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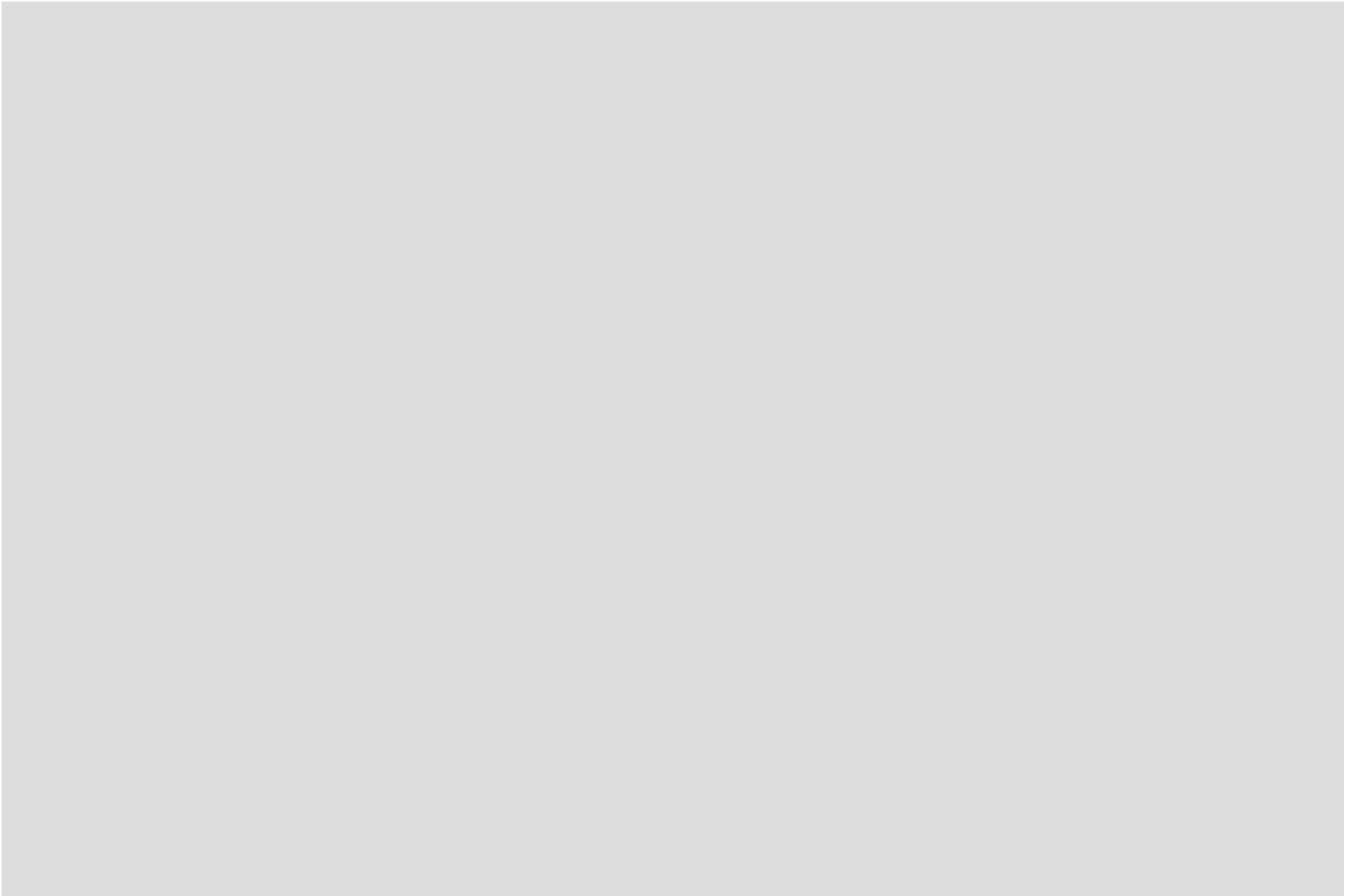
Liberalization: Lessons from Deregulation of the U.S. Airline Industry

James I. Campbell Jr.

Topics

- 1. Airline Development Before Deregulation, 1930-1978**
- 2. Airline Deregulation Act, 1978**
- 3. Airline Development After Deregulation**
- 4. Implications for U.S. postal sector**

1. Airline Development Before Deregulation, 1930-1978



1.1 Early Development, 1903 - 1929

- **Origins of airline industry**

- 1903. Wright Brothers, first heavier-than-air flight.
- Patent battles delayed aviation in U.S.
- World War I accelerated aviation in Europe.
- “Barnstormers,” crop dusters

- **Post Office subsidies**

- 1918 - 1926. First airmail service, operated by Post Office.
- 1925. Kelly Act
 - First airmail contracts
 - 1926 amend. Begin subsidy (air transport rates exceed postage).
 - 1928 amend. 10-year route certificates. PMG authorized to lower airmail postage and pound-based air transport rates.



“Few groups of business men have seen their economic position change so suddenly and so greatly by the decision of single administrative official.” Paul T. David, aviation economist

1.2 Creation of the Big Four, 1930

- **Post Office contracts 1930-34**
 - Watres Act, 1930
 - Increased POD authority to negotiate and consolidate contracts with airlines
 - Rates based on space-mile rather than pounds (effective subsidy).
 - PMG Walter Brown
 - Told major airlines “*agree among themselves as to the territory in which they shall have the paramount interest.*”
 - Avoided competitive bids
 - Forced mergers before awarding generous contracts
 - “Big Four” created:
 - United (northern); TWA (central); American (southern); Eastern (east)



TWA contracted for the first DC-1s in 1933.

1.3 Scandal and Regulation

- **Scandal**
 - Major Senate investigation chaired by Sen. Hugo Black.
 - Feb. 9, 1934. Pres. Roosevelt cancelled all airmail contracts
- **Emergency Bids, spring 1934**
 - Army was unable to carry the mail.
 - Apr. 1934. Emergency contracts awarded.
 - 80% won by Big Four
 - 20% won by other airlines (became the “Little Six”)

Washington Post, Feb. 10, 1934

Roosevelt Cancels Air Mail Contracts; Army Planes to Fill Breach

President Believes His Action Warranted by Fraud Evidence.

Move Seen Doom For Private Lines

Air Line Stocks Drop on West Coast Exchange Following Order.

By Leon Darr, Jr.

Charging fraud and collusion, President Roosevelt yesterday directed the cancellation of all air mail contracts with domestic companies—thus reshaping, is not collapsing, the Nation's network of private transport concerns.

To take their place, he called on the Army air corps, whose swift observation planes and bombers will convey all air mail, beginning a week from Monday. Out of this temporary expedient was seen the development of a Government air mail.

Faced with disclosures of the Black investigating committee, the President cut a Gordian knot in characteristic fashion, at one bold stroke logging off all subsidy to air mail transport and projecting the Government into its place.

Believes Action Warranted.

He announced the cancellation, in untroubled manner, at his regular press conference, explaining he was acting on what was believed to be sufficient evidence of fraud and collusion in awarding the contracts, which were handled by former Postmaster General Walter F. Brown, of the Hoover Administration.

With a smile as this momentous news quieted the strong of correspondents grouped about his desk, he turned to confer for a moment with Postmaster General James A. Farley, who, as head of the department concerned, a few minutes later actually signed the order canceling the contracts, effective February 13.

The Postmaster General, the Secretaries of War and Commerce, the President continued, are to cooperate to assure a continuance of the air mail, the War Department furnishing all necessary planes, pilots, fields and equipment. Beyond that, action was so swift no plans were developed.

Questioned if this meant new bidding for air contracts or the extension of the Postoffice Department into the field of air transport—an inevitable choice which now confronts the Administration—the President said he was unable yet to answer.

