



***Aviation in Transition:  
Challenges & Opportunities of Liberalization***

**Closing Remarks by Seminar Moderator**

**The Cyclical Crisis in Aviation: Causes and Potential Cures**

**Paul Dempsey  
Director  
Institute of Air & Space Law  
McGill University**

## **THE CYCLICAL CRISIS IN COMMERCIAL AVIATION: CAUSES & POTENTIAL CURES\***

by

**Paul Stephen Dempsey\***

### **INTRODUCTION**

Giovanni Bisignani, Director General of the International Air Transport Association, recently observed that “the North American airline industry is in ruins.”<sup>1</sup> Unfortunately, the financial crisis in which the airline industry presently finds itself differs only in terms of its magnitude from those which preceded it.

If one pulls newspaper clippings describing the condition of the airline industry from the early 1980s, the early 1990s, and the early 2000s, the headlines are remarkably similar. They speak of the economic disintegration of the airline industry, massive financial hemorrhaging, tens of thousands of employee layoffs, hundreds of grounded aircraft, numerous bankruptcies, and major liquidations.

This essay offers observations on the following issues:

- What is the magnitude of the contemporary financial crisis?
- How does the contemporary crisis compare with past economic downturns?
- What are the causes of the airline industry’s unsatisfactory financial performance?
- How will the airlines extricate themselves from this morass?
- How might the government assist the industry in extricating itself from this morass?
- Should foreign governments follow the U.S. lead?

### **WHAT IS THE MAGNITUDE OF THE CONTEMPORARY FINANCIAL CRISIS?**

---

\* Copyright © 2003 by Paul Stephen Dempsey.

\* Tomlinson Professor of Global Governance in Air & Space Law, and Director, Institute of Air & Space Law, McGill University. From 1979-2002, the author was Professor of Law and Director of the Transportation Law Program, University of Denver College of Law. A.B.J. 1972, University of Georgia; Hague Academy of International Law, 1974; J.D. 1975, University of Georgia; L.L.M. 1978, George Washington University; D.C.L. 1986, McGill University. Member of the Bars of the States of Colorado and Georgia, and the District of Columbia. Dr. Dempsey is the author of more than 10 books and 70 scholarly articles on issues of law, economics and public policy in transportation.

<sup>1</sup> Address before the Seminar on “Aviation in Transition: Challenges & Opportunities of Liberalization (Montreal, Canada, March 22, 2003).

In 2001, the U.S. airline industry lost \$13 billion, of which the taxpayer paid \$5 billion as part of an unprecedented \$15 billion federal bail-out package. 2001 was not turning out to be a pretty year even before the tragedy of September 11<sup>th</sup>. Demand, which grew at 4% per year throughout much of the 1990s, plateaued in 2001, well before the tragic events of September 11<sup>th</sup>. Let us examine its causes:

- The overcapitalized high-tech, tele-com, dot-com bubble burst, depriving the airline industry of large quantities of executives willing to pay exorbitant walk-up Y fares; and
- Recession swept across the landscape, causing business to tighten its belt and its travel budget, and consumer confidence to wane.

Then came September 11<sup>th</sup>.

- The FAA grounded the airline industry for three days;
- The traveling public was horrified by the repeatedly televised film clips of jets crashing into the World Trade Center;
- As enhanced security procedures were implemented by the nascent Transportation Security Administration, the “hassle factor” grew, increasing carrier costs and further depressing traffic; and
- The United States led a war in the Mideast.

As a consequence, demand plummeted. Another terrorist event will further depress traffic.

2002 was little better. Recession continued, layoffs and bankruptcies seemed abundant throughout the U.S. economy, and consumer confidence waned. Federal Reserve Chairman Alan Greenspan described the U.S. economy as having hit a “soft spot” in the road. But for the airline industry, it was far worse than stumbling into a soft spot; it was falling into an abyss. The major airlines (except Southwest) were burning through \$24 million a day, creating an enormous liquidity problem. The industry’s debt/equity ratio jumped to 90/10, 80,000 employees were laid off, and 577 aircraft were parked in the desert. By year’s end, USAirways<sup>2</sup> and United Airlines were in bankruptcy.<sup>3</sup> The industry lost \$9.5 billion, or a cumulative \$22.5 billion in just two years. This cumulative loss exceeded all the profit the industry had earned since Orville and Wilbur Wright took flight nearly a century earlier.

2003 promises to be even worse. The U.S. economy is in recession, President George the Younger has led the country into the second U.S. war against Saddam

---

<sup>2</sup> It is no coincidence that TWA, without a profit for 13 consecutive years, and USAirways stumbled into bankruptcy. Neither carrier was a member of the four large international code-sharing alliances, and thus were deprived of the connecting traffic to which they would otherwise be eligible.

<sup>3</sup> There is some irony here, inasmuch as United Airlines was the only major airline to have supported, indeed lobbied hard for, deregulation in the mid-1970s.

