

Book Review

THE SOCIAL AND ECONOMIC CONSEQUENCES OF DEREGULATION: Paul Stephen Dempsey. Westport, CT: Quorum Books, 1989, 258 pp., \$57.00.

FLYING BLIND: THE FAILURE OF AIRLINE DEREGULATION: Paul Stephen Dempsey. Economic Policy Institute, Washington, D.C., 1990, 90 pp., \$8.00.

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and
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There is an institution, now well known among American law professors, that invites small groups of academic lawyers to spend a few weeks in the summer learning about the theories and applications of microeconomics. The participating law professors are treated during their summer stay to two most notable offerings. The first is the True Faith of neoclassical economics. The second is a meal service of gourmet achievements rivaled by none in the otherwise genteel poverty of academic life.

And so it was that on one day not long ago, when Paul Stephen Dempsey was participating in this Pareto in the Pines, that a particularly sumptuous meal was served to the group then assembled. But on that very same day an editorial written by Dempsey had appeared in a major daily newspaper, an essay openly doubting the classical faith that Heaven is an unregulated marketplace. With great ceremony the uniformed waiters placed before Dempsey a silver dome, and with a flourish lifted it to show *his* meal—a plain, boiled hot dog. Such are the wages of apostasy.

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There is little doubt that Paul Dempsey has become the leading and perhaps most trenchant critic of deregulation, particularly so as to the transportation industry and even more particularly with respect to aviation. But it is not clear to us on a reading of these books, his two most recent contributions to the deregulation debate, how the Defenders of the Faith could justifiably find his work troublesome. Dempsey's approach is no assault upon the neoclassical framework. It lies, for the most part, squarely within the theory. It attacks only the factual premises on which the neoclassical theory's policy prescriptions are based. Dempsey does not dispute the axiom that "Nonregulation achieves economic efficiency and consumer welfare when certain specified conditions prevail." He tried instead only to prove that the requisite conditions simply do not prevail. And although his work does not constitute any new, broadly applicable approach to policy formulation, it does teach us something valuable about the linkage between empirically-dependent theories and the implementation of public policy.

We will be discussing these two books together, not always bothering to distinguish between the two. They are quite similar in their conclusions if not their styles;¹ and our focus is much more on the arguments than on the details of either particular work. Our discussion is organized into four main parts. It begins with a brief restatement of Dempsey's empirical argument, and a critique of some of its greater and lesser points. Second is a challenge to the argument from the perspective of antitrust law and economics. Third is a suggestion for an alternative to the conventional choices in regulatory policy. And last is a concluding note on the relationships among argument, scholarship, and public policy.

I. THE BEST LAID PLANS OF MICE AND MEN

To a first approximation, uninhibited competition among the sellers in a market is generally a good thing. Suppliers compete to satisfy consumers' preferences for quality and service, they offer a range of goods at prices near or at their marginal costs of production, and our collective resource efficiency is optimized at the same time that the range of individual choice is maximized. Fantasyland is, however, subject to being spoiled by several stubborn realities.

One is that as a matter of public choice, marginal-cost pricing and allocative efficiency are not the only desiderata we might embrace. Some

1. P. DEMPSEY *The Social and Economic Consequences of Deregulation*, (1989) [hereinafter the BOOK] differs from *Flying Blind: The Failure of Airline Deregulation* [hereinafter REPORT] in two main ways. For one, while the Report addressed the situation of deregulation in aviation, the Book carried the same case in the other recently deregulated modes of trucks and buses and trains. And for the other, while the Report was presumably written for a policy-maker audience, the Book seems to have been addressed to the much wider general public.

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things are not produced through competition—things like our wanting differently-situated people to have equal access to important services, even though the differences in their situations makes the costs of delivering those things very unequal. Transportation services to small towns might be an example. A market, in other words, is one very useful method of collective choice. But it does not produce all of the collective goods we might want to have.

A second source of trouble for unrestrained competition, is that it assumes a certain competence in its notion of consumer sovereignty—that consumers have adequate information about comparative goods and comparative prices, for example, and that the externalized costs of every purchase are as obvious to the demand side as the more patent and immediate costs are. This may not be true from time to time, for such things as investments in the transportation infrastructure which lessen or magnify the safety risks of the service. This is one form of what economics calls “market failure.”

And a third is that unrestrained competition may itself be unattainable. Where there are significant economies of scale in the production of some particular service or good, there can be great advantages to the existence of a few very large firms rather than a large number of smaller ones. The limiting case is the “natural monopoly,” in which the increased costs from decreased scale are so great that having two competing firms in one market would result in returns to at least one of them being insufficient to retain its capital investment. Absent some form of outside intervention, after a while only one would remain and the advantages of competition would be lost.

A fourth reality is that unrestrained competition can be destructive of both resource efficiency and consumer sovereignty. Where the fixed costs of production are a relatively high proportion of total costs and production capacity cannot be increased or decreased rapidly, supply may be less than optimally responsive to demand. In periods of excess capacity, producers are ill-served by forms of competition that drive prices to a level insufficient to cover total costs. Conversely, in periods of insufficient capacity, consumer demand is unfulfilled. Where that condition is endemic to the industry and coordination of pricing and capacity strategies by otherwise independent firms would be prohibited by the antitrust laws, then the market may be exhibiting a form of “failure” that often calls forth regulation by government.²

At various points in Dempsey's work there are arguments for the existence of all four of these reasons for government regulation of the

2. One excellent discussion of this phenomenon appears in A. KAHN, *THE ECONOMICS OF REGULATION*, at 173 (1970).

transportation industry: Market failure through consumer incompetence, inexorable economies of scale in transportation, a broad and deep public policy based on the recognition that transportation is the linchpin infrastructure of nearly all of modern economic life, and the circumstances for destructive competition. Without equal access to reliable transportation, whole segments of society—the aged, the remote, the infirm, the emerging—would be unfairly hampered in their chances for the fullest measure of participation. Government regulation therefore seemed to be a natural; and so it did become, for nearly every transportation mode, the system of the century. Airlines, for example, entered their maturity in a regulated environment, and until a scant ten years ago had never operated in any other way.

Then, for reasons which can only be surmised, in the years immediately following the Vietnam War the great experiment began: At various dates and with various paces, the several modes of transportation began to be deregulated. Believing perhaps that regulation was also immunization from the demands of the marketplace, the Congress was convinced by Alfred Kahn at the Civil Aeronautics Board (CAB) and by Edward Kennedy in the U.S. Senate that through deregulation and the pricing flexibility it offered to the supplying firms, there would be product innovation, increased economic efficiency, and service options dictated by actual consumer demand.

Economists had failed to find the likelihood of significant economies of scale, at least for the motor carriers and the airlines; natural monopolies and unnatural competition were unlikely to spoil the vision. And even if there were to be but a few or even a lone supplier in some part of the market, that seller would behave itself because if it did not, another “potential” entrant was always there at the edge of the playground, ready to come in and share in the monopoly rents until the market became competitive again. Thus both the traditional and the newer “contestability” arguments against regulation had the upper hand.

Dempsey, *nunc pro tunc*, was not convinced. Regulation of the transportation industry, he argues, is a necessary answer to the inevitable Hobson’s choice between price-discriminating monopolists on the one hand, and “an unstable pack of anemic bankrupt carriers” engaged in “unrestrained competition” on the other. Whether that inevitability does prove to be the case or not, Dempsey’s argument for why it *must* be the case is not fully convincing.

Transportation services, he says, are unique. What they produce is “an instantly perishable commodity.” When the airplane leaves the gate, the empty seats (on that flight) are lost forever; ditto for half-loaded trucks

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and trains.³ Unlike a can of beans in a grocery, transportation capacity cannot be stored and sold another day. And as a result the transportation industry is perhaps uniquely vulnerable to excess capacity and ruinous price wars. By that argument we are not convinced: First off, we are not certain why the perishability point matters, even if it is true. And second, we wonder whether it is in fact true—at least in its claim to uniqueness.

Dempsey would say that the marginal cost of filling another seat on an airplane is trivial compared to the fixed costs of the flight, and so competing firms are driven to fill those seats at distress prices. Prices therefore spiral downward until the revenues cover only the marginal costs and make no contribution to the fixed costs. Then, systematically, the only way out is for the carriers to seek relief in the construction of monopolistic opportunities.

The reasoning is ambitious. For one thing, to be driven to monopoly practices as a relief from the pressures of competition is a move that every business would like to make, if it could. There is no explanation here of why transportation can do so more easily than anyone else can. Or at least not a reason which relates to the regulation debate.

And for another, such cost-cutting behavior need not result in a carrier's gross revenues declining below the full costs of production, *in the longer run*. If the fixed costs were not covered by the first few seats of a flight, there would be no incentive to offer any seats at all so long as the marginal seats generated only marginally useful revenues. Thus as an act of pricing an entire flight—or of scaling an entire airline, if we believe that all costs are variable in the long run—the distress pricing of the seats at the end of the queue of demand can still generate gross margins somewhere between zero and a positive number, as a matter of long-run planning. In an equilibrium, therefore, there is no extraordinary consequence to there being even a large disparity between average and marginal costs, and we do not see why that situation alone should necessarily be destabilizing. It just means that airlines, like everybody else, usually cannot earn profits beyond the competitive rate of return to invested capital. While the argument might succeed if there was a reason to doubt the possibility of equilibrium after a period of rollicking oscillations, neither the Book nor the Report addresses the problem in that way.