Private Industry Doomed.

Belief was widespread, however, that the abrogation of all existing contracts doomed mail transport as a private industry, that the next step would be the development of another Federal service. This opinion was strengthened by the law, which prevents companies whose contracts have been withdrawn from bidding again for a period of five years.

In an impromptu interview closely following the President's

Continued on Page 1, Column 1.

Domestic Air Mail Awards Are Abrogated

Roosevelt Orders Army to Fill Breach After Discontinuance.

Continued from Page 1.

action, Gen. Douglas MacArthur, chief of staff, paced the floor enthusiastically at this new opportunity for the Army, which he emphatically declared is ready and thoroughly competent to take over the difficult air mail.

Reaction in other quarters was not so jubilant, as holders of air transport stock awaited a falling market, foreshadowed by a sharp drop on the San Francisco exchange, still open when the news broke. Affected are 14 airline companies, mostly owned, however, by huge holding companies.

An executive order was signed immediately by the President to care for the emergency. It follows: "Whereas, by an order of the Postmaster General of the United States all domestic air mail contracts for carrying the mails have been annulled; and

"Whereas, the public interest requires that air mail service continue to be afforded and the cancellation of said contracts has created an emergency in this respect; "Now, therefore, I, Franklin D. Roosevelt, President of the United States, do hereby order and direct that the Postmaster General, Secretary of War and Secretary of Commerce, together with other officers of their respective departments, cooperate to the end that necessary air mail service be afforded.

1.4 Civil Aeronautics Board, 1938

- **Four-year congressional debate**

- Extend jurisdiction of ICC or create new agency?
- Temporary legislation froze airline system after 1934 bids

- **Goals of CAB**

- "the promotion of adequate, economical, and efficient service . . . at reasonable charges," and
- "competition to the extent necessary to assure the sound development of an air-transportation system."

- **Powers of CAB**

- Route certificate: control of entry by route
- Rates: just and reasonable, non-discriminatory
- Antitrust: CAB could exempt airline agreements
- Approve mergers
- Subsidy: payments to air carriers

1.5 CAB administration, 1938-1974

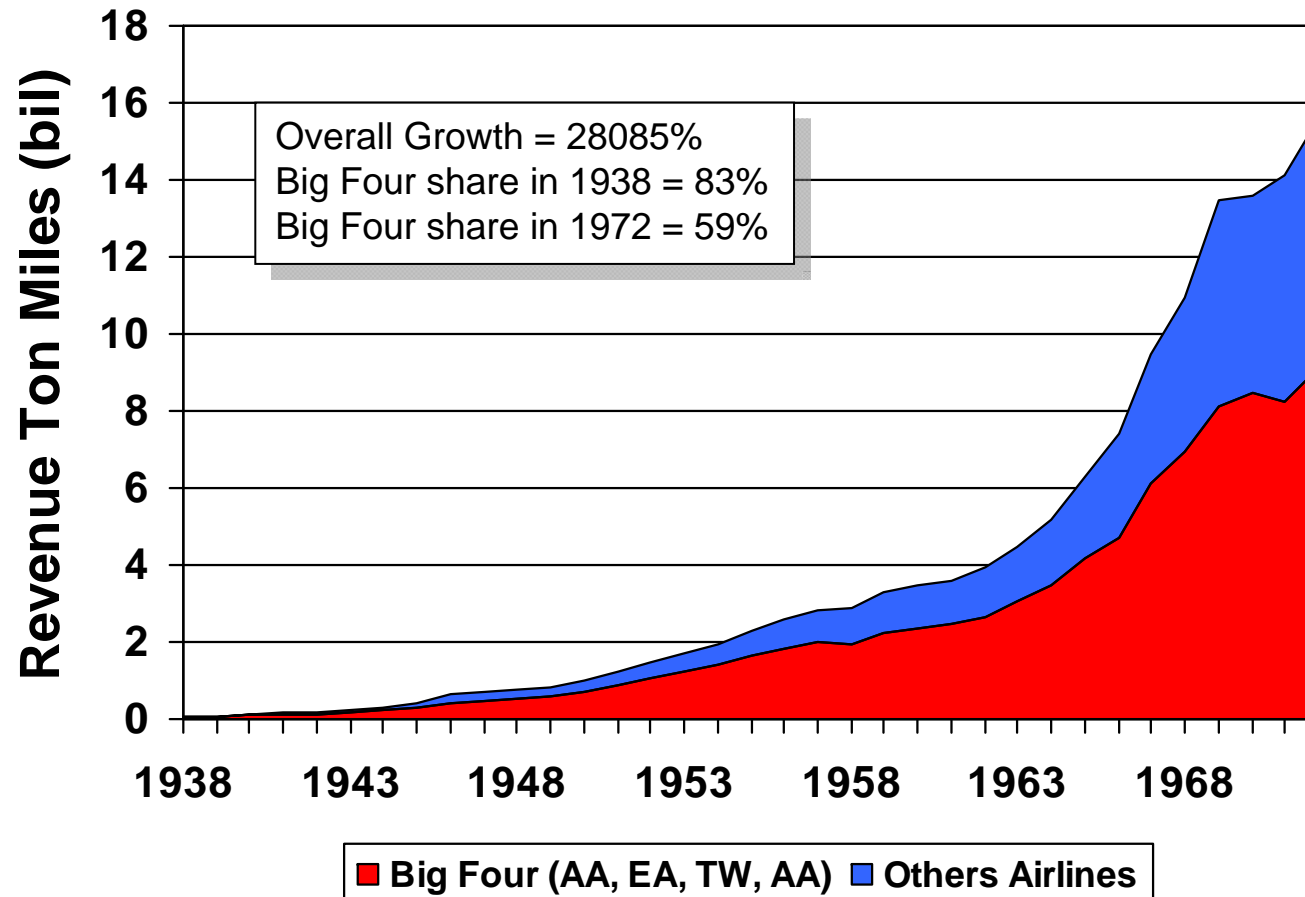
- **Congressional intent**

- Post Office Dept Solicitor Karl Crowley: "nobody in the world can ever carry the mail except the present air-mail contractors."
- Sen. Harry Truman, "*Show me that provision. If that is true, it ought to be changed.*"