Hussein, and fuel prices more than doubled<sup>4</sup> – all the ingredients for an exceptionally bad year, financially, with no end in sight. Hawaiian Airlines declared bankruptcy, and by some accounts, American Airlines – the world’s largest airline – may not be far behind. What was originally projected to be a \$7 billion loss for the year could turn into an \$11-\$13 billion loss if the war is prolonged.<sup>5</sup> That could produce a total loss for the three years of between \$34-36 billion.<sup>6</sup> With \$100 billion of debt, and \$18 billion in unfunded pension liability,<sup>7</sup> the airline industry’s access to private capital markets is virtually nonexistent.<sup>8</sup>

This financial crisis is worse than any the industry has ever suffered. But then, every downturn in the economy has led to progressively worse financial results for the U.S. airline industry since it was deregulated in 1978.

### **HOW DOES THE CONTEMPORARY CRISIS COMPARE WITH PAST ECONOMIC DOWNTURNS?**

The problems faced by the airline industry today are different in magnitude, certainly, from those it suffered in earlier periods since deregulation. But they are not new.

Let us provide some historical perspective, in reverse chronological order. During the recession of 1990-94, the industry lost \$13 billion, the worst losses in history up until that time.<sup>9</sup> Terrorism had earlier depressed demand with the explosion of Pan Am 103 over Lockerbie, Scotland. President George the Elder had led the country in its first war against Saddam Hussein, and fuel prices had spiked. The industry lost all the profit it had earned since the dawn of commercial aviation. During this period, five major airlines (Pan Am, Eastern, TWA, Continental and America West) fell into bankruptcy, and two of them (Pan Am and Eastern) were liquidated, while a third (TWA) stumbled on without profits for nearly a decade until it was acquired by American Airlines.

During the recession and fuel spike of 1981-83, the U.S. airline industry lost \$1.4 billion. Two major airlines (Braniff and Continental) fell into bankruptcy, and one (Braniff) was liquidated.

---

<sup>4</sup> Fuel prices increased 107% over 2002. Credit Could Suffer If War With Iraq Lingers, Bond Buyer, Mar. 17, 2003, at 5.

<sup>5</sup> Grounded By War, N.Y. Times, Mar. 23, 2002, at 4.

<sup>6</sup> These figures do not include the \$5 billion federal taxpayer contribution.

<sup>7</sup> Caroline Daniel, Politicians Wary of Boy Who Cried Wolf, Financial Times, Feb. 13, 2003, at 18.

<sup>8</sup> James May, Cost of Survival Too High, USA Today, Mar. 24, 2003, at 18A.

<sup>9</sup> The laissez-faire period which followed the 1981-83 recession led to a roller coaster of industry consolidations in the 1980s, creating modest profitability for a short while. Then recession, the Gulf War, and a spike in fuel caused economic collapse from 1990-94, during which the industry lost \$13 billion. The President and Congress responded by creating the Baliles Commission, most of whose members had little enthusiasm for any governmental remedy beyond such indirect subsidies as releasing crude from the Strategic Petroleum Reserve and rolling back taxes. Direct subsidies were provided to one Minneapolis-based airline. Five major carriers collapsed into bankruptcy; two were liquidated.

Before deregulation in 1978, there were no major airline bankruptcies or liquidations. None. When a carrier was suffering financially, the Civil Aeronautics Board injected it with lucrative routes, or encouraged a healthier airline to acquire it (as Delta acquired Northeast, and United acquired Capitol, for example), much the same way the banking regulators handle the problem.<sup>10</sup>

But there were several crises in the industry that caused it much financial pain. In the early 1970s, industry reeled from the onslaught of massive capacity increases inspired by overly optimistic traffic projections coinciding with dampened demand fueled by recession, and a tripling of fuel prices triggered by the Yom Kippur War and the resultant Arab Oil Embargo. The regulators responded by approving cost-based tariffs, authorizing capacity limitation and route-swapping agreements, and imposing a moratorium on new route certification. The result was reduced profitability, and a one year (1970) loss of only \$200 million - again, the worst losses in history up until that time, though they pail in insignificance compared with the \$1.4 billion losses of the early 1980s, the \$13 billion in losses of the early 1990s, or the \$34-36 billion losses of the early 2000s. But consumerists viewed the use of these financially bolstering regulatory tools as anticompetitive, and it sewed the seeds for regulatory reform, the momentum for which evolved into wholesale deregulation.<sup>11</sup>

Going back a bit further in time, in 1938, the airline industry successfully lobbied Congress for regulation to protect it from the vicissitudes of the market cycle. Before regulation, the U.S. airline industry had lost half of the capital that had been invested in it. The unregulated airline industry (before 1938 and after 1978) appears to have the characteristics of destructive competition whenever the economy softens.<sup>12</sup>

---

<sup>10</sup> Competition oversight and financial stabilization was performed during the Air Mail contract period, and during the period of economic regulation (1938-1978). Economic growth and technological developments, coupled with benign governmental oversight, kept the industry profitable, and importantly, lowered consumer prices significantly until the recession of 1969-71.