Even more troublesome, perhaps, is the fact that in experiencing this empty-seat phenomenon the transportation industry is hardly unique. This problem is just a specific example of the more general circumstance of less-than-full-capacity-operations, of which the familiar peak-load dilemma is also a variant. It is true that a seat unfilled is in some sense lost forever. But that is equally true of a lathe which operates at only 85% of

3. BOOK, *supra* note 1, at 42; REPORT, *supra* note 1, at 12.

its rated output because its owner cannot sell the products of the last 15% every day. The unused productive capacity of that lathe is also lost forever. Likewise for a grocer's freezer case only half full. The energy cost of keeping 300 steaks cold is no greater than that of 150, and the wear and tear on the freezer hardly varies at all. Computers in an accounting firm; automobiles in a real estate agency; empty seats in a law school class on Regulated Industries; any number of excess capacity opportunities exist in any number of different settings. Yet in none of them do we see the phenomena which Dempsey ascribes to them—and calls inevitable—in transportation.

Perhaps the Hobson's choice is real; we cannot be sure, because not all of the data are in. But we would not be inclined to regard that dilemma as an inevitable fact of life. If it were to be so, it would probably not be so just for the reasons Dempsey suggests.

The empirical arguments are better. Concentration in the industry has declined. Since deregulation of the airlines in 1978 and 1979, some 200 carriers have either exited or been acquired;⁴ only 74 remain. Single-carrier concentration at major airports is up from 33.8% in 1977 to over 73% ten years after.⁵ All but four hub airports are now dominated by a single airline. And for the typical city-pair—the only relevant characteristic from the point of view of an individual traveller—the situation can be fairly characterized as "a move from a regulated monopoly to an unregulated duopoly."

The theory of protection derived from contestability, or potential entry, is shown to be flawed on a number of counts: (1) Airlines operate through reservation systems, and the concentration (from scale economies?) in that part of the business makes new entry difficult if not impossible. (2) New entrants have to land somewhere, yet the number of gates (and at some airports, landing slots) is limited in all but the longest of runs. (3) There are fewer labor cost advantages to new entrants now that the pre-existing airlines have been able to avoid the most costly aspects of the older union contracts. (4) Frequent flyer programs exploit the absence of coincidence of interest between the business traveller and the person who actually pays the fare. (5) Monopolist advantages allow the existing carrier to cut its fares to stifle the potential entrant, thereby making investments in new entrants less attractive.

We have no quarrel with the empirical validity of each of those facts. We would, however, append the caveat here that, like so much of the remaining analysis, we believe (and will shortly suggest) that none of those factors is inevitable in itself, and that each is addressable in a way

4. BOOK, *supra* note 1, at 86-87; REPORT, *supra* note 1, at 12-13.

5. REPORT, *supra* note 1, at 17.

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more finely-tuned than comprehensive regulation would be. But for the moment we will accept Dempsey's conclusion, that there has been no live birthing of a new generation of competitors among airlines in the decade after deregulation.⁶

The crux of the argument, however, is not about the absolute values of the concentration indices themselves. What really counts is whether the absence of a flourishing competition has sacrificed any of the consumer interests which either competition was expected to create or which regulation was intended to preserve. Dempsey addresses these questions in three areas: Pricing, service, and safety.

A. PRICING

Its analysis of pricing and price discrimination is where the Report shines best. There is an impressive array of data which seem hardly controvertible. Pricing in the airline industry today reflects the competitive circumstances from route to route, almost wholly unconnected with relative costs. Hence travellers in smaller towns and over less well-travelled routes pay prices well above the costs of producing the service, while passengers travelling dense and popular big-city pairs pay prices wildly and disproportionately less. Deregulation was touted as a way of increasing efficiency, even at the cost of removing the subsidy that big-city routes were providing to the smaller and more costly ones. What has happened, however, is simply that the subsidy has been reversed. And price discrimination (through stay-there-on-Tuesday-and-come-back-the-preceding-day special discount fares) has become a contact sport.⁷

The news is bad in the aggregate too. Through an ingenious correction to fare prices, designed to account for changes in the fuel prices borne by the airlines, Dempsey shows clearly that the much ballyhooed reductions in fares which occurred immediately after deregulation became effective, amount to nothing a decade later. For the decade preceding deregulation, fuel-price-corrected real revenues per passenger mile declined at a 2.7% annual rate. During the decade after deregulation, the decrease has been at less than 2.0%. Consumers are therefore paying now some 2.6% *more* than they would have paid under a continuation of the pre-deregulation trend line.

We can forgive (but not fail to mention) the obvious criticism, that because the Report contains no analysis of why the reduction from 1967 to 1977 occurred, there is little reason to conclude that it would have continued at the same rate had deregulation not intervened. On the other hand, we should not fail to mention a strength of the argument, which is

6. REPORT, *supra* note 1, at 21-24; BOOK, *supra* note 1, at 89-91.

7. BOOK, *supra* note 1, at 95-96, 99; REPORT, *supra* note 1, at 27.

that because the hub-and-spoke system has actually added miles to the typical trip between point A and point B, even a flat-rate-per-mile price curve would result in some prices being higher after deregulation than before. We will worry some other time about the *really* interesting question: If prices are relatively high, why are profit margins so dangerously low?

B. SAFETY

Lower profit margins caused by destructive competition have jeopardized margins of safety. This is an emotionally powerful argument; few scenes capture the headlines more grippingly than a smoking airplane carcass littered with body bags. The trouble with it is, that with respect to aviation, there may be no facts to confirm the theory.

Other than establishing that the average age of the commercial airline fleet has grown in recent years (though without offering a comparison with the regulated years), there is almost no data here. There has been a 10% decline in the number of mechanics per airplane among the major carriers over the last ten years. But have there been offsetting increases in technological capability, or even productivity? Better machinery can easily make magnafluxing for cracks a far less labor intensive job, and ten years is a long time. Would these reductions have occurred, deregulation or not?

More to the point, one might well ask what the optimum number of mechanics per airplane actually *is*. Is it possible that under regulatory protection the machinists' unions were able to contract for more positions than optimal safety really required? That discussion is not in either the Report or the Book. It is enticing to know about changes in the number of mechanics. But it would be compelling to know the marginal returns to increased safety as the number grows and lessens.

Although the in-flight safety record has not produced a *corpus delicti* sufficient to indict deregulation, Dempsey reports that "the number of near-misses has soared." Presumably, though he doesn't say so, he means the number after deregulation compared to the number before.

As the old pilots' saying goes, one mid-air collision could ruin your whole day. But attributing it to deregulation is quite another matter. For one thing, if that scary datum is true and if it involves IFR-only⁸ scheduled carriers, then a good part of the blame may lie not with airline deregulation, but with the understaffed and undersupported air traffic system, which suffered a major blow in the Air Traffic Controllers discharge in early 1980, *immediately after* deregulation took hold. *Post hoc* does not

8. "IFR" means "Instrument Flight Rules"—a system in which aircraft fly under the control of ATC (Air Traffic Control), regardless of in-flight visibilities.

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always mean *propter hoc*. Another possibility: the National Transportation Safety Board, to stay with the near-miss business for a moment, introduced in recent years a safety violation self-reporting program through which a pilot can attain immunity from prosecution by submitting a voluntary report of his own airspace transgressions. Has that increased the *reported* number of near-misses? Likewise, with respect to a handy little device now installed in Air Traffic Control radar computers and called the "snitch." This annoying virus will blow the whistle on an air traffic controller who does not do something *himself* right now about a violation of the minimum separation standards.⁹ Could that also have affected the reported rate?

And FAA is the world's largest user of vacuum tubes, we're told. Maybe so. But how is that a consequence of deregulation? The average flight experience of starting pilots is less today than it was a few years ago. Also true. But most pilots for the majors traditionally got their training in the military. We have not had a war lately. The last one ended during a regulated era. Would the average age have been higher if the airlines had not been deregulated? Seems unlikely.

The actual airline accident data themselves do not support Dempsey's fears of compromised safety. He says that we have not had more lives lost only because pilots have been so terrified by the consequences of deregulation that they pay more attention to what is going on around them. And that even though there has been a reduction in safety margins, the whole business is so "over-engineered" that we have not yet pierced the outer moat. How do we know what the optimal behavior of pilots and airlines actually is? We do *not* know that only by knowing that certain counts declined when regulation was removed. The argument here is not necessarily wrong; it is just seriously incomplete.

C. SERVICE

This is a mixed bag. Focussing again on the case of the airlines, Dempsey sees adverse consequences attributable to deregulation for both big cities and little towns. The empirical case for service degradation on the city routes is the most virulent and least rigorous of all of the facts reported: "The planes are filthy, delayed, cancelled, and overbooked, our luggage disappears, and the food is processed cardboard." Moreover, to support their price discrimination efforts the airlines engage in consumer fraud, bait-and-switch advertising, unrealistic scheduling and revenue-based cancellations, which sounds like what every

9. Armstrong, *Altitude Deviations: The Pilot v. ATC*, 12 LAW-PILOT BAR ASS'N J. 28 (Spring, 1990).

other business might try to do absent a focussed supervision by, for example, the FTC.

For smaller towns the argument is a little better. It has two parts—service; and again, safety. On the service score the data do support the conclusion that noneconomic routes have suffered since deregulation. The air carrier measure is that of seats departing, which is down some 17% since 1979.¹⁰ Our comment here, which we shall come back to again a bit later, is that while deregulation may have created that loss, reregulation may not be the best way to recoup it. Under regulated prices, the CAB required below-cost pricing subsidized by excessive pricing on other routes flown by the same carrier. Hence some flyers supported others. But there is another way: With an aggressive EAS (Essential Air Service) policy, government can provide focussed subsidies to carriers who would be attracted to service the targeted small town routes, at a cost not to other flyers but to all citizens in general. That, we suspect, may be a more rationally and finely-honed way to address this particular half of the problem.

