
Change, Challenge and Competition

A Review of the Airline Commission Report

Alfred E. Kahn

Congress's creation of a National Commission to Ensure a Strong and Competitive Airline Industry has an obvious explanation: the industry's reported losses of some \$10 billion over the preceding three years—more, according to the current cliché, than its total earnings over its entire previous history—and the pains that the associated failures and retrenchments have imposed on its workers and equipment suppliers. There were, of course, other important contributing factors: the long history of government involvement with the industry, via regulation and subsidy; the dramatic deregulation of the late 1970s and the continuing intense public controversy over its results ever since; the idea that civil aviation is an essential part of the national infrastructure; and the importance of government, in turn, as provider of infrastructure services to the industry. As the Commission pointed out, "virtually everything an airline does—from pushing off the gate and taking off and landing airplanes, to selecting and changing flight paths—can be done only with the prior approval of a federal air traffic controller. . . . In the history of

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American business there has never been a major commercial industry whose minute-by-minute operating efficiency was capped by the daily operating efficiency of the federal government—except for the airlines." An additional motivating factor was, surely, the importance of aerospace manufacturing—which is responsible for a greater volume of our exports than any other manufacturing industry.

The Commission's chairman was Gerald Baliles, former governor of Virginia. Its 14 voting members included former government officials, current management consultants (two partially overlapping categories, for obvious reasons), aviation labor union leaders, bankers, professors, representatives of airports and aviation equipment manufacturers and—somewhat surprisingly—among airline executives only the chairman and CEO of Southwest Airlines, the industry's one continuing success story, and an official of Federal Express. In addition there were, as non-voting members, 10 congressmen—including, in the immortal words of *Casablanca*, "the usual suspects"—and the chairman of the Council of Economic Advisers.

The Commission's major specific recommendations were:

- Extensive modernization of the air traffic control system.

• Entrusting responsibility for this goal to “such means as a public-private consortium, designed for expeditious development and implementation of improved technology.” This would involve restructuring the Federal Aviation Administration (FAA) by creating “an independent corporate entity within the DOT [Department of Transportation] to manage and fund air traffic control and related functions.” Although policy control would remain with the federal government, the entity would enjoy a great deal of autonomy—including the ability to issue long-term bonds for capital purchases, removal of its financing from the federal budget and liberation from the highly constraining procurement and personnel rules that apply to other government agencies, in order better to

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conform with “best practices in the private sector.”

- Compliance with the provisions of the 1990 Noise Act, requiring conversion of the fleets to so-called Stage 3 aircraft, while prohibiting localities from independently imposing additional noise restrictions.
- Regulatory reform such as adopting an annual regulatory budget; subjecting existing and proposed regulations to cost-benefit appraisals, including, specifically, a reduction in the random testing for drugs “to the lowest level possible without reducing the deterrent effect.”
- Creation of a presidentially appointed bipartisan airline financial advisory committee “to further the financial health of the airline industry; to review the financial condition of individual airlines . . . and to advise the Secretary of Transportation when an airline’s financial condition poses risks to the public or to the industry.”
- Monitoring and review of the financial health of the airlines by DOT. “If necessary, the Secretary could review a company’s business, capital, or financial plans with the advisory

committee’s assistance” and conduct advance reviews of major changes in an airline’s ownership and control, raising any concerns “directly with the airline’s management or board.” If an airline repeatedly fails to heed such warnings or expressions of concern, “the DOT can exercise its existing authority.”

- Reform of bankruptcy procedures that would “impose an absolute limit of one year on the exclusive right of a bankrupt carrier to file a reorganization plan” and that would also make government officials members of creditors’ committees and the Secretary of Transportation a statutory party to airline bankruptcy proceedings.
- Various kinds of tax relief for the industry, including exemption from the alternative minimum tax for companies that report losses; roll-back of the increase in the ticket tax stemming from the Budget Agreement of 1990 from 10 percent to its previous 8 percent level; reducing the budget allocation for the FAA that comes from the trust fund; exempting airline fuel from any proposed transportation fuel tax; limitation on the diversion of airport revenues for non-airport purposes; and close scrutiny of airport applications to impose passenger facility charges.
- Continued receptivity on the part of the DOT to “certificating new applicants who can meet the rigorous scrutiny of the Department under its fitness standards.”
- Adoption of “policies which promote the retention and expansion of aviation industry jobs.” Specifically, the “DOT [should] require acquiring airlines, in the purchase of substantial assets or routes, to advise the Department of plans to protect potentially displaced workers.” In addition, the airlines and federal government should generally pursue “policies that encourage a new, cooperative partnership between labor and management.”
- Strenuous efforts to liberalize the restrictions on international aviation on a reciprocal basis, including raising the ceiling on foreign voting equity in American carriers from 25 to 49 percent.
- Vigorous prosecution of international agreements limiting governmental subsidies to aircraft equipment manufacturers along with other efforts to assist domestic manufacturers, such as increasing Export-Import Bank funding levels

and encouraging joint ventures for the development of new equipment.

