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Re-regulating the Airlines: Scenes from a Debate

Brian Havel

Commentary

Re-Regulating the Airlines: Scenes from a Debate

Brian F. Havel, Editor in Chief

In 2003, after nearly two years of record-breaking losses following the September 11 terrorist attacks, the Air Transport Association observed gloomily that the global air transport industry had been hit by a "perfect economic storm." Giovanni Bisignani, Director General and CEO of the International Air Transport Association (IATA) went even further in 2008, calling the recent sharp escalation in kerosene prices "potentially more destructive than [the industry's] recent battles with all the Horsemen of the Apocalypse combined." In the fall of 2008, IATA projected that the airlines' fuel bill would grow to $176 billion this year—a $40 billion increase from 2007. Industry-wide losses for 2008 were expected to top $5 billion (and $4 billion in 2009) if existing macroeconomic trends were to continue. While a looming world recession has ratcheted back the price of oil, the economic cycle itself could inflict even more substantial damage on already fragile airline balance sheets.

In summer 2008, at what appeared to be the crest of the oil price crisis, two stalwarts of American civil aviation, Robert L. Crandall (former Chairman of American Airlines) and Michael E. Levine (currently Distinguished Research Scholar and Senior Lecturer at New York University School of Law) used the fora of the Wings Club and International Aviation Club, respectively, to offer contrasting prescriptions for the industry's future. While neither proposed a wholesale return to government-controlled regulation, each pointed his ideological compass in a different direction. In brief, Crandall was prepared to saddle deregulation—with its strong bias for consumer benefits produced through "competition of any stripe"—with responsibility for the cumula-

tive failure of the post-deregulated airline industry. Levine, on the other hand, saw the solution to current challenges in deregulation's freedom to innovate and to allow the industry continually to re-invent itself.

Rejecting "unfettered competition" for an industry that serially fails to recapture its full costs, Crandall offered a mix of new regulatory interventions, including a mandated "sum-of-segments" pricing policy (to encourage non-stop flights—and discourage airline connecting complexes—by charging the full price for each segment of a connecting itinerary), binding arbitration for labor disputes, tougher bankruptcy laws that would oust managements more quickly, stringent flight caps, tighter financial standards for new airlines, massive investment in infrastructure, and "a more accommodating stance toward industry collaboration" on capacity sharing. Crandall also took aim at supporters of liberalizing inward investment, arguing that foreign investors would seek only to augment their own feeder traffic and to "discourage the creation of incremental competitive capacity by resurgent U.S. competitors." On this point, Crandall professed himself "mystified by the apparent willingness of U.S. negotiators to further weaken the domestic system by turning over control to people without any stake in making our domestic system work."

While intended to be neither comprehensive nor scholarly, Crandall's speech is noteworthy for its fundamental premise that it has become problematical to assert today—in the words used by President Clinton's National Commission to Ensure a Strong Competitive Airline Industry in 1993—that the regulation/deregulation debate is "an argument about a past that can never be recreated."

Levine's speech, delivered a month after Crandall's and therefore with the polemical luxury of being the responder, was a spirited defense of a deregulated marketplace which generates "multiple competing predictions, along with the freedom for firms to innovate using them and see which innovations flourish and which ones die." For Levine, in fact, all industries have fixed and common costs and all industries face the risk of being unable to sustain these costs as competition drives prices down. In his view, Crandall's ideological position amounts to a "picking-winners" industrial policy that would justify economic regulation of virtually every industry when a structural shift in costs is combined with a slowing of the business cycle. Levine condemned

such policies as unresponsive to market changes and hostage to political pressures and interest groups. He took issue, for example, with Crandall's proposal for a sum-of-segments pricing policy, arguing that it pays no regard to the true economic cost of seats that are more valuable when produced together with those serving other itineraries or that might otherwise go to waste. The government which would implement all of Crandall's changes, Levine remarked tartly, "is the government that has been unable for twenty-five years to modernize the [air traffic control] system." And re-regulation, he noted further, "won't affect the price of oil or the fragility of the economy," just as the era of the Civil Aeronautics Board could not prevent overcapacity, oil shocks, or weak earnings.

The analyses, proposals, and counter-proposals offered by Crandall and Levine are by no means confined to the moment in time when their speeches were delivered. Since they spoke, the fragility of the economy has been further tested by the ongoing global financial crisis and tilt toward recession. Fuel prices, though slowly descending as noted earlier, remain inflated. While it is premature to forecast the ultimate consequences for global aviation of the current economic turmoil, industry leaders and government officials will no doubt be revisiting the debate initiated by these two gentlemen in the months and years to come.

*Remarks of Robert L. Crandall**

The Wings Club, New York, N.Y.
Tuesday, June 10, 2008

Many years ago, I gave a talk here during which I used a naval analogy to urge the industry to find new approaches to its

* Former Chairman and CEO, AMR Corporation and American Airlines. During his 25-year tenure at American, Crandall led the Company to make various innovations that revolutionized the travel industry. In 1973, he headed a project to modernize American's SABRE computer reservations system, laying the groundwork for what became The SABRE Group, a leading provider of computing and communications services for air carriers worldwide. Later, Crandall introduced the concept of deep discounts for advance-purchase tickets and led the development of the industry's first yield management system. In 1980, he created the industry's first frequent flyer program and, in 1983, launched an expansion program that more than tripled American's size. Crandall currently serves on the Board of Directors of AirCell, Inc., Anixter International, Inc., and Celestica, Inc. He also serves on the Federal Aviation Administration Management Advisory Council and is

problems. The story involved a battleship captain who perceived his ship as the most powerful vessel afloat and who sent an ever more pre-emptory series of signals directing an approaching ship to change course. In the end, the other ship signaled back that it was a lighthouse.

