24-52, 57-59.
about the gravity of these problems as also the "proper" way of dealing with them. While the limitations and inadequacies of the present regulatory structure to deal with these problems is generally recognized, the nature of reform or action required is still not clear. The economists and academicians who were so confident about their understanding of the industry before deregulation are more circumspect now. In view of their recent rebuff by the market, their reluctance to make sweeping or bold recommendations about policy is understandable.

6.2 The Futile Public Debate about the Relative Merits of "Deregulation" and "Reregulation"

But that has not stopped the issue from being discussed in the public media or on political platforms. Unfortunately, such public discussions are not always the most well informed or objective, and public policy emerging only from that is not likely to be the best. Just as public and media obsession with the wonderfully low prices which immediately followed deregulation had distracted attention from the negative developments discussed in the last two chapters, so also the feeling of frustration with the inability of the present system to

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314 See Levine, Airline Deregulation: A Perspective, 60 ANTITRUST L. J. 687, 694 (1992) ("there is a set of relationships here that are simply more complicated than the ones we thought we understood fifteen years ago.")
tackle the industry's current problems has made several observers lose sight of the gains of deregulation.

Another unfortunate aspect of such discussions is that the imperfections of the CAB era are normally overlooked and the artificial stability and simplicity of the regulated regime are glorified. Not to be outdone, hardline market enthusiasts have blamed the industry's ills to the fact that deregulation was not complete. Had the airports not been left out of the free market, they claim, the market would have found a solution for the industry's bottle-necks. The proponents of reregulation counter this by pointing out that it was this free market which led to the dire financial condition of the industry in the first place. Both camps, of course, implicitly assume that their respective vehicles for salvaging the industry would behave perfectly and in accordance with text book precision.

Public policy discussions, therefore, have degenerated into a futile debate about the merits and demerits of "deregulation" vis a vis those of "reregulation", in a manner suggesting that these are the only two options available.\textsuperscript{315} Public memory being notoriously short, most people have forgotten about the shortcomings of the CAB regime. To allay the fears of

\textsuperscript{315} Partly, this is also due to the confusing nature of the two expressions.
those who still remember, the proponents of reregulation hint at "partial reregulation", thereby referring to some undefined mix of free market operations and price, route or capacity controls.

However, debating on the relative merits of a perfect regulatory system and a perfect market is meaningless. No one would seriously dispute the proposition that regulation, when perfect, would produce better results than an imperfect market place. Likewise, few would doubt that perfect markets are superior to imperfect regulatory regimes. However, in practice neither the market nor the regulator is perfect.

6.3 The Challenge of the Nineties

A better line of inquiry is to ask three basic questions. First, what are the lessons one has learnt from the experience of the last decade or so. This has to be an objective assessment of the nature of airline markets and airline competition, divorced from the question of what type of regulatory structure is needed.

Second, what do we mean by "the public interest" in the context of the airline industry, i.e., what kind of an airline industry would we like to have.

Third, in view of these "lessons" of deregulation, and this understanding of the kind of industry which would serve the best interests of the public, what kind of a
regulatory structure seems more capable of delivering the goods.

Answering these questions in a meaningful manner is the challenge which the regulators, policy makers and academicians have to meet. For that they would have to immerse themselves into the reality of the airline business. Abstract models and simplified assumptions about the nature of airline competition are no doubt helpful in analyzing the performance of the industry. But it must be recognized that their purpose is to help explain reality, not cover it up.

While it is beyond the scope of this thesis to try suggest the "correct solutions" to the industry's present woes, some light is intended to be shed on how these realities of the airline business have to be taken into consideration by policy makers.