<sup>11</sup> Potential economic collapse caused by excessive capacity, recession, and a sharp spike in fuel prices triggered by the Yom Kippur War and the Arab Oil Embargo was avoided in the early 1970s by the application of regulatory tools -- a route moratorium, capacity limitation agreements, pass through of fuel in the rates, and route swapping. All that was viewed as anticompetitive and anti-consumer, and the industry was deregulated in 1978.

<sup>12</sup> The existence of destructive competition has long been accepted as a rationale for economic regulation of an industry. Only a few years before becoming Chairman of the Civil Aeronautics Board, Alfred Kahn wrote:

The major prerequisites [of destructive competition] are fixed or sunk costs that bulk large as a percentage of total cost; and long-sustained and recurrent periods of excess capacity. These two circumstances describe a condition in which marginal costs may for long periods of time be far below average costs. If in these circumstances the structure of the industry is unconcentrated -- that is, its sellers are too small in relation to the total size of the market to perceive and to act on the basis of their joint interest in avoiding competition that drives price down to marginal cost -- the possibility arises that the industry as a whole, or at least the majority of its firms, may find themselves operating at a loss for extended periods of time.

Alfred Kahn, *Economics of Regulation* (2<sup>nd</sup> ed. MIT 1988). Kahn described the post-deregulation airline industry almost perfectly. Fixed costs outweigh variable costs, by a margin of about four to one. The airline industry suffers from relentless excess capacity. On a national basis the industry is unconcentrated,

## WHAT ARE THE CAUSES OF THE AIRLINE INDUSTRY'S UNSATISFACTORY FINANCIAL PERFORMANCE?

What has caused contemporary crisis – the worst financial result since deregulation? The fundamental problem is excess capacity relative to demand, and excess cost relative to price. At this moment in history, there are an insufficient number of passengers willing to pay a price sufficient to cover the industry's costs.

### *THE COST/PRICE DISCONNECT*

Costs have risen significantly. September 11<sup>th</sup> not only dampened travel demand, it increased security and insurance costs. By some estimates, increased security alone imposed \$2.5 billion of additional costs on the industry.

Then, there were the labor agreements signed during the “bubble” years of the 1990s. In baseball, the Texas Rangers signed a contract with free agent shortstop Alex Rodriguez for a salary of \$24 million a year. In commercial aviation, United Airlines signed a contract with its pilots union paying senior pilots \$300,000 a year. Both created a new paradigm of unrealistic and unsustainable expectations by other employee groups.

The threat or inauguration of war in the Mideast always causes fuel costs to spiral upward. The confluence of these events led airline management to focus on liquidity and CASM,<sup>13</sup> and government assistance in the form of subsidies, insurance, and tax relief.

---

leading to tremendous network competition for connecting traffic, often driving prices down to variable costs. Under deregulation, the airline industry has operated at a loss for extended periods of time.

Before Congress in 1977, Kahn testified, "the assumption that you are going to get really intense, severe, cut throat competition just seems to be unrealistic when you are talking about a relatively small number of carriers who meet one another in one market after another." Kahn said, "I just do not see any reason to believe that an industry which is potentially rapidly growing, for which there is an ever-growing market, cannot prosper and attract capital." Speaking before the New York Security Analysts in 1978, he discounted, "The most general fear about [airline deregulation,] that when the CAB withdraws its protective hand from the doorknob, the door will open to destructive competition -- to wasteful entry and cut-throat pricing -- that will depress profits, render the industry unable to raise capital, and so cause a deterioration in the service it provides -- on the whole, it must be admitted good service."

That was before deregulation. A decade after deregulation, Kahn confessed, "There is no denying that the profit record since 1978 has been dismal, that deregulation bears substantial responsibility, and that the proponents of deregulation did not anticipate such financial distress -- either so intense or so long-continued." That was said before the \$13 billion losses of airline industry losses of 1990-94, or the \$21 billion of losses in 2001-02.

Kahn also appears to have changed his mind on the issue of whether the airline industry is subject to bouts of destructive competition. When asked about whether his vision of deregulation in the late 1970s included the steep financial nose dive that resulted from it, Kahn replied, "No. I talked about the possibility that there might be really destructive competition, but I tended to dismiss it. And that certainly has been one of the unpleasant surprises of deregulation."

<sup>13</sup> CASM = cost per available seat mile, the essential unit of production in passenger air transportation. The down-gauging of aircraft (substitution of relatively smaller for larger aircraft) increases CASM, but usually reduces block-hour operational costs and results in higher load factors. Higher CASM, however, requires higher RASM (revenue per available seat mile) to break even.