Looking back on the industry's experience during the years since, I am forced to the conclusion that the captain—sure of himself despite the obvious perils ahead—went full steam ahead onto the rocks.

The consequences have been very adverse. Our airlines, once world leaders, are now laggards in every category, including fleet age, service quality, and international reputation. Fewer and fewer flights are on time. Airport congestion has become a staple of late-night comedy shows. An ever higher percentage of bags are lost or misplaced. Last-minute seats are harder and harder to find. Passenger complaints have skyrocketed. Airline service, by any standard, has become unacceptable.

Meanwhile, the financial health of the industry, and of the individual carriers, has become ever more precarious. Most have been through the bankruptcy process at least once, and some have passed through on multiple occasions.

An analyst from Mars, just arrived and knowing nothing of the industry's background, might be forgiven for believing that the entire problem can be laid at OPEC's doorstep. If only fuel prices were lower, the Martian might conclude, the industry would have no problem. Looking around the room, I see no Martians—but lots of folks who can remember—as I do—when the industry lost money while paying far less for fuel than it does today. While the price of fuel—and particularly the rapid rate at which it has risen—has certainly complicated the management challenge, it is clear that fuel prices are not the core of the problem.

Nor is inadequate scale. These days, the solution du jour seems to be mergers, and many voices clamor that consolidation is both inevitable and imperative. In my view, the arguments in favor of consolidation are unpersuasive. Mergers will not lower fuel prices. They will not increase economies of scale for already sizable major airlines. They will require major capital expenditures and are likely to increase labor costs. Finally, they will disadvan-

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Chairman and Chief Executive of Pogo, an early stage start-up developing the first branded charter company.

tage many employees, whose incentive to provide good service will be further reduced.

If consolidation were really the answer, it is conceivable that the system could be run by a single efficient operator. However, consumers clearly benefit from the existence of multiple airlines; the absence of alternatives does not encourage good customer service. Thus, our goal should be to harness competition and regulation to create a system responsive to both the imperative of efficiency and the desirability of decent service.

As is always the case, "victory has many fathers, but failure is an orphan" and no one wants to take credit for the sad state of our aviation industry. Fortunately, there is plenty of blame to go around. In my view, the industry's problems reflect several shortcomings:

- First and foremost, we have failed to confront the reality that unfettered competition just doesn't work very well in certain industries, as amply demonstrated by our airline experience and by the adverse outcomes associated with various state efforts to deregulate electricity rates. In my view, it is time to acknowledge that airlines look, and are, more like utilities than ordinary businesses;
- Second, our government has failed to develop a national transportation plan of any kind and has thus been indifferent to the continuing decline of our highways, our railroads and our airlines; and
- Third, the government has failed to invest in the capabilities and resources which only it can provide, most notably by failing to implement the new air traffic control system that everyone agrees we desperately need.

In my view, it's time to do something about all three.

I feel little need to argue that deregulation has worked poorly in the airline industry. Three decades of deregulation have demonstrated that airlines have special characteristics incompatible with a completely unregulated environment. To put things bluntly, experience has established that market forces alone cannot and will not produce a satisfactory airline industry, which clearly needs some help to solve its pricing, cost, and operating problems.

It must now be clear to all that one of the industry's fundamental problems is the way in which it prices its product. As you all know, airlines work with a very distorted supply-demand equation. The instant perishability of empty seats, the impossibility of quickly reducing fixed and semi-variable costs when demand falters, the public's view that all airline seats are interchangeable commodities, the plethora of competitors, and the desire to protect the reach of networks all create a great temptation to sustain volume by selling seats too cheaply.

In addition to producing huge losses, current pricing and operating practices have produced many negative side effects. In an effort to ameliorate losses, airlines have driven load factors much higher than can comfortably be managed, have outsourced much of their labor to firms employing marginally capable personnel, have introduced hundred of small, inefficient aircraft, have eliminated amenities once considered normal, and are imposing a wide range of fees to supplement revenue. The proliferation of fees irritates already unhappy customers, and some—notably baggage checking fees—slow up the check-in process and encourage passengers to carry aboard even more than they have in the past.

I have heard various proposals for solving the pricing problem. The most aggressive favor government-supervised pricing discussions whose goal would be to establish minimum fares sufficient to cover full costs and produce a reasonable return. While I would fully support such an approach, the idea is deeply offensive to those who cling to the belief that the markets can solve everything.

However, I think there may be a less intrusive way for government to help the industry achieve compensatory pricing while simultaneously responding to the increasingly pressing need to increase its fuel efficiency. Suppose for a moment that in a world where every airline set its own prices, a regulatory agency required that any passenger traveling between two points via a connecting point pay the sum of the local fares on his or her itinerary.

As we have all known for many years, the cheapest way to carry a passenger from point A to point B is non-stop, and the most efficient way to do it is by using the largest airplane compatible with demand. To my mind, a "sum-of-the-locals" rule would likely reduce the ability and motivation of airlines to preserve connecting complexes now being sustained by operating small,

relatively inefficient aircraft, or by pricing connecting itineraries far below actual costs or—in far too many cases—doing both!

Ask yourself this: if the non-stop fare from Detroit to Los Angeles is $450, why should a passenger be able to travel via a connection for the same amount or, as is the case today, for even less?

In a sum-of-the-locals world—or even in a world where the minimum fare was the non-stop price plus a connection premium—there might be fewer flights from Detroit to various hubs because higher through and connecting fares would mute demand. Passengers traveling only from Detroit to one of the hubs would likely have fewer service choices while passengers traveling to Los Angeles or other points beyond the hubs would confront a new paradigm in which the lower price of a non-stop journey might make waiting for a non-stop more desirable than choosing a higher cost but more convenient departure via a connecting point.

