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IN REMEMBRANCE OF ALFRED E. KAHN: FRED KAHN'S IMPACT ON DEREGULATION AND REGULATORY REFORM[‡]

After Airline Deregulation and Alfred E. Kahn[†]

By NANCY L. ROSE*

I begin by baldly stating my essential conviction: airline deregulation has been a nearly unqualified success, despite the industry's unusual vulnerability to recessions, acts of terrorism, and war.

—Kahn, 2004

Alfred E. "Fred" Kahn is widely remembered as "The Father of Airline Deregulation." Though he consistently redistributed credit for the reform (e.g., Kahn 2008), Kahn's candor, wit, and willingness as chairman of the Civil Aeronautics Board (CAB) to step outside the "regulation as usual" box established him as the face at its forefront. This legacy is enormous, as the 1978 Airline Deregulation Act may be one of the greatest microeconomic policy accomplishments of the past fifty years (Bailey 2010). The policy is notable for several reasons. It was the first dismantling of a substantial economic regulatory apparatus, and one of the only instances that included abolition of the relevant regulatory agency. Deregulation dramatically transformed the airline industry. The postderegulation US airline industry generated lower average fares; greater numbers of flights, nonstop destinations, and passengers; dramatically different network structures; and increased productivity (e.g., Borenstein and Rose 2008). And its compelling demonstration of the benefits of replacing regulation with competition advanced a broader reform agenda, both in the United States and abroad. "Without airline deregulation, … we probably would not have been able … to deregulate trucking, railroads, and buses, or continue along the same path with other major industries" (Kahn 1988a, p. 22).

The history and politics of airline deregulation and economic assessment of its impact have been exhaustively analyzed and summarized.[1] This paper instead highlights a handful of lessons that Kahn and the deregulated airline industry impart for students and practitioners of economic regulation—lessons that apply well beyond airlines. Given the perceived failures of "deregulation" in the post-2008 financial crisis world, some may prove especially timely.

I. Regulating Well is Hard

The Economics of Regulation: Principles and Institutions (Kahn 1970, 1971) remains a masterful and relevant assessment of the theory and practice of economic regulation. Airline regulation garnered a relatively brief discussion in this work, perhaps contributing to Kahn's initial rejection of the CAB role, arguing he should switch places with "whoever might be named to the chairmanship of the Federal Communications Commission … [as he] can't possibly know less than I about the airline industry" (Kahn 2008, p. 619). Notwithstanding that disavowal, Kahn's command of regulatory

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[1] With apologies to the many authors thus referenced only indirectly, the papers cited in Borenstein and Rose (2008) may provide interested readers with an entry point to this literature.

principles and challenges gave him confidence, after a brief immersion in the role as CAB chairman, to push the agency toward deregulation. Insights from that work and experience remain fresh, and include:

A. *Regulation Is Information-Intensive*

Economic regulation frequently substitutes regulators' judgment for firm decision making and impedes the ability of markets to provide feedback on that judgment. But even well-informed regulators typically know much less than firms do about efficient choices. Theoretical models highlight the complexity asymmetric information introduces to regulatory price determination (e.g., Laffont and Tirole 1993), but prices may be far from the most complex decisions regulators face. For example, CAB entry awards at the route level de facto determined airline network structure. Kahn recalled saying

> *If I knew what was the most efficient configuration of routes in the airline system, then I could continue to regulate. But since I can't tell you whether it's going to be a Delta kind of operation or … more like the Eastern shuttle or Southwest Airlines it doesn't make sense to leave it to an ignorant person like me to tell airlines how they can best configure their routes* (Public Broadcasting System PBS 2000).

B. *Incentives Matter*

Firms respond to regulatory incentives, even when regulators may not clearly understand the incentives they have created. The CAB in the 1960s and 1970s was caught in a spiral of increasing fares to chase ever-lower load factors, in largely fruitless pursuit of higher rates of return for the industry. With regulated prices fixed substantially above marginal costs, carriers could increase profits by competing for more passengers through nonprice dimensions that ranged from larger, faster aircraft and more frequent flights to designer flight attendant uniforms and piano bars. And so they competed. As Kahn trenchantly noted

> *If price is prevented from falling to marginal cost in the short run or to average total cost in the long run, then, to the extent that competition prevails, it will tend to raise cost to the level of price. Only when, in this way, marginal cost is once again equated with price will the tendency to service inflation be halted* (Kahn 1971, p. 209).

