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EVALUATING "DEREGULATION" OF COMMERCIAL AIR TRAVEL: FALSE DICHOTOMIZATION, UNTENABLE THEORIES, AND UNIMPLEMENTED PREMISES

PETER C. CARSTENSEN*

I. INTRODUCTION

Doing something better than it has been done is not necessarily the same as doing something as well as it could be done. The "deregulation" of commercial air travel in the 1970s is a case in point. Deregulation seems to have improved important aspects of the performance of the air travel business. The new regulatory framework is, therefore, *better* than the old. However, the changed regulatory context has itself caused or facilitated a number of problems in the structure and conduct of the industry.¹ The major airlines have increased their relative dominance of the industry, largely by merger, and are engaging in a number of practices that exclude new competition and exploit existing customers. Both regulatory omissions and regulatorily conferred rights have contributed to these consequences. This would suggest that the *best* regulatory system still has eluded policymakers; further reform might move regulatory control over commercial air travel closer to the optimal. An examination of the experience of altering aspects of public control over commercial air travel also can contribute to a better understanding of the relationship between public control and private economic activity.

The history and present status of airline "deregulation" reveal three ways in which scholars and public officials speak of and think about the regulatory process that are substantial obstacles to a more complete understanding, and therefore identification, of the real issues and policy choices that exist.² Unless

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1. For surveys of the problems, see Bailey & Williams, *Sources of Economic Rent in the Deregulated Airline Industries*, 30 J.L. ECON. 173 (1988); Dempsey, *Antitrust Law and Policy in Transportation: Monopoly Is the Name of the Game*, 21 GA. L. REV. 505; Kahn, *Airline Deregulation—A Mixed Bag, But a Clear Success Nevertheless*, 16 TRANSP. L.J. 229 (1988); Vine, *Airline Competition in Deregulated Markets: Theory, Firm Strategy and Public Policy*, 4 YALE J. ON REG. 393 (1987).

2. I shall largely put to one side for purposes of this discussion the manifest political problems in achieving optimal regulation. Industry self-interest, as well as self-serving demands by other interest groups, can greatly affect regulation and any reform in regulation. Regulatory decisions are, afterall, political ones which specific economic interests may vigorously try to influence because of the impact on their economic well being. Such efforts are not in themselves evil or without social value. Particularly if the legal control creates rights having direct wealth allocation effects, such concern is unavoidable. Calabresi & Melamed, *Property Rules, Liability Rules, and Inalienability: One View of the Cathedral*, 85 HARV. L. REV. 1089 (1972). Moreover,

these obstacles are recognized and overcome, any regulatory reform is condemned to at least a partial failure. This Article will focus on identifying, describing, and explaining the impact of these three types of errors. Better understanding of these central problems in regulation will yield a better understanding of the essential elements for effective reform.³ Leading policymakers to a better understanding of the nature of regulatory reform is, however, not unlike leading a horse to water: once done, the difficult political task of implementation remains.

Part I of this Article briefly will summarize some of the key aspects of the history of airline regulation and deregulation. Parts II, III and IV will identify and discuss the three fundamental problems that this history and contemporary posture suggest exist for understanding regulation and its reform: 1) the false dichotomization of regulation and deregulation; 2) the assumed validity of untenable theories of the economic character of the regulated industry; and 3) the unjustified presumption that other, unexamined regulatory schemes could and would control all undesirable aspects of structure or conduct resulting from changes in the primary regulatory controls. Parts V and VI will discuss some implications of recognizing and remedying these problems for both further reform of air travel regulation and the more general problem of improved effectiveness in regulatory reform.

II. AIRLINE REGULATION—ITS EVOLUTION

Major and direct government action created commercial air travel.⁴ Starting in 1925, the Post Office paid airlines to carry airmail, making

such allocatory decisions are essential for basic economic transactions to occur. Buyers and sellers must know what their respective roles are before they can transact. *Cf.* Coase, *The Problem of Social Cost*, 3 J.L. & ECON. 1 (1960). Yet even politically successful self-serving interests often fail to achieve real economic gains because their self-interested interventions also rest on false or incomplete understandings of the complex economic policy problem being addressed. To the extent that this Article illuminates the fundamental issues in regulation, it will assist such private interests as well.

3. At various points in the following discussion I will refer to regulation as being more or less effective or optimal. While I am not going to give that a rigorous definition, it is essential that I state what I have in mind. Initially, regulation is optimal if it causes a market to perform in efficient ways measured by relevant social criteria. Those criteria include: progressiveness, productive efficiency, equitable distribution of income, and stability. This list comes from C. KAYSER & D. TURNER, *ANTITRUST POLICY* 11-14 (1959), but represents a good set of criteria that seem acceptable to a variety of points of view and provides workable guidance in evaluating all forms of regulation. *See* S. BREYER, *REGULATION AND ITS REFORM* 34-35, 184-88 (1981); *see also* *Northern Natural Gas Co. v. FPC*, 399 F.2d 953, 959 (D.C. Cir. 1968). Such a list extends beyond neoclassical economic criteria of efficiency, but nonetheless has a strong root in that standard. The problem for regulation is that usually some aspect of a less regulated or a differently regulated market is not functioning so as to produce the socially desired quality or quantity of goods or services. Hence, public intervention in the market via some change in the legal conditions under which it operates is assumed to improve its net social value. As the net social value of the economic performance improves, the result approaches optimality. Optimality, therefore, does not have the simplistic focus on narrowly defined, present economic costs and benefits that is associated with the Pareto approach. *Cf.* Calabresi & Melamed, *supra* note 2.

4. For a brief summary of the early history of airline regulation, see A. BROWN, *THE*

commercial air travel its creature. The mail contract decisions determined which airlines survived and which did not. Because there was no direct control over passenger fares, the subsidy sometimes was competed away and there were scandals over its distribution.⁵ As a result, in 1934 Congress created a tripart regulatory system in which the Post Office still awarded mail contracts, the Interstate Commerce Commission (ICC) set maximum rates, and a third agency provided safety control.⁶ In 1938 the three agencies again were consolidated into the Civil Aeronautics Authority.⁷ By 1958, safety regulation was again separate, and the renamed Civil Aeronautics Board (CAB) retained authority to regulate the economic affairs of airlines and to pay subsidies.⁸ Direct government subsidy remained a major source of airline revenue into the 1950s.⁹ In that context the CAB had a strong incentive to restrict entry and control competition because of the perceived risk that competition would either drive existing airlines into bankruptcy or create added subsidy requirements.

As the demand for air travel grew in response to lower costs, better service, and increased wealth in the hands of consumers, the need for subsidy declined. By 1959 all of the major airlines were operating without subsidy.¹⁰ Yet the CAB continued to regulate fares, entry, and routes on the premise that the risk of excessive competition was real and, if left uncontrolled, would drive everyone from the industry or create a need for renewed subsidy.

Hence, CAB regulation continued and created the functional equivalent of a powerful and protected industry cartel modified by some concern for the general public. Prices, routes, and other aspects of competition within the CAB's jurisdiction were controlled to insure that all major airlines survived and that no company took unreasonable advantage of air travelers or of other airlines. Many firms sought entry into the business, but the CAB kept them out, thereby preserving this cartel from the competitive fate that often overtakes unprotected cartels. The CAB also acted to forbid various types of unregulated substitutes, which protected the regulated airlines from another means by which monopoly profits might be competed away.

The CAB could not control some aspects of competition within the industry, however, such as the number of flights between authorized desti-

POLITICS OF AIRLINE DEREGULATION 5-10 (1987); Gray, *The Airlines Industry*, in *THE STRUCTURE OF AMERICAN INDUSTRY* 468, 490-507 (W. Adams ed. 3d ed. 1961).

5. A. BROWN, *supra* note 4, at 6-7.

6. An interesting feature of this legislation was that it also created statutory control over who could own an airline. Thus, while the legislation granted grandfather rights to existing airline corporations, Congress already had forced General Motors and Boeing to divest their interests in United Airlines. This is an early example of the recognition that the structure of industry ownership can be an essential element in effective regulation of its conduct. Gray, *supra* note 4, at 492.

7. A. BROWN, *supra* note 4, at 7-8.

8. *Id.*; Gray, *supra* note 4, at 492-503.

9. S. BREYER, *supra* note 3, at 198; A. BROWN, *supra* note 4, at 72, 150; Gray, *supra* note 4, at 487-90.

10. A. BROWN, *supra* note 4, at 72.

nations. As a result, airlines tended in the 1960s and 1970s to compete by increasing the frequency of service. Given the CAB commitment to maintain fare levels at a point that would preserve airline profits, the airlines' course of conduct was quite rational in terms of private economic interest. Increased service allowed them to compete for service-oriented customers while the CAB control over fares protected them from loss.¹¹ The CAB was concerned about this conduct, but lacked authority directly to control it. The CAB did employ various indirect means, including sponsoring agreements among competing airlines, to reduce frequency of service in an effort to reduce total costs.¹² The CAB was acting as a typical cartel manager faced with the common situation of "cheating" by cartel members.¹³

The economic thinking behind the CAB was typical of the first half of the 1930s. Competition and the uncontrolled market were in disrepute.¹⁴ The general perception was that unregulated competition destroyed most competitors, leaving a monopoly or oligopoly. There also was optimism about the capacity of regulatory agencies to achieve better and less disruptive results than the uncontrolled market. In that context, recognizing that air travel involved evolving technology, serious safety considerations, and significant economic uncertainty, Congress adopted the type of regulation that it did.¹⁵

By the late 1950s, there was already serious criticism of the CAB.¹⁶ The agency had become a protector of existing airlines by blocking entry, frustrating price competition, and generally setting rates that allowed airlines very good returns. In the 1960s a general reaction to excessive intervention in price

11. This protection involved two elements: 1) the CAB set fares high enough to make airlines profitable despite reduced load factors (number of passengers per flight), *see* S. BREYER, *supra* note 3, at 211; and 2) the CAB control over fares insured that no airline could undercut the established fare and thus force competitive prices.

12. S. BREYER, *supra* note 3, at 218-19.

13. For a good discussion of the operational characteristics of cartels, *see* McGee, *Ocean Freight Rate Conferences and the American Merchant Marine*, 27 U. CHI. L. REV. 191, 197-204 (1960).

14. *See* E. HAWLEY, *MONOPOLY AND THE NEW DEAL* (1966). *But see* Gray, *supra* note 4, at 471 (arguing that Congress intended to promote competition). *Cf.* T. MCCRAW, *THE PROPHETS OF REGULATION* 153-209 (1986).

15. Contemporary experience with less-regulated air travel suggests that notions of destructive competition may not have been so far off the mark. A major problem with the destructive competition theory in the 1930s was that it was not articulated in terms that made it intelligible as economic theory evolved. In addition, it was a very much over used idea that was applicable, at best, only in situations such as railroading, air travel, and the like, where short-run variable costs diverged appreciably from long-run total costs, making it feasible to put to strategic use the pricing opportunities thus created. Modern legal-economic analysis suggests that such contexts do have the potential to engender exclusionary (destructive competitive) behavior. *See* Campbell, *Predation and Competition in Antitrust: The Case of Nonfungible Goods*, 87 COLUM. L. REV. 1625 (1987); Krattenmaker & Salop, *Anticompetitive Exclusion: Raising Rivals' Costs to Achieve Power Over Price*, 96 YALE L.J. 209 (1986).

16. *See, e.g.,* R. CAVES, *AIR TRANSPORT AND ITS REGULATORS: AN INDUSTRY STUDY* (1962); Gray, *supra* note 4, at 493. There was also an increasingly critical view of regulation generally. *See* L. KOHLMEIER, *THE REGULATORS* (1969); Schwartz, *Legal Restriction of Competition in the Regulated Industries: An Abdication of Judicial Responsibility*, 67 HARV. L. REV. 436 (1954).

and entry conditions began to grow. A group of academic critics, including economists and lawyers of various political persuasions, came increasingly to question the effectiveness and usefulness of such regulation.¹⁷

For various reasons, air travel emerged as a particularly conspicuous target for regulatory reform. Marred at the end of the Eisenhower administration by scandal, the CAB's chairman in the Nixon years was similarly embarrassed. In fact, one aspect of the legislative hearings that ushered in deregulation was an expose of the close links between the members of the CAB and the industry.¹⁸ Also important to stimulating the challenge were the CAB's decisions to forbid various types of discount fares that airlines had developed, to eliminate the use of foreign charter flights that had evaded high, fixed overseas fares, and generally to increase air fares.¹⁹ These regulatory moves, all of which increased fares, were in contrast to the behavior of two intrastate airlines, one in Texas and one in California, which operated outside CAB control. Both charged prices dramatically lower than those charged on comparable interstate routes.²⁰ The CAB allowed regulated airlines competing directly with the two unregulated lines to reduce their prices. Hence, the lesson that many consumers, politicians, and journalists learned was that the CAB was a block to lower fares that would result from "competition."

A third important factor in making reform possible was that a major political figure, Senator Ted Kennedy of Massachusetts, took a strong interest

17. See T. McCRAW, *supra* note 14, at 222-99. Other institutional forces also played important roles in this process. The Antitrust Division of the Justice Department began challenging the validity of various regulatory restrictions on market conduct and regulatorily fostered changes in market structure. It forced major changes in bank merger practices and telecommunications policy, and caused the elimination of rate fixing in the securities brokerage industry. *United States v. Philadelphia Nat'l Bank*, 374 U.S. 321 (1963) (holding bank mergers subject to antitrust laws as well as administrative review); *In re ABC*, 9 FCC 2d 546 (1967) (in challenge to ITT's proposed acquisition of ABC, FCC approved acquisition but parties abandoned proposal while Antitrust Division's appeal was pending). The heavy involvement of the Antitrust Division in other aspects of telecommunications policy is visible in the FCC's rules on newspaper and television cross ownership, see Report and Order in DKT. 18110, 35 Fed. Reg. 5,948 (1970), and in the break up of AT&T, see *United States v. Western Elec. Co.*, 569 F. Supp. 990 (D.D.C. 1983); its impact on the price fixing of brokers' commissions is evident in the SEC order banning such conduct. Conclusions of the Securities and Exchange Commission with Respect to Commission Rates, Exchange Act Release No. 10,383 [1973 Transfer Binder] Fed. Sec. L. Rep. (CCH) ¶ 79,511 (Sept. 12, 1973); see also *Gordon v. NYSE, Inc.*, 422 U.S. 659 (1975). The Division did not always win its challenges. See, e.g., *United States v. ICC*, 396 U.S. 491 (1970) (upholding, over antitrust objections, ICC approval of creation of Burlington Northern). The courts themselves, particularly the United States Supreme Court, also played an important independent role, gradually modifying the standards governing regulatory agencies to insist increasingly on concern for the competitive impact of decisions. *Gulf States Utilities Co. v. FPC*, 411 U.S. 747 (1973); *Denver & Rio Grande & WRR v. United States*, 387 U.S. 485 (1967); *United States v. RCA*, 358 U.S. 334 (1959).