This argument, of course, turns the conventional wisdom about hubs on its head. However, times are very different now than they were when the hub-and-spoke system was growing rapidly. In those days, the United States gave little thought to either global warming or energy independence; today, the U.S. spends $600 billion per year on petroleum, pines for energy independence, and watches the ice caps with increasing trepidation.

Things have changed dramatically and will change even more in the years ahead. In due course, our country's need for energy conservation and our airlines' need for profitability will inevitably generate an intensive search for new approaches.

As you all know, I am no longer active in airline management, and thus lack the sophisticated analytical tools I so enjoyed in years past. It may be that there are better ways of approaching the pricing dilemma and, if so, I shall look forward to hearing about them. In one way or another, however, I think it's time for everyone to face up to the need for our airlines to price their products to recapture full costs—and earn the profits needed to sustain the huge investments essential to the industry's future.

The carriers also need help in curbing labor costs. As everyone here knows, airline efforts to control labor costs have been blunted—since the demise of the mutual aid pact in 1978—by the dramatic imbalance between the negotiating strength of organized labor and that of the airlines. Unlike industries with a tangi-

ble product, airline seats cannot be stockpiled. Thus, an airline has no product to sell during a strike, loses business when a strike is threatened, and suffers from reduced traffic for months after a strike is settled. Moreover, airlines are unable to quickly reduce fixed and semi-fixed costs during a strike. Thus, as a practical matter, no airline can endure a strike and will invariably yield to labor's demands before a strike is actually called.

The result has been labor rates and work rules which are far more generous than those offered for comparable skills in other industries. Since strikes against transportation utilities are illegal in many jurisdictions around the world and are clearly contrary to the public interest, I do not see why the Railway Labor Act[1] should not be amended to require binding arbitration. While organized labor would object to being deprived of its ultimate weapon, it seems likely that the threat of binding arbitration would encourage both labor and management to adopt more moderate positions than has been true in the past while simultaneously moving all airlines closer to labor cost parity.

We would also be well advised to revise our bankruptcy laws to deprive failed carriers of the right to use lower costs to undercut the fares offered by their more prudent rivals. Forcing both management and labor to face the twin spectres of liquidation and unemployment would likely be another step towards less confrontation and more cooperation.

It is also clear that decisive government action is needed to relieve the extreme congestion now being experienced at our busiest airports. As we all know, airlines cannot unilaterally reduce frequencies because doing so would allow another carrier the opportunity to add flights and gain a competitive advantage. In the short term, the only solution is a regulatory mandate that limits the number of flights scheduled to what the runways, terminals and air traffic control facilities at a given airport can handle.

To get there, present schedules should be reduced proportionally to each carrier's present frequency share. Doing so would create pressure to use the largest feasible aircraft in each slot. Matching capacity and usage would also get flights back on time, reduce both fuel usage and costs, and influence long-term fleet

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1 [Pub. L. No. 69-257, 44 Stat. 577 (codified as amended at 45 U.S.C. §151 *et seq.* (2000)).]

planning in ways consistent with both compensatory pricing and energy conservation.

The government should also tighten the financial standards that must be met by new airlines. In the years since deregulation, nearly 200 airlines have come and gone. These inadequately financed carriers, whose principal goal has often seemed limited to either lasting long enough to reap the rewards of an initial public offering or satisfying the ego of yet another would be airline mogul, have consistently cut prices to attract passengers. Such short-term antics have destabilized the pricing structure required by a healthy industry, and have offered no lasting benefit to anyone.

Finally, we should ask ourselves whether using our anti-trust laws to prevent airlines from collaborating to achieve more intensive asset utilization and more efficient operations really makes sense. It is hard to imagine the kind of clean-slate productivity gains that are clearly needed without some relaxation of past and present restraints on cooperation.

Modest price regulation, slot controls at congested airports, more stringent standards for new carriers, revised labor laws, amended bankruptcy statutes, and a more accommodating stance towards industry collaboration are a far cry from the inclusive regulatory regime of CAB[2] days. However, these few steps—in my view—would have a dramatic and favorable impact on the financial health of our airlines, the usefulness of our airline system, service levels in the airline business, and the welfare of airline employees.

But regulation alone is not enough. We also need a national transportation plan, including a clearly articulated, widely understood statement of our aviation goals. In my view, our objectives should be:

- First, to strengthen our national economy by encouraging the creation of a cost-effective, energy-sensitive transportation network which will permit people to move easily from one place to another;
- Second, to assure safe, courteous, and on-time service for consumers; and
- Finally, to improve the financial performance and international competitiveness of America's airlines.

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2 [Civil Aeronautics Board.]

Unhappily, such a plan does not exist. For many years, the only apparent goal of U.S. aviation policy has been to secure lower fares for consumers by encouraging competition of any stripe in every market, without regard to any other consequences, including the industry's viability.

A good first step towards a sensible policy would be to revisit the basis on which we negotiate international aviation agreements. Since the late 1970s, much of our government's effort has been focused on achieving very liberal aviation agreements with governments around the world, for no apparent purpose other than to drive prices ever lower. Since the United States has long been the world's largest single aviation market, those agreements—over the years—have afforded far more opportunities for foreign airlines than for our own, with predictable consequences.