Costs have also been driven by the megatrends of deregulation. Since deregulation, all major airlines but one (Southwest) have adopted the hub-and-spoke method of distribution. On the revenue side of the equation, hubs:

- Produce a geometric growth in the number of city-pairs that can be marketed;
- Create monopoly and duopoly pricing opportunities for O&D traffic to and from the hub, as well as certain connecting markets fed only by it;
- Allow carriers to take advantage of the S-Curve relationship between revenue, along one axis, and frequency, along the other.

However, hubbing creates variable-cost-based pricing for long-distance city-pairs with multiple hubbing opportunities. But in an industry dominated by fixed costs, a variable cost focus can impair the ability of carriers to cover fully allocated costs. Moreover, in a recessionary economy in which large numbers of traditionally high-yield passengers decline to fly (and thereby cross-subsidize the fully allocated costs of leisure travel), and many more prefer the convenience of nonstop service wherever available at reasonable cost (as for example, by low cost carriers),<sup>14</sup> the cost burden of frequency and hub connectivity can outweigh its revenue generation.

Hubbing drives costs up. It erodes productive efficiency by lowering equipment utilization, lowering labor utilization, and increasing fuel consumption. Because of market fragmentation, hubbing deprives the industry of its ability to use higher capacity/lower CASM aircraft.<sup>15</sup>

---

<sup>14</sup> Hubs are highly inconvenient for the majority of passengers who flow through them. Certainly, O&D (origin-and-destination) passengers who begin or end their trips at hubs enjoy frequent, and convenient, nonstop service on every spoke radiating from a hub, though they pay a premium (some would say, a monopoly) charge for that privilege. But most passengers at hub airports are on their way to some other place. The opportunity to fly circuitously to their intended destination, spend an hour or more on the ground, then continue on, is hardly a paradigm of convenience, particularly in an industry that counts among its greatest inherent attributes its inherent ability to save time -- man's most important commodity. Surely too, many passengers trade off the inconvenience of a hub connection for a lower price, though that too makes the point that hubs are inconvenient, but competitively priced for some (but not all) who must there connect there. If frequency is synonymous with convenience, it must be because a frequent schedule saves consumers time; but if time is lost due to the connection, the savings are mutilated. The privilege of departing earlier is lost if one is forced to arrive later. Certainly too, some city-pairs are too thin to warrant nonstop service; connecting is, for example, the only way to get from Boise to Savannah. So, hub connections are convenient in some long-haul thin markets that cannot support a nonstop aircraft (though the RJs are beginning to serve many of those markets). Nevertheless, for passengers traveling in city-pair markets that can support nonstop service (such as Birmingham-Los Angeles, pre-deregulation), nonstop service is far more convenient than a hub connection. Price may indeed be a different issue, but much of airline pricing has been based largely on competitive considerations, rather than cost, and as a general rule, connectivity costs more to produce than does nonstop service.

<sup>15</sup> The fleet decisions inspired by the dominant post-deregulation hub-and-spoke paradigm account for the industry-wide plateau and decline in average aircraft size since 1978. Brenner, Leet and Schott have written:

There is ... an economy of scale in aircraft size. But the market fragmentation of deregulation has made it more difficult to obtain the benefits of that scale. In this sense, deregulation has converted what would normally have been less efficient planes, into seemingly more efficient ones, simply because the smaller planes fit better into the new market subdivisions and uncertainties. . . . The trend toward

The failure of costs to fall at the pre-deregulation pace may explain the fact that post-deregulation real (inflation adjusted) yields have fallen at a slower pace than pre-deregulation real yields.<sup>16</sup>

### ***THE DEMAND/CAPACITY DISCONNECT***

The excess capacity which plagues the industry is a product of the desire of airlines to offer the frequency levels that attract high-yield business traffic. It is a Tragedy of the Commons phenomenon.<sup>17</sup> Individually rational behavior becomes

---

smaller planes has been only an illusory cost efficiency, and in fact has actually resulted in higher seat-mile cost than would be possible without it.

Mel Brenner, James Leet & Elihu Schott, "Airline Deregulation" (Eno Foundation 1985).

<sup>16</sup> Declining costs in the pre-deregulation period correlate reasonably well with the productivity improvements of aircraft technology. It is inaccurate, however, to suggest that deregulation correlates well with the end of technological improvements, and that that explains why post-deregulation costs and yields have fallen at a slower rate. In fact, hubbing – the dominant megatrend on the deregulation landscape – has eroded airline efficiency and productivity in terms of aircraft and labor utilization and fuel burn. (inflation adjusted fares, or yields) fell faster in virtually period pre-deregulation than it did in the same number of years post-deregulation. See Paul Dempsey & Andrew Goetz, "Airline Deregulation & Laissez Faire Mythology" (Chapter 21 - Pricing, and Chapter 23 - The Economic Effects of Deregulation: The \$6 Billion Myth) (Quorum Books 1992); Paul Dempsey & Laurence Gesell, "Airline Management: Strategies for the 21st Century" (Chapter 5 - The Price: Revenue and Inventory Management, and Chapter 10 - Public Policy in Aviation) (Coast Aire 1997).