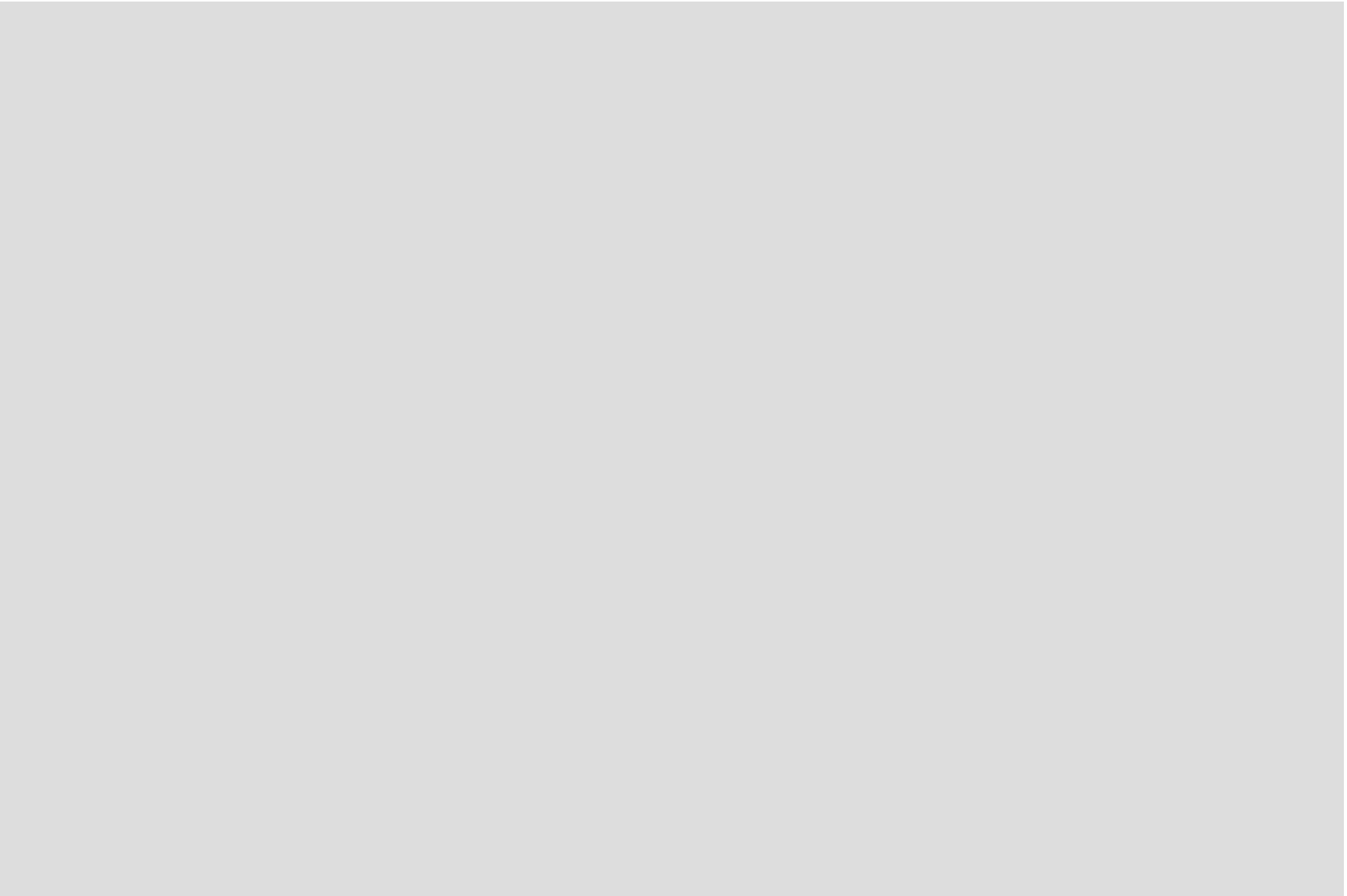
- **Effect of CAB administration, 1938-74**

- Industry grew almost 300-fold
- Entry: No trunkline carrier allowed
 - Big Four retained about 60% of business; Little Six increased to about 30%
 - Two competitive fringes: feeder airlines, charter airlines
- Rate competition discouraged; service competition promoted
- Anticompetitive agreements permitted (e.g. capacity reduction agreements)
- No airline bankruptcy.
- "*The Civil Aeronautics Act was a muddled attempt to guide competition toward a socially optimal mix of service, innovation, and economic growth.*"
 - R.H.K. Vietor, Professor Business Administration, Harvard.

1.6 Growth of domestic Airlines, 1938-1972



2. Airline Deregulation Act, 1978



2.1 Why deregulate?

- **New technology changed underlying economics**
 - 1958. Boeing 707 introduced.
 - Jet aircraft reduced long haul cost compared to short
- **Overly rigid regulation blocked change**
 - Service competition led to excessive fares
 - “ . . . and seat for your briefcase.”
 - Blockade of entry was unfair and contrary to intent of Congress.
 - Low-cost, innovative carriers prevented from offering services.
 - Unfair procedures; lack of objective standards.
- **Economists created new consensus**
 - Richard Caves (1962); William Jordan (1970); George Eads (1972); George Douglas and James Miller (1974)

2.2 Politics of Deregulation (1 of 2)

- **Major players:**
 - Against: airlines, airline employees, small towns
 - For: political leaders, CAB, excluded carriers, broad range of public interest groups
- **Cons**
 - Creamskimming: reduced service to small communities
 - ATA study: 372 routes abandoned
 - CWPS: “no useful information”
 - Destructive competition: predatory pricing, monopolization
 - Reduced safety of airline system
- **Pros**
 - Lower fares
 - Innovation
 - Improved airline finances

Against

Dependable air service has been made accessible to all Americans, whether they live in large cities or small.

. . . [Deregulation will mean] the beginning of the end of the Nation's air transportation as we know it.

-- P. Ignatius, Pres. ATA

Never in the half-century of commercial aviation has there ever been anywhere in the world a successful experiment in free airline or railroad competition.

-- Chas. Tillinghast, Pres., TWA

I have asked questions -- who wants this? And the answer I got: the academics.

-- Sen. Barry Goldwater

2.2 Politics of Deregulation (2 of 2)

- **Chronology**

- Feb. 1975. Kennedy hearings begin.
- Jul. 1975. CAB report recommends deregulation
- Jan. 1976. Kennedy comm. report.
- Apr. 1976. Senate commerce committee hearings begin.
- Jan. 1977. Carter Administration begins.
- Jun. 1977. Alfred Kahn appointed CAB chairman.
- Oct. 1978. Airline Deregulation Act enacted.

For

The present system of regulation causes higher than necessary costs and prices (which in turn suppress demand), weakens the ability of the carriers to respond to market demand and other constantly changing conditions, narrows the range of price/quality choice to the user.

-- CAB Special Staff Report

Today's regulations have not permitted the development of a system which permits the efficient movement of priority shipments.

-- Fred Smith, Federal Express

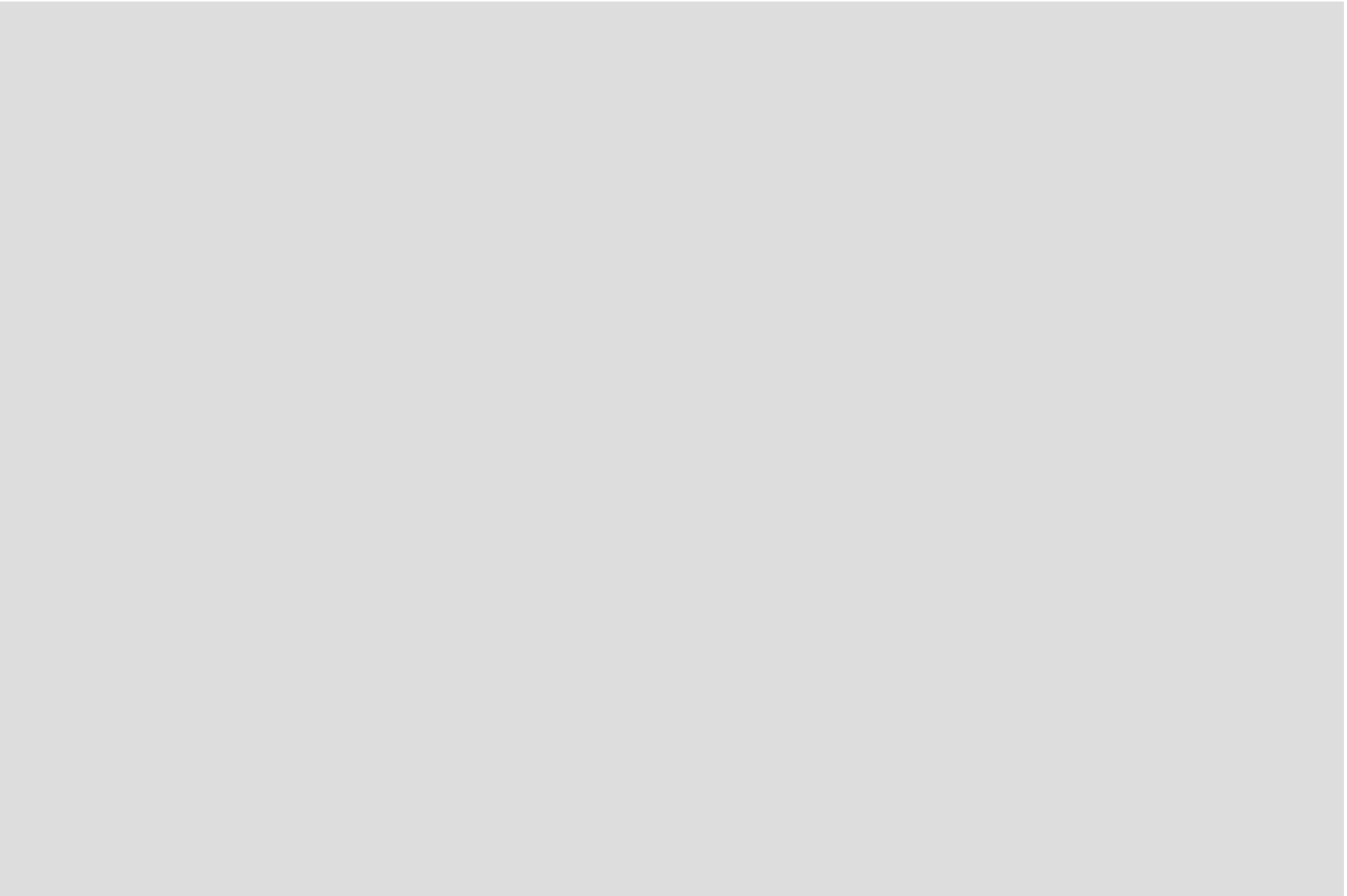
[U]nless regulatory changes are made soon, the airline industry will go the way of the railroads.