Currently, a major element of debate surrounds the question of whether foreign airlines should or should not be allowed to own more than 25 percent of the equity of a U.S. carrier. Given the deplorable economic record of U.S. carriers, it seems highly unlikely that foreign airlines have an overwhelming desire to participate in our domestic aviation market. Thus, it seems clear that the objective of those seeking U.S. carrier ownership is primarily directed at using a U.S. base to feed international flights and to discourage the creation of incremental competitive capacity by resurgent U.S. competitors. Thus, I am mystified by the apparent willingness of U.S. negotiators to further weaken the domestic system by turning over control to people without any stake in making our domestic system work.

Given the high level of congestion at our major airports and our desire to operate a more energy-efficient transportation complex, I am similarly mystified as to why we have heard little or nothing about the development of alternative surface transportation systems for short-haul journeys. At our major airports, a significant percentage of flights are to destinations less than 300 miles distant, which could readily be replaced by the modern high-speed rail systems found in many countries around the world. Similarly, we could increase long-haul aviation capacity to and from our major cities by linking nearby airports to those cities with high speed rail links.

The East Coast offers easy examples. It would be a relatively simple matter to improve rail service between New York and Washington sufficiently to render airline service unnecessary and

thus free the LaGuardia and Reagan slots now allocated for service between the two points for longer flights. We could also link Stewart Airport to New York via rail, and thus expand opportunities for service to New York dramatically. And that Detroit to Chicago trip we talked about earlier—which is 283 miles—could be struck from schedules altogether if there was decent rail service.

I'm sure there are many other opportunities in the Midwest, on the West Coast, in Florida, and elsewhere—and I'm appalled that no one in Washington seems to have given the matter a moment's thought.

We ought to consider, as well, how aviation-related policy positions impact our other national goals. Some years ago, airlines gained permission to have maintenance work done at overseas maintenance facilities. In the years since, a substantial percentage of our aircraft maintenance work has gone abroad—despite the reality that work at those facilities is done under less demanding rules, and with far less FAA oversight—than is true of work done in the United States. Additionally, of course, allowing airlines to export their maintenance work has cost the United States many thousands of high-skilled middle class jobs—which seem to be in short supply these days. Thus, it's a bit hard to know just what national policy goal is met by permitting offshore maintenance.

In recent weeks, the seriousness of this issue has been underscored by controversy about whether the FAA is or is not doing airline oversight adequately. A recent story in the Wall Street Journal alleged that the FAA has failed to perform a number of required five-year reviews of airline performance, and—quite unbelievably—that the FAA did not know whether the reviews had or had not been performed.[3] According to the article, the FAA has recently developed a new tool that will alert senior officials when five-year reviews are overdue! While the agency has done a fine job of guiding the industry towards an exemplary safety record, I find it unbelievable that it doesn't know whether required reviews have been performed—and wonder how that uncertainty impacts work done in countries as remote as China.

Finally, despite the undisputed importance of aviation to the health and vigor of our economy, our government has failed to

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3 [Christopher Conkey and Andy Pasztor, *FAA Skipped More Than 100 Safety Reviews*, WALL ST. J., May 6, 2008, at A3.]

invest in the facilities and systems needed to assure its continued growth. An effective aviation system depends on the aviation infrastructure, which consists of airports owned and operated by local government agencies and the air traffic control system owned and operated by the FAA.

A comprehensive redesign of the ATC system is a responsibility of the federal government, and has been the subject, since 2003, of an intensive planning effort under the guidance of the Joint Planning and Development Office, commonly referred to as the JPDO. Despite the acknowledged importance of the task—the U.S. Chamber of Commerce has called our failure to address the problem "devastating"—implementation of the system has been hampered by resistance from the air traffic controllers' union, the unwillingness of some in general aviation to invest in needed onboard equipment, the unavailability of capital funding, ongoing arguments about who should pay how much to build and use the system, faulty management of various projects by the FAA, and by political resistance from Congress, which is unwilling to support the facility consolidations essential to realizing the plan's economic benefits.

Additionally, as I am sure many of you know, the very slow progress we have made towards creating the ATC system we need has been complicated by the continuing struggle between those who would like to introduce a user fee system and those who advocate continued excise tax financing, and between those who favor privatizing the ATC function and those who want it to remain the province of the FAA. Unfortunately, we seem to have lost our political will to resolve conflicts and move towards solutions. Until we regain that will, our antiquated ATC system will continue to inhibit the growth and success of our aviation industry.

I read just recently that the President's approval rating has dropped to well under 30 percent—a modern record—and that Congress gets favorable marks from only 18 percent of citizens. There are certainly many reasons for the widespread dissatisfaction, which for reasons of time I will not enumerate here. But the sad state of our own industry certainly deserves a place on the list of grievances.

The United States used to be good at solving problems. These days, we don't seem up to the job. I find that discouraging, as I know many of you must. I do hope, however, that whether you

agree or disagree with the thoughts I have presented today, you will become an advocate of substantive debate about finding solutions for our commercial airline industry.

There is an old saying that what can't continue, won't—and it's pretty clear we can't stand much more of what we've had in recent years.

As you know from these remarks, I think a dollop of regulation, along with new government policies and appropriate investment, would help the carriers get back on the right track. Although I am not going to hold my breath, I sincerely hope we'll move in that direction.

Thanks very much for your attention.

"Airline Survival in a Tough World"

Remarks of Michael E. Levine*
The International Aviation Club, Washington, D.C.
Tuesday, July 29, 2008

Thank you very much for inviting me and for interrupting what might normally be "those lazy days of summer" to hear what I have to say. I say "normally" because these are not normal times in the airline world and frantic efforts to survive rather than lazy days at the shore or in the mountains are the order of the day.