<sup>17</sup> Garrett Hardin, in his powerful essay, "The Tragedy of the Commons," provides insight as to the economic forces leading a rational wealth maximizer to advance his own economic interests by externalizing his costs, and how individually rational behavior can degenerate into collectively irrational behavior:

Picture a pasture open to all. It is to be expected that each herdsman will try to keep as many cattle as possible on the commons. Such an arrangement may work reasonably satisfactorily for centuries because tribal wars, poaching, and disease keep the numbers of both man and beast well below the carrying capacity of the land. Finally, however, comes the day of reckoning, that is, the day when the long-desired goal of social stability becomes a reality. At this point, the inherent logic of the commons remorselessly generates tragedy.

As a rational being, each herdsman seeks to maximize his gain. Explicitly or implicitly, more or less consciously, he asks, "What is the utility to me of adding one more animal to my herd?" This utility has one negative and one positive component.

(1) The positive component is a function of the increment of one animal. Since the herdsman receives all the proceeds from the sale of the additional animal, the positive utility is nearly +1.

(2) The negative component is a function of the additional over-grazing created by one more animal. Since, however, the effects of overgrazing are shared by all the herdsman, the negative utility for any particular decision-making herdsman is only a fraction of 1.

Adding together the component partial utilities, the rational herdsman concludes that the only sensible course for him to pursue is to add another animal to his herd. And another. . . . But that is the conclusion reached by each and every rational herdsman sharing a commons. Therein lies the tragedy. Each man is locked into a system that compels him to increase his herd without limit - in a world that is limited. Ruin is the destination toward which all men rush,



collectively irrational. The S-Curve relationship between frequency and revenue causes carriers to offer high frequency on all their important routes in order to capture the business traveler. The 15 interior hubs, create wasteful network duplication driving competitive pricing down to variable costs in order to derive some revenue from seats that otherwise would fly empty. The internet's contribution in terms higher load factors and reduced distribution costs is offset by its ability to drive prices down to collectively nonremunerative levels.

Excess capacity is also caused by the fact that average unit costs decline with growth, and increase with constriction. This is true, not only because of the high ratio of fixed to variable costs in the industry, but also because the least expensive employee is the most recently hired, who, because of labor seniority rules, will be the first out the door if the company lays off employees.

The bankruptcy laws also play a role in producing excess capacity, by giving special protected status to aircraft lessors, and stringing out the process of capacity reduction via liquidation. The aircraft themselves are relatively fungible, and the fuselage can be readily repainted in a surviving carrier's livery, thereby bringing grounded aircraft back to life.

Moreover, the airline industry has always, will always, and probably should always provide capacity in excess of demand. Demand for airline services is highly cyclical and fickle, depending on time of day, day of week, month of year, and broader macroeconomic trends of inflation and recession, as well as the psychological impact of catastrophic events (such as a crash into the Everglades or the World Trade Center). Excess capacity encourages all carriers to sell empty seats at a price that will cover variable costs and make some contribution to fixed cost overhead, and new internet distribution engines facilitate this ability. The problem is that widespread discount pricing consumes demand at an entry point lower than consumers may be willing to pay absent draconian sale behavior, sponging up demand that might fly at a higher price later on. Since airline costs are disproportionately fixed, variable cost-based pricing is a prescription for bankruptcy if embraced too generously, for too long a time.

These problems are profoundly exacerbated during economic downturns and waning consumer confidence, as well as the threat or fear of war or a terrorist event. As the war in Iraq began, United Airlines' international bookings fell 40%.<sup>18</sup> Should a shoulder-fire missile or other terrorist event take down a commercial aircraft, the economic effect may be an additional loss in excess of \$2 billion.<sup>19</sup>

---

each pursuing his own best interest in a society that believes in the freedoms of the commons. Freedom in a commons brings ruin to all.

Garrett Hardin, *The Tragedy of the Commons*, SCIENCE (Dec. 13, 1968), at 1243. In an environment of deregulation, airports and airways are the commons, the airlines are herdsmen, and passengers, so to speak, are cattle. Certainly, many passengers feel they are treated as cattle herded aboard aircraft.

<sup>18</sup> *The Darkest Hour*, Economist (Mar. 22, 2003), at 53. For U.S. airlines, domestic bookings fell 5-10%, Latin American bookings fell 3-19%, trans-Pacific bookings fell 10-20%, and trans-Atlantic bookings fell 20-30%. Caroline Daniel, *American Airlines Pilots Agree to Cuts*, Financial Times, Mar. 31, 2003, at 17.

