
Of the recent deluge of legal literature critical of the Civil Aeronautics Board, almost all has focused on essentially procedural issues. We have learned that the CAB needs abler Commissioners, a better definition of standards and a more rigorous system of *stare decisis*, less *stare decisis* and more planning, writing of opinions by Commissioners rather than staff, delegation of authority from Commissioners to staff, and freedom from extra-judicial pressures. Few have asked what would seem prior questions. What tasks should the CAB be attempting? Is there any justification for leaving steel, automobiles and other major industries to the antitrust system while singling out a few industries such as air transport for comprehensive economic regulation of entry, price levels, price structure and accounts?

Certainly the tradition of administrative law teaching in the United States tends to accept the purported substantive goals of regulation while concentrating on the procedural techniques for reaching those goals. Only in the case of the National Labor Relations Board and, to a lesser extent the Securities and Exchange Commission, do substantive policies face systematic academic scrutiny. This tradition is curious. In antitrust, taxation and other public law fields, law teachers and writers do not hesitate to evaluate and criticize substantive rules.

Analyses of the CAB have all too seldom asked whether the Board's difficulties do not stem from attempting to do an overly complex, yet economically trivial, job. In these circumstances the legal profession is

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4 Id. at 944-48; Landis; *The Administrative Process—The Third Decade*, 13 AD. L. REV. 17, 21-22 (1960).


7 But see Professor W. K. Jones' recognition in his perceptive study for the Administrative Conference of the CAB's licensing procedures that "a reexamination of both substantive policies and their procedural implementation would open a number of avenues for change." *Jones, Report on the Licensing of Domestic Air Transportation*,
indebted to an economist, Richard E. Caves, whose Air Transport and its Regulators does not hesitate to ask the crucial questions for us and to go further in answering them than any other study to date.

Most arguments for comprehensive regulation run along one of two lines—either that the industry is characterized by too little competition or by too much, and therefore competition cannot be depended upon to fulfill its traditional role of allocating resources and determining appropriate prices. Within the "too little" category fall the "natural monopoly" industries such as electric power or telephone service. Where only one firm can exist in a given area, it is thought necessary to regulate prices in order to preclude monopoly profits and to regulate entry in order to eliminate the "waste" which is said inevitably to occur whenever some suicidal speculator attempts to establish a second firm. In the "too much" category the notion is that certain industries are characterized by "destructive" competition—too many small, irresponsible firms engaged in a death struggle, cutting corners and failing to provide adequate service, and that unless economic regulation is imposed to create order, resources will be wasted in internecine warfare and in the end only a single monopoly firm will remain. Such, for example, was the proffered justification for the Motor Carrier Act of 1935. While both arguments, however inconsistent, are advanced to support comprehensive economic regulation of the air transport industry, neither fits the facts.

The natural monopoly argument proves inapplicable because, quite aside from the large number of carriers flying within the United States and the substantial competition provided by railroad, bus and private automobile, an overwhelming percentage of the major city-pairs support more than one air carrier and some one-half of all city-pairs have a single carrier only because in the absence of direct subsidy there would be no air service at all. Nor has the Board treated the industry as a "natural monopoly" industry. Caves concludes that the rate of return for air carriers has been about average for incorporated business generally while the CAB, far from imposing a limit on carrier earnings, has treated price competition—at least within a given class of service—as anathema and has been wary of condoning any competitive moves which threaten to reduce profits. The return on equity of 16 per cent for the larger trunkline carriers, 18 percent for the smaller trunkline carriers, and 21.35 per cent for local-service carriers, which the CAB has approved

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8 Caves 12-30.
9 Caves 398-94.
10 Caves 369-77.
in recent fare-level cases, does not suggest overly stringent regulation. 11