- “Development of policies which encourage service to small communities,” including continuation of the Federal Essential Air Service program “at sufficient levels to serve its legislated purpose”—namely, that no locality that had a minimum level of certificated service before deregulation lose it.

A comprehensive evaluation of these recommendations would consume much more space than the report itself, all the more so since so many of the recommendations are vague and subject to a variety of possible interpretations—including, prominently, that the vagueness was intentional. Many are either unexceptionable or expressions of pious hope—or both—and do not deserve specific evaluation. These characterizations are not intended to be critical: the vagueness of the Commission’s mandate, its composition and the political constraints on it made such results inevitable.

Of greatest interest to this reviewer and, I suspect, to readers of *Regulation*, are the findings and recommendations bearing on the desirability or likelihood of restoring economic regulation as it was practiced before 1978. I devote my principal attention to these. I then include briefer discussions of the Commission’s proposals for reorganization of the governmental agencies responsible for the delivery of infrastructure services to the industry; of its suggestions for tax relief and bankruptcy law reform; and a brief allusion to its curious decision not to discuss some of the familiar proposals for attacking asserted obstacles to competition in the industry.

Continued Non-regulation or Reregulation?

One’s appraisal of the sections of the report bearing (mostly indirectly) on reregulation will obviously depend upon one’s evaluation of the experience with deregulation—a ground that I do not propose to cover again in this review. My articles “I Would Do it Again” (*Regulation*, Fall 1988) and “Airline Deregulation—A Mixed Bag, But a Clear Success Nevertheless” (*Transportation Law Journal*, Vol. 16, No. 2, 1988) still reflect my essential evaluation, even though they are in many ways already outdated—a further demonstration of the cloudiness of our crystal balls, which, as I pointed out during

the process of deregulation, is hardly a justification for continued thoroughgoing regulation by myopic regulators but instead strengthens the case for leaving the industry’s future to the market.

The first logical question is, why set up a special commission at all to look into ways of helping this industry merely because its investors have lost a great deal of money in recent years and thousands of workers have lost their jobs—in the context, however, of total employment having increased from 303,000 in 1976 (the last year before deregulation took off) to 540,000 in 1992? The question is foolish in a sense. The reasons I have already supplied were obviously a

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sufficient *explanation*, and some of them provide partial *justification* as well: the importance of the industry, its direct role in national security and the special responsibilities of government for it stemming from its long history of regulation and subsidization, on the one side, and its traumatic deregulation on the other. That responsibility was reflected in the Deregulation Act itself, in its institution of the subsidized Essential Air Services program and its promises—which have proved essentially empty—of assistance to workers displaced because of that abrupt change in national policy.

At the same time, the constitution of a special commission such as this one really contravenes the essential spirit of airline deregulation, the intent of which was to treat this industry no differently from others: clearly this means the government bears no special responsibility merely because investors have lost a great deal of money. To be sure, the government continues to bear a major responsibility for safety; but there was essentially no mention of that justification for special inquiry in the act of Congress setting up the Commission. And while I do not wish to minimize the severity of the disruptions and insecurities visited upon airline employees by

the removal of government-enforced cartelization, it would be difficult to make a case that they are more deserving of solicitude than the many millions of others in the economy at large who have in recent years lost their jobs or been forced to accept inferior employment.

A "Strong and Competitive" Industry—an Oxymoron?

The consistent coupling in the enabling legislation of expressions of concern about the financial condition and strength of the airlines with a repeated emphasis on the importance of *promoting* competition effectively precluded any serious public consideration of a return to the competition-suppressing regulation of 1938-78. It may also explain the absence of overt consideration in the report of whether the two goals of a financially strong and competitive airline industry are indeed compatible. The question was raised only in the dissent of Commissioner John Peterpaul (vice president of the machinists

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union), who quoted his fellow Commissioner Felix Rohatyn as having observed (along with his own exegesis): "It may not be possible' for this country to achieve both a strong *and* competitive airline industry at the same time. In other words, we may not be able to have both hyper-competitive carriers and healthy carriers."