6.4 The Lessons of the Deregulation Experience

The last decade has substantially altered both the perception and the reality of airline competition. Today it is widely acknowledged that the economies of the hub and spoke systems makes them the most efficient means of organizing air transport. The complexity of the price system and the importance of the CRS is also widely accepted as an inevitable consequence of removing regulatory controls. Moreover, it is no longer disputed
that the entry barriers inherent in the system make entry by a small new airline virtually impossible. What, then, has these and other observations about the functioning of the industry after deregulation taught us about the nature of airline competition? In order to meaningfully consider policy alternatives it is necessary to answer this question.

6.4(1) **Effective Competition Requires Competitors of Comparable Strength.**

The first lesson from the deregulation experience is that for effective competition the rival airlines must be of comparable size and strength. The liquidation of virtually all of the airlines which entered the industry in the wake of deregulation shows that for survival in the industry it is necessary to have a well recognized brand name, an extensive route system, an adequate presence at a viable hub, and sufficient funds to tide over price wars and seasonal swings in business. The implication of this is simple, if the policy makers want to make the industry more competitive they must be able to attract competitors who can enter the industry in as large a scale as the incumbents.\(^{316}\)

\(^{316}\) This in itself is not a very startling finding. Conventional wisdom and traditional legal analysis has always recognized that a "fair" fight requires rivals of comparable stature and ability.
6.4(2) Need to Discourage "Pernicious" Management Practices

Second, the fate of former giants like Pan American, Braniff and Eastern has shown that while these conditions are essential for survival, they apparently are not sufficient. Established carriers which could not develop well thought routes and products, effective marketing strategies, as well as those who allowed themselves to become overburdened with highly leveraged debts, have also sunk with the new entrants.\(^{317}\)

Does that require any policy initiative? That would depend on our ability to identify the causation of this failure. If the failure is to be attributed to unimaginative competitive strategies or bad business judgement probably no action is called for. After all it is not the function of the government to nurse and protect incompetence. However, if part of the problem seems due to what we may label "pernicious" practices such as the intentional bleeding of healthy companies by corporate take over artists not interested in running the airlines

\(^{317}\) For a description of the different corporate strategies of the 10 largest CAB certificated airlines and an analysis of why only four, American, United, Delta and Northwest were successful see Byrnes supra note 73. Since then Northwest has also fallen into serious financial trouble due to a massive billion dollar leveraged buyout debt. See And Then There Were? Fare Wars, Law Suits give Rise to Fears that Industry may become Oligopoly, Star Tribune, col. 6, p. 10, June 26, 1992.
as a business enterprise, a policy response appears appropriate.

The question still remains of course as to how these pernicious activities will be checked. Should every takeover bid be submitted to a regulatory agency which will use its own (non business) judgement to decide whether the takeover is likely to have an adverse impact on the health of the corporation? Should we simply ban such take overs? Or can we device some method by which individual decision making is preserved but confined within a broad range of safety based on scientifically observed data, not abstract theory? Present discussions seem to confine themselves to the first two options. There certainly is a need to explore the third possibility.

6.4(3) **Atomistic Competition Precluded due to Indivisibilities**

The third lesson from the deregulation experience is that atomistic competition is precluded due to the indivisibilities in the industry. Any attempt to increase or maintain the competitive level of the industry must address the question of the viability of hubs and the role of indivisibilities in the industry. Hubs are close to natural monopolies as many of the spokes are too thin too support a second carrier. As a result, only one airline is likely to enjoy the comprehensive traffic feed necessary
for competitive survival.\textsuperscript{318} Artificially keeping more than one carrier in such hubs is unlikely to be beneficial for any of them or for their customers.

6.4(4) Effective Competition in a Hub

Does that mean that there is no scope for competition in such hubs? The answer to this question is crucial to determine the nature of regulation required. An empirical study\textsuperscript{319} of non-stop city pair routes suggests that if network effects are unimportant on a particular route, i.e., if the carriers do not have to depend on feed traffic, all existing carriers act as effective competitors and thus discipline prices. If, however, network effects are important on a route, the scope of competing airlines entering that city-pair market is constrained by their ability to capture sufficient feed traffic. In practical terms this means that effective competition in a hub dominated by one airline can be offered only by an airline which uses that hub as a spoke for its own hub.


