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## Predation, Competition and Antitrust Law: Turbulence in the Airline Industry

Paul Stephen Dempsey

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**PREDATION, COMPETITION & ANTITRUST LAW:  
TURBULENCE IN THE AIRLINE INDUSTRY\***

PAUL STEPHEN DEMPSEY\*\*

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## I. INTRODUCTION

**T**HOUGH THE EARLY 1990s brought about a proliferation of new entrant airlines, the late 1990s was an era of bankruptcies, liquidations and retrenchments for upstart airlines. Five new airlines per year emerged from 1990 to 1995. But from 1995 until early 1999, not a single new airline began service.<sup>1</sup> New entrants like Air South, Pan Am (which included Carnival Airlines), Western Pacific, Kiwi, and Sun Jet International fell into bankruptcy, while others were facing enormous financial difficulty. By 1999, new entrants accounted for only 1.3% of the total market. While hub concentration was growing, competitive service declined 28% in city-pairs between 1994 and 1999.<sup>2</sup>

Several new entrant airlines came together in 1996 to form the Air Carrier Association of America. The Air Carrier Association of America was initially formed to deal with the effort of the major airlines to shift the excise tax burden away from the largest airlines and onto the smaller, affordable airlines. But as they came together, the new entrants learned they had something else in common. The major airlines appeared to be on a homicidal mission to destroy the low-fare airlines.

The window of opportunity opened after the ValuJet catastrophe in the Everglades, in May of 1996. The U.S. Department of Transportation [DOT] had been a champion of the competition brought to bear by the new entrant airlines, praising their annual \$6 billion contribution to consumer savings as a clear success of deregulation.<sup>3</sup> But the Everglades crash occurred in an election year, and for political reasons, DOT soon found itself neutralized. The Federal Aviation Administration grounded ValuJet's 53 aircraft. The question in the industry became, "Why did Delta allow ValuJet to grow so large? Why didn't Delta kill off ValuJet when it had the chance?"

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<sup>1</sup> Address by DOT Deputy General Counsel Steven Okun before the Nova University Annual Conference on International Travel & Tourism (Ft. Lauderdale, FL, April 13, 1999).

<sup>2</sup> *Id.*

<sup>3</sup> DOT, *THE LOW COST AIRLINE SERVICE REVOLUTION* (1996).

According to the new entrants, that mind-set put a number of relatively smaller airlines in the cross hairs of the majors. For example, the world's largest airline, United, allegedly targeted Frontier and Western Pacific. American allegedly set its sights on Vanguard, Western Pacific, and Sun Jet International. Delta allegedly targeted ValuJet. Northwest allegedly targeted Sun Country and Spirit Airlines. By 2002, Western Pacific, Vanguard, Sun Jet International, Sun Country and Spirit had either been driven from the market or driven into bankruptcy. Though the DOT had earlier been able to dissuade predation by "jaw-boning" the major airlines into engaging in responsible competitive behavior (by persuading Northwest and Delta to back off of their below-cost pricing and capacity dumping in markets entered by Reno and ValuJet, respectively), such moral persuasion no longer worked.

Low-fare new entrant airlines complained that the major airlines engage in below-cost pricing and capacity-dumping when a small affordable air carrier enters the markets they dominate, particularly when one dares to provide competition at their "Fortress Hubs." They alleged that pricing and capacity are not the only predatory weapons in the arsenal of the major airlines. Predatory behavior designed to suppress competition takes many forms.

According to the new entrants, capacity dumping and below-cost pricing were essential foundations of this campaign to eradicate competition. In each situation, the tactics differed somewhat, but the alleged purpose was the same—destroy the affordable airlines so as to raise consumer prices.

The major airlines claimed that the economic problems, which confronted the affordable fare airlines, are that consumers shied away from them after the Everglades crash. But as the memory of the Everglades waned, new entrants alleged the major airlines engaged in the following practices:

- Added seat capacity and flight frequency to deny competitors of realistic or achievable break-even load factors;
- Dropped prices to below-cost levels;
- Refused competitors non-discriminatory access to their networks (including joint-fare or code-sharing agreements, or participation in their frequent flyer programs);
- Biased their computer reservations system against more convenient competitive offerings (by adding the equivalent of 24-hours to competitors' connections);

- Bribed travel agents with commission overrides to steer business toward the major airlines and away from competitors;
- Entered into “exclusive dealing” arrangements with corporate purchasers and regional turboprop carriers; and
- Engaged in a price ‘lock-down,’ whereby some major airlines raised prices in the Fall of 1996 to account for the 10% ticket tax reinstatement on August 27 of that year, except in markets served by new entrants, thereby denying the upstart airlines the ability to raise their prices to account for the 10% tax reinstatement.

In the last four years of the Twentieth Century, only two new entrants began service.<sup>4</sup> After receiving 32 complaints objecting to the predatory behavior of incumbent carriers (17 of which were filed by new entrant airlines), in April 1998, the DOT issued a proposed policy statement on unfair exclusionary conduct. The draft policy defined unfair exclusionary practices as a situation in which a major airline responds to new entry into its hub markets by cutting prices or increasing capacity in a way that either (1) causes it to forgo more revenue than all of the new entrant’s capacity could have diverted from it, or (2) results in substantially lower operating profit—or greater operating losses—in the short run than would result from a reasonable alternative strategy for competing with the new entrant.<sup>5</sup> In 2001, DOT finally issued a policy on Unfair Exclusionary Conduct.<sup>6</sup>

Many such complaints were also lodged with the U.S. Department of Justice [DOJ]. In May, 1999, the DOJ filed the first anti-trust lawsuit in its history alleging predatory conduct by a major airline in attempting to monopolize a market. The suit alleged that American Airlines lowered prices and changed capacity to

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<sup>4</sup> Lorraine Woellert, *Take Airline Reform Off Standby*, *Bus. Wk.*, Jan. 24, 2000, at 50. JetBlue inaugurated service from New York Kennedy International Airport in February 2000. Given that it began service with the highest level of capitalization of any airline in history (\$128 million), it has not been subjected to the predatory conduct described herein, for it is, quite simply, too financially strong to kill.

<sup>5</sup> U.S. GENERAL ACCOUNTING OFFICE, *AVIATION COMPETITION: INFORMATION ON THE DEPARTMENT OF TRANSPORTATION’S PROPOSED POLICY* (July 1999). DOT received more than 5,000 comments on the proposed policy. See *The State of Airline Competition: Hearing Before the Subcomm. on Aviation of the House Comm. on Transp. & Infrastructure*, 105th Cong. (Oct. 21, 1999) (statement of Nancy McFadden). The final policy statement will not become effective until twelve months after it is received by the U.S. Congress. Pub. L. 105-277.

<sup>6</sup> DOT, *Enforcement Policy Regarding Unfair Exclusionary Conduct in the Air Transportation Industry*, Docket OST-98-3713 (Jan. 17, 2001).

force three new entrant airlines (i.e., Sun Jet International, Vanguard Airlines, and Western Pacific Airlines) to withdraw from the Dallas/Ft. Worth International Airport market, an airport in which American maintains a hub. At this writing, the Justice Department is appealing an adverse ruling by a federal District Court.<sup>7</sup>

Consumer discontent is growing as well. Consumer complaints increased 115% in 1999 over the previous year.<sup>8</sup>

In recent years, the Departments of Transportation and Justice have begun to exchange information and collaborate on competition issues in commercial aviation. Each agency has a different statutory mandate to protect the public against anticompetitive activity, and brings different perspectives to the problem.

This essay is divided into six broad sections:

1. The first is the present introduction.
2. In the second, we examine the empirical evidence of predatory conduct. We examine how major airlines behave in three scenarios: (1) major airline vs. major airline; (2) major airline vs. Southwest Airlines; and (3) major airline vs. small low-cost/low-fare airline. It is in the third category that we see the most flagrant instances of predatory conduct.
3. In the third section we develop a case study to examine the efforts of the world's largest airline to monopolize one of the world's largest airports.
4. The fourth section of this essay provides a legal analysis of capacity dumping, pricing discrimination, predatory pricing, monopoly leveraging, refusing to deal, refusing to share an essential facility, raising rivals' costs, and exclusive dealing arrangements. That analysis is heavily grounded in Sherman and Clayton Act applications, for the case law is well developed there, and the competition laws in the Federal Aviation Act have largely lain dormant for the two decades of deregulation. While the "unfair or deceptive practice" or "unfair method of competition" provisions of the Federal Aviation Act<sup>9</sup> are not constrained by Sherman and Clayton Act interpretations,<sup>10</sup> nonetheless the DOT is free to apply analogous

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<sup>7</sup> *United States v. AMR Corp.*, 140 F. Supp. 2d 1141 (D. Kan. 1999). The Justice Department had earlier filed suit to block Northwest Airlines' acquisition of the controlling block of voting stock of Continental Airlines.

<sup>8</sup> Lorraine Woellert, *Take Airline Reform Off Standby*, Bus. Wk., Jan. 24, 2000, at 50.

<sup>9</sup> 49 U.S.C. § 41712 (2002).

<sup>10</sup> *Pan American World Airways, Inc. v. United States*, 371 U.S. 296 (1963).

standards to its interpretation of the Federal Aviation Act. Moreover, as explained below, many of the predatory practices of the major airlines may offend all three statutes.

5. In the concluding section, we address the policy dimensions of enhanced governmental oversight and enforcement of predatory behavior by large incumbent airlines against new entrants.

## II. EMPIRICAL EVIDENCE OF PREDATION

### A. HUB CONCENTRATION

Since deregulation, all major airlines but one (i.e., Southwest) have gravitated toward the hub-and-spoke means of distribution. Though hubbing increases costs by lowering aircraft, gate, and labor utilization and increasing fuel consumption, airlines have been attracted by their revenue enhancement potential. According to Lehman Brothers, "Airlines that control a greater percentage of their hubs' gates obtain significant benefits in terms of scheduling flexibility and insulation from new competition."<sup>11</sup>

Adding a spoke to an existing hub geometrically increases the number of city-pair markets an airline can sell, and adds incremental connecting passengers to other spokes at the hub, thereby improving load factors. Hub dominance also enables the dominant airline to increase the number of city-pair monopolies radiating from the hub, allowing monopoly fares to be imposed on origin-and-destination passengers. It is this monopoly exploitation that, in a deregulated environment, only competition can remedy. Knowing that, hub dominant airlines use a variety of means (lawful and not) to suppress competition which threatens their monopolies.

Table 1 reveals the growth in airline concentration at major U.S. airports. Concentration has increased at 20 of these 22 airports over the past two decades, and at most it has increased significantly.

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<sup>11</sup> BRIAN HARRIS, AIRLINES, 1998 HUB FACTBOOK 31 (Lehman Bros. 1998).

Table 1 – Airline Concentration at Major U.S. Airports by Market Share %<sup>12</sup>

Airport (dominant airline)	1977	1982	1987	1996	1998
Atlanta Hartsfield (Delta)	n.a.	50.3	54.5	78.6	79.2
Charlotte Douglas (US Airways)	n.a.	0	1.1	92.8	91.7
Chicago O'Hare (United & American duopoly)	n.a.	57.9	77.3	81.4	n.a.
Cincinnati International (Delta)	35.0	49.4	72.1	93.6	94.8
Cleveland Hopkins (Continental)	n.a.	0.4	14.5	47.4	44.9
Dallas/Ft. Worth International (American)	n.a.	57.3	61.9	65.4	65.2
Dallas Love	n.a.	88.6	96.4	100.0	97.6
Denver Stapleton/International (United)	n.a.	30.9	43.0	69.2	71.1
Detroit Metropolitan (Northwest)	n.a.	13.8	61.2	80.1	71.2
Houston Hobby (Southwest)	n.a.	66.3	53.7	78.2	77.8
Houston Bush Intercontinental (Continental)	20.4	22.2	73.7	78.1	77.8
Memphis International (Northwest)	n.a.	0	84.9	78.5	75.5
Miami International (American)	n.a.	2.0	3.7	66.4	65.8
Minneapolis/St. Paul Int'l (Northwest)	45.9	42.6	79.5	84.3	74.4
Newark International (Continental)	n.a.	2.5	40.0	52.4	57.6
Philadelphia International (US Airways)	n.a.	22.8	36.2	60.0	69.3
Phoenix Sky Harbor (America West)	n.a.	0	44.8	39.2	42.7
Pittsburgh International (US Airways)	43.7	65.5	83.8	88.1	88.6
St. Louis Lambert International (TWA)	39.1	52.6	82.3	68.8	73.0
Salt Lake City International (Delta)	n.a.	3.0	59.0	74.9	77.0
San Francisco International (United)	n.a.	32.6	36.4	60.5	60.1
Washington Dulles (United)	n.a.	28.6	35.0	57.4	56.4

Dr. Julius Maltudis performed several studies of concentration at the nation's 50 largest airports between, calculating the Herfindahl-Hirschman Index [HHI] for each. The HHI is the

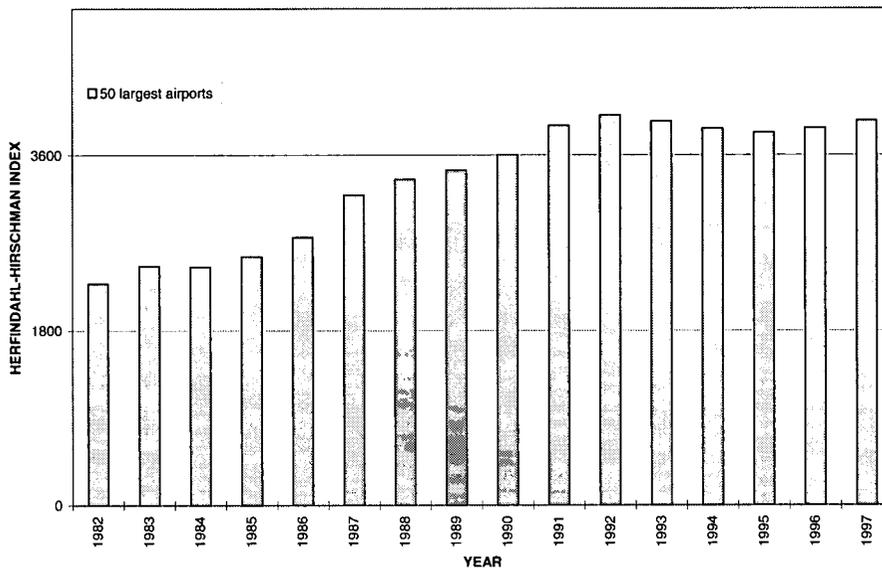
<sup>12</sup> See Julius Maltudis, *Airline Competition at the 50 Largest Airports—Update* (CIBC World Markets, Nov. 1, 1999) [hereinafter CIBC World Markets Update]; Julius Maltudis, *Airline Competition at the 50 Largest Airports—Update* (Salomon Bros. July 21, 1997) [hereinafter Salomon Bros. Update]; CONSUMER REPORTS, June 1988, at 362-67; G.A.O., AIRLINE COMPETITION 33 (1990); AVIATION DAILY, June 29, 1990, at 628-30; James Olt, *Congress, Airlines Reassessing Deregulation's Impact*, AVIATION WK. & SPACE TECH., Nov. 9, 1987, at 163; and Martha Hamilton, *The Hubbing of America: Good or Bad?*, WASH. POST, Feb. 5, 1989, at H1, H2 col. 5.

Even Chicago O'Hare and Atlanta Hartsfield are increasingly dominated by a single firm. In 1977, United had 29% of all boardings in Chicago; by 1988, it had 53%. Even before the bankruptcy of Eastern, Delta controlled 62% of Atlanta. Hamilton, *supra*, at H1, H2 col. 5. As Eastern flew into bankruptcy in March 1989, it sold its gates at Philadelphia to USAir, giving it more than 50% of that city. Judith Valnte & Robert Rose, *Concern Heightens About the Airline Industry's March Toward Near Domination by Only a Few Major Carriers*, WALL ST. J., Mar. 10, 1989, at A8, col. 1. Since Frontier was absorbed, first by People Express and then by Continental, no airport has enjoyed the three hub major carrier competition which theretofore existed in Denver. Paul Dempsey, *Antitrust Law & Policy in Transportation: Monopoly Is the Name of the Game*, 21 GA. L. REV. 505, 592-93 (1987).

methodology employed by the DOJ for determining acceptable levels of concentration for antitrust review of horizontal mergers. It provides a measure based on squaring the market share of the dominant firm. For example, a firm with a 100% monopoly would have a HHI of 10,000. Under the Justice Department's analysis, an HHI below 1,000 is presumed unconcentrated; and HHI of between 1,000 and 1,800 is believed moderately concentrated; and an HHI of above 1,800 is deemed highly concentrated.

The 50 largest airports in the United States account for 81% of total scheduled passenger enplanements.<sup>13</sup> As Chart 1 reveals, these 50 airports have an HHI well above 1,800. They are therefore highly concentrated, under the Justice Department's analysis. The weighted average of concentration for all 50 airports rose from an HHI of 2,215 in 1977, to 3,870 in 1988.<sup>14</sup> According to Maldutis, this represents "an unprecedented degree of concentration in the airline industry."<sup>15</sup>

Chart 1 – Airline Concentration at Fifty Largest Airports



<sup>13</sup> Salomon Bros. Update, *supra* note 12, at 4.

<sup>14</sup> *Id.* at 5; *Hearings Before the Senate Comm. on Commerce, Science and Transportation on Airlines*, 100th Cong. 170-195 (1987) (statement of Dr. Julius Maldutis). This corresponds to a reduction in the number of "effective" competitors in the average of the 50 airports from 4.51 in 1977 to 2.85 in 1987. PAUL STEPHEN DEMPSEY, *FLYING BLIND: THE FAILURE OF AIRLINE DEREGULATION* 17-18 (1990).

<sup>15</sup> Salomon Bros. Update, *supra* note 12, at 2; *see also* CIBC World Markets Update, *supra* note 12.

Maldutis' calculations actually *understate* the degree of concentration at these airports, for they fail to aggregate the market share of the dominant carrier with the market share of its code-sharing 'alliance' partners. Code-sharing, and the computer reservations system bias associated therewith, allows a dominant carrier to monopolize the connecting traffic at a dominant hub. For example, using Maldutis' data, adding together the 1996 passenger enplanement market share of United in Denver of 69.21%, with the market shares of its code-sharing affiliates, Mesa (3.48%) and Air Wisconsin (2.76%), results in a 75.45% market share over which it exercises control, or an HHI of 5,693, one of the highest in the nation.<sup>16</sup>

By September 1999, United Airlines had a 65.1% market share at Denver, while United Express affiliates had an 8.8% market share. If we add the market share of United's proposed partner, Delta (5.4%), United's Star Alliance had a 79.3% market share at Denver, or an HHI of 6,288.<sup>17</sup>

Hub concentration translates into escalating fares for origin-and-destination passengers. The *New York Times* observed, "Passengers who live in a hub city and begin their flight there end up paying higher fares, in some cases 50 percent more than they would had deregulation not occurred."<sup>18</sup> The U.S. General Accounting Office [GAO] found that, after its merger with Ozark, TWA increased fares 13-18% on formerly competitive routes radiating from St. Louis.<sup>19</sup> A similar study compared fares in markets radiating from Minneapolis-St. Paul in which Northwest and Republic formerly competed, and found that rates rose between 18-40%.<sup>20</sup> In 15 of the 18 hubs in which a single carrier controls more than 50% of the market, passengers pay significantly more than the industry norm.<sup>21</sup>

Between June 1996 and June 1997, average air fares increased 9% for origin-and-destination passengers flying to or from concentrated hub airports, three times the national average. Full coach fares increased 15% at Newark, 16% at Dallas/Ft. Worth,

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<sup>16</sup> See Salomon Bros. Update, *supra* note 12, at 14.

<sup>17</sup> Data provided by Denver International Airport (on file with author).

<sup>18</sup> William Stockton, *When Eight Carriers Call the Shots*, N.Y. TIMES, Nov. 20, 1988, at 3-1.

<sup>19</sup> GAO, AIRLINE COMPETITION 2, 3 (1988).

<sup>20</sup> Tom Hamburger, *Fares Rose With NWA's Dominance*, MINNEAPOLIS STAR TRIB., Dec. 1988, at 1A.

<sup>21</sup> Martha Hamilton, *Happiness Is a Cheap Seat*, ECONOMIST, Feb. 2, 1989, at 68.

17% at St. Louis, and 26% at Denver.<sup>22</sup> City-pair competition is also declining significantly. In 1992, some 12,500 routes enjoyed competitive alternatives. By 1998, only 9,400 routes were competitive, a 28% drop.<sup>23</sup>

The most comprehensive studies of the effect of airport concentration upon pricing are those performed by the General Accounting Office. The GAO compared prices at 15 concentrated<sup>24</sup> hub airports and 38 relatively unconcentrated airports. It found that prices were 27% higher in the concentrated hubs.<sup>25</sup> A decade after deregulation, dominant airlines charged 38% higher prices per mile at concentrated hubs than at unconcentrated airports.<sup>26</sup>

The DOT also studied the impact of concentration on airline pricing, and concluded as follows:

The average fare per mile at the eight most concentrated hubs is higher than the national average. Adjusting for the average trip distance and the size of the market served at the eight most concentrated hubs, fares were on average 18.7% higher than similar markets for other airports. This finding supports the conclusion that high hub concentration leads to high fares for passengers traveling to and from such cities. Fares are highest for travel between large cities within 1,000 miles of the hub.<sup>27</sup>

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<sup>22</sup> *Airlines: Flying Into 'Pockets of Pain'*, USA TODAY, Feb. 23, 1998, at 1B.

<sup>23</sup> DOT Assistant Secretary Patrick Murphy, Address at the ABA Forum on Air & Space Law (July 8, 1998).

<sup>24</sup> Concentrated airports were those defined as having more than 60% of enplanements handled by a single airline.

<sup>25</sup> GAO, AIRLINE COMPETITION 2, 3 (1989). The report was subsequently updated and expanded. See GAO, AIRLINE COMPETITION (1990).

The higher fares at concentrated airports do not reflect a premium for non-stop service, since the average number of coupons per traveler at concentrated airports was virtually identical to that at unconcentrated airports (2.26 vs. 2.28 coupons). The difference persisted when average trip length was controlled, by excluding airports those where average trip length was significantly longer than for concentrated airports. Thus neither a higher proportion of non-stops nor a higher proportion of short haul (and thus more costly) flights can explain the fare premium at concentrated airports. The study also found that the increase in fares was generally greater at concentrated airports, and that the increase in fares was especially dramatic when a carrier established dominance during the period. Finally, the study found that in 13 of the 14 concentrated airports, the dominant carrier had higher fares, in some cases very much higher than other carriers at the same airport. PAUL STEPHEN DEMPSEY, FLYING BLIND: THE FAILURE OF AIRLINE DEREGULATION 18-19 (1990).

<sup>26</sup> GAO, AIRLINE COMPETITION 3 (1990).

<sup>27</sup> DOT, SECRETARY'S TASK FORCE ON COMPETITION IN THE U.S. DOMESTIC AIRLINE INDUSTRY, EXECUTIVE SUMMARY 8 (1990).

More recently, the DOT found that, "In the absence of competition, the major carrier is able to charge fares that exceed its fares in non-hub markets of comparable distance and density by upwards of 40 percent."<sup>28</sup>

Kenneth Mead, then director of the GAO's transportation division, found that "no single factor is responsible for higher fares at concentrated airports, but that it is the interaction of a number of barriers that allows carriers at these airports to charge higher fares."<sup>29</sup> The GAO found several factors correlating with higher fares:

1. The larger the share of gates a carrier leased at an airport, especially on a long-term, exclusive use basis, the higher the fares;
2. Airports with congested runway capacity and limited expansion due to majority-in-interest clauses have about 3% higher fares; and
3. Carriers with a code-sharing agreement at one of the airports on a route charge fares almost 8% higher than carriers do on routes on which they do not code share.<sup>30</sup>

Though deregulation proponents predicted competition would drive airline prices to marginal costs,<sup>31</sup> in fact, hub pricing has put the anticipated cost/price relationship on its head. The least costly of airline operations is nonstop point-to-point service, as the costs of Southwest Airlines confirm. Though Southwest flies a relatively short average stage length, by focusing on point-to-point nonstop flights it enjoys superior aircraft, labor, gate and fuel utilization over its competitors.

Network connecting service is far less efficient from an aircraft, labor, gate and fuel utilization perspective. Yet high-cost connecting service typically is priced at a relatively low level vis-à-vis low-cost nonstop service from a dominant hub. Thus, pricing in the airline industry under deregulation appears to be driven more by competition than by costs. Airlines generally face more vigorous competitors for long-haul connecting traffic (for the

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<sup>28</sup> DOT, Request for Comments in Docket OST-98-3717 (Apr. 6, 1998).

<sup>29</sup> *Airline Concentration, Competition Concern Senate Subcommittee*, AVIATION DAILY, Apr. 10, 1990, at 67.

<sup>30</sup> *Factors Linked With Higher Fares*, AVIATION DAILY, Apr. 10, 1990, at 67. See *Airline Competition Enhancement Act of 1989: Hearing on S.1741 Before the Subcomm. on Aviation of the Senate Comm. on Commerce, Science, & Transp.*, 101st Cong., 2d Sess. 253 (1990) (statement of Kenneth M. Mead).

<sup>31</sup> Deregulation architect Alfred Kahn referred to aircraft as "marginal costs with wings."

greater distance, the more alternative hubs over which a passenger can connect) than for short-haul nonstop service, particularly to and from a hub it dominates.

Concentration levels often correlate with price levels—higher concentration tends to equate to higher prices in many markets. But the identity of the competitor can also have a significant influence on pricing. The presence of a low-cost/low fare competitor (such as Southwest, Frontier, Vanguard, Reno, Spirit, Kiwi, or Pro Air, for example) can result in significant competitive discipline and consumer savings. According to the DOT, fares tend to be \$80 higher on average when no low-fare competitor is present on the route.<sup>32</sup> This is reflected in Chart 2, which shows historical average one-way fares at six airports—Minneapolis/St. Paul, Dallas/Ft. Worth, Denver, Atlanta, Salt Lake City, and Kansas City.

At various times, Braniff, Eastern and TWA attempted to establish a hub at Kansas City. Each failed. The result is that, unlike most large interior U.S. cities, Kansas City remains relatively unconcentrated (Southwest is the largest carrier, with 23% of enplanements), and its consumers enjoy average fares among the lowest of any city its size. Note that average fares at Salt Lake City, Atlanta and Denver marched in “lock-step” with fares at Dallas and Minneapolis until 1994. In that year, Southwest acquired Salt Lake City-based Morris Air. Average fares dropped by 50% in Southwest’s markets, while traffic tripled. By late 1995, average fares in markets served by Southwest were only one-third the level of fares in other Salt Lake City markets.<sup>33</sup> By 1996, Southwest accounted for 12% of enplanements, and Salt Lake City’s average fares were as low as Kansas City’s. At Atlanta, ValuJet’s entry has brought fares down, though it only accounted for 8% of enplanements. At Denver, first MarkAir’s, then Frontier’s entry brought fares down, though by the end of the 1990’s Frontier accounted for only about 5% of enplanements.<sup>34</sup>

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<sup>32</sup> DOT Assistant Secretary Patrick Murphy, Address at the ABA Forum on Air & Space Law (July 8, 1998).

<sup>33</sup> *Hearing Before the Subcomm. on Transp. of the Senate Comm. on Appropriations*, 106th Cong. (May 5, 1998) (testimony of Patrick Murphy, DOT Assistant Secretary).

<sup>34</sup> Market share data are for 1996, the latest year for which data are available, except for ValuJet, which is 1995. Salomon Bros. Update, *supra* note 12. 1995 data were used for ValuJet because ValuJet’s fleet was grounded for a significant portion of 1996 after its tragic crash in the Everglades.

Contrast these price declines with the relatively higher prices at Dallas/Ft. Worth. Dallas/Ft. Worth International Airport is dominated by two megacarriers—American (65%) and Delta (19%). Neither is a vigorous price competitor, though prices are somewhat disciplined in short-haul markets by the presence of Southwest at Dallas Love Field. Minneapolis/St. Paul is by far the worst of the group in terms of exorbitant air fares, because during the period reflected in Chart 1, Northwest dominated the hub with an 84% market share, no low-cost/low-fare carrier accounted for even a 1% market share, and there was no secondary airport at Minneapolis.<sup>35</sup> One study revealed that concentration at the Minneapolis/St. Paul hub caused a 72% increase in prices from 1988 to 1995, and that by 1995, its residents were paying ticket prices \$693 million above the national average.<sup>36</sup> In fact, average round-trip fares at Minneapolis since 1994 of \$412 are 72% higher than at Kansas City or Salt Lake City, where the average round-trip fare is \$240. If Denver's fares were set at Minneapolis' levels (which they might be if United is successful at driving Frontier from the market), Denver's 20 million annual origin-and-destination passengers would pay several hundred million dollars in higher fares per year annually. Conversely, if Frontier were to grow to a size comparable to Southwest at Salt Lake City, consumer savings could total several hundred billion dollars per year more.

According to the Justice Department, in 1993, American Airlines identified low cost carriers as a threat, estimating that \$3.6 billion in American's annual revenue was at risk. American estimated potential annual system wide revenue losses caused by low cost carriers between \$586 million to \$1.47 billion. It estimated the impact of ValuJet's growth at Atlanta cost Delta \$232 million annually in lost revenue. According to the DOJ, in 1996, American adopted the following strategy:

[W]hen an LCC [low cost carrier] entered a DFW [Dallas/Ft. Worth International Airport] route and it appeared that the LCC would be economically viable if American simply followed a profit-maximizing business strategy, American would instead saturate the route with enough additional capacity at low fares to keep the entrant from operating profitably. American also would take further steps, such as matching the LCC's connecting fares with its own nonstop fares, to keep traffic away from the

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<sup>35</sup> *Id.*

<sup>36</sup> Mike Meyers, *Minnesotans Indeed Pay More For Air Fare, DOT Says*, MINNEAPOLIS STAR TRIB., Apr. 25, 1996, at 1A.

LCC. To evaluate the success of its strategy and determine whether to intensify its response, American would investigate the financial resources of LCC's, determine their break-even load factors, and conduct head counts at the departure gate to monitor their passenger loads. . . .

American recognized that its DFW LCC strategy could prove unprofitable in the short run. It concluded, however, that "[t]he short term cost or impact on revenue [of the LCC strategy] can be viewed as the investment necessary to achieve the desired effect on market share." Both the purpose and the effect of American's DFW LCC strategy were to drive LCCs out of DFW markets so that American could subsequently recoup its "investment" and preserve its monopoly fares.<sup>37</sup>

The problem of airline concentration at major airports and the monopoly pricing associated therewith is exacerbated by the predatory practices of large, incumbent airlines. Noting the need for competitive discipline at Fortress Hubs provided by upstart airlines, Kevin Mitchell, Chairman of the Business Travel Coalition, urged the DOT to take firm action to arrest predatory practices:

Virtually the only discipline on premium prices at fortress hubs in the recent past has come from the entry of low-fare, point-to-point airlines. Indeed, most benefits from deregulation in recent years have come from this segment of the industry. . . .

Unfortunately, applications to the DOT for start-up airlines have declined from about one every six weeks, just a couple of years ago, to virtually none in the last 12 months. Investors concerned about airline strategies of predation have often chosen to dedicate their resources to other business opportunities, leaving consumers with less choice and market-place innovations, and unnecessarily high airfares.

What can be done? . . .

[T]he DOT must implement a strong final policy regarding predatory anti-competitive practices.<sup>38</sup>

## B. MEGACARRIER ALLIANCES

Some argue that the anticompetitive practices described herein will grow worse with consummation of the "alliances" between United/Delta, American/US Airways, and Northwest/Continental/America West. Charts 3 & 4 reveal the increase in

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<sup>37</sup> United States. v. AMR Corp., 140 F. Supp. 2d 1141 (D. Kan. 1999).

<sup>38</sup> Kevin Mitchell, *Oversight Of Airlines Needed*, DENVER BUS. J., May 1, 1998, at 39A.

market shares attributable to these alliances, essentially allowing three major "alliances" to control 80% of the domestic market. The GAO has found that if all three alliances are consummated, "the number of independent airlines could decline on 1,836 of the 5,000 most frequently traveled domestic airline routes (which account for over 90 percent of the total U.S. domestic traffic) and potentially reduce competition for about 100 million of the 396 million domestic passengers last year."<sup>39</sup> Critics assert that alliance partners are not likely to engage in vigorous competition in their nonstop (hub-to-hub) or connecting markets. Their ability to bias computer reservations systems against connections which fail to share a designator code will ensure that consumer choices in the connecting market will be significantly fewer than exist today.

The Department of Transportation has been widely criticized for approving each of the 21 mergers submitted to it in the 1980s. The DOT has also given major airlines antitrust immunity to form global code-sharing cartels, further concentrating the market for connecting traffic and depriving independent airlines the opportunity to compete for it. The major airlines insist these alliances are consumer friendly. And possums fly, right? One need only look at the international alliances to see the impact of diminished competition. The United-Lufthansa alliance has largely driven its competitors, American and Delta, out of the nonstop U.S.-Germany market, one of the most important business markets on the planet. Both had a significant presence in Germany before United married Lufthansa. Globalization is a euphemism for cartelization.

Or take a look at the impact of regional airline alliances, whereby the megacarriers funnel passengers onto high price/high cost turboprop carriers flying as "United Express," "Delta Connection," or some other pseudo-airline. It is the monopolization of connecting markets via code-sharing alliances that allegedly deprives consumers of choices, and result in declining service and higher prices for medium-size cities from Mobile to Fargo.

Further consolidation in the U.S. airline industry might well reduce the level of competition and allow the industry to price

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<sup>39</sup> GAO, AVIATION COMPETITION: PROPOSED DOMESTIC AIRLINE ALLIANCES RAISE SERIOUS ISSUES 2 (June 4, 1998).

in a way that is irrelevant to cost.<sup>40</sup> Prices might rise as independent airlines are denied the opportunity to participate in the connecting market.

Cooperation may have a corrosive impact on competition. When one considers airline alliances, one should remember *Webster's* definition of a cartel: "a combination of independent commercial enterprises designed to limit competition."<sup>41</sup> With their international airline partners, three vast megacARRIER cartels will soon rule the world. The farther we march down this path, the less competition there will be.

### C. EXAMPLES OF PREDATORY PRICING BY MAJOR AIRLINES

New airline entrants typically bring with them lower fares than those prevailing prior to their entry. Because of the higher brand recognition of incumbent airlines, their vast networks and exclusive alliances with regional feeder carriers, their ability to bias the computer reservations systems they own against competing interline connections, their ability to bribe travel agents with commission overrides to steer business their way, and their frequent flyer programs, they have enormous advantages which can be overcome only if the new entrant can offer a better price. Consumers at concentrated airports often are starved for price relief, for the average fares they pay are well above competitive levels.

The new entrants typically can offer a lower price because of their lower cost structure. In a commodity business such as transportation, a company with a lower cost structure should be able to take some reasonable share of the market. If both companies price on the basis of cost, then the new entrant will likely be sustainable. The new entrant may stimulate increased demand among price-elastic travelers, expanding the size of the pie for all competitors.

But new entry cannot be sustained where the incumbent airline is willing to endure significant short-term losses in a below-cost predatory pricing strategy designed to force the new entrant out of the market (or into bankruptcy) so that after the new entrant leaves, the incumbent can resume its monopoly price gouging well above competitive levels.

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<sup>40</sup> Charles Stein, *United-Delta Alliance Off For Now*, BOSTON GLOBE, Apr. 25, 1998, at E1.

<sup>41</sup> WEBSTER'S SEVENTH NEW COLLEGIATE DICTIONARY (1966).

New airlines emerged shortly after the promulgation of the Airline Deregulation Act of 1978—carriers such as Midway Airlines, America West and People Express. Their most singular competitive advantage was their cost structure, which enabled them to offer significantly lower fares to consumers. Not saddled with the labor agreements of the established major airlines (which included the generous wage and elaborate work rule provisions that had evolved under regulation, coupled with a relatively senior work force), the new entrants enjoyed a significant comparative advantage in terms of lower base salaries, an entry level work force, and greater flexibility in the utilization of personnel. This enabled the new carriers to ‘cream skim’ dense routes, offering low-cost, low-fare, no-frills service, allowing them to penetrate the market shares of the established trunk, national and regional airlines.<sup>42</sup> Although this first wave of new entrants never accounted for more than 5% of the total passenger market, and all but America West was liquidated (though it too, stumbled into Chapter 11 bankruptcy), they put enormous pressure on the established carriers.<sup>43</sup>

Established airlines found the consuming public quite fickle, with little brand loyalty, and willing to purchase air transportation primarily on the basis of schedule and price. There was enormous pent-up demand for low-priced service, and little willingness to pay for in-flight amenities. The large carriers found that the new carriers were diverting traffic, causing load factors to fall below break-even levels. Determined to preserve market

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<sup>42</sup> The sharp erosion in carrier profitability led the major carriers to focus on cost containment, efficiency and productivity. Seat pitch was tightened. Hot meals became cold meals, then peanuts, on flights of less than 1,000 miles. But many costs, particularly fuel and equipment costs, as well as interest expenses, are beyond the control of the airlines. (Nor do airlines have adequate control over the demand side of the equation when recession curtails discretionary traffic). Ultimately, management found that it had little choice but to focus on costs that were conceivably pliable—labor costs, and perhaps more importantly, work rules, as well as distribution costs, including travel agent commissions. Labor is the single largest operating expense, accounting for between 34% and 38% of the total operating expenses. Again, the new entrants, most operating with a relatively junior work force and without labor unions (and those with union contracts that are significantly less costly and restrictive than those of the established airlines) enjoyed a significant cost advantage.

<sup>43</sup> The first wave of new entrants collapsed into bankruptcy by the mid-1980s, with only America West emerging from Chapter 11 bankruptcy successfully. Even the pre-deregulation airlines lingered on in bankruptcy and there, largely shielded from creditors, began to undercut the fares of their competitors. Pan Am and Eastern were ultimately liquidated, although Continental, TWA and America West lived through Chapter 11 to see another day.

shares, the traditional carriers met the low fares, at least on some seats, which caused significant yield erosion. The established carriers attempted to confine the impact of the low fares with revenue and inventory management, and retain high-yield traffic with various manipulations of computer reservations systems display, frequent flyer programs, travel agent commission overrides, and other practices, many of a predatory nature. By the early 1990s, more than 100 airlines had found themselves in bankruptcy, while People Express, Midway and Laker Skytrain were liquidated.

By the early 1990s, a second wave of new entrants would emerge—carriers like Kiwi International, ValuJet, AirTran, Reno, Morris Air, Vanguard, and MarkAir, as well as carriers which borrowed the names of their deceased predecessors, such as Braniff, Midway and Frontier, for example. These were carriers with ASM costs as low as 6.5 cents, in the case of Western Pacific, and 6.7 cents in the case of ValuJet.<sup>44</sup> The glut of capacity had caused the major carriers to ground 700 jets and lay off thousands of skilled workers.

The leasing companies were hungry to derive revenue from their enormous capital investments. By the mid-1990s, a 20-year-old 737-200 with Dash-9 engines could be leased for less than \$90,000 a month, while a younger, hush-kitted 737-200 with Dash-17 engines could be leased for about \$150,000 per month. A decade old Stage-3 737-300 could be leased for about \$215,000, while a new one leased for about \$280,000 a month. In the 1990s, laid-off pilots were eager to fly, and willing to take a salary at a fraction of their prior pay. At Kiwi, pilots were expected to invest \$50,000 in the company's stock,<sup>45</sup> making commercial aviation perhaps the only industry in which people will pay for the privilege to work in it. Aircraft and trained personnel were abundant, so off they flew, in the fleets of new carriers with low cost structures and low fares. Table 2 identifies some of the more prominent post-deregulation start-up airlines.

By the mid-1990s, the non-union, low-cost, low-fare carriers were the driving force in the industry. Borrowing from the wisdom of baseball legend Satchel Paige, Deputy Assistant Secretary of Transportation Patrick Murphy warned the megacarriers,

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<sup>44</sup> *Western Pacific Crows It's Lowest Cost Airline*, ROCKY MOUNTAIN NEWS, Apr. 23, 1996, at 9B.

<sup>45</sup> Julie Schmit, *Small Airline Glides Upward On Loyalty*, USA TODAY, Sept. 22, 1994, at B1; Adam Bryant, *Kiwi Works to Redefine a Hostile Airline Culture*, N.Y. TIMES, Feb. 24, 1994, at C-1.

Table 2 – Upstart Airlines

Scheduled Carriers Emerging Since Deregulation		
Air Atlanta*	Air Florida*	Air One*
Air Niagara*	Air South*	Air Train
Air Tran**	Air21*	Altair*
America West	American International*	Arrow Airways*
Access Air	Best Airlines*	Braniff II*
Braniff III*	Carnival Air**	Discovery Airlines*
Eastwind Airlines	Emerald*	Empire Airlines**
Florida Express**	Frontier II	Frontier Horizon**
Hawaii Express**	Jet America**	Jet Blue
Kiwi International*	Leisure Air*	MarkAir*
McClain Air**	MGM Grand Air**	Midway Airlines*
Midway II	Midwest Express	Morris Air**
Muse Air**	National II	Nations Air
New York Air**	Northeastern International	Pacific Express*
Pan Am II*	People Express*	Presidential*
Presidential II	Pride Air*	Pro Air
Regent Air*	Reno Air**	Royal West*
Spirit	Sterling One*	Sun Country
Sunworld*	TriStar	UltrAir*
USAfrica*	Valujet (renamed AirTran)	Vanguard
Western Pacific*		

\*Liquidated \*\* Merged into another carrier.

“Do not look back. A new airline might be gaining on you.”<sup>46</sup> In 1993, a record 42 airlines applied for a Certificate of Public Convenience and Necessity to launch commercial air service.<sup>47</sup> From January 1990 until mid-1996, DOT had certificated nearly 50 new airlines.<sup>48</sup> By 1996, 25 of the 39 new carriers certificated since 1993 were still flying (13 were passenger carriers, while 12 were charter and cargo carriers).<sup>49</sup> In 1995, low-cost carriers increased their capacity by 38%.<sup>50</sup> Flying high with 51 aircraft before its 1996 crash in the Florida Everglades, with a \$1 billion order, ValuJet became the launch customer for the 100-seat twin-engine MD-95 aircraft.<sup>51</sup> The major carriers had been fi-

<sup>46</sup> AVIATION DAILY, May 9, 1996, at 232.

<sup>47</sup> Jonathan Dahl, *New Airlines Can Leave Fliers Grounded*, WALL ST. J., June 30, 1995, at B7.

<sup>48</sup> AVIATION DAILY, Apr. 8, 1996, at 49.

<sup>49</sup> AVIATION DAILY, May 9, 1996, at 232.

<sup>50</sup> Martha Brannigan & Eleena de Lisser, *Delta Air May Try New ‘Lite’ Service*, WALL ST. J., Feb. 9, 1996, at B8.

<sup>51</sup> AVIATION DAILY, Oct. 20, 1995, at 111.

nancially decimated by the anemic profitability deregulation unleashed. Faced with a new round of upstart airlines, the major carriers began to launch widespread price wars to destroy the new entrants. In some markets, the megacarriers targeted the upstarts with predatory practices, dumping capacity and engaging in below-cost pricing.

Though some were predicting a 90% failure rate among the new airline ventures,<sup>52</sup> their yield impact on the majors was real. DOT estimated passengers flying these upstart airlines paid \$54 less per flight.<sup>53</sup> Where major carriers maintained their yields, the new airlines were stimulating new demand. Lower ticket prices were a direct reflection of the new entrants' lower cost structure.

Southwest and ValuJet had a 6.5 cent cost per available seat mile [ASM] on 500 mile stage lengths, while American, United and USAir had costs nearly double that. In the short-haul market, Delta's costs were 45% higher than ValuJet's, while USAir's costs were 187% higher than ValuJet.<sup>54</sup> In the long-haul (1,400 miles) narrow-body aircraft category, American Trans Air had costs of 5.4 cents per ASM (only 60% of USAir's). In the long-haul wide-body aircraft category, American Trans Air had ASM costs of only 4.1 cents (compared with American and United's 8.5 cents per ASM).<sup>55</sup>

And the upstart airlines seemed to be popping up everywhere. Delta was faced with low-fare carriers on 32% of its routes; by 1994, the low-fare carriers competed on 57% of Delta's routes; and by 1995, low-fare carriers competed on 60% of its routes.<sup>56</sup> American (which had withdrawn from many markets dominated by low-cost carriers) still had them affecting 40% of its bookings.<sup>57</sup>

An incumbent airline can respond to new entry in a predatory fashion, for example, by matching its low fares on frequencies in close proximity to the new entrant's departures, meeting the new competitor's introductory fares and locking them in (i.e., refusing to follow the new price leader's fares up after the promotional period), dumping additional capacity (flights) into the

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<sup>52</sup> AVIATION DAILY, Apr. 22, 1996, at 127.

<sup>53</sup> AVIATION DAILY, Apr. 24, 1996, at 139.

<sup>54</sup> ROBERTS ROACH & ASSOCIATES, SCORECARD: AIRLINE INDUSTRY COST MANAGEMENT 2Q 1995 12 (3d. ed. 1996).

<sup>55</sup> *Id.* at 1, 2.

<sup>56</sup> DELTA AIR LINES, ANNUAL REPORT 6 (1995).