While both Congress, in its enabling legislation, and the Commission, in its report, studiously avoided the question, it is not a ridiculous one. Even though I recognized the possibility 15 years ago, I must concede that the industry has demonstrated a more severe and chronic susceptibility to destructive competition than I, along with the other enthusiastic proponents of deregulation, was prepared to concede or predict: namely, tendencies to overly exuberant, competitive expansions of capacity in periods of

growing demand, quite possibly attributable to the familiar "S-curve" phenomenon—the tendency for market shares to increase disproportionately with more intensive scheduling—combined with outward immobility of capital and other inelasticities of supply in the face of decelerated expansion or declines in demand.

Even though I disagree with his conclusions, I suggest that the dissenting Commissioner Peterpaul was therefore perfectly correct in complaining about the Commission's failure to confront those fundamental questions. The consequences of this failure, he contended, was that "the solutions recommended by the Commission will prove to be totally inadequate in promoting either strong or competitive air transport and aerospace industries."

While recognizing this apparently inherent propensity of the industry—which manifested itself, under regulation, in excessive service competition, resulting in chronically low returns before 1978 as well as after—I continue to reject it and the industry's recent abysmal financial performance as justifying significant reregulation, for the following major reasons:

- The only legitimate basis for regulatory restrictions on competition in such circumstances is if the destructively competitive tendencies pose a threat to the welfare of customers—specifically, by causing a skimping on safety or quality of service that customers would have difficulty detecting—that cannot be remedied in less anti-competitive ways.
- Not even the dissenting Commissioner Peterpaul claims that the industry's severe financial distress shows signs of threatening the safety of air transport.
- While both Congress and the Commission expressed specific concern about the ability of the industry to raise the capital required to compete effectively in international markets, it is foreign carriers that, quite properly, regard themselves as incapable of prevailing in fair and open competition with the Americans rather than the other way around.
- Congress and the Commission also expressed concern about the ability of the industry to finance the statutorily prescribed conversion to Stage 3 aircraft. I have no opinion of whether the noise requirements make economic sense. But if they do, a flat banning of Stage 2 aircraft either in phases or by some stipulated date should—along with the curtailments of new

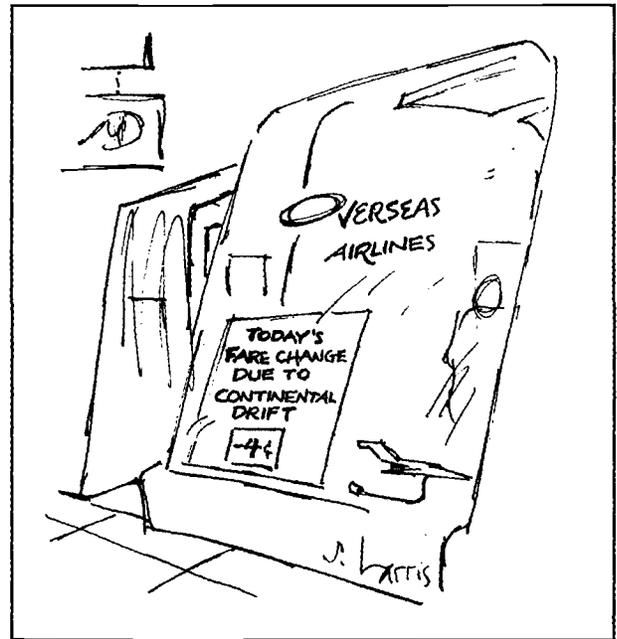
orders in recent years, the recovery of demand and the removal of non-complying aircraft from the market—suffice to restore the industry's ability to raise the necessary capital.

- The cliché about the industry having lost more money during the last two years than it earned in its entire previous history relates to returns on equity, not on total invested capital (including interest). While the latter, too, have turned troublesomely negative in recent years, they still averaged (by a simple average of annual returns) a positive 4.15 percent over the entire period 1979-92, as compared with 6.3 percent from 1965 through 1977 (leaving the very profitable 1978, when deregulation was already well under way, out of both calculations). The industry's recent catastrophic financial performance, in other words, has been the result in large measure of its ill-advised extraordinarily heavy recourse to borrowing—much of it to finance mergers and takeovers. According to *Fortune*, the leveraged and debt-financed mergers added about \$2 billion a year to the industry's debt service. That alone would explain no less than 60 percent of the reported aggregate losses in 1990-92. While the tax policy that has encouraged such immense accumulations of debt in preference to equity financing in the economy at large clearly deserves to be changed, the fact that foolish investors have lost billions of dollars does not justify recartelization of the airline industry.