Since the total number of possible hubs is limited by a country's size and population, it follows that the number of airlines that the traffic of any country will support is limited. The policy implications of this are two fold. First, a device has to be found to encourage and enable airlines having different hubs to operate spokes in each others hubs and spokes. Second, it has to be ensured that a sufficient number of airlines with viable hub and spoke systems remain on the landscape to put sufficient competitive pressure on the market participants. A secondary, but important, aspect of this policy measure is the need to ensure that there is no collusion between the limited number of market participants.

To come out with a viable policy one must look at the problem like a participant. For competition is real only when it is perceived as a threat by the actual incumbents of the market place. A promising, but politically volatile, method may be to permit major foreign airlines to operate on selected domestic routes.

6.4(6) Problem of Airport Access

However, efforts to woo competitors of strength are not likely to be successful unless the problem of access to airport facilities is solved. Relying on the free market or on the local authorities to solve this problem is unrealistic. The problem can be tackled only at the
federal level. That does not mean that the federal government will have to administratively determine whom to allot these facilities. A market based system can be devised in which all airlines can bid for the scarce resources. However a cap may be fixed to limit any single airline from controlling more than a maximum number of slots or gates. The period for which these facilities would be leased could also be limited. Of course before recommending any measure, its likely impact on the incentive structure of the airlines as well as on the likely repercussions on consumers has to be considered. The move may also meet political hurdles as the major airlines are bound to lobby against it. But merely because this alternative has difficulties does not mean it should not be considered.

6.4(7) Regulating the CRS Industry

Finally, while the indispensability of the CRS Industry to the airline industry is undeniable, an effective solution is required to minimize or remove the potential of misuse of the CRS technology by their owners. The most important drawbacks of these technological wonders in the present industry set up is that they enable their airline owners to get real-time information on their competitors' business patterns.
There can be several ways of dealing with this problem.

(a) **Divesture**

First, the link between the CRS and the airline owner can be severed. Divesture, however would not remove the possibility of the new CRS owner selling the same program and information to the highest bidder, especially if the new CRS owner can enter into exclusive agreements with the purchaser. Divesture, therefore must be coupled with a safeguard against such exclusive dealings. While the general antitrust laws may well be employed to curb such anticompetitive dealings by the new owner, it would be preferable, in view of the "selective" enforcement of the antitrust laws by the concerned administrative agencies in the past, to specifically prohibit such anticompetitive dealings.

(b) **Merger of all CRS to form a Public Utility**

A second alternative could be to merge all of the different CRS’s to form one universal reservation system and regulating the CRS industry like a public utility. That way all airlines could get equal access to the informational advantages of the CRS on the same terms. That would also permit realization of the considerable economies of scale and scope which the CRS industry enjoys.
The implications of an oligopolistic airline industry possessing perfect market intelligence, however, needs to be examined very carefully. One may ask, in this context, whether there is any significant benefit in keeping the airlines in the dark about their rivals' business activities or requiring them to rely on less efficient means of getting such market intelligence. The objection to an airline owner of a CRS using such information is not on account of any inherent undesirability of the same but rather on account of the perceived "unfairness" of this method of competition due to the exclusion of the non-owner competitors from access to the same information. Surely, it may be argued, if all competitors have equal access to such real time knowledge there is no inequity in the situation.

The danger, however, in such a situation of "perfect knowledge" is the possibility of the airlines indulging in collusive route and price strategies through tacit price fixing and capacity sharing. Although such activity would be illegal under the antitrust laws, the problem of proving collusion in these circumstances would probably be impossible.

(c) Mandatory Disclosure by Travel Agents

A third option which is worth considering is to make certain disclosures mandatory for the travel agent. For example, a travel agent may be asked to disclose to the
customer which airline CRS is being used. The customer can then search out a travel agent who operates another CRS and compare the services offered by them. Such mandatory disclosure requirements need not be an alternative to a scheme for divestiture of the CRS Industry but may be used in conjunction with it.

