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**THE EVOLUTION OF THE U.S. AIRLINE INDUSTRY:  
SOME STRUCTURAL AND COMPETITIVE RAMIFICATIONS**

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### Introduction

In October of 1978 President Jimmy Carter signed the Airline Deregulation Act. While the letter of the law called for a relatively gradual implementation of the easing of entry and route restrictions as well as a modest loosening of rate controls, actual events transpired much more quickly than the minimums required by the legislation. There was nothing in the new law that precluded the Civil Aeronautics Board (CAB) from acting on a faster timetable than what had been mandated by congress.

What eventually transpired was a fairly rapid move to almost complete practical deregulation of the industry in terms of route and rate control. While new routes had to be requested by the airlines and approved by the CAB, the Board rarely said no to any carrier request. Likewise, while the law had mandated a zone of reasonableness where rate changes could not be challenged, there was nothing to stop the CAB from approving rate requests outside these bounds. Once again, the Board apparently had forgotten the word "no". When the airlines finally caught the drift of the CAB's thinking, practical deregulation became a reality far sooner than the dates spelled out in the legislation.

Entry for new carriers was easy, route expansion for both existing or new carriers was almost automatic, and rate propositions would rarely be challenged. The industry underwent a major transformation in the years following 1978. It took a while, but by 1985, some significant changes in the structure of the airline industry had transpired.

### Overall Industry Concentration

The year 1985 may well be regarded as the high water mark of airline deregulatory accomplishment, at least in terms of the predictions that had been made by the academic<sup>1</sup> and congressional supporters<sup>2</sup> of deregulation. Industry concentration was down, and several new carriers spawned by the Airline Deregulation Act of 1978 were effectively competing<sup>3</sup> against the older, established large carriers.

Table 1 lists airline industry concentration ratios for the years 1977 through 1989, measured by percent of industry passenger revenues. While there are some variations in the time series, the trend from the 1977/78 period to the 1984/85 period is clearly

towards less concentration in the industry. The obvious conclusion is that the smaller, previously existing carriers, as well as the new entrants, were gaining market share at the expense of many of the larger airlines.

**Table 1**  
**Airline Concentration Ratios**  
**Percent of Passenger Revenue**  
**1977 through 1989**

Year	Top 5	Top 10	Top 15
1977	59.79	84.75	93.89
1978	60.19	83.53	93.09
1979	57.19	81.70	92.35
1980	56.79	83.59	93.68
1981	55.41	81.07	91.48
1982	55.65	81.81	90.85
1983	56.88	82.55	92.13
1984	56.55	80.61	90.70
1985	54.09	81.85	90.12
1986	56.47	82.04	93.36
1987	68.56	94.46	97.82
1988	68.27	94.29	97.69
1989	68.57	95.36	99.22

Source: Calculations by the authors based on data in "Air Transport, The Annual Report of the U.S. Scheduled Airline Industry", Air Transport Association of America; "Air Carrier Financial Statistics", the U.S. Department of Transportation.