The safety argument also goes beyond what the facts support. Since deregulation, Dempsey reports, the safety of flyers in small towns has been compromised by the fact that only the far less safe commuter lines will serve them.

Dempsey alleges that small town flyers have since deregulation been subjected to airline service which uses "less sophisticated planes, smaller, unpressurized, devoid of. . . radar [and] sophisticated flight instruments. . . and fly at altitudes most vulnerable to weather hazards and mid-air collisions."¹¹

Little of what is true in that argument can be traced to deregulation; and much of it probably does not matter. Weather radar is just as easily installed in a 10-place King Air as it is in a Boeing 767, and its cost is so small compared to that of the airframe itself—and its utility in keeping the flights departing on time is so great—that we would be amazed to find it installed any less frequently. Likewise with "sophisticated flight instruments." An ILS glide slope receiver is an ILS glide slope receiver. The FAA requires all such instruments to work within certain operating tolerances, and with the exception of the CAT III carriers,¹² there is no difference in avionics that really matters much between a 727 and a Merlin. Most of the gizmos on the 727 have to do with that particular airplane's characteristics, not with the requisites for safe navigation. Perhaps the

10. BOOK, *supra* note 1, at 106-107, 202-203; REPORT, *supra* note 1, at 38.

11. Quoting solely from Congressional testimony.

12. A Category I ILS allows landing with, generally, a 250 foot ceiling. Category II and Category III allow for even smaller margins. To fly a CAT II or CAT III ILS, the pilot must be specially qualified and the aircraft must be specially equipped.

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removal of cross-subsidies has affected the equipment flown (which is itself a fact not established with *comparative* data), but there is no reason to leap from that to degradation of safety performance.

As to collision avoidance, the fact is that most of the lives lost in mid-air collisions have occurred where at least one of the airplanes was a major-carrier jet. This has little to do with altitudes. Commuter aircraft fly well above the airspace beneath 10,000 feet where the general aviation Sunday drivers are; and every airplane eventually has to descend to a low altitude to land, jet or not. Moreover, on-board TCAS (Collision Avoidance Systems) have only been available for two years. Their cost will in only a few more years be low enough that they will be available as standard equipment on every airplane, even the GA bug-smashers.

If there are differences between the equipment flown by the commuters and that flown by the majors, it is not likely the result or a consideration of deregulation. No 727 has ever or will ever land at Block Island, R.I. No 767 ever at Aspen, Colorado. Regulation and profit margins have little to do with runway lengths. And as to the minimum safe equipment, there are scores of pages of dense text in the Federal Aviation Regulations dictating what each airplane must have and how well it has to work. If safety considerations resting in equipment are the problem, economic regulation is not the answer. Regulation of the equipment might be. That already exists, and despite deregulation it continues.

II. REGULATION OR OVERSIGHT?

Despite these several quibbles, Dempsey is undoubtedly the master of the facts. We are not. But the burden of his work is a plea for renewed regulation of the transportation industry. If we were to accept every fact contained in the Book and the Report as true, the kind of governmental response which is appropriate might still be an open question.

A. THE REGULATORY ALTERNATIVE

Dempsey's preferred response to excessive concentration, predatory and discriminatory pricing, and safety and service deterioration is *re*-regulation. He characterizes his preference as "regulation at the margins,"¹³ tailored to suit the particular characteristics of the industry and the social needs that it serves.

Dempsey's main course would still be, however, entry and rate regulation. Entry regulation would keep some firms out, to prevent excess capacity from interfering with productive efficiency¹⁴ and allowing other firms to operate as the only suppliers in some certain markets. Entry reg-

13. REPORT, *supra* note 1, at 59.

14. BOOK, *supra* note 1, at 223.

ulation would encourage entry into other markets—by restricting the number of hubs a particular airline might employ, for instance, or forbidding domination of a geographic area by a particular carrier—in order to end the problems associated with concentration, and to stimulate pricing and service innovations.¹⁵ Entry regulation could also achieve other goals: The threat of license revocation, for example, would deter carriers from discriminatory pricing and from failing to fulfill their safety obligations.¹⁶

Rate regulation would keep rates in a “just and reasonable” zone, allowing flexibility for the firms to price anywhere between predation (which is presumably below cost, though Dempsey does not specify exactly what that level is) and monopoly. This would shield smaller competitors from the effects of low prices and “prohibit [. . .] consumers from being exploited” by high prices.¹⁷ “This,” he reports, “keeps the market flush with competitors and ensures that healthy competition is the driving force behind pricing, a result which benefits consumers.”¹⁸ This minimalist tenor of entry and rate regulation is that of allowing competition to flourish wherever it can, in markets where competition does not create excess capacity and within a broad pricing range. The Report pares this down even further, imposing rate regulation only where an airline has sufficient market share to exert market power.

Consumer protection regulation and increased safety regulation are served up as the antipasto while required service to small communities is the *dolce*. According to the Book, consumer protection is enhanced by regulatory prohibitions and rules forbidding overbooking and penalizing cancellations, missed connections, and bad service (down to regulation of seat width and distances between seats on long flights).¹⁹ Professor Dempsey adds to the list of remedies a conclusion that “the government must intervene to protect consumers against false and misleading advertising,” referring specifically to “bait and switch” practices.²⁰

In the Book, Dempsey concludes his safety chapter by relying on regulating rates to ensure that well-managed carriers earn sufficient profits to keep their equipment in safe condition, and on license revocation (“the Damocles sword” of entry regulation) to ensure that unsafe carriers have their operating permits revoked.²¹ The Report takes a broader picture, recommending—in addition to entry and rate regulation—refurbish-

15. REPORT, *supra* note 1, at 51.

16. BOOK, *supra* note 1, at 223.

17. BOOK, *supra* note 1, at 224.

18. *Id.* at 224.

19. *Id.* at 239.

20. REPORT, *supra* note 1, at 56.

21. BOOK, *supra* note 1, at 125.

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ing the air traffic control system, updating FAA equipment, building new airports and expanding existing ones, and regulating landings and take-offs to reduce congestion.²²

For the dessert, Dempsey offers better access to the transportation network of the United States to small town entrepreneurs and to the rural poor and elderly than would be available if they had to pay its full costs. In this area, both the Book and the Report recognize regulatory and non-regulatory alternatives. Rate and entry regulation are the solution to the purported lack of sufficient service to small towns only if political pressures make direct subsidies from the federal budget infeasible.²³ It is not clear which one Dempsey prefers,²⁴ though his recognition of a non-regulatory alternative reflects what may be a trend, as illustrated by these examples, towards increasing open-mindedness to alternatives to regulation. (The Report was prepared two years after the Book.)

If we take this trend to its logical conclusion, and consider non-regulatory solutions to all of these problems, then perhaps we would truly have "regulation at the margins," reserving regulation for those areas where the kind of governmental "supervision" or "oversight" embodied in the antitrust laws and consumer protection law are inapplicable.

B. THE ROLE OF NON-REGULATORY ALTERNATIVES IN THE TRANSPORTATION INDUSTRIES

From the most fundamental perspective, there are two circumstances in which relying on rigorously enforced antitrust and consumer protection laws is inappropriate: natural monopoly and destructive competition. With apologies to Alfred Kahn, who has laid out the structural foundations for these two theories of regulation in elaborate detail,²⁵ the essential requirement for a natural monopoly is that there be insufficient demand in the relevant geographic market to support the profitable supply of a service by two firms at an efficient level of cost. A natural monopoly is not to be identified with every monopoly that results from the acts of a competitor who excludes or precludes competition. Natural monopoly is a structural relationship between demand and the cost of supplying the service, while an "ordinary" monopoly may result from the behavior of a competitor. Antitrust law can deal with the latter but not the former; a

22. REPORT, *supra* note 1, at 56-57.

23. BOOK, *supra* note 1, at 240; REPORT, *supra* note 1 at 54.

24. "If we are to abandon any notion of entry regulation and cross-subsidization at the federal level (and perhaps we should not) . . ." REPORT, *supra* note 1, at 54.

25. A. KAHN, *THE ECONOMICS OF REGULATION: PRINCIPLES AND INSTITUTIONS* (1971). Kahn has addressed many of the issues discussed in this part of the review in great detail. In particular, he discussed the applicability of the destructive competition justification for regulation to the transportation industries.

naturally monopolistic market cannot, by its structural nature, be made competitive. Some form of regulation is necessary, if the sole participant is to behave "as if" in a competitive regime.

As we noted earlier, the structural characteristic of an industry beset with destructive competition is that productive capacity does not adjust efficiently to changes in demand. Dempsey focuses on the problems of overcapacity. The inability to readily contract capacity when demand declines may lead managers to cut their profit margins very thin, or even to sell output or services at a loss if that strategy helps them avoid the even larger losses that would accompany shutting down production entirely. Faced with high fixed costs which, by definition, they must pay whether they produce or not, all of the firms in an industry may compete particularly fiercely, giving sharp price reductions where competition is present (appearing to discriminatorily price to the disadvantage of customers in areas where competition is not as challenging), pricing below cost to minimize losses (appearing to predatorily price to the disadvantage of their smaller competitors). If this overcapacity persists, the firms will earn insufficient profits to invest in maintenance of their infrastructure, safety equipment, or innovation.²⁶

Like natural monopoly, the problems in a destructive competition industry are structural; and the vision of excess capacity—plant and equipment sitting idle or under utilized because there is no way to dispose of it—does not seem to fit airlines or motor carriage. Such an industry is not to be identified with every industry in which one observes discriminatory pricing, pricing below cost, or insufficient investment in maintenance, safety, or innovation. These characteristics may result from structural conditions but they may also result from the anticompetitive behavior of the firms. Antitrust law can deal with the behavior, but is ill-equipped to deal with the underlying, fundamentally technological, structural conditions. The caution we are offering here is twofold. First, behavior that looks like destructive competition might be that, or it might be a short-term swing of the industry toward a new condition of happy stability. Accusing bloodletting by competitors of being destructive competition requires more than just pointing out the blood. Second, while it is true that an

26. It would appear that if demand conditions do not change, this overcapacity problem would eventually correct itself as old capacity outlived its useful life. But increases in demand, whether due to cyclical influences or underlying changes in the economy, may give signals to independent entrepreneurs that entry into the industry or increases in capacity will be profitable. If the decision to enter is a wise one in the long run, then the cost to consumers is the high prices charged by existing firms during the long period before the increase in output is achieved. If the decision to enter turns out to be unwise, because the increase in demand was temporary, then a new round of price cutting induced by excess capacity occurs. Price regulation in such an industry prevents the losses during periods of excess capacity and the high prices during period of insufficient capacity.