<sup>57</sup> AVIATION DAILY, Apr. 1, 1996, at 1.

market, or sandwiching the new competitor's frequencies (with a departure within a few minutes on both sides of the new entrant's departure) until the new entrant is financially exhausted and withdraws.<sup>58</sup> As Severin Borenstein notes, airport dominance may intensify the retaliatory threat:

Besides the advantage in attracting customers to its flights over a competitor's, airport dominance might also allow an airline to deter entry of competitors. This could be done with a threat of retaliation, possibly made more credible due to airport dominance, or by blocking access to scarce gates or landing slots at an airport.<sup>59</sup>

Predatory pricing has been defined as pricing below an appropriate measure of cost for the purpose of eliminating competitors in the short-term and reducing competition in the long-term.<sup>60</sup> Under neo-classical free market theoretical beliefs, predatory pricing is irrational, for the dominant firm engaging in the predatory behavior must be able to recoup the short-term losses it incurs in the longer term after it has driven the new entrant from the market; since theoretically, it can never hope to recover its short-term losses, it will not likely engage in such predation. Hence, some commentators argue that predatory pricing schemes are rarely attempted, and even more rarely successful.<sup>61</sup>

Despite the theoretical opposition to predation based on its hypothetical irrationality, airline observers have seen numerous examples of predatory behavior in the airline industry attempted since deregulation, with various degrees of success. Evaluating the post-deregulation experience, during which he served as CEO of a small airline (New York Air), Michael Levine concluded, "I believe predation is possible and that it occurs. . . . [I]t is possible for an incumbent to impose on prospective entrants nonrecoverable costs by pricing in a way that seeks to ensure that they do not attract a significant share of passengers

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<sup>58</sup> See Michael Levine, *Airline Competition in Deregulated Markets: Theory, Firm Strategy, and Public Policy*, 4 YALE J. REG. 393, 417 (1987).

<sup>59</sup> Severin Borenstein, *The Dominant-Firm Advantage in Multiproduct Industries: Evidence From the U.S. Airlines*, Q. J. OF ECON. 1237, 1248 (1991).

<sup>60</sup> *Cargill, Inc. v. Monfort of Colo., Inc.*, 479 U.S. 104 (1986).

<sup>61</sup> See, e.g., ROBERT BORK, *THE ANTITRUST PARADOX* 149-55 (1978); Areeda & Turner, *Predatory Pricing and Related Practices Under Section 2 of the Sherman Act*, 88 HARV. L. REV. 697, 699 (1975); Easterbrook, *Predatory Strategies and Counterstrategies*, 48 U. CHI. L. REV. 263, 268 (1981). This view was embraced by the Supreme Court in *Matsushita Elec. Indus. Co. v. Zenith Radio Corp.*, 475 U.S. 574 (1986).

regardless of the incumbent's own costs."<sup>62</sup> Dr. Alfred Kahn concurred, criticizing Northwest Airlines for its "scorched-earth" policy of substantially undercutting People Express' price while simultaneously increasing the number of flights in the market:

If predation means anything, it means deep, pinpointed, discriminatory price cuts by big companies aimed at driving price cutters out of the market, in order then to be able to raise prices back to their previous levels. I have little doubt that is what Northwest was and is trying to do.<sup>63</sup>

The *Economist* summarized the problem in these words:

*Predatory pricing.* Deregulation left the previously related companies with advantages and disadvantages. . . . But the deregulated companies also entered the new era with substantial patches of market in their grasp. They could try to defend them by setting some of their prices below cost, fending off smaller invaders one by one.

Mr. Kahn recons, for example, that Northwest Airlines tried to squeeze People Express off its route from Minneapolis/St. Paul to New York last year. When People started to fly the route, Northwest cut its regular fare from \$263 to \$99 (weekdays) and \$79 (weekends and off-peak). That two-thirds cut matched People's fares, and Northwest still ran its traditional high-quality service. Evidently the idea was to drive the upstart from the market, after which Northwest could put its fares back up.<sup>64</sup>

In its seminal study of airline competition commissioned by the U.S. Congress, the Transportation Research Board found:

Sharp reductions and price and increases of capacity are "predatory" if designed to drive out or suppress competition to gain higher future prices and profits through increased market power. Some economists have postulated that firms employ predatory tactics not only to strengthen or preserve their monopoly position in the markets in which they cut prices, but also to deter competitive entry in their other markets. Therefore, a valid concern is that airlines might engage in predation even on a limited basis, with the broader aim of dissuading entry and increasing market power throughout their networks.<sup>65</sup>

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<sup>62</sup> Michael Levine, *Airline Deregulation: A Perspective*, 60 ANTITRUST L.J. 687, 689 (1991). After becoming an executive for a major airline, however, Levine became an apologist for predation.

<sup>63</sup> Alfred Kahn, *The Macroeconomic Consequences of Sensible Microeconomic Policies*, SOC'Y GOV'T ECONOMISTS NEWSLETTER 6 (May 1985).

<sup>64</sup> *When Free Markets Throttle Competition*, ECONOMIST, Aug. 24, 1985, at 19.

<sup>65</sup> TRANSPORTATION RESEARCH BOARD, ENTRY AND COMPETITION IN THE U.S. AIRLINE INDUSTRY: ISSUES AND OPPORTUNITIES E-6 (1999).

Though some theorists claim that predation is economically irrational and therefore does not exist,<sup>66</sup> allegations of predatory behavior have been widespread in the airline industry. Continental Airlines, Northwest Airlines, and America West Airlines—three major carriers—alleged American Airlines had engaged in predatory pricing.<sup>67</sup> UltraAir alleged its demise was caused by predatory pricing by Continental Airlines.<sup>68</sup> Pro Air's Chairman & CEO Kevin Stamper pointed out that since his airline went aloft in July of 1997, it was forced to withdraw from Milwaukee and reduce service to Indianapolis because of predatory pricing. Said Stamper:

Matching prices is a normal competitive behavior. But it can be a powerful predatory tactic if its purpose is simply to drive the new entrant out of business and restore the markets to their prior monopoly status. . . .

Too much government involvement can stifle innovation and competition, but too little can have exactly the same effect. Our concern is that predatory activities on the part of carriers that already possess many competitive advantages may drive small airlines out of the industry and lead to monopolies and market abuse.<sup>69</sup>

Similarly, Mark Kahan, Vice Chairman & COO of Spirit Airlines, testified that after Spirit entered the Detroit-Philadelphia market, Northwest dropped its yields 54% while increasing its capacity 15%. Sharply reduced prices coupled with capacity dumping allegedly forced Spirit to withdraw from the Detroit-Boston and Detroit-Orlando markets as well. Said Kahan:

It is probable that Northwest sacrificed out-of-pocket lot less than \$10 million because of its fare decreases and capacity increases in

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<sup>66</sup> It has been argued that a rational firm will not engage in predation because the cost of predation will almost always exceed the expected pay-back. See sources cited at 62 N.Y.U. L. REV. 968 n. 2 (1987).

<sup>67</sup> *Continental Airlines v. American Airlines*, 824 F. Supp. 689 (S.D. Tex. 1993). Michael Conway, CEO of America West said, "It's my strong opinion that this action led by American is clearly a predatory action. I think it is clearly designed to further consolidate the industry, which would result in the remaining carriers, particularly American, being able to capture a greater market share and being able to raise prices at a later date." Martha Hamilton, *Fare Wars: For Some a Duel to the Death*, WASH. POST, June 4, 1992, at D9.

<sup>68</sup> James Ott, *UltraAir Suspends Service, Reviews Charter Option*, AVIATION WK. & SPACE TECH., Aug. 2, 1993, at 34.

<sup>69</sup> *Airline Hubs: Fair Competition or Predatory Pricing: Hearing Before the Subcomm. on Antitrust, Business Rights, & Competition of the Senate Comm. on the Judiciary*, 105th Cong. (Apr. 1, 1998) (testimony of Kevin Stamper, Chairman & CEO, Pro Air).

the Detroit-Boston and Detroit-Philadelphia markets in the third quarter of 1996 alone. These actions clearly made no sense unless Northwest was confident that Spirit would be obliged to exit the market. . . . You will pardon us for believing that Northwest tried to put Spirit out of business. . . .<sup>70</sup>

Vanguard also complained to DOT about the anticompetitive practices of Northwest Airlines.<sup>71</sup> So too did Sun Country Airlines, which transformed itself from a charter to a scheduled airline at Minneapolis in 1999. Northwest's response was to radically lower its fares in city-pair markets in which Sun Country entered, while increasing flight frequency and seat capacity. Northwest also allegedly turned its charter subsidiary against Sun Country, canceled its maintenance and training agreement and certain airport rentals, refused to sell or loan parts to Sun Country, and upped its hangar rent. Sun Country's chairman, William E. La Macchia, concluded, "Rational businesses do not sell their products below costs, or pay travel agents bonuses to induce them to book passengers at drastically reduced rates or cut prices from 40%-60% except in hope and expectation that competition will be stifled and supracompetitive pricing will then compensate for losses."<sup>72</sup> Ultimately, an exhausted Sun Country Airlines was forced to cease scheduled operations from Minneapolis/St. Paul on December 9, 2001.

In 1993, ValuJet complained to DOT that Delta offered below-cost fares over 40% of its capacity and 300% of ValuJet's capacity, saying, "We believe that Delta is pricing its product well below its costs and is embarking on this course of predatory pricing for the express purpose of driving ValuJet out of business."<sup>73</sup> Chronicling the alleged efforts of Delta Air Lines to drive ValuJet from its Atlanta base, Professor Fred Allvine observed:

Government study after study shows that the airline industry is *not* perfectly competitive . . . . These studies show that the major airlines employ many monopolistic practices that contribute to

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<sup>70</sup> *Aviation Competition Hearing Before the Subcomm. on Aviation, of the House Comm. on Transp. & Infrastructure*, 105th Cong. 1067 (Apr. 23, 1998) (testimony of Mark Kahan, Exec. V.P. & General Counsel, Spirit Airlines).

<sup>71</sup> Tony Kennedy & Greg Gordon, *Government Investigating NWA's Fares*, STAR-TRIBUNE, Feb. 27, 1998, at 1D.

<sup>72</sup> *Hearing on the Status of Airline Competition Before the Subcommittee on Aviation of the House Comm. on Transp. & Infrastructure*, 105th Cong. (Oct. 20, 1999) (testimony of William E. La Macchia, Chairman, Sun Country Airlines).

<sup>73</sup> Bill Poling, *Letter To DOT*, TRAVEL WEEKLY, Dec. 10, 1993, at 19.

the market power to raise and maintain prices above the competitive level. In *imperfect competitive markets* it makes perfectly good sense for large firms to use predatory pricing to destroy competition that threatens the monopoly prices charged.<sup>74</sup>

Lewis Jordan, President and COO of ValuJet, testified:

While ValuJet welcomes fair competition and does not seek to be insulated from such competition, we believe that no airline should be subjected to pricing actions designed to force it out of markets with the attendant likely consequence of fares immediately being restored to unnecessarily high levels. We urge a vigorous enforcement of the antitrust laws and reexamination of the predatory pricing doctrine to ensure fair competition for big and small carriers alike.<sup>75</sup>

After ValuJet announced it was surrendering the Atlanta-Mobile route to Delta, Delta raised its fares from \$58 to \$404, almost 600%.<sup>76</sup> In October 1995, ValuJet reached an agreement with TWA to lease its slots at LaGuardia Airport so that ValuJet could inaugurate Atlanta-New York service. Delta made a preemptive strike to acquire those slots. ValuJet brought an antitrust action against Delta for such anticompetitive behavior, which resulted in an out of court settlement. In July 1998, ValuJet announced its inauguration of Atlanta-Newark Service; within a week, Delta announced plans to increase flight frequencies in the market by 78%.<sup>77</sup>

Continental Airlines sued United Airlines for predatory conduct, receiving \$77 million in an out-of-court settlement.<sup>78</sup> Laker Airways filed a \$1.7 billion lawsuit alleging predatory practices by six large airlines drove it out of business.<sup>79</sup> The suit settled two years later for \$60 million.<sup>80</sup> Gulf Air filed an antitrust suit against Continental, Eastern and other Texas Air carriers

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<sup>74</sup> FRED ALLVINE & JOHN LINDSLEY, *INCREASING MONOPOLIZATION OF THE UNITED STATES COMMERCIAL AIRLINE INDUSTRY THROUGH THE DEVELOPMENT AND DEFENSE OF FORTRESS HUBS* (Apr. 1997).

<sup>75</sup> *Hearing Before the Subcomm. on Aviation of the House Transp. & Infrastructure Comm.* (Mar. 23, 1995) (testimony of Lewis Jordan, President, ValuJet Airlines).

<sup>76</sup> *United Denies Engaging In Predatory Pricing, Despite Study Claiming Otherwise*, AIRLINE FINANCIAL NEWS, Feb. 10, 1997.

<sup>77</sup> *Hearing Before the Subcomm. on Aviation of the House Comm. on Transp. & Infrastructure*, 106th Cong. (Oct. 18, 1999) (testimony of Joseph Leonard).

<sup>78</sup> *Trial Date Set in Pacific Express vs. United Airlines Suit*, BUS. WIRE, Mar. 23, 1990.

<sup>79</sup> *International News*, REUTERS, Nov. 24, 1984.

<sup>80</sup> Martha Hamilton, *Three Airlines Settle in Laker Case*, WASH. POST, Mar. 18, 1986, at B3.

alleging they had engaged in predatory business practices.<sup>81</sup> Pacific Express filed suit against United Airlines for alleged predatory activity.<sup>82</sup> Alaska Airlines filed suit against United Airlines for monopoly leveraging and violation of the essential facilities doctrine. TACA International Airlines has filed complaints against United Airlines, American Airlines and Continental Airlines for predatory pricing.<sup>83</sup> Virgin Atlantic brought suit against British Airways for predation. ValuJet filed suit against TWA and Delta for monopolization. USAirways filed suit against British Airways and American Airlines on antitrust grounds.<sup>84</sup> And most recently, Reno Air filed suit against Northwest Airlines for predation following its entry into the Reno-Minneapolis market.

If there is no fire, what is causing all the smoke?

The DOT has observed:

[T]here have been instances in which a new, small carrier has offered low price service between a major carrier's hub and a spoke city, only to find the major carrier cutting its own airfares and increasing the number of seats—or even airplanes—on that route and sacrificing short term profits with only one goal in mind: to drive the new entrant out of the market and then raise its own fares to their original level or higher, and cut back its service.<sup>85</sup>

An established carrier that finds its spokes assaulted by a new entrant typically will cut prices to meet the competition. Both will lose money, but large carriers have the ability to cover short-term revenue losses from profits derived from less competitive markets.<sup>86</sup> Typically, the major airlines offer the low fare only on local O&D traffic on flights in close time proximity to the new entrant's, extracting higher yields from passengers connect-

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<sup>81</sup> *Gulf Air Sues Lorenzo*, PR NEWSWIRE, Mar. 9, 1987.

<sup>82</sup> *Trial Date Set in Pacific Express vs. United Airlines Suit*, BUS. WIRE, Mar. 23, 1990.

<sup>83</sup> *United Charged With Engaging In Predatory Pricing*, AVIATION DAILY, May 19, 1992, at 302; *American, Continental, Pan Am Accused of Predatory Pricing*, AVIATION DAILY, Oct. 10, 1990, at 66.

<sup>84</sup> These cases are summarized in PAUL DEMPSEY, AIR TRANSPORTATION: FOUNDATIONS FOR THE 21ST CENTURY 283-86 (Coast Aire 1997).

<sup>85</sup> Press Release, DOT, DOT Releases Airline Competition Policy Statement (Apr. 6, 1998).

<sup>86</sup> Peter Cartensen, *Evaluating 'Deregulation' of Commercial Air Travel: False Dichotomization, Untenable Theories, and Unimplemented Premises*, 46 WASH. & LEE L. REV. 109, 126-26 (1989); Russell Klingaman, PREDATORY PRICING AND OTHER EXCLUSIONARY CONDUCT IN THE AIRLINE INDUSTRY, 4 DEPAUL BUS. L.J. 281 (1992).

ing to the assaulted spokes. This revenue advantage may neutralize the new entrant's cost advantage and will deleteriously impact its staying power.<sup>87</sup> Levine notes, "The ability of an incumbent to respond rapidly and cheaply to the prices and output of new entrants contradicts perhaps the most critical assumption of contestability theory."<sup>88</sup>

If contestability theory applied to the airline industry as deregulation proponents had anticipated, the need for actual entry to protect the consumer interest would be nil. The theory of contestability posits that the absence of barriers to entry and economies of scale will allow potential entrants to discipline monopolists from earning supra-competitive profits. While many deregulation proponents of deregulation originally embraced this theory, most have since rejected it based on the empirical behavior of airlines in the post-deregulation period, and the existence of economies of scale, scope and density, as well as the significant costs of and barriers to successful entry.<sup>89</sup>

Most empirical studies have demonstrated that deregulated airline markets are not perfectly contestable,<sup>90</sup> and that there is a positive relationship between concentration and fares.<sup>91</sup> While ticket prices in city-pair markets with two competitors were about 8% lower than in monopoly markets, and markets with three competitors were another 8% less still, a potential competitor has one-tenth to one-third the competitive impact of an actual competitor.<sup>92</sup> The exit of a competitor results in a 10% average price increase for the remaining incumbents.<sup>93</sup> Other studies reveal that the number of competitors is not nearly as significant as their identity (e.g., Southwest's presence in a market creates deeper pricing competition than, say,

<sup>87</sup> Michael Levine, *Airline Competition in Deregulated Markets: Theory, Firm Strategy, and Public Policy*, 4 YALE J. REG. 393, 451 (1987).

<sup>88</sup> Michael Levine, *Airline Competition in Deregulated Markets: Theory, Firm Strategy, and Public Policy*, 4 YALE J. REG. 393, 452 (1987).

<sup>89</sup> For a survey of these conclusions drawn from the economics literature, see PAUL DEMPSEY & LAURENCE GESELL, *AIRLINE MANAGEMENT: STRATEGIES FOR THE 21ST CENTURY* 71-84 (1997).

<sup>90</sup> The first article to cast doubt on the applicability of contestability theory to the airline industry was D. Graham, D. Kaplan, and D. Sibley, *Efficiency and Competition in the Airline Industry*, BELL J. ECON. 118 (1983).

<sup>91</sup> See sources cited in James Brander, *Dynamic Oligopoly Behavior In the Airline Industry*, 11 INT'L J. INDUS. ORG. 407, 409 (1993).

<sup>92</sup> Severin Borenstein, *The Evolution of U.S. Airline Competition*, 6 J. ECON. PERSPECTIVES 45, 53 (1992).

<sup>93</sup> *Id.* at 54.

Delta's).<sup>94</sup> Some have insisted that the airline industry is "imperfectly contestable."<sup>95</sup> Without doubt, imperfection is an appropriate adjective to describe airline economics.

The three most prominent architects of airline deregulation—Alfred Kahn, Elizabeth Bailey, and Mike Levine—all have jettisoned the notion that contestability theory explains market behavior in the airline industry. For them, market reality trumped economic theory. According to Kahn, "I bear some responsibility for promulgating the notion, before deregulation, that because the industry's capital equipment is physically mobile, neither destructive competition nor significant monopoly power were likely to emerge; but I had long since ceased to do so after it became very clear that contestability is in fact very imperfect, at best."<sup>96</sup> Although an early proponent of the application of contestability theory to the airline industry, deregulation advocate Elizabeth Bailey has concluded that airline ". . . markets are not perfectly contestable, so that carriers in concentrated markets are able to charge somewhat higher fares than carriers in less concentrated markets."<sup>97</sup>

Michael Levine, another of deregulation's principal architects, said it even more strongly: "Unfortunately, those theories turned out to be wrong as they applied to the airline industry. . ."<sup>98</sup> and "airline markets cannot be modeled by any reasonably pure version of contestability theory."<sup>99</sup> Levine acknowledged that:

[E]conomists committed to a high degree of airline market contestability have historically maintained that predation is doomed to failure and is therefore unlikely because the capital assets involved in airline production are mobile. . . . This contestability analysis is unfortunately inconsistent with much observed behav-

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<sup>94</sup> See sources cited in William Evans & Loannis Kessides, *Structure, Conduct, and Performance in the Deregulated Airline Industry*, SOUTHERN ECON. J. (1991).

<sup>95</sup> Steven Morrison & Clifford Winston, *Empirical Implications and Tests of the Contestability Hypothesis*, 30 J.L. & ECON. 53 (1987).

<sup>96</sup> Alfred Kahn, *Market Power Issues In Deregulated Industries*, 60 ANTITRUST L.J. 857 (1991).

<sup>97</sup> ELIZABETH BAILEY, DAVID GRAHAM & DANIEL KAPLAN, *DEREGULATING THE AIRLINES* 153 (1985).

<sup>98</sup> Michael Levine, *Airline Deregulation: A Perspective*, 60 ANTITRUST L.J. 687 (1991).

<sup>99</sup> Michael Levine, *Airline Competition in Deregulated Markets: Theory, Firm Strategy, and Public Policy*, 4 YALE J. REG. 393, 405 (1987).

ior since deregulation . . . large holdover incumbents are not easily susceptible to predation, but smaller new entrants are.<sup>100</sup>

Levine concluded that new industrial organization theory better describes the airline industry than the perfect competition/contestability model.<sup>101</sup> Assistant Attorney General Charles Rule concluded, "Most airline markets do not appear to be contestable, if they ever were. . . . [D]ifficulties of entry, particularly on city pairs involving hub cities, mean that hit-and-run entry is a theory that does not comport with current reality."<sup>102</sup> DOT Assistant Secretary Pat Murphy has declared contestability theory "deader than dead" in its ability to describe the market reality of commercial aviation.<sup>103</sup>

The consensus among economists (outside the Washington, D.C. *laissez faire* think tanks) today is that the airline industry does not reflect theoretical notions of perfect competition or contestability. The high degree of pricing discrimination between consumers and markets suggests that the industry may better reflect economist Joan Robinson's theory of "imperfect competition"<sup>104</sup> or Edward Chamberlin's theory of "monopolistic competition."<sup>105</sup> The literature lends strong support to the conclusion that, if airline industry is to be competitive, the competition laws must be applied with full force to it.

### 1. *Major Network Airline Competitive Response to Entry by Another Major Network Airline*

The following charts (derived from DOT historical data) reveal how such predatory conduct has manifested itself in several markets upstart airlines have attempted to enter. But before we discuss the markets in which new entrant airlines have faced predation, let us examine how one major network carrier responds to the competitive entry of another major airline into a market it dominates. We take, as an example, Denver-Philadelphia, the latest entry by a major carrier into a Denver market United dominates, and Minneapolis/St. Paul-Cleveland.

<sup>100</sup> *Id.* at 472-73.

<sup>101</sup> *Id.* at 418.

<sup>102</sup> Charles Rule, *Antitrust and Airline Mergers: A New Era* 15, 18 (speech before the International Aviation Club, Washington, D.C., Mar. 7, 1989).

<sup>103</sup> DOT Assistant Secretary Patrick Murphy, Address at the ABA Section on Air & Space Law (July 10, 1998).

<sup>104</sup> JOAN ROBINSON, *THE ECONOMICS OF IMPERFECT COMPETITION* (1933).

<sup>105</sup> EDWARD CHAMBERLIN, *THE THEORY OF MONOPOLISTIC COMPETITION* (1933).

Major airlines tend not to engage in predatory pricing against other major airlines, for they learned in the 1980s that the likelihood of success in driving them from the market is remote, and that the competitive battle will be economically painful. Major network carriers also tend not to invade other major airline's dominant hubs, except as limited entry spokes from their own hubs. A major carrier will tolerate entry into its hub by another major airline so long as the spoke radiates from the other airline's hub. In such circumstances, the etiquette of competition among major airlines seems to be "live and let live." As a thorough study on airport hub concentration by Lehman Brothers concluded, "in early 1995, the era of aggressive forays by the hub-and-spoke carriers into one another's market strengths came to an end."<sup>106</sup>

a. Denver-Philadelphia: United vs. USAir

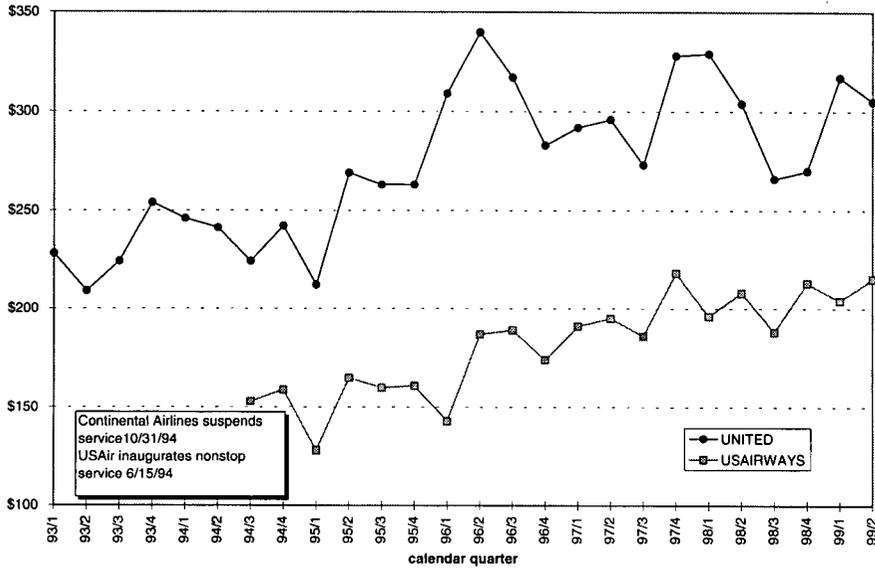
Chart 2 reveals United Airlines competitive response to USAir's entry in the Denver-Philadelphia market. In 1994, United was the dominant carrier at Denver (with a 70% market share), and US Air was the dominant carrier at Philadelphia (with a 60% market share).<sup>107</sup> USAir entered the Denver-Philadelphia nonstop market in June 15, 1994 with an average fare 37% below prevailing levels. United responded to USAir's entry by dropping its average fares by 7%. Prior to USAir's entry, United had a monopoly in the Denver-Philadelphia nonstop market. Within a year, USAir had a 26% market share. USAir has generally flown two flights a day in the market, to United's five. *United's response to USAir's entry was not to slash fares below cost, but to raise fares.* During the first quarter of 1996, United's average fares were 116% higher than USAir's. United's fares have averaged 62% higher than USAir's since USAir (now US Airways) entered the Denver-Philadelphia market.

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<sup>106</sup> BRIAN HARRIS, AIRLINES: 1998 HUB FACTBOOK 4 (Lehman Bros. 1998).

<sup>107</sup> Maldutis, Salomon Bros.Update, *supra* note 11.

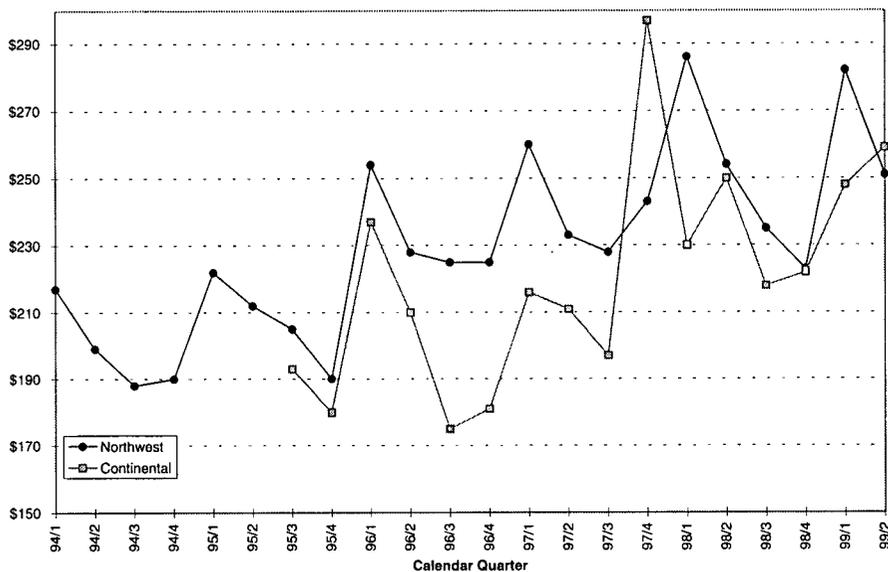
Chart 2 – Denver-Philadelphia Average Fares



b. Minneapolis/St. Paul - Cleveland: Northwest vs. Continental

Continental Airlines inaugurated service in the Minneapolis/St. Paul-Cleveland market in the third quarter of 1995. Northwest responded by dropping its fares 4%, then another four percent in the fourth quarter. But in the first quarter of 1996, Northwest raised its average fares 30%. After that, Northwest charged average fares 18% higher than Continental.

Chart 3 – Minneapolis/St. Paul-Cleveland Average Fares



A carrier with a significantly larger market share enjoys an S-curve relationship between capacity (or frequency) along one axis, and yield (or revenue) on the other. A carrier with a significantly larger number of frequencies in a city-pair market will generate more high-yield business traffic (for business travelers prefer schedule frequency), and therefore can charge a premium for it.<sup>108</sup> Typically, when a major carrier competes with a major carrier, the carrier with the largest number of frequencies reaps a significant revenue premium over its non-stop competitors, and an ever greater premium over its one-stop and connecting competitors. But as we shall see, when a major carrier competes with an upstart airline, it sacrifices this premium to wage war with the new entrant.

## 2. Major Network Airline Competitive Response to Entry by Southwest Airlines

Southwest Airlines is a low-cost affordable air carrier. But since its birth preceded deregulation, and because it has been consistently profitable for more years than any airline in the history of commercial aviation, it has achieved sufficient “mass” and economic strength to ward off competitors. According to Robert Rowen at Reno Air, “We see major airlines tailoring their

<sup>108</sup> PAUL DEMPSEY & LAURENCE GESELL, AIRLINE MANAGEMENT: STRATEGIES FOR THE 21ST CENTURY 36-40 (Coast Aire 1997).

competitive response depending on who enters the market. If it's a long-term player with a strong balance sheet like Southwest, they react moderately compared to a Kiwi or Reno Air."<sup>109</sup> The Department of Transportation has correctly concluded:

In some instances, a major carrier will choose to coexist with the low-fare competitor and tailor its response to the latter's entry accordingly. For example, at cities like Dallas and Houston, the major carriers tolerate Southwest's major presence in local markets by not competing aggressively for local passengers. Instead, they focus their efforts on carrying flow passengers to feed their networks.<sup>110</sup>

A few major airlines have taken Southwest on in competitive battles, only to be bloodied in the process. For example, United Airlines launched "Shuttle by United" as a competitive weapon to fight Southwest in the California and West Coast markets, only to cede certain airports to Southwest and withdraw to airports of strength.<sup>111</sup> US Airways fought to oust Southwest from Baltimore/Washington International Airport, only to withdraw from the battle once it realized Southwest could not be driven out. Most major network carriers have learned that Southwest is too strong to beat, and do not enter into competitive battles with it. Let us examine two such markets.

a. St. Louis-Cleveland: TWA vs. Southwest

Southwest Airlines entered the St. Louis-Cleveland market in early 1992. TWA then controlled 67% of St. Louis enplanements.<sup>112</sup> As Chart 4 reveals, TWA responded to Southwest's entry by dropping its fares to remain competitive in the market, though not to levels lower than Southwest's. In fact, since Southwest entered, TWA's average fares (\$72) have been about 42% *higher* than Southwest's (\$51) in the nonstop market.

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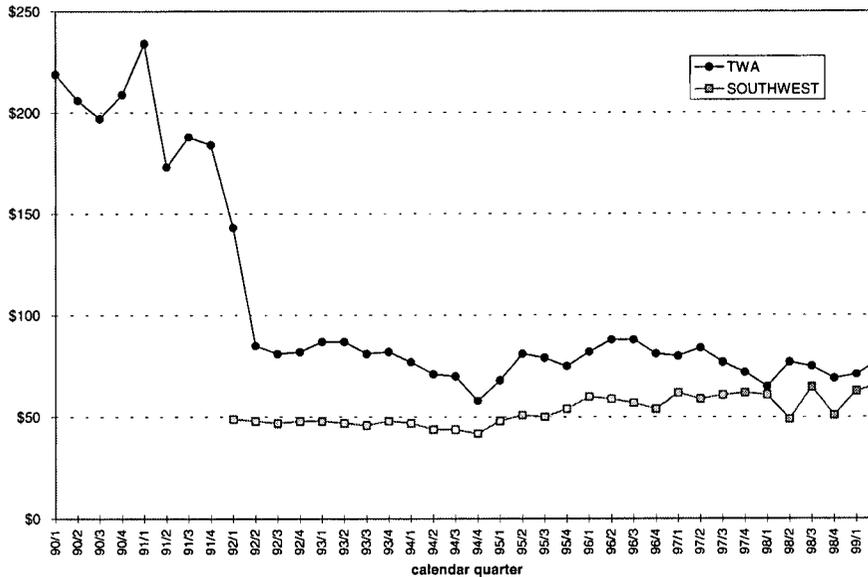
<sup>109</sup> David Kribb, *Fair or Foul?*, AIRLINE BUS., Oct. 1, 1997, at 40.

<sup>110</sup> DOT Docket No. OST-98-3713, Notice of Proposed Policy Statement (Apr. 6, 1998).

<sup>111</sup> PAUL DEMPSEY & LAURENCE GESELL, AIRLINE MANAGEMENT: STRATEGIES FOR THE 21ST CENTURY 245 (1997).

<sup>112</sup> Salomon Bros. Update, *supra* note 12, at 27.

Chart 4 – St. Louis-Cleveland Average Fares



b. St. Louis-Detroit: Northwest vs. Southwest

The same is true in the St. Louis-Detroit market, where TWA maintains a hub at St. Louis and Northwest maintains a hub at Detroit. As Chart 5 reveals, both TWA and Northwest have ceded the low-fare market to Southwest, consistently charging a significant premium above Southwest. TWA's average fares (\$69) have been 53% higher than Southwest's (\$45) from 1990-1997, while Northwest's fares (\$62) have been 37% higher than Southwest's. Since Southwest is too large and well capitalized to be driven out of the market, the incumbent major airlines have priced at a level which, while disciplined by competition, seeks to maximize revenue. The allegation by the major airlines that they must meet and march in "lock step" with the new entrant's fares in order to remain in the market is therefore specious.

Chart 5 – St. Louis-Detroit Average Fares



### 3. Major Airline Predatory Response to New Entrant Airlines

We now turn to situations in which a major airline is faced with new competition with a low-cost/low-fare new entrant, one less well capitalized than Southwest. Here we see instances of sharp price reductions with the apparent intent of driving the new entrant out of the market. The incumbent has greater financial resources than the new entrant, has monopoly routes to cross-subsidize losses in competitive markets, and knows the smaller entrant does not have the financial means to withstand the assault, and therefore has a lower pain threshold than does a major carrier. The Department of Transportation has correctly observed:

[A]lthough many major airlines appear to engage in peaceful co-existence with Southwest Airlines, often] the major carrier will choose to drive the new entrant from the market. It will adopt a strategy involving drastic price cuts and flooding the market with new low-fare capacity (and perhaps offering “bonus” frequent flyer miles and higher commission overrides for travel agents as well) in order to keep the new entrant from achieving its break-even load factor and thus force its withdrawal. . . . After the new entrant’s withdrawal, however, the major carrier drops the added capacity and raises its fares at least to their original level. By accepting substantial self-diversion in the short run, the major prevents the new entrant from establishing itself as a competitor in a

potentially large array of markets. Consumers thus lose the benefits of this competition indefinitely.<sup>113</sup>

We now examine several markets where this has occurred. The target carriers in this sample are ValuJet, Kiwi International, Vanguard Airlines, Western Pacific Airlines, MarkAir, Frontier Airlines, and Reno Air.

a. Atlanta-Memphis: Northwest vs. ValuJet

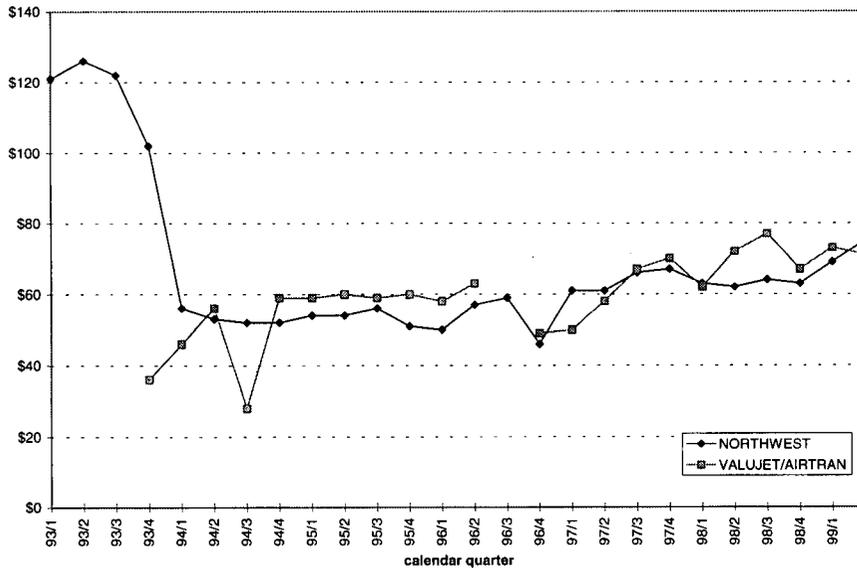
Though Northwest Airlines charges average fares 37% higher than low-cost/low-fare Southwest Airlines from its Detroit hub, it responded radically differently when low-cost/low-fare ValuJet (now AirTran) entered Northwest's Memphis hub. As Chart 6 reveals, Northwest responded to ValuJet's entry into the Atlanta-Memphis market by *dropping its average fares 54%*, from \$122, in the quarter immediately preceding ValuJet's entry, to \$56 in the quarter following its entry. From the fourth quarter of 1994 until the first quarter of 1997, Northwest's average fares were consistently lower than ValuJet's. Since January 1994, Northwest has offered an average fare of \$55.93, lower than ValuJet's average fare of \$56.13. Since Northwest offers a 1st Class product (which during the quarters for which data is available, ValuJet—now AirTran—did not), and since the DOT data includes 1st Class in the average fare base, *Northwest is underpricing ValuJet* in its coach product by a significant margin.<sup>114</sup>

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<sup>113</sup> DOT Docket OST-98-3713, Notice of Proposed Policy Statement (Apr. 6, 1998).

<sup>114</sup> See FRED ALLVINE & JOHN LINDSLEY, INCREASING MONOPOLIZATION OF THE UNITED STATES COMMERCIAL AIRLINE INDUSTRY THROUGH THE DEVELOPMENT AND DEFENSE OF FORTRESS HUBS 7 (Apr. 1997).

Chart 6 – Atlanta-Memphis Average Fares



According to ValuJet, not only had Northwest cut its yield to less than half its level six months prior to ValuJet's entry into the market, Northwest also increased its capacity by more than 50% in the Atlanta-Memphis market beginning in late 1994.<sup>115</sup>

Why then, does Northwest charge 37% more than Southwest in the St. Louis-Detroit market, and less than ValuJet in the Atlanta-Memphis market? The likely answer is predatory intent, which emerges depending on the perception of economic strength of the target. Northwest realizes it cannot drive Southwest from the market, but that ValuJet might be driven from it.

#### b. Atlanta-Newark: Continental vs. Kiwi

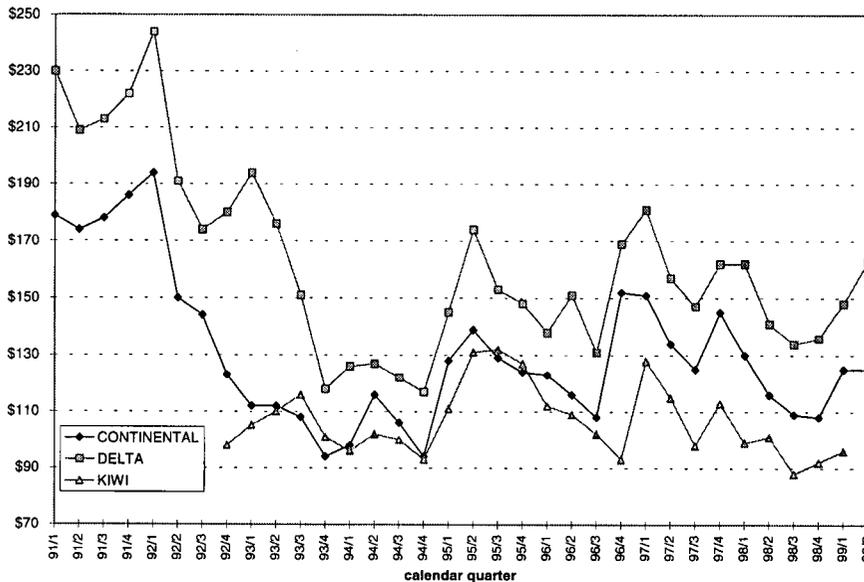
Kiwi International Airlines entered the Atlanta-Newark market in early 1994. Kiwi was attempting to establish a base of operations at Newark, an airport then and now dominated by Continental Airlines (with 54% of enplanements).<sup>116</sup> Atlanta, of course, is the hub of Delta Airlines. As Chart 7 reveals, the response to Kiwi's entry was to inflict economic pain on Kiwi by radically dropping prices. What is interesting is that Continental responded much more harshly than did Delta. After Kiwi entered, Continental's average fares (\$120) were *only 10% higher*

<sup>115</sup> TRANSPORTATION RESEARCH BOARD, ENTRY AND COMPETITION IN THE U.S. AIRLINE INDUSTRY: ISSUES AND OPPORTUNITIES, C-2 (1999).

<sup>116</sup> Salomon Bros. Update, *supra* note, at 12.

than Kiwi's (\$109), while Delta's (\$150) were 38% higher than Kiwi's. The likely explanation is that by making Newark its base of operations, Kiwi was far more of a threat to Continental than it was to Delta. Delta appeared to be responding in the range of the normal competitive response to the entry of a major airline.

Chart 7 – Atlanta-Newark Average Fares



c. Dallas/Ft. Worth-Wichita: American vs. Vanguard

Vanguard Airlines attempted to enter the Dallas/Ft. Worth-Wichita market in 1995, but was driven out within a year and a half by American Airlines' competitive response.<sup>117</sup> As Chart 8 reveals, though fares were on an upward climb before Vanguard entered, *American dropped its fares 100%* from a high of \$106 in the first quarter of 1995, immediately preceding Vanguard's entry, to a low of \$53 two quarters before Vanguard retreated. By the end of 1997, American had raised prices 77% to recover the short-term losses it sustained in driving Vanguard out. Admiral Robert Spane, President & CEO of Vanguard Airlines testified before a Congressional Committee about the predatory practices his airline faced:

In late 1996, we announced that Vanguard Airlines intended to open several routes between Dallas/Ft. Worth and other Mid-

<sup>117</sup> GAO, Aviation Competition: Information on the Department of Transportation's Proposed Policy 10 (July 1999).

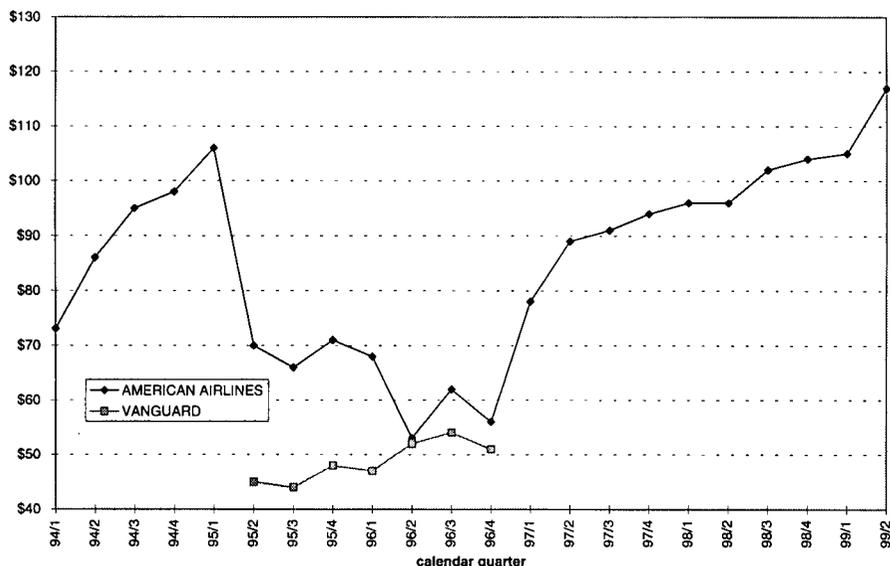
western cities. We announced that we intended to fly these routes at substantially lower fares than were in the market at the time.

Immediately after our announcement, [American Airlines] announced that they would increase service from Kansas City to Dallas by 3 flights a day in addition to the 9 they were already flying. They replaced 3 prop flights to Wichita with 4 larger pure jets, increasing capacity by approximately 1,000 seats per day (this was one of our core markets), and they resumed service to Cincinnati after having withdrawn from that market two years earlier.

These new flights operated within a few minutes of Vanguard's proposed schedule and at "new" low fares. The major then launched a significant amount of market specific advertising that we were unable to match due to cost.

