

September 2005

COMMERCIAL AVIATION

Bankruptcy and Pension Problems Are Symptoms of Underlying Structural Issues



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Highlights of [GAO-05-945](#), a report to congressional committees

COMMERCIAL AVIATION

Bankruptcy and Pension Problems Are Symptoms of Underlying Structural Issues

Why GAO Did This Study

Since 2001 the U.S. airline industry has lost over \$30 billion. Delta, Northwest, United, and US Airways have filed for bankruptcy, the latter two terminating and transferring their pension plans to the Pension Benefit Guaranty Corporation (PBGC). The net claim on PBGC from these terminations was \$9.7 billion; plan participants lost \$5.3 billion in benefits (in constant 2005 dollars).

Considerable debate has ensued over airlines' use of bankruptcy protection as a means to continue operations. Many in the industry have maintained that airlines' use of this approach is harmful to the industry. This debate has received even sharper focus with pension defaults. Critics argue that by not having to meet their pension obligations, airlines in bankruptcy have an advantage that may encourage other companies to take the same approach.

At the request of the Congress, we have continued to assess the financial condition of the airline industry and focused on the problems of bankruptcy and pension terminations. This report details: (1) the role of bankruptcy in the airline industry, (2) whether bankruptcies are harming the industry, and (3) the effect of airline pension underfunding on employees, airlines, and the PBGC.

DOT and PBGC agreed with this report's conclusions. GAO is making no recommendations.

www.gao.gov/cgi-bin/getrpt?GAO-05-945.

To view the full product, including the scope and methodology, click on the link above. For more information, contact JayEtta Z. Hecker at (202) 512-2834 or heckerj@gao.gov.

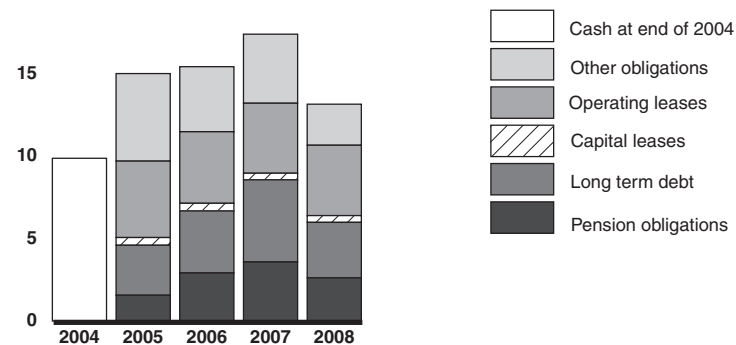
What GAO Found

Bankruptcy is endemic to the airline industry, owing to long-standing structural challenges and weak financial performance in the industry. Structurally, the industry is characterized by high fixed costs, cyclical demand for its services, and intense competition. Consequently, since deregulation in 1978, there have been 162 airline bankruptcy filings, 22 of them in the last five years. Airlines have used bankruptcy in response to liquidity pressures and as a means to restructure their costs. Our analysis of major airline bankruptcies shows mixed results in being able to significantly reduce costs—most but not all airlines were able to do so. However, bankruptcy is not a panacea for airlines. Few have emerged from bankruptcy and are still operating.

There is no clear evidence that airlines in bankruptcy keep capacity in the system that otherwise would have been eliminated, or harm the industry by lowering fares below what other airlines charge. While the liquidation of an airline may reduce capacity in the near-term, capacity returns relatively quickly. In individual markets where a dominant carrier significantly reduces operations, other carriers expand capacity to compensate. Several studies have found that airlines in bankruptcy have not reduced fares and rival airlines were not harmed financially.

The defined benefit pension plans of the remaining airlines with active plans are underfunded by \$13.7 billion, raising the potential of more sizeable losses to PBGC and plan participants. These airlines face an estimated \$10.4 billion in minimum pension contribution requirements over the next 4 years, significantly more than some of them may be able to afford given their continued operating losses and other fixed obligations (see figure). While spreading these contributions over more years would relieve some of these airlines' liquidity pressures, it does not ensure that they will avoid bankruptcy because it does not fully address other fundamental structural problems, such as other high fixed costs.

Comparison of Legacy Airline Cash Balance with Future Fixed Obligations
20 In billions of dollars



Source: PBGC data and SEC 10K filings.