- Nor has the intense price competition manifested itself in a substantial reduction in real wages. Between 1979 and 1992, according to the Air Transport Association, average total compensation (including fringe benefits) per airline employee (which of course conceals a wide spread between, for example, flight attendants and pilots) increased from \$29,946 to \$52,057, or 73.8 percent, while, in private industry at large, the employment cost index (also including fringes) went up 95.6 percent and the consumer price index 93.3 percent. Competition has evidently resulted in some relative decline in average airline wages and benefits—just as its suppression under regulation permitted a much more rapid increase than in the economy at large—but not, surely, to a degree even remotely worthy of public concern.

The Recommended Financial Advisory Committee

It is easy to see that the Commission's recommendation of an independent financial advisory



committee was the outcome of a profound ideological controversy among its members. The proposal obviously represents an uneasy compromise between the majority, which either staunchly opposed or recognized the futility of

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proposing substantial reregulation, and the minority that clearly favored some such step. The former can point to the report's declaration that the role of the committee "would be truly advisory" and that it was not recommending any "new DOT regulatory authority." And the proponents can and doubtless will point to the fact that the constitution of the committee would be in the context of the Commission's assertion "that strengthening the financial condition of the airline industry is in the public interest," that it would be presidentially appointed and therefore expected to be both high-level and influential, that it would include representatives of finance, industry and labor (with no mention, for example, of the antitrust agencies). Those in favor of some sort of reregulation can also point

out that the “existing authority” of DOT, which the Commission observes the Secretary “can exercise . . . [i]f an airline repeatedly fails to heed warnings or concerns” and which makes it unnecessary for the Commission to recommend “new DOT regulatory authority” includes the authority to rescind a carrier’s operating license on the ground that it is not “fit.” The Commission recommends this fitness standard be “rigorously” applied also to new entrants.

My view of this recommendation coincides with that of my predecessor as chairman of the Civil Aeronautics Board (CAB) and in initiating the airline deregulation process, John E. Robson, who labels it “a possible Trojan Horse for airline reregulation”—precisely the characterization that I inserted in my own notes before reaching his vigorous dissent. (On the ground that two characterizations are twice as good as one, I suggest it should also be regarded as the camel’s nose under the tent.) I regard it as by far the most important recommendation of the Commission (I mean by this in no way to mini-

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mize the merits of such sensible recommendations as restructuring the FAA and liberalizing the restrictions on international aviation) because it is one of the few directed at the fundamental, unconflicted issue of reregulation—and because it is profoundly dangerous.

Archimedes once said that if he were given a lever long enough and a place on which to stand, he could move the earth. The DOT’s authority to require that carriers, both applicants and incumbents, satisfy its standards of “fitness”—defined, according to the Commission’s recommendations, to include financial “fitness”—is just such a lever and vantage point. While the majority of the Commission clearly intended no such result, the report provides ample support for using such authority to reinstitute thoroughgoing carteliza-

tion of the industry.

Observe that the committee would be instructed to advise the Secretary “when an airline’s financial condition poses risks to the public or to the industry.” In the context of an overwhelming concern about the industry’s financial condition, it is difficult not to see in this instruction a proposed application of precisely the criterion of “financial injury” to competitors on the basis of which the CAB historically denied applications for new route authority in competition with incumbents. The DOT would also be instructed to “review a company’s business, capital or financial plans”—which would clearly embrace plans to expand or extend operations—to determine whether proposed expansions might not be in the carrier’s own interest (precisely as the CAB undertook responsibility for determining before 1978) or in the financial interest of the industry at large. It is impossible to ignore the likelihood that among the “business . . . plans” that the Secretary would be encouraged to review, with the assistance of the advisory committee, would be new pricing initiatives: surely these might be regarded as “posing risks . . . to the industry.” Similarly, the recommendation of the Commission that “the DOT continue to be receptive to certificating new applicants who can meet the rigorous scrutiny of the Department under its ‘fitness standards,’” while couched in pro-competitive terms, has an ominous ring. “Fitness” to be counted on to operate safely and not to abscond with travelers’ dollars is one thing; but “rigorous” tests of financial “fitness” can serve also as a peg on which to hang full-scale recartelization, as Commissioner Robson eloquently pointed out in his dissent.