-- Sen. Howard Cannon

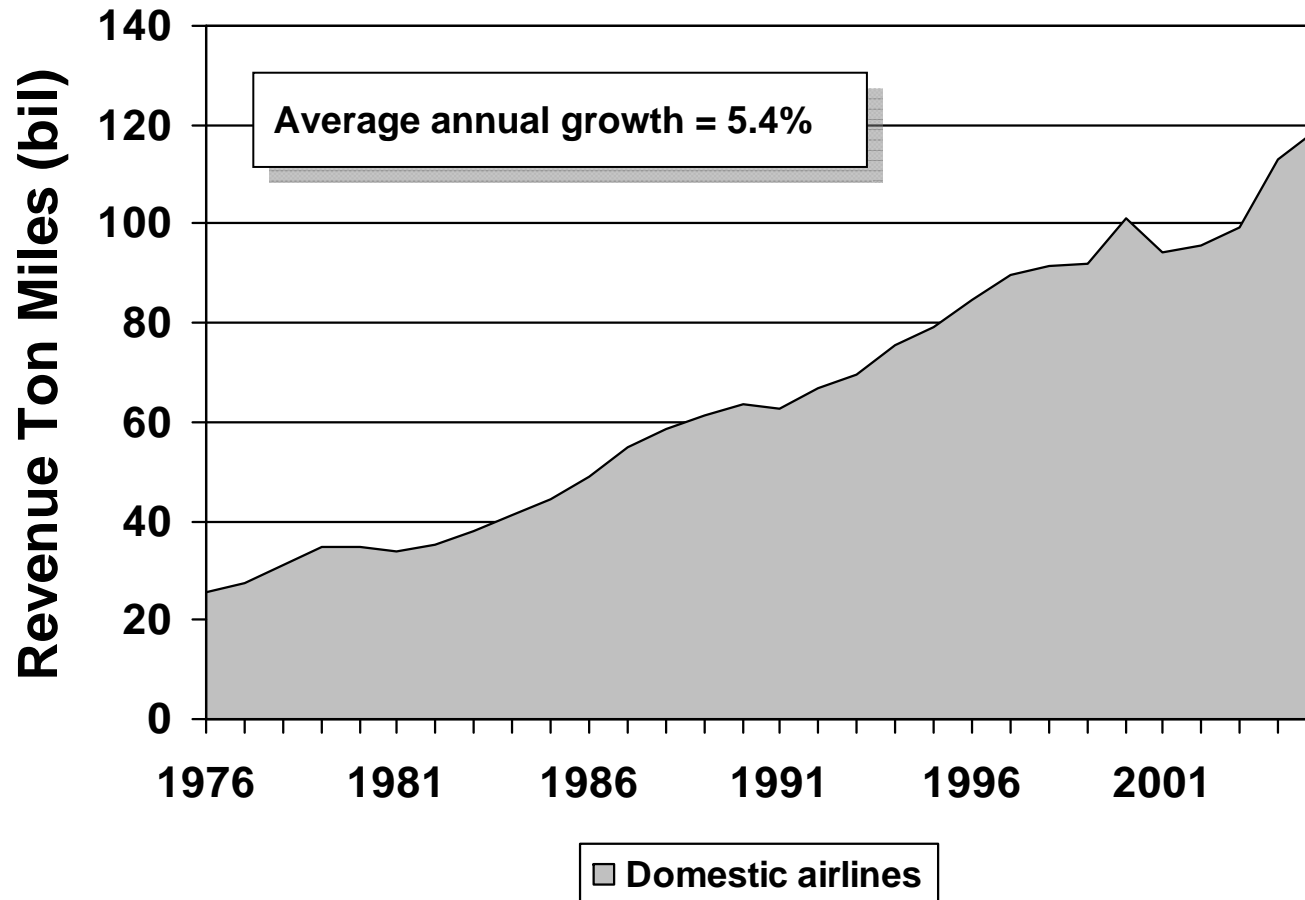
2.3 Airline Deregulation Act, 1978

- **First major sector deregulation**
- **Deregulation provisions**
 - Four-year transition period
 - End controls on entry and fares in domestic service
 - End immunity from antitrust law
 - 4-year transition: CAB abolished Dec. 31, 1982
- **Other provisions**
 - New program of direct subsidies for small town service
 - Ten-year employee protection program
 - Regulation of international airlines continued by Dept. of Transportation
 - No change in safety regulation