The result was obvious—we were forced to pull out of the market or dramatically change our schedule and the prices returned to pre-Vanguard levels.<sup>118</sup>

Chart 8 – Dallas/Ft. Worth-Wichita Average Fares



According to the Justice Department, Vanguard commenced three daily nonstops between Dallas/Ft. Worth [DFW] and Kansas City in January 1995. American responded by reducing its

<sup>118</sup> *Airline Hubs: Fair Competition or Predatory Pricing: Hearing Before the Subcomm. on Antitrust, Business Rights & Competition of the Sen. Comm. on the Judiciary*, 105th Cong. (Apr. 1, 1998) (testimony of Admiral Robert Spane, President & CEO, Vanguard Airlines).

average one-way fare to \$80 by April 1995, at which time Vanguard reduced its daily frequencies to one. From May to June 1995, American added six additional frequencies (in addition to its existing flight) according to DOJ in order "to drive [Vanguard] from the market." By December 1995, Vanguard abandoned the route. American responded by reducing its frequencies from 14 to 11 daily round trips in February, then to 10 in July, while increasing its average fares as much as 80% higher than when Vanguard was in the market.

According to DOJ, in September 1996, Vanguard announced it would resume DFW-Kansas City service, as well as enter the DFW-Phoenix and DFW-Cincinnati markets. Within days of Vanguard's announcement, American planned three increased round trip frequencies (up from 10) in the DFW-Kansas City market, the substitution of five jets for four of its nine small commuter aircraft flights in the DFW-Wichita market, three new round-trips in the DFW-Cincinnati market (a route it had abandoned as unprofitable in 1994), and the acceleration of two frequency increases in the DFW-Phoenix market. Additionally, American matched Vanguard's connecting fairs in the DFW-Chicago and DFW-Des Moines markets on flights that "bracketed" Vanguard's flights. In response, Vanguard exited DFW-Cincinnati and DFW-Phoenix in November, 1996, and DFW-Wichita in December, 1996, while reducing service in the DFW-Kansas City market to one daily round-trip.<sup>119</sup> In response to DOJ's allegations, American Airlines denied that it flooded these markets with capacity, or that it priced below its viable costs.<sup>120</sup>

d. Dallas/Ft. Worth-Colorado Springs: Delta vs. Western Pacific

Ed Beauvais had founded the only post-deregulation carrier to become a major airline, America West. The threat that he might successfully launch another successful carrier brought a brisk response against start-up Western Pacific Airlines, based in Colorado Springs. American Airlines and Delta Air Lines responded sharply and swiftly to Western Pacific's April, 1995, entry into the Dallas/Ft. Worth-Colorado Springs market, *dropping fares 92%* from their levels in the quarter preceding Western Pacific's entry to two quarters after such entry. American added

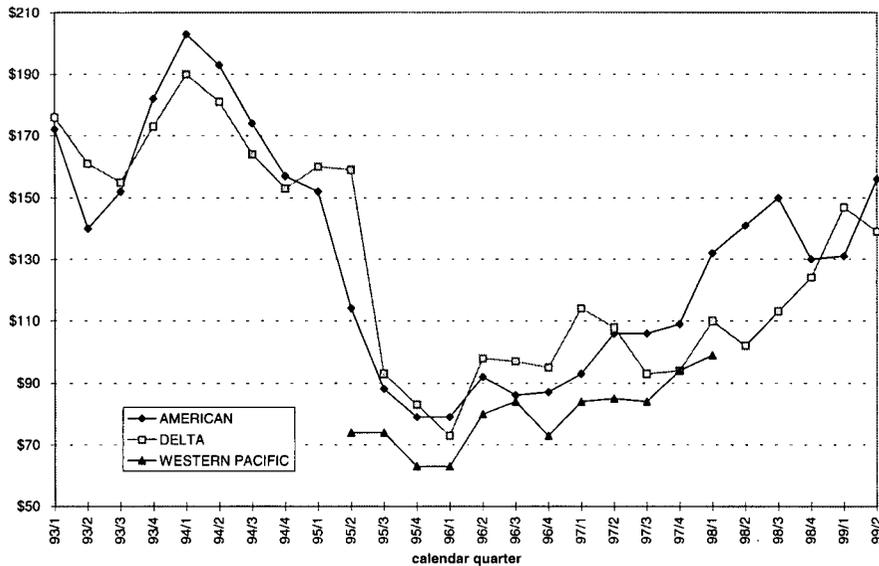
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<sup>119</sup> United States v. AMR Corp., 140 F. Supp. 2d 1141 (D. Kan. 1999).

<sup>120</sup> Press Release, American Airlines Response to the Department of Justice's Allegations of Predatory Practices (May 13, 1999).

more seats at lower fares, larger aircraft and additional frequencies.<sup>121</sup> On October 15, 1997, Western Pacific withdrew from its Colorado Springs hub altogether before collapsing in bankruptcy and liquidation.

Chart 9 – Dallas/Ft. Worth-Colorado Springs Average Fares



#### 4. United Airlines' Response to MarkAir's Entry at Denver

In 1993, MarkAir filed a complaint with the DOT alleging that Alaska Airlines was engaging in below-cost pricing in several Alaska and Pacific Northwest Markets served by MarkAir in order to force it to exit those markets.<sup>122</sup>

In August, 1993, MarkAir announced its intention to abandon Alaska and establish a hub at Denver. In March 1994, it was revealed MarkAir intended to move its corporate headquarters to Denver. In April 1994, it successfully emerged from Chapter 11 bankruptcy. Keep these dates in mind as you look through the accompanying charts, for they offer profound insights as to the motivation of United Airlines to sharply attack MarkAir with predatory pricing in the third quarter of 1994, which resulted in MarkAir's return to bankruptcy, and liquidation.

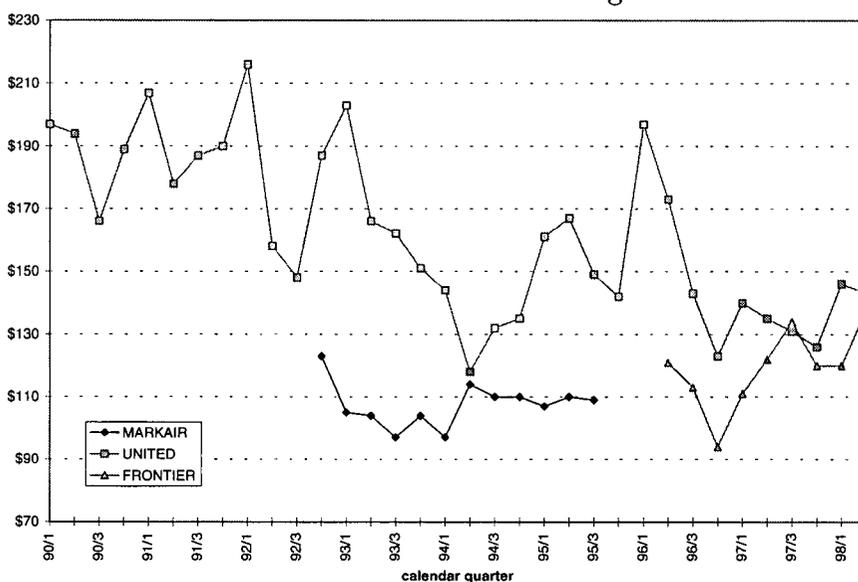
<sup>121</sup> *AMR Corp.*, 140 F. Supp. 2d 1141.

<sup>122</sup> TRANSPORTATION RESEARCH BOARD, ENTRY AND COMPETITION IN THE U.S. AIRLINE INDUSTRY: ISSUES AND OPPORTUNITIES C-6 (1999).

a. Denver-Seattle: United vs. MarkAir

In the Denver-Seattle market, United ignored MarkAir's presence in the market until it announced it was shifting its base of operations from Seattle/Anchorage, to Denver. In the first quarter of 1993, United offered average fares of \$203, some 93% higher than MarkAir's \$104. In August 1993, MarkAir announced it intended to shift its hub to Denver. After that, United dropped its fares to levels lower than those prevailing before or since in this decade. Note how United targeted MarkAir in the second quarter of 1994, as it was seeking to emerge from bankruptcy, *dropping fares 42%* (from \$203 in the first quarter of 1993 to \$118 in the second quarter of 1994). After MarkAir was driven out of business, United was able to enjoy recoupment of its short-term losses by raising prices 67% (to \$197 in the first quarter of 1996). Frontier Airlines entered the market on May 1, 1996, and United again began to lower fares sharply, pricing below Frontier in the third quarter of 1997.

Chart 10 – Denver-Seattle Average Fares

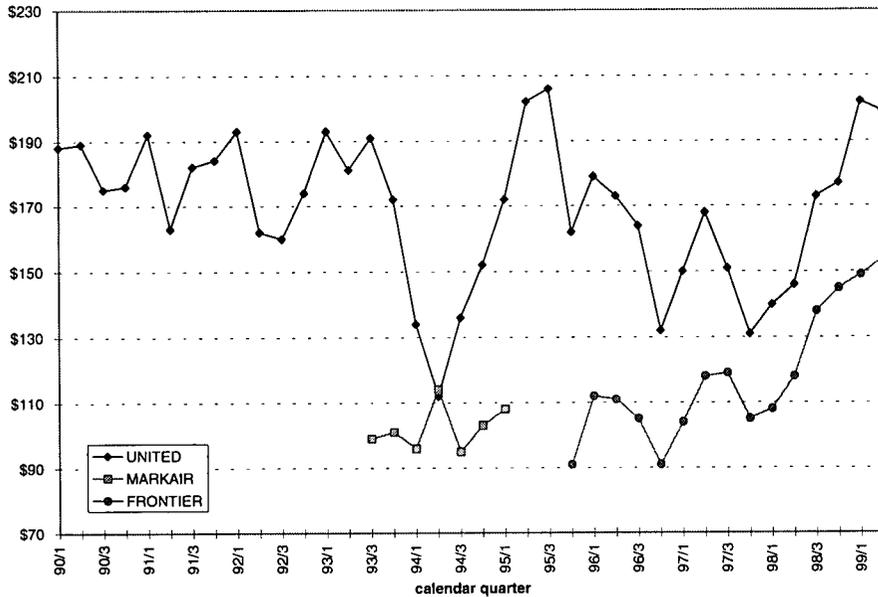


b. Denver-San Francisco: United vs. MarkAir

MarkAir entered the Denver-San Francisco market on September 7, 1993. United began to drop its prices steadily to levels 38% below those prevailing before MarkAir entered, until United priced below MarkAir's average fares in the second quar-

ter of 1994. Is it a coincidence that this was the quarter that MarkAir was attempting to emerge from Chapter 11 bankruptcy? After MarkAir was returned to bankruptcy, United raised its fares 84% above the predatory levels, to levels higher than those prevailing before MarkAir entered. This enabled United to recoup the short-term losses it had suffered in driving MarkAir from the market.

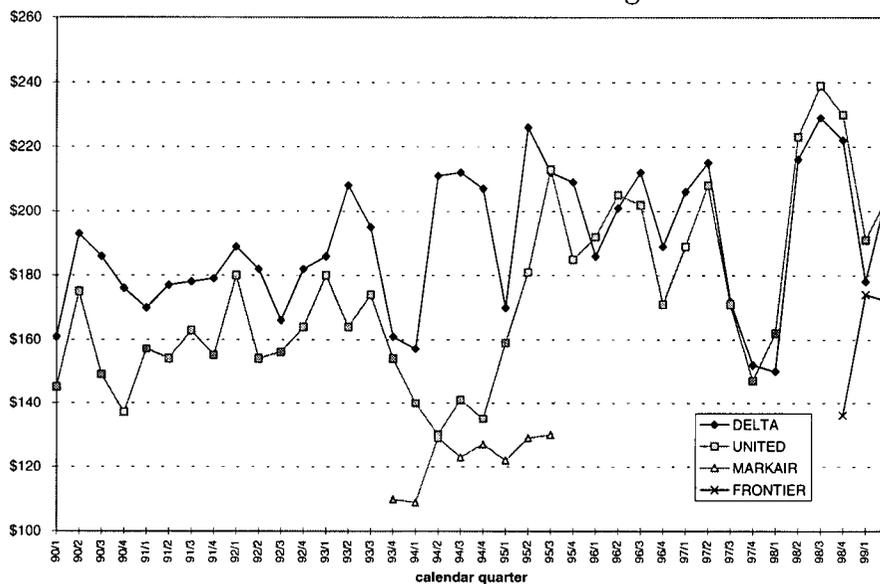
Chart 11 – Denver-San Francisco Average Fares



c. Denver-Atlanta: United vs. MarkAir

One should contrast United’s competitive response to MarkAir’s entry in the Denver-Atlanta market with Delta’s. Here again, United made its sharpest attack at MarkAir in the second quarter of 1994, as MarkAir was attempting to emerge from bankruptcy. In 1994, United’s average prices were only 12% higher than MarkAir’s, while in the second quarter, they are nearly identical. Note that instead of dropping prices, Delta ceded the low-fare market to MarkAir, marching away from the battle, and charging prices 65% higher than MarkAir’s. Delta focused on revenue maximization rather than predation.

Chart 12 – Denver-Atlanta Average Fares



## 5. United Airlines' Response to Frontier Airlines' Entry at Denver

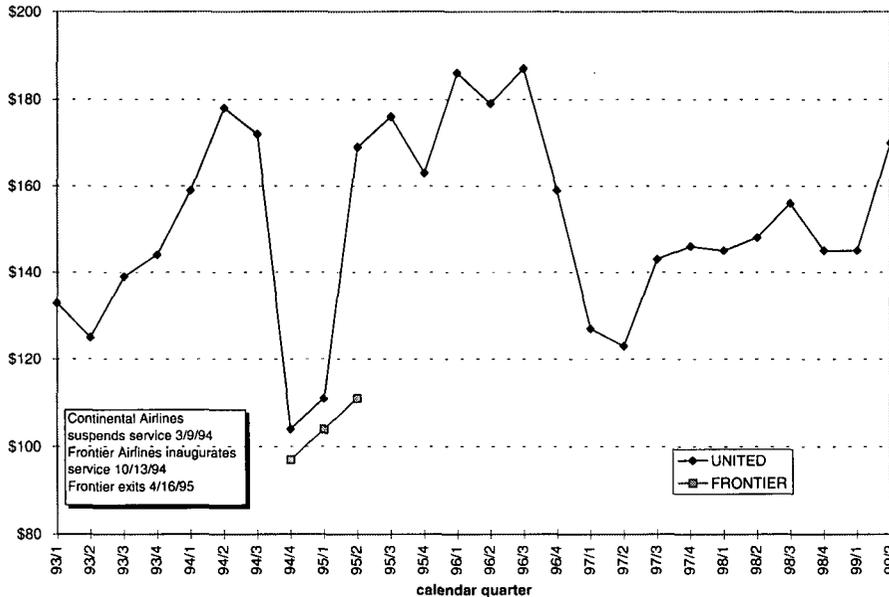
### a. Denver-Tucson: United vs. Frontier

United responds aggressively when low-fare carriers attempt to establish a presence at its Denver hub. From United's perspective, new entry threatens its Fortress Hub monopoly.

Frontier Airlines entered the Denver-Tucson market with two flights a day on September 13, 1994. Continental Airlines had served the market with two to three flights per day until it withdrew on March 9, 1994, so Frontier essentially filled the void of Continental's departure. United's response to Frontier's two flights was to *slash fares 40%* (from \$172 in the third quarter of 1994, to \$104 in the fourth quarter of that year). For the first two quarters of Frontier's competitive presence, United's average fares were *only 7% higher* than Frontier's. Given that the DOT's average fare data includes First Class fares as well as Economy Class fares, we can assume the 7% difference reflects the fact that United sells First Class tickets, while Frontier's aircraft are configured in single-class Economy configuration. This means that United likely was pricing its Economy product at Frontier's level, and well below United's costs. With United's advantages of more frequency, greater market identity, and frequent flyer loyalty, Frontier was unable to achieve break-even load factors and was forced reluctantly to abandon the market on April 16, 1995. After Frontier left, United raised fares as

much as 93%, to levels higher than those prevailing before Frontier entered (they reached \$186-187 in the first and third quarters of that year), so as to recoup its short-term losses in driving Frontier out. The deleterious impact on consumers in Tucson and Denver is manifest.

Chart 13 – Denver-Tuscon Average Fares



b. Denver-Phoenix: United vs. Frontier

Frontier began serving the Denver-Phoenix market on September 25, 1995, with two flights a day. This was significantly less service than the four to five flights a day Continental had operated in the market until it ceased serving it on October 31, 1994. United's response to Frontier's two flights was to slash its average Denver-Phoenix fares by 39% (from \$146 in the second quarter of 1995, to \$89 in the fourth quarter), a level Frontier is convinced was significantly below United's costs. Beginning in the fourth quarter of 1996, United's average one-way fare (\$97) was only 3% higher than Frontier's (\$94). Given that United offers first-class service (and Frontier does not), United's coach fares must have been lower than Frontier's, for the DOT data aggregate first and coach tickets into the average fare calculation. Though relatively few Frontier passengers take Continental One Pass miles, a large portion of United's passengers take Mileage Plus points for travel. Frequent flyer mileage is an indi-

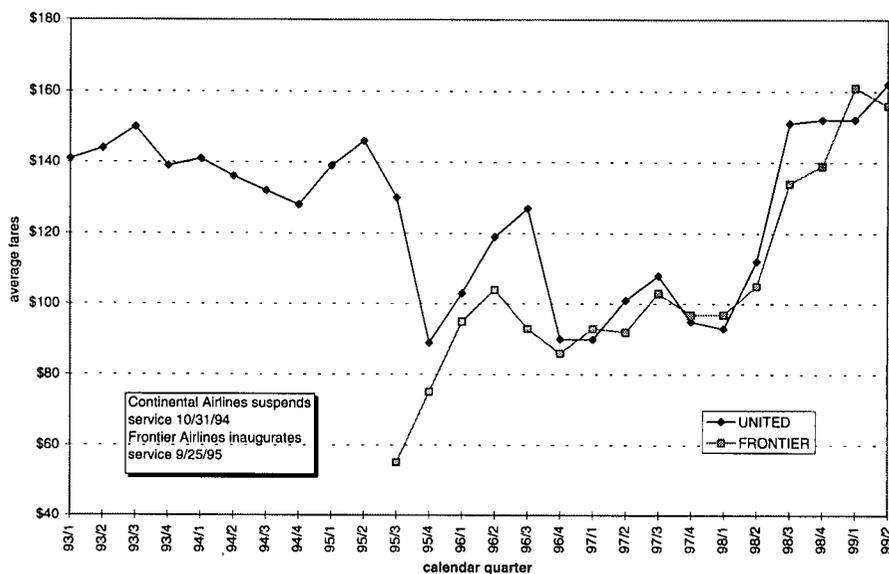
rect form of price rebating. Ed Perkins, editor of *Consumer Reports Travel Letter*, wrote:

The big lines justify their matching cuts as a good-faith response to competition. I don't agree. When a big line matches a small line's fares, dollar for dollar, it's actually undercutting fares.

Why? Simply because, no matter how low the fare, the big lines give frequent flyer mileage—in effect, a rebate worth two cents a mile. Thus, for example, when a big line matches Kiwi's \$94 fare from Chicago to Newark, it actually undercuts Kiwi's fare by about \$14—the value of the 714 miles of credit for the flight.<sup>123</sup>

Frontier had the temerity to add a third flight to the Denver-Phoenix market in December, 1995, to replace the elimination of MarkAir's single flight from the market. On February 10, 1997, United responded by increasing its frequencies in two important Frontier markets—63% in the Denver-Phoenix market (from 8 flights per day before Frontier entered, to 13 in February 1997), and 71% in the Denver-Las Vegas market—with its self-described competitive “weapon”—Shuttle by United. By the Summer of 1996, United had increased seat capacity in the Denver-Phoenix market by 30%, and in the Denver-Las Vegas market by 32%, over Summer averages prevailing a year earlier.

Chart 14 – Denver-Phoenix Average Fares

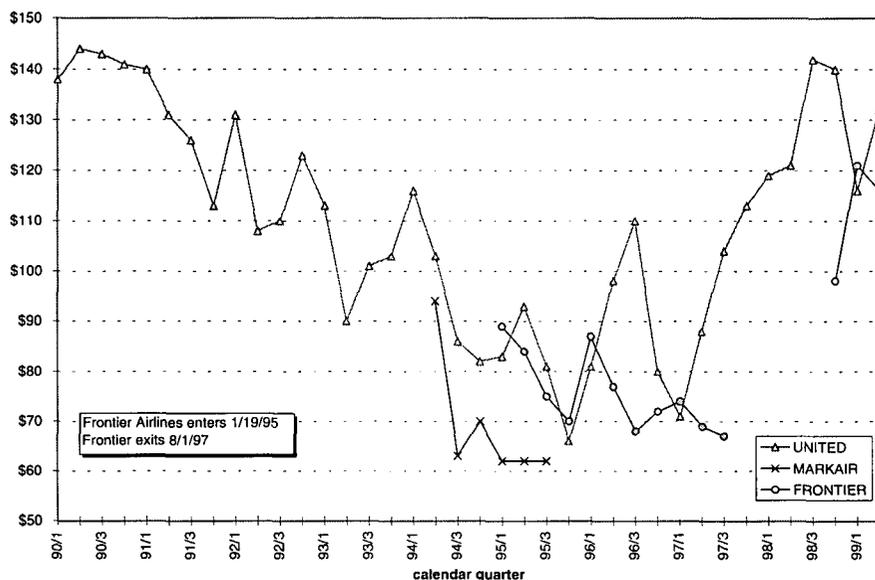


<sup>123</sup> Ed Perkins, *Protect Lower Fares: Save the Small Airlines*, BUFFALO NEWS, May 28, 1995, at 5G.

## c. Denver-Las Vegas: United vs. Frontier

MarkAir entered the Denver-Las Vegas market in the second quarter of 1994. United's prevailing average fare in the 1990s had been \$123. After MarkAir entered, in the third quarter of 1994, United dropped fares 30%, to \$86. Frontier Airlines entered the market on January 19, 1995. For the five ensuing quarters, United's fares averaged *less* than Frontier's average fare of \$81. United again attacked Frontier with fares 4% below Frontier's in the first quarter of 1997. All the while, United was adding capacity, increasing seats 38% from the first quarter of 1995 to the first quarter of 1997. With such below-cost pricing by United, and United's dumping of capacity into the market with the introduction of United Shuttle in February 1997 (increasing flight frequency 75% between January and March, 1997), Frontier was forced to withdraw from the market by the Summer of 1997. United then raised prices to the highest level they had been since early 1994, before MarkAir entered.

Chart 15 – Denver-Las Vegas Average Fares



Though United portrays Shuttle as a consumer-friendly low-cost/low-fare alternative, the facts suggest otherwise. Although United still offers low fares in the Denver-Phoenix market (where it competes with Frontier and America West), United Shuttle raised fares sharply after Frontier withdrew from the Denver-Las Vegas market:

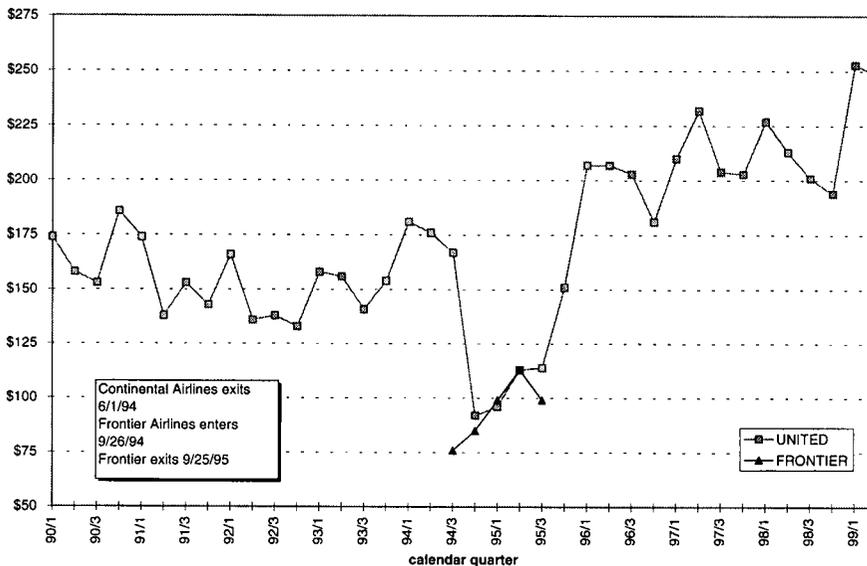
Table 3 – A Tale of Two Cities: United’s Lowest Regular Fares

	Before Shuttle	Introductory Fare Feb. 11, 1997	February 11, 1998
Denver-Phoenix (60 8 miles)	\$98	\$98	\$168
Denver-Las Vegas (649 miles)	\$138	\$98	\$224

## d. Denver-Billings: United vs. Frontier

Frontier Airlines entered the Denver-Billings market on September 26, 1994. At the time, United’s average fare was \$167. United responded to Frontier’s entry by *slashing its average fares 45%*. By Frontier’s first full quarter in the market, United was charging prices only 8% higher than Frontier’s. By Frontier’s second full quarter in the market, United was pricing its product 3% below Frontier’s. After Frontier was forced to withdraw from the market one year after it entered, on September 25, 1995, United enjoyed significant recoupment of its short-term losses, raising average fares 150%, to levels never before seen in the Denver-Billings market

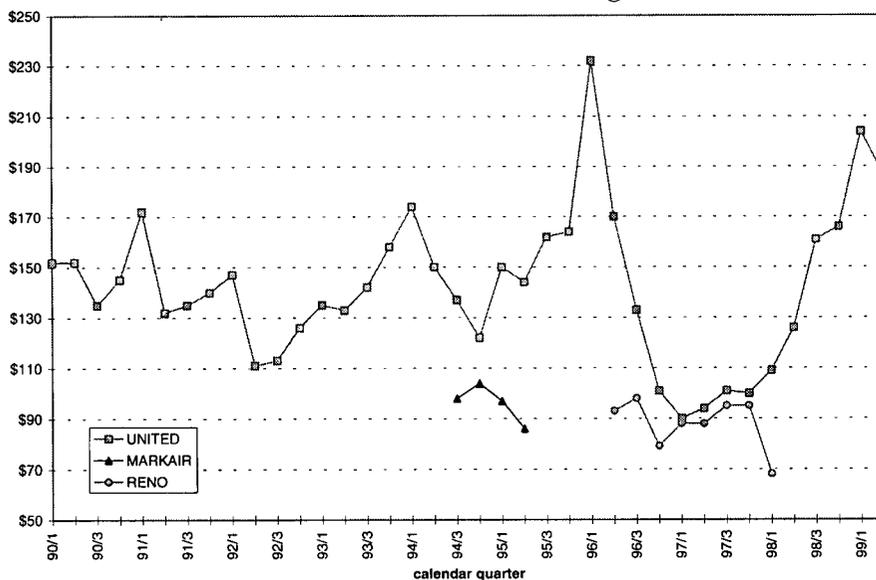
Chart 16 – Denver-Billings Average Fares



6. *United Airlines' Response to Reno Air's Entry at Denver*

Lest one conclude that United Airlines launches predatory strikes only at airlines which attempt to establish a hub at Denver, consider Denver-Reno, where Reno-based Reno Air entered on June 6, 1996. Though fares had been marching upward in that market for some time, United responded to Reno's entry with a 61% price drop (from \$232 in the quarter before Reno Air entered to \$90 in the first quarter of 1997). In the three quarters of 1997 for which we have data, United's average fare (\$95) was only 4% above that of Reno Air's (\$91). Reno had little choice but to withdraw from the market.

Chart 17 – Denver-Reno Average Fares



## D. SUMMARY

If major hub-dominant airlines are free to price below cost and increase capacity or flight frequency significantly, a new entrant will find consumer demand for its product eroded below a break-even cost level. Though the incumbent will lose money in the short-term, it will recoup those losses in the long-term.

In summary, we have seen that the competitive response of a major airline to the entry of another major airline into its hub is generally not to dump capacity or price below-cost, for such a predatory effort would be futile. But when a less-well-capitalized, younger, low-cost new entrant airline attempts to enter, the competitive response is predatory, with the intent of driving the

new entrant out of the market. Chronologically, the process is this:

1. Major airline establishes dominance at airport serving major city.
2. Dominance allows major airline to price well above competitive levels.
3. When a new entrant attempts to enter a major airline's hub, dominant airline responds with below-cost pricing, capacity dumping, and/or a number of other predatory practices until the new entrant is driven out.
4. Once the new entrant is driven out of the market, dominant airline raises prices to levels sometimes higher than those prevailing before the new entrant attempted entry.

Predatory behavior can have a chilling effect on new entry. As Irwin Steltzer observed, a hunter who walks past a field with a no trespassing sign may ignore it, unless the field is littered with bodies of previous trespassers. Similarly, Mark Atwood concludes, "Fear of predation shrinks the available pool of investment capital for upstart airlines and channels their entry away from the very (monopoly) markets where their competitive presence would be most valuable" to the consuming public, relegating them to the small, safe niches of the airline market.<sup>124</sup>

Reviewing this pattern, which has appeared again and again over the past two decades, Alfred Kahn concluded:

When I am confronted with that objective sequence of events, I am prepared to characterize the response of the incumbents . . . as predatory, and I see no reason to require any further demonstration. I think the most grievous governmental failure in the recent years has been the failure to prosecute a single case against new competitors, and I certainly applaud the Department of Transportation for undertaking a vigorous enforcement effort. . . .

. . . The acid test, whether it is framed in terms of a predatory intent or in terms of the likely objective of anticompetitive consequences, . . . is whether the incumbent airline is deliberately accepting financial losses selectively in the markets where it is subject to competitive challenge, engaging in what Corwin Edwards 50 years ago called discriminatory sharp-shooting.

For the reasons that the DOT clearly expands, a policy of deliberately losing money would not make sense except on the expectation of driving people out and being able to recover it. . . .

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<sup>124</sup> Mark Atwood, *Refining Predatory Policy: The Fear Factor and Reduced Funding for Low-Fare Airlines*, ANTITRUST L. & ECON. REV. 89 (1999).

The scores of competitors that have entered the industry over the last 20 years attest to the widespread eagerness of enterprisers to take the risk of coming in and competing in free markets. But the history of their entry and demise also demonstrates that we must have vigorous antitrust-like policies to keep open the opportunity for that entry, free of the threat, apparently abundantly demonstrated by actual practice, of predatory responses.<sup>125</sup>

Over the past decade, several studies performed by the U.S. General Accounting Office have chronicled the plethora of predatory weapons used by major airlines to thwart these Congressional goals. In a 1996 report, the GAO concluded:

[W]e identified a number of policy options 6 years ago that DOT could consider to lower these barriers [to entry] and increase competition. Since then, there has been little progress toward reducing these barriers, and some . . . have grown worse. Therefore, we believe that DOT must now take positive steps to address several of the most serious barriers.<sup>126</sup>

In its 1996 report on new entrant airlines, *The Low Cost Airline Service Revolution*, the DOT expressed concern that hub dominant airlines have an incentive to discourage competitive entry by engaging in predatory behavior and unfair competitive practices:

The high fares hub dominant carriers have enjoyed at their hub cities provides the incentive for those carriers to discourage competitive entry. And allegations of predatory behavior have increased as a result of the recent emergence and growth of a number of low cost low fare new entrant airlines. Given the incentives and the reality of very high prices for local passengers at certain hub network hubs, we have to be concerned about the possible predatory behavior or unfair competitive practices. . . . [W]e will not be indifferent to attempts to exclude or preclude new entry through predatory activity. . . . [T]he beneficial impact of low cost new entry—especially in disciplining fares and filling service voids—is simply too important to permit predation to undermine it. Anticompetitive activity can take myriad forms, from sudden and targeted service increases and sharp and highly selective fare cuts to . . . other “doing business” problems. The Department will continue to evaluate which actions cross the line

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<sup>125</sup> *Aviation Competition Hearing Before the Subcomm. on Aviation, of the House Comm. on Transp. & Infrastructure*, 105th Cong. 1067 (Apr. 23, 1998) (testimony of Alfred Kahn).

<sup>126</sup> GAO, AIRLINE DEREGULATION: BARRIERS TO ENTRY CONTINUE TO LIMIT COMPETITION IN SEVERAL KEY DOMESTIC MARKETS 22 (Oct. 1996).

from tough competition to anticompetitive predation and react accordingly. . . .

[W]e will continue to consider and carefully review allegations of anticompetitive behavior that are brought to our attention. . . .

[W]here appropriate we will pursue enforcement activity to prohibit any airline from engaging in behavior that may be anticompetitive.<sup>127</sup>

It is for these reasons that the Departments of Transportation and Justice began to focus on major airlines' predatory and anticompetitive practices at concentrated hub airports and routes radiating therefrom.

### III. MONOPOLIZATION OF DENVER: A CASE STUDY

#### A. INTRODUCTION

United Airlines is the *largest airline in the world*. Beginning in 1982, United launched a plan to monopolize the Denver non-stop and connecting passenger market.

The monopolization of the Denver hub was achieved with several deliberative steps. Step one was to eliminate the original Frontier Airlines as a competitor, which occurred in 1986. Step two was to drive Continental Airlines out of Denver as a hub competitor, which occurred in 1994. Steps three and four were to eliminate Western Pacific Airlines and the new Frontier Airlines as low-cost competitors. Western Pacific was liquidated in 1998.

Until the Departments of Transportation and Justice began to focus on these problems in 1997, the means by which United Airlines accomplished these goals included: (1) adding seat capacity and flight frequency in competitors' city-pairs in order to drive its competitors' load factors to below break-even levels; (2) dropping prices to levels at or below those of any competitor which dares to enter its market, even if the price is below United's costs; (3) refusing any competitor access to its dominant passenger network; (4) biasing its computer reservations system to dissuade travel agents from selling its competitors' services; (5) bribing travel agents with commission overrides to steer passenger business toward United; and (6) entering into exclusive dealing arrangements with corporate purchasers. After a competitor was eliminated, United's conduct as a monopolist was also consistent—raise prices in its monopoly city-pairs to

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<sup>127</sup> DOT, THE LOW COST AIRLINE SERVICE REVOLUTION 31-33 (1996).

whatever the market will bear. This gave it the economic resources to repeat the cycle whenever a new entrant attempted to invade its fortress hub.

This section documents the anticompetitive behavior of United Airlines toward its Denver competitors chronologically, beginning shortly after airline deregulation.

#### B. THE DEMISE OF THE ORIGINAL FRONTIER AIRLINES

The original Frontier airlines began service as a "local service carrier" in 1946. By the beginning of 1982, Frontier Airlines had more flights at Denver than any other carrier, serving a total of 85 cities from its Denver hub. Frontier had been consistently profitable during the previous ten years.<sup>128</sup> Although the industry as a whole lost money in 1981, Frontier earned \$32 million of profit on revenue of \$577 million.<sup>129</sup> It was to be Frontier Airlines' last good year.

According to *Aviation Daily*, in 1982, "United, a major competitor at Denver Stapleton, launched a massive campaign to capture a bigger share of the Denver market and to become the dominant carrier at the airport."<sup>130</sup> The 1981 air traffic controllers' strike had led the FAA to impose a cap on landing slots. In 1982, as it began its buildup at Denver, United was buying slots from anyone who would sell them, moving acres of seats to Denver.<sup>131</sup> United increased its flights out of Denver by a third, predominantly adding capacity in Frontier's markets.<sup>132</sup> In its "United's High On Denver" plan, United Airlines executives explicitly identified Frontier Airlines as its principal target.<sup>133</sup> From May to July of 1982, United increased its flights from 96 to 133 daily departures, becoming Denver's largest carrier, versus 120 daily departures by Frontier and 110 by Continental.<sup>134</sup> This author's study of the airline industry (published in 1992) discussed this period as follows:

United, the nation's largest airline, was determined to dominate Denver. With a deep pocket that could cross-subsidize losses in competitive markets, a powerful computer reservations system

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<sup>128</sup> H. Laws & R. Lossee, *Frontier* (monograph Dec. 2, 1986), at 2.

<sup>129</sup> HISTORY OF THE FORMER FRONTIER AIRLINES: 1946-1986.

<sup>130</sup> AVIATION DAILY, Sept. 2, 1986, at 348.

<sup>131</sup> Dee Mosteller & Danna Henderson, *Denver's Stapleton Airport: A Good Place To Watch Deregulation*, AIR TRANSPORT WORLD, Nov. 1986, at 64.

<sup>132</sup> *Id.*

<sup>133</sup> *United Is Biggest, Best at Denver*, FRIENDLY TIMES, Oct. 1982.

<sup>134</sup> *Id.*

that could discriminate against competitors, and an attractive frequent-flyer program that could lure business travelers (the most lucrative segment of the passenger market), United, the nation's largest airline, began to turn up the heat on Frontier.<sup>135</sup> 1982 marked the first time United Airlines was described by the press as "the 800-pound gorilla."<sup>136</sup>

It is a metaphor that has since been almost universally embraced by observers of the airline industry.<sup>137</sup>

By 1983, United had added over 100,000 seats per week at Denver since deregulation, and increased its frequencies to 174 departures per day at Denver's Stapleton International Airport. Frontier had 138 daily departures and 24.3% of the market, while Continental had 18.5%.<sup>138</sup> Frontier was being squeezed by a determined United Airlines. That year, despite a significant cost-saving labor agreement, an 11.2% increase in passenger boardings, and an improvement in revenue, Frontier posted a net loss of \$13.8 million, the first in more than a decade.<sup>139</sup> By the end of 1983, Continental Airlines collapsed into Chapter 11 bankruptcy.

By 1984, average fares in Denver were the lowest in the United States. In 1985, they dropped another 8.3%.<sup>140</sup> Frontier was forced to begin liquidating assets, and United seized the opportunity. In early 1985, Frontier sold five McDonnell-Douglas aircraft to United Airlines for \$95 million, and in May of 1985,

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<sup>135</sup> PAUL DEMPSEY & ANDREW GOETZ, AIRLINE DEREGULATION & LAISSEZ-FAIRE MYTHOLOGY 70 (1992).

<sup>136</sup> *Frank Lorenzo Lures a Co-Pilot*, BUS. WK., Dec. 6, 1982, at 42.

<sup>137</sup> See, e.g., Steven Lolford, *Carriers Moves On Labor Costs Are Viewed As Bold Decisions*, TRAVEL WKLY., Sept. 12, 1983, at 1; Douglas Feaver, *Airline Charts New Course After Best Year*, WASH. POST, Feb. 24, 1985, at G1; Joan Feldman, *Is There Any Justice in Reagan's Airline Merger Policy?*, AIR TRANSPORT WORLD, May 1986, at 18; Mark Hornway, *Ferris Loads Up On Debt To Thwart Allegis Buyout*, CRAINS CHICAGO BUS., June 1, 1987, at 2; MACNEIL/LEHRER NEWSHOUR, Nov. 4, 1987; Robert Rose, *Taking Off: United Airlines Begins To Pick Up Altitude*, WALL ST. J., July 28, 1988, at 1; Stanley Ziemba, *Sleeping Giant United Wakes Up*, CHICAGO TRIB., Feb. 9, 1992, at C1; Paul Betts, *Grounded After a Bumpy Flight*, FIN. TIMES, Jan. 10, 1994, at 14; Gene Amole, *Blame Romer, Peña, for DIA Fare Hike*, ROCKY MOUNTAIN NEWS, Jan. 31, 1995, at 5A; *Colorado Business Strategy*, ROCKY MOUNTAIN NEWS, Feb. 12, 1995, at 98A; James Ott, *Domicile Issue Divides UAL, Cabin Crews*, AVIATION WK. & SPACE TECH., Nov. 20, 1995, at 52; Chuck Green, *Supporting DIA Tests a Person's Endurance*, DENVER POST, Jan. 14, 1996, at B1; and Robert Moorman, *The "New" New Frontier*, AIR TRANSPORT WORLD, Aug. 1996, at 86.

<sup>138</sup> *Texas Air Makes Bid for Frontier*, AVIATION DAILY, Apr. 5, 1985, at 201.

<sup>139</sup> FRONTIER AIRLINES, ANNUAL REPORT (1983).

<sup>140</sup> Stapleton Int'l Airport, Average Airline Fares for Selected U.S. Airports (1988).

was forced to sell half its remaining fleet (25 of 51 of its Boeing 737s) to United for \$265 million. By purchasing more than half of Frontier, United was able to gradually downsize its competitor.<sup>141</sup> The rest of Frontier was sold to Newark-based new entrant airline People Express in November 1985.<sup>142</sup>

By 1986, United controlled nearly 40% of the Denver market, followed by Continental at 28% and People Express-owned Frontier at 18%.<sup>143</sup> (See Chart 16). Fares at Denver fell another 4.6% in that year.<sup>144</sup> Denver was being described as the “fare wars capital of the world,” with the lowest unrestricted fares of any major hub in the United States. Yields (the amount of revenue charged per seat) were as low as 5 cents a mile, while Frontier’s seat-mile costs were north of 8 cents.<sup>145</sup>

Below-cost pricing began to take its toll on smaller carriers in the Denver market. In May 1986, Pioneer Airlines, a long-time Denver commuter carrier, ceased operations.<sup>146</sup> In addition to below-cost pricing, United launched a program to bribe Denver travel agents with \$100 every time they told a customer “it’s just as easy and just as cheap to fly United.”<sup>147</sup>

In July 1986, with Frontier still losing money, People Express agreed to sell Frontier to United, and transferred many of Frontier’s most important assets to United while the deal was pending. United was able to acquire \$43.2 million worth of assets from Frontier, including some of its most valuable properties—five takeoff and landing slots at Chicago O’Hare, three gates at Dallas/Ft. Worth, contracts to acquire two MD-80 aircraft, and two hangars and six gates at Denver.<sup>148</sup> By now, United had spent more than \$400 million directly on Frontier’s assets, and hundreds of millions of dollars more in below-cost pricing, in an effort to eliminate Frontier as a competitor at Denver. Conti-

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<sup>141</sup> Certain aircraft were leased back to Frontier for short periods of time.

<sup>142</sup> *Frontier Begins Downsizing Operations*, AVIATION DAILY, May 15, 1985, at 83.

<sup>143</sup> Stapleton Int’l Airport, Domestic Market Shares (July 1986).

<sup>144</sup> Stapleton Int’l Airport, Average Airline Fares for Selected U.S. Airports (1988).

<sup>145</sup> Dee Mosteller & Danna Henderson, *Denver’s Stapleton Airport: A Good Place To Watch Deregulation*, AIR TRANSPORT WORLD, Nov. 1986, at 64.

<sup>146</sup> *Id.*

<sup>147</sup> Henry Dubroff, *Touters of United Rewarded*, DENVER POST, Mar. 8, 1986.

<sup>148</sup> In re Frontier Airlines, Inc. (memorandum opinion and order on motion to approve settlement, Case No. 85 B 8021 E, Mar. 23, 1987), at 4.

mental filed a lawsuit objecting to the monopoly Frontier's acquisition by United would create.<sup>149</sup>

Once it had acquired several of Frontier's prized assets, United began to take a hard line stance in its negotiations over the acquisition of the rest of Frontier. Although United had agreed to purchase Frontier, and agreed to "use its best efforts" to resolve potential labor problems, United balked at consummating the acquisition as its pilots refused to accede to United's insistence that Frontier's pilots be integrated into United's labor force at their existing wage levels (in effect, a "C" scale, with wages 40% below those of United's pilots). Some speculated that United failed to exercise good faith in the negotiations (for example, United never negotiated with the other union groups), because it knew that Frontier's deteriorating cash position would soon cause it to collapse in bankruptcy. By walking away, United could eliminate Frontier without having to conclude the purchase agreement with People Express.

Meanwhile, People Express continued to lose money, and was forced to shut down Frontier on August 24, 1986.<sup>150</sup> Frontier entered bankruptcy two days later. A United Airlines' publication revealed, "United will benefit from eliminating the instability of Denver's three-carrier hub. *This will translate into higher fares and better returns and will ensure that another carrier does not attempt to build a presence in Denver.*"<sup>151</sup>

But United did not anticipate that Continental would pick up the pieces of a grounded Frontier. Only a month after People put Frontier into bankruptcy, Frank Lorenzo's Texas Air offered to purchase both People Express and Frontier, and by February 1987, they were both folded into Continental (along with New York Air).<sup>152</sup> After a settlement with United over the transfer of assets from Frontier,<sup>153</sup> Continental came away with most of Frontier's aircraft, in addition to three hangars and two concourses (C and D) at Denver's Stapleton Airport.<sup>154</sup> With the acquisition of Frontier, Continental surpassed United with 236

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<sup>149</sup> Dee Mosteller & Danna Henderson, *Denver's Stapleton Airport: A Good Place To Watch Deregulation*, AIR TRANSPORT WORLD, Nov. 1986, at 64.

<sup>150</sup> Agis Salpukas, *Frontier Files for Bankruptcy*, N.Y. TIMES, Aug. 29, 1986, at D1.

<sup>151</sup> *Reporters, Analysts Applaud United's Frontier Purchase*, FRIENDLY TIMES, Aug. 1986, at 2 [emphasis supplied].

<sup>152</sup> PAUL DEMPSEY & ANDREW GOETZ, AIRLINE DEREGULATION & LAISSEZ-FAIRE MYTHOLOGY 87 (Quorum 1992).

<sup>153</sup> See *In re Frontier Airlines, Inc.*, 74 Bankr. 973 (1987).