18. S. BREYER, *supra* note 3, at 216; A. BROWN, *supra* note 4, at 101.

19. S. BREYER, *supra* note 3, at 208, 330.

20. *Id.* at 330-31.

in the topic of reforming airline regulation.²¹ The result was a series of highly publicized hearings that gave an open forum to the opponents of regulation and were very effective vehicles for propaganda.²² The focus of the hearings was the high price of tickets. The central thesis of the hearings was that, by eliminating CAB control over certain aspects of commercial air travel, competition would result. Competition would, in turn, lower fares for passengers without any serious harms to other interests.²³

The central substantive reforms that resulted were the elimination of the CAB's powers to set fares, to determine which air carriers would serve which routes, and to control entry by new firms.²⁴ These reforms also had the effect of eliminating any public control over ticket pricing practices, commissions paid to travel agents, and the profits of airlines. The proponents of reform claimed that by eliminating these three controls, the pricing of air travel would become market-governed under traditional notions of supply and demand and that such market prices would be lower than the regulated prices established by the CAB. In addition, the legislation provided for the eventual termination of the CAB itself and distributed its remaining powers to other agencies, primarily the Department of Transportation.²⁵ Among those powers was the right to approve mergers among airlines.

At no time did anyone suggest that Congress should eliminate air safety regulation.²⁶ In the 1950s Congress had transferred the CAB's authority to regulate safety to the Federal Aviation Administration (FAA).²⁷ The FAA sets air safety rules for all civilian aircraft, including private planes, and regulates through its system of air traffic control the takeoff, landing, and flight paths of most civilian planes. Thus, despite sweeping statements about deregulation of air travel, the actual focus of reform was on three controls that most directly limited the impact of market competition (direct and indirect) on the fares and routes of airlines.

Those claiming competition would be very workable in this context relied on three arguments. First, although there were relatively few competitors serving almost any pair of cities, thus producing an observed structure that

21. *Id.* at 327-29; A. BROWN, *supra* note 4, at 102-10. The initial hearings were *Oversight of Civil Aeronautics Board Practices and Procedures, Subcomm. on Admin. Prac. & Proc.*, Senate Jud. Com., 94th Cong., 1st Sess. (1975).

22. See S. BREYER, *supra* note 3, at 317-34; A. BROWN, *supra* note 4, at 107-10.

23. In his book about regulation, Breyer reiterates this position and, although the book appeared in 1982, fails to acknowledge many of the problems that were emerging with the simplistic implementation of the lower price strategy. See *supra* note 3, at 197-221, 317-39.

24. Airline Deregulation Act of 1978, 92 Stat. 1705 (1978) (codified at 49 U.S.C. § 1301 et seq. (1982)); S. BREYER, *supra* note 3, at 339; A. BROWN, *supra* note 4, at 123-26.

25. Airline Deregulation Act of 1978, § 40, 49 U.S.C. § 1551 et seq. (1982).

26. To the contrary, the revised public interest standard for CAB and eventual Department of Transportation decisions emphasizes as the first two goals "maintenance of safety" and "prevention of any deterioration in . . . safety." *Id.* at § 3, 49 U.S.C. § 1302(a) (1982).

27. See Federal Aviation Act of 1958, 72 Stat. 731 (1958); A. BROWN, *supra* note 3, at 9; see also H. R. No. 2360, 85th Cong., 2d Sess. (1958), reprinted in 1958 U.S. CODE CONG. & ADMIN. NEWS 3741.

was highly oligopolistic and monopolistic in some cases, the low barriers to entry for both new airlines and existing airlines not serving the particular city pair would make it impossible for fares to get substantially out of line with the costs of providing service. If fares rose, other airlines easily could enter the market.²⁸

Second, the success of the unregulated airlines in California and Texas demonstrated concretely that competition would work. This showed the validity of the theory of contestability and that, in real world terms, the results would be lower fares and profitable business.

Third, to the extent that any risks of anticompetitive conduct or structure remained, antitrust law would deal with them. The antitrust rules forbidding attempts to monopolize and conspiracy in restraint of trade would control abusive conduct aimed at eliminating competitors, as well as conspiratorial conduct intended to raise prices or exploit consumers in other ways. The antitrust laws' very strict restrictions on mergers would insure that existing competitors could not combine and thus create structures to dominate air travel markets in ways that would frustrate competition.

III. THE FALSE DICHOTOMY BETWEEN REGULATION AND DEREGULATION

Policy discussions and analyses of commercial air travel regulation customarily speak of "regulation" and "deregulation" as distinct and mutually exclusive categories. Thus, Kahn, Breyer, and Levine all have argued for the present set of controls on the basis that they reflect a deregulated industry.²⁹ The only alternative, they suggest, is a return to the prior regulatory controls, which would produce even less desirable outcomes. The recent FTC study of the effects of deregulation employs the same dichotomous approach.³⁰ The labels regulation and deregulation invoked in such discussions imply unambiguous, alternative states of the world. A regulated industry is, implicitly, one subject to direct public control over its performance.³¹ When such an

28. This theory later was formalized under the label contestable market theory. J. BAUMOL, J. PANZAR, & R. WILLIG, *CONTESTABLE MARKETS AND THE THEORY OF INDUSTRY STRUCTURE* (1982). The theory states that if a firm can enter and leave a market with little or no fixed investment, that is, investment that cannot be transferred upon exit, then existing competitors will set prices at cost because any higher price would stimulate such entry. In the case of air travel, the structure of the overall investment in providing the service was important. Airports were publicly owned and available to all comers. Hence, the airlines, new or existing, did not have to incur the single largest fixed capital investment as a direct expense of entry. Secondly, planes themselves could be redirected into any number of alternative services. Thus, viewing the plane as the primary capital of the airline, entry and exit both would appear easy because the amount of fixed and unrecoverable investment associated with any specific entry would be minor.

29. S. BREYER, *supra* note 3; Kahn, *supra* note 1; Levine, *supra* note 1; *see also* Wood, *Regulation, Deregulation, and Re-Regulation: An American Perspective*, 1987 B.Y.U. L. REV. 381.

30. *See* J. OGUR, C. WAGNER, & M. VITA, *THE DEREGULATED AIRLINE INDUSTRY: A REVIEW OF THE EVIDENCE* (1988) [hereinafter *FTC STUDY*].

31. *See, e.g.*, S. BREYER, *supra* note 3, at 10, 13-35; A. KAHN, *THE ECONOMICS OF REGULATION: PRINCIPLES AND INSTITUTIONS* (1970-71); Levine, *supra* note 1, at 481.

industry is deregulated, it ceases to be the object of public control, and its participants are free to make their own decisions, subject only to the constraints of the market.

Such a dichotomization is false with respect to analysis of regulation and deregulation of any industry, and is extremely so with respect to commercial air travel. "Deregulation" has in fact meant eliminating a few, specific controls while retaining all others. Air travel today, as in the past, is totally dependent on the existence and effective operation of such industry specific controls as the FAA's air traffic system that regulates air traffic and the FAA's specific controls over airplane safety, as well as general regulatory systems ranging from contract law through property rights.

Dichotomization between regulation and deregulation conceals or ignores a central legal and economic fact: the elimination of particular regulations must be understood and examined in context of the regulations that remain, and one must evaluate how this new mix of controls will interact with each other and with the goals and actions of the economic actors subject to them, especially with respect to the public interest concerns about price, safety, and service. The central definitional point is that regulation consists of all controls that define rights, impose duties, and specify the nature and scope of public intervention into the decisionmaking of economic actors. The key questions in any particular regulatory context are, therefore, how much of what kind of regulatory control shall exist. The question is never the dichotomous one of whether there should or should not be "regulation."

Broadly defined, regulation is an indispensable element of modern economic order. Traditional thinking, however, assumes that the market is a natural, economic phenomenon. If such a "natural" market has particular failures, then regulation may improve the situation.³² Thus, markets exist, by assumption, prior to regulation. The historic fact is that regulation interacts with private economic interests at the most fundamental level to create contemporary economic order, including markets. The market does not exist prior to regulation any more than regulation exists prior to the market. Regulation plays a very active role in constituting the forms and contexts within which economic activity occurs. The specific shape of economic activity at any point in time is a function, in significant part, of the legal context in which it occurs. The existence or nonexistence of particular rights, controls, or prohibitions shapes what is economically rational for individual economic actors to do.³³ Of course, the reverse is also true. Economic needs can compel regulation to adapt and respond.³⁴ The result is an interactive and reactive relationship which also is strongly affected by other forces: social needs, ideology, and all the factors that shape human history.

32. See S. BREYER, *supra* note 3, at 13-35.

33. Cf. Coase, *supra* note 2.

34. See M. SKLAR, *THE CORPORATE RECONSTRUCTION OF AMERICAN CAPITALISM, 1890-1916* (1988).

Regulation plays an important role at each of the four stages of industrial organization: basic conditions, structure, conduct, and performance.³⁵ Its function in any stage is to implement social control. The law of property, tort, and contract as well as patent, trade secret, and trademark law define various rights in tangible and intangible interests, as well as the obligations of those who make use of those rights and how those rights can be exchanged.³⁶ These are fundamental elements of the basic conditions of economic organization. At the structural stage, entry and merger regulation is common. Corporate law generally regulates such activity, and many particular types of business are subject to more specific controls. Such control imposes an additional, expressly regulatory, condition on the evolution of an industry's structure.

With respect to an industry's conduct, regulation can facilitate market processes, but it also (often simultaneously) can set limits on market transactions by defining the nature of permitted or forbidden conduct. The reasons for such limitations are many. The most important include limiting the ability of economic actors to exploit specific market situations, and defining health, safety, or other aspects of the good or service that is to be provided. In some instances, if market facilitation is the primary objective, the basic function of regulation is to insure that the necessary information reaches market actors so that the market can function effectively.³⁷ Even in these

35. The "structure-conduct-performance" paradigm is controversial insofar as it is interpreted to declare that structure determines conduct and performance. Compare Kruse, *Decentralization and Section 5 of the Federal Trade Commission Act*, 46 GEO. WASH. L. REV. 200 (1978) with Weiss, *The Structure-Conduct-Performance Paradigm and Antitrust*, 127 U. PA. L. REV. 1104 (1979). It is a basic analytic tool when used as a purely descriptive statement about the institutional aspects of industrial order. See Carstensen, *Antitrust Law and the Paradigm of Industrial Organization*, 16 U.C. DAVIS L. REV. 487 (1983).

36. Such regulation allocates property rights and assigns duties. It is a key premise of the Coasian theorem that rights must be assigned so that there can be transactions. Coase contends that in a transaction-costless world, initial entitlements do not affect the achieving of an efficient outcome because they will be bought or sold to reach such an outcome. Coase, *supra* note 2. Implicitly, for this system to work there must be, however arbitrary, an assignment of rights so that transactions can take place. Such an assignment entails major wealth allocation decisions that, in a Coasian system, can have no efficiency justification but only equitable ones. See Calabresi & Melamed, *supra* note 2. Moreover, even Coase explicitly has stated that his theory is dependent on a valid and functioning law of contracts that will enforce the transactions. Coase, *The Coase Theorem and the Empty Core: A Comment*, 24 J.L. ECON. 183 (1981). Consequently, the nature of the contract law one assumes, as well as the assignment of rights, will affect the operation of the transactional system. The initial set of entitlements and obligations defines the possible set of transactionable and nontransactionable resolutions to economic problems that will be possible. Experience in economies that lacked well-developed law in particular areas shows that businesses develop alternative ways to solve problems. See F. CARSTENSEN, *AMERICAN ENTERPRISE IN FOREIGN MARKETS* (1984). On the other hand, even prohibitions on contract may not completely eliminate the use of contractual understandings, but manifestly the changed legal circumstance alters the incentives to use such devices. Palay, *Avoiding Regulatory Constraints: Contracting Safeguards and the Role of Informal Agreements*, 1 J.L. ECON. & ORG. 155 (1985).

37. See, e.g., Securities Act of 1933, 15 U.S.C. § 77a et seq. (1982); Securities Exchange Act of 1934, 15 U.S.C. § 78a et seq. (1982).

situations, the legal system is simultaneously facilitating and restricting economic conduct. The regulatory concern is to create incentives to pursue socially desirable courses of conduct that may not be, in the short run, in the direct economic interest of the actors involved.

In some instances, the law seeks, with greater or lesser success, to replace the market with direct controls over performance. The law commands that certain rights shall exist for all regardless of wealth, such as public education, and those rights may not lawfully be bought or sold.³⁸ In other instances, public authority will define the prices and other aspects of the good or service being sold. This is typical of utility regulation, which seeks to replace significant areas of managerial discretion with public commands.

Although specific regulations focus on particular stages of industrial organization, regulation of any stage will necessarily have impacts, intended and unintended, on other stages. Controls over basic conditions or structure should cause changes in conduct and performance. Control over performance or conduct, conversely, will affect both the basic conditions of the industry and the nature of effective structure. These interactions are important in the overall dynamic of economic relationships and are a key factor in making the consequences of changes in legal controls unpredictable.

Implementing regulatory control, like the substance of regulatory control, is also a problem of institutional choice.³⁹ The legislature can draft detailed commands or it can make broad grants of authority.⁴⁰ It can assign courts or agencies to implement those commands and fill in the details, which may entail highly discretionary power or very limited power. Another important institutional design problem is the enforcement system chosen. A public authority can enforce the regulations either through its own adjudicatory system or by direct action in court. Absent such an agency, with or without adjudicating powers, enforcement initiative will rest solely with private parties.