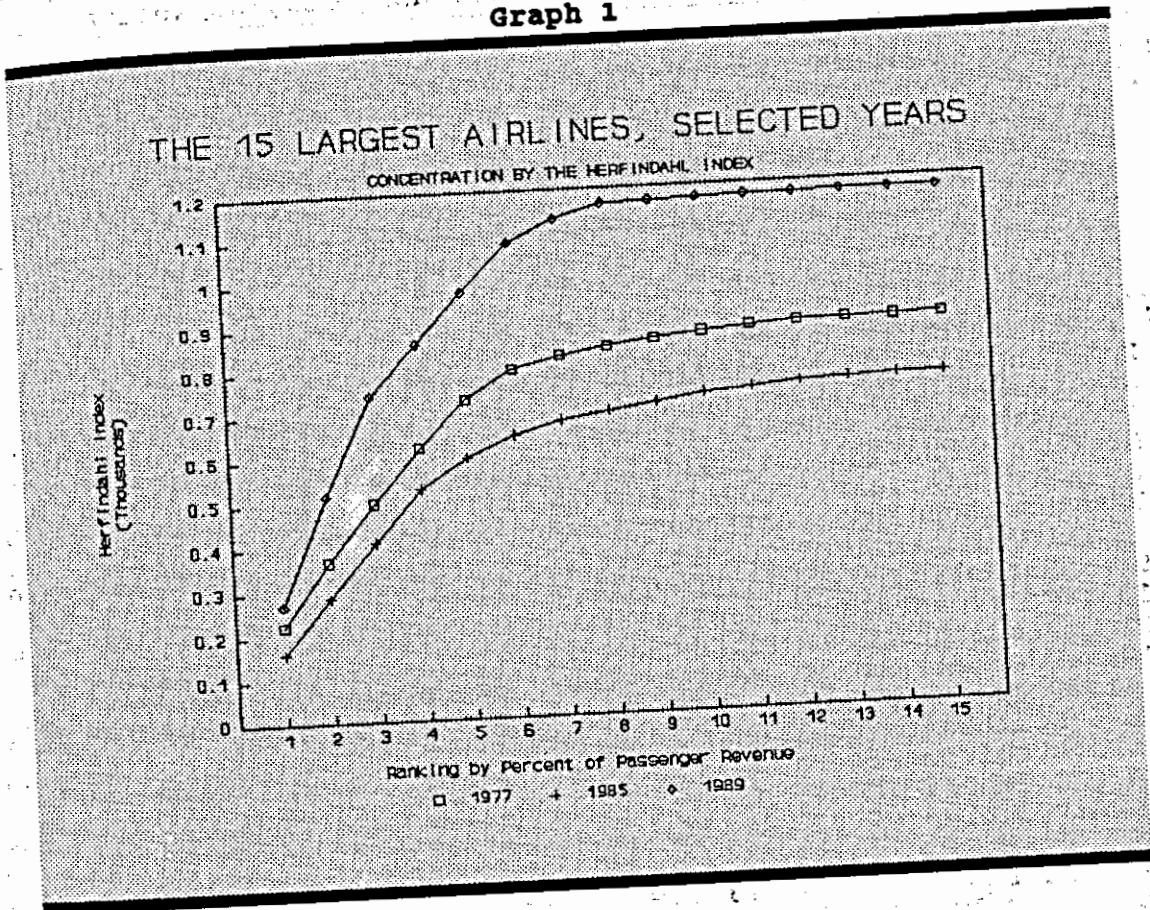
Looking at the five largest companies, their share fell from almost sixty percent in 1977 to barely above fifty-four percent in 1985. This amounts to a loss of slightly over six percentage points. The ten largest firms saw their share of passenger revenue fall from 84.8% in 1977 to 81.9% in 1985, a loss of almost three points. For the fifteen largest firms, revenue share was ninety three percent in 1978, compared to ninety percent in 1985. It is important to note that the largest losses in market share were experienced by the five largest carriers.

Concentration ratios tell a statistically obvious part of the story. Some analysts have argued that the Herfindahl Index is perhaps a better indicator of concentration in any industry. Herfindahl Index Information is presented in Graph 1 for the years 1978, 1985, and 1989.

The Herfindahl Index is simply the square of the usual cumulative concentration ratio data. It gives a better picture of the impact on an industry where a few large firms control a significant percentage of output. The graphic data is quite interesting. By its lower position on the graph, the curve for the 1985 data shows a marked drop in airline industry concentration

compared to 1977. The industry had obviously become less concentrated and more competitive. What happens after 1985 is another matter.

Graph 1



From both Table 1 and Graph 1, the raw concentration figures show that the five largest carriers increased their market share from fifty-four percent in 1985 to 68.6% in 1989. The top ten carriers saw their share increase from almost eighty-two percent to well over ninety-five percent. Looking at the fifteen largest carriers, in round numbers, their percentage of passenger revenue grew from ninety in 1985 up to ninety-nine by 1989. We should note that the largest relative gains (or should we say regain?) were made by the five largest carrier grouping.

The Herfindahl Index graph shows these increases in vivid visual terms. The competitive gains of the first few years of deregulation have been completely reversed. The industry now is far more concentrated than it was prior to the deregulation of 1978.

### The Airline Industry In 1985

We have previously noted that historians may well say that 1985 marked the highest accomplishments of the airline deregulatory

experiment. Table 2 presents data listing the twenty-five largest airlines of 1985, ranked by passenger revenues. Additionally, this table lists the status of each airline prior to deregulation as well as their market shares for both 1977 and 1989, as well as 1985.