When I say that these are not normal times, I am not speaking casually. While there is much uncertainty about the price of oil and the near and medium term future of the economy, the range of possible situations for the U.S. industry over the next couple of

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* Distinguished Research Scholar and Senior Lecturer, New York University School of Law. Levine served as Dean of Yale University's School of Management and held professorial chairs at California Institute of Technology, Yale, and University of Southern California before entering the airline industry. He was an Executive Vice President at Continental Airlines and Northwest Airlines and later served as President and CEO of New York Air. Levine has held a teaching appointment at Harvard and was an academic visitor at the London School of Economics and Duke University. He did pioneering work on airline deregulation, the application of market mechanisms to airport congestion, and the origins of regulation and the behavior of regulatory agencies. At the Civil Aeronautics Board, Levine was instrumental in bringing about airline deregulation. As the agency's General Director, International and Domestic Aviation, in 1978 and 1979, he devised many of the mechanisms and practices used to deregulate the industry.

years goes from "extremely stressed, requiring urgent action" at the optimistic end to "unprecedented crisis that will produce a radical change in industry structure" at the pessimistic end, with the likely range of outcomes pointing toward pretty radical change and a lot of pain. Only if you believe that oil prices will drop into the $80-90 range within the near term can we expect things to go back more or less to where they were a year or so ago, albeit with somewhat less service, somewhat higher fares, and a fair amount of stress from possible persistent economic weakness to keep things interesting. Even in this scenario, an airline or two might fail.

Don't get me wrong: I don't know what the price of oil will be next year, let alone in the next five or fifteen years. We may be witnessing a short-term oil price bubble. Or maybe we are witnessing a long-cycle wave of a kind we have seen before, with oil prices going high enough for long enough to call forth the investments in production, conservation, and substitute technology that will begin to bring the price down, probably at the point where everyone agrees that high prices are here to stay. Of course, if such a cycle plays out, we will still have a significant period of high-priced oil. Even the very successful contrarian restructuring shark who has just bought into Spicejet of India has done so on the theory that the oil price bubble will break relatively soon and bring prices down to a mere $100/barrel!

Suppose he's right. At an actual realized price of $100 a barrel, complicated by an economic slowdown, nobody in the U.S. industry will make money without significant changes in their business model and some won't be able to manage the transition. At higher prices than that, the changes will have to be much more drastic indeed. We will then be looking at a domestic industry situation worse than that following 9/11 or even the Depression era that engendered regulation in the first place and facing challenges greater than that posed by deregulation thirty years ago.

Why such a sensational characterization?

Well, 9/11 was an external event that didn't change the economics of the industry but imposed a halt in output and a temporary reduction in demand, causing a liquidity crisis. Once the liquidity crisis was over and output resumed, demand came back and the structure of the industry wasn't much affected. It's true that 9/11 imposed very substantial and continuing security costs on the industry, but those costs, even broadly calculated,

amounted to no more than a couple of per cent of total operating costs.

The Great Depression occurred in the industry's childhood and, from the industry's perspective, was replaced in quick succession by a four-year period of 100 percent load factors, followed in turn by a postwar explosion in demand accommodated by government-funded technological advance and an interim supply of very cheap capital. Deregulation imposed new competitive stresses and forced the industry to rearrange contractual commitments and change the way it did business, but it did so in the context of unprecedented growth in demand that continued over twenty-eight years with only a few interruptions.

In each case, after the initial shock the industry entered a virtuous cycle of rising demand, reduced costs, and system expansion broadening the availability and convenience of the air transport product.

This looks different.

For thirty-two years, people paid less and less for air transportation that became more available and more convenient, a process that buoyed the industry even as it put unprecedented stress on individual managements and firms. Before that, technology lowered costs and made air transportation more valuable. Now, for the first time in the industry's history, travelers face rising fares reflecting dramatically rising costs, suppressing demand. In an effort to accommodate itself to reduced demand, the industry is engaged in reducing capacity and rearranging route systems in ways that impair the convenience of the service it has to offer, making air transportation less valuable to those who use it at the same moment that they are being asked to pay more for it.

Since the advent of jets, the U.S. industry has produced seats for price-sensitive leisure passengers and schedules for convenience-sensitive business customers in the same "factory," using the price-elastic leisure demand to help support network and frequency expansion that, in turn, made air service more valuable to customers willing to pay more for convenience. As service expanded, still more seats were available for sale at low prices to leisure travelers. As more of them showed up, they supported still more schedules that could attract even more business revenue, to the point where you could go from anywhere in the U.S. to anywhere else in the U.S. and to many places in the world with no

more than one stop on the same airline, usually more than once a day.

The present process is a cycle running in reverse: As fuel has gone from $30 per barrel to near $150, fuel costs have gone from around 10 percent of network expenses to more than 40 percent. This has forced prices up in an effort to cover costs. As prices go up, price-sensitive travelers leave the system. Flights are consolidated into larger aircraft to get CASM[4] down to where RASM[5] has a prayer of covering it. As aircraft size rises and total passenger volume falls, the system shrinks. As the system shrinks, it becomes less attractive to convenience-oriented travelers and they resist paying more for less, hitting the road or taking fewer trips, causing the system to shrink some more. We have started down that road. Where will it end?

Well, we don't really know. What will oil prices be? Will technological innovation or process improvements lower the components of CASM other than fuel? Will leisure transportation continue to be produced jointly with business transportation? Will airlines become more specialized, and how much cost can be saved or convenience increased by specialization? How rapidly and pervasively will households and businesses find substitutes for air travel? And we haven't even reached the question of what the macroeconomic environment will be as all this plays out. It will have a big influence on the magnitude and rate of change.