Each combination of level of specificity of substantive command with method of enforcement has its own administrative characteristics. Legislative commands are relatively inflexible, while discretionary agency or judicial decisions as a rule offer more latitude for incremental adaptation. Agencies and legislators can more directly address broad classes of cases and anticipate problems overtly, while judicial decisions involve the least overt planning because they are almost entirely ad hoc and after the fact. Finally, agencies have more access to the specifics about an industry than does the judicial system, and usually more association with direct political power. Hence, the same command enforced by and through an agency may yield very different results than if it were enforced through judicial proceedings.⁴¹

38. See Calabresi & Melamed, *supra* note 2.

39. See Komesar, *In Search of a General Approach to Legal Analysis: A Comparative Institutional Approach*, 79 MICH. L. REV. 1350 (1981).

40. Thus, the Federal Trade Commission Act authorizes the FTC to prohibit "unfair competition" and "unfair acts and practices," 15 U.S.C. § 46 (1982), while the Environmental Protection Act provides pages of detailed, specifically defined goals and standards. 42 U.S.C. § 4321 et seq. (1982).

41. Agencies, legislatures, and courts respond differently to political pressures of various

Ultimately, public regulation interacts with private economic interest. Economic actors make strategic use of regulatory commands for their own economic advantage. This often involves using regulation in ways that its authors did not foresee. Equally important, private actors can evade the legal control over specific activity in a variety of ways.⁴² Moreover, the range of strategic responses is not limited to either evasion or manipulation, but may include any combination of the two responses. Thus, regulation does not mean effective public control of a situation. Hence, revision of regulation to adapt to strategic responses is a continuing need.

The narrow, traditional concept of regulation captures only a small portion of the complex reality sketched above. It invokes a particular type of comprehensive performance control used to regulate certain industries. The traditional "regulated industries" included natural monopoly utilities (gas, electricity, telephone), suppliers of transportation (especially railroads), and financial institutions of various kinds. Historically each had its rates regulated by some method and its services defined by statute; entry, as well as many types of expansion, required specific approval. Even in this traditional area, each regulated industry had its own regulatory authority; moreover, the specifics of regulation in one industry quite frequently differed from those used in another. In some, the key regulatory controls were over entry, while in others they focused on performance factors such as prices or services. Some agencies decreed specific prices, while others set only maximum rates. Still other regulatory agencies sought primarily to define permitted conduct, leaving ultimate prices and the quality and quantity of goods or services, beyond some minimum, to the discretion of the parties. Even traditionally recognized regulation is, therefore, quite heterogeneous.

Trying to articulate a definition for deregulation, given the highly ambiguous nature of even traditional regulation, is suggestive that it too can have no rigorous meaning. As an alternative state, it simply implies a condition of not being regulated. Yet no one uses that definition in anything approaching an absolute sense. In reality, deregulation implies the elimination or the alteration of some public control(s) over private decisionmaking. As such, it is a comparative rather than a discrete state. Industries can be more or less controlled and so can be more or less regulated. Upon close examination, therefore, there is not a discretely bifurcated world of regulated and unregulated business.

The false dichotomy between regulation and deregulation greatly interferes with an adequate understanding of the relationship between public control and private economic activity in two ways. First, and most directly, it falsely implies a clear choice between regulation and deregulation when in fact the choice is always among regulations implemented in various ways with respect to specific aspects of an activity. Second, and more fundamentally, it falsely

kinds. See Komesar, *A Job for Judges: The Judiciary and the Constitution in a Massive and Complex Society*, 86 MICH. L. REV. 657 (1988).

42. See Palay, *supra* note 36.

posits that public control over business either exists or does not exist. It is a serious falsity to think of economic activity existing in some natural order into which public control obtrudes. This is a type of simplification of complex reality that conceals the broader nature of the legal economic context in which particular economic activity necessarily occurs.

Casting the issue in such dichotomous terms also has the third negative effect of restricting the scope of public debate and scholarly discourse about reform. A dichotomous vision implies an either/or approach to regulation.⁴³ The reality is that the choice is between different mixes of regulations.

All of these consequences are present in the case of airlines. Levine, Kahn, and Breyer, as well as the FTC experts, all present the regulatory choice as one between a return to rate and route controls and a retention of the existing, "deregulated" system.⁴⁴ This approach defines regulation narrowly and negatively. As a result, policymakers ignored foreseeable problems that would arise once some regulations were altered. Manifestly, the potential options are not so circumscribed. The fundamental policy question is what controls should exist, because air travel could not exist absent some regulation. The optimal controls will be those that will facilitate socially desirable economic competition without impairing safety and service unreasonably. Such an approach requires an attention to the details of how airlines conduct themselves, how the structure of the industry affects the types of behavior that are possible and rational, and how the basic conditions of the business, particularly the property rights assigned to participants and the explicit definition of the framework within which rights can be bought, sold and resold, influence both structure and conduct. To appreciate the full impact of the myopic vision of regulation inherent in the dichotomous view, it is necessary to explore the related problems of false assumptions about the economics of the business and false presumptions about how other regulatory controls would work.

IV. THE IMPACT OF FALSE ASSUMPTIONS ABOUT REALITY

The justification for eliminating rate, route, and entry regulation rested on key assumptions about the airline business. The core assumption was that this business was inherently a highly competitive activity.⁴⁵ Hence, unregulated rates would closely approximate costs. This would occur either because of actual competition or because the ease of entry (and exit) was such that if prices exceeded cost for even a short period of time on any route, new entry would occur, driving prices down. The second important assumption was that fares would be relatively uniform and would reflect fully the lower average

43. Illustrative is the debate between Alfred Kahn and Melvin Brenner. Brenner, *Airline Deregulation—A Case Study in Public Policy Failure*, 16 *TRANSP. L.J.* 179 (1988); Brenner, *Rejoinder to Comments by Alfred Kahn*, 16 *TRANSP. L.J.* 253 (1988); Kahn, *supra* note 1.

44. *See supra* notes 1, 30.

45. *See* S. BREYER, *supra* note 3, at 317-18; R. CAVES, *supra* note 16.

cost of service.⁴⁶ Thus, all travelers would benefit from the lower prices. The third important assumption was that the experience of the unregulated intra-state airlines prior to 1978 was a valid guide to the future.⁴⁷ The fourth and final assumption was that if FAA safety regulation remained unchanged, the airlines' safety incentives also would remain unchanged.⁴⁸

A. *The Assumption of Competitiveness*

In light of experience, the central assumption that the airline business *can be* highly competitive is not invalid, but the airline business is not an *inherently* competitive business. Hence, preserving competition over any period of time requires the conscious maintenance (regulation) of certain necessary conditions. Standard deregulation analysis neither recognized nor provided for these conditions. Yet the degree of competitiveness in the commercial airline business depends on the overall regulatory scheme. No individual airline has an interest in promoting continued competition, and the leading airlines have strong incentives to exploit the changed regulatory framework to frustrate competition. Achieving and maintaining the competitive potential of this business, therefore, requires regulatory controls sensitive and responsive to the changed regulatory environment.

Rate, route, and entry regulation made significant economic competition impossible and, beyond doubt, had increased the cost of air travel over what it was likely to be in a competitive environment.⁴⁹ Hence, eliminating these bars to competition made good sense. The error lay in assuming that merely eliminating those controls, without more, would insure competitive conduct. This conclusion assumed that key competitive aspects of the airline business were given and immutable.

The model of effective competition on which the proponents of reform relied assumed, first, that the basic place for competition was each discrete city pair—two cities between which a plane would fly. Second, the proponents assumed that the key unit of operation was a plane. Finally, the reformers assumed that the supply of gates and landing rights at airports was sufficient to accommodate new entry. If these three assumed characteristics of the business were true, entry and exit into any city pair would be very easy, almost costless, because the only airline capital at risk would be the planes themselves, which easily could be diverted.⁵⁰ Given such low barriers, the

46. See S. BREYER, *supra* note 3, at 186; Kahn, *Surprises of Airline Deregulation*, 78 AM. ECON. REV. 316 (1988).

47. S. BREYER, *supra* note 3, at 204, 330; see also Levine, *supra* note 1, at 401.

48. S. BREYER, *supra* note 3, at 317-19.

49. See FTC STUDY, *supra* note 30; S. MORRISON & C. WINSTON, *ECONOMIC EFFECTS OF AIRLINE DEREGULATION* (1986).

50. A perfectly contestable market is one in which the costs of entry and exit are nonexistent. In such a market, even if only a single enterprise is present, it will not raise its prices above the cost-justified level because that would induce entry. The entrant can enter long enough to capture the excess profit, but when prices fall can exit costlessly to await the next opportunity. J. BAUMOL, J. PANZAR, & R. WILLIG, *supra* note 28. This theory provided a logical and convincing

threat of competition would be real and effective. Existing airlines would price close to cost whether they faced competition or not.

The assumption that all city pairs would be inherently open to easy entry, and therefore to the continuing force of competition, justified the further conclusion that strategic conduct by airlines was unlikely. In many potentially competitive contexts, each producer has unique costs or other advantages that it can exploit to entrench its position in the market by punishing rivals or creating barriers to new entry.⁵¹ Such conduct represents an alternative use of potentially profitable opportunities. The firm "invests" its profits in strategic activity that pays for itself through higher and possibly more stable profits in the future. As in any investment calculus, it is reasonable to engage in such activities only if there is an expected gain and if that gain justifies the cost of seeking to achieve it. If, therefore, a firm can gain no advantage from making selected discounted sales or taking other strategic actions, it will not be economically rational to engage in such actions.⁵² Those plotting reform of airline regulation assumed it would be basically irrational for airlines to engage in strategic pricing.

The assumption that airlines are inherently competitive, however, is false.⁵³ Moreover, an important implication of that falsity is that strategic conduct and exploitative behavior are plausible. The reformers' core error was the assumption that discrete city pairs were the relevant arena for competition. In a world of unregulated choice of routes, a hub and spoke system, rather than discrete city pairs, is the most efficient route structure for an airline.⁵⁴ In a hub and spoke system, an airline originates a group of flights from a variety of places that all converge on the hub location; passengers either

explanation for what seemed to be the situation of the airline business. It explained how there could be very limited numbers of actual competitors and yet each competitor would behave as if it faced many competitors. In addition, the contestable market theory provided an assurance that strategic efforts to eliminate or cripple particular competitors would not be rational business behavior. It would make no sense to spend resources to drive out or preempt a particular competitor if that did not change the prospects of future competition.

51. See *supra* note 15.

52. For example, farmers incur most of the cost of producing crops substantially before harvesting them. At harvest, a farmer could elect to receive only the cost of harvesting and it still would be rational to harvest. Hence, the farmer has wide pricing discretion that could be used strategically. Given the structure of American agriculture, however, it would be irrational to exercise discretion to price below the market price. The farmer simply would give away wealth to the buyer and could gain no advantage in future crop years because of the ease of entry and expansion by other producers. In farming, therefore, the problems are reversed. Buyers can exploit in any short run period the fact that it will make more sense for a farmer to sell at below total cost, but above out of pocket harvesting cost. Such localized monopoly explains some of the special features of agricultural market regulation. See Paterson & Mueller, *Sherman Section 2 Monopolization for Agricultural Marketing Cooperatives*, 60 TUL. L. REV. 955 (1986).

53. G. HURDLE, R. JOHNSON, A. JOSKOW, G. WERDEN, & M. WILLIAMS, CONCENTRATION, POLITICAL ENTRY, AND PERFORMANCE IN THE AIRLINE INDUSTRY (1988) [hereinafter DEPT. OF JUSTICE STUDY]; Bailey & Williams, *supra* note 1, at 193-97.

54. Bailey & Williams, *supra* note 1, at 185-87; Levine, *supra* note 1, at 411; see also DEPT. OF JUSTICE STUDY, *supra* note 53.

travel to or from the hub or change planes in the hub for some other location. Because passengers at any point will want to go to diverse destinations, a system of coordinated flights that allow interchange at a central point increases the number of passengers on all the related flights.⁵⁵ The hub and spoke system also is more efficient in collecting and dispersing passengers among a set of destinations. The implication for competition is that entry into and retention of a position in a particular city pair will depend on that pair's relationship to the hub and spoke system of the entering airline. It is still possible to have competition, so long as there are competing hub and spoke systems either based at the same or reasonably proximate airports. In a hub and spoke world, however, contestability of particular markets is much more problematic because it depends on the choices that exist or might feasibly exist for travelers.⁵⁶

Experience also has shown that several additional factors affect the contestability of airline markets. First, reputation is important to effective competition in any specific market.⁵⁷ If travelers and travel agents have little or no knowledge about an airline, the company must make an investment of resources to acquire the necessary reputation in the market. These investments not only increase the cost and time for effective entry, but also are largely lost if the airline ceases to serve that community. This makes entry and exit costly and thus reduces the contestability of the market. Second, because travel agents' commission rates are unregulated, airlines often compensate travel agents based on the total volume of business they generate for that airline.⁵⁸ This makes the agents loyal to a particular airline and creates an economic disincentive to recommend alternative carriers. To overcome this barrier a new entrant may have to create and monitor some special reward system that can get agents to facilitate (or at least not obstruct) its entry. This too increases the costs of entry and is a cost that will be lost if the entrant must exit again. Third, a few major airlines operate the computerized reservation systems.⁵⁹ Other airlines must have their flight and fare information on such systems for agents to know of the offering. By structuring the information revealed to agents, the system operator can affect the choice of carrier. In addition, these systems provide detailed information about competitors' plans (new rates and routes must be recorded on the system to be available) and achievements (the computer system can track in detail the performance of rivals on any route). Both of these effects negatively impact competition by giving the dominant firm better information and better access to customers. Finally, the new entrant must invest in local facilities, such as

55. There are a few city pairs that generate very substantial traffic, for example, New York-Los Angeles, and in which isolated service is more viable, but even then, linked flights at each end will increase the number of passengers for whom the primary flight is attractive. See Levine, *supra* note 1, at 410, 442.