**Table 2**  
**The Twenty-Five Largest Airlines of 1985**  
**Ranked by 1985 Passenger Revenues**  
**Prior Status and Percent of Passenger Revenue**  
**For Selected Years**

Rank	Company	Pass. Rev. (thousands)	%PRev 1985	Prior Status	%PRev 1977	%PRev 1989
1	American	4985236	12.7	PET	12.0	16.4
2	United	4373200	11.1	PET	14.9	15.7
3	Delta	4360384	11.1	PET	10.3	15.0
4	Eastern	4284048	10.9	PET	11.1	2.5
5	Trans World	3220385	8.2	PET	11.4	7.1
6	Pan American	2675124	6.8	PET	8.2	5.6
7	Northwest	2154393	5.5	PET	5.2	10.5
8	USAir	1625961	4.1	PER	2.7	10.8
9	Republic	1598237	4.1	MRG	NA	PUR
10	Continental	1540588	3.9	PET	3.5	8.1
11	Piedmont	1296087	3.3	PER	0.9	PUR
12	Western	1168255	3.0	PET	3.7	PUR
13	People Express	870587	2.2	NEW	NA	PUR
14	Southwest	656689	1.7	PEI	0.3	1.8
15	Pacific Southwest	548815	1.4	PEI	1.0	PUR
16	Frontier	515072	1.3	PER	1.2	PUR
17	Ozark	439715	1.1	PER	1.0	PUR
18	Alaska	373456	1.0	PEI	0.4	1.5
19	AirCal	307981	0.8	PEI	0.3	PUR
20	World	239078	0.6	PEC	NA	NA
21	America West	237805	0.6	NEW	NA	1.7
22	NY Air	224982	0.6	NEW	NA	PUR
23	Braniff	195849	0.5	RIN	4.1	0.7
24	Midway	177010	0.5	NEW	NA	0.8
25	Muse Air	124912	0.3	NEW	NA	PUR

- PET = Previously Existing Trunk Airline
- PER = Previously Existing Regional Carrier
- MRG = Formed by Merger of Two Previously Existing Regional Firms
- NEW = New Airline Formed Since Deregulation
- PEI = Previously Existing Former Intrastate Only Airline
- RIN = Reincarnation of a Previously Existing Bankrupt Trunk
- PEC = Previously Existing Charter (Supplemental) Carrier
- PUR = Purchased by Another Carrier
- NA = Not Applicable

Source: Calculations by the authors based on data in "Air Transport, The Annual Report of the U.S. Scheduled Airline

Industry", Air Transport Association of America; "Air Carrier Financial Statistics", U.S. Department of Transportation; Airline annual reports to stockholders; various newspaper articles.

The seven largest airlines of 1985 were all previously existing trunk carriers. The largest carriers of 1977 were still the largest carriers of 1985, even though the exact rankings may have changed. Additionally, even though the industry became less concentrated between 1977 and 1985, some of these largest carriers actually gained market share during this period.

A clear winner is American Airlines. By 1985 American had surpassed the perennial number one airline, United, to become the industry leader. American's share had grown from 12.0% in 1977 to 12.8% in 1985. That might not seem like much, but it is a relative increase of well over 6% in a period when increases by the old major carriers were the exception rather than the rule. By 1989, American's lead had grown to 16.4% of passenger revenue, comfortably ahead of second place United's 15.7%.

United, which had been the industry leader saw its share fall from 14.9% in 1977 to only 11.1% in 1985. That is a relative decrease of approximately 25%. However, by 1989 this had increased to 15.7%, for a relative gain of 41% over the 1985 figure. That is quite a rebound.

In 1985, Delta was in third place (up from fifth in 1977) with 11.1% of revenue compared to 10.3% in 1977. This put Delta in almost a tie for the second place position, just a few million dollars behind United Airlines. Delta maintained its third place position in 1989 with 15% of revenue.

Eastern was the fourth largest carrier of 1985, up from the fifth position in 1977. This increase in rank took place even though Eastern's share of revenue fell from 11.1% in 1977 to 10.9% in 1985. The reason for this is that the fourth place firm in 1977, TWA, saw its revenue share fall from 11.4% to only 8.2%. Even with this drop, Trans World still maintained the fifth place slot in 1985.

Pan American was in sixth place in 1977 and retained sixth place in 1985, even though its revenue share declined from 8.2% to 6.8%. Northwest also maintained its ranking, seventh place in both years. However, NW Experienced a gain in revenue share from 5.2% to 5.5% during the period.