But we do know this: If oil prices stay up, the system is likely to look very different than before simply because there won't be enough business to sustain the old system. And we know that the transition to whatever is the new structure will cause a lot of pain to customers, airlines, labor, financiers, and civic parties. Some will guess right about where they fit into the new universe and how to get there; many will guess wrong.

We are beginning to get calls to stop this movie and to write a new script, with the stopping and writing done by government. We have heard calls for "planning," for freezing capacity and then shrinking it proportionately by existing firms. We have heard suggestions that the government should enforce pricing on a sum-of-segment basis, without regard for the true economic cost of seats that are more valuable when produced together with those serv-

4 [Cost per available seat mile.]

5 [Revenue per available seat mile.]

ing other itineraries or that might otherwise go to waste. We are told that without this kind of intervention, there will be a continued and inexorable tendency toward overinvestment, overcapacity, and losses, ending in a cataclysm that will leave the country without air service. (I call this the Yogi Berra argument: "nobody goes there anymore; it's too crowded"). Since airlines are a vital public service, the industry should be regulated like public utilities. While we are at it, we are told to overhaul the bankruptcy laws to prevent bankrupts from competing. And finally, we are told that the same government that we are counting on to do all this planning and implementing is the government that has been unable for twenty-five years to modernize the ATC[6] system and that we need to ignore the paradox and tell that government to get on the stick.

We are also told that we can accomplish all this without eliminating healthy competition, although we are not told how. And we are told that despite the fact that we will move the industry to a competition-restricted cost-plus model, we can we can break the "stranglehold" of labor on the industry by imposing compulsory arbitration, somehow wishing away the effect of labor leverage on a diminished industry that the arbitrator knows is protected from the competitive consequences of its settlements.

Those who offer these arguments have been skeptical from the outset that a liberal market economy can be made to work in the airline industry. Their theoretical argument is an old one: that an industry with substantial fixed or common costs will be unsustainable as competition drives prices to levels that don't allow the common costs to be recovered. This argument proves much too much: If we really believed it, we'd have to regulate virtually every industry, because virtually every industry has some fixed and common costs. If it were true, the only difference among industries would be a difference in the rate at which they disappear. But every supermarket pays rent; every company has overhead and capital equipment and yet costs are recovered.

Of course, drastic reductions in demand always leave an excess of capital and overhead that can't be supported. During the Great Depression it looked like market capitalism was dying or dead and nobody would ever recover those costs. Many thought virtually every business needed economic regulation but, even

6 [Air traffic control.]

though the economy as a whole remained unregulated, when the demand that had dropped dramatically recovered common costs were recovered again and firms and market capitalism survived.

We shouldn't really be surprised at the calls for reregulation. While airline assets are moveable, they are long-lived, and the skills of those who work with them can be highly specialized. People who own and manage those assets, people who work with them, and people who depend on them, such as cities that have grown in conjunction with air transport (for example, as passenger or cargo hubs or the home for companies that depend on air transportation) find that the business can change faster then they can find replacement uses, jobs, and service. That causes pain. A lot of pain.

What makes it worse is that the airline business is very cyclical, depending as it does on both disposable income and business activity. When a structural shift in costs is combined with a slowing of the business cycle, a bigger transition is imposed. At the moment, we are in a cyclical "double whammy": business activity and disposable income (some of it fueled by consumer debt) has gone from boom to near-bust in just two years and fuel costs have exploded, going from between 10-15 percent of total costs to 40-50 percent in the same period.

As costs have risen, airlines are pursuing domestic supply adjustments in an attempt to raise load factors and support price increases. Seasonal changes, rising prices, and an economy that has softened further, will finally force significant domestic capacity reduction this autumn to chase declining demand. We are seeing airports drop off networks and small cities lose air service. But what has already occurred is miniscule. And while some airlines plan substantial cuts for this fall, most have cut only slightly. The planned domestic cuts in aggregate only take us from the record supply levels of this spring and summer back approximately to levels seen last year. They are still a small fraction of the cuts that will be required to produce a profitable new equilibrium if oil prices stay high.

Reregulation wouldn't affect the price of oil or the fragility of the economy. Those fundamentals will take time, perhaps a lot of time, to fix. In the meantime, to adapt to these realities the industry will need just the kind of innovation and flexibility that regulation is designed to impede. We can't make changes necessary to achieve economic profit while preserving social utility, whatever

the cost environment, without answering some important questions:

What is the minimum level of frequency that business travelers will find useful and keep networks commercially viable?

Precisely how do business travelers trade off ground travel and schedule frequency? Will they use more remote airports that have lower costs and prices? Will they drive farther for schedule frequency? How much farther? For how much more frequency?

What is the smallest aircraft that can be used profitably to provide that level of network convenience?

What kind of an aircraft might that be, a jet or turboprop or some hybrid like the geared fan? If it is something new, how long will it take to get it and what do we do in the meantime?

How much is it worth paying in capital costs to economize on fuel costs? Can the flexibility of low capital costs be used to position aircraft for network convenience, mitigating loss of business demand?

To what extent is the optimum size, extent, and specialization of an airline "factory" (a single firm) different from the optimum size of an airline "product line" (the network it and its subcontractors and alliance partners sell to the public)? Is there an efficiency limit to airline firm size?

Can hubs be made operationally more efficient and less wasteful of aircraft time, facilities, and labor?

Should leisure travel for price-sensitive customers be produced separately from business travel networks, as in much of Europe, or together, as in the U.S. up until now?

What features of air travel do customers insist on? What service features should be bundled and what offered à la carte? What features will they buy?

What will people spend their money on if airline travel becomes more expensive, making individual vacations and distant second homes less attractive ways to spend discretionary funds? Will they still visit their friends and relatives, or will they post pictures on the web and send them fruitcakes at Christmas? To what extent will demand dry up and to what extent will it shift to cheap charter-like airlines that put air and ground arrangements together?