56. DEPT. OF JUSTICE STUDY, *supra* note 53; Bailey & Williams, *supra* note 1, at 185.

57. Levine, *supra* note 1, at 418-22, 427-32.

58. Illinois Corp. Travel, Inc. v. American Airlines, Inc., 806 F.2d 722 (7th Cir. 1986).

59. Levine, *supra* note 1, at 415-16.

gates and baggage facilities, or rent them at prices that may exceed cost and therefore put the new entrant at a cost disadvantage compared to the other participants in the market.

A special barrier to entry into some important markets is a lack of gates and landing slots. These two essential inputs are relatively fixed in quantity at any time. If the supply at an airport is fully committed, a potential entrant only can enter if it acquires facilities and landing rights from an existing firm. Even when the total is not fixed, it may be hard to find landing slots or acquire a set of gates so located that the new entrant can be an effective competitor, particularly in light of the hub and spoke integration that is essential for efficient operation.

The lack of control over airline decisions to create hubs at particular airports is another factor exacerbating the problems of contestability. The most likely way in which airlines will compete in the future is through the development of competing hubs.⁶⁰ Without any control over the process of hub establishment, there is a substantial risk that airlines with adjacent hubs will expand to foreclose potentially competitive entry and expansion.⁶¹

The implication of the sum of these facts is that air travel markets are not, as had been assumed, inherently contestable.⁶² Moreover, some of the features that limit contestability are the result of the existing regulatory system over air travel. Specifically, granting perpetual landing rights to existing users entrenches their position in comparison to a system of periodic redistribution of landing rights. Similarly, allowing long-run contracts conferring exclusionary rights to gates at airports increases the cost and difficulty of entry. The complete elimination of control over compensating agents opened the way to exclusionary compensation systems. Allowing vertical integration into operation of reservations systems created yet other types of strategic opportunity. The lack of control over developing hubs allowed strategic expansion, which can have exclusionary effects.

Thus, the contestability of airline markets is in significant measure a function of the overall regulatory context. The redefinition of rights and obligations resulting from deregulation created the opportunity for strategic conduct aimed directly at avoiding the potential of contestability. These risks were not visible in the pre-1978 airline world because the CAB directly regulated the contestability of any market. Moreover, the CAB also had sufficient control over rates, routes, and entry that it could discipline any airline which acted in a strategic way. This means that there was neither incentive nor opportunity to engage in the kinds of conduct that have since emerged as problems. The lesson of these events, in part, is that it is dangerous to theorize about future conduct based on conduct that occurred under a set of restrictive legal controls which are being removed.

60. *Id.* at 444.

61. Schmalensee, *Entry Deterrence in the Ready-to-eat Breakfast Cereal Industry*, 9 BELL J. ECON. 305 (1978).

62. Economic studies confirm this. DEPT. OF JUSTICE STUDY, *supra* note 53; Bailey & Williams, *supra* note 1.

B. *The Assumption of Uniform Rates*

Another serious false assumption involved the uniformity of airline fares. Prior to 1978, a general formula set fares based on miles traveled. In such a pricing situation, the key questions are total costs of the trip, including appropriate overhead and depreciation, and a load factor. Given this information, alternative prices can be calculated quite easily based on total cost divided by the expected number of passengers. Such fares would be basically the same for any class of travel. The result in economic terms is average total cost pricing.⁶³

This pricing model assumes that the demand for air travel is similar among all or most travelers or that there is some mechanism that causes the demand to be reflected as a single quantity. If it is a single quantity, then the airline cannot differentiate among customers and must set only one price for any type of service. This severely limits airlines' ability to engage in strategic pricing. Any price cut (or increase) only can be made on an across-the-board basis. A strategic price cut therefore would sacrifice a higher possible price on all sales in order to force down the prices of a competitor.⁶⁴ This is likely to be very costly and unrewarding. Conversely, if customers have substitutes, an across-the-board, general price increase is most likely to cause a substantial loss of business. Thus, as demand is more homogeneous, strategic pricing is increasingly improbable. For example, despite great divergence between average and marginal cost in producing agricultural goods, the fact that most are sold in well organized public markets in which buyers easily can substitute among sellers means that strategic pricing is improbable.

Even in 1978, careful analysis would have shown that average cost pricing for air travel was unlikely, absent specific regulatory requirements. The basic unit of air travel is the seat, but seats do not travel by themselves. They are grouped into airplanes, which carry various numbers of seats. The implication of this is that the incremental cost of the marginal seat is very close to zero.⁶⁵ The resulting major difference between average cost and variable cost makes feasible two kinds of pricing: exploitative and strategic.

Exploitative pricing aims to extract all the profit from a market context by varying prices depending on consumer desire for the good or service. So long as sellers can keep discount buyers from reselling to those who are being forced to pay high prices, these differential prices are feasible. Such price differentiation in turn increases total revenues for the same volume of business. It is readily apparent that demand for air travel varies greatly among

63. S. BREYER, *supra* note 3, at 202-04, has a table setting forth such calculations.

64. Robert Bork, among others, uses this model to claim that all price predation is irrational. R. BORK, *ANTITRUST PARADOX* 144-59 (1978). So it would be if the assumption of uniform prices holds true in all situations. In fact, predation usually arises only when sellers can target price cuts. See *In re Borden, Inc.*, 92 F.T.C. 669 (1978), *aff'd sub nom. Borden, Inc. v. Federal Trade Comm'n*, 674 F.2d 498 (6th Cir. 1982); see also Campbell, *supra* note 15.

65. Breyer reports that the rule of thumb was that the marginal seat cost 10% of the ticket price. S. BREYER, *supra* note 3, at 200; see also Frank, *When Are Price Differentials Discriminatory?*, 2 J. POL'Y ANALYSIS & MGMT. 238 (1983).

consumers. Hence, differentiated prices are a plausible strategy. An important element in facilitating such exploitative pricing is the nontransferability of tickets.⁶⁶ If tickets could be resold easily and lawfully, those persons with the greatest demand could buy from those who are less intensively committed to traveling at that moment. In fact, one can imagine a secondary market developing in which speculators buy up discount tickets and resell them.⁶⁷ For present purposes, the cost and demand characteristics of air travel make price differentiation to exploit travelers an attractive and plausible strategy.⁶⁸ The nontransferability and the absence of any constraint on pricing of individual tickets, both functions of the regulatory system, facilitate such a strategy.

Second, cost differentials facilitate exclusionary pricing. If existing or potential rivals can be excluded in cost effective ways, then future exploitation will be that much less constrained. If demand is differentiable, and the spread between average and variable costs is substantial, an airline can engage in focused, competitive responses aimed at particular competitors and the specific subset of customers that both are serving. For example, if a major airline runs a number of flights from its hub and faces new competition on one or two routes, it can cut its prices to the marginal cost of seats for those segments facing competition.⁶⁹ This would force the competing airline to reduce its prices as well. Such fares would be below the average total cost of serving those specific routes. Customers traveling those routes will get very low prices, but all other customers, for whom the competitive route was only a segment of the trip, will get no comparable fare reduction. Thus, the price cutter does not face an across-the-board loss of revenue. In fact, assuming a relatively large hub and spoke system, the losses would probably be minor and easily covered by revenue from other, less competitive segments. Yet the

66. Tickets are analogized to sales of service and not of a commodity. Hence, the contract right is not transferable.

67. Without more elaborate, technical, and institutional economic analysis, the degree to which such a resale right would limit price variance is uncertain. Except for an article published some 40 years ago, no one has tried to define and solve those questions. Vickrey, *Some Objections to Marginal-Cost Pricing*, 56 J. POL. ECON. 218, 232-35 (1948). In general, one would predict that prices for tickets would gradually increase from the first point of availability until shortly before the flight. At that point, prices might remain high if demand were great, or decline if there were excess supply. The key point is that if an airline's own prices for tickets involved a greater spread than the actual demand, that would produce a resale market response. It should be noted that transferability alone might not be enough. Those interested in a particular flight also would need easy access to information identifying existing ticket holders or their agents.

68. See Kahn, *supra* note 46, at 319-20. The Wall Street Journal has continually focused on airline pricing. See Dahl & Rose, *Airlines Make Major Push to Raise Fares*, Wall St. J., Aug. 29, 1988, at 11, col. 3; Petzinger, *Several Airlines Slash Fares to Florida For Fall, Limit Cuts to Avert Price War*, Wall St. J., Aug. 16, 1988, at 5, col. 1; O'Brien & Phillips, *Many Business Travelers to Pay More As Airlines Eliminate a Discount Fare*, Wall St. J., Nov. 14, 1988, at B9, col. 1; Nomani & Dahl, *Air Fares Soaring for Leisure Travelers*, Wall St. J., Nov. 16, 1988, at B1, col. 3.

69. See Bailey & Williams, *supra* note 1, at 174; Levine, *supra* note 1, at 412, 441-46, 452, 472-78.

new competitor finds itself in a situation in which it never can earn its full costs unless it develops noncompeting routes.⁷⁰

Both of these uses of the difference between average and marginal cost assume some barriers to entry exist for other airlines. If they did not, exclusion would not occur; exploitative differentiation simply would induce entry. As we already have seen, the assumption of easy contestability is invalid. Hence, it follows that both exclusionary and exploitative pricing are feasible, and that the assumption of uniform pricing, absent regulatory command, is also invalid.

The 1978 legislation eliminated CAB limits on the price and other conduct of existing airlines. Thus, the 1978 law empowered existing airlines to behave strategically to exclude competitors, if that was economically rational. If the assumptions of the contestability of these markets had been correct, the changed conditions would not have made strategic conduct any more rational than before; because contestability of these markets was not a given, however, the existing airlines were more free to increase their incontestability.

C. *The Assumed Relevance of Pre-1978 Competitive Experience*

The third key assumption proving the desirability of unfettered competition was that the successful pre-1978 experience of the unregulated Texas and California airlines gave a valid picture of what competition would be like after elimination of route, fare, and entry restrictions.⁷¹ That experience showed low fares, good service, and profits.⁷² It was an ideal competitive outcome.

This experience is not irrelevant to the prediction of the likely effect of changed regulation. But it is an experience during which the unregulated firms operated within a competitive context in which their larger rivals were constrained in important ways. Specifically, the existing airlines could not charge highly differentiated prices, could not pay travel agents for diverting passengers, and did not control the reservation systems. Moreover, any competitive response required CAB approval. This delayed responses, insured a public disclosure of any plan, and created a forum in which the targets could challenge specific behavior. In sum, the context in which the intrastate airlines achieved their success was dramatically different from the context that industry-wide changes in regulation would produce. Rightly understood, the pre-1978 experience suggested that careful revision of controls could

70. See Levine, *supra* note 1, at 417, 472-78. Many commentators believe that predatory pricing is implausible behavior. See, e.g., R. BORK, *supra* note 64, at 149-59; Areeda & Turner, *Predatory Pricing and Related Practices Under Section 2 of the Sherman Act*, 88 HARV. L. REV. 697 (1975). This claim is highly dependent on the assumption of uniform pricing, which makes such a strategy very costly to a firm with a large market share. Selective price cutting creates a very different and less burdensome cost situation, as well as far less consumer benefit. See Campbell, *supra* note 15.

71. S. BREYER, *supra* note 3, at 317-18, 330; A. BROWN, *supra* note 4, at 134.

72. Note, *Is Regulation Necessary? California Air Transportation and National Regulatory Policy*, 74 YALE L.J. 1416 (1965).

stimulate competition and produce desirable results. It did not justify an assumption that, absent regulation, competition would be a continuing phenomenon of airline behavior.

D. The Assumption of Unchanged Safety Incentives

The contention that the quality of air travel, specifically its safety, would not change involved the interaction of a false assumption with a false presumption about the effectiveness of a regulatory scheme. The assumption was that the incentives for airlines to invest in safety would not change as a result of terminating rate, route, and entry regulation. After all, the FAA controls remained unchanged. Therefore, the same controls would exist that had worked well in the past. In the past, however, rates and profits were regulated. In 1978 both rates and, more importantly, profits ceased to be controlled. This change directly affects incentives to invest in specific activities.

Under regulation, if profits increased, rates were reduced. But if revenues were allocated to uses such as safety, fares would not be reduced because such investments were not "profits." Profits were the residual left after these expenditures.⁷³ Hence, under rate and profit regulation, airlines had a specific incentive to allocate discretionary revenues away from "profit" and into other uses that the CAB would not label as profit. Thus, prior to 1978, expenditures on safety precautions, plane maintenance, and the like, were part of the cost of doing business and did not come out of the returns that the airline could receive on its invested capital.⁷⁴

After decontrol of fares and profits, there were two pressures on investments in safety. First, the funds used for excess safety investment now could be diverted into profits. Thus, the balance between possible uses of available funds became quite different. Second, competitive pressures might well drive down total earnings, which would in turn create added incentives to postpone or minimize any avoidable investment. The combined effect of these pressures

73. By way of analogy, Averch and Johnson found that electric utilities under rate regulation, based on a return keyed to total plant investment, had a tendency to overinvest in assets that were includable in that rate base so long as the resulting rates did not exceed the optimal monopoly price. Averch & Johnson, *Behavior of the Firm Under Regulatory Constraint*, 52 AM. ECON. REV. 1052 (1962). A similar but weaker condition would exist as to expenditures that do not reduce the net profits available to the enterprise, such as safety. The spending of funds that were obtained by otherwise disallowed price increases, for objectives that will make at least marginal contributions to the long-run well being of the enterprise, will make sense, given the assumption of a regulatory cap on traditional profits. If, however, the enterprise had full discretionary control over the same revenue and no profit cap, it would not expend them in the same way.

74. Similarly, airlines may have overpaid much of their work force. Excessive wages would buy labor peace and employee loyalty without reducing shareholder returns because a lower wage structure would result primarily in lower ticket prices for all airlines. Moreover, the airline that reduced its own operating costs by controlling wages would get little direct reward and would find both its own labor force and its rivals distressed at its conduct. As a consequence, the expected gain from hard bargaining on wages or other working conditions would not be very great.

was to eliminate any profit-avoiding incentive to make such investments and to create a context in which the pressures not to do so also would increase.