What then should we conclude about the opposing explanation—that the law of the CAB is all that stands between the airlines and the law of the jungle; that without regulation of entry the airline industry would be flooded with new entrants, armed with baling wire, greed and little else; and that the industry would dissolve in a bitter war-to-the-end for a few choice markets, leaving the rest of the country either without service or with a single monopoly carrier? 12 The answer that appears from Caves' work is that the "destructive" competition argument does not fit the facts. First, there is no evidence of destructive competition before the enactment of the Civil Aeronautics Act in 1938. The low profits then prevailing had other causes and the carriers, the principal advocates of regulation, had just as much incentive to eliminate competition in general as "destructive" competition. Second, while the CAB has not admitted a single carrier to trunkline status since 1938, Caves finds little reason to believe that entry into particular city-pair markets has been seriously restricted, particularly since the mid-1950's. He finds it "hard to point to any group of air routes that has for long had many less than the maximum number of carriers that could occupy it efficiently..." 13 Third, the argument is weak on analytical grounds. There is no reason to believe that unsubsidized carriers would give up markets that they now serve profitably in order to throw resources into money-losing battles in the few largest markets. Nor is there any reason to believe that businessmen would throw money away by entering markets with a full complement of existing carriers unless they believed that they would be more efficient than existing carriers. If that proved to be the case, one ought to welcome the entry. Whatever the financial fortunes of individual firms, few assets are lost to society when a firm fails, given the "relatively perfect and world-wide" resale market in planes, 14 the demand for specialized air line personnel and the existing system under which airports and many ground facilities are owned by

11 Caves 394.

12 See, e.g., the following "analysis" provided by the President of the Air Transport Association, the spokesman for the carriers, and a colleague:

"On the day [when entry controls were eliminated], every airline would tear up its time tables, disregard its certificates, forget that it has franchise responsibilities and do what business it pleased in the interest of greater profits and not public convenience... The industry, in such a chaotic struggle for survival, would then have to abandon service to roughly some 500 of the cities to which it is now certificated, and operate only between the 50 most profitable pairs of points." Tipton and Gewirtz, The Effect of Regulated Competition on the Air Transport Industry, 22 J. AIR L. & COM. 157, 190 (1955), quoted in Caves 382-83.

13 Caves 230. To this generalization Caves finds, however, "major exceptions in some of the prime markets of the Big Four before the mid-1950s." Ibid.

14 Caves 106, 136.
parties other than the carriers. Moreover, far from being characterized by heavy fixed costs and therefore, according to the argument sometimes heard, susceptible to heavy financial losses under competition, the airline industry has surprisingly low fixed costs.\textsuperscript{15}

The inescapable conclusion is that the airline's structure is deemed appropriate for regulation not because it is an industry that would otherwise be characterized by too little or too much competition but because it falls somewhere between. Ignoring the obvious point that under this analysis no industry can be deemed inappropriate for comprehensive economic regulation, we can nevertheless see that what is feared is, to flourish the talisman, oligopoly. Barring certain technical arguments based on "second-best" theorizing,\textsuperscript{16} the usual fear is that the few firms which constitute an oligopolistic industry will act collusively, either tacitly or overtly, in order to participate in the monopoly profits which a single firm could reap. If fear of oligopoly is the justification for regulation, then it seems appropriate to ask whether CAB policies have been designed to prevent collusion. Since the antitrust system alone presumably could deal with overt collusion, we should really be interested in tacit collusion. In a market with few firms tacit collusion really refers to a situation where these few firms act with full realization of their interdependence, avoiding price-cutting and other tactics which could cause industry output and prices to depart from that deemed optimum for a single monopoly firm.

Accepting, then, for the purpose of discussion the oligopoly justification for regulation, one is struck by Caves' conclusion that, far from fostering price competition, the CAB has gone out of its way to discourage all price competition. Differences of view among the carriers over the most profitable fare strategy for the industry have not been permitted to erupt in differences in fares.\textsuperscript{17} Caves further finds that the CAB has on balance discouraged quality alternation or class-of-service proliferation strategies that might in part substitute for price competition.\textsuperscript{18} If the CAB's power over entry has been at all effective, its effect must have been to protect entrenched oligopolists from the disturbing effect on market share and price that is associated with new entrants. Doctrines of primary and exclusive jurisdiction have tended to ward off unsettling radiations from antitrust. Oligopoly plus regulation may add up only to effective oligopoly behavior.

\textsuperscript{15} Caves 80-82.


\textsuperscript{17} Caves 154-55, 232.