After deregulation allowed price competition, average fares declined, load factors increased, and many in-flight amenities began to disappear (Borenstein and Rose 2008). Despite complaints about crowded flights and poor service quality, particularly from business travelers, the competitive market has "proved to the satisfaction of the carriers that most travelers are willing to sacrifice comfort for lower fares" (Kahn 2004, p. 3–4), and airlines have responded accordingly.

C. *Ignore Institutions at Your Peril*

Kahn's division of *The Economics of Regulation* into a first volume based on the "Principles," or theory, of regulation, and a second focused on its "Institutions" attests to the central role he assigned to institutional factors. These may, for example, explain why two "structurally competitive" industries subject to apparently similar regulation experience dramatically divergent outcomes—as under federal price and entry regulation of the trucking and airline industries. The higher profit rates earned by regulated trucking firms may be attributed, at least in part, to their ability to use rate bureaus to facilitate collusion, something the CAB effectively blocked in the airline industry. Failing to appreciate the significance or implications of institutions may undermine both the credibility of economic research and the contributions of regulatory policy.

D. *Innovation Increases the Challenges*

As firms respond to incentives and regulatory ignorance, regulators often find themselves in something like the arcade game of "Whac-A-Mole." Firms "relax" regulatory constraints through behaviors that regulators fail to anticipate, increasing profits by actions not covered by existing rules. Vigilant regulators, responding to these actions, revise constraints, and firms start the effort to bypass regulations anew.

> *The regulatory rule is: each time the dike springs a leak, plug it with one of your*

> *fingers; just as dynamic industry will perpetually find ways of opening new holes in the dike, so an ingenious regulator will never run out of fingers* (Kahn 1979, p. 11).

In an industry with potentially rapid innovations to processes or products, these challenges are magnified, as are the costs of regulatory errors.

Less vigilant regulators end up with outmoded regulation at best, and potentially disastrous consequences at worst. Failing to regulate competition through ever larger in-flight sandwich sizes may merit a *Colbert Report*–style comedy sketch; capital risk regulation that fails to detect and control off-balance sheet derivatives is no laughing matter. Failing to adapt regulation to industry changes, rather than "deregulation" per se, seems a more plausible explanation for many of the regulatory failures leading to the 1980s Savings and Loan debacle (PBS 2000) or the 2008 financial crisis.

E. *Regulation May Be More Costly than the Market Flaws It Is Designed to Correct*

Introductory microeconomics courses describe myriad market-failure rationales for government intervention to restore competitive ideals. Given the many challenges confronting regulators, it should come as no surprise that the empirical and theoretical regulatory economics literatures of the past half-century overwhelmingly conclude that such interventions are neither costless nor perfect. As Kahn emphasized (1971, p. xii)

> *When we turn from the normative question of what we want to the institutional question of how we get it, we find ourselves launched into the baffling arena of social and political as well as economic behavior and organizations, into the real world of ignorance, error and corruption, where all institutions are in varying degrees imperfect.*

The policy trade-off is not between imperfect markets and perfect regulation, but choosing which flaws—market or regulatory—are less costly. In many cases, the imperfectly competitive market is far superior to inherently imperfect regulation. This conclusion, while familiar to students of economic regulation, is far too often neglected in discussions that presume one simply needs "better regulation" or "better-intentioned" regulators to correct a given market failure.

II. Markets Are Messy

The airline industry's considerable and persistent turmoil over the nearly 35 years since deregulation has been surprising and troubling. Much has been made of low and volatile aggregate profits and high rates of firm turnover and bankruptcies, particularly by those calling for a return to regulation. And while average fares have fallen, the variance of fares has exploded (Borenstein and Rose 2008). Does this argue for more ordered regulated markets?