There are so many variables and contingencies that we don't now know the answers to these questions. Certainly, no government effort to find and implement a planned answer can be conducted free of intense interest-group politics and crippling complexity. Nor can it be conducted quickly (consider the FAA's struggle with sectional and labor interests in its efforts to restructure ATC). There would be no magic in outsourcing this decision to a private monopoly, either. Any single management will be limited by its own history, talent, circumstances, prejudices, and incentives. In short, neither an all-seeing government nor any single private management can be relied on to predict the shape of the industry as we move through what may well be a terrible and rapidly-changing period.

What is essential is that we generate multiple competing predictions, along with the freedom for firms to innovate using them and see which innovations flourish and which ones die. Only a deregulated market can do that.

Time puts a golden haze over our memories. We have forgotten how different the world that CAB[7] regulation made was from the world that was waiting to emerge after deregulation. It's important to remember that the route system that the CAB made didn't survive even the early years of deregulation. Deregulation has brought the public enormous benefits in price and service and offered the business world tremendous opportunities that the CAB didn't invent, and some that it suppressed. Some examples:

It didn't create semi-ubiquitous hub-and-spoke networks. Even Delta's Atlanta hub was an unintended accident of the way its route certificates were written.

It didn't create low-cost point-to-point PSA and Southwest.

It didn't create cheap and stylish JetBlue or its niche ancestor, New York Air.

It didn't create leisure-focused, small-market Allegiant, although it hoped to do something like that with Supplemental Carriers and failed, partly because of the restrictions it imposed on them to keep them from competing with trunklines.

It didn't create route systems that linked dozens of international cities with interior U.S. gateways.

It didn't create alliances.

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7 [Civil Aeronautics Board.]

We could go on, but you get the point.

It was the freedom to experiment and innovate provided by deregulation that created these, along with the dozens of mistakes that emerged and disappeared. Some were ideas created and suppressed while the CAB had the power to suppress them. Some were not even thought up until there was some prospect of putting them into practice. Some were born of the desperation produced by competition.

Not only didn't regulation create the modern industry, it couldn't protect the industry that it did create from the outside world or from itself.

Regulation couldn't prevent overcapacity. The industry operated at load factors around 50 percent, lower in many markets. Despite a five-year CAB effort, including an illegal route moratorium. Widebody load factors declined to 30 percent or so in transcontinental markets in the early 1970s and the industry was still losing money in 1973 and experienced only weak earnings in 1975.

It couldn't prevent oil shocks or their effects on profits (remember 1973).

It couldn't make all airlines profitable because it could never find a rate level or even a prescriptive formula (the aged among you will remember the DPFI[8]) that allowed weak or poorly managed airlines to make a profit in competition with stronger airlines.

Regulation made airlines vulnerable to labor by imposing industry-wide rate structures and preventing bankruptcies, insuring that airline labor couldn't kill the goose that laid golden eggs by squeezing it too hard.

So reregulation will get us the worst of both worlds. It will not be able to "stop the movie," even if it slows it for a while. And trying to do so will simply postpone the inevitable adjustment and is a prescription for waste:

Waste from dysfunctional patterns and practices that will be preserved. Waste from opportunities that won't be pursued. Waste from seats that could be sold but will go empty. And waste from inefficient wealth transfers to politically powerful interests

8 [Domestic Passenger Fare Investigation.]

at the expense of the traveling public and the economy as a whole.

The airline industry is not unique in its vulnerability to transition. Consider the railroad industry: It went through nearly 100 years of agony as a result of government-imposed obstacles to adaptation to the effects of 19th century overbuilding and of 20th century technological changes like the rise of trucks and pipelines. Regulation responsive to the complaints of labor, sectional interests, and competitors blocked mergers and route realignments, as well as the new rates, high and low, that would make it possible to implement labor-saving technological innovations like unit trains and centralized, automated controls. Only deregulation allowed forging today's system of large networks and specialized carriers that is viable and economically competitive.

Consider the airline industry's current siblings-in-agony, the domestic auto manufacturers. The openness of the industry to foreign competition and foreign capital has resulted in the U.S. production of millions of vehicles a year adapted to the new prices of oil, while forcing the producers of products that consumers no longer want to engage in a forced march toward innovation in the hope of survival. Does anyone think that we'd be better off as a country trying to impose industry-wide output cuts and to force consumers to buy proportionate numbers of Expeditions, Suburbans, and Ram trucks, rather than more efficient vehicles? Ford has just announced a complete makeover in its lines of cars and the relationship of its U.S. and world products. Does anyone think we'll get to a sustainable automobile industry faster if we regulate and dictate its adaptation?

Adaptation is occurring. The vehicles we need are being built and sold in the United States. Not many of them are being built in Michigan and St. Louis and St. Paul and many don't have U.S. brand names on them. But the industry is hurrying to adapt and U.S.-based companies have been forced to join the race. As a patriotic sentimentalist, I hope that they will succeed, but I don't think we'll hasten the day that that will occur by trying to preserve the industry as it was in 2005, let alone in 1978.

Michigan and Indiana and Missouri are reeling from the changes in the auto industry. And in the same way, if it turns out that we need radical changes in the airline network, there will be plenty more agony to go around in those places and elsewhere. (Why fly to Las Vegas if you can take a bus to Connecticut, New

Jersey, and their analogs around the country in less time and at a fraction of the cost?) Anticipated pain is already producing rumblings in Congress that there might be a public duty to halt or slow service changes as airlines respond to oil prices. It's not to our moral credit to ignore the pain that industrial adjustment creates and, being practical, we ignore that pain at our political peril. So if airline-adjustment pain continues or intensifies, what should the government do?