<sup>154</sup> PAUL DEMPSEY & ANDREW GOETZ, AIRLINE DEREGULATION & LAISSEZ-FAIRE MYTHOLOGY 88 (Quorum 1992).

daily departures compared to United's 218, and briefly held the dominant position at Denver from June 1987 to May 1988.<sup>155</sup> The era of three hubbing airlines in Denver was over.

Subsequently, an antitrust action was filed against United by a large number of former Frontier pilots, flight attendants, and ticket, reservations and station agents against United Airlines. In that case, plaintiffs alleged that United engaged in various anticompetitive activities designed to destroy Frontier. Among the more prominent allegations was that United: (1) exerted monopoly power in the computer reservations system [CRS] market in Denver and also with respect to its Apollo CRS; (2) overcharged Frontier for its participation in the Apollo system; (3) caused Apollo to operate unfairly in ticket sales; and (4) purposefully did not go forward with the stock purchase agreement it had concluded with Frontier, leaving Frontier so weakened financially that it failed.<sup>156</sup> Unfortunately, the court held that employees lack standing to bring an antitrust claim, and never reached the merits of the complaint.<sup>157</sup>

Another lawsuit brought in 1985 by Continental Airlines objected to the manipulation and display bias, and suppression of competitors' fares and schedules imposed by United and American Airlines in their computer reservations systems.<sup>158</sup> In the mid-1980s, United's Apollo CRS was used by between 70% and 80% of Denver-area travel agencies.<sup>159</sup> A federal district court "found sufficient evidence that United and American committed mail fraud and wire fraud in connection with their CRSs to allow Continental to proceed with a jury trial on its \$1 billion RICO (Racketeering Influenced and Corrupt Organizations Act) claim against the carriers," to allow the case to proceed to a jury.<sup>160</sup> Continental claimed United had programmed its CRS to favor United's flights over those of its competitors, even when a competitors' flight was more convenient for a customer. Continental also alleged that United overcharged it and other carriers for participation in its CRS. The court found that United

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<sup>155</sup> *Continental Expects To Operate 250 Daily Denver Departures By Yearend*, AVIATION DAILY, Nov. 3, 1986, at 182.

<sup>156</sup> *Sharp v. United Airlines*, 967 F.2d 404 (10th Cir. 1992).

<sup>157</sup> *Id.*

<sup>158</sup> *American, Continental Spar As CRS Suit Heads To Court*, AVIATION DAILY, Feb. 27, 1989, at 295.

<sup>159</sup> *Dee Mosteller & Danna Henderson, Denver's Stapleton Airport: A Good Place To Watch Deregulation*, AIR TRANSPORT WORLD, Nov. 1986, at 64.

<sup>160</sup> *American, Continental Spar As CRS Suit Heads To Court*, AVIATION DAILY, Feb. 27, 1989, at 295.

and American "had specific intent to defraud" when they "deceitfully concealed material facts concerning the manipulation of the Continental plaintiff's flight information in Sabre and Apollo."<sup>161</sup> After 10 weeks of trial, on the eve of jury deliberations, United settled the suit for about \$70 million.<sup>162</sup>

With Frontier and People Express gone, the Denver market became a duopoly for Continental and United. With Frontier out of business, United's market share at Denver climbed to 50%. For a short while it resembled more of a "shared monopoly," as each carrier attempted to recoup some of the losses incurred in the battle with Frontier.<sup>163</sup> Accordingly, airline ticket prices at Denver rose by 17.6% in 1987 and a record 39.2% in 1988.<sup>164</sup> Without Frontier, passenger enplanements at Denver declined sharply, exacerbated by the fare increases.

### C. THE DEMISE OF CONTINENTAL AIRLINES' HUB AT DENVER

Founded as Varney Speed Lines in 1934, Continental Airlines' first route was from El Paso to Denver. From 1937 to 1963, Continental was headquartered in Denver.<sup>165</sup> After Frontier and People Express went out of business, and Frontier's gates and aircraft folded into Continental, for a short while Continental became Denver's leading carrier. In 1987, Continental accounted for 42% of total enplaned passengers at Denver.<sup>166</sup> The status was short-lived, however, as United quickly regained the lead in May 1988, a position it never again relinquished. (See Chart 16). By 1990, Continental was in bankruptcy for the second time in a decade.

Former United Airlines' CEO Stephen Wolf said, "I never fought anything so hard in my life" as the new Denver International Airport [DIA].<sup>167</sup> Opposition was predicated on cost, and (though never said by United publicly), the possibility that a large new airport might have sufficient capacity to attract new

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<sup>161</sup> *Continental Lawsuit Going To Trial*, DENVER POST, Feb. 24, 1989.

<sup>162</sup> *Continental Settles Lawsuit*, N.Y. TIMES, Mar. 30, 1990, at D13.

<sup>163</sup> PAUL DEMPSEY & ANDREW GOETZ, AIRLINE DEREGULATION & LAISSEZ-FAIRE MYTHOLOGY 89 (Quorum 1992).

<sup>164</sup> Stapleton Int'l Airport, Average Airline Fares for Selected U.S. Airports (1988).

<sup>165</sup> Jeffrey Leib, *Continental's Denver Departure*, Oct. 23, 1994, at H1.

<sup>166</sup> Leigh Fisher Associates Analysis, Prepared for the City and County of Denver (1994).

<sup>167</sup> Don Phillips, *\$3.1 Billion Airport At Denver Preparing for Rough Takeoff*, WASH. POST, Feb. 13, 1994, at A10.

competition. But once Continental jumped on the DIA bandwagon, United had little choice but to jump aboard too.

Among the last things Frank Lorenzo did as CEO of Continental was to sign a lease with the city of Denver in the summer of 1990 for 20 gates at the new Denver International Airport. Because Continental became DIA's first hub carrier, it was able to reserve the closest (and therefore most desirable) concourse (A) to the main terminal building, and the city agreed to build a pedestrian bridge linking the terminal directly to that concourse. When United subsequently signed up for Concourse B (which had no pedestrian bridge to the main terminal), it insisted the city make the glass on Continental's Concourse A bridge opaque, so that no passenger could see the splendid view of the Colorado Rocky Mountains from it, for United believed the bridge offered Continental a competitive advantage. Mercifully, DIA engineer Ginger Evans refused, and the city breached its contractual agreement.<sup>168</sup> United chose not to press its case, undoubtedly fearing the public relations fallout once the new airport opened.

United took several actions to pressure Continental to depart. For example, United refused to allow DIA to open until its automated baggage system could deliver 225 bags a minute. DIA's chief engineer, Ginger Evans, contended DIA could have opened early in 1994 with the baggage system operating at 40 bags per minute, adequate to allow United to meet its connect times.<sup>169</sup> "Virtually every design and construction professional [who] was involved directly or as a consultant . . . believed at that time the project, including the BAE automated baggage system, could have been completed by October 21, 1993 [the originally scheduled opening date]."<sup>170</sup> If an allegedly malfunctioning baggage system was not the fundamental cause of the delay, what was? One plausible and widely accepted explanation has been proffered by former Denver airport director George Doughty in testimony before Congress:

United Airlines did not want to go to DIA. United could have cooperated with the City to work out options for manual bag handling, but they did not. . . . As to exactly what United's ratio-

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<sup>168</sup> *Woman of the Year Ginger S. Evans*, ENGINEERING NEWS-RECORD, Feb. 11, 1994, at 34.

<sup>169</sup> See PAUL DEMPSEY, ANDREW GOETZ & JOSEPH SZYLIOVICZ, DENVER INTERNATIONAL AIRPORT: LESSONS LEARNED (McGraw Hill 1997).

<sup>170</sup> GREINER SAYS SEC STAFF CASE AGAINST DENVER CONSULTANTS NOT LEGITIMATE, AIRPORTS, Dec. 19, 1993.

nale [was] one can only speculate, but a few things are clear. United had no incentive to move in 1994. They had just increased their operations at Denver in order to capture an even greater market share that would eventually force Continental to dismantle its hub. It was to their advantage not to move until that was assured. . . .<sup>171</sup>

In 1992, Continental reached its last high water mark of 285 flights per day (including Continental Express) at Denver. With 38% of the market, Continental was still second to United's 40%. United designated Denver its "major domestic initiative," and increased its capacity by 30% over the next several years in what appeared to be a deliberate move to oust Continental once and for all.<sup>172</sup> UAL's 1992 Annual Report spoke of "an *aggressive plan* for expansion" at Denver: "At Denver, United phased in a dramatic increase in departures during the year, moving from 180 flights last spring to 217 during the summer and, by March of this year, to 247 departures [plus 105 by United Express carriers]."<sup>173</sup> Its 1993 Annual Report stated, "An *aggressive buildup* has made a significant contribution to revenue improvement at [the Denver] hub. United ended 1993 with 257 daily departures in Denver, up from 212 a year earlier. . . . Already the number one carrier in the Mile High City, United had increased its capacity over the last two years by nearly 30 percent."<sup>174</sup> United's aggressive behavior at Denver was clearly targeted at Continental. United pulled away and never looked back as it steadily increased market share, leading to Continental's decision to pull out.

Toward the end, Continental was losing \$10 million a month at its Denver hub, and could not face the prospect of continuing hub operations at the more expensive new airport. Denver airport director Jim DeLong described it as a "fierce battle for dominance of the Denver market."<sup>175</sup> Continental's Annual Report revealed that the company had lost \$130 million at Denver

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<sup>171</sup> *Hearing Before the Subcomm. on Aviation of the House Comm. on Transp. & Infrastructure*, 101st Cong. (May 11, 1995) (testimony of George Dougherty).

<sup>172</sup> Bill Mintz, *Denver A Victim of Continental's Fare Strategy*, HOUSTON CHRON., July 8, 1994, at 2 ("United Airlines, the dominant carrier in the Denver market, has been increasing its service to pressure Continental."); see also Paul Dempsey, *Rip United Airline's Hold from DIA*, DENVER BUS. J., Aug. 25-31, 1995.

<sup>173</sup> UAL CORP., 1992 ANNUAL REPORT 7 (1993) [emphasis supplied].

<sup>174</sup> *Id.* at 6 [emphasis supplied].

<sup>175</sup> Jeffrey Leib, *GAO Study Encouraging for DIA's Financing*, DENVER POST, Feb. 14, 1995, at C3.

in 1993, and lost \$500 million at Denver from 1990-1993.<sup>176</sup> According to Continental's CEO Robert Ferguson, "Continental's losses are at unacceptably high levels in Denver, even with our reduced flying."<sup>177</sup> Continental's Annual Report said, "Although the new facilities [at DIA] will be greatly superior to those presently serving Continental's Denver passengers, they also will be much more expensive."<sup>178</sup> It was estimated that increased landing fees required to pay off bonds issued to finance DIA would have added another \$50 million to Continental's costs.<sup>179</sup>

The advantages Continental gained from signing the first lease at DIA were never fully realized because Continental ultimately was forced to cry "uncle," in March 1994, and announced its decision to abandon its Denver hub operations and relinquish the market to United. Continental had already downsized its presence in Denver from a high of 285 flights a day in February 1992, to 165 flights in August 1993, to 148 flights in January 1994, to 107 flights in March 1994. Continental's Denver operations dropped to 86 flights in July 1994, 59 in September 1994, and 19 in March 1995.<sup>180</sup> Meanwhile, United increased its flights to 280.<sup>181</sup>

Following Continental's announcement that it was scaling back its Denver hub beginning in the fall of 1993, the withdrawal proceeded throughout the following year. Continental dropped 26 routes through August 1994, and an additional 23 on October 31, 1994. By the time DIA opened, Continental was down to 13 flights a day to three cities.

Passenger traffic, which was increasing since 1990, began to decline after Continental's pullout. In 1995, only 31 million total passengers were flown to, from or through Denver, down

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<sup>176</sup> CONTINENTAL AIRLINES, 1994 ANNUAL REPORT 19 (1995).

<sup>177</sup> Michelle Mahoney, *Denver Exit Costly One for Continental Airlines*, DENVER POST, July 10, 1994, at 2D; *Continental To Close Denver Crew Bases This Fall*, AVIATION DAILY, July 8, 1994, at 38.

<sup>178</sup> Michelle Mahoney, *Denver Costly for Continental*, DENVER POST, June 18, 1994, at A23.

<sup>179</sup> Bill Mintz, *Denver A Victim of Continental Fare Strategy*, HOUSTON CHRON., July 8, 1994, at 2; Michelle Mahoney, *Airline's Memo Jolts Morale*, DENVER POST, Mar. 31, 1994, at C1.

<sup>180</sup> City and County of Denver, *Airport System Revenue Bonds, Series 1994* (Sept. 1, 1994); Michelle Mahoney, *Airline Changes Buffet Denver*, DENVER POST, Feb. 13, 1994.

<sup>181</sup> Leigh Fisher Associates Analysis Prepared for the City and County of Denver (1994).

from 33 million in 1994. A contributing factor in this decline is the fare increase strategy that United enacted as it realized more monopoly opportunities.

United's goal of becoming the dominant carrier in Denver has been fully realized, as United and its code-sharing affiliates controlled nearly 80% of the total passenger market at Denver. By September 1996, United flew to 55 cities from Denver and Colorado Springs.<sup>182</sup> In 1994, United's CEO, Gerald Greenwald, confessed that United's strategy to dominate the Denver market had paid off in increased market share and profitability. Outgoing United CEO Stephen Wolf called Denver the "major domestic initiative" for the airline over the preceding two years. According to Greenwald, "United has done a fantastic job of building strength in Denver and we'd like to take advantage of that, if anything, and build it stronger."<sup>183</sup>

As noted above, United may have purposely delayed opening of DIA in order to encourage Continental to abandon its Denver hub. Along the way, United also cut several additional deals with the city to disadvantage its competitors. United insisted it be allowed to take over the Concourse C automated baggage system loop, so that only United would have a high-speed baggage system. Ironically, the Concourse C automated system was the only one operating well before United occupied it. Other airlines were relegated to traditional tug-and-cart technology.

Further, United insisted that carriers using Concourse A pay a disproportionate share of the costs of that concourse's automated baggage system, though the system has never been functional. (On a per-passenger basis, Continental Airlines pays the highest costs of any carrier at DIA; it absorbs a portion of the additional costs of its two sub-lessees on Concourse A; but because of this agreement, half of Concourse A's domestic gates remain empty.) United's insistence assures that the high cost of Concourse A's gates will dissuade new carrier entry on that concourse for years to come, despite its superior location. Unfortunately, DIA's costs have dissuaded many low-fare airlines (including Southwest Airlines) from entering the market, and driven low-cost airlines (e.g., Midway and Morris Air) from it. Finally, United insisted the city build it a hangar directly north of Concourse C, on land a future concourse is supposed to oc-

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<sup>182</sup> Jeffrey Leib, *United Joins Fare War*, DENVER POST, Sept. 19, 1996, at A1.

<sup>183</sup> Michelle Mahoney & Jeffrey Leib, *UAL's Success Key To Denver*, DENVER POST, July 13, 1994, at C1.

copy. No such future concourse can be built without tearing down United's hangar.

In summary, though unable to stop construction of a new airport at Denver, United Airlines was able to ensure its Fortress Hub dominance of DIA by driving up its costs, withholding permission to open DIA until Continental Airlines had succumbed to United's below-cost pricing and fully committed itself to eliminating its Denver hub, by ensuring Concourse C carriers would be deprived use of an automated baggage system and that Concourse A carriers would pay an exorbitant price for its automated baggage system (though a back-up baggage system was welded on top of it, thereby denying Concourse A carriers the automated system whose costs they must pay).

As Continental departed, an airline executive observed, "Denver residents will know the true definition of high fares."<sup>184</sup> By mid-1995, United enjoyed about 70% of Denver's passenger traffic, and even a higher percentage of DIA's \$5 billion travel market.<sup>185</sup> Continental Airlines, once an airline as large in Denver as United, accounted for less than 3% of DIA's traffic. Without a major airline to discipline the monopolist, United could extract whatever the market would bear.

United raised fares to monopoly levels in virtually every market Continental abandoned. For example, United Airlines quadrupled its unrestricted coach fare from Denver to San Francisco (from \$238 to \$954), and tripled its fare from Denver to Los Angeles (from \$298 to \$892).<sup>186</sup> United would boast that nearly 60% of its seats at DIA are discounted, with approximately 55% discounted up to 35% or more of the full fare.<sup>187</sup> That makes United sound like a benign monopolist until you compare these statistics with industry-wide data compiled by the Air Transport Association of America [ATA]. According to ATA, more than 90% of passengers fly at a discount, and the average discount is more than 60% of the full fare, and has been for nearly a decade.<sup>188</sup> In 1996, 93% of U.S. travelers were flying on a discounted ticket (compared with 60% on United at Denver), and the average discount was 67.5% off the full fare (compared with only 55% of Denver's United travelers enjoying a

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<sup>184</sup> Alex Berenson, *Continental Fading Away*, DENVER POST, July 29, 1994, at A1.

<sup>185</sup> Jeffrey Leib, *DIA Floats Bid for Southwest*, DENVER POST, June 26, 1995, at E1.

<sup>186</sup> Jeffrey Leib, *United Forging 'Fortress Hub'*, DENVER POST, Aug. 24, 1994, at C1.

<sup>187</sup> United Airlines, 3 The Plane Fax (Apr. 1996) (newsletter by UAL Vice President Roger Gibson).

<sup>188</sup> AIR TRANSPORT ASS'N, 1996 ANNUAL REPORT 8 (1996).

35% discount off the full fare).<sup>189</sup> It is remarkable that United would insist that Denver passengers should be grateful for its pricing when its Denver discounting was so miserly.

In a study of Denver International Airport, the GAO reported to Congress that United Airlines raised prices at Denver 38% from June 1994-95, while the average ticket price nationally increased only 7% over the same period.<sup>190</sup> In August 1995, American Express Travel said its Denver customers were paying 46% more.<sup>191</sup> However, in September 1995, United insisted average fares were only up 16%, but included free frequent-flyer tickets in this calculation.<sup>192</sup> Moreover, it is unclear whether United was calculating fares for all Denver passengers, or only origin and destination [O&D] passengers (passengers who begin or end their trips in Denver). One would expect that connecting ticket prices would be priced competitively, for a consumer traveling east-to-west (or vice versa) has a multitude of airlines from which to choose and hubs through which to connect, while local O&D passengers are subject to the monopolist's whim on pricing.

United contended it also had to raise prices to cover the \$210 million in increased costs attributable to Denver International Airport over the airport it replaced, Stapleton.<sup>193</sup> Earlier, United had estimated that its costs of operations at the new airport would increase by only \$100 million.<sup>194</sup> But most of United's fare increases were imposed as Continental downsized its Denver hub, months before DIA opened. With DIA opening, and blaming DIA's high costs, United announced it was adding another \$40 round trip to the prices of tickets beginning or ending at Denver.

But because of DIA's efficient runway configuration, terminal spacing, and triple Cat. III simultaneous landing capability, United's operating costs at DIA (excluding airport fees) would

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<sup>189</sup> Julius Maldutis, *Airline Update*—November 1996 (Dec. 10, 1996), at 11.

<sup>190</sup> GAO, *DENVER AIRPORT: OPERATING RESULTS AND FINANCIAL RISKS 6* (1996); Jeffrey Leib, *GAO Study Encouraging for DIA's Financing*, DENVER POST, Feb. 14, 1996, at C3.

<sup>191</sup> Ann Imse, *United Disputes Air Fare Reports*, ROCKY MOUNTAIN NEWS, Aug. 18, 1995, at 53A.

<sup>192</sup> Ann Imse, *United Targets Fare Grips*, ROCKY MOUNTAIN NEWS, Sept. 2, 1995, at 74A. United would later claim its fares were up only 15%. See Roger Gibson, *United Airlines Decries Guest Editorial*, DENVER BUS. J., Oct. 6, 1996.

<sup>193</sup> *United To Raise Fares To Pay for New Denver Airport*, ORLANDO SENTINEL, Jan. 29, 1995, at A26.

<sup>194</sup> *News In Brief*, AIRLINE FIN. NEWS, Apr. 18, 1994.

be significantly lower than those at Stapleton Airport. Stapleton had been plagued by congestion and delays (particularly during periods of inclement weather), which mutilate efficient aircraft and labor utilization. Thus, DIA's efficiencies offset a portion of United's facility fees and landing costs at DIA.

Because of United's poor credit rating, the city had financed many major facilities for United at DIA—including a hangar with six aircraft maintenance bays, an 18-bay ground equipment maintenance building, an air freight facility, kitchens, and a baggage system—many of which are traditionally tenant-financed facilities, and at other airports would not be included in fees paid to the airport authority.

Moreover, in Congressional testimony, Denver aviation director Jim DeLong identified United Airlines' belated and massive scope changes as the most significant cause of increased construction costs at DIA.<sup>195</sup> "It is clear that your airline is a significant contributor to what you describe as the high cost of DIA,"<sup>196</sup> Denver mayor Wellington Webb told United. "It is no secret that when one air carrier becomes dominant in a market, that they develop as a fortress hub, and as a result, fares have always increased."<sup>197</sup> Webb was right. United's massive scope changes negotiated after construction on the main terminal was well under way, coupled with its insistence on delaying the airport opening, contributed to hundreds of millions of dollars in additional construction and interest expenses at DIA. In order to avoid DIA's high costs, other airlines were flying over DIA to reach Colorado ski resorts like Vail and Aspen directly.<sup>198</sup> Low-cost/low-fare carriers like Midway Airlines and Morris Air departed Denver, MarkAir collapsed into bankruptcy, and Southwest Airlines announced DIA's costs made that airport prohibitively expensive to enter.

United's market dominance has also been a significant factor dissuading other new airline entrants at DIA. The city of Denver launched a campaign to try to recruit new entrants to fill the competitive void left by the departure of Continental Airlines. Denver mayor Wellington Webb observed, "every carrier we

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<sup>195</sup> *Hearing Before the Subcomm. on Aviation of the House Comm. on Transp. & Infrastructure* (May 11, 1995) (testimony of James DeLong).

<sup>196</sup> Patrick O'Driscoll, *Webb Blasts United*, DENVER POST, Jan. 29, 1995, at A1.

<sup>197</sup> Kevin Flynn & Burt Hubbard, *Webb Berated United for \$40 Fare Increase*, ROCKY MOUNTAIN NEWS, Jan. 29, 1995, at 4A.

<sup>198</sup> See Ann Imse, *Vail Gains Link to World With 3 Big Air Routes*, ROCKY MOUNTAIN NEWS, June 16, 1995, at 68A.

have spoken with is concerned with United's dominance of the market."<sup>199</sup> A letter to the editor of the *Denver Post* put it well: "Since Continental's withdrawal from this market, United's behavior has been that of a monopolist. . . . The only serious question with regard to United Airlines is why the antitrust regulators have been so quiescent."<sup>200</sup>

While United relishes the role of monopolist at Denver, it objected to a proposed agreement between British Airways and American Airlines on grounds that the alliance would create a monopoly, with the two airlines controlling the majority of routes between the United States and London.<sup>201</sup> United officials also complained about "predatory pricing" by smaller rivals in Denver and Chicago.<sup>202</sup> United was the only major carrier to support promulgation of the Airline Deregulation Act of 1978, whose principal purposes included the following:

- The availability of a variety of adequate, economic, efficient, and low-priced services without unreasonable discrimination or unfair or deceptive practices.
- Preventing unfair, deceptive, predatory, or anticompetitive practices in air transportation.
- Avoiding unreasonable industry concentration, excessive market domination, monopoly powers, and other conditions that would tend to allow at least one air carrier . . . unreasonably to increase prices, reduce services, or exclude competition in air transportation.
- Maintaining a complete and convenient system of continuous scheduled interstate air transportation for small communities and isolated areas.
- Encouraging entry into air transportation markets by new and existing air carriers and the continued strengthening of small air carriers to ensure a more effective and competitive airline industry.<sup>203</sup>

#### D. MONOPOLIZATION OF THE CONNECTING PASSENGER MARKET

The new Frontier Airlines, Inc., inaugurated service in the Summer of 1994. Its strategic plan was to restore jet service from Denver markets that had recently been abandoned by

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<sup>199</sup> Jeffrey Leib, *Additional Carriers Among Webb's DIA Goals for '96*, DENVER POST, Dec. 31, 1995, at H1.

<sup>200</sup> Virginia Anne Housum, *Letter to the Editor*, DENVER POST, Oct. 6, 1996, at B6.

<sup>201</sup> *United Requests Inquiry Into American-British Air Alliance*, DALLAS MORNING NEWS, Oct. 10, 1996, at 4D.

<sup>202</sup> Jeffrey Keyes, MINNEAPOLIS STAR TRIB., June 22, 1992, at 3D.

<sup>203</sup> 49 U.S.C. § 40101 (2002).

Continental Airlines, which was in the process of sharply downsizing its Denver hub. Although a high-cost carrier like United Airlines (which dominates the Denver market) might not be able to break-even with jet service in thin markets, Frontier, with its significantly lower cost structure, believed it could. In July 1994, Frontier inaugurated jet service between Denver and four cities in North Dakota (Bismarck, Fargo, Grand Forks, and Minot). In August and September 1994, Frontier launched jet service to four cities in Montana (Billings, Bozeman, Great Falls and Missoula). As late as 1993 (before Continental's departure) most of these cities enjoyed two round-trip jet flights a day from Denver; half still had turboprop service.<sup>204</sup> In October 1994, Frontier began service to Albuquerque, El Paso and Tucson.<sup>205</sup>

Most of these markets previously were served by another airline by the same name (Frontier), which, as noted above, was acquired by Continental Airlines in 1986. Many of the new Frontier Airlines' executives and employees served the old Frontier Airlines, and understood that sufficient traffic flows existed to support jet service (provided by a low-cost carrier) from Denver to many medium and small-size cities across the Great Plains and Rocky Mountain regions. Both the original Frontier, and Continental, had proven that many of these thin markets had sufficient traffic to provide adequate load factors to support jet service from Denver. The new Frontier's marketing studies confirmed the existence of ample traffic to support two round-trip Boeing 737s a day. Again, while a large, established major carrier, with its high cost structure, may be unable to provide jet service to such markets, a new entrant carrier, with its relatively lower cost structure, should be able to. Frontier believed that passengers in these communities prefer the speed and comfort of jet service over flying relatively slower turboprop planes without in-flight amenities (such as lavatories or galleys).

Because Frontier flew the only jets in several of these markets, Frontier enjoyed a disproportionately large share of local origin-and-destination traffic (e.g., Denver-Bozeman, Denver-Bismarck). But United refused to allow Frontier to connect passengers with it. As a consequence, Frontier was deprived of sufficient connecting traffic to make these flights viable.

From the outset, Frontier began to try to tap the feed traffic off the huge networks of the dominant hub carriers at Denver—

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<sup>204</sup> Frontier Airlines, Inc., Prospectus (Apr. 21, 1994).

<sup>205</sup> Frontier Airlines, Inc., Annual Report 2 (1996).

United Airlines and Continental Airlines. Since cooperative code-sharing and related arrangements were the only means by which Frontier could tap sufficient connecting traffic to make thin routes viable, Frontier asked each company for cooperative joint-fare and code-sharing agreements. United repeatedly refused.

It may not be immediately apparent why discriminatory joint-fares and code-sharing, and the related impact of discriminatory display bias in computer reservations systems, adversely affect competition and small community service, so let us digress a moment to explain how these relationships affect connecting traffic. Under deregulation, most of the traffic which moves today connects between aircraft, usually at a hub, like Denver, Salt Lake City, St. Louis, Chicago, Dallas/Ft. Worth, or Minneapolis. A passenger flying from Grand Forks or Bismarck, North Dakota, to Phoenix or San Diego might connect over Denver or Minneapolis. Without a joint-fare and code-sharing relationship with United, it is very difficult for any carrier providing service from Denver to attract that passenger, even though the routing and connection over Minneapolis might involve a more circuitous and time-consuming journey. Alternatively, a passenger can take a direct code-sharing routing on a slow, noisy turbo-prop aircraft to Denver to connect on to a jet headed for Phoenix or San Diego.

**JOINT FARES.** Typically, the longer the distance flown, the lower the price per mile. Part of this is a reflection of cost considerations, and part is a reflection of competitive considerations. A passenger flying from A to C via B will usually be given a lower through fare from A to C than the sum of adding the A to B fare with the B to C fare. A joint-fare agreement between two carriers allows a passenger to take advantage of a lower through rate (prorated on a discount basis between the connecting carriers), as opposed to the higher sum of two point-to-point fares. But in the absence of a joint-fare agreement between the connecting carriers, a passenger is charged the individual A to B fare, plus the individual B to C fare. Without a joint fare agreement between United and Frontier, many passengers attempting to fly from, say, Bozeman, Montana, to Kansas City, Kansas, found the more circuitous Delta Air Lines connection over Salt Lake City or Northwest Airlines connections over Minneapolis to be the lower ticket price. While several major airlines (including Continental, TWA and USAir) entered into joint fare

agreements with Frontier, United refused.<sup>206</sup> It was not until the DOT intervened that United consented to entering into a ticketing-and-baggage agreement with Frontier.

**CODE-SHARING.** Code-sharing is a means whereby two carriers agree to be displayed in the airline computer reservations systems as an “on-line” (Carrier X to Carrier X) connection, rather than an interline (Carrier X to Carrier Y) connection. At Denver, United had marketing and code-sharing agreements with Mesa Airlines, Great Lakes Aviation and Air Wisconsin, flying mostly turboprop aircraft throughout the Rocky Mountain and Great Plains region.<sup>207</sup> United’s connections with Mesa, Great Lakes and Air Wisconsin were falsely displayed in the CRS as on-line connections between United and “United Express.” Without a code-sharing agreement with United, the United-Frontier connection was shown as what it truly was—an interline connection between United and Frontier. Unfortunately, the CRS system of which United is principal owner saddles the displays of all interline connecting flights with the equivalent of an artificial and astounding 1,440 minutes (24 hours), which is added to the true elapsed time of the flight. Zero minutes are added to the United-Great Lakes or United-Air Wisconsin interline connections, for they are falsely treated as “on-line” connections, as if it were a United jet connecting to a United jet.

Eighty-five percent of flights are sold by travel agents off the first page of the computer reservations system screen. By adding the equivalent of an artificial 1,440 minutes to Frontier’s connecting flights, they are often shoved off the first page of the screen, and hence, rarely sold. In other words, a United jet connecting to a Great Lakes Beech 1900, 19-seat aircraft, gets superior retail shelf space to a United jet connecting to a Frontier jet, even though consumer preferences for speed, convenience and safety may favor jet-to-jet connections rather than jet-to-turboprop connections. This is fundamentally unfair to small jet airlines, to small communities seeking competitive jet service, and to consumers.

For example, Frontier flew from Denver to Bismarck and Fargo, North Dakota, in 108-seat Boeing 737 jets. Great Lakes Aviation (United Express) flew Beech-1900 19-seat turboprop aircraft, without a lavatory or in-flight amenities, requiring flight

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<sup>206</sup> *Id.* at 3.

<sup>207</sup> Leigh Fisher Associates Analysis Prepared for the City and County of Denver (1994).

times that took nearly an hour longer than the Frontier flight. The *Wall Street Journal* described the United Express flight from Denver to Bismarck as among the longest commercial commuter-flights in the United States.<sup>208</sup> Now most passengers, if given a choice, would prefer to fly a jet rather than a turboprop aircraft. But with code-sharing (combined with the CRS bias described above), most of United's connecting passengers were funneled aboard the Beech-1900s.

Let's pose an analogy. Suppose Frontier was in the bean business, and made the best beans money could buy. Suppose also, that the major supermarket chains in Denver (i.e., Safeway, Albertson's, and King Soopers) were owned by the major bean companies (i.e., Green Giant, Campbell's, and Libby's). Frontier asks for shelf space to sell its product, and each of its competitors refuses. Frontier would have the option of either opening its own supermarket chain (impossible), or hawking their wares from carts on the street. United Airlines owns the majority interest in the Apollo CRS. In fact, the major airlines variously control the four major CRSs, and each of them discriminate against non-code-sharing connecting flights.

United Airlines and its code-sharing affiliates controlled nearly 80% of the traffic at Denver. Without a joint-fare or code-sharing agreement with United, Frontier could not attract sufficient traffic to make thin routes viable. Frontier cannot profitably restore jet service to communities which have lost it, though in fact, that was precisely its original intent.

Frontier urged United to enter into joint-fare and code-sharing relationships with it for sound business reasons. Convenient interline connections are a two-way street; they allow passengers to flow conveniently over the networks of both carriers. Frontier pointed out to United that it can provide United's passengers superior and more convenient jet service vis-à-vis the turboprop connections which now exist. Frontier emphasized to United that a large volume of the traffic that now flows over the Salt Lake City and Minneapolis hubs could be funneled by Frontier over Denver to feed the United Airlines network. Frontier believed it made sound business sense for United to do business with Frontier. But at a meeting with Frontier's executives at United's Elk Grove Township, Illinois, headquarters, United's then-Senior Vice President Rakesh Gangwal responded, "Frontier is a low-cost provider. United can never be a low-cost pro-

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<sup>208</sup> Lisa Miller, *Odds & Ends*, WALL ST. J., July 28, 1995, at 9.

vider. Therefore, we think of you as the enemy."<sup>209</sup> No enemy would be given either a joint-fare or a code-sharing agreement. United Airlines is a \$15 billion corporation, more than 200 times the size of Frontier.<sup>210</sup> United perceived Frontier to be the enemy.

Frontier informed United Airlines that it believed that its refusal to allow Frontier nondiscriminatory access to United's network potentially poses a serious potential antitrust problem for them. An analogous problem arose in the 1970s and 1980s in the telecommunications industry with AT&T's refusal to permit MCI nondiscriminatory access to its network. It took years, but ultimately MCI won a multi-million dollar verdict against AT&T, and the DOJ forced divestiture of AT&T into seven regional holding companies, and one long-distance carrier. Today, federal regulatory authorities require that all telecommunications companies be given nondiscriminatory access to the networks of their competitors. USWest would never be allowed to enter into preferential connections and rates with, say, Sprint, depriving or dissuading consumers who preferred AT&T of access. Just as AT&T was the largest telephone company in the world, United is the largest airline in the world. Frontier can no more be expected to replicate the vast United Airlines route network than could MCI have been expected to replicate the vast AT&T network.

If such a rule (requiring nondiscriminatory connections between telecommunications networks) existed with respect to the transportation networks, Frontier's Montana and North Dakota service likely would have been profitable, and as a consequence, Frontier would not have been forced to terminate service to Montana in September 1995, and to two North Dakota markets in January 1995, and the final two in September 1996. Frontier re-deployed those Boeing 737s to markets which already had frequent jet service, such as Denver-Los Angeles, Denver-Chicago, Denver-San Francisco, and Denver-Phoenix, where sufficient nonstop origin-and-destination passenger traffic exists to provide break-even load factors. As a result of the shift in its route structure, Frontier enjoyed two profitable quarters in 1996, despite its considerable losses in serving these remaining small

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<sup>209</sup> The meeting was held between United Airlines Senior Vice President Rakesh Gangwal and Frontier Airlines CEO Sam Addoms and Frontier Vice President Dan Love.

<sup>210</sup> Compare the gross revenues of UAL CORPORATION 1995 ANNUAL REPORT with FRONTIER AIRLINES, 1996 ANNUAL REPORT.

communities, and the cost of shifting its route structure toward dense markets.

Of course, passengers in those dense markets to which Frontier has re-deployed its aircraft benefit from new competition. Fares have fallen dramatically (but as we shall see below, this put Frontier in United's cross hairs). Nevertheless, large sections of the nation are wholly excluded from jet service because of discriminatory joint-fare and code-sharing arrangements, as well as computer reservations systems bias which shoves non-code-sharing interline arrangements off the first page of the CRS screen. That is not to suggest that all small communities have sufficient traffic to support jet service. But many small communities that could support jet service from a low-cost carrier are denied it because of these pernicious code-sharing practices.

United's refusal to enter into joint fare and code-sharing relationships with domestic jet airlines results in relegating small communities to inferior and high-cost monopoly turboprop aircraft. Code-sharing is a way of defrauding consumers into believing they will be flying a megacARRIER's jets, when on most occasions they are funneled onto a smaller carrier's turboprop aircraft at the hub, all in a deliberate attempt to steer feed traffic away from jet competitors.<sup>211</sup>

Even competing turboprop carriers are injured by these discriminatory arrangements. GP Express (formerly Continental Connection) also suffered from an inability to tap the United Airlines network. United entered into preferential joint-fare and code-sharing agreements with select carriers (one per city-pair market) which gave their interline connections preferred space on the computer reservations systems. For example, United code-shared with Mesa Airlines out of Denver to Rocky Mountain cities like Telluride and Grand Junction. United's interline with Mesa was falsely shown on the CRS as an "on-line" connection from United to United Express. As a pseudo-on-line connection, it enjoyed a higher display on the CRS screens. The United-GP Express interline would be shown as an interline (in this instance, no deceit), and often shoved off the first page of the CRS screen. With Continental's departure from Denver, and unable to tap United's feed at the Denver hub, GP Express collapsed into bankruptcy in 1995. The net result of these discriminatory and anticompetitive practices is poorer and more

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<sup>211</sup> United does maintain code-sharing with Air Wisconsin on a carefully limited number of smaller jets.

expensive air service to many small communities across America.

The DOT has found that 34 small communities have lost all service since promulgation of the Airline Deregulation Act of 1978. Many communities which had jet service lost it to turbo-prop aircraft. Out of 320 small communities, the number served by major carriers declined from 213 in 1978 to 33 in 1995, and the number of small communities served by multiple carriers has decreased from 135 in 1978, to 122 in 1995.

The DOT studies *severely understate* the problem. Of the 514 non-hub communities receiving air service in 1978, by 1987 (a decade after deregulation began) 313 (60.8%) had suffered declines in flight frequency, and 144 (28%) had lost all service; only 32 (6.2%) enjoyed the inauguration of new service.<sup>212</sup> By 1995, things were even worse. Of the 514 non-hub communities receiving air service in 1978, by 1995 167 (32.5%) had been terminated, while only 26 (5.1%) gained new service.<sup>213</sup>

The DOT's studies were unable to comment meaningfully about pricing of air service to small communities, for commuter carriers generally do not report pricing data. But the GAO has found that passengers flying from small-city airports to major airports paid 34% more if the major airport was concentrated and 42% more if both the small-city and major airport were concentrated.

For those small community city-pair markets with sufficient volume to support jet service by a low-cost carrier, the code-sharing phenomenon insures that they will instead be relegated to relatively higher-cost/higher-priced turboprop service. For example, one of the nation's largest connecting turboprop carriers, Mesa Airlines (which in the 1990s operated as a United Airlines code-sharing affiliate—"United Express"), charged yields of nearly 35 cents per mile, compared with about 12 cents a mile by United Airlines. Even USAir, which operates short-haul high-cost jet service, charges only about 18 cents a mile—about half that charged by a turboprop carrier.<sup>214</sup> A low-cost jet entrant typically charges consumers significantly less than do the major airlines.

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<sup>212</sup> Andrew Goetz & Paul Dempsey, *Airline Deregulation Ten Years After: Something Foul in the Air*, 54 J. AIR L. & COM. 927, 947 (1989); see also PAUL DEMPSEY & ANDREW GOETZ, AIRLINE DEREGULATION & LAISSEZ FAIRE MYTHOLOGY (1991).

<sup>213</sup> Unpublished study by Dr. Andrew Goetz, University of Denver (on file with author).

<sup>214</sup> 1996 data from Julius Maldutis, Airline Update-August 1996 (Sept. 8, 1996).

For most Colorado communities (and many small communities throughout the Rocky Mountain and Great Plains region), the result of United's discriminatory and anti-competitive practices is that they are served from Denver only by a United Express affiliate flying turboprop aircraft and charging sky high air fares, even in those markets which have sufficient traffic to sustain jet service.

In 1995, United Airlines controlled 95% of the connecting passenger traffic at Denver International Airport.<sup>215</sup> But United wanted all of it. United's overwhelming dominance of DIA (and the city-pair markets radiating from it) is attributable to its ability to fill seats by flowing connecting passengers over the Denver hub, and to deprive any other competitor of the ability to do that.

#### E. SUMMARY OF FRONTIER'S ALLEGATIONS OF PREDATORY BEHAVIOR

As noted above, Frontier initially sought to restore nonstop jet service to a number of city-pairs which formerly enjoyed jet service prior to the elimination of the Continental Airlines hub at Denver. Because United Airlines monopolized the feed traffic necessary to provide adequate load factors in those "thin" markets, Frontier was forced to amend its route strategy to focus on large city-pair markets radiating from Denver.

Since inaugurating service in July 1994, Frontier has withdrawn from the following city-pairs:

- Denver-Bismarck, N.D.
- Denver-Fargo, N.D.
- Denver-Minot, N.D.
- Denver-Grand Forks, N.D.
- Denver-Billings, Mont.
- Denver-Great Falls, Mont.
- Denver-Bozeman, Mont.
- Denver-Missoula, Mont.
- Denver-Tucson, Ariz.
- Denver-Las Vegas, Nev. \*
- Denver-San Diego, Calif. \*
- Denver-St. Louis, Mo.

\* service subsequently restored

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<sup>215</sup> Leigh Fisher Associates, Year End Settlement of 1995 Rental Fees and Charges at DIA, Tab 4, Table 1 (June 28, 1996) [data are for the 10 months of 1995 during which DIA was open].

Again, Frontier Airlines' original route strategy was to restore jet service to markets that previously enjoyed it, prior to Continental Airlines elimination of its Denver hub. Frontier also initially focused its route structure on city-pairs not served by United Airlines not wanting to antagonize a carrier with a reputation for engaging in predatory conduct to suppress competition.

In the summer of 1994, Frontier began service between Denver and four cities in North Dakota, and between Denver and four cities in Montana. These were markets that had sufficient local and connecting traffic to support jet service, particularly at a cost structure of a new low-cost airline like Frontier. Because the competing service in most of these nonstop markets was in high-cost, slow turboprop aircraft (flying as United Express), Frontier would dominate the local origin-and-destination market, for Frontier offered superior jet service at a competitive price. But United would monopolize the connecting market at the Denver hub, denying Frontier reasonable access to connecting passengers who might prefer to connect to a Frontier jet rather than a United Express turboprop aircraft. According to Frontier, the means by which United would deny Frontier connecting traffic were as follows:

*United refused to enter into a ticketing-and-baggage agreement with Frontier*, though most other major airlines did enter into such an agreement with Frontier. This meant that passengers seeking to connect at Denver between United and Frontier flights would have to collect their bags from the incoming flight in the main terminal at Denver International Airport, then check them again onto their outgoing flight. Such an inconvenience would dissuade passengers from making the connection. It was not until the Department of Transportation "jaw boned" United into giving Frontier a ticketing-and-baggage agreement that United reluctantly did so.

*United refused to enter into a joint-fare agreement with Frontier*. Typically, carriers interlining passengers agree on a discounted combination of the A-B fare and the B-C fare, so that the passenger pays an overall A-C fare lower than the sum of the two undiscounted fares. United has joint-fare arrangements with its United Express affiliates. United (connecting at Denver with United Express) could therefore offer consumers a lower price between, for example, Portland, Oregon, and Fargo, N.D., than could Frontier.

*United refused to enter into a code-sharing agreement with Frontier.* Code-sharing is a means whereby an airline falsely displays and sells an interline connection as if it were an on-line connection. Thus, a United Airlines Los Angeles-Denver connection with a Great Lakes Aviation flight on a Beech 1900 turboprop flight between Denver-Fargo, N.D., is falsely portrayed as a United flight connected to a United flight both on the computer reservations systems [CRSs] and the ticket issued to the passenger. Most tickets are sold via CRSs, the retail distribution center for the overwhelming majority of flights. United owns a controlling interest in the Apollo CRS, which is strongly biased against non-code-sharing interline flights. By using a CRS algorithm prejudiced against the United-Frontier connection (and all other interline connections which do not enjoy a code-share), United assures that such connections will not be displayed on the first page of the CRS screen, where travel agents sell 85% of all flights. This allows United to monopolize the connecting traffic at Denver.

*United biased its computer reservations system against competitive connecting service.* The overwhelming numbers of airline tickets are sold by travel agents. Travel agents sell 85% of tickets from the first page of their computer reservations screen. The computer reservations systems are owned by the major airlines, and are strongly biased against independent carrier connections. Although many (perhaps most) consumers would prefer to connect to a jet rather than a turboprop airplane, many at Denver have been funneled onto small turboprop aircraft operated by companies like Great Lakes Aviation, Mesa Airlines and Air Wisconsin, all then operating at Denver as "United Express." Ironically, jet aircraft have lower available seat mile costs than do turboprop aircraft. The Apollo computer reservations system, which United dominates, added the equivalent of 1,440 minutes (24 hours) to United's connections with Frontier at Denver, while adding zero additional time to its connections with Great Lakes, Mesa and Air Wisconsin. Adding such a severe penalty to independent carrier connections assures that they are not displayed on the first page of the CRS screens, and therefore, are rarely sold, even if consumers would prefer them.