\textsuperscript{18} Caves 232-39, 250-52.
Even if one dismisses the natural monopoly, excessive competition and oligopoly arguments, one is met with a host of assertions concerning the deterioration of service that would supposedly accompany deregulation. Safety would decline. Or the planes would never leave on time. Or reservations would be unobtainable. It is difficult to know how to evaluate such unsupported assertions. It is not at all clear why a firm, faced with competition and seeking to make money, would eliminate maintenance, scheduling or reservations while a regulated firm, more assured of profits by the regulatory policies we have observed, would nonetheless incur the necessary expenditures. If the answer is that the regulated firm is specifically required to provide prescribed levels of maintenance, to adhere to advance schedules and to maintain a reservation service, then surely the imposition of specific requirements does not depend on the additional paraphernalia of entry controls, fare proceedings and the like. As Caves points out, one can imagine a system of safety regulation unrelated to economic regulation. Indeed, the division of authority between the CAB and the Federal Aviation Authority is grounded on just such a distinction.\footnote{Caves 437.}

Aside from the effects one can expect from helping an oligopoly to succeed, the principal effect of the CAB's policies appears to be to channel a much greater stream of resources into the airline industry than would have been the case under competition. It has achieved this effect by inducing much earlier and therefore greater investment in new aircraft than the airlines would have made under competition and by subsidizing service by local-service airlines in smaller communities.\footnote{Until the early 1950s the CAB subsidized even the trunklines serving major population centers.} The greater stream of resources has been financed in two ways: first, by higher fares firms are permitted to charge as a result of regulatory protection from new entry and from price and product competition; and second, by cold cash advanced by the Government through the mail-pay scheme or otherwise. If resources were not scarce, one might hesitate to quarrel with such a policy. But excess investment in one industry tends to be made at the cost of investment, or goods and services to society, in other industries.\footnote{The issue of the appropriate levels of government expenditures and of the deficit should not be confused with the question of the source of the real resources to be consumed. See Denison, The Sources of Economic Growth in the United States and the Alternatives Before Us (Comm. for Economic Development, Supp. Paper No. 13) (1962). The discussion also rules out the possibility of the existence of external economies which might justify subsidy. Caves 430.}

To what extent such diversion of investment is desirable for military, technological or social purposes is a crucial, but all-too-
seldom analyzed, issue. In any event, one of the consequences of subsidy has often been regulation. One of the most interesting aspects of Caves' study is his suggestive analysis of the special sets of incentives faced by a firm under direct subsidy. Subsidy seems ineluctably to induce controls on the receiver's conduct. Since one can conceive of incentive forms of subsidy which would not require direct control of behavior, it is worth asking whether the felt need to subsidize justifies the accompanying regulation.

Given this desire to subsidize by higher fares and direct grant, which apparently is what is meant by the "promotional role" of the Board, what can one say about the cost of regulation itself? Here Caves' analysis is scanty but suggestive. The legacy of the CAB has been a patchwork series of route certifications with a welter of special restrictions requiring intermediate stops, prohibiting intermediate stops, requiring through service, prohibiting through service and so forth, all designed to help weak carriers, offset advantages to connecting carriers, and accomplish all of the other minor policies with which CAB jurisprudence abounds. The effect, as Caves indicates, is to create inefficiency in routing of planes, seasonal imbalances and other artificial constraints which can only be translated into costs to the economy.

One other kind of cost which Caves does not adequately analyze, no doubt because he is not a lawyer, is at the heart of the current debate in the legal literature. Professor Cramton has suggested that regulatory agencies, instead of focusing on the crucial questions of market structure, have devoted themselves to questions of equity which make little economic difference—such as determining which one of two or more applying carriers is to get a new route award and what restrictions on the certificate have to be imposed to balance the competitive advantages of incumbent and new carriers. Given the judicialization of administrative procedure with the adversary system, cross-examination, record-building and promiscuous intervention, the inevitable consequence is that the resources of the agency are overtaxed on economically trivial issues. No degree or combination of ability, definition of standards, procedural reform and planning can reduce this cost of regulation.

22 The current debate over a supersonic plane is suggestive. While the debate centers on a one billion dollar subsidy to produce such a plane, it is seldom asked whether that one billion dollars worth of resources should be denied other sectors of the economy.