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airline seat is wasted in some sense when the airplane leaves the gate with that seat empty, the same is true of every empty hotel bed when twilight falls. Yet we do not observe destructive competition in that rather similar industry. Once again, the argument ultimately for regulation therefore requires more than observing that marginal costs are low relative to fixed costs.

The bottom line in a "regulation at the margins" approach must therefore be a consideration of whether the industry is one in which government antitrust oversight will never be successful in making the market competitive, because of its structural conditions. If the natural monopoly or destructive competition arguments apply, one must then decide whether the regulatory solution creates more distortions than would occur by either leaving it alone or by adopting the ill-equipped antitrust solution. If a correction of the ills by either regulation or antitrust is appropriate, the choice of remedies must take into account whether the political will and expertise of regulators or antitrust enforcers is more likely to lead to the desired correction.

Evidence that firms are exhibiting the kind of behavior associated with natural monopoly, or that industries are showing effects that may be the result of structural destructive competition, are the best clues for where to look for situations where regulation is necessary. Dempsey excels in gathering this evidence. His journalistic flair presents a most enticing case that there is something wrong with the performance of these industries; and his view is amply supported in a number of instances, at least in the Report, by the testimony of fairminded deregulators who have recognized problems with the way in which deregulation occurred.²⁷ The next necessary step, however, is to show that these industries, or selected markets within them, are structurally impervious to oversight. Only then should we conclude that regulation is more appropriate.

C. THE EVIDENCE FOR THE INAPPROPRIATENESS OF OVERSIGHT

1. EXCESSIVE CONCENTRATION: Figure 8.1 in the chapter on concentration lists the numerous mergers that have occurred since the Airline Deregulation Act of 1978. Figure 8.2 does the same for the railroads, while the rest of the chapter covers motor carrier and water carrier acquisitions. Professor Dempsey's discussion of the antitrust analysis by the Civil Aeronautics Board²⁸ leads us to conclude that his recommendations would benefit from a serious reconsideration of antitrust as an alternative to regulation.

Dempsey reports that the administrative law judge evaluating the

27. *E.g.*, REPORT, *supra* note 1, at 9-11, 24.

28. BOOK, *supra* note 1, at 134-139.

Texas International-National Airlines merger had decided that the combined statistical market shares created by the merger would exceed the percentage limits allowed by the Supreme Court's *per se* illegality test in *United States v. Philadelphia National Bank*, 374 U.S. 321 (1963), in at least one market, and was therefore illegal under Section 7 of the Clayton Act, the antitrust provision governing mergers. The regulators at the CAB, however, chose to follow what Professor Dempsey describes as the more "functional" approach of *Brown Shoe v. United States*, 370 U.S. 294 (1962), and *United States v. General Dynamics*, 415 U.S. 486 (1974), which takes such considerations as the product and geographic market definitions, cross-elasticities of demand, and entry barriers into account in deciding whether the large market share is likely to lead to the improper exploitation of that market position by the newly merged firms.²⁹

It is a relatively minor point that, in fact, every merger case including *Philadelphia National Bank* has required an analysis of product and geographic market definitions (of which cross-elasticities of demand is often a part) and neither *Brown Shoe* nor *General Dynamics* depended in any significant way on either the presence or absence of entry barriers. Moreover, *Brown Shoe* and *General Dynamics* are generally considered to be polar opposites in antitrust jurisprudence; and regulators of the breed that Professor Dempsey would rely on in the future would have to have been extraordinarily ignorant of antitrust law and policy to have relied on them both.

Brown Shoe, in fact, took an even stronger anti-merger posture than *Philadelphia National Bank*. Compared to the 30% market share *per se* illegality threshold established in the bank merger, the merger of the shoe companies resulted in only a 5% share of shoe manufacturing in the United States yet was still held illegal. While it was true that in some local retail shoe markets the resulting concentration was much higher, the court's finding of illegality did not depend on that. Rather than being "functional," the approach of *Brown Shoe* is typically characterized as that of "incipiency," which reflects a concern that increasing concentration be prevented as soon as a trend appears in the industry, even before it could possibly have had ill effects. If the CAB had really understood and applied such a standard, they might very well have disapproved every airline merger that occurred.

In addition, while *General Dynamics* did establish an approach that went beyond mere market shares and did allow the merger of large companies, it had a peculiar set of facts, bearing no relationship to entry barriers. The shares of coal contracts owned by the merging parties in that case may have exceeded the *per se* threshold in the relevant market, but

29. BOOK, *supra* note 1, at 135.

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all of that coal had already been committed to purchasers and could not possibly affect future competition. If Dempsey has accurately described their analysis, he can hardly find reassuring the ignorance exhibited by the regulators. Dempsey would, after all, fain rely on regulators than on the specialists in antitrust enforcement at the Justice Department or the Federal Trade Commission.

More significantly, most of the rest of Professor Dempsey's discussion excoriates the regulators in the CAB and the Department of Transportation for approving merger after merger while giving at least modest credit to those in charge of "oversight"—the antitrust specialists at the Justice Department—for recognizing the anticompetitive effects of several of the mergers. It is hard to imagine how one can conclude from this recitation that regulatory control by an agency specializing in an industry could be recommended over an "oversight" control by a department specializing in antitrust.

Professor Dempsey does recommend that statutory criteria for mergers be tightened.³⁰ He also argues that the Justice Department, using the same criteria, would have challenged some of the mergers to which he objects.³¹ Additionally, ease of entry—the grounds on which many of the airline mergers were approved—is a theoretically sound reason for approving a merger and would undoubtedly be a part of any acceptable statutory criteria for assessing the legality of mergers. The increasing concentration in the airline industry was due in substantial part, as Professor Dempsey points out, to incorrect factual predictions by the experts regarding contestability,³² and apparently not to inadequate statutory criteria. This applies as well to shippers with monopsony power, enabling them to force truckers to carry their goods for unprofitable rates, as it does to airlines that dominate hubs.

We are therefore left to wonder whether antitrust is inherently inappropriate in preventing undesirable concentration. Dempsey's argument regarding the inability of antitrust law to contain undesirable increases in concentration relies on a regulatory failure, and a detailed and persuasive argument it is. He does not argue, in this context, that antitrust is fundamentally unsuited to the structural characteristics of the transportation industries. In fact, his rate regulation solution looks a lot like expedited antitrust review. Only where there is proof of excessive concentration in a particular airline market, for instance, would a consumer complaint trigger a review of rates to see if the airline was exploiting its monopoly position.³³ Precisely because so many of Dempsey's arguments are redolent

30. BOOK, *supra* note 1, at 240; REPORT, *supra* note 1, at 53.

31. 49 U.S.C. § 1384 (1982).

32. REPORT, *supra* note 1, at 8-10.

33. REPORT, *supra* note 1, at 52.

of antitrust solutions, we are convinced that antitrust approaches to many of the ills of the transportation sector deserve to be explored more fully.

2. PREDATORY PRICING: Professor Dempsey begins his chapter on Pricing with claims of predatory pricing in competitive markets and discriminatory rates in monopoly and oligopoly markets.³⁴ Regulation is his answer to both. Rate regulation that defines a "zone of reasonableness" would simply prohibit rates below cost and above a monopoly price.³⁵ For price discrimination, the Book asserts that "for the sale of important infrastructure services, such as transportation, it is only economic regulation that protects the public against the pernicious effects of pricing discrimination."³⁶ The Report, written after the publication of the Book, takes a more open-minded approach towards solutions for discrimination: "It is time to consider *either* amending the Robinson-Patman Act to prohibit discrimination in the sale of services, or reestablishing the regulatory mechanism for its prohibition."³⁷ Because the oversight solutions to predatory and discriminatory pricing are quite different, we will discuss them separately.

A price is predatory only if it is chosen with the intent to drive out competitors. It is not necessarily below cost, since a profitable price that undercuts the lowest profitable price of the competitors may also drive them out. This kind of predatory pricing is undesirable only if it is likely to lead to monopoly or oligopoly. As long as the market can attract and sustain a sufficient number of competitors, i.e., is not a natural monopoly or oligopoly, price competition is desirable, as Professor Dempsey recognizes.³⁸ The principal reason why many jurisdictions do not make such a price illegal is that it is hard to tell whether the price is predatory or competition enhancing. Without knowing whether an industry is naturally monopolistic, it is hard to object to any prices above cost unless there is intrinsic evidence of intent to monopolize through pricing strategies.