This is not to claim that no incentives to invest in safety would remain. Airlines have strong, long-run interests in preserving a good reputation for safety because that reputation will help insure customer loyalty over time. In addition, many airline employees have a direct interest in safety investments and other employees, out of a sense of loyalty, also may have strong interests. All of this would counterbalance the disincentives discussed earlier. The incentive structure is not completely reversed, therefore, but it was altered as a direct result of changes in other regulatory controls. No one evaluating deregulation seems to have considered the kind of reaction to investments in safety that would be the logical consequence of the changes in fare and profit regulation. Thus, the assumption that the incentive to invest in safety would remain unchanged was false.

E. The Interrelationship of the False Dichotomy and the False Assumptions

The false dichotomy between regulation and deregulation rests in significant part on a lack of awareness of the positive role of law in creating viable market contexts. The narrow and incomplete definition of regulation blinds its adherents to the broader needs of any economic order to have basic rights and obligations defined. The definition in turn either facilitates or frustrates the development of desired competition or other economic conduct.

The failure to conceptualize the positive (and negative) role of regulation in market contexts reinforced the series of false assumptions that led to the conclusion that the airline business was inherently competitive. In fact, regulation can serve to create, facilitate, and guarantee the conditions, structure, and conduct essential to optimal competition. The ultimate policy goal of desirable performance requires, if such performance is not to be directly commanded, careful choice of incentives, commands, controls, and rights so that private actors seeking their own economic self-interest will behave in ways that produce the desired type and quality of performance. This is a difficult task even if clearly and directly identified. When hampered by both a false dichotomization as to regulatory response and false assumptions that directly deny the potential for regulation to affect competition positively it is hardly surprising that the results will be gravely flawed. There were, however, traditional controls that were not generally perceived as regulations capable of dealing with any foreseeable problems that might arise in the new "deregulated" environment. I now turn to an examination of those presumptions.

V. FALSE PRESUMPTIONS ABOUT OTHER REGULATORY SCHEMES

Proponents of deregulation, in addition to assuming (falsely) that the economics of air travel dictated that neither exploitative nor exclusionary practices were likely to occur, also presumed that other regulatory schemes would provide protection against any remaining risks of undesirable structure or conduct. There were two areas of concern. The first related to safety, and

the claim was that the FAA would retain its authority, and therefore safety control (regulation) would remain the same.⁷⁵ The other concern was that competitive problems or abuses might occur. The primary focus of this concern seems to have been exclusionary practices such as predatory pricing or other conduct aimed at excluding new entrants or expanding airlines from existing markets.⁷⁶ Proponents asserted that exclusionary conduct, if it created a serious risk of harm, would violate the "attempt to monopolize" standards of antitrust law. In addition, proponents believed mergers were unlikely to be a serious problem because they would not create lasting market dominance.⁷⁷ Similarly, exploitative conduct would be possible only if some sort of collusive arrangement existed, and such an arrangement would violate the prohibition against cartelistic behavior imbedded in section 1 of the Sherman Act. Finally, mergers, which could alter market structure and therefore make exclusion or exploitation more attractive, would violate the strict antimerger tenants of amended section 7 of the Clayton Act. Hence, contrary to the dichotomous perception of regulation versus deregulation, reliance on other regulatory schemes to provide necessary protection of public interest concerns was central to the justification for deregulation.

The interrelationship between (false) assumptions about the economic realities of the airline business and the presumptions about other control systems are also important. The anticompetitive and safety risks were defined based on the assumption that the competitiveness of the business was a given and that the incentives to invest in safety would remain unchanged. Hence, exclusionary or exploitative conduct would be rare and necessarily would fall into the prohibited categories of antitrust law. Similarly, the unchanged nature of safety regulation meant there could be no potential for change in that vital aspect of the quality of service. In fact, the economics of air travel made exclusionary and exploitative conduct generally feasible and altered the incentives to allocate revenue among possible uses, including safety. Consequently, the role of the other regulations radically was altered. Yet, no particular effort was made to determine whether or not these other regulatory systems would be effective, given the changes in the regulatory control over other aspects of the business.

75. S. BREYER, *supra* note 3, at 199-200.

76. The secondary focus was on the consumer interest in receiving lower and nondiscriminatory prices. Here, the central claim was that actual or potential competition would be sufficiently strong to impel the airlines to offer prices that reflected cost. But it also was asserted that the antitrust laws would regulate any behavior intended to exclude (and therefore create conditions for exploitation) or directly exploit consumers. S. BREYER, *supra* note 3, at 32, 159-60.

77. See Cohen, *The Antitrust Implications of Airline Deregulation*, 28 ANTITRUST BULL. 131, 139 (1983); Eads, *Airline Competitive Conduct in a Less Regulated Environment: Implications for Antitrust*, 28 ANTITRUST BULL. 159, 179-83 (1983); Keyes, *Notes on the History of Federal Regulation of Airline Mergers*, 37 J. AIR L. & COM. 357 (1971); Phillips, *Airline Mergers in the New Regulatory Environment*, 129 U. PA. L. REV. 856, 876-79 (1981); White, *Economies of Scale and the Question of "Natural Monopoly" in the Airline Industry*, 44 J. AIR L. & COM. 545, 546 (1979).

A. Safety Issues

From the outset of air travel, the public has been strongly concerned with safety. In general, airlines and passengers have preferred an anticipatory and preventive approach. After-the-fact tort liability never has offered the kind of assurance of quality that government certified safety of aircraft has provided. Thus, as to airplane safety, a regulatory system has been consistently in place over the years.

As more airplanes began to use the skies, it also became essential to create a system of control over the use of flyways to insure the safety of all users. Once again, government undertook the regulatory task and established detailed controls over the paths that planes may follow, as well as control over their takeoff and landing. This created a comprehensive pattern of controls. The function of the FAA, therefore, is to insure that airplanes and their operation meet a reasonable level of safety.⁷⁸ The FAA has functioned reasonably well over time in the context of the existing pattern of regulation over commercial airlines. Much of its effectiveness arises from a pattern of self-policing by the airlines, which means that only limited supervision is required.

In a world in which the airlines had relatively protected profit margins that were set based on various measures of actual average costs, investments in safety would have been a relatively costless use of resources. That changed after 1978. Yet neither in 1978 nor subsequently has Congress made any significant increase in the FAA's scope and budget to provide greater supervision over airlines.⁷⁹ Thus, the regulatory situation as to safety remains as it was before the changes in airline incentives. Most importantly, this situation was not the result of careful investigation of the likely impact of changes in the incentive structure that the other changes in regulation will produce.

If airlines shirk some of their safety obligations and problems result, the response may be to condemn competition as a source of the safety problem.⁸⁰ Such an analysis would miss the interactive character of the consequences in issue. The decline in safety would in fact be the result of the interaction of a safety regulation system established in the context of one set of incentives that failed to provide adequate controls when the underlying economic incentives changed. The problem would not be competition itself, therefore, but the mismatch between competition and safety regulation based on a premise of different economic relationships.

The uniform results of statistical studies of airline safety do not yet support the proposition that airlines have become less safe in the less controlled market.⁸¹ This may mean that the safety incentives have not been

78. See 49 U.S.C. §§ 1421, 1424 (1982).

79. The scope of FAA research authority has been expanded. See Aviation Safety Research Act of 1988, 102 Stat. 3011 (1988).

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

81. The best recent summary of the data is in FTC STUDY, *supra* note 30, at 61-68. For a wider range of views, see *Safety and Re-Regulation of the Airline Industry, Hearing before the Comm. on Com., Sci., and Transport., 100th Cong., 2d Sess. (1987) [hereinafter SAFETY HEARING]*.

altered enough to create a different balance in specific situations. But it also may mean that the altered safety investments do not yet appear as factors in the outcomes,⁸² possibly because of lags between changes in incentives and actual conduct responses.⁸³ Additionally, the lack of statistical response also may be an artifact of the nature of a statistical analysis that tends to demand very high levels of correlation before admitting that a relationship exists, and that is very dependent on the specific data and their assumed relationships.⁸⁴ Certainly, there is some evidence that would suggest that, at the margin, there has been a decline in safety investments by many airlines, and that the more economically marginal airlines are the primary offenders.⁸⁵ Moreover, it is beyond doubt that more comprehensive policing would require a substantially greater continuing investment of resources than has occurred.⁸⁶

B. Control Over Anticompetitive Conduct

Congress was not unaware of the risk that anticompetitive conduct could occur in air travel despite the theoretical claims that it would be both irrational and ineffective. The standard answer to such concerns was that the antitrust laws would provide all the protection necessary to deal with those problems.⁸⁷ Given the narrow definition of the anticompetitive risks, and the judicial interpretation of antitrust law in the mid-1970s, this was a superficially plausible claim.

However, the exact impact of antitrust law on the foreseeable risks to competition never were mapped out nor, conversely, were the potential problems that antitrust law might create for procompetitive solutions to problems identified. Thus, the assertion that antitrust law would protect and not obstruct competition was just that: an assertion. In addition, antitrust law was under a sustained and ultimately at least partially successful attack, which focused very much on those aspects that governed single-firm conduct and which largely barred mergers among substantial actual or potential competitors. Unfortunately, these were the primary parts of antitrust on

82. *See id.* at 33 (Statement of T. Allen McArbor).

83. For example, the Wall Street Journal profiled a case in which a worker at Eastern Airlines claimed that supervisors were forging records and altering safety reports. The worker's view remained that a certain level of safety was required. As workers turn over, new norms may result. *See* Wall St. J., June 9, 1988, at 1, col. 6; *see also* Wall St. J., Apr. 20, 1988, at 4, col. 2; Wall St. J., June 2, 1988, at 5, col. 1; Wall St. J., June 9, 1988, at 1, col. 6.

84. My review of the primary studies does not suggest that there are major flaws of either type. But I am not an expert in statistical model building and testing.

85. *See* OFFICE OF TECHNOLOGY ASSESSMENT, SAFE SKIES FOR TOMORROW: AVIATION SAFETY IN A COMPETITIVE ENVIRONMENT (1988) (for House aviation subcommittee); Valente, *Some Airlines Narrow Their Safety Margins, Seeking to Cut Costs*, Wall St. J., Sept. 19, 1988, at 1, col. 6.; *see also* SAFETY HEARING, *supra* note 81 (Eastern Pilots Ass'n Statement).

86. The effort to do a full safety review of Eastern Airlines caused severe distortions and other problems for the relatively small body of FAA inspectors. *See* Wall St. J., Apr. 29, 1988, at 3, col. 4.

87. S. BREYER, *supra* note 3, at 220 ("The antitrust laws were sufficient to cope with the problem"); *id.* at 159-61.

which the reformers relied.⁸⁸ Thus, to some extent antitrust law never was what proponents of deregulation claimed, and, to an even greater degree, antitrust law was about to cease to be what it had been with respect to the most important elements for controlling airline conduct and structure. Finally, antitrust law in the 1970s created a significant barrier to efficiency-enhancing, nonmerger integration. The proponents of reform ignored this effect as well.

1. Anticompetitive Conduct

The state of antitrust law in the mid-1970s with regard to exclusionary and exploitative conduct by single firms appeared to provide a substantial scope for judicial review of such conduct.⁸⁹ The substantive law was, however, very unclear, and included at least some highly problematic holdings. The line between vigorous competition and unlawful exclusion is neither theoretically clear nor empirically evident. Largely unarticulated differences with respect to the dynamics of economic activity led to a wide range of judicial responses.

Single-firm conduct could be reached under the antitrust laws only if it constituted an attempt to monopolize or monopolization.⁹⁰ Neither type of behavior was clearly defined in the 1970s.⁹¹ If a plaintiff showed that a defendant had exclusionary or other "bad" intent, or that a defendant had engaged in competitively questionable conduct which lacked clear justification, that showing would be likely to raise serious antitrust problems.⁹² However, at least some of the cases seemed to condemn rational economic behavior and to rest on excessive preoccupation with motives whose anticompetitiveness was at best highly ambiguous.⁹³ A series of law review articles and judicial decisions starting in the mid-1970s cut back substantially on the scope of this field.⁹⁴

As a matter of general antitrust law, this change probably was appropriate. However, it raised serious problems for an industry in rapid change in which conduct might need some greater control to avoid short-term problems. Moreover, the lack of clear rules in antitrust law emphasized that

88. See, e.g., *id.* at 159-61; cf. A. BROWN, *supra* note 4, at 132.

89. See Cooper, *Attempts and Monopolization: A Mildly Expansionary Answer to the Prophylactic Riddle of Section Two*, 72 MICH. L. REV. 373 (1974).

90. See Carstensen, *supra* note 35, at 513-17.

91. See Cooper, *supra* note 89. In my view, antitrust law governing single firm conduct remains chaotic because of the failure of judicial and academic analysis to see the legal options in a broader context. See Carstensen, *Commentary: Reflections on Hay, Clark, and the Relationship of Economic Analysis and Policy to Rules of Antitrust Law*, 1983 WIS. L. REV. 953, 979-88; Carstensen, *Predatory Pricing in the Courts: Reflection on Two Decisions*, 61 NOTRE DAME L. REV. 928 (1986).

92. See, e.g., *Lessig v. Tidewater*, 327 F.2d 459 (9th Cir. 1964).

93. A competitor that can identify particular rivals has a strong incentive to place competition on a personal basis, often generating many statements that seem to be stronger evidence of misconduct than they are. See R. POSNER, *ANTITRUST LAW* 189-90 (1976).

94. See, e.g., *Telex v. International Business Mach.*, 510 F.2d 894 (10th Cir. 1975); *Areeda & Turner*, *supra* note 70.

other methods of control might be essential to dealing with particular problems of conduct. The combination of the false assumption of uniform pricing and the false presumption that general antitrust law was adequate to handle any strategic pricing that was anticompetitive left an unintended as well as unperceived gap in the regulatory framework.