*United prohibited its code-sharing affiliates from code-sharing with Frontier.* United has code-sharing partners which feed its Denver hub—Air Wisconsin and Great Lakes Aviation—both operating as "United Express." Air Wisconsin (a company over which United Airlines exercises considerable influence) purchased

Mountain Air Express [Max], a Denver-based code-sharing partner of Frontier, which provided new traffic to Frontier from such cities as Kansas City, Tulsa, Oklahoma City, Colorado Springs and Hayden/Steamboat Springs, and Montrose, Colorado. Because of Air Wisconsin's exclusive contractual relationship with United, Max was forced to cancel its code-sharing agreement with Frontier. Connecting passengers and cargo from these cities was lost by Frontier, and gained by United.

All these reasons made it necessary for Frontier to withdraw from the four cities in North Dakota and the four cities in Montana, and contributed to its decision to withdraw from the Tucson market as well. These city-pair markets are simply too "thin" to be served by a competitive low-cost jet carrier where the dominant hub carrier monopolizes the connecting traffic. United Airlines controlled 97% of the connecting traffic at Denver.

Frontier's withdrawals from Denver-Las Vegas, and Denver-St. Louis were also influenced by United's monopolization of connecting traffic, but since they are significantly larger markets, it was less of a factor. However, Denver-Las Vegas is a market where United flooded the route with a significant increase in flight frequencies with its competitive "weapon", Shuttle by United, and significantly dropped fares (then, of course, raised them sharply after Frontier left the market). Shuttle also appeared in the Denver-Phoenix and Denver-Salt Lake City markets, which may have caused the departure therefrom of another low-fare carrier, Vanguard Airlines. Though United portrays Shuttle as a consumer-friendly low-cost/low-fare alternative, the facts suggest otherwise. United Shuttle raised fares sharply after Frontier withdrew from the Denver-Las Vegas market.

Additional predatory practices of United which have driven Frontier from markets, or caused it financial injury so that it could not expand its operations, include the following:

*United engaged in below-cost pricing until Frontier was driven out of the markets.* Average fare data produced by the DOT reveals that United often lowered its average fares to Frontier's levels until Frontier exited the market, then increased fares to levels above those which preceded Frontier's entry. Since, in some markets, United offers a first-class product, an average fare which appears to match Frontier's actually undercuts Frontier's single-class coach product, for the DOT's average fare data includes all tickets sold, first and coach class. United also refused to raise fares in Frontier's markets after Congress re-imposed the 10% ticket

tax in August 1996, though United raised its prices in most non-Frontier markets radiating from Denver to account for those increased costs. As explained below, Frontier's research revealed that United was pricing its product in markets in which Frontier entered about 30% below its costs in the fall of 1996.

*United dumped excessive capacity into markets Frontier has entered.* For example, after Frontier entered the Denver-Los Angeles market, United added 8,600 seats per week in the summer of 1996 vis-à-vis average levels a year earlier. In this period, United increased its average capacity, year-over-year, as follows:

- Denver - Los Angeles +24%
- Denver - Salt Lake City +28%
- Denver - Phoenix +30%
- Denver - Las Vegas +32%
- Denver - Omaha +35%

*United entered into "exclusive dealing" contracts with corporate purchasers.* Frontier attempted to sell its product to corporations in Denver and other major cities it serves, only to learn that United has contractually prohibited companies to which it gives a corporate discount from enjoying a discount from a competitor. United is not alone in such behavior, as Frontier also has encountered corporate purchasers in Minneapolis who are tied to Northwest Airlines' exclusive dealing contracts. In essence, these megacarriers are saying to corporations, "We'll give you a discount only if you don't fly Frontier."

*United bribed travel agents to book flights on United.* A "bribe" is defined by Webster's as "money or favor bestowed on or promised to a person in a position of trust to pervert his judgment or corrupt his conduct," or "something that serves to induce or influence."<sup>216</sup> Travel agent commission overrides have become increasingly important to agents now that major airlines have rolled back and capped commissions, reducing agent revenue by 20% or more. Overrides are earned when travel agents exceed prescribed quotas on United's flights well in excess of United's relative seat capacity in those markets. In order to meet those quotas, agents must sell more of United's product and less of a competitor like Frontier. To do so, they must somehow steer purchasers to United's product, even if it is higher priced or offered at a less convenient departure time. An airline like Frontier, which offers only a few frequencies per market, can never provide sufficient capacity to compete with

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<sup>216</sup> WEBSTER'S SEVENTH NEW COLLEGIATE DICTIONARY (1966).

those override quotas. In essence, these megacarriers are saying, "We'll give you a commission override check only if you don't book too many flights on our competitor."

*United refused to sell Frontier access to its Mileage Plus frequent flyer program.* Although United Airlines sells Mileage Plus frequent flyer miles to its code-sharing partner airlines, car rental agencies, hotels, florists, mortgage companies, clothiers, credit card companies, and a plethora of other businesses, United steadfastly refused to sell Mileage Plus miles to Frontier. An overwhelming number of Denver's regular air passengers belong to United's Mileage Plus program. Because they cannot earn Mileage Plus miles on Frontier, they are thereby dissuaded from purchasing Frontier's product. Frontier does offer its passengers Continental Airlines' One Pass miles (for Continental does not have such an exclusionary policy), but far fewer of Denver's frequent flyers belong to the One Pass mileage program.

*United preempted Frontier's acquisition of aircraft, and entry into the Denver-Dallas/Ft. Worth and Denver-San Diego markets.* On February 2, 1998, Frontier Airlines proposed to the Western Pacific Airlines [WestPac] Chapter 11 bankruptcy estate that, if Western Pacific shut down, Frontier be allowed to fly off WestPac's air traffic liability (tickets sold but not yet flown) on a non-exclusive basis. Frontier would wet lease between 2 and 4 of WestPac's Boeing 737-300 aircraft to restore low-fare service between Denver-Dallas and Denver-San Diego, markets in which Western Pacific provided the only low-fare nonstop alternative to United Airlines.

To digress for a moment, all three carriers—United, Western Pacific and Frontier—hubbed at Denver International Airport [DIA]. In December 1997, United and its code-sharing affiliates operating as United Express controlled 70.9% of the passenger traffic at DIA (of which United had 64.7% and United Express had 6.2%), Western Pacific had 5.5%. and Frontier had 3.5%.<sup>217</sup>

On Wednesday morning, February 4, 1998, United made a preemptive strike against Frontier, cutting an exclusive deal with the Western Pacific bankruptcy estate to fly all the air traffic liability. Without this source of tickets to accelerate the ramp-up of demand, Frontier could not take on WestPac's aircraft to open new service to Dallas and San Diego. With Western Pacific's grounding on February 4, this resulted in a situation where no low-fare competitor operated in either market. With

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<sup>217</sup> Data: Denver International Airport.

the demise of Western Pacific, and the preemptive strike against Frontier's entry, United gained a full monopoly in the Denver-San Diego nonstop market (until July 1998), faces only two high-cost competitors (American and Delta) in the Denver-Dallas/Ft. Worth nonstop market, and effectively took WestPac's 5.5% market share.

Given United's relatively high load factors in Denver, it was difficult for United to accommodate many Western Pacific customers. By the agreement, they were precluded from using their Western Pacific tickets on Frontier. Also, given the low average fares at which the Western Pacific tickets were sold (because WestPac was having difficulty filling seats while it was in Chapter 11 bankruptcy), and the fact that United agreed to fly the tickets for 50% of their face value, the revenue potential of these tickets could not have been a realistic motivation for United.

The only reason this made sense for United is that it caused competitive harm to Frontier, effectively prohibited Frontier from immediately entering the Denver-Dallas and Denver-San Diego markets,<sup>218</sup> prohibited these Western Pacific customers from being introduced to the Frontier product, allowed United to control another 5.5% of the Denver market, limited Frontier's ability to acquire new aircraft, and exacerbated Frontier's Stage 3 aircraft compliance obligations by December 31, 1998.

Five years after its birth in 1994, Frontier accounted for only about 5% of the Denver market. United is the largest airline in the world. United has been engaged in a long-term effort to suppress competition and monopolize the Denver market via a plethora of means—capacity dumping, below-cost pricing, exclusive dealing contracts with regional feeder airlines and corporate purchasers, travel agent commission overrides, computer reservation systems bias, and discriminatory ticketing-and-baggage, joint-fare, and code-sharing agreements.

#### F. THE DEMISE OF MARKAIR

As Continental downsized its hub at Denver, United raised prices sharply in the city-pair markets Continental exited. In many cases, fares became so high that some Denver travelers chose to fly out of the Colorado Springs airport located 65 miles south of downtown Denver. A new low-cost airline, Western Pacific, started hub operations in Colorado Springs in 1995, and

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<sup>218</sup> Frontier re-entered the Denver-San Diego market on July 23.

attracted a sizable number of Denver travelers who prefer driving the extra distance to avoid the high fares at Denver. In summer 1995, regular shuttle van service to Colorado Springs from Denver was inaugurated to tap into the growing exodus. As we shall see below, diversion of some of Denver's traffic to Colorado Springs put Western Pacific in United's cross-hairs.

After Continental folded its hub at Denver, a few (very few) low-cost, low-fare airlines emerged to serve Denver—MarkAir (which moved its operations in Chapter 11 to Denver from Alaska, then collapsed entirely in late-1995), Vanguard (headquartered in Kansas City), Reno Air (serving Denver through Reno, Nevada), and Frontier (a new airline with many of the same officers as the original airline by the same name). Most found United engaging in various types of predatory behavior—pricing at fares at or below those of competitors, dumping excess capacity in competitors' markets, and paying travel agents commission overrides to steer business toward United.

MarkAir moved the base of its operations from Anchorage to Denver in 1993. In 1994, MarkAir provided 17 daily nonstops to 10 cities from Denver.<sup>219</sup> The question was whether MarkAir could stay off United's radar screen. MarkAir CEO Neil Bergt described his strategy as "bottom fishing," trying to expand the market with low fares without upsetting competitors.<sup>220</sup> One airline analyst predicted that "as soon as the industry hits a bump, Denver's resident giant, United Airlines, will force MarkAir out of Denver."<sup>221</sup> Another accurately predicted, "As soon as United decides that they've had enough, then it's all over for MarkAir."<sup>222</sup> In markets where it had a monopoly, United charged monopolistic prices (\$1,064 round-trip for a walk-up ticket from Denver to San Francisco, for example). But where MarkAir competed with United, United met its fares on a capacity-controlled basis (both United and MarkAir charged \$160 round-trip for a walk-up ticket from Denver to Los Angeles) on flights in close proximity to MarkAir's.<sup>223</sup> United's employee-

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<sup>219</sup> Leigh Fisher Associates Analysis, Prepared for the City and County of Denver (1994).

<sup>220</sup> Aldo Svaldi, *Can MarkAir Stay Aloft?*, DENVER BUS. J., Oct. 22, 1993, at 1A.

<sup>221</sup> Helen Jung, *MarkAir Red Ink Runs Deep*, ANCHORAGE DAILY NEWS, May 20, 1995, at C1.

<sup>222</sup> Helen Jung, *MarkAir Cuts Anchorage Lower 48 Link*, ANCHORAGE DAILY NEWS, Apr. 20, 1995, at A1.

<sup>223</sup> Ann Imse, *Frontier Will Fly To West Coast*, ROCKY MOUNTAIN NEWS, Sept. 22, 1995, at 58A.

owner pilots took credit for derailing a deal which would have allowed the city of Denver to guarantee \$30 million of MarkAir's debt to retain MarkAir's competitive presence at Denver.<sup>224</sup> After MarkAir moved its headquarters from Alaska to Denver, United also launched a promotion to wound MarkAir in Alaska, matching its promotion "ticket-for-ticket" to trade books of travel coupons for Alaska residents' "permanent fund" \$980 dividend.<sup>225</sup>

MarkAir collapsed into bankruptcy and liquidation in 1995. MarkAir's demise resulted in "dramatically higher prices for unrestricted, or walk up, tickets to certain cities" including Atlanta (United's \$1,066 compared to MarkAir's \$376), Seattle (United's \$1,296 compared to MarkAir's \$342), and San Diego (United's \$1,002 compared to MarkAir's \$304).<sup>226</sup>

### G. THE AFTERMATH OF MARKAIR

After MarkAir's demise, Frontier announced it would fill some of the void of the MarkAir departure (and the earlier Continental departure) by inaugurating service to several of the most popular travel destinations from Denver, beginning with Chicago and Phoenix.<sup>227</sup> As noted above, without joint fares and code-sharing with the dominant hub carrier at Denver, Frontier could not hope to fill sufficient seats in thin markets to break even. In 1995, Frontier terminated service to four cities in Montana, two in North Dakota, and one in Arizona, and began service from Denver to Omaha, Las Vegas, Phoenix, Chicago (Midway), Los Angeles, Minneapolis, Salt Lake City, and San Francisco. In 1996, Frontier terminated service at Bismarck and Fargo, North Dakota, and began service to Seattle, St. Louis, and San Diego. By the end of 1996, Frontier flew 10 Boeing 737 aircraft to 13 cities from Denver, accounting for slightly more than three percent of the Denver passenger market. Each of these markets had undergone significant capacity constriction

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<sup>224</sup> Alex Berenson, *UAL Pilots Fought MarkAir*, DENVER POST, Nov. 24, 1994, at D1.

<sup>225</sup> *United, MarkAir War Heats Up*, DENVER POST, Oct. 11, 1994, at C1. The "permanent fund" dividend is paid by the state of Alaska annually to each state resident based on oil royalties earned by the state from oil production at Prudhoe Bay.

<sup>226</sup> Ann Imse, *MarkAir Demise Costly for DIA*, ROCKY MOUNTAIN NEWS, Nov. 1, 1995, at 42A.

<sup>227</sup> Steve Caulk, *Frontier Steps Up Expansion*, ROCKY MOUNTAIN NEWS, Aug. 3, 1995, at 50A.

with Continental and MarkAir's departures, many of which had become a United nonstop monopoly.

Going head-to-head with United was a risky strategy, for as the world's largest airline, United had the power to crush an airline as small as Frontier. But Frontier had little choice but to make a "midcourse correction" in its route strategy. Without an ability to connect with the United network, Frontier could do nothing but lose money serving small communities. It needed to serve markets with sufficient origin-and-destination traffic to provide adequate load factors. Frontier hoped that by offering no more than two or perhaps three round trips per market, the "800-pound gorilla"<sup>228</sup> would sleep. The gorilla slept soundly until Frontier posted its first two quarterly profits in Jan.-Mar. and Apr.-June 1996. Then the gorilla awoke in a foul mood.

Meanwhile, there had been a profound change in Washington. As DOT Secretary, Federico Peña had championed the cause of new entrant airlines. Early in the Clinton Administration, the DOT and Justice Department "jaw-boned" Northwest Airlines into backing off its predatory capacity dumping and pricing practices targeted at Reno Air, which had just opened a route from Reno, Nevada, to Minneapolis (Northwest's hub).

The facts were these. In February 1993, Reno Air announced plans to serve Minneapolis with three daily flights beginning April 1. Northwest countered by announcing it would serve the Reno-Minneapolis market, for the first time, also with three daily flights beginning April 1, as well as new flights from Reno to Los Angeles, San Diego and Seattle, three of Reno Air's most important markets. Northwest also matched Reno Air's fares in these markets. Nevada Senators Richard Bryan and Harry Reid urged the DOJ to investigate Northwest's alleged antitrust violations. Northwest succumbed to the pressure, and withdrew from the Reno markets.

In 1996, Secretary of Transportation Federico Peña announced, "In the past year, American consumers have saved an estimated \$6.3 billion in airline fares because of the competition brought about by the new low cost, low fare airlines."<sup>229</sup> But by the end of President Clinton's first term, it was clear that Peña would not be DOT Secretary in his second term. This political

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<sup>228</sup> See, e.g., Gene Amole, *Frontier Airlines Needs Your Business*, ROCKY MOUNTAIN NEWS, Nov. 14, 1996.

<sup>229</sup> *Id.*

vacuum gave United the freedom to move brazenly against competitors in the city he once served as mayor.

The Denver market is estimated to be about a \$5 billion revenue prize. With approximately 300 daily departures and service to 62 cities, United has the market power to influence passenger choices through its schedule frequency and frequent flyer program. United also controls the regional distribution channels through the use of a large corporate discount program and the payment of commission overrides to key travel agencies.

However, United is a relatively high-cost airline when measured in industry terms of Cost per Available Seat Mile [CASM].<sup>230</sup> Airlines enjoy a significant cost taper over distance. Using second quarter 1995 data (the most recent data we could find) produced independently by Roberts Roach & Associates, when adjusted for stage length (the length of the flight), United's system-wide operating costs are as follows:

Table 4 – United Airlines Domestic Boeing 737-300 Available Seat Mile Costs<sup>231</sup>

<i>Stage Length (miles)</i>	<i>United ASM Costs</i>
200	19.35¢
250	16.95
300	15.35
350	14.21
400	13.35
450	12.68
500	12.15
550	11.71
600	11.35
650	11.04
700	10.78
750	10.55
800	10.35
850	10.17
900	10.02
950	9.88
1000	9.75
1050	9.64
1100	9.53
1150	9.44
1200	9.35

<sup>230</sup> See ROBERTS ROACH & ASSOCIATES, SCORECARD: AIRLINE INDUSTRY COST MANAGEMENT (3rd ed. 1996).

<sup>231</sup> ROBERTS ROACH & ASSOCIATES, SCORECARD: AIRLINE INDUSTRY COST MANAGEMENT 51 (3rd ed. 1996). The costs in this study have not been adjusted

These data assume 100% break-even load factors (selling a sufficient number of seats to cover fully allocated costs). But because of hourly, daily, seasonal and directional cycles in demand, no carrier achieves 100% break-even load factors (most major airlines achieve annual average load factors of between 65% and 70%). Thus, these data understate, by about a third, the actual Revenue per Available Seat Mile [RASM] needed to achieve break-even load factors. In other words, United's average prices should be about a third higher than these ASM costs in order for it to break-even. For this reason, the following analysis errs on the side of conservatism.

Comparing Frontier's ASM costs to United's requires an apples-to-apples comparison of stage-lengths. In the second quarter of 1995, Frontier's average stage length was 407 miles; Frontier's ASM costs were 9.29 cents per mile. As Table 4 reveals, United's ASM costs at a 400 mile stage length were 13.35 cents per mile. Thus, Frontier's costs are about 30% lower than United's. Operating costs at Denver are likely higher than United's system-wide averages revealed in Table 4, somewhere in the neighborhood of an additional one cent per ASM. This suggests the difference in Frontier's vis-à-vis United's costs is even greater than 30%.

Despite the fact that United's costs are significantly higher than Frontier's, United priced not only below its costs, but below Frontier's as well. In several instances, United lowered prices below Frontier's lowest price. United is pricing significantly below its true operating costs in order to disrupt, disable or destroy its low-fare competitors.

As Table 5 below reveals, the sale fares announced by United Airlines in December 1996 averaged 99.47% of United's unit costs. But in city-pair markets radiating from Denver in which Frontier competed, United's prices were only 68.85% of cost, and in markets where Frontier does not compete, United's prices were 109.04% of costs. Stated differently, in markets in which Frontier competes, United prices its product an average of 31% below its costs. United cross-subsides these losses with revenue derived from non-competitive and international markets.

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for specific Denver operating costs. They are based on system-wide costs. Some upward adjustment should be made to reflect the higher operating costs of Denver International Airport to more accurately reflect United's true cost of operation at the Denver hub.

Table 5 – Comparison of United Airlines' Costs vs. Prices  
(Dec. 9, 1996)<sup>232</sup>

City Pair	Miles	Aircraft type		Cost per seat \$	Excise Tax \$	Total UAL Cost per seat \$	UAL Actual Fare \$	UAL Fare as % of Cost	Cities Served	
		Boeing 737-300 (ASM costs in cents per mile)	Boeing 757						Frontier markets	Non-Frontier markets
DEN/LNK	442	x12.68		=56.05	+6.23	=62.27	81.00	130.07		130.07
DEN/OKC	500	12.15		60.75	6.75	67.50	69.00	102.22		102.22
DEN/DSM	602	11.04		66.46	7.38	73.85	93.00	125.94		125.94
DEN/GEG		10.02		83.37	9.26	92.63	80.00	86.37		86.37
DEN/IND	987	9.75		96.23	10.96	106.93	99.00	92.59		92.59
DEN/WAS	1473		7.43	109.44	12.16	121.60	130.00	106.90		106.90
DEN/BWI	1500		7.43	111.45	12.38	123.83	163.00	131.63		131.63
DEN/NYC	1626		7.28	118.37	13.15	131.53	197.00	149.78		149.78
DEN/EWR	1626		7.28	118.37	13.15	131.53	81.00	61.59		61.59
DEN/BDL	1680		7.24	121.63	13.51	135.15	193.00	142.81		142.81
DEN/BOS	1763		7.15	126.05	14.01	140.06	166.00	118.52		118.52
CHI/TPA	1006	9.64		96.96	10.78	107.75	80.00	74.24		74.24
CHI/PDX	1745		7.19	125.47	13.94	139.41	149.00	106.88		106.88
CHI/LAX	1746		7.19	125.54	13.95	139.49	183.00	131.20		131.20
SEA/WAS	2318		6.87	158.83	17.65	176.48	197.00	111.63		111.63
DEN/OMA	485	12.15		58.93	6.55	65.48	63.00	96.22		96.22
DEN/PHX	983	9.75		95.84	10.65	106.49	77.00	72.31		72.31
DEN/LAX	845	10.17		85.94	9.55	95.49	63.00	65.98		65.98
DEN/CHI	907	9.88		89.61	9.96	99.57	63.00	63.27		63.27
DEN/SFO	954	9.75		93.02	10.34	103.35	63.00	60.96		60.96
DEN/SEA	1017	9.64		98.04	10.89	108.93	63.00	57.83		57.83
AVERAGE FARE AS PERCENTAGE OF COSTS								99.47	68.85	109.04

The city codes are as follows:

BDL = HARTFORD	GEG = SPOKANE	PDX = PORTLAND
BOS = BOSTON	IND = INDIANAPOLIS	PHX = PHOENIX
BWI = BALTIMORE	LNK = LINCOLN	SEA = SEATTLE
CHI = CHICAGO	LAX = LOS ANGELES	SFO = SAN FRANCISCO
DEN = DENVER	LAX = NEW YORK	TPA = TAMPA
DSM = DES MOINES	OKC = OKLAHOMA CITY	WAS = WASHINGTON, D.C.
EWR = NEWARK	OMA = OMAHA	

For three reasons, these data *understate* the differential between United's costs and prices by a significant margin. First, given that most major airlines fill only about 65% to 70% of their seats annually, these data understate the United's break-even revenue requirements by about one-third. Second, the significant increase in the cost of aviation fuel has not been included. Fuel cost between 52-54 cents a gallon in the second quarter of 1995; by the fourth quarter of 1996, it had increased 23%, to more than 70 cents per gallon.<sup>233</sup> Third, the above calculations are based on United's system-wide costs which are lower than operations from DIA, for Denver International Airport's fees account for about one cent per ASM higher than other airports. In other words, the difference between United's

<sup>232</sup> This analysis was prepared by Frontier Airlines CEO Sam Addoms. Cost data are based on ROBERTS ROACH & ASSOC., SCORECARD: AIRLINE INDUSTRY COST MANAGEMENT (3d ed. 1996).

<sup>233</sup> Julius Maldutis, Airline Update—November 1996 (Dec. 10, 1996), at 11.

costs and its prices is significantly greater than these calculations. Finally, these prices are United's lowest. Frontier does not have the proprietary data to determine the size of the inventory over which these seats have been spread. However, Frontier's booking and sales data suggest that United's low-fare seat buckets were opened wide after Frontier announced quarterly profits.

Even before entering Denver's largest air passenger markets, Frontier had already brought down United's fares here and there. For example, before Frontier's entry into the Denver-Omaha market, United's lowest walk-up fare was \$460 round-trip. Frontier entered with a \$140 fare, which United promptly matched. According to DOT data, in the first quarter of 1994, United's average one-way fare in the Denver-Albuquerque market was \$187; in the fourth quarter of 1994, as Frontier entered the market, United's average one-way fare dropped to \$87. In the Denver-Bismarck market, United dropped its average \$310 fare to \$104 after Frontier entered.

Beginning in 1995, Frontier began entering Denver's largest nonstop markets. In the Denver-Los Angeles market, United's average one-way fare dropped from \$163 in the third quarter of 1995, to \$122 as Frontier entered in the fourth quarter of 1995. In the Denver-Phoenix market, United dropped its average one-way fare from \$147 in the second quarter of 1995, to \$89 in the fourth quarter of that year.

American Express reported that Denver's cheapest fares fell 44% in November 1996 (compared to a year earlier) for 10 routes out of Denver in which Frontier competed. In contrast, United's business fares increased 21%.<sup>234</sup> The unrestricted business fare also becomes a revenue source with which to cross-subsidize below-cost pricing against competitors. In a letter to the editor of the *Denver Post*, one consumer summarized what more and more Colorado residents are experiencing:

I travel extensively on business, and it is my experience that United is deliberately manipulating prices to put its competitors out of business.

A recent round trip to Boston on United cost \$1,667. The following week, I flew to Minneapolis, again on United, at a cost of \$146. The difference is because Frontier flies to Minneapolis. United is charging excessive fares on some routes and using the profits to undercut competition where it exists.

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<sup>234</sup> ROCKY MOUNTAIN NEWS, Dec. 23, 1996.

This unethical behavior would be bad enough on its own. But United is using the taxpayer-supported airports, and the taxpayer-funded air traffic control system in its anti-competitive efforts.<sup>235</sup>

United's pricing in markets Frontier was forced to abandon was even more remarkable. In the Denver-Billings market, United's average one-way fare was \$168 before Frontier entered (in the third quarter of 1994); United dropped it to \$92 after Frontier entered (in the first quarter of 1995), then increased it to \$208 after Frontier departed. United's average one-way fare in the Denver-Tucson market was \$178 in the second quarter of 1994, dropped to \$104 after Frontier entered, then rose to as high as \$186 after Frontier departed. United offered high prices before and after low-fare competitors entered its markets, but not while it was trying to drive them out of its markets. Indeed, United used the high prices it extracts from its monopoly markets to cross-subsidize below-cost predatory pricing in markets in which low-cost carriers dare to enter.

All airlines suffered higher costs in the second half of 1996. Fuel costs increased between 18% and 25%. Congress re-imposed a 10% excise tax in late August of that year. Frontier attempted to raise its prices modestly to recover these costs on six different occasions. United matched only one of those price increases in markets in which Frontier offers service, but raised prices significantly in many markets in which Frontier does not. Of course, Frontier had no choice but to reduce its prices to United's level, even though United set them at levels below Frontier's costs, and *well below* United's.

Taking advantage of this unique intersection of two potentially unfavorable events (the double whammy of sharply higher taxes and fuel costs), United appeared to have initiated a deliberate effort to suppress prices at the lowest end of their pricing scale. Simultaneously, year over year, coinciding with the end of Frontier's first two profitable quarters, United dramatically expanded seat and flight capacity available at these lower prices so that Frontier's profitability would turn south.<sup>236</sup>

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<sup>235</sup> Michael Reilly, *Letter to the Editor*, DENVER POST, Dec. 26, 1996, at 10B.

<sup>236</sup> Unfortunately, while the actual fare data is public, only United Airlines knows the actual number of seats it offers at the lowest price. Moreover, actual cost data and actual fare data for the last quarter of 1996 will not be known until about mid-April of 1997.

This had the effects of eroding Frontier's market share, causing a decline in Frontier's load factors, eroding Frontier's yield, and creating a higher break-even load factor requirement for Frontier precipitated both by lower average fares and higher unit costs. Frontier's seven consecutive months of profitable operations turned into significant monthly losses.

Until May 1996, United matched Frontier's lowest fares only on flights in close departure proximity to Frontier's flights.<sup>237</sup> That month, United matched Frontier's fares on all flights, spreading its lowest fare buckets across square miles of seats. To add insult to injury, by the fall of 1996, United was underpricing Frontier on many routes in which they competed, despite United's significantly higher cost structure.<sup>238</sup> United then began to add flight frequencies in several of the markets in which Frontier competed.

For example, United increased its frequencies in the nonstop Denver-Los Angeles market from 14 daily round-trips in August 1994, and 15 in August 1995, to 20 in August 1996. That increased United's share to more than 90% of the flights in that city-pair market. The Denver-Los Angeles market is the sixth biggest market in United's system,<sup>239</sup> and United was determined to increase its monopoly position in the market. Comparing August 1995 to August 1996, United also added a new daily round-trip flight in the Denver-San Francisco market and the Denver-Salt Lake city market, and two in the Denver-Las Vegas market. Again, flights were added in these markets after Frontier entered.

For example, comparing 1996 with 1995, in the Denver-Las Vegas Market, United increased its seat capacity up to 71% and flights 37%; in the Denver-Los Angeles market, United increased seats up to 34% and flights 33%; in the Denver-Phoenix market, United increased seats up to 38% and flights 27%; and in the Denver-San Francisco market, United increased seats up to 19% and flights 16%. At cities Frontier departed, United tended to reduce seat capacity and flights, year over year. For example, in the Denver-Billings market, United reduced seats and flights by as much as a third.

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<sup>237</sup> Jeffrey Leib, *Frontier Joins Discount Fray*, DENVER POST, Aug. 15, 1995, at C1.

<sup>238</sup> Ann Imse, *Frontier Exec Calls United Predatory*, ROCKY MOUNTAIN NEWS, Nov. 9, 1996, at 1B.

<sup>239</sup> AVIATION DAILY, Dec. 9, 1996, at 392.

In late 1996, United announced it was adding capacity from Denver to 12 cities, 11 of which were cities in which either Frontier or Western Pacific competed. Even though United had confessed that it was losing money in the Denver-Las Vegas and Denver-Phoenix markets (in both of which Frontier competes), United announced sharp increases in frequencies in these markets with Shuttle by United to operate low-fare high-frequency service.<sup>240</sup> According to one source, "The Shuttle is United's weapon against a growing swarm of low-cost airlines that are winning fliers with low fares."<sup>241</sup> A United spokesman described United's Shuttle in these terms, "Shuttle by United was created by the employees to be a competitive tool against low-fare, short-haul carriers."<sup>242</sup>

Originally launched in West Coast markets to discipline Southwest (an airline which, United learned, was too large to destroy), United turned the Shuttle toward Frontier and Western Pacific. Beginning February 11, 1997, United flew 13 round trips in the Denver-Phoenix market (up from 9), and 12 round-trips in the Denver-Las Vegas market (up from 7). Vanguard Airlines announced it was exiting the Denver-Phoenix market.<sup>243</sup> United insisted that one of the reasons it was losing money in these markets was the equipment—its DC-10s would be replaced by the Shuttle's 737s.<sup>244</sup> The Available Seat Mile [ASM] costs of a wide-bodied aircraft like a DC-10 are typically lower than the ASM costs of a narrow-body aircraft like a 737, even though the pilots in the cockpit of a wide-bodied aircraft are paid significantly more than those of a narrow-body aircraft. United refused to reveal the Shuttle's costs. But operating from Denver, any legitimate accounting methodology would likely place United's Shuttle costs significantly higher than Frontier's.<sup>245</sup> Even with the Shuttle, United's system-wide 737 costs rose 4%, year-over-year. Shuttle by United accounted for 45%

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<sup>240</sup> Ann Imse, *Frontier Exec Calls United Predatory*, ROCKY MOUNTAIN NEWS, Nov. 9, 1996, at 1B.

<sup>241</sup> Julie Schmit, *West Coast Showdown*, USA TODAY, Sept. 30, 1994, at 1B.

<sup>242</sup> Penny Parker, *United Taps Low Fares To Launch Its Shuttle*, DENVER POST, Nov. 20, 1996, at C3.

<sup>243</sup> Jeffrey Leib, *Vanguard Cancels Flight Before Shuttle Debuts*, DENVER POST, Nov. 9, 1996, at 3D.

<sup>244</sup> Jeffrey Leib, *Low-Fare United Shuttle DIA-Bound*, DENVER POST, Nov. 7, 1996, at 1C.

<sup>245</sup> ROBERTS ROACH & ASSOCIATES, SCORECARD: AIRLINE INDUSTRY COST MANAGEMENT (3rd ed. 1996).

of United's total Boeing 737-300 operations.<sup>246</sup> Thus, the above chart revealing United's 737-300 system-wide domestic cost structure probably reflects costs which approximate those of the Shuttle, particularly given that DIA's fees and charges add about one cent per mile to carrier costs.

Why, then, did United bring the Shuttle to Denver? Former Denver airport director George Doughty offered this explanation:

[I]t is clear that United is not doing this because it wants to provide a low-fare product at its fortress hub. You can bet if there were no low-fare competitors, there would be no shuttle. It goes counter to its pricing philosophy, which is to maximize fares. You need only compare fares available in markets where United has a monopoly or competes only with another Big Seven carrier to markets where there is a competing low-fare carrier.<sup>247</sup>

United also offered major travel agencies commission overrides in various city-pairs radiating from Denver, several in which Frontier competed. With agent commissions capped at \$50 by the major airlines in 1994, overrides have become a far more important, if not essential, stream of revenue for agents. Agencies only earn overrides if they book an extremely high percentage (e.g., 90%) of flights on the carrier which offers them. Thus, agents are incentivized to book their customers on United even when Frontier (or any other competitor) has a more desirable schedule or better service. Earlier in this study, travel agent commission overrides [TACOs] were referred to as "bribes." According to Webster's dictionary, a bribe is defined as "money or favor bestowed on or promised to a person in a position of trust to pervert his judgment or corrupt his conduct." Though not yet declared illegal, TACOs satisfy this definition. Agents also rely on computer reservations systems which, as we have seen, are biased against non code-share connections.

United Airlines also included a contractual provision in its corporate discount contracts with Denver businesses prohibiting them from entering into similar agreements with other carriers. Typically, it provides: "During the Term of this Agreement, Customer will not enter into any similar agreement with any other airline under which air transportation is provided to Customer in return for any incentive on the air routes serviced by United."

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<sup>246</sup> *Id.* at 18.

<sup>247</sup> George Doughty, *Smart Business Travelers Can Invest In Fare Competition*, DENVER BUS. J., Nov. 29, 1996, at 27A.

United's combined strategy of (1) dumping excess capacity in Frontier's markets; (2) lowering prices to or below Frontier's; (3) bribing agents with commission overrides to steer business toward United; (4) refusing to enter into joint-fare or code-sharing agreements with low-cost jet competitors; (5) biasing its CRS against interline flights; and (6) imposing "exclusive dealing" requirements with corporate accounts, began to take its toll. Although Frontier was profitable in the first two calendar quarters of 1996, it lost money in the third, and continued to lose money until the Departments of Justice and Transportation began to investigate Frontier's allegations of anticompetitive activity by United at Denver. By October and November 1996, Frontier was filling only 50.7% and 52.7% of its seats, respectively (compared with 58.4% and 61.1%, respectively, a year earlier).<sup>248</sup> United's market share continued to grow.

Table 6<sup>249</sup> reveals that in 1996, United Airlines had 100% of the capacity (measured by departures or seats) in 30 of its 52 non-stop markets radiating from its Denver Fortress Hub, and more than 70% in 9 additional city-pairs radiating from Denver. Coupled with its code-sharing affiliates, United controlled 100% of 71 non-stop city-pairs radiating from Denver.

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<sup>248</sup> Jeffrey Leib, *Frontier's Passenger Traffic Dips*, DENVER POST, Nov. 1996, at C1; *Frontier Fills Fewer Seats*, DENVER POST, Dec. 12, 1996, at 2C.

<sup>249</sup> These data were derived from the August 1996 Official Airline Guide.

Table 6 – United Airlines and Affiliates Market Share in Denver City-Pairs

MARKET -- DENVER TO & FROM:	AIRLINE/S	UNITED DEPARTURE SHARE	UNITED SEAT SHARE	COMMENTS
ALBUQUERQUE	F9/UA	72.4%	75.6%	
ALLIANCE	UA*	100.0%	100.0%	UNITED EXPRESS
AMARILLO	UA*	100.0%	100.0%	UNITED EXPRESS
ANCHORAGE	UA	100.0%	100.0%	
ASPEN	UA*	100.0%	100.0%	UNITED EXPRESS
ATLANTA	DL/UA	40.0%	34.9%	
AUSTIN	UA	100.0%	100.0%	
BALTIMORE	UA	100.0%	100.0%	
BILLINGS	UA	100.0%	100.0%	
BISMARCK	UA*	85.0%	55.0%	UNITED EXPRESS
BOISE	UA	100.0%	100.0%	
BOSTON	UA	100.0%	100.0%	
CASPER	UA*	100.0%	100.0%	UNITED EXPRESS
CEDAR RAPIDS	UA	100.0%	100.0%	
CHADRON	UA*	100.0%	100.0%	UNITED EXPRESS
CHEYENNE	UA*	100.0%	100.0%	UNITED EXPRESS
CHICAGO	F9/AA/UA	58.6%	68.8%	UA ORD
CORTEZ	UA*	100.0%	100.0%	UNITED EXPRESS
CLEVELAND	CO/UA	50.0%	45.7%	
COLUMBUS	UA	100.0%	100.0%	
CODY	UA*	100.0%	100.0%	UNITED EXPRESS
COLORADO SPRINGS	UA	100.0%	100.0%	
DALLAS	AA/DL/UA	33.3%	27.9%	
DES MOINES	UA	100.0%	100.0%	
DETROIT	NW/UA	57.1%	55.1%	
DICKINSON	UA*	100.0%	100.0%	UNITED EXPRESS
DURANGO	UA*	100.0%	100.0%	UNITED EXPRESS
EUGENE	UA	100.0%	100.0%	
FARMINGTON	UA*	100.0%	100.0%	UNITED EXPRESS
FORT COLLINS	UA*	100.0%	100.0%	UNITED EXPRESS
GILLETTE	UA*	100.0%	100.0%	UNITED EXPRESS
GARDEN CITY	UA*	100.0%	100.0%	UNITED EXPRESS
GRAND ISLAND	UA*	100.0%	100.0%	UNITED EXPRESS
GRAND JUNCTION	UA*	100.0%	100.0%	UNITED EXPRESS
GUNNISON	UA*	100.0%	100.0%	UNITED EXPRESS
HARTFORD	UA	100.0%	100.0%	
HOUSTON	CO/UA	49.4%	43.4%	
INDIANAPOLIS	UA	100.0%	100.0%	
JACKSON HOLE	UA/UA*	100.0%	100.0%	UNITED & UNITED EXPRESS
KANSAS CITY	NJ/UA	71.0%	78.0%	
LARAMIE	UA*	100.0%	100.0%	UNITED EXPRESS
LAS VEGAS	F9/HP/UA	66.3%	75.0%	
LIBERAL	UA*	100.0%	100.0%	UNITED EXPRESS
LINCOLN	UA	100.0%	100.0%	
LOS ANGELES	F9/UA	90.4%	92.7%	
LUBBOCK	UA*	100.0%	100.0%	UNITED EXPRESS
MCCOOK	UA*	100.0%	100.0%	UNITED EXPRESS
MIAMI	UA	100.0%	100.0%	
MIDLAND	UA*	100.0%	100.0%	UNITED EXPRESS
MILWAUKEE	UA/YX	60.0%	67.7%	
MINNEAPOLIS	F9/NW/UA	50.5%	45.1%	

MOLINE	UA*	100.0%	100.0%	UNITED EXPRESS
MONTROSE	UA*	100.0%	100.0%	UNITED EXPRESS
NASHVILLE	UA	100.0%	100.0%	
NEW ORLEANS	UA	100.0%	100.0%	
NEW YORK	CO/UA	60.0%	66.5%	
NORTH PLATTE	UA*	100.0%	100.0%	UNITED EXPRESS
OAKLAND	UA	100.0%	100.0%	
OKLAHOMA CITY	UA	100.0%	100.0%	
OMAHA	F9/UA	73.9%	84.7%	
ORLANDO	UA	100.0%	100.0%	
PALM SPRINGS	UA	100.0%	100.0%	
PHILADELPHIA	UA/US	85.7%	85.0%	
PHOENIX	F9/HP/UA	47.8%	54.3%	
PEORIA	UA*	100.0%	100.0%	UNITED EXPRESS
PIERRE	UA*	100.0%	100.0%	UNITED EXPRESS
PORTLAND	UA	100%	100.0%	
PUEBLO	UA*	100.0%	00.0%	UNITED EXPRESS
RAPID CITY	UA*	100.0%	100.0%	UNITED EXPRESS
RENO	QQ/UA	60.6%	58.1%	
RIVERTON	UA*	100.0%	100.0%	UNITED EXPRESS
ROCK SPRINGS	UA*	100.0%	100.0%	UNITED EXPRESS
SACRAMENTO	UA	100.0%	100.0%	
ST. LOUIS	F9/TW/UA	33.8%	26.6%	
SALT LAKE CITY	DL/F9/NJ/ TW/UA	33.6%	32.0%	
SAN ANTONIO	UA	100.0%	100.0%	
SAN DIEGO	F9/UA	87.5%	89.3%	
SAN FRANCISCO	F9/UA	88.8%	92.3%	
SAN JOSE	UA	100.0%	100.0%	
SANTA BARBARA	UA*	100.0%	100.0%	UNITED EXPRESS
SANTA FE	UA*	100.0%	100.0%	UNITED EXPRESS
SCOTT'SBLUFF	CO*/UA*	100.0%	100.0%	UNITED EXPRESS
SEATTLE	F9/UA	84.6%	90.9%	
SHERIDAN	UA*	100.0%	100.0%	UNITED EXPRESS
SIOUX CITY	UA*	100.0%	100.0%	UNITED EXPRESS
SIOUX FALLS	UA/UA*	100.0%	100.0%	UNITED & UNITED EXPRESS
SPOKANE	UA	100.0%	100.0%	
SPRINGFIELD	UA*	100.0%	100.0%	UNITED EXPRESS
STEAM BOAT SPRINGS	UA/UA*	100.0%	100.0%	UNITED & UNITED EXPRESS
TAMPA	UA	100.0%	100.0%	
TELLURIDE	UA*	100.0%	100.0%	UNITED EXPRESS
TUCSON	UA	100.0%	100.0%	
TULSA	UA	100.0%	100.0%	
WASHINGTON DC	UA	100.0%	100.0%	
WICHITA	NJ/UA/UA*	80.0%	77.9%	UNITED & UNITED EXPRESS

CO = Continental Airlines  
DL = Delta Air Lines  
F9 = Frontier Airlines  
HP = America West  
NJ = Vanguard Airlines  
NW = Northwest Airlines  
TW = Trans World Airlines  
QQ = Reno Air  
UA = United Airlines  
US = US Airways  
XY = Midwest Express

The above data may be summarized as follows:

Table 7 – Summary of United Airlines and Affiliates Market Share at Denver

CITY-PAIR MARKETS	100% market share	> 70% market share	Total Markets
UNITED	30	39	52
UNITED EXPRESS	38	39	39
SHARED	3	4	4
TOTAL	71	82	95

By the fall of 1999, United flew 305 daily jet departures from Denver to 59 destinations. Its code-sharing affiliates (i.e., Air Wisconsin and Great Lakes) flew an additional 184 daily departures from Denver to 52 destinations.

Denver is perhaps the nation's most geographically isolated airline hub. Denver is about 400 miles from Salt Lake City, 600 miles from Phoenix, 650 miles from Dallas, 700 miles to Minneapolis, 800 miles to St. Louis, and 900 miles to Chicago—all potentially competing hubs. Because most passengers prefer the shortest connecting flights (and CRS algorithms prioritize flights, *inter alia*, on elapsed time from origin to destination), sales of circuitous connections are relatively infrequent. For example, most passengers flying from the state capitals of Oklahoma City, Oklahoma, to Laramie, Wyoming, would not likely fly via Dallas or St. Louis. They would instead fly via Denver—on United, which has 100% of the flights from Oklahoma City to Denver, and United Express, which has 100% of the flights from Denver to Laramie. Similarly, most passengers flying from the state capitals of Albuquerque, New Mexico, to Des Moines, Iowa, for example, would likely fly directly via Denver on United rather than circuitously through the competing hubs of Minneapolis, Chicago, St. Louis or Salt Lake City. Thus, the geographic scope of United's monopoly domination is vast. Moreover, in the Albuquerque-Des Moines example, Frontier ordinarily would not be allowed to participate as a viable competitor in the market (though it has two flights a day between Albuquerque and Denver), because United denied Frontier a joint-fare relationship, a code-sharing agreement, Mileage Plus participation, and saddled Frontier's connecting flights with the equivalent of 24 hours in the CRS algorithm so as to shove its flights off the first page of the CRS screen, where 85% of flights are sold by travel agents.<sup>250</sup>

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<sup>250</sup> PAUL DEMPSEY, UNFRIENDLY SKIES OVER COLORADO: UNITED AIRLINES' FORETRESS HUB MONOPOLY AT DENVER 12-18 (1997).