Earnings volatility is not confined to the deregulated era, although aggregate losses are more prevalent during this period (Borenstein and Rose 2008, and Borenstein 2011a). Adverse demand and fuel price shocks undoubtedly are part of the story, and unrelated to deregulation. The nature of airline labor negotiations, with contracts that typically fix wages for the future based on past profitability, also may exacerbate profitability swings (Borenstein and Rose 2008). If firms respond strategically to union bargaining by increasing their financial leverage (Matsa 2010), this may further increase earnings volatility and perhaps bankruptcy rates.

But Borenstein (2011a) suggests that persistently higher costs of legacy airlines relative to low-cost carriers (LCC) that have expanded since deregulation, and the declining ability of legacy carriers to realize price premia over LCC fares, also may play important roles. Over the past 20 years, competition from LCCs has increased dramatically. More than 60 percent of US passengers in 2010 traveled on routes with LCC presence, and the aggregate LCC share of passenger miles has tripled since 1990, to roughly 30 percent (Borenstein 2011b). While painful for legacy airlines and their employees, this is "competition doing exactly what we hoped and expected it to do" (Kahn 2008b, p. 316–17). LCC expansion also appears coincident with some reduction in fare dispersion (Borenstein and Rose 2008; Borenstein 2011b), though dispersion is very unlikely to disappear in an industry managing fixed capacity with stochastic demand and heterogeneous customers.

Financial volatility has not thus far impaired the industry's ability to finance investment, suggesting that claims of "destructive competition" are likely misplaced. Competitive dynamics may appear disorderly, but as Kahn (2004, p. 5) argues, even "… the unusual vulnerability of an industry to external shocks does not constitute a legitimate case for a return to regulated cartelization."

III. Deregulation Does Not Mean "Laissez-Faire"

Two of the unfortunate "surprises" Kahn noted in his 1988 retrospective were not inevitable consequences of deregulation: increased concentration of market power, particularly in hub markets, and escalating costs of airline delays and airport congestion. These owe their origin more to failure of ancillary government policies than to airline deregulation per se.

The early years of deregulation saw enormous entry into airline markets: existing carriers expanded into new markets and new carriers entered the industry. But the 47 new carriers that had entered the industry by 1984 were quickly eclipsed by the exit of 48 carriers by liquidation or acquisition over the next 3 years. During the subsequent decade, industry concentration rose, particularly on hub routes, prompting concerns about the exercise of market power and stability of the early deregulation price declines.

Kahn (1988b, p. 318) argued this in large part reflected a "lamentable failure of the administration to enforce the policies of the antitrust laws—to disallow a single merger or to press for divestiture of the computerized reservation systems or attack a single case of predation." Encouragingly, Borenstein (2011b) finds some evidence that market power may have moderated in recent years, particularly at the most dominated hub airports and for the highest-end fares.

Crowded flights and airports and flight delays have frustrated travelers and policymakers. Delays were particularly exasperating to Kahn, who had long advocated congestion pricing in regulated monopoly settings, and argued for this explicitly in his days at the CAB. He later laid the blame squarely on the "major derelictions" of the relevant government and airport authorities, who "on the one hand failed efficiently to expand airport and air traffic control capacity and, on the other, to price those scarce facilities at their marginal opportunity costs. No wonder there are shortages" (Kahn 1988b, p. 321).

The political failure to adopt sensible policies toward airport investment and congestion pricing has been accompanied by an inability of the Federal Aviation Administration to effectively modernize the technology infrastructure used by the air traffic control system. These all impede the efficient operation of the air transportation network and reduce the social surplus associated with air travel. They should be addressed through improved infrastructure policy, not shrinking the industry through reregulation.

Researchers and policymakers would do well to heed these lessons from Kahn, a man who taught us

> *that facts make a difference, if only we have the humane procedures to uncover them and the brains to understand them; and that intellectual rigor, decked out in wit and flair, even in Washington, can be a winning combination* (Shenefield 2003, p.1).

We shall sorely miss that combination.

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