USAir (called Allegheny before deregulation) previously was categorized as a regional carrier under the Civil Aeronautics Board (CAB) old classification scheme. USAir was the eighth largest carrier in 1985. Through internal expansion it had increased its market share from 2.7% in 1977 to 4.1% in 1985.

The ninth largest airline of 1985 was Republic, with a market share of 4.1%. Republic had been formed by the merger of two former regional carriers, Southern and North Central. Rounding out the top ten is Continental, which saw its market share increase from 3.5% in 1977 to 3.9% in 1985.

The number eleven spot is held by Piedmont. This former regional carrier saw its market share increase from 0.9% in 1977 to 3.3% in 1985. That amounts to a phenomenal relative increase of 366%. Western Airlines holds down twelfth place with 3% of passenger



revenue. This old trunk carrier saw its share decline from 3.7% in 1977.

Number thirteen is People Express with 2.2% of industry passenger revenues. This carrier is what deregulation was supposed to be all about. People Express was started from scratch shortly after deregulation, and its nontraditional approach to air travel threw the entire industry into an uproar. People was a "no frills" airline. Prices were dirt cheap but there were no meals, no free baggage handling, and the airline did not pay travel agent commissions. Low price was their draw, and the public fell in love with the concept. To capture well over 2% of the total airline market in a few years is testament to the appeal of low prices.

However, the success of People Express was short lived. The larger airlines retaliated by matching the low fares (with free frills still included). People also overextended itself through internal route extension and the purchase of other carriers such as Frontier and Britt. It thought that it needed to grow and confront the large carriers nose to nose with an extensive route network of its own. That was a grievous miscalculation and People quickly fell into financial distress and was soon purchased by Frank Lorenzo's Texas Air Corporation empire.

The number fourteen carrier of 1985 was Southwest, a former Texas intrastate operation. Its market share grew from 0.3% in 1977 to 1.7% in 1985. That is a growth of almost six hundred percent. Obviously Southwest was very successful in expanding beyond its former boundaries within the state of Texas.

In the fifteenth spot we find Pacific Southwest (PSA). This former California intrastate carrier saw its share rise from 1.0% in 1977 to 1.4% in 1985.

Places sixteen and seventeen are held by two former regional carriers, Frontier and Ozark. Both carriers increased their market share by approximately ten percent during the period. The eighteenth and nineteenth positions are held by two former intrastate airlines, Alaska and Air California. Interestingly, both of these carriers were able to expand their market shares in the neighborhood of two hundred and fifty percent by expanding outside the boundaries of their former operations which were limited to in-state activities.

The number twenty firm is World Airways. This was the only example from the annals of deregulation where a former charter airline (also called non-scheduled or supplemental carrier) attempted to enter the regular scheduled service market. While they did generate 0.6% of revenues in 1985, World was not successful in the long run.

The final five spots of the top twenty-five airlines of 1985 consisted of four new entrants to the industry as well as one reincarnation of a former major trunk carrier. Number twenty-three was Braniff. This grand old name of the airline industry had been the eighth largest carrier in 1977, with 4.1% of the market. However, a badly planned expansion program drove it into bankruptcy in 1982. This reincarnated scaled down version of Braniff held only 0.5% of passenger revenue in 1985.

The four new airlines rounding out the twenty-five largest carriers are America West (0.6%), New York Air (0.6%), Midway (0.5%), and Muse Air (0.3%). While these new entrants and aggressive



expansion by previously existing smaller firms were not an overwhelming force in terms of market share, they certainly made their presence felt through the future strategic moves of the larger carriers.

### The Merger Epidemic

The year 1985 appears to have marked the peak of competition that was endangered by airline deregulation. In the following year, the larger carriers apparently chose to spend rather than fight. In 1986, we saw the beginning of a merger wave in airlines unlike anything else in history.

Of the twenty-five largest airlines in 1985, ten (forty percent of the total) had been purchased by other carriers in 1986 or shortly following. The impact on market share has been significant.

Northwest bought Republic, its market share increased from 5.5% in 1985 to 10.5% in 1989. American bought Air Cal. Delta acquired Western. USAir purchased both Pacific Southwest (PSA) and Piedmont. This is especially significant since Piedmont was almost equal in size to its purchaser. USAir's market share grew from 4.1% in 1985 to 10.8% in 1989.

People Express bought Frontier and Britt. It later sold Frontier to Texas Air for about half what it had payed only a few months earlier. Texas Air bought People Express shortly thereafter.