Because, then, the industry’s wounds have been largely self-inflicted; because the compression of its real wages has been only slight and has only partially reversed their inflation under regulation and both efficiency and equity almost certainly require that the process continue; because these problems have been exacerbated by such more or less temporary circumstances as the recession and the stubbornly feeble recovery in the United States and the other major industrial countries; and because correction of the previous overexpansion of capacity is already in process, on both the supply and the demand sides, I see no legitimate basis in the experience of the past three years for even par-

tial reregulation. As for the possibility that the goal of a financially strong and competitive industry may be an oxymoron, surely the intense competition released by deregulation has made the American industry an even more formidable competitor internationally than it was before; the process of further compression of costs is still going on and is still a healthy one. I see no reason, therefore, to disagree with the central finding by Michael Porter (in his *The Competitive Advantage of Nations*)—based upon his exhaustive analysis, country by country and industry by industry—that the single most important source of international competitiveness is intense competition domestically.

Competitive Issues

In view of the Commission's finding that the industry is today far more competitive than it was under regulation and its central concern with the industry's financial weakness, it is perhaps understandable that it explicitly decided to make no recommendations about perceived existing obstacles to competition: "Some of the issues that we were asked to study, such as computer reservations systems and frequent flyer programs, after careful examination required no action by this Commission."

The Commission was not entirely silent on policies to promote competition. It devoted a single sentence to advocating vigorous enforcement of prohibitions of anti-competitive mergers and acquisitions and its unexceptionable recommendations for liberalization of international aviation correctly identified the single most important effort that the government might make to this end.

I will not attempt here to make good the thinness of this discussion, except to offer my opinion that there was no justification for the failure during the 1980s to apply the antitrust laws vigorously, but that it would probably not have made a major difference in the end result, at least thus far, since the industry continues to be so intensely competitive. I have long advocated efforts to remedy the competitive advantages of the hub-dominating megacarriers stemming from their frequent flyer programs, override commissions to travel agents and ownership of computerized reservations systems. But it is necessary to recognize that those advantages have stemmed also, in important part, from the

superior efficiency of hub-and-spoke operations, which would and should have been immune to antitrust attack. Moreover, reflecting once again the cloudiness of our crystal balls—the pendulum of informed opinion has recently swung back from a widespread concern that we would soon end up with an industry dominated by only three or four megacarriers toward a view of them as pitiful giants, forced drastically to curtail their operations and to find ways of competing more effectively with their much smaller, more flexible and lower-cost niche rivals.

Reorganization of the FAA

If the proposal for setting up an independent financial advisory committee is by far the most dangerous recommendation of the Commission, the recommendation for restructuring the FAA—specifically, that it be "established as an

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independent government corporation and removed from the federal budget process"—is the most important positive one. As the Commission points out, the FAA, as now constituted, financed and constrained, is incapable of providing the industry with the state-of-the-art air traffic control system that it badly needs. The creation of an independent federal corporate entity to manage and fund air traffic control and related functions, with the ability to issue long-term bonds to finance the extremely large investments required, would almost certainly be a great improvement.

The only substantial—but very important—remaining question is whether the proposal goes far enough. It would keep the new corporate entity within the DOT and leave with the federal government "policy control of the air traffic control system" as well as the oversight of system safety. While I find it difficult to conceive of the responsibility for safety being removed from government, my preference would have been

consideration of privatizing the air traffic control function as recently urged by Robert W. Poole, Jr., of the Reason Foundation, entrusting it to a cooperative, industry-owned and user-funded corporation, with, I would add, strict antitrust-like requirements of open, non-discriminatory access for all certificated carriers.

It may be, of course, that the Commission's recommendation was dictated by considerations of political feasibility. This may have been true also of its failure to consider the possible desirability of privatization of airports, as well—as, once again, Robert Poole has vigorously advo-

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cated—in which event it would have had to consider the need for some sort of regulation of the privatized entities.

The Commission did make other recommendations with respect to airports: that (1) the high-density rule at the four slot-constrained airports be reexamined, with a view to its possible removal or relaxation; (2) Congress fully fund system capacity elements such as airports as long as these remain within the federal budget process; (3) the maximum possible joint use of air space and military air fields by the FAA and the Department of Defense be subject to active cooperation between the two agencies; and (4) airport bonds be classified as public-purpose bonds. The first and third seem to me unexceptionable; the second and fourth barely scratch the surface of the question of the extent to which airport financing should be removed from governmental budget processes or subsidized at taxpayers' expense.