This "dead zone," devoid of significant competition is broader than the circumference described in the preceding paragraph. Generally speaking, the operational economics of jet aircraft with more than 100 seats make them best suited for flights of more than 400 miles. The zone of less than 400 miles is dominated by turboprop and relatively small jet commuter aircraft. Moreover, most passengers prefer jets to turboprop aircraft. Thus, the turboprops generally serve relatively small cities (for larger cities are served by larger jet aircraft). That makes the United-dominated zone for connecting traffic in the Great Plains/Rocky Mountain region extend beyond the perimeters described above. Even a 500 mile stage length poses a significant cost penalty for established major airlines:<sup>251</sup>

Table 8 – Distance-Based Costs for Dominant Airlines at Selected Cities

Western Hub	Distance from Denver (miles)	Dominant Airline	Average Domestic Stage Length (miles)	System-wide costs per ASM (cents)	ASM costs @ 500 miles	500 mile costs as % of system
Salt Lake City	400	Delta	687	8.61	9.57	111%
Phoenix	600	America West	733	7.19	8.13	113%
Dallas	650	American	1,032	8.43	14.29	170%
Minneapolis	700	Northwest	718	8.66	11.51	133%
St. Louis	800	TWA	752	8.16	12.10	148%

The point is, United's dominance of the connecting market in the Rocky Mountain/Great Plains region encompasses a broader geographic area than the straight-line distances between Denver and these competing hubs. According to Lehman Brothers, Denver's catchment area is one of the largest in the nation, and the largest by far in United's system.<sup>252</sup>

#### H. THE DEMISE OF WESTERN PACIFIC AIRLINES

Western Pacific began serving Colorado Springs Airport (about 75 miles south of Denver) in 1995. In September 1995, United "counterattacked an upstart Colorado Springs airline . . . and sharply cut ticket prices on tickets from Denver to 16 cities

<sup>251</sup> Data are derived from ROBERTS ROACH & ASSOCIATES, SCORECARD: AIRLINE INDUSTRY COST MANAGEMENT 41 (2Q 1995), except for domestic stage length, which are taken from DOT Form 41 (August 1996).

<sup>252</sup> BRIAN HARRIS, AIRLINES: 1998 HUB FACTBOOK 20 (Lehman Bros. 1998).

[in 13 of which WesternPacific competed].”<sup>253</sup> Despite its significantly higher cost structure, United began matching or beating WestPac’s fares.

By late 1996, WestPac was serving 20 cities with fifteen 138-seat Boeing 737-300 aircraft.<sup>254</sup> WestPac’s lowest walk-up fare to San Francisco was \$417, while United’s was \$1,080.<sup>255</sup> United’s management described WestPac as a “nuisance,” taking several actions to clip its wings.<sup>256</sup> First, United began matching WestPac’s fares on a capacity controlled basis. For example, United dropped its Colorado Springs-Washington (Dulles) round-trip fare to \$228, though flying the same aircraft out of Denver cost consumers \$1,138.<sup>257</sup> Then United began matching WestPac’s fares from Colorado Springs on a “seat-for-seat” basis.<sup>258</sup> By replacing 737 service from Colorado Springs to Chicago with DC-10s, United increased its capacity by 20%.<sup>259</sup> Pricing below cost and dumping capacity are two of the consistent tactics United has used to drive competitors from markets it seeks to dominate.

A December 1996 cover story of the *Wall Street Journal* summarized the predatory behavior targeted at small airlines like Western Pacific and Frontier by megacarriers like United. After the ValuJet crash in the Everglades caused a temporary drop in new entrant airlines’ bookings,

Big carriers, sensing vulnerability, aggressively matched fares and added flights on routes flown by small airlines. . . .<sup>260</sup>

[B]ig carriers such as United . . . were increasing pressure on Western Pacific and other start-ups. Trying to win back customers, UAL Corp.’s United, for example, increased its flights between Denver and Colorado Springs and even added a DC-10 on

<sup>253</sup> Jeffrey Leib, *United Cuts Fares To Meet, Beat Springs Deals*, DENVER POST, Sept. 22, 1995, at A1.

<sup>254</sup> *Carriers Suffer With Rising Fuel Prices, Reduced Traffic and Taxes*, AIRLINE FIN. NEWS (Oct. 14, 1996).

<sup>255</sup> Ann Gottlieb & Jeffrey Leib, *Competition Would Cut Fares*, DENVER POST, July 16, 1996, at A10.

<sup>256</sup> *United Airlines Chief: WestPac’s a Nuisance*, COLO. SPRINGS GAZETTE TELEGRAPH, Jan. 10, 1996, at D1.

<sup>257</sup> Ann Imse, *Computer Helps You Find Lowest of the Low Fares*, ROCKY MOUNTAIN NEWS, Mar. 24, 1996.

<sup>258</sup> *United Airlines Chief: WestPac’s a Nuisance*, COLO. SPRINGS GAZETTE TELEGRAPH, Jan. 10, 1996, at D1.

<sup>259</sup> Bill Vogrin, *United Makes Denver Flights a Big Deal*, COLO. SPRINGS GAZETTE TELEGRAPH, Mar. 5, 1996, at A1.

<sup>260</sup> Scott McCartney, *Start-Ups Still Suffer From ValuJet Crash and FAA’s Missteps*, WALL ST. J., Dec. 9, 1996, at 1.

the short hop. The carrier more aggressively matched the fares of Western Pacific and Frontier, and announced plans to bring its low-fare Shuttle by United from the West Coast into Denver.<sup>261</sup>

In 1997, the Colorado state legislature approved \$5.5 million in loan or loan guarantees for Western Pacific Airlines to move to Denver International Airport.<sup>262</sup> Fearing competition, United Airlines attempted to torpedo the deal.<sup>263</sup> United Airlines President John Edwardson said his carrier would “vociferously” protest any attempt by Denver officials to lure WestPac to DIA.<sup>264</sup> Issuing a “blistering attack” on what he described as “parliamentary chicanery,”<sup>265</sup> United Airlines spokesman Tony Molinaro decried it as “blatantly not a fair deal.”<sup>266</sup> United Airlines spokesman John Philp said, “Our position is that airlines shouldn’t be asked to subsidize a competitor.”<sup>267</sup> Subsequently, he took the position that the fund “should be equally available to all the operators here in the state of Colorado,”<sup>268</sup> and that United might seek economic incentives for expanding its Denver training center.<sup>269</sup> (Actually, at United’s insistence, the Denver City Council had earlier agreed to pay United up to \$1.25 million as an incentive to expand its training center at Stapleton International Airport.)<sup>270</sup> At another point, Philp said that Western Pacific should not need the “artificial crutch” of loans or loan guarantees,<sup>271</sup> though why the world’s largest airline needed to regularly feed at the public trough was not explained.

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<sup>261</sup> *Id.* at A10.

<sup>262</sup> Richard Williamson & Dan Luzzader, *WestPac Lands \$5.5 Million*, ROCKY MOUNTAIN NEWS, Apr. 26, 1997, at 1B.

<sup>263</sup> Michelle Johnston & Jeffrey Leib, *WestPac Aid Gets Speedy OK*, DENVER POST, Apr. 25, 1997, at A1.

<sup>264</sup> Jeffrey Leib, *United Will Oppose Aid For WestPac*, DENVER POST, Apr. 23, 1997, at C1.

<sup>265</sup> Jeffrey Leib & Jim Mallory, *WestPac Joins DIA In Big Way*, DENVER POST, May 1, 1997, at 12A.

<sup>266</sup> *United’s Double Standard*, ROCKY MOUNTAIN NEWS, April 28, 1997, at 40A.

<sup>267</sup> Richard Williamson, *Western Pacific Wants City To Make DIA More Attractive*, ROCKY MOUNTAIN NEWS, Apr. 22, 1997, at 6B.

<sup>268</sup> Richard Williamson, *United Might Want Denver To Show It Some Money, Too*, ROCKY MOUNTAIN NEWS, May 3, 1997, at 3B.

<sup>269</sup> Richard Williamson, *Airline Passes the Hat*, DENVER POST, May 7, 1997, at 2B.

<sup>270</sup> *United To Pay \$9.5 Million For Its Flight Training Center*, ROCKY MOUNTAIN NEWS, Dec. 5, 1996, at 3B; Arthur Hodges, *Denver Offers Cash To Keep United Training Center*, DENVER POST, Nov. 21, 1996, at B3; Kevin Flynn, *United Getting \$1.25 Million In Incentives From Denver*, ROCKY MOUNTAIN NEWS, Nov. 21, 1996, at 37A.

<sup>271</sup> Jeffrey Leib, *WestPac Makes Aid Pitch*, DENVER POST, May 7, 1997, at 8C.

Ironically, the Colorado Business Incentive fund was created in 1991 from a jet fuel tax, designed to lure United Airlines to build a heavy maintenance base at Denver International Airport.<sup>272</sup> In 1991, United asked the state of Colorado for an “artificial crutch” of \$600 million—not in loans—but in outright grants as an incentive to build its heavy maintenance facility at DIA.<sup>273</sup> Colorado Governor Roy Romer proposed between \$427 million and \$609 million in tax credits to build United’s heavy maintenance facility at DIA.<sup>274</sup> The Colorado legislature and Denver city council approved tax incentives worth between \$228 million and \$318 million<sup>275</sup> over a 30-year period.<sup>276</sup> United instead shopped the offer, and built that base in Indianapolis, lured there by \$270 million worth of incentives.<sup>277</sup>

In constructing DIA, the airport financed many traditionally tenant-provided facilities, including loading bridges, commuter facilities, aircraft docking systems, communications equipment, baggage and mail sorting equipment, flight display monitors, and ticket and service counters.<sup>278</sup> At United’s insistence, the city installed an airport-financed automated baggage system at DIA, well after construction had begun, which required major redesign of the main terminal building and contributed to massive cost increases. As a quid-pro-quo, in 1991, United promised to build a reservations center in Denver employing some 2,000 reservationists.<sup>279</sup> But by 1994, United persuaded the city to relieve it of that commitment.<sup>280</sup> United, the world’s largest airline, which has enjoyed hundreds of millions of dollars in public assistance, had the audacity to attempt to derail a \$5.5 million

<sup>272</sup> Jeffrey Leib, *United Will Oppose Aid for WestPac*, DENVER POST, Apr. 23, 1997, at C1.

<sup>273</sup> *Editorial*, DENVER POST, Apr. 29, 1997, at B8.

<sup>274</sup> *Colorado Has Plan To Entice United Air To Set Denver Project*, WALL ST. J., May 13, 1991, at 5C.

<sup>275</sup> *No Decision, United Says, On New Facility*, CHICAGO TRIB., June 14, 1991, at 3C.

<sup>276</sup> Robin Mead, *Denver’s Jumbo Airport Gamble*, THE INDEPENDENT, July 23, 1991, at 21.

<sup>277</sup> Scott Thurston, *How Dispute Over hangar Started For City*, ATLANTA CONST., Nov. 10, 1992, at F9.

<sup>278</sup> PAUL DEMPSEY, ANDREW GOETZ & JOSEPH SZYLIOVICZ, *DENVER INTERNATIONAL AIRPORT: LESSONS LEARNED* (1997).

<sup>279</sup> Dyan Zaslowsky, *Some Small Signs of Optimism for Denver’s Office Market*, N.Y. TIMES, Dec. 11, 1991, at D20.

<sup>280</sup> Al Knight, *Will Someone Go By City Hall And Wake Up the City Council?*, DENVER POST, Apr. 3, 1994, at E1; Patrick O’Driscoll, *City Lets United Off Hook for Center*, DENVER POST, Mar. 4, 1994, at A18; Dyan Zaslowsky, *Some Small Signs of Optimism for Denver’s Office Market*, N.Y. TIMES, Dec. 11, 1991, at D20.

loan to a new entrant airline which had the audacity to move to the Fortress Hub it dominates.

Western Pacific Airlines moved the base of its operations to Denver without public assistance, and ceased operations in February 1998.

### I. THE PRICE OF MONOPOLIZATION

As it drove competitors out of markets, United raised prices sharply. For example, before Frontier entered the Denver-Billings market, United's lowest round-trip fare was \$384. After Frontier entered, United lowered its fare to \$198. After Frontier departed, United raised its fares to \$345.<sup>281</sup>

The Denver-Boulder metropolitan area is the largest center of business activity in the Rocky Mountain Region, an oasis of population isolated from other business centers in North America. For example, the distance from Denver to Phoenix is nearly 600 miles, to Dallas nearly 650 miles, to Minneapolis 700 miles, to Los Angeles 850 miles, to Chicago 900 miles, and to Seattle 1,000 miles.<sup>282</sup> Amtrak rail service exists to some of these cities, but it is extremely slow. Interstate highways make these cities accessible by automobile, but the distances and driving times are vast. These features make Denver and Colorado more reliant on air transportation than most other American cities. As a consequence, an unusually high proportion (58%) of passengers at Denver International Airport are origin-and-destination [O&D] passengers.<sup>283</sup> It is these passengers upon whom a monopoly fare can be placed by a dominant airline.

A 1990 study by the GAO comparing pricing between concentrated and unconcentrated hub airports found that O&D fares were 27% higher at the concentrated hubs.<sup>284</sup> A separate study performed that year by the DOT found that average yields were 18.7% higher at single-carrier hubs.<sup>285</sup> A 1996 study by DOT

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<sup>281</sup> Ann Imse, *Frontier Exec Calls United Predatory*, ROCKY MOUNTAIN NEWS, Nov. 9, 1996, at 1B.

<sup>282</sup> Leigh Fisher Associates Analysis, Prepared for the City and County of Denver (1994).

<sup>283</sup> GAO, DENVER AIRPORT: OPERATING RESULTS AND FINANCIAL RISKS 18 (1996).

<sup>284</sup> GAO, AIRLINE COMPETITION: INDUSTRY OPERATING AND MARKETING PRACTICES LIMIT MARKET ENTRY (1990).

<sup>285</sup> DOT, SECRETARY'S TASK FORCE ON COMPETITION IN THE U.S. DOMESTIC AIRLINE INDUSTRY: AIRPORTS, AIR TRAFFIC CONTROL, AND RELATED CONCERNS (1990).

concluded that the presence of low-cost competitors produce a 40% fare savings to consumers at dominated network hubs.<sup>286</sup>

A 1994 study of airline pricing at Denver prepared for the city estimated 16.5 million enplaned passengers, of whom 8.25 million were O&D. Average airfares of \$362 multiplied times 8.25 million O&D passengers produced \$3 billion in gross revenue. Assuming a 15% increase in air fares attributable to the hub monopoly of United Airlines, the annual cost to Denver consumers from monopolization of the Denver hub was \$450 million. Assuming a 27% increase, the annual consumer cost of monopolization was \$810 million in 1994 terms. The airport itself loses \$10 million in revenue because higher prices translates into fewer passengers. Thus, in a relatively short time frame, United could recover the losses it incurred in its below-cost fare wars with its competitors at Denver.

These are highly conservative estimates. By 1996, the consensus was that DIA produced \$5 billion in gross revenue for the airlines which serve it, that 58% of the traffic was O&D, and that a monopoly airline could charge fares 42% higher than in competitive markets. This suggests a potential direct negative impact on Colorado consumers of several hundred million dollars a year. Much of that increase is attributable to United Airlines' dominance of virtually all spokes radiating from Denver.

These are the minimum costs imposed on the Colorado economy by monopolization of DIA. They do not account for the ripple effect on business, particularly travel-related business, such as hotel, convention and tourism. In Colorado, the ski industry does nearly \$2 billion in retail activity, while tourism is a \$6 billion industry. The success and well being of both industries is directly tied to the reasonableness of air fares to Colorado. A perception that Colorado is an expensive tourism destination will send tourists elsewhere. United's monopoly will siphon tens of billions of dollars of revenue out of the Colorado economy over the long term, significantly dampening discretionary traffic demand in an economy strongly dependent on tourism.

It has been proven statistically that a 15% increase in air fares results in a 4.5% decrease in passenger traffic; a 27% increase in fares results in about an 8% decrease in passenger traffic.<sup>287</sup> In 1994, it was estimated that the tourism economic impact of Sta-

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<sup>286</sup> DOT, *THE LOW COST AIRLINE SERVICE REVOLUTION* 9 (1996).

<sup>287</sup> Julius Maldutis, *Airline Update* - August 1996 (Sept. 9, 1996), at 2.

pleton International Airport was \$892 million (comprised of \$622 million in winter tourism, \$222 in summer tourism, and \$48.4 million in business travel and conventions). A decline in passenger traffic of between 4% and 8% attributable to monopoly air fares translates directly into a loss of tens of millions of dollars in lost income for these industries. The aggregate impact of higher ticket prices imposed by United Airlines upon O&D passengers, plus the loss of revenue sustained by the Colorado tourism industry and Colorado business more generally, plus declining DIA revenue attributable to dampened passenger demand, may be well over \$1 billion annually.

The only thing that stands between a consumer's wallet and a wealth-maximizing monopolist is a competitor.

As 1996 drew to a close, United Airlines and its code-sharing affiliates controlled nearly more than 95% of the connecting traffic, and nearly 80% of the total passenger traffic at the Denver hub. In December 1996, speaking before about 300 Denver business leaders, when asked how large a market share the carrier seeks at DIA, United Airlines Vice President Roger Gibson responded, "I'd like all of it."<sup>288</sup>

Predation does not manifest itself solely in terms of the major airline pricing below cost and flooding the market with capacity. Anticompetitive weaponry designed to suppress competition and monopolize the market include a plethora of activities. Frontier alleged the following anticompetitive activities by United Airlines at Denver:

- United bribed large travel agencies with commission overrides to book United at levels higher than its capacity in the market.
- United entered into "exclusive dealing" contracts with large corporate purchasers forbidding them from entering into similar discount arrangements with competitors such as Frontier.
- United entered into "exclusive dealing" contracts with its commuter affiliates prohibiting them from code-sharing with Frontier.
- United biased its computer reservations system in a manner to monopolize the connecting travel market at Denver; it adds the equivalent of 24-hours to the display of Frontier's interline connections at Denver.
- United used its influence with the city of Denver to ensure that Concourse A rents are higher than those charged United on Concourse B at Denver International Airport.

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<sup>288</sup> United Airlines Vice President Roger Gibson, Statement before the Denver Rotary Club breakfast meeting at the Denver Athletic Club (Dec. 12, 1996).

- Although United, the world's largest airline, concluded an agreement to code-share with Delta, the third largest airline, it refused to enter into a code-sharing agreement with Frontier, which sought code-sharing with United at its Denver Fortress Hub.

The impact of predation on smaller, less well capitalized airlines is profound. Predatory behavior can dissuade new entry.<sup>289</sup> Predation can cripple a small airline once it entered by denying it break-even load factors and revenue.<sup>290</sup>

#### IV. LEGAL ANALYSIS OF PREDATION

In this section, we examine the legal basis for imposing legal sanctions against predatory behavior in the airline industry aimed at harming smaller competitors. Though the emphasis of the DOT's policy statement is aimed at predatory pricing, other predatory conduct is also harmful to competition.

##### A. THE FEDERAL AVIATION ACT

Congress promulgated four separate competition laws to encourage competition and punish anticompetitive behavior in the U.S. economy: (1) the Sherman Act; (2) the Clayton Act; (3) the Robinson-Patman Act; and (4) the Federal Trade Commission Act. Each addresses a somewhat different problem and has differing statutory thresholds. Because the latter two do not apply to the airline industry (Robinson-Patman applies to the sale of goods, not services, and the Federal Trade Commission Act explicitly excludes air carriers from its reach), Congress has promulgated specific legislation to govern unfair and deceptive practices and unfair methods of competition in the airline industry. Moreover, the Airline Deregulation Act of 1978, which amended the Federal Aviation Act of 1958, explicitly provides that deregulation was not designed to condone unfair methods of competition, or deceptive, anticompetitive and monopolistic practices.

Section 41712 (formerly section 411) of the Federal Aviation Act provides:

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<sup>289</sup> Mark Clouatre, *Comments: The Legacy of Continental Airlines v. American Airlines*, 60 J. AIR L. & COM. 869, 900 (1995); Alfred Kahn, *Deregulatory Schizophrenia*, 75 CALIF. L. REV. 1059 1063 (1987).

<sup>290</sup> Alfred Kahn, *Thinking About Predation—A Personal Diary*, 6 REV. INDUS. ORG. 137, 141 (1991).

On the initiative of the Secretary of Transportation or the complaint of an air carrier . . . and if the Secretary considers it is in the public interest, the Secretary may investigate and decide whether an air carrier . . . has been or is engaged in an unfair or deceptive practice or an unfair method of competition in air transportation . . . . If the Secretary, after notice and an opportunity for a hearing, finds that an air carrier . . . is engaged in an unfair or deceptive practice or unfair method of competition, the Secretary shall order the air carrier . . . to stop the practice or method."<sup>291</sup>

This statutory provision is modeled after, and indeed mirrors, section 5 of the Federal Trade Commission Act.<sup>292</sup> According to Judge Posner, "Although the language of the corresponding section of the two sections is not identical, none of the differences seem deliberate, let alone material. . . . [S]ection 411 is essentially a copy of section 5 of the Federal Trade Commission Act."<sup>293</sup>

In March of 1938, Congress empowered the Federal Trade Commission [FTC] to prohibit "unfair or deceptive acts or practices in commerce," and "unfair methods of competition in commerce." Three months later, it promulgated the Civil Aeronautics Act of 1938 (which was later folded into the Federal Aviation Act of 1958), including section 411 thereof, which gave the nascent Civil Aeronautics Board [CAB] jurisdiction to prohibit unfair and deceptive practices and unfair methods of competition. Having given the prevailing aeronautical agency jurisdiction to enforce the unfair and deceptive practices/unfair methods of competition prohibition, Congress saw no need to have the FTC replicate the CAB's oversight. Thus, section 5 of the Federal Trade Commission Act explicitly excludes "air carriers and foreign air carriers subject to the Federal Aviation Act" from its reach."<sup>294</sup>

With the sunset of the Civil Aeronautics Board on January 1, 1985, jurisdiction under section 411 was transferred from the

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<sup>291</sup> 49 U.S.C. § 41712 (2002).

<sup>292</sup> 15 U.S.C. § 45 (2002). *See* *United Air Lines v. Civil Aeronautics Bd.*, 766 F.2d 1107 (7th Cir. 1985).

<sup>293</sup> *United Air Lines*, 766 F.2d at 1112.

<sup>294</sup> The Federal Trade Commission Act provides, "The Commission is hereby empowered and directed to prevent persons, partnerships, or corporations, except . . . air carriers and foreign air carriers subject to the Federal Aviation Act of 1958 . . . from using unfair methods of competition in or affecting commerce and unfair or deceptive acts or practices in or affecting commerce." 15 U.S.C. § 45(a)(2) (2002).

CAB to the DOT. Noting that the CAB had issued rules under section 411 since 1960, Judge Posner studied the legislative history of the Civil Aeronautics Board Sunset Act of 1984 and concluded, "Congress, looking forward to the period after abolition of the Board, was very concerned to preserve (in the Department of Transportation) authority to enforce section 411. . . . And Congress was well aware that the Board had used rulemaking to enforce the section."<sup>295</sup> In that case, Posner, speaking for the Seventh Circuit, upheld the jurisdiction of the CAB to "make antitrust-like regulations by means of informal rulemaking."<sup>296</sup>

The legislative history of the Civil Aeronautics Board Sunset Act of 1984 emphasized the DOT's need to arrest anticompetitive practices:

There is also a strong need to preserve the Board's authority under Section 411 to ensure fair competition in air transportation. . . . Although the airline industry has been deregulated, this does not mean that there are no limits to competitive practices. As is the case with all industries, carriers must not engage in practices that would destroy the framework under which fair competition operates. Air carriers are prohibited, as are firms in other industries, from practices which are inconsistent with the anti-trust laws or the somewhat broader prohibitions of Section 411 of the Federal Aviation Act (corresponding to Section 5 of the Federal Trade Commission Act) against unfair competitive practices.<sup>297</sup>

Unless the DOT enforces the statutory prohibition against unfair and deceptive practices and unfair methods of competition, airlines will be in the unique position among American industries of being absolutely free to engage in such anticompetitive practices, contrary to the explicit wish of Congress in promulgating the Civil Aeronautics Act of 1938, the Federal Aviation Act of 1958, the Airline Deregulation Act of 1978, and the Civil Aeronautics Board Sunset Act of 1984. Every other industry in our economy is subject to the oversight of the Federal Trade Commission. Airlines are not. Nor are airlines subject to the deceptive practices regulation of the states, under the broad construction of the preemption provisions of the Airline Deregulation Act of 1978.<sup>298</sup> Therefore, it is imperative that the

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<sup>295</sup> *United Air Lines*, 766 F.2d at 1112.

<sup>296</sup> *United Air Lines*, 766 F.2d at 1120.

<sup>297</sup> H.R. REP. NO. 98-793, 98th Cong., 2d Sess. 4-5 (1984).

<sup>298</sup> *Morales v. Trans World Airlines*, 504 U.S. 374 (1992).

DOT fulfill its legislative mandate to prohibit unfair and deceptive practices, as well as unfair methods of competition.

Again, section 5 of the Federal Trade Commission Act is essentially the equivalent of section 411 [now section 41712] of the Federal Aviation Act. The Supreme Court found that the "paramount aim" of Section 5 is to protect the public against evils likely to result from destruction of competition or restriction of it in substantial degree,<sup>299</sup> and that Section 5 is intended to combat, in their incipency, trade practices that exhibit strong potential for stifling competition.<sup>300</sup> According to the Supreme Court, the fundamental question is whether the methods complained of are 'unfair', and whether they produce substantial injury to the public by restricting competition in interstate trade and common liberty to engage therein.<sup>301</sup> Public policy is particularly concerned where unfair practices jeopardize or injure a present or potential competitor,<sup>302</sup> though an adverse effect on consumers may also trigger the prohibition.<sup>303</sup> The purpose of the legislation was to combat unfair practices, which if remained unchecked, would probably result in a violation of the antitrust laws (the Sherman and Clayton Acts).<sup>304</sup>

Both the Federal Trade Commission and the DOT may forbid anticompetitive practices before they become sufficiently serious to violate the Sherman or Clayton Acts.<sup>305</sup> Indeed, the definition of "unfair methods of competition" is not confined to those activities that were illegal under the common law or condemned by the Sherman or Clayton Acts.<sup>306</sup> The DOT has acknowledged

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<sup>299</sup> *FTC v. Raladam Co.*, 283 U.S. 643 (1931).

<sup>300</sup> *FTC v. Texaco*, 393 U.S. 223 (1968). It is not imperative, in order to bring into play the 'prophylactic' action of the FTC, to prove that a monopoly has been achieved, since one of the purposes of the Federal Trade Commission Act is to prevent potential injury by stopping unfair methods of competition in their incipency." *Hastings Manufacturing Co. v. FTC*, 153 F.2d 253 (6th Cir. 1946).

<sup>301</sup> *Raladam*, 283 U.S. 643.

<sup>302</sup> *Id.*

<sup>303</sup> *FTC v. Sperry & Hutchinson Co.*, 405 U.S. 233 (1972).

<sup>304</sup> *Butterick Pub. Co. v. FTC*, 85 F.2d 522 (2d Cir. 1936).

<sup>305</sup> See *Atlantic Refining Co. v. FTC*, 381 U.S. 367 (1965); *Pan American World Airways, Inc., v. United States*, 371 U.S. 296 (1963). If the purpose and practice of the anticompetitive activity runs counter to the public policy declared in the Sherman and Clayton Acts, the FTC has jurisdiction to suppress it as an unfair method of competition. *Fashion Originators' Guild v. FTC*, 312 U.S. 457 (1941). The Federal Trade Commission Act was designed to bolster and supplement the Sherman and Clayton Acts as well as condemn as 'unfair methods of competition' existing violations of them. *FTC v. Motion Picture Adver. Co.*, 344 U.S. 392 (1953).

<sup>306</sup> *Motion Picture Adver. Co.*, 344 U.S. 392.

that its authority under this provision “allows us to define practices that do not violate the antitrust laws as unfair methods of competition, if they violate the spirit of the antitrust laws.”<sup>307</sup> The Supreme Court has held:

“Unfair or deceptive practices or unfair methods of competition,” as used in § 411 [now § 41712], are broader concepts than the common-law ideas of unfair competition. The section is concerned not with punishment of wrongdoing or protection of injured competitors, but rather with protection of the public interest.<sup>308</sup>

Section 41712 provides that the Secretary shall take action against unfair and deceptive practices if he believes such action is in the “public interest.” Congress explicitly defined the “public interest” in the Airline Deregulation Act to include the following:

[T]he Secretary of Transportation shall consider the following matters, among others, as being in the public interest . . . :

(4) the availability of a variety of adequate, economic, efficient, and low-priced services without unreasonable discrimination or unfair or deceptive practices. . . .

(9) preventing unfair, deceptive, predatory, or anticompetitive practices in air transportation.

(10) avoiding unreasonable industry concentration, excessive market domination, monopoly powers, and other conditions that would tend to allow at least one air carrier . . . unreasonably to increase prices, reduce service, or exclude competition in air transportation.

(11) maintaining a complete and convenient system of continuous scheduled interstate air transportation for small communities . . . .

(13) encouraging entry into air transportation markets by new and existing air carriers and the continued strengthening of

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<sup>307</sup> 61 Fed. Reg. 42,208, 42,215. This interpretation is supported by *Sperry & Hutchinson Co. v. FTC*, 432 F.2d 146 (5th Cir. 1970), which held that under section 5 of the Federal Trade Commission Act, the FTC could declare conduct “unfair” if it constituted either (1) a per se violation of antitrust policy, (2) a violation of the letter of the Sherman, Clayton or Robinson-Patman Acts, or (3) a violation of the spirit of these Acts. Similarly, the Third Circuit held that the Sherman Act acts as a guide or declaration of policy for the FTC in determining what constitutes an unfair method of competition. *New Jersey Wood Finishing Co. v. Minnesota Mining & Manuf. Co.*, 332 F.2d 346 (3rd Cir. 1964).

<sup>308</sup> *American Airlines v. North American Airlines*, 351 U.S. 79, 85 (1956) [citations omitted].

small air carriers to ensure a more effective and competitive airline industry.<sup>309</sup>

Another statutory foundation upon which DOT could base a prohibition against anticompetitive practices is the continuing requirement that air carriers holding certificates of public convenience and necessity be "fit, willing, and able"<sup>310</sup> A carrier's failure to comply with its legal obligations may result in the amendment, modification, suspension or revocation of its certificate.<sup>311</sup>

In determining whether a new applicant is fit, the DOT assesses whether the applicant: (1) has the managerial and operational ability to conduct the proposed operations; (2) has sufficient financial resources available to commence operations without undue risk; and (3) will comply with its statutory and regulatory obligations under the law (or in the regulatory language often used, has demonstrated satisfactory "compliance disposition").<sup>312</sup> It is the latter of this three-prong test that is of relevance here.

The DOT has stated:

In dealing with the issue of compliance disposition, the key question is whether the applicant will conform to the provisions of the Federal Aviation Act and the rules, regulations and requirements thereunder. A reason judgment regarding and applicant's future conduct can only be based on an examination of its past history, including any evidence of improper conduct.<sup>313</sup>

Further, the DOT has observed, "The Department regards compliance disposition as an important element in our fitness process and has not hesitated to act where there was substantial evidence of a person's lack of disposition to comply with the law . . . ."<sup>314</sup> As important as an evaluation of an applicant's financial and operational ability is whether the applicant has demonstrated an ability and willingness to comply with the Federal Aviation Act, the rules and regulations promulgated thereunder, as well as other federal and state statutory obligations.<sup>315</sup>

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<sup>309</sup> 49 U.S.C. § 40101 (2002).

<sup>310</sup> 49 U.S.C. § 41110(e) (2002).

<sup>311</sup> 49 U.S.C. § 41110(a)(2) (2002).

<sup>312</sup> See Application of Air Illinois, Inc., DOT Order 86-2-25 (1986).

<sup>313</sup> Regent Air Corporation, DOT Order 85-6-15 (1985) [citation omitted].

<sup>314</sup> Application of Trans World Airlines, Inc. ('TWA') for the Institution of An Investigation on its Prospective Continuing Fitness Under Section 401(r) of the Federal Aviation Act, DOT Order 85-6-16 (1985).

<sup>315</sup> See Trans-Panama, S.A., Foreign Permit, 97 C.A.B. 161 n.27 (1982).

Anticompetitive conduct designed to suppress competition may violate the policy provisions of the Federal Aviation Act (which prohibit “unfair, deceptive, predatory, or anticompetitive practices” and “unreasonable industry concentration, excessive market domination, monopoly powers, and other conditions that would tend to allow at least one air carrier . . . unreasonably to increase prices, reduce service, or exclude competition in air transportation”), section 41712 of the Federal Aviation Act (which prohibits “unfair or deceptive practice[s]” and “unfair method[s] of competition”), and as we shall see below, section 2 of the Sherman Act, and/or section 3 of the Clayton Act. Therefore, the DOT may use the continuing statutory requirement of a certificated carrier to remain “fit, willing, and able” under section 41110 of the Federal Aviation Act to impose whatever certificate amendment, modification, suspension or revocation may be necessary to force the carrier to abate such unlawful conduct.

Between 1993 and 1999, the Department of Transportation received thirty-two informal complaints alleging unfair competitive practices. Half involved complaints of unfair pricing and capacity responses to new entry – dumping low-fare capacity, and in some cases adding flights.<sup>316</sup> Since 1996, new entrants have tended to exit more routes than they entered. According to Professors Oster and Strong, “the slowdown in route entry may be due to the nature of responses by network carriers. . . . [T]he response of incumbents [to the entry of low-fare carrier Southwest Airlines] appeared to be very mild compared to the responses [of Northwest] to Reno Air and Spirit . . . .”<sup>317</sup> They observed that “the decline in entry applications [after 1996], and in the number of carriers moving from authorized to operating status, may in part be due to the perceptions of both investors and prospective new entrants about the nature of likely entry responses from the incumbent carriers.”<sup>318</sup> As Alfred Kahn has observed, “The entry of these new low-fare carriers keeps the industry honest . . . . I’m a strong advocate of competition and I don’t want to go back to regulation. But you’ve got to distinguish legitimate competition from what is intended to

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<sup>316</sup> Clinton Oster, Jr. & John Strong, *Predatory Practices in the U.S. Airline Industry*, 10 n. 8 (Jan. 15, 2001) (unpublished), at <http://ostpxweb.dot.gov/aviation/domestic-competition/predpractices.pdf>.

<sup>317</sup> *Id.* at 13.

<sup>318</sup> *Id.* at 15.

drive competitors out and exploit consumers.”<sup>319</sup> As Congress has observed, “Although the airline industry has been deregulated, this does not mean that there are no limits to competitive practices. As in the case with all industry, carriers must not engage in practices which would destroy the framework under which fair competition operates.”<sup>320</sup>

John Nannes, Deputy Assistant Attorney General, U.S. DOJ, speaking before the International Aviation Club, said:

In the 1980s, the DOT approved a number of transactions involving carriers with high shares of city-pair traffic, reasoning that other carriers could easily enter those city pairs and discipline fares if the merging carriers began to act noncompetitively. . . .

. . . .

. . . Companies rarely engage in predatory conduct, it [was] said, because any attempt by the predator to “recoup” the financial costs of predation in the form of higher prices after the prey is driven out will be defeated by new entrants undercutting those higher prices. . . .

The airline industry exhibits certain characteristics that make a predation theory more than merely “plausible.” First, hub carriers dominate hub markets, as demonstrated by market share. Second, hub carriers appear to be in a position to exact high fares, as demonstrated by hub premiums. Third, hub carriers can easily respond to entry by start-up carrier by increasing capacity and reducing fares in affected markets virtually overnight. Fourth, hub carriers have an incentive to act before start-up carriers develop a foothold in the hub: it is obviously easier to drive a carrier out before it gets established in the market. Fifth, a start-up is likely to have limited capital and is thus vulnerable to predatory practices; this is not an instance [where anyone] has to wait a long time to see whether competitors can be, or actually have been, driven out of business. Sixth, a hub carrier “defending its turf” against encroachment by a start-up carrier in a few markets can create a “reputation for predation” that deters start-up carriers from entering its many other hub markets; this can significantly alter the “cost-benefit” predation calculation for a hub carrier in a way uncharacteristic of most other industries. In short, a “recoupment scenario” is not implausible at all.<sup>321</sup>

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<sup>319</sup> Donna Rosato, *An Inside Look at DOT's Fight Against Airline Predation*, USA TODAY, Apr. 6, 1998, at 2B.

<sup>320</sup> H.R. REP. NO. 98-793, at 4-5 (1984).

<sup>321</sup> John Nannes, *The Importance of Entry Conditions in Analyzing Airline Antitrust Issues*, Address Before the International Aviation Club (July 20, 1999), at 7-13, available at <http://www.usdoj.gov/atr/public/speeches/2574.pdf>.

The Department of Transportation became so concerned with the high failure rate of new entrant airlines, the widespread allegations of predatory pricing and capacity dumping, and the ineffectiveness of the antitrust laws to arrest it, that in 1998 it announced a proposed policy statement on unfair exclusionary practices.<sup>322</sup> The policy was designed to fill a void in the law which places the unfair competitive practices of virtually all U.S. industries, except airlines, under the jurisdiction of the Federal Trade Commission. Such jurisdiction instead resides with DOT.

As the Department of Transportation observed:

A major carrier can minimize or even avoid self diversion of local revenue, for example, by matching the new entrant's low fares on a restricted basis (and without significantly increasing capacity) and relying on its own service advantages to retain high fare traffic. We have seen that major carriers can operate profitably in the same markets as low-fare carriers. Major carriers are competing with Southwest, the most successful low-fare carrier, on a broad scale and are nevertheless reporting record or near-record earnings. Our enforcement policy will not guarantee new entrants success or even survival. Optimally, it will give them a level playing field.<sup>323</sup>

More recently, the Department of Transportation concluded:

The most controversial competitive responses to entry have involved sharp fare cuts, a large increase in the number of seats sold at low fares, and often an increase in total capacity. . . .

. . . .

. . . .In some cases the incumbent network airline has . . . responded to entry in ways that appear to be economically irra-

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<sup>322</sup> Under the DOT's proposed guidelines, the DOT would initiate enforcement proceedings when one or more of the following occurs:

the major carrier adds capacity and sells such a large number of seats at very low fares that the ensuing self-diversion of revenue results in lower local revenue than would a reasonable alternative response;

the number of local passengers that the major carrier carries at the new entrant's low fares (or at similar fares that are substantially below the major carrier's previous fares) exceeds the new entrant's total seat capacity, resulting, through self-diversion, in lower local revenue than would a reasonable alternative response; or

the number of local passengers that the major carrier carries at the new entrant's low fares (or at similar fares that are substantially below the major carriers' previous fares) exceeds the number of low-fare passengers carried by the new entrant, resulting, through self diversion, in lower local revenue than would a reasonable alternative response.

<sup>323</sup> DOT, Enforcement Policy Regarding Unfair Exclusionary Conduct in the Air Transportation Industry, 63 Fed. Reg. 17,919 (Apr. 10, 1998).

tional unless the entrant exits the market or reduces its service. In these cases the hubbing airline cuts its fares and increases the availability of its lowest fares by so much that it obtains much lower revenues and profits than it would have obtained if it had chosen a more moderate response. In extreme cases the incumbent airline cuts its fares to match the new entrant's fare levels, eliminates all or most of its restrictions on discount fares, and greatly expands the availability of discount-fare seats. The incumbent airline often adds flights as well. . . . [A]lthough the incumbent carries many more passengers, its total revenues are well below the revenues realizable through a more moderate response to entry.

. . . .  
. . . .When the incumbent airline responds to entry by slashing fares and making low discount fares much more available, the new entrant airline usually cannot obtain enough traffic to sustain its service. The ready availability of low fares on the incumbent airline, which offers service features not offered by the new entrant airline and has an established reputation, dries up the traffic available to the entrant. The entrant must exit the market, and the incumbent airline then often increases its fares and sharply reduces the availability of its lowest discount fares.<sup>324</sup>

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<sup>324</sup> DOT, Enforcement Policy Regarding Unfair Exclusionary Conduct in the Air Transportation Industry, Docket OST-98-3713 (Jan. 17, 2001). This article has identified several situations in which major carriers have engaged in price cuts and/or capacity increases which cause them to forego more revenue than all the new entrant's capacity in the market could have diverted from it, or results in substantially lower operating profits (or greater operating losses) in the short run than would a reasonable alternative strategy for competing with the new entrant. While the DOT's proposed Policy Statement is a step in the right direction, this author concludes it does not go far enough. It should go further, and address more definitively anticompetitive practices other than predatory pricing and capacity dumping:

In determining whether a major carrier has engaged in predatory behavior, the definition of a "major carrier" should include not only a major carrier but also its code-sharing and commuter affiliates and alliance partners. The major carrier has considerable influence over the schedule and pricing practices of its network affiliates. The importance of this is enhanced as more regional feeders obtain regional jets.

Because many major carriers walk in "lock step" on issues of capacity and pricing in response to new entrants, it is important that DOT to view the totality or sum of all major carriers' existing practices to determine whether they are predatory.

The guidelines speak to exclusionary practices "in response to" entry by a new carrier. The exclusionary practices review contemplated in the Policy Statement should also apply in circumstances where the new carrier first enters a market followed by a major carrier entry. At present, the guideline apparently only envisions cir-

cumstances where the new carrier enters an existing market of a major carrier.

The DOT has made it clear that it does not intend the three scenarios of predatory pricing and capacity dumping it enumerated to be an exclusive list, and that other conduct may constitute unfair competition under section 41712 of the Federal Aviation Act warranting enforcement action, including hoarding airport gates, using bonus frequent flyer awards or travel agent commission overrides in ways that appear to target new entrants unfairly. While the DOT need not set forth an exhaustive list, it is important that the DOT explicitly acknowledge that other practices may lead to a finding of unfair competition, such as exclusive dealing arrangements with regional feeder carriers, exclusive dealing contracts with corporate purchasers of air transportation, refusal to sell competitors frequent flyer mileage at a price at which it sells non-carriers such mileage, refusal to offer competitors ticketing-and-baggage, joint-fare and code-sharing arrangements on a non-discriminatory basis to or from its dominant hubs, and/or biasing its computer reservations systems against competitive offerings.

The DOT should explicitly recognize that unfair and deceptive practices and unfair methods of competition include situations where a market dominant airline enters into exclusive code-sharing, joint-fare or ticketing-and-baggage arrangements at any airport it dominates, or exclusive dealing contracts with connecting airlines for service to or from an airport it dominates, or exclusive dealing contract with a corporate purchaser of air travel at any city located near an airport which the airline dominates, or pays commission overrides to any travel agency or travel agents for traffic in any city-pair which a new entrant has entered, or refuses to sell frequent flyer mileage to its airline competitors for travel to or from a market dominant airport at a price higher than the lowest available price offered to any purchaser.

The DOT has the power to issue cease and desist orders against any carrier it finds is engaging in unfair and deceptive practices or unfair methods of competition under section 41712 of the Federal Aviation Act. In fashioning such cease and desist orders, DOT should order a carrier engaging in such predatory conduct to pay restitution to any other carrier which suffers economic injury because of such anticompetitive conduct.

Even a \$10 million fine may not dissuade a major airline with more than \$10 billion in annual revenue from engaging in predatory conduct. The DOT should make it clear that violations of sections 40101 and 41712 of the Federal Aviation Act, section 2 of the Sherman Act, and section 3 of the Clayton Act, may lead to a finding that a carrier has violated its continuing obligation to be "fit, willing and able" under 41110 of the Federal Aviation Act, and may require certificate amendment, modification, suspension or revocation thereunder to arrest such unlawful behavior. Such a certificate amendment might, for example, require the carrier to offer new entrant airlines non-discriminatory joint-fares, code-sharing, and frequent flyer mileage access, and/or eliminate commission overrides at its dominant hubs.

## B. MONOPOLIZATION UNDER THE ANTITRUST LAWS

As noted above, the unfair and deceptive practices/unfair methods of competition language of both section 5 of the Federal Trade Commission Act and section 41712 of the Federal Aviation Act have been interpreted to include such actions as assault the public interest, or the spirit of the antitrust laws. In this section, we examine predatory conduct in the airline industry that violates the spirit, if not the letter, of the Sherman and Clayton Acts.

Section 2 of the Sherman Act provides that “every person who shall monopolize, or attempt to monopolize . . . any part of the trade or commerce . . . is guilty of a felony.”<sup>325</sup> A Section 2 claim can be brought against the use of monopoly power “to foreclose competition, to gain a competitive advantage, or to destroy a competitor.”<sup>326</sup>

Monopoly power is the power to control prices or exclude competition.<sup>327</sup> The creation or maintenance of a monopoly by illegitimate means is prohibited by section 2 of the Sherman Act.

The offense of *attempting to create a monopoly* requires proof of: (1) a specific intent to control prices or eliminate competition in a market (objective evidence of intent is sufficient); (2) predatory or anticompetitive conduct aimed at accomplishing this unlawful purpose; and (3) a dangerous probability of success (a realistic danger that if the defendant’s conduct runs its course, it would create a monopoly).<sup>328</sup> Intention can be proven by establishing either an intent to achieve monopoly power or an intent

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Predation should be arrested expeditiously. The DOT should prescribe tight time deadlines for processing a complaint under section 41712 of the Federal Aviation Act, and be prepared to devote the staff resources to resolving the issue quickly.

<sup>325</sup> 15 U.S.C.S. § 2 (2002). Section 2 has two elements: (1) the possession of monopoly power in the relevant market, and (2) the willful acquisition or maintenance of that power, as distinguished from growth or development as a consequence of a superior product, business acumen, or historic accident. *Id.*

<sup>326</sup> *United States v. Griffith*, 334 U.S. 100 (1948).

<sup>327</sup> *United States v. Grinell Corp.*, 384 U.S. 563, 571 (1966). Whether monopoly power exists or not depends on several factors, including the probable development of the industry, consumer demand, and defendant’s market share. *Hayden Publishing Co. v. Cox Broadcasting Corp.*, 730 F.2d 64, 68 (2d Cir. 1984).