Texas Air Corp. deserves a few words. While listed as apparently separate entities in 1989 on Table 2, both Eastern and Continental were owned by Texas Air. Including the People Express acquisition, the Texas Air Corporation was actually the largest airline in the country in 1987 if you look at the aggregation of its holdings. The driving force of Texas Air, Frank Lorenzo, is no longer in control. People Express and New York Air were folded into the Continental subsidiary. Continental is holding its own, at least in a relative sense. Eastern Airlines, which was only a shadow of its former self, with a mere 2.5% of revenue in 1989, ceased operations in early 1991. As of this writing, it is in the process of being dissolved and sold off in pieces.

A few other mergers round out the picture. TWA bought Ozark. Alaska purchased Horizon, a regional operation in the pacific northwest. Muse Air was acquired by Southwestern.

In short, these mergers eliminated airlines that had amounted to slightly over eighteen percent of passenger revenues in 1985. The impact on concentration is quite obvious from the 1987, 1988, and 1989 data in Table 1, as well as the 1989 curve in Graph 1. As of this writing both Pan American and TWA are selling off valuable routes and other assets in order to stave off financial disaster. American and United appear to be the primary beneficiaries at the moment. The big are still getting bigger, and the smaller are having their problems.

### The Question of Hubs

Until this point we have examined only overall industry concentration. Another aspect of deregulation has been the development of hub and spoke systems of flight operation. The end

result of this has been that, in many instances, a single airline controls an overwhelming majority of enplaned passengers at a given airport<sup>8</sup>.

The theory of contestable markets predicted that such "fortress hubs" could not endure since competitive forces would draw in new entrants if fares at such hubs generated any abnormally high profits. Contestability theory seems to hold little water in the airline industry<sup>9</sup>. Recent government studies find possible problems with the hub situation<sup>10</sup>.

Table 3 lists the thirty-one large hub airports of 1988 ranked by passenger enplanements. The government defines a large hub as a city that generates at least one percent of total national enplanements. The table also lists the leading carrier and its percentage of enplanements for 1988, 1985, and 1977.

Table 3  
The Thirty-One Large Hub Airports of 1988  
Ranked by 1988 Total Passenger Enplanements  
Leading Carrier and Percent of Passengers  
For the Years 1988, 1985 and 1977

Year: 1988								
Large Hub	#Pass	1988	Pass%	1985	Pass%	1977	Pass%	
Airports	('000)							
1 Chicago-O'Hare	26597	United	50.2	United	41.3	United	29.9	
2 Atlanta	21824	Delta	58.4	Delta	52.8	Delta	49.9	
3 Dallas-Ft. Worth	21014	Amer.	63.7	Amer.	61.8	Bran.	34.1	
4 Los Angeles Int	18643	Amer.	17.7	United	15.6	United	27.0	
5 Denver	14442	United	44.4	United	35.8	United	32.5	
6 San Francisco	13348	United	35.4	United	31.9	United	41.4	
7 NYC-Laguardia	11322	East.	22.0	East.	30.9	East.	30.9	
8 Newark	10838	Cont.	43.9	People	51.0	East.	30.9	
9 NYC-Kennedy	10660	Pan Am	29.0	TWA	29.9	Amer.	21.2	
10 Boston	10141	Delta	17.4	East.	20.4	East.	23.5	
11 St. Louis	9554	TWA	82.4	TWA	57.5	TWA	39.4	
12 Miami Int	9462	East.	45.1	East.	53.4	East.	42.3	
13 Phoenix	9455	AmWest	35.0	Amer.	35.0	Amer.	27.1	
14 Detroit	9214	NW	60.0	Repub.	45.3	Delta	20.9	
15 Honolulu	8396	Hawai.	30.9	Hawai.	25.2	Hawai.	25.7	
16 Pittsburgh	8379	USAir	85.4	USAir	79.8	Alleg.	45.4	
17 Minn.-St. Paul	8171	NW	77.6	NW	43.2	NW	45.8	
18 Orlando	7473	Delta	26.4	East.	25.1	East.	50.2	
19 DC-National	7259	East.	22.5	East.	24.4	East.	27.7	
20 Houston InterCont	6872	Cont.	77.0	Cont.	59.8	Cont.	21.0	
21 Las Vegas	6865	AmWest	33.7	PSA	12.7	United	23.2	
22 Seattle-Tacoma	6826	United	28.6	United	22.0	United	31.3	
23 Philadelphia	6634	USAir	36.6	USAir	28.9	East.	22.1	
24 Charlotte	6620	Pied.*	91.9	Pied.	75.8	East.	74.4	
25 San Diego	5181	USAir	16.6	PSA	23.8	Amer.	32.1	
26 Salt Lake City	4730	Delta	80.2	West.	73.3	West.	39.8	
27 Memphis	4533	NW	83.5	Repub.	63.2	Delta	40.2	
28 Tampa-St. Pete.	4495	East.	20.3	East.	23.7	East.	30.7	