Tax and Related Budgetary Relief

I have no basis for an independent opinion about the several proposals by the Commission under this heading. I find it difficult, however,

to take them seriously, unaccompanied as they are by any explicit consideration in the report of whether or by what standard the industry may be considered to be overtaxed or insufficiently funded by the government. The recommendations seem on their face to be governed by no guiding principle other than to find plausible ways of assisting the industry financially.

Bankruptcy Law Reforms

The history of the past 10 years has been punctuated with complaints from the non-bankrupt carriers that the way in which the bankruptcy laws have been administered bears a heavy responsibility for the industry's financial plight—prolonging the life of failed carriers that ought to have been allowed to die; conferring on them the unfair competitive advantage of relief from responsibility for debt service; and encouraging them to engage in severe discounting of fares in a short-sighted quest for cash flow sufficient to keep alive. Bankruptcy reform, the report declares, "has received more attention than almost all others in the course of the Commission's work."

The Commission's assessment of these complaints is moderate. It points out that the asserted cost advantages accruing to carriers in bankruptcy are accompanied by severe disadvantages, including, prominently, "reduced consumer . . . confidence, marked loss of traffic . . . and hamper[ing] an airline's ability to do business with its suppliers on other than a cash-up-front basis." It does not blame the bankruptcy laws for the industry's proclivity to price wars, presumably in consideration of the fact that it has by no means been the carriers in receivership that have been exclusively responsible for their initiation and prolongation. It concludes, nevertheless, "that airline bankruptcies take too long. . . . There is little question that comprehensive bankruptcy code reform is overdue."

Its recommendations are modest: the "absolute limit of one year" that it proposes relates not to the life of bankrupt carriers but only to the exclusive right of their incumbent managements to file reorganization plans.

The bankruptcy laws fulfill a very important economic function. When a business fails to meet its obligations to its creditors, economic efficiency requires a decision, in a context of inevitably great uncertainty, whether it is more valuable alive or dead—that is, whether it is or is not likely to gener-

ate net revenues with a present value greater than its salvage or scrap value. Those criteria would seem to accord with the interests of the creditors as well. To the extent, therefore, that the administration of the bankruptcy laws does in effect place the enterprise under the control of the creditors—who will have an undiluted interest in making the best possible estimates of those highly uncertain future magnitudes—it will in principle make the most efficient decisions possible.

The legitimate complaint about the way in which the laws have in fact been administered seems to be that it has not been in conformance with this exclusive goal and that the effect has been to keep alive carriers and managements that have merited extinction, all the while dissipating valuable assets. On the other hand, it is important for economists to remind themselves periodically that their definition of efficiency runs in terms of ultimate “equilibrium” outcomes, in which displaced workers are—by definition—absorbed into alternative employments. There is an economic as well as social value served by cushioning those “transitions” in one way or another—some ways better than others. In these circumstances, the Commission’s modest recommendations about bankruptcy law reform—including its recognition that the need, if any, relates to industry generally rather than to the airlines specifically—seem to me difficult to oppose.

Conclusion

The single most important rule for doctors is to do no harm. By this standard—apart from the one Trojan Horse concession to its minority—

the Commission has earned the public’s gratitude. This gratitude is surely augmented if one takes into account the political constraints to which it was subject and the intractability of the problem that it was charged to confront.

Selected Readings

- Borenstein, Severin. “The Evolution of U.S. Airline Competition.” *The Journal of Economic Perspectives*. Vol. 6, No. 2, Spring 1992.
- Evans, William N., and Kessides, Ioannis. “Structure, Conduct, and Performance in the Deregulated Airline Industry.” *Southern Economic Journal*. Vol. 59, No. 3, January 14, 1993.
- Kahn, Alfred E. “The Competitive Consequences of Hub Dominance: A Case Study.” *Review of Industrial Organization* 8, 1993.
- Kahn, Alfred E. “Destructive Competition and the Quality of Service.” In *The Economics of Regulation*, Vol. II. New York: John Wiley & Sons, 1971. Reprinted by MIT Press, 1988.
- Morrison, Steven A., and Winston, Clifford. *The Evolution of the Airline Industry*. Washington, D.C.: Brookings Institution, forthcoming.
- Transportation Research Board, National Research Council. *Winds of Change, Domestic Air Transport Since Deregulation*. Special Report 230, 1991.