<sup>328</sup> *Spectrum Sports, Inc. v. McQuillan*, 506 U.S. 447 (1993); *Swift & Co. v. United States*, 196 U.S. 375 (1905).

to drive competitors from the market so that the dominant firm could later charge monopoly prices.

A claim of *monopolization* requires proof of: (1) the possession of monopoly power in a relevant market; and (2) the exercise of one or more impermissible exclusionary practices designed to strengthen or perpetuate its monopoly position (or put differently, conduct directed at “smothering competition”).<sup>329</sup> Monopolization refers to activities that may be illegal if performed by the dominant firm in a relevant market.<sup>330</sup> Thus, practices which do not in themselves constitute an antitrust violation may, in conjunction with overwhelming market power, violate section 2.

Monopoly power is a large amount of market power, or the ability to reduce output and raise prices above marginal costs. Market share in a relevant market is generally accepted as an effective surrogate for direct measurement of market power. Generally speaking, the defendant must have 70% or more of the relevant geographic and product market.

A relevant *geographic market* is an area where the dominant firm can increase its price without large numbers of consumers turning to alternative supply sources outside the area, or producers outside the area can quickly flood the area with substitute products. The relevant geographic market in commercial aviation is certainly city-pairs; it may also include domination of a hub airport, where large number of banks of flights from numerous cities enable it to dominate the city's local passenger market. In terms of the anticompetitive and monopolistic practices of a major hub airline directed at a new entrant, the relevant geographic market is the hub airport and city-pairs radiating therefrom.

Extensive studies of the consumer impact of hub monopolization conducted by the DOT and the GAO conclude that a dominant airline charges prices between 19% and 27% higher for passengers beginning or ending their trips at a monopoly hub airport than prices for similar distances in competitive markets.

The *relevant product* requires an assessment of the products that are sufficiently close substitutes to compete effectively in

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<sup>329</sup> U.S. v. Grinnell Corp., 384 U.S. 563 (1966); Berkey Photo v. Eastman Kodak, 603 F.2d 263, 275 (2d Cir. 1979).

<sup>330</sup> HERBERT HOVENCAMP, ECONOMICS AND FEDERAL ANTITRUST LAW 135 (1984); Lorain Journal & Co. v. United States, 342 U.S. 143 (1951).

each other's markets.<sup>331</sup> Scheduled passenger air transportation is probably the relevant product market in commercial aviation (the competitive alternatives of rail, bus and automobile transport, or freight transportation, likely can be ignored).

One might argue that the relevant product markets in scheduled commercial aviation are non-stop passenger air transportation to and from a hub, and connecting service to and from other cities via the hub. One alternative product market to the non-stop market to and from a hub is connecting service via other hubs. However, connecting service is viewed by most consumers as an inferior product alternative to non-stop service, and has only a marginal competitive impact on non-stop service.

One who effectively controls a market may not lawfully use any exclusionary practice against a competitor, even though it is not technically a restraint of trade in violation of section 1 of the Sherman Act.<sup>332</sup> A monopolist may not legitimately deter potential competitors from entering its market or existing rivals from increasing their output.<sup>333</sup> Under certain market conditions, the following constitute illegitimate exercises of monopoly power:

1. expansion of output or capacity
2. predatory pricing
3. pricing discrimination
4. monopoly leveraging
5. refusal to deal with a competitor
6. refusal to share an "essential facility"
7. raising rivals' costs
8. exclusive dealing arrangements

The following analysis examines airline monopolization under each of these doctrines.

### *1. Expansion of Output or Capacity*

Professor Hovencamp notes, "excess capacity can be part of the entry deterrence strategy of a dominant firm. The dominant firm can hold its excess capacity, plus the threat of future output increases, over the heads of smaller firms thinking about enlarging output or entering the market."<sup>334</sup> In the seminal de-

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<sup>331</sup> Robert Pitofsky, *New Definitions of Relevant Market and the Assault of Antitrust*, 90 COLUM. L. REV. 1805 (1990).

<sup>332</sup> HERBERT HOVENCAMP, *ECONOMICS AND FEDERAL ANTITRUST LAW* 136-37 (1984).

<sup>333</sup> *Id.* at 138.

<sup>334</sup> *Id.* at 182.

cision of *United States v. Aluminum Co.*,<sup>335</sup> Judge Learned Hand held that Alcoa had actively discouraged new entry into the aluminum production industry by expanding its capacity more rapidly than the demand for its output warranted. Alcoa's program of accelerated development effectively foreclosed entry, and was "exclusionary," because it denied potential competitors a fair share of the market. Similarly, a major carrier's increase of capacity in a market entered by an upstart airline, at a time when passenger demand (measured by passenger enplanements) increased less than the major airline's capacity increase, may be *prima facie* evidence of a capacity expansion which unlawfully deters entry.<sup>336</sup>

The costs of adding capacity to a market are significant. They include the purchase price or lease on additional aircraft (or the opportunity costs incurred when re-deploying existing aircraft), training and salaries of flight crew, fuel, meals, distribution costs (including travel agent commissions, and computer reservations systems fees, and advertising), gate leases, aircraft maintenance, catering, ticketing costs, and so on. The cost of increasing output by one unit of production (an aircraft) is approximately 80-85% of fully allocated costs, and higher than that for a large mature carrier.

Fully allocated costs are used to determine route profitability and unit costs within the airline industry. These costs are adjusted for stage length in order to determine the economics of flying specific routes as there is a cost taper that occurs based

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<sup>335</sup> *United States v. Aluminum Co.*, 148 F.2d 416, 431 (2d Cir. 1945).

<sup>336</sup> After new entrant Frontier Airlines entered the market, United Airlines increased its frequencies in the nonstop Denver-Los Angeles market from 14 daily round-trips in August 1994, and 15 in August 1995, to 20 in August 1996. That increased United's share to more than 90% of the flights in that city-pair market. The Denver-Los Angeles market is the sixth biggest market in United's system (AVIATION DAILY, Dec. 9, 1996, at 392), and United was determined to increase its monopoly position in the market. Comparing August 1995 to August 1996, United also added a new daily round-trip flight in the Denver-San Francisco market and the Denver-Salt Lake city market, and two in the Denver-Las Vegas market. Again, flights were added in these markets after Frontier entered. Comparing 1996 with 1995, in the Denver-Las Vegas Market, United increased its seat capacity up to 71% and flights 37%; in the Denver-Los Angeles market, United increased seats up to 34% and flights 33%; in the Denver-Phoenix market, United increased seats up to 38% and flights 27%; and in the Denver-San Francisco market, United increased seats up to 19% and flights 16%. At cities Frontier departed, United tended to reduce seat capacity and flights, year over year. For example, in the Denver-Billings market, United reduced seats and flights by as much as a third.

upon the distance flown. Specifically, short haul flying is more expensive to fly than longer stage lengths. Because short hauls require higher fuel burn per mile traveled, less efficient aircraft utilization, and higher cycle related maintenance and ground handling costs, the shorter the distance flown, the higher the cost per mile.

Roberts Roach & Associates, in their definitive work on this subject, "Scorecard: Airline Industry Cost Management," have identified by airline, and by aircraft type, the ASM cost of each major air carrier. Their cost work only addresses fully allocated costs.

Incremental costs are less understood on an industry wide basis, as the specific elements peculiar to each airlines incremental costs are not available to the public. An airline considering the addition of a specific aircraft to its fleet, uses these costs to determine the impact of this potential addition to its overall costs and upon its specific route revenue analysis.

Route decisions and fare policy are not determined by incremental costs but are made on the basis of fully allocated costs. Similarly, when moving equipment from one route placement into another, only fully allocated costs are considered with adjustments, as appropriate, for changes in stage length.

Each airline would have a set of specific outcomes for each stage length and aircraft type. But if the relationship of incremental cost and fully allocated cost can be said to remain in the 80%-85% range of fit (as adjusted for specific stage length) then one can begin to draw some conclusions about fare levels and their purpose and intent. Given the maturity and size of a major carrier's fleet, that percentage would likely be higher by a significant measure.

## 2. *Predatory Pricing*

The Supreme Court has never addressed the issue of predatory pricing and related anticompetitive practices in the context of a service industry largely driven by network economies of scale and scope, such as commercial aviation.<sup>337</sup> The courts have made clear that key elements of antitrust analysis are to be tailored to fit the unique characteristics of the industry involved. The DOT has accurately summarized the economic characteris-

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<sup>337</sup> *Aviation Competition Hearing Before the Subcomm. on Aviation, of the House Comm. on Transp. & Infrastructure, 105th Cong. 1067 (Apr. 23, 1998)* (testimony of Mark Kahan, Exec. V.P. & General Counsel, Spirit Airlines).

tics of the airline industry which explain why predation sometimes is the *modus operandi* of a major carrier when faced with entry by a low-cost/low-fare airline:

Although the Supreme Court has said that predation rarely occurs and is even more rarely successful, our informal investigations suggest that the nature of the air transportation industry can at a minimum allow unfair exclusionary practices to succeed. Compared to firms in other industries, a major air carrier can price-discriminate to a much greater extent, adjust prices much faster, and shift resources between markets much more readily. Through booking and other data generated by computer reservations systems and other sources, air carriers have access to comprehensive, "real time" information on their competitors' activities and can thus respond to competitive initiatives more precisely and swiftly than firms in other industries. . . . These characteristics of the air transportation industry allow a major carrier to drive a new entrant from a local hub market. Having observed this behavior, other potential new entrants refrain from entering, leaving the major carrier free to reap greater profits indefinitely.<sup>338</sup>

The Supreme Court last addressed the issue of predatory pricing in a 1993 tobacco industry case of *Liggett & Myers v. Brown & Williamson Corp.*<sup>339</sup> The court re-emphasized that the antitrust laws were passed to protect competition, not competitors, and

<sup>338</sup> DOT, Request for Comments in Docket OST-98-3717 (Apr. 6, 1998).

<sup>339</sup> *Liggett & Myers v. Brown & Williamson Corp.*, 509 U.S. 209 (1993). In an earlier case, *Matsushita*, the Supreme Court observed:

[T]he success of [predatory pricing] schemes is inherently uncertain: the short-run loss is definite, but the long-run gain depends on successfully neutralizing the competition. Moreover, it is not enough simply to achieve monopoly power, as monopoly pricing may breed quick entry by new competitors eager to share in the excess profits. The success of any predatory pricing scheme depends on maintaining monopoly power for long enough both to recoup the predator's losses and to harvest some additional gain. Absent some assurance that the hoped-for monopoly will materialize, and that it can be sustained for a significant period of time, "[the] predator must make a substantial investment with no assurance that it will pay off."

*Matsushita Elec. Indus. Co. v. Zenith Radio Corp.*, 475 U.S. 574, 589 (1995) (citing Easterbrook, *Predatory Strategies and Counterstrategies*, 48 U. CHI. L. REV. 263, 268 (1981)).

The *Matsushita* decision involved an alleged conspiracy of Japanese television manufacturers. The court felt that a conspiracy among several firms to price below costs was unlikely both because predatory pricing is costly, and success is dependent on a host of uncertainties, making such schemes more likely to fail than succeed. *Id.* at 594. Single firm predation by a monopolist, however, may

said that to sustain a *prima facie* case under section 2 of the Sherman Act, a plaintiff had to prove the following:

1. The prices complained of must be below an appropriate measure of its rival's costs.
2. The below-cost pricing must be capable of producing the intended effects on the firm's rivals, such as driving them from the market. This requires an evaluation of the extent and duration of the alleged predation, the relative financial strength of the predator and its intended victim, and their respective incentives and will. The issue is whether, given the aggregate losses caused by the below-cost pricing, the intended target would likely succumb.
3. The competitor must have a reasonable prospect (or a dangerous possibility) of recouping its short-term investment in below-cost prices by achieving longer-term monopoly profits. Once the rival is driven from the market, it must be likely that the predator will be able to raise prices above a competitive level adequate to recover the amounts expended on the predation, including the time value of the money invested in it. In other words, the predator must be able to obtain sufficient market power to set its prices above competitive levels for a sufficient period of time in order to earn excess profits beyond those lost during the period of below-cost pricing.<sup>340</sup>

In *Brown & Williamson*, the Supreme Court sustained dismissal of a \$149 million jury award for Liggett, principally because it had failed to show how B&W, with only a 12% market share, could recover its investment in below-cost sales.

With respect to the first criterion, some courts have endorsed the "Areeda-Turner" test, which uses average variable costs as a proxy for marginal costs. But others have criticized this as an appropriate indicia of predation. William Baumol notes that:

[T]he threat to competition and to the general welfare is not a function of the relationship between prices and costs, but rather a matter of the responsiveness of pricing to changing competitive developments. Thus, it seems appropriate to look beyond the Areeda-Turner test, which evaluates matters solely in terms of the relation between the established firm's prices and its marginal costs or average variable costs.<sup>341</sup>

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be more likely to be successful. Recall that antitrust law is to be applied on a case-by-case basis.

<sup>340</sup> *Brooke Group Ltd. v. Brown & Williamson Tobacco Co.*, 509 U.S. 209 (1993).

<sup>341</sup> William Baumol, *Quasi Permanence of Price Reductions: A Policy for Prevention of Predatory Pricing*, 89 *YALE L.J.* 1, 3 (1979).

The problem with the Areeda-Turner methodology is that, though it offers a bright line standard by which ostensibly to measure costs, it does not work well in identifying predatory pricing in an industry as complex as commercial aviation (where, for example, pricing is but a single component of predatory strategy, fixed costs bulk large as a percentage of total costs, and because joint costs must be spread over an array of origin-and-destination and connecting passengers and freight, "true" costs are difficult to discern). Fully allocated costs, or in a situation where a carrier commits additional capacity to a market in which a new entrant appears, may well be far superior proxies for costs in this industry.

The Supreme Court has yet to prescribe which measure of cost should be used – Areeda-Turner or any other. In fact, the Court has held that "no consensus has yet been reached on the proper definition of predatory pricing" and left open the question of whether "above-cost pricing coupled with predatory intent is ever sufficient to state a claim of predation."<sup>342</sup> The Supreme Court has also emphasized that antitrust claims are to be resolved on a case-by-case basis, focusing on the particular facts before it.<sup>343</sup> Clearly, the unique economic characteristics of commercial aviation have to be taken into account.<sup>344</sup>

The difficulty of using variable costs as a proxy for an airline's marginal costs is that they are extremely small in the airline industry, and nowhere near what would be necessary to attain break-even. An additional passenger on a scheduled flight costs the airline "peanuts," literally and figuratively. If every airline priced every seat on the basis of average variable costs, all would be bankrupt within a year. Because commercial aviation is a capital intensive industry, with an extremely high ratio of fixed to variable costs, and some other measure (perhaps fully allocated costs or, as suggested above, incremental costs) is appropriate.

The Transportation Research Board has recognized that, in attempting to determine whether behavior is predatory on the basis of pricing below costs, that an air carrier's marginal costs in a particular market – even short-run average variable costs – can be difficult to quantify retrospectively. However, the TRB

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<sup>342</sup> *Cargill, Inc. v. Monfort of Colo.*, 479 U.S. 104, 118 n. 12 (1986).

<sup>343</sup> *Eastman Kodak Co. v. Image Tech. Serv., Inc.*, 504 U.S. 451 (1991).

<sup>344</sup> For a summary of what those unique economic characteristics are, see PAUL DEMPSEY & LAURENCE GESELL, *AIRLINE MANAGEMENT: STRATEGIES FOR THE 21<sup>ST</sup> CENTURY* 31-93 (Quorum 1997).

concluded that opportunity cost – the value of the best alternative response that is foregone – is an appropriate method for assessing the costs of the alleged predatory conduct.<sup>345</sup>

Recognizing the difficulty of determining whether an airline's price cutting or capacity dumping constitutes an antitrust violation, because of the industry's obscure cost characteristics, the DOT has advocated a methodology focused on a firm's foregone revenue, rather than the relationship between price and cost.<sup>346</sup> The DOT has recognized that the incremental cost of adding a passenger to a scheduled flight with empty seats is very low. The incremental cost of an additional passenger on a full flight is the foregone revenue lost from the passenger who cannot be accommodated. If an airline decides to add a flight or substitute a larger aircraft, the incremental cost would be additional costs incurred associated with those decisions.<sup>347</sup> Taking an aircraft from a more lucrative market to a less profitable one involves incurring lost opportunity costs of the more productive, and profitable, use of that equipment.

In its antitrust suit against American Airlines, the Justice Department alleged that by increasing flight and seat capacity in city-pair markets entered by low cost carriers, American incurred increased costs in the form of the ownership and operating costs of additional aircraft allocated to those routes, as well as labor, fuel, food, sales and other costs which would not have been incurred absent the capacity increases. DOJ alleged that the additional revenues generated by the increased capacity were less than American's costs of allowing the flights as measured by (a) the flights' variable costs, (b) American's total costs of serving the routes, and (c) American's own measure of route profitability.<sup>348</sup> For its part, American insisted that its prices matched, but did not undercut, the new entrants' and covered American's variable costs.<sup>349</sup>

Fares designed to match a lower-cost competitor's fare are a competitive tool designed specifically to insure that market share is not lost through competitive air pricing. This is true

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<sup>345</sup> TRANSPORTATION RESEARCH BOARD, ENTRY AND COMPETITION IN THE U.S. AIRLINE INDUSTRY: ISSUES AND OPPORTUNITIES, E-7, E-8 (1999).

<sup>346</sup> GAO, AVIATION COMPETITION: INFORMATION ON THE DEPARTMENT OF TRANSPORTATION'S PROPOSED POLICY 12 (July 1999).

<sup>347</sup> *Id.* at 13.

<sup>348</sup> *United States v. AMR Corp.*, 140 F. Supp. 2d 1141 (D. Kan. 1999).

<sup>349</sup> Press Release, American Airlines, American Airlines' Response to Department of Justice's Allegations of Predatory Practices (May 13, 1999).

whether or not air fare matching occurs at levels below either fully allocated cost or incremental cost. (Given a major carrier's scheduled departure frequency, market dominant frequent flyer plan and more expansive meal and customer amenities, one could also argue that a price match is, indeed, a price undercut. Moreover, mileage awards are a *de facto* form of price rebating, and therefore, price undercutting). Lowering prices below cost and below a competitor's prices may constitute anti-competitive or predatory behavior.

Moreover, some scholars question whether below-cost pricing is even necessary to constitute true predation – that it may in fact be evidenced by the injury imposed on competitors, whether or not the incumbent monopolist suffers short-term losses. Concluding that pricing between average variable costs and average total costs may constitute predation, Paul Joskow and Alvin Klevorick argue that predatory pricing “may or may not entail actual short-run economic losses for the alleged predator; it almost always imposes short-run economic losses on some or all of the firm's existing competitors.”<sup>350</sup> They note that the exit of new entrants from a market increases the perceived long-term risks of entry into the market, and thereby raises the cost of capital of new entry.<sup>351</sup> William Comanor and H.E. Frech conclude “the predator need not actually incur losses in any standard accounting sense. His investment is rather the lower profit earned due to his conduct as compared with those that could otherwise be earned.”<sup>352</sup> Thus, the sacrifice of profits to punish or deter new entrants suggest that opportunity costs may well be a better measure of predatory behavior than attempting to measure losses according to a mainstream accounting methodology. Paul Milgrom and John Roberts observed, “predatory pricing can make excellent theoretical sense, and yet the predatory prices bear no necessary relation to marginal costs.”<sup>353</sup>

With respect to the *Brown & Williamson's* second criterion (the potential of below-cost pricing driving the rival from the

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<sup>350</sup> Paul Joskow & Alvin Klevorick, *A Framework for Analyzing Predatory Pricing Policy*, 89 YALE L.J. 213 (1979).

<sup>351</sup> *Id.*

<sup>352</sup> William Comanor & H.E. Frech III, *Predatory Pricing and the Meaning of Intent*, 38 ANTITRUST BULL. 298 (1993).

<sup>353</sup> PAUL MILGROM & JOHN ROBERTS, *NEW THEORIES OF PREDATORY PRICING*, IN *INDUSTRIAL STRUCTURE IN THE NEW INDUSTRIAL ECONOMICS* 112 (Oxford University Press 1990).

market), an upstart airline's bookings plummet when a major carrier puts the new entrant in its cross-hairs. Because it earns supra-competitive profits in its monopoly markets, the incumbent airline can cross-subsidize below-cost pricing for an extended period of time in order to drive a smaller competitor out of business, unless of course, the major carrier is forced to abide by the antitrust and competition laws.

With respect to *Brown & Williamson's* final criterion, recoupment by the incumbent of short-term costs incurred in driving the new entrant out seems likely in many, if not most, situations, particularly where an incumbent is guarding a Fortress Hub. Recall the analysis above, where it was revealed that the monopoly premium in Denver alone resulted in fares approximately \$750 million per year lower than those charged to O&D passengers in Minneapolis or Dallas/Ft. Worth. According to Joskow and Klevorick, "The predator expects that its entry-impeding, exit-inducing strategy will enable it either eventually to raise prices or to maintain an existing market structure in which prices are above competitive levels. . . . The critical question is whether or not the dominant firm can use that monopoly power to maintain prices above the competitive level for some significant period of time . . . ." <sup>354</sup>

For the first two decades of deregulation, the failure of the Transportation and Justice Departments to define a rational and comprehensive view on predatory pricing behavior within the aviation markets led to consistent abuse of this practice throughout the United States. Following deregulation in 1978, the public suffered the end of competition and even air service in so many markets that the major carriers responsible for this phenomenon believe themselves insulated from the law and its enforcement. <sup>355</sup> Joskow and Klevorick noted, "Incorrectly labeling a dominant firm's temporary price decrease as nonpredatory will result in substantial long-run welfare losses if such a price drop succeeds in deterring entry or in inducing exit and this leaves the dominant firm with a substantial degree of monopoly power." <sup>356</sup>

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<sup>354</sup> Paul Joskow & Alvin Klevorick, *A Framework for Analyzing Predatory Pricing Policy*, 89 YALE L.J. 213 (1979).

<sup>355</sup> PAUL DEMPSEY & ANDREW GOETZ, AIRLINE DEREGULATION & LAISSEZ FAIRE MYTHOLOGY 221-38 (Quorum 1992).

<sup>356</sup> Paul Joskow & Alvin Klevorick, *A Framework for Analyzing Predatory Pricing Policy*, 89 YALE L.J. 213 (1979).

### 3. Price Discrimination

Major carriers often charge prices above competitive levels in their monopoly markets, using these profits to cross-subsidize below-cost pricing in competitive markets. Persistent or systematic price discrimination is possible only if the dominant firm has a certain level of market power in the markets containing disfavored buyers. Refusal by dominant hub airlines to enter into a joint-fare agreement with a new entrant places it in the position of being a disfavored purchaser, causing it competitive injury, for in effect, its customers must purchase United's connecting product at a non-discounted price.<sup>357</sup> In *United States v. United Shoe Machinery Co.*,<sup>358</sup> Judge Wyzanski condemned the defendant for earning a high rate of return in markets where it had no competitors, and a much lower rate of return where competition was greater.<sup>359</sup> Joskow and Klevorick observed, "By sustaining losses in a few geographical markets for a couple of years, while maintaining monopoly prices in others, the firm could substantially reduce the rate of competitive entry over the full range of geographical markets."<sup>360</sup>

### 4. Monopoly Leveraging

Monopoly leveraging involves the exploitation of monopoly power in one market to gain an unwarranted competitive advantage in a second market.<sup>361</sup> Monopoly leveraging requires proof of three elements: (1) monopoly power in one market; (2) use of that power to foreclose competition or gain a competitive advantage in a distinct market; and (3) injury amounting to a tangible harm to competition.<sup>362</sup> Dominant megacarriers can use the supra-competitive profits earned from monopoly city-pair

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<sup>357</sup> PAUL DEMPSEY, UNFRIENDLY SKIES OVER COLORADO: UNITED AIRLINES' FORETRESS HUB MONOPOLY AT DENVER 14 (1997).

<sup>358</sup> *United States v. United Shoe Machinery Co.*, 110 F. Supp. 295, 340-41 (D. Mass. 1953).

<sup>359</sup> However, the Robinson-Patman Act, which prohibits anticompetitive price discrimination, does not apply to the sale of services, so no independent cause of action may be made under that statute.

<sup>360</sup> Paul Joskow & Alvin Klevorick, *A Framework for Analyzing Predatory Pricing Policy*, 89 YALE L.J. 213 (1979).

<sup>361</sup> The circuits are split as to whether a monopoly leveraging claim is a valid, separate cause of action under section 2 of the Sherman Act. The Second Circuit gave birth to the monopoly leveraging doctrine in *Berkey Photo v. Eastman Kodak Co.*, 603 F.2d 263 (2d Cir. 1979). The Ninth Circuit holds it is not a valid, separate claim. See *Alaska Airlines v. United Airlines*, 948 F.2d 536 (9th Cir. 1991).

<sup>362</sup> *Virgin Atlantic Airways v. British Airways*, 872 F. Supp. 52 (S.D.N.Y. 1994).

markets to cross-subsidize losses in competitive markets in order to dominate all routes radiating from the dominated hub. A major carrier can also use the supra-competitive profits earned from its first class service to cross-subsidize losses sustained in its effort to monopolize the coach market in city-pairs radiating from its hub. Several major airlines (including Continental, Delta, United and US Airways) have also established an "airline-within-an-airline" as a competitive weapon against low-cost competitors. Costs of these weaponry subsidiaries often are both obfuscated and cross-subsidized by the major airline which establishes them in terms of direct capital subsidies, managerial expertise, joint purchases of aircraft, fuel and insurance, and joint utilization of gates, ticketing and maintenance facilities. Moreover, by denying jet competitors connecting traffic (with its refusal to enter into joint-fare and code-sharing agreements, and biasing its computer reservations system against carriers which do not have a code-sharing relationship with the dominant carrier), the major airline can also use its domination of the connecting market to monopolize the local origin-and-destination market.

Further, a carrier with the locally dominant computer reservations system, used by more travel agents than any other, can use this domination of the retail air travel distribution network to accentuate its dominance of air travel at its hub. For example, Apollo's display bias against non-code-sharing connecting flights (adding the equivalent of 24 hours to their display), coupled with United's refusal to code-share with upstart airlines, gives their product offerings inferior shelf space in the vertically integrated retail market which United controls.<sup>363</sup> One court summarized the pernicious impacts of CRS display bias:

Display biasing is unreasonably restrictive of competition in that it restricts competition on the merits in the air transportation business. When consumers attempt to purchase a ticket on the best available flight their final decision is not solely based upon the merits of the particular flight (flight time, price, service, etc.). Rather, biasing artificially inflates the value of the host airline's flights by listing their flights above better flights. The consumer bears the brunt of this practice by getting a less than optimal flight, and the airline with the better flight has lost a sale it should have otherwise made. This type of competitive advantage depends upon the perpetuation of a fraud upon the con-

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<sup>363</sup> PAUL DEMPSEY, UNFRIENDLY SKIES OVER COLORADO: UNITED AIRLINES' FORTRESS HUB MONOPOLY AT DENVER 12-18 (1997).

sumer. It is unreasonable and therefore an unwarranted competitive advantage because it inhibits competition on the merits.<sup>364</sup>

According to Alfred Kahn, code-sharing has “hampered competitive entry by smaller unaffiliated carriers, lacking that same comprehensive feed of traffic; and they have probably also tended to eliminate potential competitors . . . .”<sup>365</sup> According to the GAO, an airline that owns its own computer reservations system stands a significantly better chance of selling its product through its system than does a competitor.<sup>366</sup> A 1990 study revealed that travel agents subscribing to a particular CRS “choose that airline 41 percent of the time for business travelers and 55 percent of the time for leisure travelers.”<sup>367</sup> This phenomenon is referred to as the “halo effect”—a carrier with a disproportionate number of CRS terminals in a given area enjoys a greater number of bookings relative to the capacity it offers in the market.<sup>368</sup>

The disproportionate number of sales reflects several factors. Among the most significant problems is the CRS algorithms which bias CRS displays in favor of the offerings of the large network carriers and their code-sharing affiliates. Stephen Breyer put it this way:

[Critics allege that] CRS-owning airlines bias the programs and displays in their own favor. Carrier A, for example, may use a computer algorithm that lists all of its own connections before it lists any connection with other airlines. Or it may list carriers with which A maintains a marketing relationship before it lists other carriers, or it may make up a supposedly neutral order for display—say, “list carriers in order of elapsed time”—but then use fake elapsed times to make certain the computer displays A and its friends first.<sup>369</sup>

Currently, CRS vendors severely penalize the display of off-line connections. The large network carriers which own the

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<sup>364</sup> *In re Air Passenger Computer Reservations Systems Antitrust Litigation*, 694 F. Supp. 1443 (C.D. Calif. 1988).

<sup>365</sup> Alfred Kahn, *Market Power Issues In Deregulated Markets*, 60 ANTITRUST L.J. 857 (1991).

<sup>366</sup> GAO, AIRLINE COMPETITION: IMPACT OF COMPUTERIZED RESERVATIONS SYSTEMS (1986).

<sup>367</sup> GAO, AIRLINE OPERATING & MARKETING PRACTICES 65 (1990).

<sup>368</sup> THOMAS PETZINGER, *HARD LANDING* 242 (1995).

<sup>369</sup> Stephen Breyer, *Anticipating Antitrust's Centennial: Antitrust, Deregulation, and the Newly Liberated Marketplace*, 75 CALIF. L. REV. 1005, 1038 (1987) [citations omitted].

CRSs, with their vast route structures and ubiquitous code-sharing alliances, are relatively less negatively impacted by such bias penalties than their smaller rivals, with their less developed route structures and intercarrier alliances. Code-sharing connections are falsely (perhaps fraudulently) treated as if they were on-line connections, to which no penalty is added, thereby often elevating them to the first page of the CRS screen, and/or shoving their competitors off the first page. Eighty-five percent of sales are made from the first page of the CRS screen. Because the largest airlines have the most ubiquitous code-sharing relationships, the competitive offerings of smaller, independent airlines receive poorer display. Moreover, through "dual designations" many code-sharing flights are listed three different times, creating enormous "screen clutter," and again, shoving competitive offerings onto the second or third page of the CRS display, where they rarely are sold.

The algorithms that determine which flights receive priority are established by each CRS company. Typically, they involve a formula consisting of the proximity of a flight to the requested departure time (*displacement time*), plus total *elapsed time* from origin to destination, plus penalties imposed on flights that require a connection, and those which involve a change in airlines. Code-sharing interlining connections are falsely treated as if they were on-line connections, to which no additional points (the equivalent of minutes) are added. However, the major CRSs radically penalize interline connections which do not enjoy a code-share. For example, Galileo adds 1,440 points (the equivalent of 24 hours); Worldspan adds 3,030 points; Sabre adds 999 points. In many instances, this pushes the competitive interline connection off the first page of the CRS screen, even where the interline connection is jet-to-jet, and the CRS preferred code-share alternative is jet-to-turboprop.

At a concentrated hub airport, the net impact of the enormous penalty imposed by megacARRIER dominated CRS vendors against interline connections is to disadvantage interline connections which have been denied a code-share by the dominant airline, and thereby deprive independent competitors of sufficient connecting traffic to sustain competition in thin markets

##### 5. *Refusal to Deal with a Competitor*

Though ordinarily a firm has the discretion to choose those with whom it will do business, a firm with monopoly power can-

not refuse to deal with a competitor in the hope of destroying it or creating a larger market for itself.<sup>370</sup> The motive of the dominant firm must be to injure a competitor or substantially drive it from the market, for a refusal to deal raises antitrust concerns only when it is an attempt by a dominant firm to create or maintain a monopoly. A refusal to deal is also an antitrust violation where the firm refusing to deal is a monopolist and the refusal to deal tends to create a monopoly in a second market.<sup>371</sup> A major carrier's refusal to enter into joint-fare or code-sharing agreements with an upstart airline, and a major carrier's refusal to sell a new entrant access to its frequent flyer program may fall within this doctrine.

A monopolist must be unable to offer any plausible efficiency justification for its refusal to deal.<sup>372</sup> Given that consumers prefer low-priced jet service to high-priced turboprop service, a major carrier cannot argue that its customers enjoy better service or lower prices by funneling its passengers onto turboprop affiliates, or refusing to code-share with regional jet carriers outside the existing network. Major carriers sell frequent flyer points to companies as diverse as hotel chains, rental car companies, cruise lines, mortgage companies, florists, telephone companies, and a variety of airlines. However, they refuse to sell points to low-cost/low-fare airlines that attempt to compete at their monopoly Fortress Hubs.

#### 6. Refusal to Share an "Essential Facility"

Related to the "refusal to deal" problem, an essential facility is a productive asset that cannot reasonably and economically be duplicated and to which access is necessary if one wishes to enter the market and compete meaningfully in it.<sup>373</sup> A plaintiff must prove that it is economically infeasible to reproduce the facility, and that denial of access imposes a severe handicap on the market entrant. The doctrine is intended to prevent a monopolist in one market from using its market power to inhibit competition in another.<sup>374</sup> The essential facilities doctrine emerged in the Supreme Court decision of *United States v. Termi-*

<sup>370</sup> Eleanor Fox, *The Modernization of Antitrust: A New Equilibrium*, 66 CORNELL L. REV. 1140 (1982).

<sup>371</sup> HERBERT HOVENCAMP, *ECONOMICS AND FEDERAL ANTITRUST LAW* 275 (1984).

<sup>372</sup> *Aspen Skiing Corp. v. Aspen Highlands Skiing Corp.*, 472 U.S. 585 (1985).

<sup>373</sup> See *Alaska Airlines v. United States*, 948 F.2d 536 (9th Cir. 1991); *Hecht v. Pro-Football Inc.*, 570 F.2d 982, 992 (D.C. Cir. 1977).

<sup>374</sup> *Alaska Airlines v. United Airlines*, 948 F.2d 536 (9th Cir. 1991).

*nal Railroad*,<sup>375</sup> where the refusal of a consortium of railroads to afford a competitor access across a bridge into St. Louis was deemed to be predatory conduct attempting to monopolize the trade. Other cases have extended the doctrine to the refusal of a competing power company to "wheel" electricity across their lines,<sup>376</sup> the refusal of a telephone network to allow a competitor to have access to its local customers,<sup>377</sup> and the refusal of ski areas to allow a competitor to market its operations in cooperation with them.<sup>378</sup>

It could reasonably be argued that a dominant airline's vast route network radiating from the hub constitutes an essential facility under antitrust law, one that cannot realistically be duplicated. Further, a major carrier's refusal to allow an upstart airline nondiscriminatory access to that network under joint-fare and code-sharing agreements, and denial of frequent flyer plan participation, may constitute a deliberate effort to discourage customers from doing business with the upstart airline, monopolize the downstream travel market to cities throughout the region, and disadvantage consumers with inferior service and higher prices. The *Aspen Highlands* case suggests a monopolist can be required to cooperate with its competitors in a joint marketing arrangement, like a frequent flyer program. Other examples of airline practices which may fall under the essential facilities doctrine include the refusal to sub-lease underutilized gates at airports without available gates to a new entrant, or an incumbent airline's exercise of its "majority-in-interest" clause to prohibit the airport from expanding gate capacity.

From the narrow perspective of a major carrier's perceived competitive interests, a refusal to enter into a code-share and/or joint-fare relationship with a regional jet carrier can enhance its monopoly position. Any carrier providing jet service presents a greater potential as a future rival in markets served by the major carrier. By refusing to enter into cooperative relationships with such regional jet carriers, the major carrier undermines their economic viability, and even threatens their very existence. By dealing exclusively with regional carriers providing only inferior turboprop service, the major carrier assumes little risk of aiding a potential rival in its major jet service markets.

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<sup>375</sup> *United States v. Terminal R.R. Ass'n*, 224 U.S. 383 (1912).

<sup>376</sup> *Otter Tail Power Co. v. United States*, 410 U.S. 366 (1973).

<sup>377</sup> *MCI Communications Corp. v. AT&T*, 708 F.2d 1081 (7th Cir. 1983).

<sup>378</sup> *Aspen Skiing Co. v. Aspen Highlands Skiing Corp.*, 472 U.S. 585 (1985).

Such an exclusionary policy can only be practiced by a major carrier that enjoys considerable monopoly power in the marketplace. While such a practice might appear perfectly rational from the narrow perspective of the economic interest of the monopolist, the same might be said of a monopolist's price-fixing, collusion, and other anti-competitive practices. No less than these practices, however, exclusionary joint-fare and code-sharing practices do irreparable damage to the competitive environment of the airline industry, and deter consumers from receiving the competitive low-priced jet service they prefer.

There is, of course, nothing wrong with a major carrier choosing to code-share or interline with a regional carrier on the basis that such an agreement will improve the efficiency of service. Where the decision to enter into such agreements is on the basis of anti-competitive reasons unrelated to efficiency, however, the law is very clear. As the United States Supreme Court recognized in *Aspen Skiing vs. Aspen Highlands*,<sup>379</sup> "if a firm has been 'attempting to exclude rivals on some basis other than efficiency' it is fair to characterize its behavior as predatory."<sup>380</sup>

The law with regard to the "duty to deal" with potential competitors has its origins in the "essential facilities" or "bottleneck" doctrine first set forth in the Supreme Court case of *United States v. Terminal Railroad*.<sup>381</sup> In that case, a railway company combination gained control of all railway connections across the Mississippi river at St. Louis, making it impossible for any railroad company to pass through St. Louis without using the facilities controlled by the railroad combination. This power gave the combination veto power over use of the facility by a competitor. The Court held that the exercise of such power was a violation of the Sherman Act, and ordered a reorganization under which the combination was required to make its facilities available to competitors "upon such just and reasonable terms and regulations as will . . . place every such company upon as nearly an equal plane . . . ."<sup>382</sup>

This "duty to deal" under the antitrust laws was further developed by the Supreme Court in *Otter Tail Power v. United States*.<sup>383</sup> In that case, Otter Tail Power company refused to deal with municipalities seeking to establish their own power systems when

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<sup>379</sup> *Aspen Skiing*, 472 U.S. at 605.

<sup>380</sup> *Id.*

<sup>381</sup> *United States v. Terminal R.R. Ass'n*, 224 U.S. 383 (1912).

<sup>382</sup> *Id.* at 410.

<sup>383</sup> *Otter Tail Power v. United States*, 410 U.S. 366 (1973).

Otter Tail's retail franchises expired. Specifically, the power company refused to transport wholesale power to the municipal systems.

Otter Tail argued that unless it refused to deal with the municipalities, the municipalities would eventually turn to public power and that Otter Tail would suffer economic injury. In other words, Otter Tail argued that since it was acting in its own economic interest, it had no duty to deal with the municipalities. The Court sharply rejected this argument, citing *United States v. Arnold, Schwinn Co.*<sup>384</sup> for the proposition that "The promotion of self-interest alone does not invoke the rule of reason to immunize the otherwise illegal conduct."<sup>385</sup> The Court observed that the Sherman Act assumes that an enterprise will protect itself by offering superior service, lower costs, and improved efficiency, and not by anticompetitive uses of its dominant economic power.

In the context of exclusionary joint-fare or code-sharing practices, a similar question must be asked as to whether a major carrier's refusal to enter into cooperative agreements with a new entrant is for the purpose of improving the quality of service, or for other anticompetitive reasons. If given a reasonable opportunity for choice, most passengers would readily vote with their feet by opting for jet rather than small turboprop air service to their ultimate or secondary destinations, the efficiency argument of connecting with such small, slow turboprop aircraft, with less cabin room and fewer in-flight amenities (no lavatories or galleys, for example) would be disbelieved by any objective observer.

In the case of *Otter Tail*, the dissenters argued that Otter Tail had no duty to deal with the municipalities since it had "asserted a legitimate business interest in keeping its lines free for its own power sales and in refusing to lend a hand in its own demise by wheeling cheaper power from the Bureau of Reclamation to municipal consumers which might otherwise purchase power at retail from Otter Tail itself."<sup>386</sup> A similar argument might be made today by major carriers that they should have no duty to deal with regional jet carriers that might pose a future competitive challenge. However, such an argument was specifically rejected by the Supreme Court in *Otter Tail*, which concluded that

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<sup>384</sup> *United States v. Arnold, Schwinn Co.*, 388 U.S. 365 (1967).

<sup>385</sup> *Id.* at 379.

<sup>386</sup> *Id.* at 385.

such a refusal to deal constituted a “use of monopoly power . . . to foreclose competition or gain a competitive advantage.”<sup>387</sup> The Court further noted that “use of monopoly power ‘to destroy threatened competition’ is a violation of the ‘attempt to monopolize’ clause of section 2 of the Sherman Act.”<sup>388</sup>

The long antitrust saga resulting in the break-up of AT&T is also instructive. MCI successfully employed the antitrust laws to secure nondiscriminatory access to the vast AT&T network, ultimately resulting in AT&T paying MCI millions of dollars in damages, and the Justice Department forcing a consent decree breaking up AT&T into seven regional holding companies and a single long-distance carrier. Today, it is inconceivable that a regional telephone company would be allowed to enter into discriminatory connections and rate agreements with preferred long-distance telephone companies. Given the manifest parallels between the communications and transportation networks, the case law developed on the essential facilities antitrust doctrine is directly applicable here and requires nondiscriminatory ticketing & baggage, joint-fare, and code-sharing agreements between a dominant carrier with a new entrant which seeks such relationships.

In *MCI v. AT&T*,<sup>389</sup> AT&T declined to enter into an interconnection agreement with its competitor, MCI, to allow MCI to have nondiscriminatory access to its telephone network. The Supreme Court held that this refusal to deal with a competitor was governed by the essential facilities doctrine as set forth in *Terminal Railroad*, concluding that “the antitrust laws have imposed on firms controlling an essential facility the obligation to make the facility available on non-discriminatory terms.”<sup>390</sup>

The Court set forth four elements necessary to establish liability under the essential facilities doctrine:

1. control of the essential facility by the monopolist;
2. a competitor’s practical inability to duplicate the essential facility;
3. the denial of the use of the facility to a competitor; and
4. the feasibility of providing the facility.

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<sup>387</sup> *Id.* at 366.

<sup>388</sup> *Id.*

<sup>389</sup> *MCI v. AT&T*, 708 F.2d 1081 (7th Cir. 1983).

<sup>390</sup> *Id.* at 1132.

All of these elements are satisfied when applied to the current circumstances of a major carrier refusing to enter into joint-fare and code-sharing agreements with a regional jet carrier.

First, major airlines and their code-sharing affiliates control nearly 70% of all passenger traffic at numerous strategic hub airports, and control more than 90% of connecting passenger traffic as well. A major airline's vast route system radiating from a hub is analogous to AT&T's telephone lines or Otter Tail's electric wires; a major carrier's dominance of a hub is analogous to Terminal Railroad's railroad switching yard at St. Louis. A major carrier's frequent flyer program is analogous to Aspen Skiing's ski card.

Second, it is clearly impractical for a small regional jet carrier to duplicate the route network resources controlled by one of the world's largest airlines. Just as it would have been manifestly impossible for MCI to replicate the AT&T network to reach all of AT&T's monopoly customers, it would be impossible for a small regional carrier to duplicate the network of a large airline.

Third, several major carriers have refused to allow upstart airlines to enter into joint-fare, code-sharing or Mileage Plus relationships with them. The only apparent reason for such refusal to deal on the part of major carriers is the anticompetitive reason of not wanting to in any way aid its potential competition (a low-cost/low-fare jet carrier which dares to compete at the monopoly Fortress Hub it dominates)—a reason held to be clearly unlawful in *Otter Tail*. Indeed, in *MCI* the Court held that the violation of AT&T's duty to deal was analogous to Otter's Tail's violation, noting that "no legitimate business or technical reason was shown for AT&T's denial of the requested interconnections."<sup>391</sup> The Court further noted that MCI "was not requesting preferential access to the facilities that would justify a denial."

Although some major carriers advance a labor-related reason for declining to enter into such cooperative code-sharing agreements with upstart airlines, no cases can be found which have accepted a union contract rationale to uphold anticompetitive behavior antithetical to the antitrust laws. Clearly, there is no authority for the proposition that a "scope clause" in a union contract can supersede the antitrust laws. Moreover, the sham "scope clause" defense is wholly inapplicable to a major carrier's refusal to enter into a nondiscriminatory joint-fare relationship with an upstart airline, or sell it access its frequent flyer pro-

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<sup>391</sup> *Id.* at 1133.

gram. Further, the Court in *Terminal R.R.* emphasized that access to an essential facility must be “upon such just and reasonable terms and regulations as will, in respect of use, character, and cost of service, place every such company upon as nearly an equal plane as may be with respect to expenses and charges as that occupied by the proprietary companies.”<sup>392</sup>

The essential facilities doctrine has been applied by analogy to a variety of circumstances similar to those here. Under this line of cases, the focus is “on the intent and competitive effect of the refusal to deal; not on whether the facility itself is ‘essential.’”<sup>393</sup>

For example, in *Aspen Skiing v. Aspen Highlands*,<sup>394</sup> a company operating three out of four skiing mountains in Aspen, Colorado, declined to renew an agreement with an operator of the fourth skiing mountain for a joint multi-day ski-lift ticket. At trial on an allegation of monopolization, evidence revealed that as a result of the defendant’s refusal to market a multi-day, multi-mountain ticket with plaintiff, the plaintiff was severely damaged from a competitive standpoint, while the defendant, through its control of three of the four mountains, could continue to offer such a ticket. The Court held that the multi-mountain ticket was a “facility,” and further held that the defendant’s refusal to deal with the plaintiff in issuing a joint multi-mountain ticket revealed an intent to “create or maintain a monopoly” in violation of the Sherman Act.<sup>395</sup> The Court found that “by refusing to cooperate with plaintiff, defendant became the only business in Aspen that could offer a multi-day, multi-mountain skiing experience.”<sup>396</sup>

The Tenth Circuit affirmed the district court, applying the four *MCI* factors in finding a violation of the Sherman Act. First, it found that the defendant’s refusal to enter into a joint ticket agreement was “sufficiently analogous to Terminal Railroad to satisfy the element of control of an essential facility.”<sup>397</sup> Second, the court found that there was no practical opportunity for the plaintiff to develop another ski mountain in the Aspen

<sup>392</sup> *United States v. Terminal R.R. Ass’n*, 224 U.S. 383, 411 (1912).