Of greater moment are those price levels that are *below* cost, but that cannot be justified by legitimate pro-competitive reasons, such as reducing prices for a short period to meet the bona fide low price of a competitor if that is necessary to sustain a firm's place in the market. Of concern to economists is below cost pricing that (1) is part of a firm's strategy to drive competitors out of the market and then to capitalize on the predatory firm's monopoly position, or (2) is the result of structural conditions that portend the long periods of unhealthy profits which characterize destructive competition. If strategic pricing is the problem, then antitrust is

34. BOOK, *supra* note 1, ch. 5, at 95.

35. BOOK, *supra* note 1, at 224.

36. BOOK, *supra* note 1, at 220.

37. REPORT, *supra* note 1, at 53 (emphasis added).

38. BOOK, *supra* note 1, at 224.

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designed to deal with it. To establish the argument that oversight is not an appropriate substitute for regulation, it must be demonstrated that the structural conditions necessary for destructive competition exist.

Allegations of predatory pricing have arisen in innumerable industries including waste disposal, meat packing; consumer electronics, gasoline and petroleum products, bread, frozen pies, dairy products, newspaper advertising, and eggs, to mention only a few. The traditional antitrust solution to strategic below cost pricing is the application of Section 2 of the Sherman Act, current version at 15 U.S.C. Sec. 2 (1982). If the short term losses in one market are supported by monopoly pricing in another market, discriminatory pricing and therefore the Robinson-Patman Act are implicated, as discussed below. But even in the simple predatory pricing case, the Sherman Act prohibitions against monopolization (in the event the strategy is successful) and against attempts to monopolize (in the event the strategy is unsuccessful) are specifically tailored to separate strategic cases from the short-term, potentially pro-competitive, price cutting by fashioning rules designed to determine the reasons behind pricing policy.

Since predatory pricing is alleged to occur in as many different industries as it does, its existence is not necessarily a sign that the industry's structure is naturally monopolistic or destructively competitive and therefore deserving of regulation. We might interpret Professor Dempsey's allegations of predatory pricing in the transportation industries, then, as a recommendation that antitrust scrutiny of predatory practices be heightened. Federal and state authorities as well as private plaintiffs can bring suit against strategic below-cost pricing. If Professor Dempsey were to identify a weakness in the current interpretation of antitrust theories relevant to predatory pricing, which would be a constructive and logical next step in his analysis, reregulation would be a preferred solution only if (1) political considerations would not permit sufficiently rigorous antitrust scrutiny but would permit sufficient regulatory scrutiny *and* regulation could be sufficiently flexible to distinguish strategic and non-strategic predatory pricing, or (2) a particular industry were shown to be naturally monopolistic or destructively competitive.

3. DISCRIMINATORY PRICING: Professor Dempsey's catalog of price differences that reflect the lack of competition rather than the cost of providing the service certainly captures the imagination.³⁹ In 1982, US Air apparently charged its passengers \$24 more to fly between Buffalo and Albany than they would pay if they remained on the same plane and flew

39. Some of the differences may in some measure be explained by differences in cost but, as the example in the text illustrates, others are apparently due to competition. It would be valuable, in analyzing the effect of deregulation, to separate the two.

the 100 additional miles to Boston. Apparently there were greater competitive pressures on the Buffalo-Boston run.⁴⁰ Assuming that there were monopoly profits derived from the Buffalo-Albany passengers, those profits might support, at least temporarily, below-cost pricing for the Buffalo-Boston passengers. But even without below cost pricing, monopoly profits in one market distort consumer choices and lead to allocative inefficiency.

Professor Dempsey addresses this question as if it were either simply a price discrimination problem or a price discrimination/predatory pricing problem. His recommended solution, commendably open-minded to an antitrust-based oversight regime, is either broadening the Robinson-Patman Act to cover *services* (the Federal law only applies to goods, although some state laws currently prohibit price discrimination with regard to services), or regulating rates. The Robinson-Patman Act appropriately recognizes defenses related to the cost of supplying the goods and to meeting the legitimate price of competitors in selected markets, but proper structuring of pricing decisions may make this latter defense a weak protection against US Air-type cases where a firm charges discriminatory rates because of competitive pressure.

This suggestion—that the Robinson-Patman Act may be weak protection against rate discrimination—clearly requires more analysis of the way in which the “meeting competition” defense is applied. But even a detailed analysis would miss the fact that price discrimination in the regulated industries seems to be intimately tied to the concentration in some markets. US Air would not have been able to cover losses in the Buffalo-Boston run, if indeed the prices were non-compensatory, if they did not either have hopes of eventually dominating that route for a long enough period to recapture the losses (which seems implausible), or if they were not willing to apply monopoly profits derived elsewhere to lessen the impact on their annual profit statement.⁴¹ Recapturing the losses by monopoly profits as a result of the discriminatory pricing that drove out competitors would almost certainly be a violation of the prohibition against monopolizing in Section 2 of the Sherman Act while Section 7 of the Clayton Act, 15 U.S.C. sec. 18 (1982), is designed to prevent just the very sort of merger (with Piedmont) that may have lead to US Air’s mo-

40. Book, *supra* note 1, at 43-44.

41. Economists often conclude that it is irrational to support losses in one market with profits in another when it would be more profitable simply to stop competing in the unprofitable market. In the transportation markets, however, it may be either that the losses would be of such short duration that maintaining a presence in the market would be justified or that marketing in the transportation industry requires that one appear to be a major carrier with connections to many points. That marketing necessity may require maintenance of an unprofitable route to maintain both the appearance and reality of having a large route system.

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nopoly in the Buffalo-Albany run in the first place. Since *United States v. E.I. Du Pont de Nemours & Co.*,⁴² it has been clear that long after an acquisition has occurred the merger can be challenged, and that the legality of the merger depends only on whether, at the time of the suit, "there was a reasonable probability that the acquisition is likely to result in a substantial lessening of competition." There is no need to accept the results of these mergers now if the undesirable competitive consequences of price discrimination result. The antitrust option again appears to be a solution that deserves more consideration.

Professor Dempsey points out that only three of the hubs in which one carrier is dominant directly resulted from mergers,⁴³ but this does not diminish the relevance of antitrust law. Mergers in other regions that could have been prevented by more rigorous application of Section 7 of the Clayton Act decrease the number of potential entrants into every market. Numerous antitrust cases rely on the doctrine of elimination of potential competition as grounds for challenging a merger. Moreover, the antitrust laws are directed at many types of behavior other than mergers designed to achieve a monopoly. Refusal to lease gates to competitors or even monopolization of those gates may, under proper factual (and, of course, political) circumstances, be a violation of the Sherman Act. As the discussion of predatory pricing reveals, acts intending to result in monopoly, whether successful or not, may violate the Sherman Act. Before concluding that regulation is needed to prevent price discrimination, it seems appropriate to examine the antitrust legality of the behavior that put transportation firms in the position to engage in the behavior. Like predatory pricing, price discrimination occurs in a wide variety of industries. The mere existence of the practice is not an argument for switching from oversight to regulation.

Professor Dempsey's own recognition of the oversight option, as in his recommendation to expand coverage of the Robinson-Patman Act to cover services, could be the first step in a more thorough consideration of the larger antitrust picture.

4. SERVICE DETERIORATION: For all modes of transportation except airlines, Professor Dempsey's concern in the Service chapter of the Book is with deterioration of service to small communities, discussed in an earlier section. For airlines, there is also a deterioration in the quality of the product consumers now purchase. Some of the evidence is unconvincing: apparently half of those surveyed in one study thought service had deteriorated and half did not think so. But a long list of consumer complaints are described, ranging from concern about flight delays and can-

42. 353 U.S. 586 (1957).

43. Book, *supra* note 1, at 230.

cellations, overbooking, and misleading advertising to sardine-sized seats, rude customer service, and unappetizing food.⁴⁴ This litany exposes two questions. The first is, why would companies who make their money from pleasing their customers be willing to do so poorly? The second is, what should be done about it?

One of the supposed beauties of the competitive process is that firms compete to satisfy customers in both price and service dimensions. Unless it is demonstrated that competition does not work in a particular industry (because of the industry's natural monopoly or destructive competition structure), it seems a fair initial presumption to conclude that the failure to provide adequate service, in all of its dimensions, is due to a lack of competition. Professor Dempsey certainly agrees that there is a lack of competition and an excess of concentration. Addressing the concentration problem is at least plausibly an oversight problem, as our discussion has already illustrated.

A deeper look at the types of practices about which consumers complain reveals two different sorts of things. The first sort seems to be the kind of complaint that competition would cure. Because these problems are so apparent to airline passengers who care, if they really were significant to customers and would make a difference in airline selection, airlines would compete with better food, friendlier staff, and larger seats. There is, however, a second sort of service problem: unfair competitive practices of a type observed even in very competitive industries like used car sales and trade schools. The truth of some of the claims made by advertisers are hard to test. It is hard to determine whether some of the performance characteristics of a product are due to the particular item purchased. It is difficult for the consumer to discern whether the performance by one competitor is superior to another. Into this category of practices fall those complaints like misleading flight scheduling, overbooking, and misleading advertising. These deceptive practices are the customary jurisdiction of the Federal Trade Commission, which has developed expertise in a variety of industries while exploring the unfairness to competitors of particular business practices. Unless deception is so much more complicated in the transportation industries that it requires a specialized agency, a proposition Professor Dempsey has not established, prevention of these practices does not seem to justify a regulatory agency rather than conventional oversight by the FTC.

It may be in the area of service that Professor Dempsey is least devoted to regulatory alternatives. In both the Book and Report, he describes the ills as well as particular proposed cures, but does not call for

44. Book, *supra* note 1, at 109-110.

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a regulatory authority to issue directives.⁴⁵ Given our "supervisory" analysis, this is probably appropriate, particularly for addressing the complaints that exist even in competitive industries. For these problems, the nature of governmental intervention does not even depend on whether the industry is naturally monopolistic. For the category of service preferences that a truly competitive market would satisfy, the question, as with so many other current ills of the transportation industry, is whether a truly competitive market can ever occur.