6.5 The "Public Interest"

Before translating the policy implications of the deregulation experience into specific policy proposals it is important to define with reasonable clarity what the proposals should be designed to achieve. No doubt the ultimate aim of any policy prescription should be to achieve what is in the public interest. But what is meant by the "public interest" in the context of the airline industry?

This a particularly important and vexed question which is often side-tracked in academic discussions. Take the case of airline bankruptcies. Why should the bankruptcy of an airline be of any special significance? How or why does it attract more concern than the liquidation of another business concern? Is it because it signifies the end of an era of extremely low fares (Peoples Express), or because it means the end of a part of history (Pan American), or because it displays that even the largest of airlines cannot withstand the
combination of poor management and leveraged debt (Eastern)?

Or consider the issue of "discriminatory pricing". No doubt, the complexity of the price structure after deregulation has made it impossible for a lay person to find out whether she is getting the best deal. But it has also enabled many persons, who would have been otherwise unable to afford air travel, to fly on deep discount tickets. Would simple and uniform fare structures serve the public interest better merely because full fare travellers would have to pay less? Should frequent flyer programs be discontinued just because it encourages corporate travellers to fly on higher priced tickets? Should airlines be forced to discontinue with frequent flyer programs?

These questions cannot be answered easily. They also reveal that the answer may well be different depending on whom we consider to be a representative member of the all encompassing expression "public". However, it must be kept in mind that air transportation, ultimately, is a public necessity.\(^{320}\) The social utility of having a well developed, healthy and consumer responsive air transportation system far exceeds what is reflected by the

\(^{320}\) The expression "public utility" is not used to avoid introducing into the discussion the special connotations that expression has for economists and public policy practitioners.
private profits of the airlines providing such service. Nor does the costs incurred by the airlines fully reveal the societal expenditure on building up and maintaining the infrastructure for such services. Participants in the industry, therefore, have a greater public responsibility than do the participants in most other industries and consumers have a right to expect that airline managements will run their businesses with greater restraint than would be tolerated in less socially significant businesses.

However, aside from recognizing the necessity of more onerous responsibilities in respect of safety due to the "hazardous" nature of the business, commentators have generally ignored the "social" obligation of airlines to ensure that their business activities does not jeopardize the very existence of the air transportation system.

To ensure this, some form of mandatory disclosure requirements coupled with statutory guidelines regarding acceptable levels of debts and liquidity for operating an airline, sources of financing for takeovers or acquisitions of airlines, and acceptable types of intra-company transfers of assets between airlines and their subsidiaries or holding corporations may be in order. The object of such statutory scrutiny would be to prevent an airline management from embarking on a perilous adventure
at the expense of the consumers of air transport, the airline’s creditors and its shareholders.

Regarding the question of discriminatory pricing by airlines, the wide range of prices appear to be an inevitable consequence of different price elasticities in different segments of the airline market. However, the general practice of most airlines of making "discounted" tickets both nontransferable and nonrefundable is not justifiable and does cause hardship to consumers. A statutory provision prohibiting airlines from making such tickets both nontransferable and nonrefundable should effectively deal with this problem.

Finally, as far as frequent flyer programs are concerned, the extreme popularity of these programs suggests that consumers do perceive them as highly desirable. The fact that it encourages business travellers to buy more expensive business class and first class tickets is no ground for discontinuing these programs. If a corporation or its shareholders are really bothered by this it is open for them to take appropriate action to stop their corporate employee from travelling on the more expensive tickets. Moreover, there seems no social benefit of forcing the airlines to stop selling cheaper tickets to the general public so that it could sell less expensive

\(^{321}\) See supra Chapter 5.
tickets to a class of persons who does not seem to mind or care that they pay more than the general public.