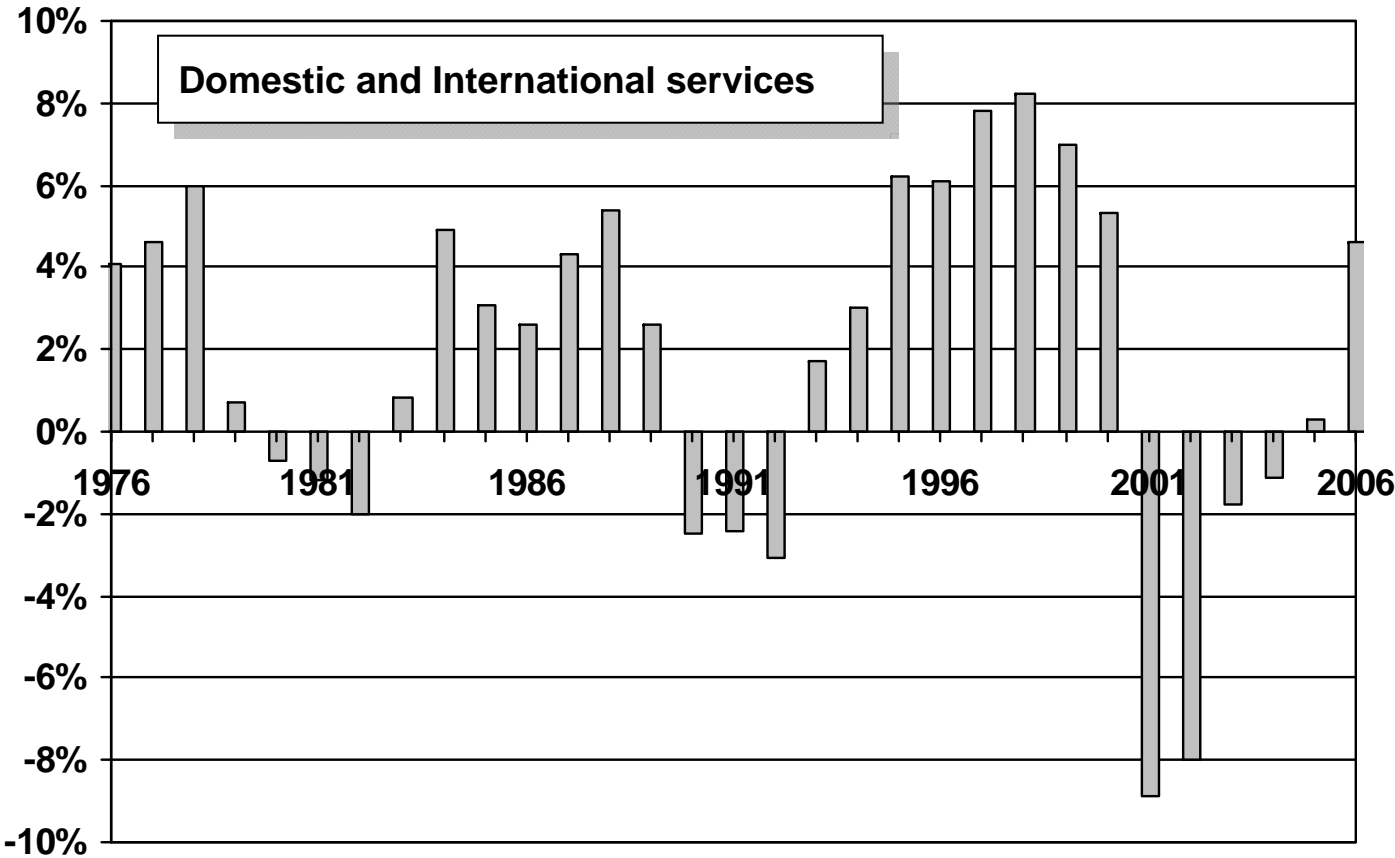
3. Airline Development After Deregulation



3.1 Growth of domestic airlines, 1976-2005



3.2 U.S. airlines' operating profit, 1976-2006



Source: Air Transport Association

3.3 Major bumps in the road

- **1980. Rising fuel prices**
 - Jet fuel increased from 39¢ in 1978 to 87¢ per gallon in 1980.
- **1981. Air traffic controllers fired**
 - Slot controls imposed on major airports hindered competition
- **2001. Terrorist attacks**
 - Annual domestic passenger volume did not exceed 2000 until 2004.

N.Y. Times, Aug. 6, 1981

U.S. SAYS GOAL NOW IS TO RECONSTRUCT AIR CONTROL FORCE

LEWIS TERMS STRIKE 'OVER'

Traffic Union Expects Talks as
12,000 of 13,000 Members
Remain Off Their Jobs

By RICHARD WITKIN
Special to The New York Times

WASHINGTON, Aug. 6— The Reagan Administration, dispatching dismissal notices to more of the 12,000 striking air traffic controllers, turned its emphasis today to "rebuilding the system" with accelerated training of recruits and better use of those available to work.

"As far as I'm concerned," Transportation Secretary Drew Lewis said at a news conference late this afternoon, "it's a nonstrike situation. It's over. Our concern is rebuilding the system."

The Administration thereby stuck to its resolve to face down the largest strike of Federal employees since 167,000 postal workers struck in 1970.

Members of the controllers' union were holding ranks; only 1,000 of the 13,000 original strikers were back at work today. Leaders of the union continued to voice hope that, perhaps with the help of other unions, they could eventually break the Government's determination.

Union Expects Bargaining

Officials of the union, the Professional Air Traffic Controllers Organization, insisted that the Administration would eventually bargain with them. "The system cannot work without us, and they know it," said Michael W. Fermon, the eastern regional vice president of the union. "There's absolute chaos at airports."

3.4 New market solutions

- **Revise price/service tradeoff**
 - Lower rates
 - Increased load factors
 - Fewer amenities
 - Increase in connections (minor)
- **Differentiation in demand**
 - Economy, Economy Plus, Business, First Class, etc.
 - Good customer benefit programs

3.5 Higher premium on smart management

- **Airline operations**

- Increased competition on airline routes
- Route restructure: hub and spoke
- Fleet simplification
- Global alliances: “code-sharing”
- Frequent flyer programs

- **Revenue management**

- More price discrimination
- More sensitive to demand, cost, competition

- **Other managerial factors**

- Computerization: reservations systems
- Labor relations more important
- Governance changes (smaller boards, different executive compensation, management changes)

3.6 Examples of poor management decisions

- **Braniff Airways**

- Well positioned regional airline based in Dallas
- Expanded too quickly; misjudged course of deregulation
- Could not cope with economic downturn in 1980

- **Texas International Airlines**

- Bought by New York financier in 1971
- Alienated unions (creative use of bankruptcy law)
- Acquired and effectively destroyed Continental, Eastern

- **Pan American**

- Could not compete in global market without U.S. feeder
- Ultimately bought National but mismanaged