5. SAFETY: Only one of Professor Dempsey's cluster of recommendations for improving safety really involves regulation. The Book's primary recommendation is to ensure that carriers can afford safety (and to withdraw permits if they do not spend their wealth that way) while the Report adds the regulation of landings and take-offs and a series of infrastructure expenditures by the Government to reduce hazards. The additions offered in the Report seem to be appropriate governmental expenditures, assuming, as we have, that there are defects in these areas, and regulating landings and take-offs for safety purposes seems to be an obvious part of individual airport management. Naturally, however, the suggestion of rate and entry regulation to ensure profitability draws our critical attention.

As we will develop in more detail below, it is uncertain whether the ills of the industry are the results of deregulating transportation systems that have operated in a regulated market for so long, or are the inevitable effects of the industry's structural characteristics. Once again, the existence of ills such as unprofitability does not alone prove the existence of such structural characteristics.

It seems quite plausible that any industry, suddenly released from behavioral constraints, either technological or, as in this case, regulatory, will go through a period of instability regardless of whether regulation was appropriate in the first place. Evidence of that instability might be the entry of numerous firms that do not possess the ability to survive in the market, numerous bankruptcies as some firms survive and others fail in the changing conditions, and even low profitability of surviving firms while the new entrants challenge their right to customers. This is the critical question: whether a mass of data that richly paints an instability is proving the need for a return to regulation, or is simply the evanescent consequence of *deregulation*, whether initially justified or not.

Economists expect that there will be some turnover in firms and shifting of market shares and relative profitability in any dynamic market. Such changes might even describe healthy competition. A market released from legal constraints would be expected to exhibit even more

45. BOOK, *supra* note 1, at 238; REPORT, *supra* note 1, at 54-55.

"turmoil," as Alfred Kahn describes it, even if eventually it will stabilize and become a more typical competitive market. Evidence from what might be only a "shake-out period" may demonstrate that the rapidity of deregulation and the lack of supervision after deregulation was an error, but it alone is not proof that the market is structurally characterized by destructive competition. We recognize that the turmoil of rapid entry and exit, of bankruptcies and of periods of low profitability, is costly to the economy. But laissez-faire describes a market free from legal constraints, not one free from costs. Finding the appropriate mechanism for reducing those costs involves looking beyond the symptoms to the cause, which may be the lack of regulation, as Professor Dempsey assumes, or it may be the instability induced by deregulation, or the lack of proper oversight during the change from one to the other. The next logical step, once again, is to examine the structural characteristics of the various markets involved. Unless the transportation industries are shown to be structurally different from other industries, the usual remedy of more competition, guaranteed by government oversight of the competitive process, rather than less, as would occur under regulation, seems the appropriate way to ensure both productivity and profitability.

6. SERVICE TO SMALL TOWNS AND ECONOMIC EFFICIENCY: If carriers are not required to service unprofitable routes, they will not do so. This disadvantages entrepreneurs located in small towns who cannot get their products to market. If carriers have higher costs in servicing some routes than others, businesses along the higher cost routes will have to pay more and will, therefore, be at a competitive disadvantage relative to those whose location was chosen to reduce the costs of satisfying customers. Undoubtedly true. What do we do about it? Unlike the other problems that Professor Dempsey identifies, many policy makers do not even see this as a problem. Some even believe that a market that gives firms incentives to minimize the costs of satisfying consumers is working *correctly*.

The difficulty with analyzing Professor Dempsey's proposals in this area is that the answers depend on political and distributional opinions. Deregulation may in fact have been a product of the political judgment that small towns did not deserve subsidies from large towns. The subsidies had been provided by cross-subsidization; shippers in large towns paid artificially high rates so that shippers in small towns could pay artificially low rates.⁴⁶ If deregulation was intended to eliminate the cross-subsidies and wealth transfers, it was apparently a booming success, not a failure. The shrinking of the scheduled air service network is happening as it may have been intended. The evidence of deterioration of service to

46. BOOK, *supra* note 1, at 204.

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small towns is therefore hardly surprising, nor is the evidence of the substitution of more efficient, smaller commuter planes for larger, less-efficient jets and the reduced satisfaction of passengers who used to enjoy subsidies. Of course they are complaining, but it is about the withdrawal of a benefit for which others were paying.

Occasionally, Professor Dempsey's arguments reflect both his distributional preferences and a concern for "discriminatory" rates.⁴⁷ If this means discriminatory by Robinson-Patman standards, reread our discussion above. If "discriminatory" just reflects the higher costs of serving the remote shipper, then the concern is a distributional judgment, not an economic fact.

It appears from the Book that the reduction in service is greater than what was expected.⁴⁸ Congress responded politically, which seems to be appropriate in a democracy, and has maintained the direct subsidy to carriers serving uneconomic markets.⁴⁹ This solution does not seem to require regulatory supervision, so far as one can tell from either the Book or the Report, and Professor Dempsey's support for it is a respectable distributional preference, whether we agree with his favorite forms of charity or not.

In the Report, Dempsey takes exactly the proper course in dealing with the allocative inefficiencies inherent in subsidizing one activity by artificially enhancing the costs of another. To policy analysts who believe that pursuing allocative efficiency is the only justification for government intervention, Professor Dempsey's distributional preferences will never be convincing. It is unquestionably the case that supporting artificially low prices in one market through artificially enhanced prices in another distorts consumers' choices. Without that distortion, consumers' decisions would be based on the actual costs of allocating resources to one use rather than another. As Professor Dempsey says, however, "society frequently views the achievement of objectives other than allocative efficiency as warranting some sacrifice of the latter."⁵⁰ While Congress apparently agrees with him, this ordering of objectives does not support a call for regulation. Dempsey does not demonstrate that establishing service territories through entry regulation⁵¹ is preferable to direct subsidies. Hiding the subsidies through higher prices to lower cost shippers only creates the illusion of a budgetary saving.

47. REPORT, *supra* note 1, at 54.

48. BOOK, *supra* note 1, at 202.

49. *Id.* at 204.

50. REPORT, *supra* note 1, at 54. See also, BOOK, *supra* note 1, at 78 ("[S]ociety frequently views the achievement of objectives other than allocative efficiency as more important than fidelity to the ideology of *laissez faire*").

51. REPORT, *supra* note 1, at 54.

III. IS TRANSPORTATION REALLY SPECIAL?

Throughout the previous section we have described the authority of antitrust and fair trade enforcers, both public and private, to address many of the ills which Dempsey describes. In some cases the antitrust enforcers appear to have done a better job than the regulators did in curbing anticompetitive behavior, but in example after example the regulators have failed to do a satisfactory job of controlling the industry even after deregulation. Even those that cannot be addressed by what we have called "oversight" do not obviously require reregulation unless the markets involved can be described as naturally monopolistic or destructively competitive. But this is the big question: "Do these industries possess the structural characteristics of natural monopolies or markets in which competition is destructive?" What is Professor Dempsey's evidence?

As we discussed above, evidence of low profits, predatory pricing, discriminatory pricing, and bankruptcies may be symptoms of natural monopoly or destructive competition, but they are equally consistent with anticompetitive behaviors witnessed in other industries that no one suggests regulating. According to the Book, when the transportation industries were initially regulated there was a lot going on that had nothing to do with the inherent structural nature of the industries. Railroads suffered from overcapacity due to government support of railroad expansion; and the Interstate Commerce Commission was a response to political shenanigans, watered stock and other forms of financial piracy, and differences in rates that caused what even Professor Dempsey refers to as "blind antagonism" towards the railroads.⁵² The motor carriers were initially regulated during a period of excess capacity, during the Great Depression of the 1930's, at least partially in response to Congress's desire (undoubtedly encouraged by the railroads whose excess capacity problems were aggravated by increasing truck competition) to create equality in the regulatory scheme. It seemed unfair to regulate railroads but not their competitors.⁵³ In addition, the depressed business conditions that created the excess capacity also created extraordinary conditions in all industries and so massive government intervention was invoked.⁵⁴ Airline regulation soon followed, to continue the parallel regulatory structure and to promote national defense interests.

During this initial regulatory period, the economy witnessed many of

52. BOOK, *supra* note 1, at 8-10.

53. *Id.* at 17.

54. Professor Dempsey claims that under regulation the industry grew and prospered. *Id.* at 18. Towards the end of the 1930's, however, everything prospered as the world came out of the Depression and prepared for war.

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the ills of the eighties that Professor Dempsey describes so dramatically. The excess capacity, caused not by the inherent structural nature of the industry but by exogenous factors, government subsidies, intermodal competition, and depressions, naturally led to unprofitability, price cutting, and predation. Currently we observe many of the same ills, quite possibly created not by the inherent structural characteristics of the industries but by the shock of sudden deregulation without appropriate oversight. Railroads suffer unprofitability from intermodal competition⁵⁵ that had been deferred or limited by regulation. Even efficient motor carriers are going bankrupt because they have lost a great share of the "equity" that they used to possess in the form of their operating certificates. Entry barriers resulting from failure to enforce the antitrust laws regarding mergers or predatory pricing in the airline industry prevent the competition necessary to ensure profitable pricing and service. This is indeed "cruel restructuring"⁵⁶ but it is not necessarily the result of either natural monopoly or destructive competition.

A. *DESTRUCTIVE COMPETITION*

Professor Dempsey's destructive competition arguments come in one iterated form: Transportation is an industry inherently vulnerable to overcapacity because an empty seat or a partially filled trailer or railroad car is an "instantly perishable commodity."

We have already offered our own doubts about at least the uniqueness of that condition, and have suggested that it alone does not account for the special evils he is seeking to correct. There must be something more.