<sup>19</sup> *The Darkest Hour*, Economist (Mar. 22, 2003), at 53.

## HOW WILL THE AIRLINES EXTRICATE THEMSELVES FROM THIS MORASS?

**Bankruptcy.** Airline deregulation has been criticized as a bankrupt policy.<sup>20</sup> In this latest cycle, major airlines like USAirways, United Airlines, and Hawaiian Airlines, and smaller carriers like Vanguard, National and Midway, have fallen into bankruptcy. In the short term, creditors are held at bay while the company tries to restructure under the benevolent oversight of a Chapter 11 bankruptcy judge. The carriers in bankruptcy offer lower fares based on artificially lower costs, thereby causing competitive injury to carriers paying all their bills, creating the potential for cascading bankruptcies. Some sources predict that all of the major U.S. network airlines are heading for bankruptcy.<sup>21</sup> TWA managed to go to bankruptcy court three separate times to shore up a balance sheet ravaged by the fact that the company failed to make a profit for 13 consecutive years. Some industry observers decried the Chapter 11 process as creating a race of the un-dead.<sup>22</sup>

Bankruptcy offers an opportunity, though, for companies to restructure themselves into viable enterprises, and some actually do. As noted earlier, airlines began to focus on costs, particularly after September 11<sup>th</sup> exacerbated the financial hemorrhaging.

**Route Restructuring.** To reduce the high cost of hub-and-spoking, American Airlines is experimenting with the concept of the rolling hub, whereby efficient equipment scheduling trumps convenient passenger connectivity, hoping that cost reductions will outpace revenue losses. Clearly, the overall number of hubs needs to be reduced. America West abandoned Columbus, Ohio, as a hub, and in earlier periods, American Airlines abandoned the hubs of Nashville, Raleigh/Durham and San Jose. Look for the number of Midwestern hubs to fall.

**Fleet Standardization.** Airlines are renegotiating leases, and standardizing fleet types. In downsizing gauge, they are trading higher CASMs for lower block hour costs, attempting to pair the capacity offered with demand, keeping frequency high with regional jets. But it is unclear whether the high frequency model is sustainable in a soft

---

<sup>20</sup> Hobart Rowen, *Airline Deregulation: A Bankrupt Policy*, Washington Post, Sept. 29, 1983, at A21. ALPA President Randy Babbitt wrote:

The corporate body count in the airline industry continues to rise, but the policymakers in the White House are satisfied because “this is the free market at work.” This policy of “economics by bankruptcy, is literally a bankrupt policy, and it can no longer be tolerated. It’s time we stopped worshiping at the altar of laissez faire and realized that the victims we are sacrificing to this ideological demon are real human beings, whose lives and livelihoods are being destroyed for the sake of an ancient, ivory tower theory.

Pan Am Shutdown Is Yet Another Tragic Loss, PR Newswire (Dec. 4, 1991).

<sup>21</sup> The Darkest Hour, *Economist* (Mar. 22, 2003), at 53.

<sup>22</sup> Mike France, See *Bankruptcy Reform Won’t Fix Telecom*, Bus. Week (Oct. 21, 2002), at 40.

economy, or whether the traveling public is collectively willing to absorb a higher CASM product.

**Capacity Reduction.** Airlines are grounding older and larger aircraft, parking hundreds in the desert. Liquidations may also ground aircraft, at least temporarily. Of course, they may well find themselves in the fleets of other airlines, as have their predecessors, as a new generation of entrepreneurs takes to the skies. There are three industries everyone thinks they can run – restaurants, sports franchises, and airlines. Despite their miserable economic performance, airlines are still perceived by some investors as a glamorous industry.

**Labor Cost Reduction.** With labor accounting for nearly 40% of major airline costs, management will attempt to persuade or coerce wage and work rule reductions, amending collective bargaining agreements to eliminate scope clause restrictions on feeder operations. Pension contributions and liability will be deferred. This may well cause a deterioration in labor/management relations.<sup>23</sup> Further, the airlines must reduce billions of dollars in unfunded pension liability, though this too, will be unpopular with employees.

Higher revenue demand, of course, will not be restored until there is national economic recovery. And for the moment, at least, that appears not to be on the horizon. Moreover, one wonders whether, if all airlines were able to achieve the cost structure of a jetBlue or Southwest Airlines, they would nevertheless eventually compete away their profit.

### **HOW MIGHT GOVERNMENT HELP THE AIRLINES EXTRICATE THEMSELVES FROM THIS MORASS?**

The market is not an end in itself. It is one mechanism that may, or may not, produce ideal efficiency or desirable social results, depending on a number of variables. Government -- the institution created by the people to order their affairs -- is always free to amend the rules of competition to achieve a more desirable economic or social result. The relationship between the government and the market is a complex one, and sometimes the government gets it wrong.