This is well illustrated in the emergence of airline-owned computer reservation systems. These computer systems were manipulable in a variety of ways that permitted exclusionary behavior toward small rivals and new entrants. They facilitated fine-tuned exclusionary behavior, such as rate reductions on flights that were most directly substitutable, without any broader rate reduction. In general, competitive theory assumes goods and services are easily substitutable. As a result, a price change will spread among a broad set of buyers and sellers because of substitution. By careful manipulation of the choices available to limited classes of customers, airlines that had computer reservation systems could avoid spreading price competition beyond a specific target. While such manipulation posed risks to the overall competitiveness of the airline business, it was not clearly an antitrust violation.⁹⁵

Even assuming that exploitation of control over computer reservation systems was a violation of antitrust law, a further problem would emerge: an effective remedy. In general, antitrust law would provide only a conduct-oriented decree. Such a decree would control how the operator used its system. Thus, the court would become the regulator of the specific area to deal with risks of abuse. This would recreate a more regulated mode from which air travel had escaped, and perhaps a less efficient one because regulation now would be dispersed among all courts enforcing decrees and limited to the topics covered in those decrees.

A simpler and more effective solution would be to terminate ownership relations between the reservation service and the airlines. The services could be independent businesses that would provide the service to airlines and travel agents.⁹⁶ An independent operator would have strong incentives to provide equal, nonmanipulative treatment of users. By changing structural relationships, regulatory controls over conduct could be minimized. But as a separate business, reservation services would most likely have to impose a direct charge to travel agents for access to and use of the system. By contrast, airlines currently offer their reservation service free or even pay agents to use it. Under any system of payment, the cost of the service would not be different (and the ultimate cost would still be borne by consumers), but who was paying immediately would change. This means that the most desirable change could occur only on an industry-wide, structural basis. Thus, at the remedy stage, antitrust also may not be now or ever have been a very good tool for structuring the optimal types of conduct and structure.

95. The courts generally have failed to find such conduct unlawful, *see, e.g.*, Dempsey, *supra* note 1, at 595-96; Levine, *supra* note 1, at 415-16, 482, even though a number of practices by reservation system operators have been directly forbidden by administrative rule. *See* Carrier Owned Computer Reservation Systems, 14 C.F.R. §§ 255.1-255.10 (1988).

96. Levine, *supra* note 1, at 460.

The law with respect to agreed upon behavior was also on the verge of change. Until *Continental Television, Inc., v. GTE Sylvania, Inc.*⁹⁷ in 1977, antitrust law generally condemned all agreements that controlled the competitive potential of the restrained party.⁹⁸ Even after *Sylvania*, vertical price fixing and most horizontal agreements remained highly suspect.⁹⁹ However, the changing rules generally favored vertical nonprice arrangements. This in particular led to a lessened focus on airlines' travel agent arrangements. Yet, these contracts had intentional exclusionary effects that the new theories of antitrust simply ignored. The problem, once again, was that antitrust was changing toward a less intrusive approach that generally may have been rational, but was not well adapted to the problems of transition on the scale occurring in the airline industry. Under more rigorous scrutiny, these differential agreements would seem contrary to the general Robinson Patman policy of equal treatment for all.¹⁰⁰ They also might raise consumer protection questions because the agents' neutrality was being compromised in an undisclosed manner.

2. Merger

The most important change in airline structure since "decontrol" has been the wave of mergers that has increased the level of concentration in the industry as a whole and created regional monopoly problems.¹⁰¹ These mergers would have been unthinkable under prevailing standards in the mid-1970s. The substantive law of mergers was very strict as to horizontal combinations.¹⁰² As a result, even combinations involving firms with relatively small market shares were held illegal. The decided cases also offered few defenses to mergers that entailed unacceptable changes in market share. Moreover, if a merger violated the law in any respect, the entire merger was objectionable.¹⁰³ This set of substantive standards would have precluded almost all of the airline combinations in which the parties competed in at least some city pairs. Even financially distressed airlines would have had a hard time justifying combinations with actual competitors, given the other potential acquirors that existed.¹⁰⁴ The cases made clear that, even if a lower price would result, it

97. 433 U.S. 36 (1977).

98. *Albrecht v. Herald Co.*, 390 U.S. 145 (1968); *United States v. Schwinn*, 388 U.S. 365 (1967), *overruled*, *Continental Television, Inc. v. GTE Sylvania, Inc.*, 433 U.S. 36 (1977).

99. *See, e.g.*, *FTC v. Indiana Fed'n of Dentists*, 476 U.S. 447 (1986); *Monsanto v. Spray-Rite*, 465 U.S. 752 (1984).

100. *See* 15 U.S.C. § 13 (1982).

101. For a comprehensive and critical review of the merger phenomenon, see Dempsey, *supra* note 1, at 510-47; *see also* Bailey & Williams, *supra* note 1.

102. *United States v. Pabst*, 384 U.S. 546 (1966); *United States v. Von's Grocery*, 384 U.S. 270 (1966); *United States v. Continental Can*, 378 U.S. 441 (1964); *United States v. Aluminum Co. of Am.*, 377 U.S. 271 (1964); *Brown Shoe Co. v. United States*, 370 U.S. 294 (1962).

103. *Brown Shoe Co. v. United States*, 370 U.S. 294 (1962).

104. *See United States v. Greater Buffalo Press, Inc.*, 400 U.S. 990 (1971); *Citizens Publishing Co. v. United States*, 394 U.S. 131 (1969).

was important to maintain the maximum feasible number of competitors in the market.

Even if merging airlines were not direct competitors, merger law, employing the doctrines of potential competition and entrenchment, still would have posed a serious challenge in the 1970s. Under the potential competition doctrine, mergers that eliminated likely entrants into concentrated markets were objectionable because they foreclosed the potential for new competition to deconcentrate such markets.¹⁰⁵ While airlines could argue that their markets were contestable, the likely contestants were exactly the same airlines that were merging. The entrenchment doctrine held that combinations which reinforced the economic power of an established firm in a concentrated market would be objectionable even if the acquiror was not deemed to be among the most likely entrants.¹⁰⁶ Hence, if a merger would affect contestability negatively, it also would entrench. In application, these standards would have raised serious questions about combinations such as the one between Delta and Western.¹⁰⁷ Both parties were financially strong airlines with significant shares in their regions. Each was capable of entry into the area of the other either *de novo* or by acquiring smaller commuter or regional lines. In contrast, the expansion of Republic by combination of geographically diverse regional airlines with nondominant positions is an example of the sort of merger that would not be objectionable.¹⁰⁸

Careful attention to the United States Supreme Court and courts of appeals decisions in the middle 1970s would have suggested that the strongest forms of these rules were falling into disrepute.¹⁰⁹ The courts were increasingly sympathetic to merger requests and increasingly skeptical as to the anticompetitive risks of such combinations. Thus, the substantive law was shifting toward greater tolerance of combination. Yet Congress in deregulating airlines relied on the strict antimerger standards and simply presumed that those standards would govern.¹¹⁰ As a result, Congress did not write into the law the kind of bars to combination that would have forced existing airlines to contest markets rather than combine.

Congress also assumed that any system of implementing merger prohibitions would yield similar results, and therefore retained administrative review and approval for mergers. In the 1980s, the CAB's authority to approve mergers went to the Department of Transportation. The Secretary of Trans-

105. *FTC v. Procter & Gamble*, 386 U.S. 568 (1967); *United States v. Penn-Olin*, 378 U.S. 158 (1964).

106. *FTC v. Procter & Gamble*, 386 U.S. 568 (1967); *General Foods v. FTC*, 386 F.2d 936 (3d Cir. 1967).

107. *Dempsey*, *supra* note 1, at 510-13, 519 n.56.

108. *Id.* at 510-13, 521.

109. *United States v. Citizens and Southern*, 422 U.S. 86 (1975); *United States v. Marine Bancorporation, Inc.*, 418 U.S. 602 (1974); *United States v. General Dynamics*, 415 U.S. 486 (1974); *Fruehauf v. FTC*, 603 F.2d 345 (2d Cir. 1979); *United States v. International Harvester*, 564 F.2d 769 (7th Cir. 1977).

110. *Kahn*, *supra* note 46; *see also supra* note 87.

portation approved all mergers presented to her.¹¹¹ For institutional reasons, no one has contested these decisions, despite their questionable character.¹¹² For example, the Secretary relied heavily on the contestable market theory in rationalizing the approvals.¹¹³ The validity of that theory is highly dubious in many contexts,¹¹⁴ but a largely *ex parte* administrative proceeding is not a good forum to challenge the applicability of such theory. The Antitrust Division of the Department of Justice strongly opposed several of the more egregious combinations,¹¹⁵ but it never made a direct challenge. The Antitrust Division did sponsor substantial work disproving the application of contestable market theories to airlines,¹¹⁶ however, and so such challenges might well have been successful.¹¹⁷

The shift in standards and the failure to challenge that shift has resulted in massive restructuring of the airline industry. Both national and regional concentration has increased. Moreover, it is now clear that dominance of particular markets is not easily contestable. Thus, antitrust standards failed to preserve the structure necessary to achieve the benefits of unregulated rate and service competition.

3. Anticompetitive Aspects of Antitrust Law

To complicate the antitrust analysis further, a good case can be made that antitrust law's almost absolute opposition in the 1970s to cooperation among actual or potential competitors worked to deter development of hub and spoke systems based on airlines' cooperation. For example, the Delta-Western merger offered an advantage to the parties because it would allow them to combine an eastern and a western hub, thus creating a more effective and comprehensive national grid of service. To achieve the best result, moreover, Western had to relocate its hub to a new airport, Salt Lake, at which no other line had a hub.¹¹⁸ In the absence of a merger, an agreement between those two lines to combine service in certain ways to integrate their hubs would have been feasible. The state of antitrust law in the 1970s, however, and even today, would make such an agreement more easily challenged than a complete combination.

111. Dempsey, *supra* note 1, at 593.

112. As a technical matter, none of the merger approvals were cast in a form giving antitrust immunity. See Dempsey, *supra* note 1, at 545-49. Nonetheless, neither the Antitrust Division nor the state attorneys general sought to challenge any of these transactions.

113. See, e.g., Department of Transportation Decision Allowing US Air to Acquire Piedmont, 52 Fed. Reg. 27,490 (1988).

114. See DEPT. OF JUSTICE STUDY, *supra* note 53; Bailey & Williams, *supra* note 1, at 406, 482.

115. Dempsey, *supra* note 1, at 598.

116. DEPT. OF JUSTICE STUDY, *supra* note 53; see Bailey & Williams, *supra* note 1 (work sponsored by National Science Foundation).

117. *But see* Dempsey, *supra* note 1, at 545. The key issue would be whether the courts found agency expertise controlling.

118. Levine, *supra* note 1, at 492.

Basically, agreements among competitors that coordinated their competition were generally illegal.¹¹⁹ While in context of the facts of the particular cases, the strong presumption of illegality usually made sense, it was cast in sweeping terms that seemed to allow no exception. In the airline business, the strong antitrust-based criticism of the CAB's effort to get industry-wide coordination and limitation of service would have had a similar negative implication for any less global effort to coordinate.¹²⁰ It is true that in this period the Supreme Court viewed legitimate joint ventures and associations that might, as valid incidents of their organization, restrict intermember competition, differently from those efforts which sought only market control.¹²¹ Nevertheless, in the late 1970s merger was clearly a less risky means to combine airline businesses than was the use of contractual agreements. This in turn created antitrust-driven incentives to merge and discouraged smaller enterprises from creating better coordination.

4. Conclusion

In reforming direct control over competition, policymakers failed to consider critically what the risks of exclusionary and exploitative conduct might be, and whether and how the antitrust laws might deal with those risks. They also failed to consider whether antitrust law might frustrate particular types of desirable integration within the industry that might make the need for merger less impelling. Antitrust law was presented as if it would solve any and all problems. It could not and did not, a result that should have been obvious from the outset.

VI. EXPERIENCE WITH DEREGULATED COMMERCIAL AIR TRAVEL: THE IMPACT OF ANALYTIC FAILURES

In the aggregate, air fares responded to the elimination of rate, entry, and route regulation as reformers had predicted: they declined markedly. Moreover, even, a decade later, most estimates suggest that average air fares are still substantially lower than they would have been under CAB-type regulation.¹²² Estimates of the gains vary, but generally conclude that, at least through the mid-1980s, the gains are substantial.¹²³ While some critics seem convinced that removal of the three key regulations was itself a bad decision,¹²⁴

119. See, e.g., *Arizona v. Maricopa County Medical Soc'y*, 457 U.S. 332 (1982); *United States v. Topco Assocs.*, 405 U.S. 596 (1972).

120. See *Moss v. CAB*, 430 F.2d 891 (D.C. Cir. 1970); S. BREYER, *supra* note 3, at 211.

121. Compare *BMI v. CBS*, 441 U.S. 1 (1979) and *Northwest Wholesale Stationers v. Pacific Stationery & Printing Co.*, 472 U.S. 284 (1985) with *NCAA v. Oklahoma*, 468 U.S. 85 (1984); *FTC v. Indiana Fed'n of Dentists*, 476 U.S. 447 (1986) and *United States v. National Soc'y of Professional Eng'rs*, 435 U.S. 679 (1978).

122. See S. MORRISON & C. WINSTON, *supra* note 49; Kahn, *supra* note 1.

123. See, e.g., S. MORRISON & C. WINSTON, *supra* note 49.

124. Brenner, *Airline Deregulation—A Case Study in Public Policy Failure*, 16 *TRANSP. L.J.* 179 (1988); Ruppenthal, *U.S. Airline Deregulation—Winners and Losers*, 23 *LOGISTICS AND TRANSP. REV.* 65 (1987).

the more plausible criticism is that the removal of regulations without offsetting market-facilitating requirements has made possible a variety of strategic and exploitative conduct and has facilitated structural changes whose long run effect on desirable performance will be negative.

The present failures of public control over commercial airlines stem directly from the three fundamental errors discussed in the preceding sections. Each section illustrated the impact of those errors on particular subjects of concern. This section will discuss in some greater detail several problem areas that more completely illustrate the cumulative impact of the fundamental errors, and further will explore the problem of finding regulatory options to facilitate the market-enhancing goals of the initial deregulation of this business.