The "something more" that the Report reveals may be the extremely low marginal costs of production in the transportation industries.⁵⁷ As long as an additional seat or portion of a truck can be sold at a price that covers the incremental cost of providing it, it will be more profitable to sell a bit of transportation below its full cost than not to sell it at all. Because it is more profitable, transportation companies will predictably offer lower rates as they find empty space just before the flight. Hotels will give a better room rate if they have empty space at midnight. Symphonies sell rush seats just before the show. We could understand regulating hotels and symphonies under this logic, but airline pricing does not follow this pattern. To the contrary, airlines charge *higher* prices to people who try to make reservations just before take-off.⁵⁸ The airlines have figured out

55. *Id.* at 34.

56. *Id.* at 41, quoting Frank, *Airlines*, *Forbes*, Jan. 4, 1982, at 198.

57. REPORT, *supra* note 1, at 52, for instance.

58. We do not mean to suggest that airlines are pricing irrationally. Airlines are pricing by an inverse elasticity rule, assuming that those who make plans at the last minute, business peo-

ahead of time, apparently, who those people would be who would fly at a vastly reduced rate and, as it happens, those passengers for whom travel is relatively more discretionary are also able to make reservations ahead of time. There must be something more going on that distinguishes the transportation industry.

Traditionally, the basic requirement for a destructive competition industry was relatively high fixed cost. For railroads, the regulation of which started the move towards "parallel" regulation of motor carriers and airlines, 22% of costs are fixed.⁵⁹ It is particularly easy to imagine destructive competition among railroads whenever overcapacity exists, because compared to the costs of fuel and an engineer (and however many conductors the contract requires) the fixed costs of tracks and roadbeds loom large and a price that would cover any portion of those fixed costs in addition to the energy and labor costs would be better than not selling the service at all. "Losses" from this strategy could go on for a long time, since the immovable roadbed cannot very quickly be sold off to someone with a more profitable use for it. As long as there is a market for gates at airports, for airplanes, or for trucks and buses, however, it is hard to see from the arguments presented in the Book or the Report how unprofitable overcapacity could continue for very long.

The economic argument offered in the previous paragraph is not original; the deregulators had it in mind when deregulating the airlines and motor carriers in the first place. And like so many other economic arguments, it has a tremendous capacity for assuming too much about the characteristics of the industry. It seems as though there is a better market for used gates, planes, and trucks than for railroad track but we are not the fact experts. Evidence showing that competition is fierce does not, however, automatically mean that assumptions are wrong, if the evidence is also consistent with another theory—in this case, that the airlines have engaged in behavior that could be prevented by rigorous and conventional antitrust enforcement.

B. NATURAL MONOPOLY

As we have said, the essential requirement for a natural monopoly is that there be insufficient demand in the relevant geographic market to support the profitable supply of a service by two firms at an efficient level of cost. Analogously, a natural oligopoly might occur in the market where there is insufficient demand to support more than a few firms efficiently.

ple or Professor Dempsey's passenger traveling to the funeral of a beloved family member, are less flexible in their travel plans and therefore willing to pay more than the vacation traveler, who reserves ahead of time.

59. BOOK, *supra* note 1, at 69.

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Under either of those circumstances, it is reasonable to suppose that the firms in the market will not behave competitively. The behavior of particular concern is enhanced prices in such markets where there are no potential entrants waiting to enter and satisfy consumers by offering lower prices—that is, where markets are not “contestable.”

Professor Dempsey's discussion of contestability illustrates quite nicely the difficulty of translating economic assumptions into reality. Particularly bedeviling for those who predicted that entry or the threat of entry would eliminate monopoly profits, is the ability of airlines to respond immediately to price cutting. A new airline that cannot capture customers by undercutting the price of existing competitors will not be as easily attracted to enter the market. Combined with the spotty history of upstart airlines,⁶⁰ the apparent anticompetitive behavior of existing firms,⁶¹ and the barriers to entry allegedly created by frequent flyer plans,⁶² it does in retrospect seem futile for policy makers to have relied on new airlines to challenge the old.

The contests for business take place market by market, however, and many of the entry barriers that would survive rigorous application of the antitrust laws do not apply to existing carriers, which might expand their minor presence in the market or enter a market in a limited way without incurring the costs of starting up a new airline. The domination of gates, for instance, might not withstand antitrust scrutiny while the frequent flyer barrier may not be as insurmountable for existing carriers. It might still be too early to give up the contestability argument since antitrust law has not been given a chance to remedy the anticompetitive behavior.

Even if a market is contestable, however, competition will not succeed where there is insufficient demand to support a number of competing airlines. It is these naturally monopolistic or oligopolistic markets that present the greatest resistance to antitrust oversight. Since evidence that monopoly prices are being charged *or* that there is high concentration in many markets is consistent with either anticompetitive behavior or natural monopoly (or oligopoly), we need to find some way to distinguish the cases before reregulation can confidently be recommended.

The natural monopoly question is a structural one, requiring an analysis of the cost structure of providing the service and of the level of demand in the market. This needs to be done market-by-market until one learns enough to generalize about the types of city-pairs, for instance, in which rate supervision is necessary. This is undoubtedly too extensive

60. REPORT, *supra* note 1, at 23.

61. See the discussion of predatory pricing *supra*.

62. REPORT, *supra* note 1, at 22.

and too technical a task for either Professor Dempsey's Book or Report. We do not fault him for its omission. But as a matter of policy selection, the choice between applying antitrust remedies or regulatory remedies to a particular market certainly requires it. The absolute size of competitors does not compel the conclusion that a natural monopoly exists⁶³ nor does evidence of collusion between them;⁶⁴ a full consideration requires an examination of minimum optimal size relative to demand in a market. Evidence of concentration is not enough alone, particularly where there is also evidence that the firms in the market obtained their market shares by illegal predatory pricing,⁶⁵ or where the concentration data is national rather than market specific.⁶⁶ "Regulation at the margins" requires consideration of where oversight fails. The limited information on whether there actually are any naturally monopolistic markets, as there surely must be, makes one question the proof that regulation is required at all.

Professor Dempsey identifies the expense and evidentiary difficulty of antitrust litigation as a reason why regulation is preferred.⁶⁷ But a sensible principle of policy analysis, inquiring into the justifications for government intervention in the market place, must include a comparison of the costs of intervention with the costs of letting the ills in the market persist. The relevant corollary is that the costs of antitrust oversight must be compared systematically with the costs of regulation. That would involve more than comparing the costs of running the Antitrust Division of the Justice Department to the costs of running the Interstate Commerce Commission or Professor Dempsey's new Federal Transportation Commission. It would require as well a comparison of the relative flexibilities of the oversight and regulatory alternatives. The Book reveals that the CAB "turned a deaf ear" to World Airways begging for an end to predatory pricing in the transcontinental market, where fares fell to \$99 one way.⁶⁸ Professor Dempsey had started to identify in more detail, in the Report,⁶⁹ the political considerations involved in selecting regulators who would be neutral and unbiased. But it may be that the political problems are less severe in antitrust enforcement, where federal enforcers are appointed by the executive branch but state enforcers are inclined to be of all political stripes and private plaintiffs have no uniform political axe to grind at all.

Professor Dempsey also criticizes the antitrust remedy as being lim-

63. BOOK, *supra* note 1, at 12 (size of railroads).

64. *Id.* (Evidence of extensive pooling arrangements to suppress rate wars).

65. *Id.* at 84-85. (Economies of scale combined with entry barriers are said to create a natural monopoly but there is evidence that trucking firms created entry barriers and obtained economies of scale by predatory practices).

66. *Id.* at 86-87.

67. *Id.* at 222.

68. *Id.* at 43.

69. REPORT, *supra* note 1, at 57.

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ited to damages, which may compensate the victim of an antitrust injury but fails to restore competition to the marketplace. As a result, he says, "the public's interest in a healthy competitive environment goes unsatisfied."⁷⁰ In fact, antitrust remedies available to the government include a full range of equitable remedies including divestiture of assets acquired under a merger, which could restore a competitor to the market, and perhaps more significantly, injunctive relief, which can stop anticompetitive behavior before the competitor is eliminated. Proof of an actual anticompetitive effect is not required. In fact, a case for attempted monopolization can be made out even if the attempt has not been successful. The treble damages remedy is designed to more than compensate the victim, in order to give private plaintiffs the incentive to vindicate the public's interest in a healthy competitive environment and deter would-be violators. Rate and entry regulation is not always better than that. In this case, it may not be nearly as good.

IV. A POSTSCRIPT ON DIALOGUE

The arguments that Dempsey supports in the Report and in the Book present an opportunity for us to comment on a set of questions rather different from the analytical business that we have just been through. While they are not questions raised uniquely by Dempsey's work and no one else's, the elegance of his presentations and the grandness of his grasp of the data do bring certain heuristic problems clearly into view. They have to do with the nature of economic argument, and with the linkage between empirical investigation and policy choice.

By their nature, policy choices create and distribute benefits and risks. An interstate highway system advantages many, and creates an irreducible risk of harm to others. Keeping new drugs from the market for a time protects some future purchasers but denies likely benefits to others who will die in the meantime. Safer cars could be mandated, but at the cost of other sacrifices and distortions. Some people *like* guns. Others like butter. The solution is never just mathematical. Such is the nature of policy choice.

Policy debate therefore occurs on various levels, two of which might be described as subjective versus objective, opinion versus fact, advocacy versus science. The Preface to the Book carefully warns the gentle reader that Dempsey is presenting only one side of the debate, that the reader should add Dempsey's contribution to the opinions of others to get the full picture. Because this caveat is never repeated in the Book itself (nor anywhere in the Report), and because it is so important to a proper

70. BOOK, *supra* note 1, at 222.

interpretation of Dempsey's argument, we think it appropriate to highlight some of the reasons why Dempsey's warning should be taken seriously.