Nonetheless, prudent government involvement is inevitable in a complex economy if it is to achieve desirable results. Nations that have tried to do without it (contemporary Russia or Nigeria) achieve suboptimal results. Of course, nations that overdo the heavy hand of government (the U.S.S.R.) also achieve suboptimal result. Like the Laffer curve, the trick is to have the right mix of government and private enterprise to

---

<sup>23</sup> At United Airlines, Chapter 11 is likely to produce two results that labor will abhor: (1) dramatically less favorable wages and working conditions, and (2) a significant reduction or total elimination of their equity ownership (stock). The enormously difficult task of transforming United into a sustainable company will likely further rupture already sour relationships between labor and management. One must remember that TWA flew thirteen straight years without a profit, so United is not likely to be liquidated anytime soon. But the path they must take will not be without serious pain. Nevertheless, if Lorenzo's Continental can be transformed into Bethune's Continental, anything is possible.

inspire innovation and efficiency on the one hand, and yet produce a set of economic and social outcomes that are perceived fair by the people -- who indeed, control the government -- on the other.

To avert industry-wide collapse, the U.S. government responded quickly after September 11<sup>th</sup>, providing \$5 billion in direct grants, \$10 billion in loans, war risk insurance, and relief from tort liability. As the quid-pro-quo for loans, the government demanded sizeable warrants for the purchase of stock. The net result is that the federal government becomes a stockholder in several airlines. Governmental ownership of the means of production is the definition of socialism, an anathema to a capitalist economy.<sup>24</sup> Now who would have imagined that a concept such as deregulation -- designed to inject free market capitalism into an industry whose pricing and entry had been regulated for 40 years -- would instead produce socialism? Regulation is not the antithesis of competition; socialism is.

But let us succinctly list the federal government's alternatives at this point:

- **Do Nothing.** Allow the market to pursue its Darwinian imperative of ridding the market of excessive capacity via liquidation. If constrained to one, or two, or perhaps three major airlines, this restructuring may be transitionally painful, but acceptable. It will be more painful if the nation's very largest airlines are liquidated. As the veins and arteries of commerce, communications and national defense, transportation corridors have profound externalities upon a nation. A widespread collapse may be unacceptable because of the economic pain it may wreak on the rest of the U.S. economy. This is particularly true with respect to an atypical nation like the United States which is obsessively reliant on a single mode of transport – aviation – for the intercity movement of people,<sup>25</sup> and a service economy, reliant more on the movement of its brain power rather than its manufactured goods. Moreover, if each downward turn of the economic cycle produces such onerous financial results on the airline industry, it may be appropriate to “do something.”
- **Nationalize the Industry.** As we have seen, the U.S. government has already committed to a \$15 billion bail out. For a fraction of that, it could have purchased the stock of most of the major airlines. Of course, it would have inherited \$100 billion in debt. An Amtrak in the air is not a result Congress would likely prefer. Nonetheless, as a holder of warrants to purchase stock in the airlines to which it has given loans, the U.S. government is on the road to partial nationalization. State ownership is already the rule in the intercity rail and urban transit industries,

---

<sup>24</sup> To the contemporary crisis, the U.S. government responded with socialism -- having the taxpayers bail out the industry with an infusion of public money. The U.S. government has not only become the financial fuel injector, but the financial lender and insurer of last resort, holding a growing portfolio of airline stocks.

<sup>25</sup> Other developed nations, such as Europe and Japan, for example, have well developed, frequent, and reasonably priced intercity rail networks. For the United States, intercity rail is an infrequent and skeletal system on all but the Northeast Corridor.

both of which were originally privately owned. The Air Transport Association has conceded that, “a forced nationalization of the industry is not unrealistic.”<sup>26</sup>