29	Kansas City Int	4470	Bran.	26.9	East.	31.7	TWA	36.2
30	Baltimore-Wash.	4370	Pied.*	58.0	Pied.	41.8	Alleg.	25.5
31	DC-Dulles	4327	United	51.7	United	15.8	United	25.7

\*piedmont was acquired by USAir in 1986.  
 Operations were combined in 1990.

Source: Calculations by the authors based on data in "Airport Activity Statistics of Certified Carriers", U.S. Federal Aviation Administration.

Looking at the overall degree of hub concentration, the authors have run some tabulations of the data presented in Table 3. In 1977 only two airports found the leading carrier controlling in excess of fifty percent of passenger enplanements. By 1985, this number had increased to ten. Looking at 1988, we find thirteen airports in the fifty percent plus situation. In 1977 and 1985, not a single situation existed where the leading airline controlled in excess of 80% of passengers. By 1988, five large hubs (Charlotte, Pittsburgh, Memphis, St. Louis, and Salt Lake City) fell into this category.

Examining the largest of these thirty-one hub cities, we find that the nation's three most active airports (Chicago-O'Hare, Atlanta, and Dallas-Ft. Worth) all show the leading carrier handling more than half the passengers. Of the remaining big ten airports, the next seven are all below the fifty percent mark, with an average of a relatively modest thirty percent.

Returning to the big three airports, a few comments are in order. At Chicago, the country's busiest airport with more than twenty-six million passengers in 1988, the leading carrier has always been United. It is extremely interesting to note that United's share at O'Hare was 29.9% in 1977. This had grown to 41.3% by 1985. The reader should recall the earlier section of this paper where we noted that United's share of passenger revenue fell significantly (almost 25%) during this period. While United may have been having difficulties on other fronts, it was obviously strengthening its position in Chicago. The trend has been continuing, and United increased its share at O'Hare to 50.2% in 1988.

The nation's second most active airport is Atlanta. Delta has historically been the leader here, and that carrier has increased its share throughout the deregulatory era. In 1977 Delta handled 49.9% of passengers. By 1985, this had increased to 52.8%, reaching 58.4% in 1988. The recent shutdown of Eastern Airlines has special ramifications for Atlanta. Eastern was the second place carrier at Atlanta with 34.6% of passengers in 1988. As this article is being written, Delta is attempting to buy 18 of Eastern's 35 gates at Atlanta. The competitive implications are obvious.

Dallas-Ft. Worth ranks as the number three most active airport. In 1977 the leading carrier was Braniff (the old original Braniff) with 34.1% of passengers. American was in second place with 30.6% of the traffic. Braniff went bankrupt in 1982 and ceased operations. In 1985, American was the leading carrier at DFW with 61.8% of travelers. This is almost as much as Braniff and American combined.

had in 1977. American's share at DFW had grown to 63.7% by 1988.

Number four, Los Angeles International, is among the least concentrated airports in the country. The leading carrier, American, handles only 17.7% of traffic. The only other large hub airports with lower ratios are Boston (# 10) with 17.4% (Delta), and San Diego (#25) with 16.6% (USAir). Of the other airports in the top ten, the leading carrier percent of enplaned passengers varies from 22.0% (Eastern at Laguardia) to 44.4% (United at Denver).

The most impressive example of dominance is at Charlotte (#24) where Piedmont handled 91.9% of passengers. In second place is USAir's impact at Pittsburgh (#16), where it carries 85.4% of flyers. With three major hubs where it holds strong dominance, Northwest is a power to be reckoned with. It controls 77.6% of passengers at Minneapolis-St. Paul (#17), 60.0% in Detroit (#14), and 83.5% at Memphis (#27). Two other extremely high concentration situations are Salt Lake City (#26) where Delta controls 80.2% of passengers after its merger with Western, and St. Louis (#11) where TWA handles 82.4% of traffic after its purchase of Ozark.