Since air transportation cannot become the alcove of just a small section of society, whatever regulatory machinery and methods are chosen should be able to judge, weigh and balance the competing needs of different sections of the society. This brings us to the third basic question: who or what is to perform this task?

6.6 The Choice of Regulatory Structure

If one hears the debate raging through the industry circles or in the pages of the popular press one gets the impression that the only policy choices available are the present form of "deregulation" or a CAB type "reregulation". However, neither are these the only policy alternatives available nor do either of them seem capable of solving the current problems of the industry.

6.6(1) Reregulation not warranted

We have already seen that "deregulation" has not been able prevent the problems of the industry from developing. On the contrary, it has created conditions which have allowed such problems to develop by not anticipating certain characteristics of airline markets.

But does that mean a return to a regulatory structure based on that established by the Civil Aeronautics Act is
necessary or even desirable? Or, to put it differently, is it reasonable to expect a new regulatory agency to sort out the problems of the industry in a manner which would be in the best interests of the public?

In view of our experience with the various attempts to directly regulate business in the past, both in this country and abroad, one would be inclined to say no. Even assuming that the (hopefully better) understanding of airline markets and competition during the last decade would enable such a regulatory agency to act in an informed manner, it is extremely doubtful that it would be able to function in a more efficient or socially relevant manner than its predecessor.

The history of the airline industry has shown how poorly our regulators had understood the needs of the transportation system. Within less than two years of relaxing their hold on the industry, the entire map of domestic air transport had changed. The market simply made a mockery of forty years of "studies and research" based on assumptions of linear routes, direct flights and uniform prices, assumptions which were shared by both proponents and opponents of deregulation. Only the most naive of persons would believe that with this "new found knowledge" of the nature of airline competition, a present day CAB would be the answer to all of the industry's woe.
Moreover, in view of the political necessity of appeasing the considerable strong "free market lobby" in the country, there is no guarantee that the nature or extent of authority granted to a modern day CAB would be adequate. However, it is almost certain that any kind of regulatory regime which tries to directly control an economic activity, by substituting its judgement for the judgement of the marketplace, even an imperfect one, leads to inefficiencies and is socially wasteful.

Aside from its high costs, direct regulation suffers from two great disadvantages. First, it restricts the choice of the market participants and substitutes its own set of values and preferences on the public. Second, such a regulatory set up has no effective means of receiving feedback about whether the system is adequately responding to public demands and preferences.

6.6(2) Need for employing indirect, non intrusive forms of regulation

Does that mean then that nothing should be done by the government, that we would just have to live with things as they are and hope that in some magical way the market will reform itself and the problems will be swept away? One should hope not. Once we give up the stereotype characterization of markets as "contestable" or "competitive" and look at them simply as "markets" which
need some help from the government, we might be in a better position to deal with the problems.

What is required now is to end the futile debate about whether to go back to a regulated era or to continue with the deregulation experiment, and focus instead on the possibilities of employing the various other non intrusive forms of policy instruments available to a government to help the market. The market may not be the "best" alternative. But in this imperfect world it is the one which is likely to prove the most responsive to the needs of the general public. A regulatory agency, however well informed, can only second guess what the public needs.

If the market fails to respond adequately to such needs, the solution is not necessarily the removal of individual choice of the market participants and substitute that with the dictates of a regulatory agency. A more sensible course is to try to influence the choice of the market participants rather than take away the choice altogether.

With this in mind, and in view of the above observations and analysis of airline competition and the problems facing the industry, a few suggestions are made regarding some regulatory measures which could be tried instead of resorting to reregulation or plain inaction. In keeping with the nature of industry and the issues
involved the proposed actions would have to be implemented at the Federal level.

6.7 Proposed Regulatory Measures

A. SETTING UP OF AN ADVISORY BODY.

(a) Constitution and Procedure

A statutory body may be set up consisting of airline industry experts, academicians, management experts, lawyers and elected representatives of the public for the commission and study of various aspects of airline operations in the country. Representatives of airlines, consumer groups and other interested persons would be able to submit their views on subjects being studied by the Advisory Body though there would be no right of a personal hearing.