3.7 Many carriers could not adapt

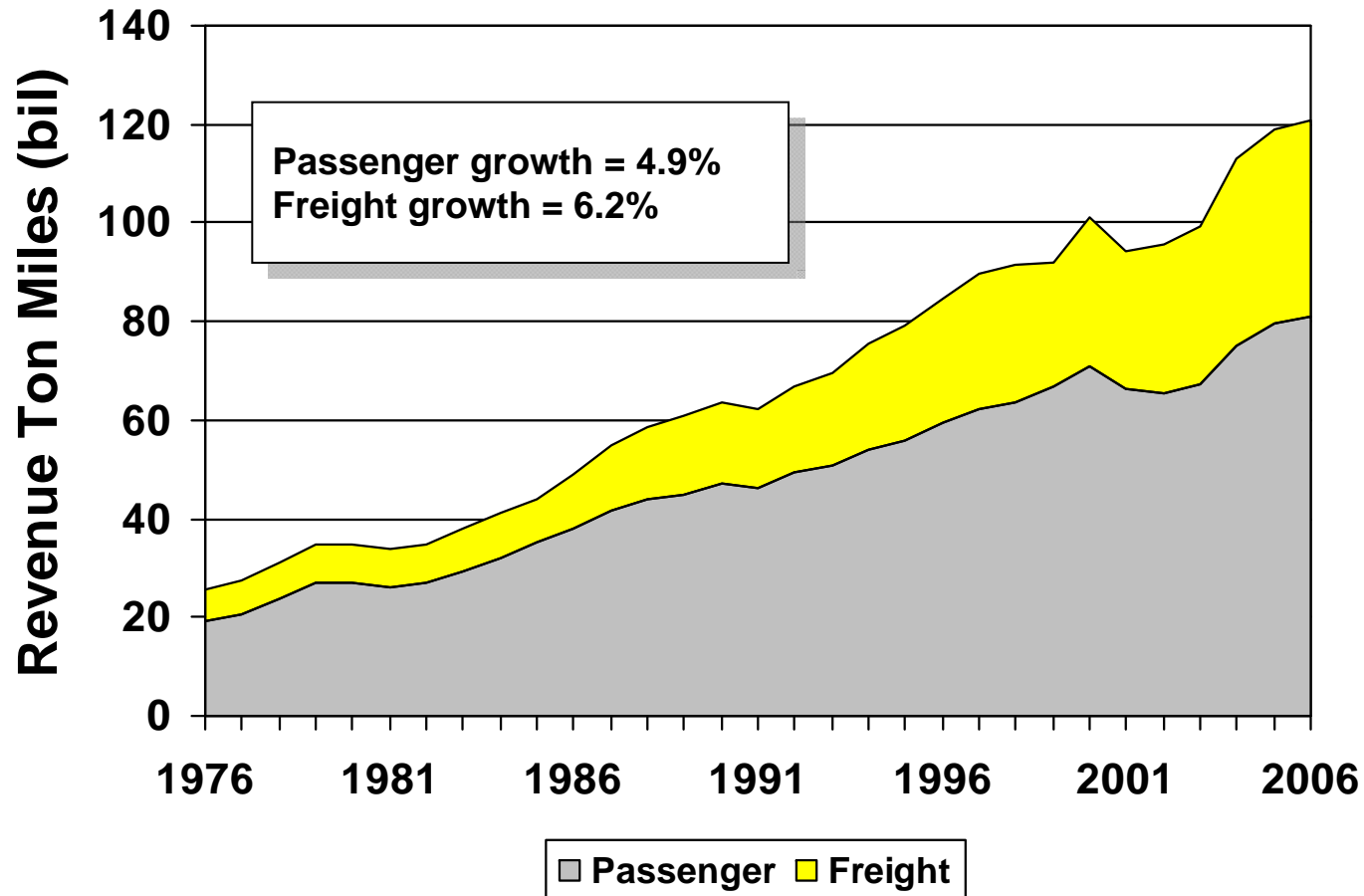
- **Liquidated**
 - Braniff, Eastern, and Pan Am
- **Acquired**
 - Continental, Frontier, National, Ozark, Piedmont, PSA, Republic, TWA, Western
- **Bankrupt**
 - America West, Continental, Delta, Northwest, United, USAir
- **Survivors**
 - Alaska, American, Southwest



3.8 Development of new markets

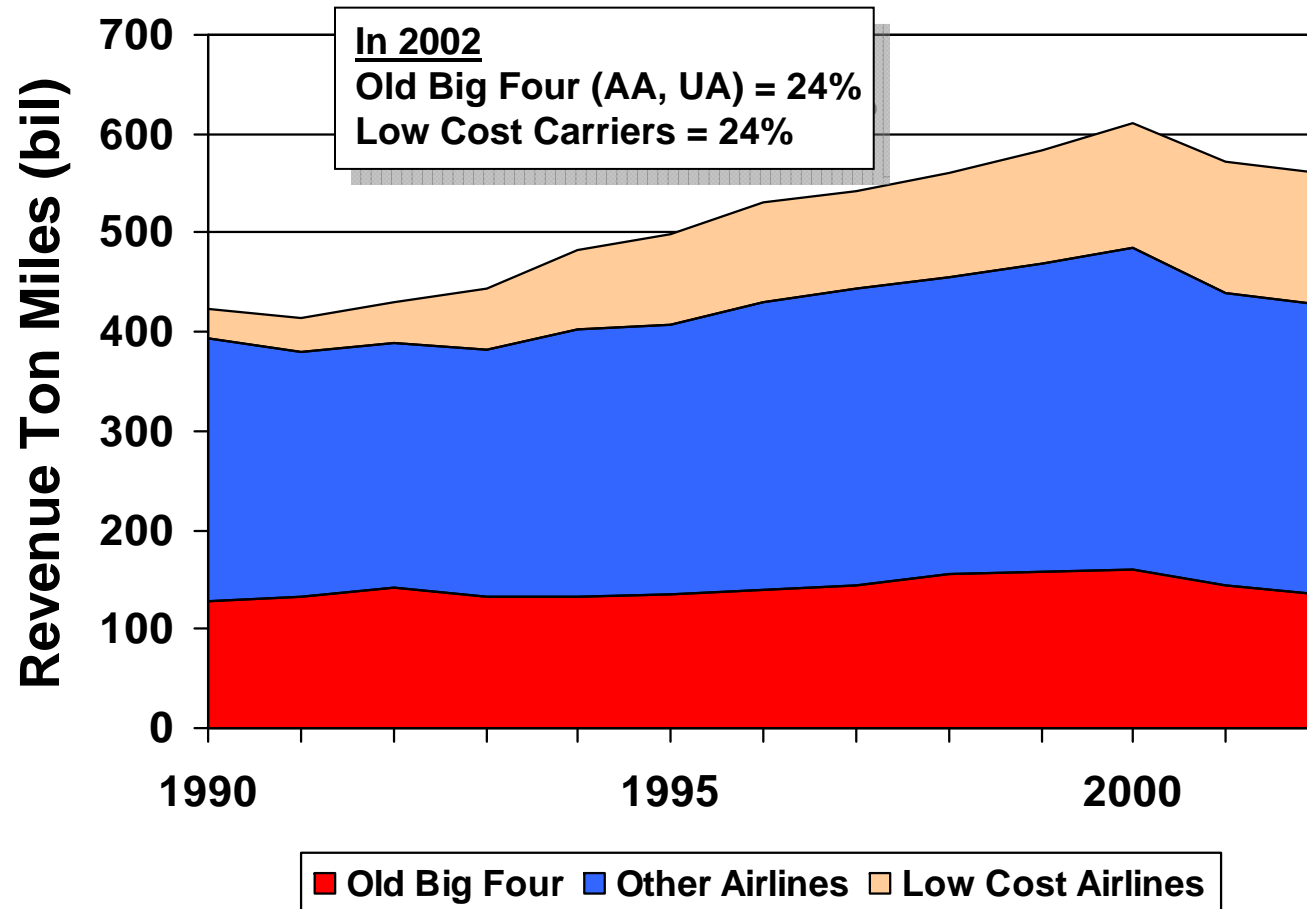
- **All cargo express and freight services (mid 1980s)**
 - Separate air transportation systems for freight
- **Low cost airlines (mid 1990s on)**
 - Dense routes
 - Underutilized airports
 - Few amenities
 - Bypass national hub-spoke networks