<sup>393</sup> *MCI*, 708 F.2d at 1148.

<sup>394</sup> *Aspen Skiing Co. v. Aspen Highlands Skiing Corp.*, 472 U.S. 585 (1985).

<sup>395</sup> *Aspen Highlands Skiing Corp. v. Aspen Skiing Co.*, 738 F. 2d 1509, 1520 (10th Cir. 1984).

<sup>396</sup> *Id.* The jury awarded damages to the plaintiff in the amount of \$2.5 million, which was trebled by the district court to \$7.5 million.

<sup>397</sup> *Id.* at 1520.

area. Third, there was no dispute that defendant denied the use of the joint ticket "facility" to plaintiff. Fourth, there was no evidence that it was not feasible for the defendant to provide the plaintiff with access to the joint ticket "facility" or that there was a legitimate service or efficiency reason for refusing to deal with the plaintiff.

In affirming the Tenth Circuit, the Supreme Court emphasized the non-competitive purpose in refusing to deal, holding that "if a firm has been 'attempting to exclude rivals on some basis other than efficiency' it is fair to characterize its behavior as predatory."<sup>398</sup>

The Supreme Court restated that while there is no "general" duty to engage in a joint marketing program with a competitor, "the absence of an unqualified duty to cooperate does not mean that every time a firm declines to participate in a particular cooperative venture . . . that it may not give rise to liability."<sup>399</sup> The Court characterized the lack of any "general" obligation as simply the counterpart of the "independent businessman's cherished right to select his customers and his associates."<sup>400</sup> However, "the high value that we have placed on the right to refuse to deal with other firms *does not mean that the right is unqualified.*"<sup>401</sup>

In *Lorraine Journal*, the Supreme Court found a newspaper to be in violation of the Sherman Act for refusing to sell advertising to persons that patronized a competing radio station. The Court stated that:

The publisher claims a right as a private business concern to select its customers and to refuse to accept advertisements from whomever it pleases. We do not dispute that general right. But the word "right" is one of the most deceptive of pitfalls; it is so easy to slip from a qualified meaning in the premise to an unqualified one in the conclusion. Most rights are qualified. . . . *The right claimed by the publisher is neither absolute nor exempt from regulation. Its exercise as a purposeful means of monopolizing interstate commerce is prohibited by the Sherman Act.*<sup>402</sup>

Although the violation found in *Lorraine Journal* was an "attempt to monopolize," the Supreme Court cited *United States v*

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<sup>398</sup> *Aspen Skiing Co.*, 472 U.S. at 605.

<sup>399</sup> *Id.* at 599.

<sup>400</sup> *Id.*

<sup>401</sup> *Id.* (citing *Lorraine Journal v. United States*, 342 U.S. 143 (1951)) [emphasis supplied].

<sup>402</sup> *Id.* at 153 [emphasis supplied].

*Aluminum Co.*<sup>403</sup> for the proposition that “no monopolist monopolizes unconscious of what he is doing”, and Judge Bork for the proposition that “improper exclusion (exclusion not the result of superior efficiency) is always deliberately intended.”<sup>404</sup>

The Court also defined what was meant by “exclusionary” behavior. This term “comprehends at the most behavior that not only 1) tends to impair the opportunities of rivals, but also 2) either does not further competition on the merits or does so in an unnecessarily restrictive way.”<sup>405</sup> The question is therefore whether United Airlines’ exclusionary joint-fare and code-sharing practices 1) limit the opportunities of regional jet carriers, and 2) unnecessarily limit competition for anticompetitive purposes unrelated to providing the highest quality of jet service to air travelers.

The most important finding of the Supreme Court in *Aspen* was that “it seems appropriate to infer that [the joint skiing tickets] satisfy consumer demand in competitive markets”.<sup>406</sup> An analogous inference with regard to the circumstances relevant here would be that air travelers in a free competitive market would, given an equal fare, choose to travel on a carrier offering jet service rather than a relatively small commuter turboprop aircraft to an ultimate destination from a transfer point.

Certainly a policy of refusing to deal on a non-discriminatory basis with regional jet carriers is not a policy with a legitimate business objective, nor is the desire to inhibit or suppress competition a valid business reason for such a policy. Indeed, the burden would be on a carrier to rebut the presumption that an airline policy of deliberating denying its customers the option of economical and efficient jet interline service is not a valid business reason.

As we have seen, the refusal to deal with a competitor has been held to constitute predatory behavior and an unlawful use of monopoly power to foreclose competition under *Aspen Skiing v. Aspen Highlands*, *United States v. Terminal Railroad*, *Otter Tail Power v. United States*, and *MCI v. AT&T*.

<sup>403</sup> *United States v Aluminum Co.*, 148 F. 2d 416, 432 (2d Cir. 1945).

<sup>404</sup> *Aspen Skiing Co.*, 472 U.S. at 601.

<sup>405</sup> *Id.* at 605 (citing AREEDA AND TURNER, ANTITRUST LAW 78 (1978)).

<sup>406</sup> *Id.* at 603.

### 7. *Raising Rivals' Costs*

Evaluating the post-deregulation experience, during which he served as CEO of a small airline (New York Air), deregulation architect Michael Levine concluded, 'I believe predation is possible and that it occurs. . . . [I]t is possible for an incumbent to impose on prospective entrants nonrecoverable costs by pricing in a way that seeks to ensure that they do not attract a significant share of passengers regardless of the incumbent's own costs.'<sup>407</sup>

In a thorough treatment of the subject, Professors Krattenmaker and Salop introduced a new analytical model into situations like these, where a larger firm attempts to injure a smaller firm by raising its costs of operation. Krattenmaker and Salop suggest proper antitrust analysis involves a two-pronged test: (1) does the challenged conduct unavoidably and significantly increase the cost of its competitors; and (2) if so, does raising the rivals' costs enable the excluding firm to exert monopoly power to raise prices above, or restrict output below, a competitive level?<sup>408</sup>

Since sunk costs are not trivial, and an incumbent can respond in price and quantity as quickly as a new competitor can enter the threat of hypothetical new entry materializing apparently has little effect on an incumbent's pricing, contrary to the essential tenet of contestability theory.<sup>409</sup>

Although many neo-classical economists continue to cling to the notion that predation is irrational and therefore highly unlikely to exist, modern economics literature has developed a theoretical model which supports the notion that dominant firms may attain monopoly power by placing their competitors at a competitive cost disadvantage.<sup>410</sup> In the airline industry, this may be reflected in vertical agreements between major airlines and their commuter feeders, which make replication of the connecting network prohibitive, or vertical ownership of computer reservations systems, which charge rivals prices far above any reasonable measure of costs. Raising rivals costs may also be reflected in a dominant hub carrier's refusal to enter into ticketing-and-baggage, joint-fare, and/or code-sharing with smaller

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<sup>407</sup> Michael Levine, *Airline Deregulation: A Perspective*, 60 ANTITRUST L.J. 687, 689 (1991).

<sup>408</sup> Thomas Krattenmaker & Steven Salop, *Anticompetitive Exclusion: Raising Rivals' Costs to Achieve Power Over Price*, 96 YALE L.J. 209 (1986).

<sup>409</sup>

<sup>410</sup> Thomas Krattenmaker & Steven Salop, *Anticompetitive Exclusion: Raising Rivals' Costs To Achieve Power Over Price*, 96 YALE L.J. 209 (1986).

regional jet carriers, and other violations of the “essential facilities doctrine.” As Professors Krattenmaker and Salop note:

There have been a number of criticisms made of the plausibility of predatory pricing, but these arguments do not apply to the exclusionary strategies we analyze. Raising rivals’ costs can be a particularly effective method of anticompetitive exclusion. This strategy need not entail sacrificing one’s own profits in the short run; it need not require classical market power as a prerequisite for its success; and it may give the excluding firm various options in exercising its acquired power.<sup>411</sup>

In one sense, barriers to entry appear deceptively small, and were deemed inconsequential by deregulation’s architects. As former Assistant DOT Secretary Matt Scocozza said, “in 1978 we envisioned that there would be a hundred airlines flying to every major hub.”<sup>412</sup> A large used aircraft leasing market and a large number of skilled workers (individuals who had been laid off by the major airlines or lost their jobs because of major carrier liquidation) were available in the early 1990s. Despite their financial collapse, airlines remain a glamorous industry. Coupled with investor and lender enthusiasm for new airline ventures, this led to the emergence of a number of new airlines in the early 1990s. But entering and surviving are two entirely different things.<sup>413</sup> More than a hundred new airlines have emerged since deregulation, and the overwhelming majority have collapsed in bankruptcy.<sup>414</sup> Moreover, even entering a single market where the incumbent enjoys supra-competitive profits is difficult, given that the overwhelming number of nonstop city-pair routes appear able to support only a single airline, and that new entry must manifest itself inflexibly in plane-load lots.<sup>415</sup>

Barriers to entry have been defined as “any factor that prevents a new firm from competing on a equal footing with existing firms.”<sup>416</sup> These factors are numerous in the airline industry, ranging from the refusal of major carriers to allow smaller jet competitors nondiscriminatory access to their vast

<sup>411</sup> *Id.* at 223.

<sup>412</sup> *The Frenzied Skies*, Bus. Wk., Dec. 19, 1988, at 70, 71.

<sup>413</sup> WILLIAM O’CONNOR, AN INTRODUCTION TO AIRLINE ECONOMICS 7 (5th ed. 1995).

<sup>414</sup> For a list, see PAUL DEMPSEY & LAURENCE GESELL, AIRLINE MANAGEMENT: STRATEGIES FOR THE 21ST CENTURY 115-18 (1997).

<sup>415</sup> MELVIN BRENNER, JAMES LEET & ELIHU SCHOTT, AIRLINE DEREGULATION 50 (1985).

<sup>416</sup> EDWIN DOLAN, ECONOMICS 602 (4th ed. 1986).

connecting network monopolies, to computer reservations systems.

Economies of scale, scope and density also appear to exist in the airline industry, although the fact that new entrant airlines have lower ASM costs than established major airlines might suggest the contrary to those who do not look more deeply. Informational economies are associated with incumbency—a small carrier must invest in relatively higher advertising, marketing and ramp up costs in introducing its service to a city-pair market, while a large established carrier adding that city-pair to its existing hub network has relatively lower start-up costs. Economies of scale and scope are achieved as a carrier increases frequency in a market (spreading more customers over its station costs, for example), as well as the impact enhanced frequency has on demand for its product (because of the S-curve relationship between frequency and capacity on one axis, and revenue and yields on the other) the carrier with more frequency enjoys a disproportionately larger share of passengers and higher-yield revenue.<sup>417</sup> A hub carrier also enjoys network economies by adding a spoke to an existing hub network, offering a vast increase in the number of city-pair products it can offer. According to Levine, “We have seen the creation of a large number of hub monopolies because of the economies of scale and scope at the hubs.”<sup>418</sup> Kahn has insisted, “We advocates of deregulation were misled by the apparent lack of evidence of economies of scale.”<sup>419</sup> Add to network economies the vast increase in product lines that are added when large networks are joined together in code-sharing relationships, relationships from which new entrants are generally excluded. Anticompetitive behavior by airline monopolists exacerbates these economic and structural barriers to entry.

Then there are the “induced” scale and scope effects, including frequent flyer programs (for which larger network carriers have a manifest advantage vis-à-vis their smaller competitors) which attract higher-yield business travelers, and travel agent commission overrides, which essentially bribe agents to steer business toward the carrier which offers them. These have been

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<sup>417</sup> PAUL DEMPSEY & LAURENCE GESELL, *AIRLINE MANAGEMENT: STRATEGIES FOR THE 21ST CENTURY* 36-38 (1997).

<sup>418</sup> Michael Levine, *Airline Deregulation: A Perspective*, 60 *ANTITRUST L.J.* 687, 693 (1991).

<sup>419</sup> Alfred Kahn, *Surprises from Airline Deregulation*, 78 *AEA PAPERS & PROCEEDINGS* 316, 318 (1988).

described in the literature as the “principal-agent” problem.<sup>420</sup> As Levine has noted, “by constructing incentive commission programs and by inventing frequent flyer programs, big airlines learned to create economies of scope and scale that are not present in the basic technology.”<sup>421</sup> Alfred Kahn has recognized, “computerized reservation systems and frequent flyer programs . . . have contributed to [major carrier] dominance of their respective hubs, increased their ability to exploit the inelasticity of demand for their services by frequent business travelers, and erected obstacles to competition by smaller rivals.”<sup>422</sup> The GAO found:

Practices such as frequent flyer programs and travel agent commission overrides encourage travelers to choose one airline over another on the basis of factors other than obtaining the best fare. Such practices may be most importation if an airline is already dominant in a given market or markets. Ultimately this may lead to higher fares than would exist in the absence of these marketing programs.<sup>423</sup>

Levine cataloged the multitude of developments not anticipated by the pro-deregulation economists—mergers and consolidations, vertical integration, hub-and-spoke systems, complicated fare structures, frequent flyer programs, travel agent commission overrides, computer reservations systems [CRS], slot and gate monopolies, predation, and the high mortality rate among new entrants. From these developments, he concluded:

[T]hese unanticipated effects of deregulation seem to stem from the economics of information and from related economies of scope and scale, and from production indivisibilities (such as the problems of providing frequent and convenient service in city-pair markets with small traffic flows) . . . . Frequent flyer programs, the importance of travel agents and travel agent incentive programs, computer reservations systems, and hub and spoke systems all are techniques of utilizing economies of scale and scope to take best advantage . . . of the costs of communicating a com-

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<sup>420</sup> See Ross, *The Economic Theory of Agency: The Principal's Problem*, 63 AM. ECON. REV. 134 (1973).

<sup>421</sup> Michael Levine, *Airline Deregulation: A Perspective*, 60 ANTITRUST L.J. 687, 690 (1991). See Michael Levine, *Airline Competition in Deregulated Markets: Theory, Firm Strategy, and Public Policy*, 4 YALE J. REG. 393, 419 (1987).

<sup>422</sup> Alfred Kahn, *Market Power Issues In Deregulated Industries*, 60 ANTITRUST L.J. 857 (1991).

<sup>423</sup> GAO, *International Aviation Alliances and the Influence of Airline Marketing Practices*, GAO/T-RCED-98-131 (Mar. 19, 1998).

plex web of service and service attributes to consumers . . . . The information and transaction costs are real . . . .<sup>424</sup>

Major carrier CRS fees are a source of significant distribution costs on smaller rivals. Several observers of the airline industry have expressed concern about CRS fees, unilaterally imposed by CRS vendors, and undisciplined by competition among the members of the CRS oligopoly. Said one, "even if airlines owning the systems do not discriminate, they can exact a supra-competitive price for access to the reservation system if the market for the systems is not competitive."<sup>425</sup> The GAO concurred:

CRSs earn profits exceeding those that could reasonably be expected to be earned in a competitive market. They therefore unfairly transfer millions of dollars of revenues annually from airlines that do not own CRSs to those that do, making the former less competitive in the marketplace. . . .

These excessive booking fees, in combination with the incremental revenues earned by CRS vendors, resulted in the transfers of millions of dollars per year from non-vendors to vendors.<sup>426</sup>

Because of the dearth of competition in the CRS industry, United and American earn more than \$300 million per year from weaker airlines beyond the cost of providing the service, according to the GAO.<sup>427</sup> The DOT has concluded that booking fees charged other airlines were approximately double American's or United's average costs.<sup>428</sup> These carriers enjoy rates of return on their CRSs of between 60% to 100% a year.<sup>429</sup> American's Sabre earned a 20% operating margin in 1993, and a 24% operating margin in 1994.<sup>430</sup> Critics have argued that CRSs produce extraordinary profits for their owners, far beyond the rents that could be exacted in a fully competitive market. For exam-

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<sup>424</sup> Michael Levine, *Airline Competition in Deregulated Markets: Theory, Firm Strategy, and Public Policy*, 4 YALE J. REG. 393, 423 (1987).

<sup>425</sup> Jerome Ellig, *Computer Reservations Systems, Creative Destruction and Consumer Welfare*, 19 TRANSP. L.J. 287, 288 (1991).

<sup>426</sup> GAO, AIRLINE COMPETITION: INDUSTRY OPERATING AND MARKETING PRACTICES LIMIT MARKET ENTRY 63 (Aug. 1990).

<sup>427</sup> *Intelligence*, AVIATION DAILY (Feb. 11, 1991), at 269.

<sup>428</sup> *The Financial Condition of the Airline Industry and the Adequacy of Competition: Hearings Before the Subcomm. on Aviation of the House Comm. on Public Works & Transp.*, 102nd Cong., 2d Sess. XVII (1991); DOT, STUDY OF COMPUTER RESERVATIONS SYSTEMS 110 (1988).

<sup>429</sup> *The Financial Condition of the Airline Industry and the Adequacy of Competition: Hearings Before the Subcomm. on Aviation of the House Comm. on Public Works & Transp.*, 102nd Cong., 2d Sess. XVIII (1991).

<sup>430</sup> AMR CORP., ANNUAL REPORT 21 (1994).

ple, they have asserted that Sabre gives American Airlines fees in excess of costs of approximately \$215 million a year, and an advantage of \$328 million a year as a result of the "halo" effect.<sup>431</sup>

CRS vendors impose a charge (approximately \$3.10) based on each and every booking made on an airline, irrespective of whether a ticket is sold or segment flown reflecting that booking. CRS vendors insist airlines pay high fees based on reservations booked, rather than segments flown, and incentivize travel agents to maintain high booking levels via productivity rewards conferred on the basis of increased CRS usage. Under the CRS productivity pricing contractual provisions, rent payable by an agent is reduced if the travel agent maintains a certain volume of bookings per month.<sup>432</sup> Of course, additional bookings result in additional revenue to the CRS. But from the perspective of the airline whose product is booked, where an agent books, cancels, and re-books a reservation several times, the aggregate CRS fees can erode or eliminate profit on its sale, even if the ticket which corresponds to the reservation is sold. False bookings increase distribution costs for airlines, exacerbate the revenue transfer problem from smaller to the larger airlines that own CRSs, and result in inventory spoilage. Such increased transactions costs serve no legitimate market purpose, and result in a regressive wealth transfer from small to large airlines (which own CRSs).

Passive segments are bookings made by a travel agent for any flight any time, whether the desired class of service is sold out or not. The bookings are nefariously not communicated to the internal reservations system of the carrier whose flights are booked. Sometimes agents issue a ticket with an expired date. Delays are experienced when these passengers arrive at the airport because the airline has no record of them. Legitimate passengers are inconvenienced, and sometimes denied boarding. Thus, consumers also are ill-served by passive bookings.

CRSs also give the major airlines which own them access to real-time market demand information with which to engage in yield management—expanding or contracting the low- or high-fare buckets as demand falls or rises, respectively. CRSs allow the accumulation of exceptionally detailed information on con-

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<sup>431</sup> *The Financial Condition of the Airline Industry and the Adequacy of Competition: Hearings Before the Subcomm. on Aviation of the House Comm. on Public Works & Transp.*, 102nd Cong., 2d Sess. 65 (1991) (statement of Edward R. Beauvais).

<sup>432</sup> Mia Wouters, *The Hybrid Relationship Between Computer Reservations Systems (CRSs) and Airlines*, AVIATION Q. 346, 348 (1997).

sumer travel patterns between any conceivable pair of city-pairs on the planet. DOT regulations do require marketing, booking and sales data must be made available to all participating carriers on a non-discriminatory basis.<sup>433</sup> However, the exorbitant fees charged by CRS owners for the data tapes are cost prohibitive for small airlines. The North American tapes cost approximately \$10,000 per month per CRS, for a total annual cost for the data of the four CRSs of \$480,000. In fact, some estimate the cost at \$2 million per year. These figures are well beyond the economic reach of a small airline. As a consequence, the megacarriers have detailed real-time data on small carrier sales through their CRSs, while the small carriers are effectively denied access to the same sales data of the major carriers, and even if they can afford it, can not have the real-time access CRS owners do. One wonders whether Wal-Mart would have been snuffed out in its infancy had Sears and Montgomery Ward had proprietary data concerning its sales, offering to divulge their sales data only at a price beyond the ability of their competitors to pay. The extraordinary data access fees charged by major carriers' computer reservations system also may fall under the "raising rivals costs" doctrine.

As Michael Levine, now Senior Vice President at Northwest Airlines, observed:

An airline that controls the system on which travel agents make bookings on itself and its competitors gains market intelligence because it receives real-time information about market preferences and the success of marketing initiatives. An airline without access to the information generated by such a system knows only the travel patterns of those who buy its tickets. . . .

In contrast, an airline whose CRS is used by travel agents has access to a very accurate picture of both its own and its rivals' business patterns. . . . A CRS owner can then use this information to distort market signals to its rivals, leading them to make incorrect decisions. When a CRS owner sees travel agents making bookings on a rival airline's flights, it can intervene through targeted secret incentive programs in an attempt to switch business. By responding selectively, it can temporarily distort signals the market sends to competitors, in order to persuade the rival to abandon fares, schedules, or even routes where, absent these secret interventions, its offerings would be preferred by consumers.<sup>434</sup>

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<sup>433</sup> 14 C.F.R. § 255.10 (2002).

<sup>434</sup> Michael Levine, *Airline Competition in Deregulated Markets: Theory, Firm Structure, and Public Policy*, 4 YALE J. REG. 393, 461-62 (1987).

Finally, equal access to technology essentially exists on the operations side of the equation—if it has adequate financial resources, a new airline can buy or lease a 737 or an MD-80 nearly as easily as an established airline can (albeit not at the same price). But on the distribution side of the equation, the largest airlines, which own the computer reservations systems, through which the vast majority of flights are sold, are incentivized to display their competitors' flights more poorly, and earn significant supra-competitive profits from their competitors' CRS bookings and sales.<sup>435</sup> In this way, major airlines raise their rivals' costs so as to cause them economic harm.

### 8. *Exclusive Dealing Arrangements*

An exclusive dealing arrangement is a contract whereby the buyer promises to purchase all its product from a particular seller. An exclusive dealing claim requires proof of: (1) an agreement; and (2) an unreasonable restraint of trade or commerce (such as the foreclosure of competition in a substantial share of the line of commerce affected).<sup>436</sup> Such arrangements are analyzed both under section 1 of the Sherman Act (which prohibits collusive anticompetitive activities which restrain trade or commerce)<sup>437</sup> and section 3 of the Clayton Act (which prohibits tying arrangements). The 1985 Justice Department guidelines state that exclusive dealing arrangements may be anticompetitive when they exclude rivals from the market. A major airline's exclusive agreements with corporate purchasers and their requirement that travel agents book the incumbent's product disproportionately in order to earn commission overrides may fall under this doctrine. Alfred Kahn has recognized that override commissions "amount to an inducement to exclusive dealing" at odds with Clayton § 3.<sup>438</sup> Michael Levine found "Incentive commission programs attempt to induce the agent to breach his responsibility to travelers in favor of a particular airline."<sup>439</sup>

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<sup>435</sup> PAUL DEMPSEY, UNFRIENDLY SKIES OVER COLORADO: UNITED AIRLINES' FORTRESS HUB MONOPOLY AT DENVER 12-18 (1997).

<sup>436</sup> *International Distribution Centers v. Walsh Trucking*, 812 F.2d 786, 793 (2d Cir. 1987).

<sup>437</sup> 15 U.S.C. § 1 (2002).

<sup>438</sup> Alfred Kahn, *Market Power Issues In Deregulated Industries*, 60 ANTITRUST L.J. 857 (1991).

<sup>439</sup> Michael Levine, *Airline Competition in Deregulated Markets: Theory, Firm Strategy, and Public Policy*, 4 YALE J. REG. 393, 462 (1987).

A major carrier's requirements of exclusive dealing by its regional code-sharing turboprop feeder carriers also fall within the "exclusive dealing" prohibition.

A 1996 GAO report entitled "Barriers to Entry Continue to Limit Competition in Several Key Domestic Markets" concluded:

[A]irlines sometimes choose not to enter new markets because certain strategies of the established airlines make it extremely difficult for other carriers to attract traffic. These marketing strategies include bonus commissions paid to travel agents, frequent flyer plans, airline ownership of the computer reservation systems used by travel agents, and code-sharing partnerships with commuter carriers. Taken together, these new marketing strategies deter new as well as established airlines from entering those markets where an established airline is dominant. As a result, competition suffers, leading to higher airfares.<sup>440</sup>

## V. POLICY ANALYSIS

Major airlines have alleged that new entrant airlines advocate re-regulation of the airline industry.<sup>441</sup> That allegation is patently absurd. New entrants are airlines born of deregulation. They ask that the existing competition laws, applicable to every other industry in the United States, also be made applicable to the world's largest airlines. One must recall the admonitions of Alfred Kahn, the father of deregulation, who repeatedly insisted, "When we deregulated the airlines, we certainly did not intend to exempt them from the antitrust laws."<sup>442</sup> According to Kahn, "Manifestly, withdrawal of the regulatory protections entails a correspondingly accentuated reliance on vigorous anti-trust enforcement."<sup>443</sup>

Yet in the two decades of deregulation, the antitrust and competition laws have not been applied with full force to the airline industry. According to Paul Hudson, Executive Director of Aviation Consumer Action Project:

[T]he major carriers have been very busy undermining free market competition, while the DOT and the Justice Departments

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<sup>440</sup> GAO, AIRLINE DEREGULATION: BARRIERS TO ENTRY CONTINUE TO LIMIT COMPETITION IN SEVERAL KEY DOMESTIC MARKETS 2 (Oct. 1996).

<sup>441</sup> See Roger Gibson, *Controls Could Turn Clock Back 20 Years*, DENVER POST, May 4, 1997, at E1.

<sup>442</sup> Melanie Pickett, *The Air Fare Puzzle*, L.A. TIMES, Nov. 19, 1989, at D3.

<sup>443</sup> Alfred Kahn, *Market Power Issues In Deregulated Industries*, 60 ANTITRUST L.J. 857 (1991).

have been distracted or asleep. How major airlines do this is complicated, but in essence it involves use of unfair competition that limits consumer access to low cost air transportation, refrains from vigorous price competition, engages in various forms of commercial bribery and coercion, limits consumer access to price information, and utilizes discriminatory pricing, and deceptive advertising to the maximum.<sup>444</sup>

Re-regulation of the airline industry would require a substantial legislative overhaul of the Federal Aviation Act. New entrants do not believe that will be necessary if the Airline Deregulation Act is applied as written, particularly its provisions prohibiting unfair and deceptive practices and unfair methods of competition.

To the extent new entrants perceive a need for legislative change, they see it in the arena of further deregulation in order to enhance competition—deregulating the buy-sell slot rule, deregulating the airport perimeter rule, deregulating exclusive airport gate agreements and majority-in-interest clauses, and stripping major airlines of the ability to regulate computer reservations systems in a manner which distorts competition, or to bias travel agents with consumer overrides. That's not re-regulation. That's eliminating anticompetitive barriers to entry that suppress competition. Eliminating barriers to entry was among the fundamental purposes of the Airline Deregulation Act of 1978. Allowing the largest airlines to monopolize gates, slots, and the computerized distribution system is nowhere listed among deregulation's objectives.

Ironically, the major airlines have been vigorous proponents of competitive access in *foreign* markets. Testifying before a Senate Judiciary Subcommittee on April 22, United Airlines Vice President Cyril Murphy said, "It would be irresponsible for governments not to protect their citizens against the possibility of [cartelization and monopoly pricing]."<sup>445</sup> In opposing the proposed American Airlines/British Airways alliance (which, incidentally, would compete with the United/Lufthansa alliance, which had been conferred immunity from the application of the antitrust laws) Murphy said, "Governmental bodies have as their dual goals freeing the industry in terms of the elements of com-

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<sup>444</sup> *State of Competition in the Airline Industry: Hearing Before the House Comm. on the Judiciary*, 105th Cong. 57-743 (May 19, 1998) (testimony of Paul Hudson, Exec. Dir., Aviation Consumer Action Project).

<sup>445</sup> *Hearing Before the Antitrust, Monopolies and Business Rights Subcomm. of the Senate Comm. on the Judiciary* (April 22, 1997) (statement of Cyril Murphy).

petition and protecting their citizens from the potential for anti-competitive abuse of that new, open environment. This means . . . developing anti-monopoly policies that provide strict scrutiny of the 'superhubs' so as to maintain the opportunity for meaningful intrahub competition."<sup>446</sup> Among the remedies proposed by United was the surrender, by American Airlines and British Airways, without compensation, of slots at Heathrow, JFK and Chicago O'Hare Airports, a restriction on the acquisition of new slots, and the termination of code-sharing agreements with British Midland.

Yet United and other major airlines take a different view when addressing competition issues in the superhubs they dominate. Though United Airlines advocates vigorous governmental intervention to prevent monopoly abuse at London's Heathrow Airport, on April 10, United Airlines CEO Gerald Greenwald said, "Try to get the government to come in and solve competitive issues, and we will all regret it."<sup>447</sup> Northwest hired several economists to refute the allegation that predatory pricing exists in the airline industry, or that monopoly hub carriers exact a monopoly fare premium from passengers.<sup>448</sup> Northwest CEO John

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<sup>446</sup> *Id.*

<sup>447</sup> Richard Williamson, *United Slaps Back At Frontier*, ROCKY MOUNTAIN NEWS, April 10, 1997, at 1B. Though United had urged the U.S. government to strip its competitors of slots at Heathrow, JFK and O'Hare Airports, United Executive Vice President Stuart Oran complained that Frontier had asked the DOT to provide it with "free slots" at LaGuardia Airport. Press Release, United Airlines, May 8, 1997. The affordable fare carriers possess less than 1% of the takeoff and landing slots at the four slot constrained airports—Chicago O'Hare, Washington National, and New York Kennedy and LaGuardia Airports. United was given "free" slots at each of these airports (and it is asking for more "free" slots at London Heathrow Airport). Because of slot regulation, incumbent airlines have been able to capture a monopoly premium associated with monopolization of a finite public resource. Deregulation of slots would open these clogged monopoly bottlenecks. Similarly, perimeter rules are inconsistent with a free market system.

<sup>448</sup> According to Northwest Vice President Elliot Seiden, "the available evidence does not support the allegation that network airlines extract a 'hub premium'." *State of Competition in the Airline Industry: Hearing Before the House Comm. on the Judiciary*, 105th Cong. 57-743 (May 19, 1998) (statement of Elliott M. Seiden, Vice President, Law and Government Affairs, Northwest Airlines). Northwest financed a study to prove that there was no hub premium, a conclusion reached by no independent study since deregulation. The study was produced by Professors Darryl Jenkins and Robert Gordon. Contrary to nearly all prior research on the subject, they described the "hub premium" as a "myth." The Northwest Airlines' study insisted that, instead of higher fares, "residents of Minneapolis/St. Paul, Detroit and Memphis actually enjoyed a modest hub discount of 4 percent . . ." Furthermore, Jenkins and Gordon concluded, "Those passengers originating or terminating their travel in a Northwest hub receive a travel

Dasburg insisted, "Are we to believe today that the nation's air transportation system now depends upon the survival of a handful of thinly capitalized new-entrant airlines and, therefore, an interventionist policy is warranted and desirable?"<sup>449</sup> Northwest Vice President Elliot Seiden said, "What is really at work here is the sense that some firms are entitled to a break – let them get started, give them a shot, let them get their roots spread . . . . Our view is that's just a formula for slow death."<sup>450</sup> Competition

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bargain compared to other passengers on Northwest Airlines." DARRYL JENKINS AND ROBERT GORDON, *HUB AND NETWORK PRICING* (2000).

The Jenkins-Gordon study was quickly and widely criticized. Frank Berardino, President of Gellman Research Associates observed:

Only Northwest Airlines' fares are included in the analysis, and so, the full competitive alternatives available to consumers are never part of the comparison. Therefore, how do we know if the fares are relatively high or low? . . . The authors never report their regression analysis; their whole hub premium comparison is based on them.

Noting that the Jenkins-Gordon study failed to compare fares at dominated and non-dominated hubs, Kevin Mitchell of the Business Travel Coalition concluded, "the study's results fly like arrows thick and fast at the conclusion of virtually every credible analysis regarding hub premiums since deregulation . . . ." Kevin P. Mitchell, *Letter to the Editor*, *BUS. TRAVEL NEWS* (Oct. 15, 1999). Five major independent studies of airline pricing at Minneapolis/St. Paul since 1990 have concluded that fares are between 30% and 49% higher for trips beginning or ending at MSP than in competitive markets. Minnesota Planning, *Flight Plan: Airline Competition in Minnesota* 6 (1999).

In January 2001, the U.S. Department of Transportation issued a study on "Dominated Hub Fares". On its first page, the DOT sharply criticized the Jenkins-Gordon study:

[O]thers have reported on the prevalence of high fares paid by passengers at hub airports dominated by a network carrier; indeed, no credible study concludes otherwise. . . .

A hub study prepared by Professors Darryl Jenkins and Robert Gordon and funded by Northwest, "Hub and Network Pricing in the Northwest Airlines Domestic System," purports to show that Northwest fares in its nonstop hub markets are lower than Northwest fares in competitive connecting markets. Aside from finding the study's conclusion implausible, we have been unable to determine how the authors reached their result. The authors have not responded to our requests for further detail about the analytical model used.

DOT, *DOMINATED HUB FARES* 1 (January 2001).

<sup>449</sup> *Dasburg Calls On Government to Halt Market Intervention*, *AVIATION DAILY*, Apr. 24, 1997, at 151.

<sup>450</sup> Lisa Zagaroli, *Unfriendly Skies: Market Domination: Why Feds Went After American*, *DETROIT NEWS*, July 20, 2000, available at <http://www.detnews.com/2000/business/0007/20/a12-93466.htm>. Apparently, Northwest fears that consumers might prefer the services of low-cost/low-fare competitors to its own. Yet the anti-

is a formula for slow death? Hmm. Is monopoly Northwest's formula for a long life?

In a carefully orchestrated counterattack to the DOT initiative, major airline executives, and a gaggle of institutes, foundations and think tanks (some of which were financed by the big airlines) decried the DOT policy as "re-regulation." Nothing DOT has proposed would restore route licensing or tariff filing, once the heart of economic regulation.<sup>451</sup> Moreover, the Airline Deregulation Act of 1978 explicitly insists DOT protect the public against "unfair, deceptive, predatory or anticompetitive practices in air transportation."

## VI. CONCLUSIONS

The competition unleashed by airline deregulation has been beneficial to large segments of the consuming public, particularly discretionary travelers able to book their flights well in advance of departure. But competition should be further advanced so that a larger universe of Americans can enjoy the benefits of airline deregulation. In the Airline Deregulation Act of 1978, Congress explicitly affirmed its commitment to preventing unfair, deceptive, predatory or anticompetitive practices in air transportation, avoiding unreasonable industry concentration, excessive market domination, monopoly power and other conditions that would allow a carrier unreasonably to increase prices, reduce service or exclude competition in air transportation.

*Real air fares, though below 1978 levels, are falling at a significantly slower rate than they did in the pre-deregulation era.* Compare the 20 years preceding deregulation with the 20 years for which we have data since deregulation. From 1958 to 1978, before deregulation real (inflation adjusted) yields fell 46% or at an average annual rate of 2.3% per year. From 1978 to 1998, since deregulation real yields have fallen 40%, or at a rate of only 2.09% per year.<sup>452</sup> (See Chart 18). The price of business travel

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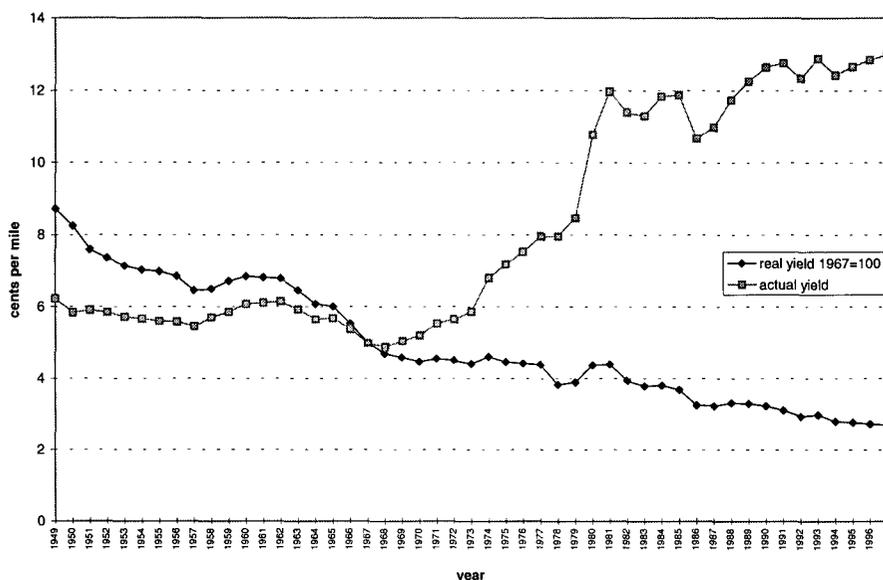
trust and competition laws exist to allow consumers to choose among competitors, and not to allow the dominant firm to deny consumers of that choice.

<sup>451</sup> See PAUL DEMPSEY & WILLIAM THOMS, LAW & ECONOMIC REGULATION IN TRANSPORTATION (Quorum Books 1986).

<sup>452</sup> See ESG AVIATION SERVICES, THE AIRLINE MONITOR 14 (Nov. 1999); ESG AVIATION SERVICES, THE AIRLINE MONITOR 9 (Sept. 1997); ESG AVIATION SERVICES, THE AIRLINE MONITOR 4 (Nov. 1994). Given the circuitry of travel mandated by a hub system (the dominant megatrend on the deregulation landscape), a yield measure probably overstates the post-deregulation decline in prices, for yields are

increased 17% in 1997 alone.<sup>453</sup> *Business Week* recently reported that in 1998 the air fare portion of the Consumer Price Index is increasing 37% on an annual basis. Moreover, Alfred Kahn has found that unrestricted fares have increased 73% under deregulation.<sup>454</sup> According to Kahn, "I do not see how anybody can object in principle to calls for reregulation when you clearly have a good deal of monopoly power. Hubbing seems to have contributed to that, and the carriers are ever more exploiting it at the expense of nondiscretionary travelers."<sup>455</sup> Thus, if deregulation is to continue to be perceived as a consumer success, competition must be enhanced.

Chart 18 – Airline Yields (1949 – 1997)



Prices are not fully competitive for travel to or from airports dominated by a single airline, and for travel to and from small communities. In the first decade of deregulation, 61% of the 514 non-hub communities receiving air service in 1978 suffered declines in flight frequency, 28% lost all service; only 6% en-

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based on revenue passenger miles (the revenue derived from passengers per mile flown, measured in cents per mile). Nonetheless, as a proxy for prices, it provides a rough approximation of long-term trends.

<sup>453</sup> Charles Stein, *United-Delta Alliance Off For Now*, BOSTON GLOBE, Apr. 25, 1998, at E1.

<sup>454</sup> *Aviation Competition Hearing Before the Subcomm. on Aviation, of the House Comm. on Transp. & Infrastructure*, 105th Cong. 1067 (Apr. 23, 1998) (testimony of Alfred Kahn).

<sup>455</sup> *Id.*

joyed the inauguration of new service. By 1995, 33% had lost all service, while only 5% had gained new service.<sup>456</sup>

It's not just a case of inferior service; it's a case of higher prices. The General Accounting Office found that passengers flying from small-city airports to major airports paid 34% more if the major airport was concentrated and 42% more if both the small-city and major airports were concentrated. The DOT found that passengers pay an average of \$54 less per flight in markets with low-cost carrier service. Market dominant airlines are using their domination of public resources in a manner to suppress competition. Because airports and the airways are public resources, they should be used for public benefit, and airline competition produces major public benefits.

In recent years, new entrant airlines like Air South, Sun Jet International, Kiwi, Pan American World Airways (including Carnival Airlines), Vanguard, Midway, Access Air, and Western Pacific have disappeared from the competitive landscape. Since deregulation in 1978, the 43 pre-deregulation airlines have dwindled to 15, while two-thirds of the 226 post-deregulation entrants have disappeared. Most of the surviving new carriers are cargo, charter or megacARRIER feeders, and not independent scheduled passenger airlines. In recent years the number of new entrant airlines collapsing has exceeded the number of new airlines emerging.

The arsenal of anticompetitive activities used by major airlines against new entrants is not new, though these tactical weapons have been used with increasingly better precision and effectiveness over time by the major airlines. Far too many low-cost/low-fare airlines have found themselves in the cross-hairs of the major airlines. It is also apparent that a failure of government agencies to impose sanctions against such practices has led to a widespread belief among the major airlines that our nation's competition laws do not apply to them. The DOJ and the DOT should take such enforcement action against a major hub-dominant airline for blatantly anticompetitive activities such as those described herein as is necessary to preserve competition, while there is still competition to preserve.

New airline ventures fail for a number of reasons. A spike in fuel costs, recession, the failure to find a market niche, or mana-

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<sup>456</sup> Data calculated by Dr. Andrew Goetz of the University of Denver Intermodal Transportation Institute.

gerial ineptitude can destroy a new airline. So too, can the predatory practices of the major airlines.

The homicidal cycle is well established:

1. Major airline establishes monopoly in a market, and raises prices to confiscatory levels
2. New low-cost airline enters the market, offering low fares.
3. Major airline responds by matching fares (even if below cost), sometimes adding aircraft capacity and frequency. Major airline rebates a portion of the ticket price in the form of frequent flyer travel, and bribes travel agents with commission overrides to steer business their way.
4. After suffering severe economic losses new entrant airline withdraws from the market.
5. Major airline reduces service and raises prices to confiscatory levels, often higher than those prevailing before the new entrant emerged.

The cycle repeats itself, though less often, as the pile of bankrupt airline corpses has grown higher, and chilled investment enthusiasm for new airline ventures.

What is wrong with this scenario is the economic impact route monopolization has on the local and regional economy, for air transportation is an essential part of the infrastructure of economic development. Business executives need frequent and reasonably priced air transportation, and will locate offices, factories, and warehouses only in those communities that have it.

Deregulation's principal architect, Alfred Kahn, has long decried our government's "abysmal dereliction" in failing to enforce the competition laws on airlines. In applauding DOT's new initiative, Kahn told Congress, "The most grievous governmental failure in recent years has . . . been the failure to prosecute a single case against what appears to have been flagrant cases of predatory competition by incumbent major airlines against new competitors."

What can arrest concentration and monopolization of air transportation and foster competition? The DOT's proposed policy against predatory practices is a step in the right direction, but more is needed. A legislative moratorium against carrier alliances should swiftly be promulgated. Hub dominant airlines should be required to offer new entrants nondiscriminatory connections, as the courts have required the telecommunications industry to do.

Though the government should not be concerned about the survival of individual competitors, it should be concerned about

the survival of competition. Monopolistic exploitation cannot long be tolerated in infrastructure industries upon which the rest of the economy depends. Better to have a competitor discipline a monopolist than have the government do it.

The major airlines forget that the people own the airports and the airways. The people have a right to insist that these public resources be used to serve the public interest. Competition is consistent with the public interest; monopolization is not.

Ron Chernow, author of the biography of John D. Rockefeller, *Titan*, observed, "Free markets do not exist in a state of nature. Free markets are things that have to be defined by custom and law."<sup>457</sup> Congress has commanded that the market of air transportation be free of unfair and deceptive practices and unfair methods of competition. Two decades into deregulation, it is time for the Department of Transportation to finally give meaning to those words. As the *New York Times* opined, "Although it can be hard to draw the line between predation and clean competition, the Federal Government needs to try. A flying public upset at the high fares on many routes deserves assurance that pricing practices are fair."<sup>458</sup>

Neither the Department of Transportation nor the Department of Justice need protect an individual competitor from the rigors of the marketplace. They should, however, protect competition. Without application of the competition laws, predation runs riot, and competition is jeopardized. Because of the profound economic externalities airlines impose upon communities and businesses across America, monopolization in the airline industry cannot be tolerated. As Senator John McCain has observed, "The only thing worse than a regulated monopoly is an unregulated one." After all, the American people own the airways and the airports, which were built with their tax dollars. These are public resources to be used in the public interest. It is reasonable to insist that air carriers serve the public interest. Monopolistic exploitation of consumers, and anticompetitive conduct designed to achieve it, are antithetical to that duty.

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<sup>457</sup> JOSEPH CHERNOW, *TITAN* (1998).

<sup>458</sup> *Unfair Airline Practices*, N.Y. TIMES, Apr. 7, 1998.