In its functioning the Advisory Body will have the responsibility of properly considering all material before it but its proceedings will not be in the nature of an administrative hearing and there will be no lengthy "due process" requirements.

(b) Functions

The Advisory Body would:

1. Identify the principal hubs in the country and the number of airlines each of these hubs could reasonably support. It would also report on the
actual presence of airlines in such hubs and instances where a single airline had access to more than 50% of the landing slots.

2. Identify suitable indices to measure the economic health of airlines and periodically review the performance of individual airlines in this behalf.

3. Issue guidelines for lending institutions, shareholders and creditors regarding acceptable or safe limits of debt/liquidity ratios, debt/asset ratios and other such financial indices, keeping in view the special needs of the airline industry.

4. Identify those airports which are suffering from chronic congestion and suggest alternative airport sites which could be developed to relieve such congestion. Also suggest types of tax or other indirect incentives which might be given to encourage use of such alternative airports.

5. Identify underutilized airports and suggest means of utilizing them more efficiently.

6. Study trends in air traffic growth and project future needs of infrastructure, airports and aircrafts.

The object of such an Advisory Body would be three fold. First, as a result of such continual scrutiny of the industry both the airlines and the government would be able to react promptly to the needs of the public and the market. Second, the enhanced public exposure of airline
management functioning and the availability of the guidelines and economic health indices would discourage speculative and pernicious management practices of the kind mentioned above. Third, the proposals of the Advisory Board regarding statutory incentives and disincentives for inducing desirable conduct would be available to the government on a continuing basis and the government would also get very important feedback of the results of the statutory provisions.

B. DIVESTURE OF THE CRS INDUSTRY.

C. MANDATORY DISCLOSURE REQUIREMENTS.

Suitable statutory provisions may be enacted to impose mandatory disclosure requirements:

1. For airline management regarding the effect of major management decisions on the indices of airline health identified by the Advisory Body.

2. For travel agents regarding ownership of CRS used by them.

3. For persons contemplating takeovers and acquisitions of airlines regarding the source of their finances and, if financed through debt, the terms of such debt and the proposed manner of repaying the same.

4. For airlines and CRS owners regarding agreements with other airlines or CRS owners.
D. PROHIBIT SALE OF NONTRANSFERABLE AND NONREFUNDABLE TICKETS.

A statutory provision prohibiting the selling of tickets which are both nontransferable and nonrefundable may be enacted. If a ticket is characterized as nontransferable, the airline must agree to refund the fare in case of a cancellation. If the ticket is nonrefundable the passenger must be permitted to transfer it.

E. PROVISIONS REGARDING AIRPORT ACCESS.

Suitable statutory provisions may be made for:

1. Ensuring that not more than 50% of the landing slots available at an airport is used by one airline.

2. Fixing higher rates of landing charges for more congested airports than those fixed for less congested airports.

3. Fixing higher rates of landing charges for flights landing during peak traffic hours as compared to those for off peak hour flights.

F. PERMIT FOREIGN AIRLINES OR THEIR U.S. SUBSIDIARIES TO OPERATE ON U.S. DOMESTIC ROUTES.

G. PROHIBIT EXCLUSIVE DEALING AGREEMENTS BETWEEN CRS OWNERS AND AIRLINES.
The above proposals seek to indirectly influence the market participants in a manner which, hopefully, would induce them to adhere to a standard of conduct considered to be desirable on the basis of an objective and rigorous study of the industry. Obviously, these proposals are only nebulous and before any concrete regulatory steps are taken they would have to be studied in depth. However, it hoped that they will provide some guidance to lawyers and law makers in the matter of designing methods which will try to cure the imperfections and limitations of the market without taking away the individual choice of its participants.
BIBLIOGRAPHY