3.9 Growth of air freight, 1976-2006

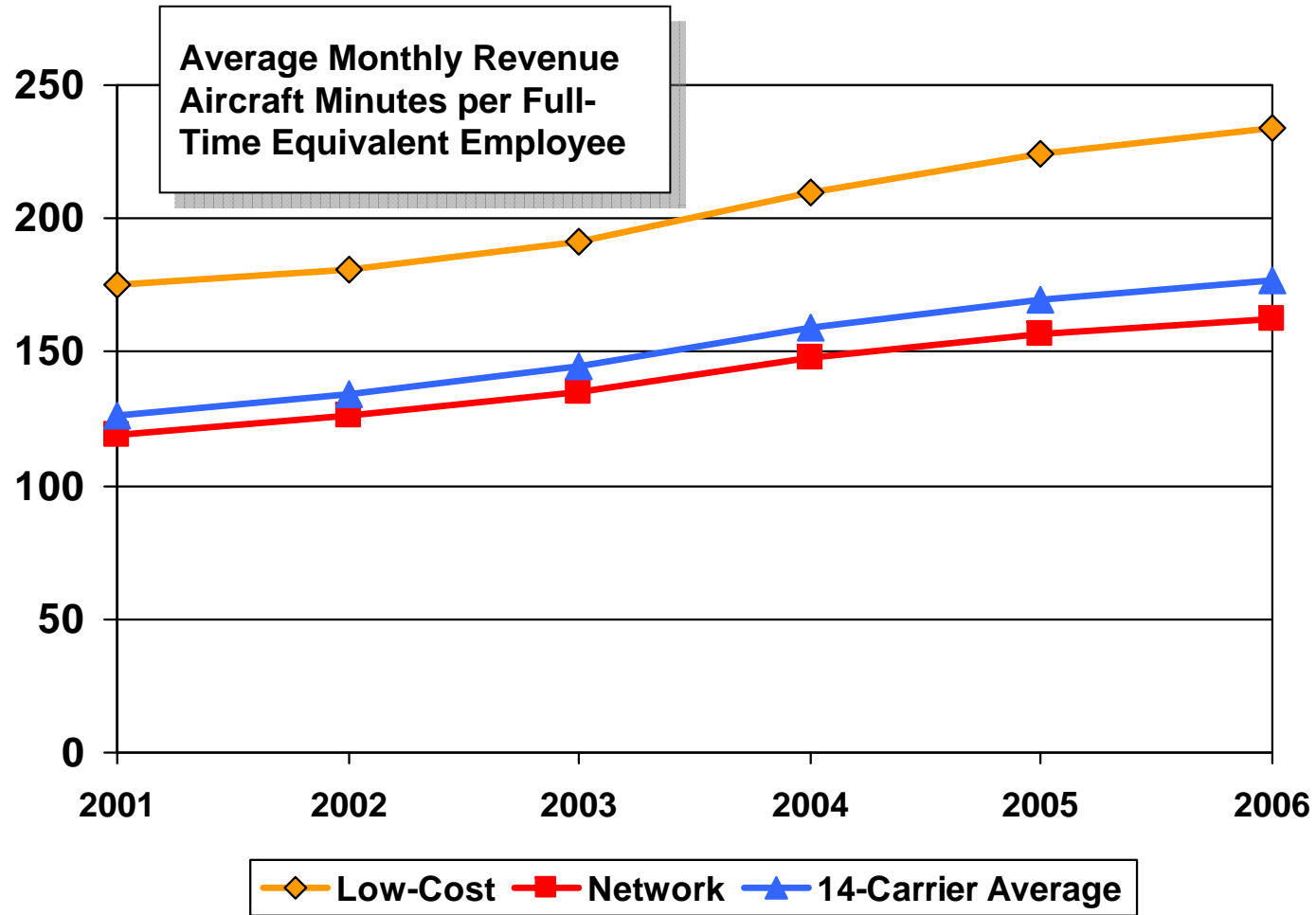


Source: Bureau of Transportation Statistics

3.10 Growth of low cost airlines, 1990-2002

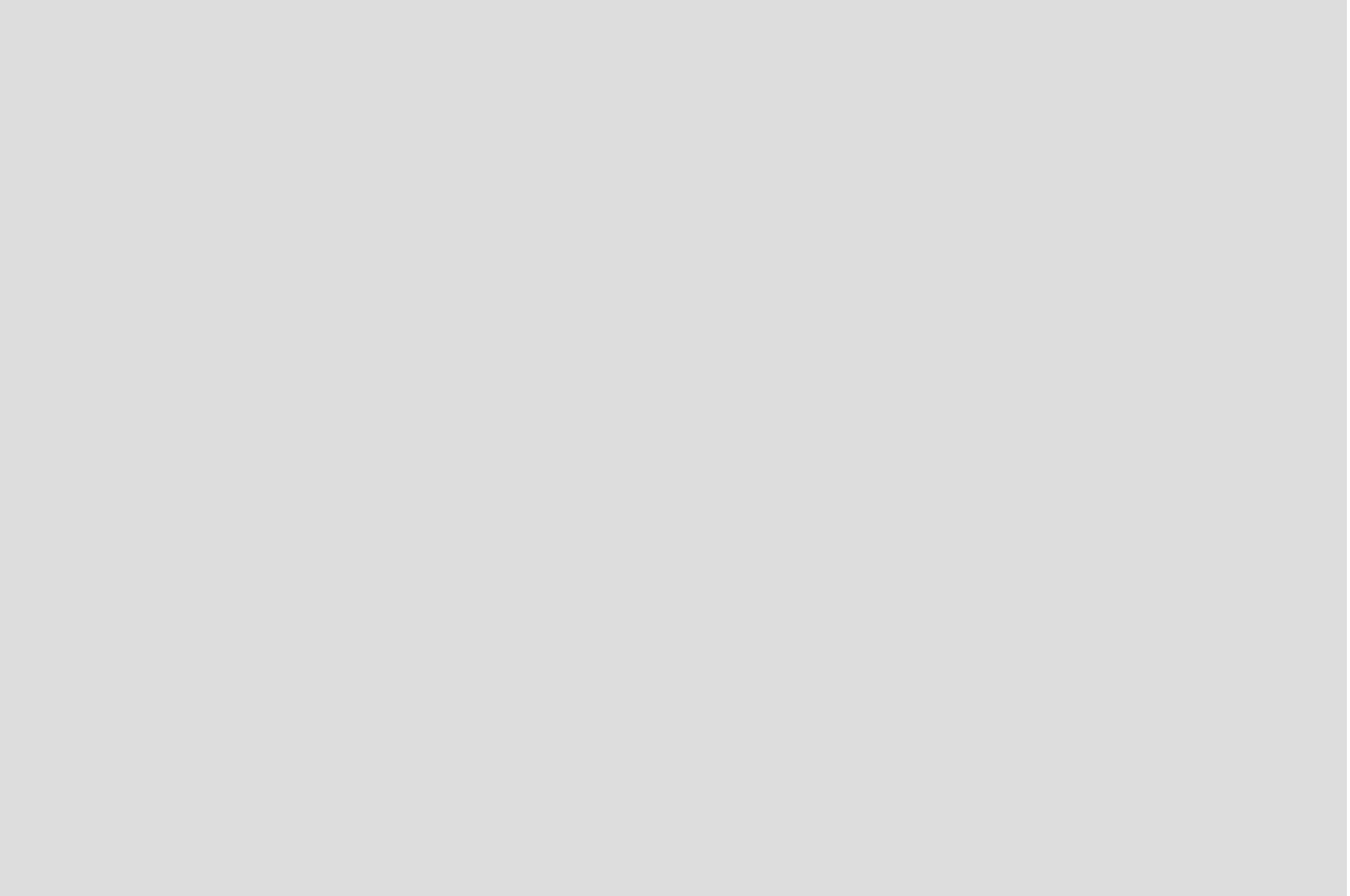


3.11 Productivity of low cost airlines



Source: Bureau of Transportation Statistics

4. Implications for the U.S. postal sector



4.1 Assessments of airline deregulation: Business Historian

As regulation shapes markets, it shapes the inner workings of firms—their investment decisions and asset mix, the operating systems..., pricing and distribution, and managerial and professional skills. At the onset of deregulation, American Airlines' route structure, marketing system, fleet, and costs were the product of regulation.

But . . . business organizations like American Airlines are much more than a set of transactions. They are human institutions, composed . . . of “organizational resources” . . . , primarily the collective skills of managers, professionals, and workers, together with operating and competitive knowledge imbedded throughout the organization—for example, in institutional arrangements, software, training programs, labor relationships, and traditions. In the airline industry, these resources were shaped by regulation, and they were initially ill-suited to unrestricted competition.

[T]he airlines' regulatory experience . . . provides a historical model of how public policy changes, of how it affects markets, and of how business firms respond strategically. . . .