23 Caves 420, 430-31. Caves also suggests that the outdated route systems which are the legacy of regulation lead to a less-than-optimum choice of equipment such as "owning small numbers of many kinds of planes or of using planes on a route that are less suited than other types available."

Caves was not, of course, preparing lenses for lawyer's myopia and so his insights on the role of economic regulation are to a certain extent sandwiched among the large bodies of factual material which are the hallmark of an economist's "industry study." Of the four parts into which the book is divided, Part I supplies the conventional data on concentration, elasticity of demand, costs and barriers to entry which lies within the peculiar competence of the economist. Part II, which will be more familiar to the lawyer, describes the pattern of regulation. This material, which combines legal, administrative and economic insights, is of high quality. Part III, in a return to more conventional economic analysis, considers the market conduct of the carriers with particular emphasis on pricing, investment and product strategies. Part IV, dealing with market performance—and particularly the last chapter on "Performance, Structure and the Goals of Regulation" which is a kind of summary plus speculation—is the most interesting but at the same time the most sketchy and impressionistic.

This reviewer does not purport to be technically competent to judge the economic materials. One draws comfort, however, from the care with which the legal materials are handled. At the same time one is troubled by the scantiness of the data on which some of the economic judgments are made. Some of Caves' judgments, particularly where he speculates about what would happen in the absence of regulation, seem to be made—perhaps inevitably—as much from \textit{a priori} reasoning as from evidence.

It will, however, always be difficult to know what would happen if a regulated industry became unregulated. A lack of knowledge of consequences did not, of course, deter the Congress from imposing regulation in the first place. And it is cold comfort to recognize that the CAB itself has often not been able to predict the consequences of changes in its regulatory policies. To seek the consequences of deregulation tends to be, barring transitional questions, only a somewhat more complicated way of asking what the consequences of regulation are in the first place. The only scientific way of getting at the consequences of regulation of a particular industry is to isolate a control group—an otherwise identical industry which is not regulated. There are two principal albeit imperfect sources of such a control group—the same industry prior to regulation and the same industry in unregulated intrastate transactions.\footnote{For a promising beginning using primarily the pre-regulation approach, see Stigler and Friedland, \textit{What Can the Regulators Regulate? The Case of Electricity} (mimeo 1963); Stigler, \textit{Public Regulation of the Securities Markets}, 37 J. Bus. 117 (1964).} Caves despairs of learning anything about the airline industry from the first method; the industry was relatively immature prior to the 1938 Act and was in any event heavily regulated even then by the Post Office Depart-
ment and other bodies. It may be that in spite of the paucity of instances, Caves could have done more with the available material on relatively unregulated intrastate activities, particularly the San Francisco-Los Angeles-San Diego markets where, it is said, one finds a good deal of price competition, adequate service and relatively low fares.26

One of the strengths of Caves' work is that he does not fail to face squarely the practical question of how deregulation should be conducted. However strongly one may oppose regulation and rue the tendency of regulatory programs to be irreversible, one must acknowledge the transitional difficulties which deregulation would produce. A palatable plan for deregulation should minimize windfall gains and losses and should provide some assurance of an acceptable minimum of service during the transition period for those markets thought to be viable under competition.

Caves' first step would be to open large city-pair markets to unlimited entry by presently certificated unsubsidized carriers. Rather prompt rearrangement of routes and more efficient use of carriers and ground facilities could be anticipated. At the same time he would set maximum and minimum fares 10 per cent above and below existing fares and remove restrictions on the creation of new classes of service. Step two would be the elimination of entry controls on new, previously uncertificated carriers in these same big-city markets. The last step would be to open all remaining unsubsidized city-pair markets to the regime of open competition. Sufficient time would elapse between each of the three transitional stages to permit stabilization of the industry, thereby minimizing the transitional effects of deregulation.27

Caves has thus offered material for the first round of what could be, whatever the final conclusion, a most productive debate on the purposes and consequences of comprehensive economic regulation. Whether the proponents of regulation will face the challenge squarely or elude it with the comfortable maxims of an earlier, more optimistic era remains to be seen.

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27 Caves apparently sees no alternative to CAB regulation of local-service carriers so long as direct subsidy is continued.

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