- **Reform the tax laws.** The tax burden upon airlines has grown sharply in recent years, on an industry that can ill afford it. Principal among the increases are taxes and fees designed to attend to infrastructure and security needs. Airlines claim that the government takes \$42 of a \$100 ticket, though that figure is disputed. The airlines will ask for relief, and for the government to assure reasonably priced war risk insurance. Given the importance of transportation to the overall economy, it may be appropriate to cover at least a portion of these needs from the general fund.
- **Reform the labor laws.** The Railway Labor Act generates a sluggish dispute resolution process during which frustration can build and service, and concomitantly, revenue, can decline. The industry has urged binding arbitration as an alternative.
- **Accord the airlines antitrust immunity.** Before the bottom fell out, the United/USAirways merger proposal, and, more recently, the Northwest/Continental/Delta domestic alliance was opposed by the Justice Department. Both raised serious consumer concerns. Nonetheless, both would have enabled a rationalization of duplicative capacity, as would antitrust immunity to eliminate, or share (such as providing pooled blocked space) presently competitive routes.
- **Eliminate foreign ownership and cabotage restrictions.** The elimination of foreign ownership restrictions would enable foreign investors, and airline alliance partners, to “bail out” distressed airlines. If successful, this would alleviate market disruption, but not fully shed the industry of excess capacity. Certainly, Star Alliance partners Lufthansa and Singapore Airlines would suffer serious traffic losses if United Airlines were to be liquidated. Whether they would have the temerity to invest their capital in an airline with United’s cost structure is another question. The elimination of cabotage restrictions would allow foreign airlines to provide domestic service. Given the events of September 11<sup>th</sup>, and the reliance of the U.S. military upon the Civil Reserve Air Fleet, the elimination of either foreign ownership or cabotage restrictions raises significant foreign policy and national security concerns.
- **Re-regulate the industry.** Since the prevailing wisdom over the last quarter of the 20<sup>th</sup> Century has been the market can do no wrong and the government can do no good, there appears to be little political enthusiasm for re-regulation. Nevertheless, let us succinctly discuss its principal strengths and weaknesses. Re-regulation would relieve Congress of having to deal with the industry’s financial concerns, and shore it up at every downward turn of the economic cycle. Indeed, regulation is able to compress the impact of market cycle swings on this industry

---

<sup>26</sup> The Darkest Hour, Economist (Mar. 22, 2003), at 53.

so prone to chronic overcapacity and high fixed costs. Congress established regulation in 1938, at the industry's request, in order to shield it from destructive competition. The quid-pro-quo was that rates would be just, reasonable and nondiscriminatory; indeed, real yields fell faster during the period of economic regulation than it has subsequent to it. With modern computer software, the regulatory tools of price regulation could be performed more efficiently and expeditiously than they could before 1978. But, the difficulty in regulating today is the absence of a relatively homogeneous cost structure among new entrant vis-à-vis incumbent airlines, and the prevailing political correctness that insists that deregulation is not the (or even a) cause of the industry's financial collapse.<sup>27</sup>

### **SHOULD FOREIGN GOVERNMENTS FOLLOW THE U.S. LEAD?**

Nations large and small are faced with a vigorous momentum for "open skies" liberalization of bilateral air transport agreements, and conclusion of multinational "open skies" agreements, led by the United States, and the elimination of the airline nationality clauses<sup>28</sup> led by the European Union.<sup>29</sup> The response will be different depending upon the economic, political and social perspectives of each nation. Those which endorse neo-classical economic ideology will embrace "open skies" without hesitation. Moreover, all but the most poorly managed airlines in those parts of the world with double digit traffic growth will likely profit from liberalization.

But, as the foregoing review of the United States' experience with deregulation (the domestic sibling of international liberalization) reveals, the industry – its investors and employees – may suffer severe financial upheaval as a consequence of the restructuring, and perhaps bankruptcy, that liberalization may produce.

Certainly, there are national airlines that are poorly managed – some even governmentally owned – that would benefit from enhanced competitive pressure, so as to encourage them to become more efficient and productive, and more responsive to consumer needs. But not all nations will welcome the potential disintegration of their national airline. On certain thin routes, the loss of a national airline may result in the creation of a monopoly. Yields earned by certain European Airlines on routes to some of the poorest nations in Africa are some of the highest in the world, leading to serious equity concerns. In certain nations, the national airline has domestic service obligations on routes, though nonremunerative, important nonetheless for social, economic and political reasons. The loss of such airlines will require public subsidization if such service is not to be lost.

### **CONCLUSION**

---

<sup>27</sup> Paradoxically, deregulation proponents insist that deregulation produces billions of dollars of consumer savings, but has no impact whatsoever on the dismal economic performance of the industry.

<sup>28</sup> These clauses in bilateral air transport agreements typically require that the airline be "effectively owned and controlled" by nationals of the signatory state.

<sup>29</sup> Paul Dempsey, *Competition in the Air: European Union Regulation of Commercial Aviation*, 66 J. Air L. & Com. 979-1153 (2001).

In summary, the severity of the financial problems faced by the U.S. airline industry is breathtaking. Every market cycle since deregulation has been profoundly worse than the one that preceded it:

- Pre-deregulation – \$100 million losses in one year; no airline bankruptcies;
- 1981-82 – \$1.4 billion losses in two years; two major airline bankruptcies; one liquidation;
- 1990-94 – \$13 billion losses in five years; five major airline bankruptcies; two liquidations; and
- 2000-03 – up to \$36 billion losses in three years; three major airline bankruptcies, so far, but more likely.

There is an ominous and anonymous quotation that has long circulated in transportation circles: “Since the invention of the wheel, in the long term no one has made money moving people.”<sup>30</sup> This was true with steamships, with intercity railroads, and urban transit. Let us hope it is not also true in commercial aviation.

---

<sup>30</sup> Though freight must get to market, passenger demand for transport is quite fickle.