Alchian & Demsetz, Production, Information, Information Costs and Economic Organization, 62 AM. ECON. REV. 777 (1972)

ANDERSON, DOUGLAS D., REGULATORY POLITICS (1981)


BAILEY, GRAHAM & KAPLAN, Deregulating the Airlines (1985)

Bliss, Donald T. & Lewis, Jacob M., Overseeing Competition in the Airline Industry: Will the Transfer to Justice Department Make a Difference? 34 FED B. NEWS J. 293 (1987)


BRENNER, LEET & SCHOTT, AIRLINE DEREGULATION (1985)


BRYER, S., REGULATION AND ITS REFORM, (1981)

BYRNES, JONATHAN L.S., DIVERSIFICATION STRATEGIES FOR REGULATED AND DEREGULATED INDUSTRIES: LESSONS FROM THE AIRLINES (1985)

Call & Keeler, Airline Deregulation, Fares and Market Behavior, in ANALYTICAL STUDIES IN TRANSPORTATION ECONOMICS (A. Daughety Ed., 1985)

CAVES, RICHARD, AIR TRANSPORT AND ITS REGULATORS (1962)

CHERINGTON, P., AIRLINE PRICE POLICY, A STUDY OF DOMESTIC AIRLINE PASSENGER FARES (1958)

DAVIES, R.E.G., AIRLINES OF THE UNITED STATES SINCE 1914 (1972)


DOUGLAS, GEORGE W., & MILLER, JAMES C., ECONOMIC REGULATION OF DOMESTIC AIR TRANSPORT: THEORY AND POLICY (1974)

EADS, G., THE LOCAL SERVICE AIRLINES EXPERIMENT (1972)

Eads, George C., Competition in the Domestic Trunk Airline Industry: Too much or Too Little, in PROMOTING COMPETITION IN REGULATED MARKETS (A. Phillips Ed. 1975)


EHLERS, P., COMPUTERIZED RESERVATION SYSTEMS IN THE AIR TRANSPORT INDUSTRY (1988)


FRASER, ROBERT C., DONHEISER, ALAN D. & MILLER, THOMAS G., CIVIL AVIATIONS DEVELOPMENT: A POLICY AND OPERATIONS ANALYSIS (1972)

GILL, F. & BATES, G., AIRLINE COMPETITION (1947)


Hawk, Barry E., Airline Deregulation After 10 Years - The Need For Vigorous Antitrust Enforcement and Intergovernmental Agreements, 34 ANTITRUST BUL. 267, (1989)


Kahn, Market Power and Deregulated Industries, 60 ANTITRUST L. J., 857 (1992)


KEYES, L.S., *FEDERAL CONTROL OF ENTRY INTO AIR TRANSPORTATION* (1951)


LOWENFELD, ANDREAS F., AVIATION LAW


DE MURIAS, RAMON, THE ECONOMIC REGULATION OF INTERNATIONAL AIR TRANSPORTATION

NANCE, J., BLIND TRUST: THE HUMAN CRISIS IN AIRLINE SAFETY (1986)


Pitofsky, Robert, Antitrust in the Next 100 Years, 75 Cal. L. Rev. 817 (1987)

RICHMOND, S., REGULATION AND COMPETITION IN AIR TRANSPORTATION (1961)


U.S. DEPT OF TRANSPORT, STUDY OF AIRLINE COMPUTER RESERVATION SYSTEMS (1988)

U.S. DEPT OF TRANSPORT, AIRLINE MARKETING PRACTICES: TRAVEL AGENCIES, FREQUENT-FLYER PROGRAMS, AND COMPUTER RESERVATION SYSTEMS (1990)


Williamson, Williamson on Predatory Pricing II 88 YALE L.J. 1183 (1979)

WHEATCROFT, S. & LIPMAN, G., AIR TRANSPORT IN A COMPETITIVE EUROPEAN MARKET (1986)