More than a decade after it began, airline deregulation is less than a total success. There are competitive bottlenecks . . . , oligopolistic patterns of competition . . . , traffic congestion, and service problems. But costs are also lower and route structures more efficient; newer, safer aircraft are being financed with earned profits, and passengers generally have widespread choices of carriers and of pricing and service packages. Economies of scale and scope are better realized.

Competition scarcely appears more "perfect" in the airline industry than regulation; the problems are just different.

-- R.H.K. Vietor, prof bus adm, Harvard (1990)

4.1 Assessments of airline deregulation: Economists

Financial success in the airline industry appears to stem from a combination of factors, few of which ... have anything to do with size. Low-cost operations, and efficient network, and an experienced business-educated management can be developed, in principle, by any airline.

Although economists and other advocates of deregulation have a good track record in predicting its overall benefits, they have seriously underestimated the difficulty of transition and the time it would take the industry to adjust.

-- S.A. Morrison & C. Winston (1995)

Every passing year demonstrates . . . the superiority of the road we chose for airlines and . . . the bankruptcy of the highly managed or regulated course we have taken in telecommunications.

-- Alfred Kahn (2004)

4.1 Assessments of airline deregulation: Others

While not always neat and clean, marketplace competition in the airline industry has produced stunning consumer benefits in the form of low fares, expanded service options and product differentiation, and a steady flow of new airlines eager to challenge incumbents. As a result, more Americans fly for business and pleasure, and ship goods by air, than ever before. Air transportation has become an indispensable element of America's infrastructure and our nation's economic well-being.

-- James May, ATA (2007)

The evidence suggests that reregulation of airline entry and fares would likely reverse much of the benefits that consumers have gained and would not save airline pensions. The change in fares and service since deregulation provides evidence that the vast majority of consumers have benefited, though not all to the same degree. Although a number of airlines have failed and some have terminated their pension plans, those changes resulted from the entry of more efficient competitors, poor business decisions, and inadequate pension funding rules.

-- GAO report (2006)

4.1 Assessments of airline deregulation: Others

From the consumer point of view, the intense, ideological debate over deregulation . . . has had a major, negative impact on public policy. . . . Instead of crafting careful public policies that promote competition while restricting the abuse of market power, regulators have been largely immobilized. The pure efficiency gains that have clearly been made as a result of deregulation have been polluted by rampant abuse of market power. The performance of the deregulated industries certainly improved, but not nearly as much as it could have from the captive consumer point of view.

-- Mark Cooper, Consumer Fed. (1999)

Nearly half of American air travelers would fly more if it were easier, and more than one-fourth said they skipped at least one air trip in the past 12 months because of the hassles involved, according to an industry survey.

-- CNN, May 30, 2008

4.2 Airlines v. postal services

- **Aviation sector**

- Network transportation service
- Revenues in 1970: 9.0 billion; employees, 297,000
- Substantial economies of scale and scope
 - Fixed costs: 40%
 - Low sunk costs
- Shaped by government from origin
- Private corporations
- Oligopoly with service competition

- **Postal sector**

- Network transportation *and delivery* service
- Revenues in 1970: 7.7 billion; employees, 741,000
- Substantial economies of scale and scope
 - Fixed costs: 60%
 - Low sunk costs
- Shaped by government from origin
- Government agency
- Single monopoly with limited competition at fringes.

- **Aviation equivalent**

- Split USPS into four corporatized entities allowed to compete with one another but protected from outside competition.

4.2 Possible lessons: effects of technology

- **Aviation sector**

- Jet engine changed the economics of air transportation
 - New economics implied different commercial practices
- CAB regulation and regulated companies were slow to adapt to new technology. Politics, due process, legal procedures are poorly suited commercial problems.

- **Postal sector**

- 1970s - 1980s. Improvements in air transportation and telecommunications implied changes in demand for long-distance postal services.
 - Express companies responded more quickly than postal systems.
- 1990s - present. Internet and computers changed postal operations and demand for postal services more fundamentally.
- Government post offices slow to respond to new competition. Government regulation of express (postal, aviation, customs) slow to adapt potential of express services causing waste and inefficiency.
- *Possible lesson: Effects of new technologies are likely to be more fundamental than apparent.*

4.3 Possible lessons: the policy debate

• Aviation sector

- Defenders of status quo: too pessimistic
 - Small community service did **not** justify system regulation
 - Destructive competition was **not** inherent
 - Subsidy to air carriers was **not** necessary or efficient
 - Safety was **not** jeopardized
- Economists, etc.: right but naive
 - Fundamental not incremental reform
 - But changes were more diverse, fundamental, slower than foreseen

• Postal sector

- Defenders of status quo may be too pessimistic.
 - Universal service may be flexible (e.g. NL, UK).
 - Monopoly may not be necessary for universal service.
 - Competition may stimulate more than cream skim
- Economists, etc., may be right in broad terms, but may be incorrect and naive in specific terms.
- *Possible lesson: Policy debates tend to be simplistic and overstated, with extra measure of resistance to changing the status quo. Reform policies may be improved by an intelligent union of academic and operational insights.*

4.4 Possible lessons: business strategy

• Aviation sector

- What did not work
 - Rapid, over-optimistic expansion
 - Mergers of different cultures
 - Labor confrontation
- What did work
 - Effective management, new techniques
 - New visions (express, low cost carriers)
 - Flexibility (changing technology, bumps in road)
- “If we had to do it over again”
 - Concentrate on fundamentals
 - Look further down the road
 - Concentrate on survival

• Postal sector

- Developments to date
 - New innovations (parcel, express) dominated by private companies
 - Improved execution of traditional postal services by USPS
 - PAEA limited scope of USPS activities
- *Possible lesson #1 Long term survival is likely to require (1) fundamental responses to fundamental changes in market and (2) flexible and creative responses to unanticipated problems; government needs to give management freedom to do so.*
- *#2. Adapting postal operations to a new regulatory framework may take decades, not years.*

4.5 Possible lessons: elements of legislation

• Aviation sector

- Good points of deregulation act
 - Fundamental, not incremental
 - Entry freedom: open; allowed innovation, express systems, low cost carriers.
 - Price/service freedom: allowed adjustment of price/service trade offs
 - Management: stimulated by competition.
 - Public services: more efficient small town service subsidy.
- Bad or missing elements
 - Misuse of bankruptcy laws; possibly inadequate attention to labor issues
 - Possible lack of consumers' rights
 - Failure to adjust related policies: airports, air traffic control

• Postal sector

- PAEA
 - Incremental, not fundamental
 - Entry: no entry (no change in statute but regulations to be revised); to be studied
 - Price/service freedom: flexibility limited by price cap, worksharing, service regulations, USO.
 - Management: no change in organization; congressional restraints increased; to be studied.
 - Public service: no change in statute; to be studied.
- *Possible lessons. Additional, more fundamental postal reform legislation will likely be required but will not be easy.*

4.6 Summary observations

1. In the U.S., experience in airline deregulation suggests—

1. Legislation is an exceedingly blunt instrument for economic reform even compared to regulation.
2. In network industries, market mechanisms are highly imperfect but likely better than government management in times of changing technology.
3. Public service objectives should be specifically defined and targeted.
4. Going from a regulated market to a competitive market takes a very long time; legislation must take a long term and fundamental view.
5. In policy debates, in general, those with a stake in the status quo tend to be too conservative; those without a stake tend to be too simplistic.
6. It is very difficult to anticipate an appropriate regulatory framework ex ante.
7. When a regulated entity is transformed into a competitive enterprise, its first priority must be survival.
8. So far, the U.S. has not addressed postal reform with the same seriousness as airline reform; the postal sector deserves better.
9. Caveat: each industry has unique economic characteristics; lessons from the airline (or any other industry) must be interpreted carefully.