If we were to describe the rules that might ideally govern the terms of a policy debate, an attempt to match the style of argument to the nature of the choices in review, we might begin with the following four desiderata:

First, debate should recognize the difference between analytical propositions and policy judgments—between, that is to say, questions for which facts are answers, and questions for which facts are wholly secondary to the choice of preferences.

Second, all data not derived from controlled experimental designs would require additional argumentation to demonstrate that the correlations were causal, and that the causes are germane to the choices than in issue. *Post hoc*, again, isn't always *propter hoc*.

Third, there would be a distinction observed and respected, between objective or scientific inquiry on the one hand and "advocacy" on the other. This is not to say that advocacy cannot be scholarly or objective in many senses of the word, nor that advocacy isn't useful in the application of science (nor even that it is ineradicable), but only to suggest that once an argument is labelled by convention or by signature, certain conventional limits should attach.

Fourth, there would be, in an objective inquiry, a rule against impassioning the assembly with characterizations of facts that, while true, have the effect of motivating by their color and the susceptibilities of the audience rather than by their content and the strength of their meaning.

Facts are important, no doubt about it. The judgment about trading off humane values against economic efficiency requires some measure of how much of the one jeopardizes how much of the other, and of how various methods of titrating the two might adjust the marginal advantages. Unless there is to be a decision at one end point or the other, measurements of marginal costs do provide one useful starting point for the argument.

But they hardly conclude it. Vast piles of facts, about the benefits of cheaper transportation and the costs of injuries, about the distributions of gains and the focus of harms—about the values of subsidies to small towns at the cost of efficiencies to others—will never solve the problem of whether one *ought* to have a subsidy for this group or that, nor of how much. The facts are there to demonstrate the consequences of the policy choices, not to make them. There is a danger, though, that while more and more facts add more and more clarification and definition of the pref-

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erence choices, at some point their mass overwhelms the dialogue. But the preference questions are still not resolved.

There is also, in this heuristic catalogue, the risk of confusion about the meaning of disproving a non-exclusive hypothesis. Or if you like, call it the burying of the burden of proof. During a debate an advocate expounds a theory which predicts that doing X will be very, very good. An opponent then destroys with facts the credibility of that one theory. Strictly speaking, the net effect should be zero—the pendulum still dangles in the middle. It has not thereby been established that doing X will be very *bad*.

Dempsey makes rather much of the facts which prove that Alfred Kahn was wrong in his theory of contestable markets and in his predictions of limits on economies of scale. While broken promises may be reasons for voting the scoundrels out of office, they are not in our view facts which prove the contrary of what the promisors had wanted to achieve. Dempsey's facts may (or may not) have destroyed *one* set of arguments in favor of deregulation. But unless he is able to establish that those discredited arguments are the *only* legitimate reasons for moving in a particular direction, the reader should not accept the contrary positions without more. Disproving a negative is a contribution; it is not a conclusion. And rigor with facts is not necessarily more important (though it is easier) than rigor with preference is.

Even within the realm of the facts there are limits. A true empirical investigation requires an experimental group and a control group, each measured before and after the introduction of the experimental variable. If differences appear in the two "afters" which cannot be explained by any factors other than the variable being tested, it is legitimate to conclude (infer, actually) that the variable and its results are causally connected.

The real world does not allow for controlled experiments very often. The uncontrolled types are about all we have, most of the time. One of those is the before and after, without the control group. If the after is different from the before in a way that is explained by the introduction of the tested variable, we can infer some causal linkages, but with much less certainty and with the need for far greater caution than would be true for a true experimental design. In other words, *post hoc* is not necessarily *propter hoc*. It might be, if everything else can be ruled out. But not necessarily.

Deregulation occurred, and the commercial fleet is older than it was before. Is deregulation the cause of that aging? Maybe, but Dempsey does not give us enough data to be able to tell. What was the aging per year during regulation? Were the demand and supply functions different across time for other reasons, so that after a certain amount of new air-

craft purchasing the market would go soft for a while because the demand had just been satisfied?

Likewise for near misses, cardboard food, luggage in perdition, younger flight crews. . . These all occurred after deregulation began. Dempsey would have us believe they occurred *because* deregulation began. And he does propose a plausible theory—under competition, profit margins are slimmer and so investment in these commodities is systematically reduced. What little revenue there is, he implies, is spent just keeping the planes aloft. But it is also true that the air traffic control system is very different now from what it used to be, for reasons that have nothing to do with deregulation.

What we do need to know is what would have happened anyway. That much of the argument is not in either the Book or the Report. And without it, a two-celled design is a precarious sort of animal. There are male flight attendants now, and older female flight attendants. There were not many of those before 1980. Is that change a consequence of deregulation? Or could it be from some entirely different cause? How can we tell?

The critical question has to do with the difference between *deregulation* on the one hand, and *nonregulation* on the other. The fact is, that since its adolescence the airline industry at the least—and trucks and trains even more so—has never been *unregulated*. Airlines accepted regulation in return for subsidies (early mail contracts); railroads took it in return for protections. And so, as Dempsey records, regulation has been the only way of life the industry has ever known. What we have, then, after 1980 or so, is not an *unregulated* industry, but a *deregulated* one.

Consider just one possibility. Under regulation, where pricing is at least in part a function of costs, the management of an airline has less incentive to incur labor unrest than would be true in an industry completely unprotected from the realities of a competitive marketplace. It is therefore possible (though we do not say that it actually happened) that the costs of labor for airlines and trains were allowed to rise to supra-competitive levels. "Featherbedding," we believe it has been called. With deregulation and the competition it brings, airlines saddled with long-term labor contracts will face very serious perturbations in a competitive environment, problems which they might not have faced had they never been regulated in the first place.

How much of the mess we are in, described by Dempsey's data, is attributable to neither regulation or nonregulation, but rather to the change from the one to the other? As the Republicans in the White House have said of the economy, we cannot overcome in a night the effects of a binge that lasted a generation.

Exactly how the case could have been made is not something that

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we are able to comment on. But the fact that it needs to be made seems clear to us at least. One airline, America West, has grown up after deregulation and seems to be among the most successful in the industry. Are there other examples which, along with America West, could have been used as a sort of surrogate fourth cell in the experimental design? It seems likely; but in any case, it certainly does seem necessary.

The point is simply that the data do not compel *reregulation* if they can be as easily explained by the fact of *deregulation* as they could be by the fact of *nonregulation*. Policy-makers should be alert to this crucial difference—a special variant of the general maxim that bad enough should be left alone.

We offer one final criticism, or caveat in the assessment of the importance of this generally well-done work. The assemblage of the facts, the interweaving of analytical and policy arguments, the failure to take advantage of opportunities (albeit limited) for a more compelling heuristic structure, sum to a style which deserves some note.

There is a difference between scientific inquiry and advocacy. Advocacy presumes a forum with a neutral and capable decision-maker, in which each contesting point of view needs and deserves a champion. The champions have no duty to be objective; that is the job of the forum. Advocacy is inherently partisan. Decision-making, perhaps especially decision-making in the realm of social preference, ought to have advocacy as at least a part of its method.

Scientific inquiry is something else again. It purports to be objective. Its purpose is to investigate agreed-to issues, or to use data to clarify issues for policy-makers to consider. Its obligation is comprehensiveness—the statement not of one argument, but of all. The presentation not of data that would establish a single point of view, but of data which portrays a more complete picture, which essays the consequences of all the reasonable alternatives.

Science, moreover, because of its purpose to inform rather than to persuade, avoids the presentation of facts in ways colored toward a certain point of view, or designed to move the reader by tugging at hidden fears or foibles.

In these works we read, more in the Book than in the Report, phrases such as “the social Darwinist grave of bankruptcy.” We are told that “Under deregulation, management philosophy in the airline industry is dominated by the predatory insight of P.T. Barnum, ‘There’s a sucker born every minute.’” And “Too many of us have seen the crushed accordions of twisted steel and bent chrome on our interstate highways that were passenger automobiles before they were squashed by huge diesel-powered trucks pulling giant trailers. . .” Dempsey begins his summary with this: “The industry’s unrealistic scheduling, funneling of aircraft into

hub and choke bottlenecks, and filling of cockpits with near adolescent pilots, have significantly narrowed the margin of safety and sent the number of near-misses skyrocketing. Airline service has gone to Hell in the 80's. We are herded aboard aerial slums, served cardboard food, overbooked, bumped and misconnected. Our luggage is routed through the Twilight Zone, never again to be seen during our natural lives."

There are more, but those will do. We are, it must be said, generally admirers of Dempsey's literary style. And we are most certainly not attempting to say that such a style—the style of advocacy rather than the style of neutral science—is inappropriate. No science has ever advanced without its passions and its partisans. Especially in the field of policy debate, advocacy is very much to be called for and prized. But the style does justify the warning of the Preface: Consider this to be just one version of the picture, one glimpse of the problem and its array of potential solutions. Just one glimpse.

But what a glimpse it has been! We have been shown twisted heaps of metal and bloodless competitors lying in the Darwinian grave of bankruptcy, apparently choked to death on cardboard food, whose airplane seats have left the gate, their value lost forever. Small towns and big subsidies and the spirit of America bent 'neath the burden of the inelastic supply curve. But, and more seriously, we have also seen how even an elegant theory—such as that which led us to deregulation—can lead us astray when its dependence on empirical accuracy is disappointed by the failure of empirical estimates. If Dempsey has done nothing more, he has certainly taught policy makers exactly that weakness, and therefore the need for modesty about the course the theory commends.

None has limned the facts so well and few have argued a case more elegantly than Dempsey has in these two works. While in the end we prefer our supervision to his regulation, we applaud his contribution to a perplexing and lively debate. Well done, dear friend.