A. *The Growth and Exclusionary Effect of Hub and Spoke Systems*

In the regulated period, the focus was on particular city pairs because that was the unit in which CAB grants were made.¹²⁵ After termination of control over routes, however, hub and spoke systems grew dramatically because there were significant efficiencies in operating flights to various destinations from a hub at which passengers were collected and then dispersed.¹²⁶ The elimination of controls over routes was a central element of regulatory reform, but no one asked whether an unregulated route structure would be different. The simplistic model of the airline business produced a substantially wrong prediction about an important aspect of organization.

This important false assumption about the efficient structure of airlines, combined with the false dichotomization of regulation and deregulation, precluded reformers from even considering how contestability could be enhanced and preserved, given the changed economic incentives.

If the reformers had focused on the problems posed by such a transformation, the false presumption that antitrust would be an effective regulatory control would have posed a further problem.¹²⁷ In fact, easy and effective solutions to the problems that a hub and spoke organization posed would not have been readily apparent. The fundamental policy goal would be to maintain as much contestability as was feasible, given the efficient configuration of routes. Airlines with hubs at the same or reasonably adjacent airports can be effective competitors for most classes of customers.¹²⁸ Preserving and enhancing such hub competition requires at least a strong rule against mergers of airlines having hubs in the same or adjacent markets. This interhub competition is the key to maximizing contestability. Mergers such

125. Even the CAB had a subsidiary recognition that the ways in which flights between any pair might link with other flights had some relevance to consumers and economic efficiency. *See, e.g., Continental Air Lines v. CAB*, 443 F.2d 745 (D.C. Cir. 1971).

126. Levine, *supra* note 1, at 412, 442-44.

127. *Cf. A. BROWN, supra* note 4, at 132 (one hearing witness did specifically point out general weakness of antitrust).

128. Levine, *supra* note 1, at 412.

as Northwest with Republic, TWA with Ozark, and USAir with Piedmont created very clear elimination of hub competition.¹²⁹

Could and should regulation go further, and seek to control expansion without merger into adjacent airports (preemptive hubbing), or limit in some way the proportion of flights and flight gates that any one airline could occupy at any one airport?¹³⁰ Such a limit would require the dominant airline(s) to support expansion of existing airports to create easier entry conditions. However, it is not clear that making gates available would be sufficient.

Finally, a focus on hubs and their creation might have suggested a more critical review of the ways antitrust law precluded creation of hubs not involving mergers. The strong, almost absolute, prohibitions on agreements among competitors would have been a significant deterrent to any sort of joint efforts to create a coordinated hub system based on two or more airlines.

The post-1980 environment has been much more tolerant of such contractual efforts, but there were also no impediments to merger. Because merger allows greater opportunity to capture any potential (exploitative) monopoly profits and makes exclusionary, strategic conduct more practical, no incentive existed to develop the nonmerger options to achieve efficiency. Instead of general antitrust law, what was needed was a strong airline-specific antimerger policy combined with a system of authorizing contractual integration. Such contracts would require express review of restrictive terms to insure the achievement of efficiency without creating the high levels of incontestability associated with the present structure. In combination, these controls would stimulate the creation of competing hub systems. They would not directly (or indirectly) control preemptive hubbing, nor would they directly eliminate the incentives to engage in such conduct. However, by creating a context of more competing hubs, the potential gain from unnecessary expansion intended to preempt access at any particular point would be reduced. Hence, refined and easily employed controls on structure and conduct (one restrictive and the other facilitatory) greatly could have reduced the negative competitive impacts of hub organization.

B. Other Impediments to New Entry

A major premise of removing regulation on routes and entry was that new airlines would find it relatively easy to enter and survive in the industry. This was an important part of the contestable market theory, as well as the more general view that competition was a relevant model for air travel. Despite the success of the unregulated carriers in Texas and California, only one of which survived deregulation, new entry turned out not to be very

129. See Bailey & Williams, *supra* note 1, at 195; Dempsey, *supra* note 1, at 535, 539; Levine, *supra* note 1, at 423, 437.

130. The two hubbing airlines in Denver control 80% of all gates and flights. Similar domination exists at a number of other airports. See Dempsey, *supra* note 1, at 540-41.

successful in the deregulated world. Most new entrants did not survive, or achieved only very minor market positions.¹³¹ Examination of this marked lack of success showed that new entrants faced substantial costs in making entry into a market, and that existing airlines had many inherent advantages over new entrants and possessed a number of ways in which they could undermine or destroy such enterprises. The hub and spoke systems gave flexibility to compete in focused ways, including highly selective price cutting. The reservations systems owned by the major airlines allowed them to acquire a high level of information about competitors and manipulate various aspects of competition. Similarly, the removal of control over commissions to travel agents allowed payments based on total volume that an agent delivered. This allowed leading lines to entrench their position. Finally, the major airlines entered into contracts with smaller lines and commuter lines that tied them into the major's system, limiting the supply of passengers available for transfer to competing lines.

The false analogy to prior experience, when new entrants were shielded from most strategic conduct, prices were simple, and agents had no conflict of interest, caused major miscalculation as to the conditions of entry and exit once the new regulatory system was in place. The false analogy reinforced the false economic theory of air travel, which itself ignored these same characteristics. Finally, the presumption about the ability of antitrust to deal with exclusionary behavior led to a further breakdown in policing of the system. For example, there is not even a requirement that travel agents disclose to travelers the agents' conflicts. Without the false dichotomization, the importance of disclosure of agent compensation would be evident, and a real question might exist as to whether some limits on the scope of differentiation of compensation should be imposed.¹³²

In the sale of commodities, neither buyers nor sellers can pay differential brokerage to agents unless there is a reasonable, cost-based justification for that differential.¹³³ Such a limit could have been imposed on airline compensation schemes. When agents provided special services, they could be compensated. This system would be likely to stimulate competition among agents and could bring about lower levels of cost for agents' services. It would not

131. The most successful new entrant, People's Express, succumbed to a variety of difficulties and was combined with Eastern Airlines and Continental. It is true that the owner of the combined entity, Texas Air, is a new entrant, but its entry largely has taken the form of acquisition of existing airlines, creating an even larger enterprise. This is not the model of competitive entry that underlay deregulation. In addition, Texas Air has been very unprofitable. See Levine, *supra* note 1, at 409, 429 n.237; Dempsey, *supra* note 1, at 540; see also Pasztor & Carley, *People Express Bid by Texas Air Clears a Hurdle*, Wall St. J., Oct. 2, 1986, at 2, col. 2.

132. Interestingly, efforts by some agents to make compensation more competitive by giving rebates to travelers have encountered strong resistance from the airlines and, so far, the courts have upheld the airlines' refusal to deal with such agents. *Illinois Corp. Travel v. American Airlines*, 806 F.2d 722 (7th Cir. 1986).

133. 15 U.S.C. § 13 (1982 & Supp. IV 1986).

directly block differences, but would make them more vulnerable and clearly reviewable.

The misuse of reservation systems as weapons to harm competitors is another problem area. There was no control over the use of reservation systems in the early period.¹³⁴ Eventually, some controls over the reservation systems emerged,¹³⁵ but the antitrust claims so far have been unsuccessful.¹³⁶ Moreover, as long as some airlines own and control the reservation system, rules governing conduct never will fully control strategic opportunity. The preferable course would have been to require complete divestiture. If the systems were owned by third parties, the incentives to discriminate would decline.

Finally, there were and are no effective constraints on price variations that have either exclusionary or exploitative effects. American Airlines combined unlawful price predation with reservation manipulation against Braniff. This conduct did result in some compensation to Braniff after Braniff sued, but American also drove Braniff out of its Dallas hub and essentially removed it as a major competitor.¹³⁷ Other examples also exist.¹³⁸

Absent false dichotomization and the false assumption of uniform prices, a regulator would have considered whether the potential discretion in setting fares could be limited without undue burden. Two market defining and facilitating regulatory controls might be considered. First, tickets could be made transferable. This would allow purchase and resale. Given a viable resale market, selective price cuts would enrich speculators or arbitrageurs rather than an identifiable class of users. That could at least dampen the incentive to use highly selective discounts. However, it is not clear that small lot speculation would be practical. It remains to be seen whether the costs of connecting speculators to buyers could be kept low enough to make it attractive for this type of middleman to develop.

An alternative and a more draconian regulation would require that prices for any class (tourist, first, etc.) of air travel be uniformly priced for any trip at any time. The primary reason that analysts generally regard predatory (exclusionary) pricing as irrational is because it requires cutting prices across the board. All sales must be made at the low price. This means that the dominant seller will have lost profits on all sales. Highly selective pricing allows the dominant firm to take a small loss relative to the harm it can inflict on its more focused competitor. Requiring uniform prices for classes of travel directly would alter the cost of exclusionary pricing. Unfortunately, it also would build rigidity into the pricing system. Airlines could retain

134. The early misuse was most dramatic in the case of Braniff. American Airlines manipulated reservation systems to create false reservations, giving the impression that flights were full. See J. NANCE, *SPLASH OF COLOR* (1984).

135. *United Air Lines v. CAB*, 766 F.2d 1107 (7th Cir. 1985).

136. See, e.g., *United Air Lines v. Austin Travel Corp.*, 681 F. Supp. 176 (S.D.N.Y. 1988).

137. J. NANCE, *supra* note 134; see also *United States v. American Airlines*, 743 F.2d 1114 (5th Cir. 1984), *cert. dismissed*, 474 U.S. 1001 (1985).

138. Levine, *supra* note 1, at 472-78.

pricing flexibility on a per flight basis that would be consistent with the model that Breyer articulated: all seats would be priced the same for any flight.¹³⁹ If there is not enough actual competition, however, the result might be reinforcement of interdependent pricing, because the greater costs associated with competition would make cooperation more attractive. On the other hand, greater price rigidity also may make new entry easier. A major existing competitor will hesitate to respond to marginal competition with fare cuts that will produce significant responses by other major competitors over a wide range of offerings. Eventually, expanded numbers of competitors should bring all fares down. Restrictions on price discretion thus could make markets more contestable over time, even though they had a short run effect of rigidifying price structures.

How well or how poorly such a price control would work to facilitate contestability also would depend on the degree to which other barriers to entry simultaneously were reduced. This interaction problem highlights a key aspect of effective regulation that promotes competition: it must be comprehensive. Manipulation of only one element, such as pricing, may yield worse rather than better results.

Another example of entry barriers is the problem of gate and landing slot access.¹⁴⁰ At present, existing competitors have perpetual title to these essential elements of competition. If supplies are limited, this blocks entry and makes markets substantially more incontestable. One regulatory solution, already suggested in context of the exclusionary effect of hubs, is to require that some excess capacity be created whenever an airline or small group of airlines dominates an airport or a period of time at an airport. If two or three airlines control 50-60% of the gates and landing slots, similar limits could exist.¹⁴¹ By keeping the door open to entry, the risk of contest is present, which yields, in theory, the more competitive result. Alternatively, the duration of gate and slot rights could be expressly limited. If existing competitors had to bid each year for slots and gates, the potential entrant could obtain needed resources.¹⁴² There are serious problems with creating effective bidding when most bidders regularly bid against each other in various locations. Still, shortening entitlements and opening them up to voluntary or compulsory transfer can reduce significantly these barriers to entry, and therefore, in combination with other reforms, make markets for air travel more easily contestable.

The central point is that a number of features of the airline business affects the ease of entry and exit. If contestability is to be an important

139. S. BREYER, *supra* note 3, at 52-55. One might even allow prices for a flight to vary over time, with early buyers getting a discount over late buyers.

140. Dempsey, *supra* note 1; Levine, *supra* note 1, at 416, 464-71.

141. Such a limit might require that any airline controlling more than 30% of the landing rights or gates at an airport had to yield some of those rights on demand if no other access exists.

142. This would shift the risk inherent in building large and expensive airports to other investors. At present, the airlines, by virtue of their long-term rights, directly assume those costs. The risk premium that other investors might demand could be very substantial.

control over conduct and performance, regulations need to focus on how to facilitate contestability.

C. *Exploitation of Travelers*

Ticket prices, after a dramatic drop, have begun to increase.¹⁴³ Moreover, prices vary greatly for trips of similar distances, depending on the destination.¹⁴⁴ In addition, trips along the same route have very different prices, depending on when a ticket is purchased. It appears, therefore, that almost every seat on a flight has its own unique price. This situation directly falsifies the assumption of uniform pricing. That assumption had rested on the further assumption of vigorous, inherent competition, which itself is false. The presumption that antitrust law could control exploitative pricing also is false. But the false dichotomy between regulation and deregulation has kept policy analysis from directly evaluating the merits of alternative definitions of the legal rights of airlines to vary prices and to deny general transferability of tickets.

One impact of significant price differentiation is that air travelers share very unevenly in the distribution of the gains from deregulation.¹⁴⁵ Those travelers with very specific and strong demands, and those living in less densely served markets, have few choices, and therefore get little competition. Such pricing also suggests that the market for air travel is not very similar to the commodity markets that provide the basic model of competition. In a commodity market, those who value a good more bid up the price until those who hold it, whether producers or arbitrageurs, will sell. Such transactions produce a uniform price at any given time, with fluctuations in supply or demand causing it to rise and fall. This system makes entry at the margin more feasible because an entrant knows what the price is likely to be and how added capacity is likely to affect that price. Because price varies for all sellers at the same time, new entrants are not such distinct targets.

Prior to deregulation, the CAB defined the various types of fares that could be charged and required uniformity. In conferring pricing freedom on the airlines, Congress placed no limit on what rights the airlines would sell. Congress retained, without express consideration, the personal nature of the ticket right: a ticket is the travel right of a particular person and not a right to a seat on a particular flight. In combination, this constellation of rights defined air travel tickets in a way that maximized the ability of airlines to vary the prices charged for the tickets. Advocates of deregulation, such as Breyer, used average total cost to calculate what deregulated fares would be, but they failed to consider how the constellation of rights and definition of a ticket would encourage or discourage the use of average cost prices. The system of pricing that emerged helps to reinforce both the exclusionary use

143. See *supra* note 68.

144. Kahn, *supra* note 46, at 319-20; Levine, *supra* 1, at 413, 446-52.

145. S. MORRISON & C. WINSTON, *supra* note 49; Bailey & Williams, *supra* note 1, at 180-83, 191-99; Levine, *supra* note 1, at 414, 446-52.

of pricing to defeat new rivals and deter new entry, as well as its exploitative use against customers.¹⁴⁶ Once again, the dichotomous vision of the legal choices created unnecessary degrees of discretion.