First of all, like doctors, it should do no harm. This means not standing in the way of adaptation and not trying to guess up front what will work. Picking winners and shaping industries (sometimes known as "industrial policy") hasn't worked here in the past. It hasn't worked in Europe, it hasn't worked in India or China or Japan and there is no reason to believe it will work here this time.

In fact dynamic growth has occurred in just those countries and industries that have moved or stayed away from industrial policy. The problems with it are obvious: First, the policy always somehow protects the interests of everyone already in the game. The decisions made are hostage to political pressures and interest groups of all sorts. Second, by the time you get everyone to agree on what should be done, the circumstances have changed again so that the policy is outmoded. Finally, it's bad enough that the outcome is often inefficient; but even worse is the irresistible pressure to validate the decision by suppressing alternatives that might compete with the plan or prove it wrong.

What we need instead is the combined product of many firms with a great deal at stake striving to survive and prosper in the environment that is emerging.

Second, the FAA should build an ATC system that reduces costs by using airspace efficiently, reducing or eliminating holds and circuity. It should also promote its efficient use by letting users face the costs of serving them and letting them decide how much they value it. That might best be done by removing the system from appropriations and labor politics, but I don't kid myself about the political difficulty of doing that. Even without that step, something has to be done to overhaul the present process or we will never get the system back into phase with the demands the real world places on it.

Third, whether or not oil prices fall, the bankruptcy laws should be revised to reduce even further management's exclusive

right to propose a reorganization. I am not suggesting forced liquidation here and certainly not suggesting that we restrict the right of firms in reorganization to make the most efficient economic use of the assets they have by competing where advantageous. What I am suggesting is that managements that have failed to adapt to a changing environment be subject to being pushed aside for a competing plan of reorganization, with liquidation a real alternative if no reorganization plan seems likely to succeed. This will promote innovation and adaptation and minimize distortions to competition while preserving intangible value where it exists.

In Australia, filing for bankruptcy ousts management. A new temporary management weighs possible reorganization against liquidation and proceeds accordingly. This may throw away specialized knowledge unnecessarily and probably goes too far in the opposite direction from where we are, but forcing existing management into a real race on neutral ground to salvage efficient use of remaining assets is the right balance to strike between using firm-specialized knowledge and perpetuating the jobs of incumbent executives at the expense of creditors and competitors.

Fourth, it means stepping up to what preserving air service to ease political pain really costs. If we want an Essential Air Service Program to perpetuate air service to smaller and medium-size communities, we need to recognize that it will become a lot more expensive at $4.00 per gallon than at $1.00 and if service cuts expand the number of protected points. Whether there is the political will to subsidize more expensive service to more airports, many of which are a relatively short drive from other airports that have service, will be tested as the number of such airports goes up. But whatever the level of service we really want, we should step up to paying for it directly and not hold the industry hostage or provide special regulatory carve-outs to provide it.

Fifth, it means trying to assist industrial development alternatives for communities trying to find alternative uses for abandoned facilities like airline hubs and maintenance centers.

Sixth, it may mean being freer with unemployment insurance in industries especially hard hit by changing economic conditions, but tying it to job retraining for younger workers and carefully designing it so that it doesn't destroy incentives to adapt. We should ease the transition to other forms of specialized job knowl-

edge, but make sure not to create more rooms full of idle auto workers with no incentive to find other employment.

Seventh, it means continuing to move to protect pensions from underfunding and ultimate abandonment in bankruptcy and perhaps strengthening the PBGC[9] system still further so that the failure of airlines doesn't leave individuals who have earned pensions stranded at retirement.

And finally, it means moving to some sort of health care system not tied to employment, so that loss of an airline job (or an auto company job) doesn't mean loss of health insurance and potential financial catastrophe to workers and so that shrinking airlines are not burdened by legacy health costs.

I am aware that the better ATC system paid for by users that we've been long waiting for is not likely to come soon. And I am aware that my other suggestions address problems that are very complicated as well and risk mistakes. But allowing the economy to adapt to a comprehensive set of new energy prices and policies seems increasingly important now, and I'd rather see mistakes made in measures designed to lubricate change and anesthetize those who experience pain from change than mistakes made by efforts to keep change from occurring.

So to sum up:

We don't know what's going to happen to the price of oil. If it stays above $100, the industry will change a lot and if it stays above, say, $125, the industry will change radically. In either case, I don't know exactly what will emerge, but I don't think anyone else does either. I know it is very unlikely to be an 80-percent scale model of what exists today and we shouldn't try to build one. We will see less total service at higher prices, and both business and leisure travelers will find other ways to spend their money to achieve their goals. The leisure and business ends of the market may separate, perhaps becoming something more like what exists in Europe and is emerging in Asia. In that world, we may see fewer hubs and more turboprops connecting to them but more jet service twice a week from Appleton, Wisconsin to Orlando, tied to a hotel package and tickets to see the Mouse.

No one really knows how the public will react to a dramatic shift in the relative price of air transportation and other uses for their money. Let's not try to outguess demand with a planning

9 [Pension Benefit Guaranty Corp.]

process designed to enforce a new order, but rather let's allow as many players as possible to make their own guesses about where we should go, putting their money where their mouths are.

"Depend upon it, sir, when a man knows he is to be hanged in a fortnight, it concentrates his mind wonderfully," Dr. Johnson is reported to have said. Let's not break the concentration of airline managements by saving them from grisly contemplation. Let's focus instead on minimizing the damage to those who depend on the potential victims.

Thank you for listening.