Looking at new entrants since deregulation, there have been some limited impacts at the large hubs. In 1985, People Express was the leading carrier at its Newark hub, with fifty-one percent of passengers. The 1988 figures show Continental (which digested the remains of People Express) holding 43.9% of enplanements at Newark.

Of currently functioning new carriers, America West is the only airline to be the leading carrier at any large hubs. It is the first place carrier at both Phoenix (#13) with 35% of flyers, as well as Las Vegas (#21) where it handles 33.7% of enplanements. That is quite an accomplishment for an airline that only began flying in 1983.

## SUMMARY AND CONCLUSIONS

As the following discussion has shown, the effects of a major structural change, such as deregulation, on an industry are not always immediately apparent. While in the 78-85 phase it appeared as if industry concentrations were lessening, the post-85 era indicates an increasing level of concentration. Other factors; such as fears of terrorism, a general global economic downturn, labor disputes, and especially soaring fuel prices, have caused the industry to be in it worst shape ever. The Air Transport Association estimates that the total industry losses for 1990 will exceed \$2 billion, with \$1.7 billion occurring in the fourth quarter. The Continental, Eastern, and Pan American failures may be the beginning of a major industry restructuring.

While the dramatic fuel increases affected even the most financially secure airlines, some had adequate money to enable them to take advantage of the dire straits their competitors were in. Delta, the major carrier at Atlanta, agreed to purchase 18 of Eastern's 35 gates at Atlanta, thereby increasing its already strong, monopolistic position. Northwest's largest east coast expansion will be accomplished by the purchase of Eastern's facilities at Washington National Airport. United as able to purchase Pan Am's London assets for approximately 50 cents on the dollar, and USAir will pick up Pan Am's Philadelphia hub and

Canadian routes. Clearly, it is a good time for an airline to be in a position to solidify its market control through the purchase of weaker competitor's assets at "fire sale" prices.

By any measure, industry concentration has increased. What may be of more relevance, to the airline consumer, is the increase in market, or hub concentrations. While the theory of contestable markets, as cited earlier, may well apply to certain industries, or while the level of industry concentration may be the relevant yardstick concerning monopoly power, the unique characteristics of the airline industry would seem to indicate that market concentration is of more concern. While an extra automobile in Los Angeles could be transported and sold in Atlanta, if excess profits were being made in Atlanta due to the monopoly position of a few car dealers, the same is not true with excess airline seats. Once the plane leaves, the empty seat is gone forever. Another problem for the transferring of resources is the limited or nonexistent gate availability at certain hubs. This can be due to either the large capital outlays necessary for new construction and the problem of time lags, or the limit on new flights imposed by the FAA under the auspices of safety.

The recent problems of the airlines have led to a major policy change by the Department of Transportation that not all policymakers are comfortable with. In January, Transportation Secretary Samuel Skinner announced that DOT will nearly double the allowable amount of foreign equity, from 25% to 49%, that can be held in a domestic airline. Voting stock is limited to 25%, and the number of foreign directors and officers allowed is one-third. In addition, Skinner said that debt financing from foreign sources will not be considered a potential means of foreign control, under normal circumstances. This announcement allows KLM Royal Dutch Airlines to keep its significant investment in Northwest Airlines.

Many on capital hill, including Rep. James L. Oberstar, chairman of the House aviation subcommittee, were troubled by the relaxation of regulations. Others see it as absolutely necessary for the troubled industry. There does seem to exist however, the potential for foreign influence in the domestic airline industry. At this point, it is impossible to do anything but speculate on the potential impact of this investment on the competitive structure of the industry. But with the potential for one foreign firm, government owned, or group of firms to control 49%, non-voting or not, of two or more domestic airlines, the potential for collusion and/or monopoly exploitation would seem to exist.

What this paper has tried to illustrate is the domestic airline industry is more concentrated now, both at an industry level and market level, than before deregulation. And, conditions in the industry at present are conducive for even greater levels of concentration in the future. This does not necessarily mean the authors are suggesting a reversion to regulation. Some of the problem lies with the rash of mergers that were approved, without adequate consideration given to the competitive consequences. We have adequate antitrust laws in place to prevent widespread monopoly abuses by industry. Their lack of enforcement may be the problem. The industry is still changing since deregulation, and policymakers and regulators must keep a wary eye on these changes as they effect

the structure of the industry.

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