A second aspect of pricing that has emerged in the last two years is the increasing cooperation among airlines to raise prices.¹⁴⁷ The lesson of the earlier period of vigorous and general price cuts was that, while it expanded the numbers of travelers, the loss of revenue was not always fully offset. This suggests that if no one competes too vigorously on price, all will be better off with relatively high price strategies. The barriers to new entry make this a more valuable strategy because new airlines are not likely to disrupt it. The false assumption of contestability explains why mutual exploitative action is occurring.

The conduct at hand represents tacit collusion by oligopolists. In the mid-1970s it may have appeared that such conduct would constitute unlawful behavior. However, the FTC lost two cases in trying to implement that theory.¹⁴⁸ Moreover, careful analysis of the tacit conspiracy problem shows that the key to liability in antitrust terms is the existence of a practical, effective, and judicially enforceable remedy.¹⁴⁹ But in the case of airline pricing, regardless of the rules governing the intraflight prices, it is probably impossible to keep airlines from knowing their competitors' prices in detail—the nature of the selling process is such that prices must be announced generally and publicly. As a result, given relatively few competitors and some barriers to entry, interdependent pricing seems unavoidable and unremediable.¹⁵⁰

The basis for tacit collusion is an industry structure of relatively few actual and potential competitors who understand that they have a long-run interaction and that a short-run focus will not serve their own best interests. As the future casts a "long shadow" over the present, cooperation becomes the preferred strategy for maximizing long-term profits.¹⁵¹ This necessitates introducing new competition that cannot be acquired and that cannot easily be the target of strategic exclusionary conduct. Denying airlines the ability to create by merger highly concentrated structures, and insisting on regulations that lower entry barriers are also key parts of the necessary controls. Avoiding interdependent pricing thus requires that structural conditions—actual and potential competition—make such conduct unprofitable, and this only can happen if various regulations make it happen.

146. Bailey & Williams, *supra* note 1, at 185, 188.

147. See Koten, *Airlines Pushing Fares Linked to Mileage*, Wall St. J., Jan. 13, 1989, at B1, col. 3; Thomas, *Rivals Aid to Braniff in Leaving Dallas Hub Suggests New Coziness*, Wall St. J., Aug. 31, 1988, at 1, col. 6; Velonte, *Flying Dinosaurs, Pan Am and TWA Battered by Rivals, Struggle to Survive*, Wall St. J., Oct. 18, 1988, at 1, col. 6.

148. *E.I. DuPont de Nemours & Co. v. FTC*, 729 F.2d 128 (2d Cir. 1984); *Boise Cascade Corp. v. FTC*, 637 F.2d 573 (9th Cir. 1980).

149. See Carstensen, *supra* note 91.

150. Cf. Turner, *The Definition of Agreement Under the Sherman Act*, 75 HARV. L. REV. 655 (1962).

151. R. AXELROD, *EVOLUTION OF COOPERATION* (1985).

D. The Changed Structure of the Industry

Large scale merger has occurred in the industry. When combined with the failure of new entry, the result has been a very substantial increase in concentration measured both at the national level and at the regional one.¹⁵² Economic theory would predict that the reduction in the number of competitors in the national and regional markets will cause fares to increase. This is indeed the effect that has occurred. Moreover, it is evident that the greatest price increases have come in areas in which mergers have eliminated competing hubs and have produced high levels of concentration.¹⁵³

Once again, the simplistic theory of the airline business predicted that merger would only increase efficiency because the high contestability of the markets meant that no other gains were imaginable.¹⁵⁴ Secondly, the presumption that strict antimerger law would bar any combinations if they posed risks to market contestability proved equally false.¹⁵⁵ Once again, the source of the problem lies in the false assumptions and false presumptions, which under the guidance of a false dichotomy led to no direct expression of an antimerger rule in the resulting regulatory constellation. In hindsight, the failure to impose strict control over merger under procedures that would facilitate rather than frustrate enforcing such prohibitions is one of the most serious mistakes of the 1978 reform. It is evident that, having permitted the structure to change dramatically, it will now be very difficult to reverse that process. This is an important lesson for future deregulators.¹⁵⁶

An interesting question is whether new controls now can force structural changes that will restore a more competitive structure. Certainly such limits are imaginable. They include caps on the proportion of gates and slots an airline can have at any airport. It is at best problematic whether shuffling rights among existing airlines would by itself stimulate competition. Clearly, the best choice would be to force divestitures of parts of consolidated airlines to recreate a larger group of operating firms in an environment in which merger was no longer a feasible strategy.

There is one tactic that may be more amenable to control. Relying on the more relaxed standards of current antitrust law, the major airlines have entered into agreements with feeder lines that make them relatively dependent on their sponsor.¹⁵⁷ This precludes the expansion and transformation of such airlines into more general competitors. Careful review of the specifics of these agreements might limit their restrictive character. Once again, this is a regulatory type control which would aim to filter out all but the most essential

152. See Dempsey, *supra* note 1, at 589.

153. DEPT. OF JUSTICE STUDY, *supra* note 53; Bailey & Williams, *supra* note 1, at 195.

154. See Dempsey, *supra* note 1, at 510 (discussing and citing several commentators who claimed mergers were unlikely); see also *supra* note 77.

155. See Kahn, *supra* note 46, at 318-19.

156. The move to sell the Eastern shuttle to Donald Trump is a minor step in that direction. This new airline might then emerge as a major new competitor, but only if merger is largely precluded to it.

157. Levine, *supra* note 1, at 410, 437-41.

limits on competition. But whether that would induce any of these captive airlines to expand is at best problematic. Once again, the need is for regulation that both creates greater freedom for such airlines and at the same time reduces the existing barriers to their expansion so that such growth is an economically attractive activity for them.

E. Summary

These areas of concern run the gambit of issues with which regulation might deal. They reflect a recognition that reform of regulation has not achieved what it might. For those observers who start with the false dichotomy of regulation or deregulation, further reform is not a positive route.¹⁵⁸ They see new regulation as only restoring the old controls and creating the old evils without making a substantial positive contribution. This perspective rests on a false dichotomy that underlies much of the discourse in this area: regulation versus deregulation as discrete options.

The real issue in 1978 was what changes to make in regulation. The choices of what to eliminate still appear to be correct. What was not done, because of the false dichotomization, assumptions, and presumptions, was to put in place new regulation that would govern conditions, structure, and conduct so that the competitive engine which was to produce good performance would work optimally.¹⁵⁹ This review suggests that regulation can facilitate as well as frustrate the working of a competitive market. In 1978, the regulatory frustrations were eliminated, but essential regulatory facilitations were ignored.

VII. SENSIBLE REGULATION AND REFORM

The foregoing description of the deep errors of analysis and articulation in the process of airline deregulation suggest something of the scope of the broader problem that exists for all regulatory reforms.¹⁶⁰ Two important considerations suggest caution about any expectation that merely revealing the nature of the errors will lead to self-correction. First, the political process demands relatively simple public discussion.¹⁶¹ Binary analysis is more easily presented than anything more complex. In the case of airline regulation, the Kennedy hearings and the key decisionmakers in the Ford and Carter administrations focused on the problems within the existing regulatory system. They offered plausible and simple solutions to the perceived problems. Those solutions did not take account of a number of factors, but, it is generally

158. Kahn, *supra* note 43, at 321; Levine, *supra* note 1, at 393, 493.

159. Brown suggests that this was a conscious political strategy to avoid conflict among supporters of reform. A. BROWN, *supra* note 4, at 137; *see also* S. BREYER, *supra* note 3, at 319-32.

160. Professor Gearney's analysis of health care market deregulation provides an instructive parallel. Gearney, *Competitive Reform in Health Care: The Vulnerable Revolution*, 5 YALE J. ON REG. 179 (1988).

161. *See* S. BREYER, *supra* note 3, at 350-52; A. BROWN, *supra* note 4, at 176.

conceded, they moved things forward toward at least temporarily better results. To expect those deeply immersed in the practical political problems of implementing reform to define a more complex and ambitious reform agenda may be very unreasonable. This is especially so when the prevailing wisdom of the time is dichotomous: one "regulated" or did not "regulate" without any critical inquiry into the meaning of those categories. To ask politicians and administrators to perceive the subtext of the academic theory is at least a high expectation.

The second reason for being skeptical that greater understanding of the complexity of regulation will produce better results is that it is not always clear that better understanding of how economic actors may act necessarily points to better solutions.¹⁶² A higher awareness of the uncertainty of reform may, therefore, act to inhibit the reformer rather than perfect the reform. In a dynamic world, as Charles Lindblom has so convincingly established, no regulation can be once and for all time.¹⁶³ Each problem addressed results in a change in the underlying economic order that reacts and interacts with many other changes to create a continually changing context in which public and private actors must respond. Lindblom's concept of incremental decisionmaking aptly describes the nature of airline deregulation. Particular aspects of regulation were challenged and rejected as unhelpful and unjustified. There was no real effort to anticipate the overall nature of change in the industry, or to deal with it in any meaningful way. New crises will demand new solutions to new issues. But will a more thorough understanding of that complexity produce better or worse decisions?

Despite the manifest basis for pessimism, better understanding should facilitate better regulation. Central is a critical shift in perspective to focus evaluation more on the likely future context. If reform relies heavily on an expectation of both actual and potential competition, the ways in which competition can be facilitated or frustrated should be absolutely central to the agenda of regulatory reform. If the industry is one in which sophisticated buyers are taking large blocks of service, so that they can be expected to impel participants to compete, then concern may be minimal. The deregulated general trucking business is a good example.¹⁶⁴ Little specialized regulation has been called for to make that market work, although changed incentives for safety seem to present a problem. Once an activity is more specialized and customers less competent, problems can be expected. This is the story of the industry that moves household goods.¹⁶⁵ There, the regulatory problem

162. S. BREYER, *supra* note 3, at 184; Levine, *supra* note 1, at 480-92.

163. D. BRAYBROOKE & C. LINDBLOM, *A STRATEGY OF DECISION* (1963).

164. Bailey, *Price and Productivity Change Following Deregulation: The U.S. Experience*, 96 *ECON. J.* 1 (1986); Moore, *Rail and Truck Reform—The Record So Far*, 7 *REG.* 33-41 (Nov./Dec. 1983). *But see* Kling, *Trucking Deregulation: Evolution of a New Power Structure*, 22 *J. ECON. ISSUES* 1201 (1988).

165. *Cf.* *Rothery Storage & Van Co. v. Atlas Van Lines*, 792 F.2d 210 (D.C. Cir. 1986), *cert. denied*, 479 U.S. 1033 (1987); *Three Way Corp. v. ICC*, 792 F.2d 232 (D.C. Cir.) (upholding regulations governing various aspects of competitive conduct), *cert. denied*, 479 U.S. 895 (1986).

was how to facilitate effective competition, given the many strategic and exploitative options that existed. If the reforms do not start from a dichotomous view of the choices and do not assume demonstrably false pictures of the way an industry will operate, they can adopt a more relevant and sophisticated approach to the problems of transformation that necessarily will occur.

Another key to effective reform is the recognition that there will be stages through which the industry will proceed as it adjusts.¹⁶⁶ In the initial stage, the key assumptions about structure and conduct might well be imbedded in a statute. If markets are to perform competitively, the assumed conditions for competition should be part of the direct control over the industry for the transition period. The opportunity to impose additional controls or restrictions to facilitate these express goals might be made subject to administrative discretion.

The process would focus less on terminating an agency than on restructuring its mandate. Imposing a new perspective and new types of regulatory controls will generate a better context for an ongoing review of the evolution of competition in an industry.

The traditional regulatory categories themselves often provide unduly limited choices. The model of agency decisions subject to loose judicial review greatly limits the potential for an informed, critical policy debate. Instead of internal agency decisions reviewed by the judiciary, a transitional regulatory system might have an administrator's decision reviewed by a quasi-judicial general agency. For example, the Secretary of Transportation could evaluate airline mergers and other regulatory matters, subject to review by the FTC at which the Antitrust Division would be a statutory party. By combining the expertise of an industry-oriented regulatory authority with an external, but still regulatory, review forum that by definition will have a special concern with the implementation of competitive policy, a different mix of policy perspectives and participation will occur. By redesigning the process of policymaking and review, the legislature more effectively can implement its goals.

Another important aspect of effective deregulation is reconsideration. Clearly, there will be surprises as the new regulation interacts with business conduct. A crisis that forces legislative review and action insures that the new regulatory environment is not enshrined. Creating sunset provisions is not enough; the post-sunset environment must be sufficiently unacceptable to all interests that finding acceptable resolutions to observed problems will be desirable. One of the most obvious facts about any specific economic regulation is that, because of the interactive and reactive impacts it has on other aspects of the activity, it is hard to predict how well or how poorly a particular regulatory control will perform in practice. It is also likely that some adaptations of other controls may be necessary, although at the outset which ones will need what changes is very unpredictable. A system that causes

166. Kahn, *supra* note 46, at 320.

regular review and reconsideration of the regulatory process will be most likely to provide responses at a relevant time. In fact, a more responsive system of dealing with regulatory failures would be likely to discourage exploitation of many kinds of failure. The expected short-run gains would not be worth the effort of identifying and exploiting them. In sum, once the dynamics of regulation are more clearly recognized, the need for a responsive legislative system is also manifest. Regrettably, as the descriptions of airline deregulation show, in the present political context, it is likely to be very difficult to achieve such an ongoing, sophisticated reconsideration.¹⁶⁷

VIII. CONCLUSION

Airline deregulation is an experiment in revising and reforming legal control over an industry. The result has been, on balance, positive, but its durability seems questionable. The analysis presented here has tried to identify the fundamental flaws in the analysis of reform that have contributed to its suboptimal nature. Simple ideas hardly ever are very productive if the underlying reality is complex. Only if the complexity of the relationship between legal control and economic activity is the starting point of analysis can there be a full understanding of the problems inherent in an industry, as well as the workable prescriptions to resolve those problems.

167. See S. BREYER, *supra* note 3, at 132; A. BROWN, *supra* note 4, at 178-79.