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Abbreviations

ASM	Available seat mile
ATSB	Air Transportation Stabilization Board
BTS	Bureau of Transportation Statistics
CASM	Cost per available seat mile
DOT	Department of Transportation
DRC	Deficit Reduction Contributions
FAA	Federal Aviation Administration
PBGC	Pension Benefit Guaranty Corporation
PFEA	Pension Funding Equity Act
RLA	Railway Labor Act
SEC	Securities and Exchange Commission

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September 30, 2005

Congressional Committees

Since 2001, the U.S. airline industry has confronted financial losses of unprecedented proportions. From 2001 through 2004, legacy airlines (i.e., generally, those network airlines whose interstate operations predated deregulation) incurred operating losses of \$28 billion. Since 2000, four of the nation's largest legacy airlines—Delta Air Lines, Northwest Airlines, United Airlines and US Airways—have gone into bankruptcy.¹ Together, these airlines provided over 40 percent of the available passenger seating capacity operated by all U.S. airlines during the second quarter of 2005. Under bankruptcy protection, United and US Airways terminated their pension plans and passed the unfunded liability to the Pension Benefit Guaranty Corporation (PBGC).²

In recent years, considerable debate has ensued over legacy airlines' use of chapter 11 bankruptcy protection as a means to continue operations, often for years. Some in the industry and elsewhere have maintained that legacy airlines' use of this approach is harmful to the airline industry as a whole because it allows inefficient carriers to stay in business, creating overcapacity and allowing these airlines to potentially underprice their competitors. This debate has received even sharper focus since US Airways and United defaulted on their pensions. Without their pension obligations, critics argue, US Airways and United enjoy a cost advantage that may encourage other airlines sponsoring defined benefit plans to take the same approach.

Last year, we reported on the industry's poor financial condition, the reasons for it, and the need for legacy airlines to reduce their costs if they

¹Two other smaller carriers—ATA Airlines and Aloha—are also in bankruptcy protection. Hawaiian Airlines emerged from bankruptcy protection in June of this year.

²Through its single-employer insurance program, PBGC insures certain benefits of the more than 34 million worker, retiree, and separated vested participants of over 29,000 private-sector defined benefit pension plans. Defined benefit pension plans promise a benefit that is generally based on an employee's salary and years of service, with the employer being responsible to fund the benefit, invest and manage plan assets, and bear the investment risk. A single-employer plan is one that is established and maintained by only one employer. It may be established unilaterally by the sponsor or through a collective bargaining agreement.

are to survive.³ At the request of Congress, we have continued to assess the financial condition of the airline industry and, in particular, the problems of bankruptcy and pension plan terminations. Accordingly, this report details (1) the role of bankruptcy in the airline industry, (2) whether bankruptcies are harming the industry, and (3) the effect of airline pension underfunding on employees, airlines, and PBGC.

To help answer these questions, we relied on a variety of data sources. To assess the financial status of airlines, including bankrupt airlines, we used airline financial and operating data reported to the U.S. Department of Transportation (DOT). To assess the reliability of these data, we reviewed the quality control procedures that the Department and its contractors use in collecting and maintaining these data. To analyze the impact of airline bankruptcies, we relied on two different but complementary databases: Professor Lynn M. LoPucki's Bankruptcy Research Database and New Generation Research's bankruptcydata.com. We assessed the reliability of these data by comparing key elements from the two data sources and also by comparing key elements with corporate filings with the U.S. Securities and Exchange Commission (SEC). To assess the effect of underfunding airline pensions, we relied on PBGC data, supplemented by public financial reports filed with SEC. We determined that the data we used were sufficiently reliable for the purposes of this report. For our work, we also reviewed academic studies, met with airline and trade association representatives, government experts, and industry and legal analysts. Additional information on our scope and methodology is available in appendix I. We performed our work from August 2004 through September 2005 in accordance with generally accepted government auditing standards.

Results in Brief

Bankruptcy is endemic to the airline industry, owing to long-standing structural challenges and weak financial performance in the industry. Airlines have used bankruptcy in response to liquidity pressures and as a means to restructure their costs. However, our analysis of major airline bankruptcies shows mixed results in reducing costs while under bankruptcy. For example, Continental Airlines was able to reduce costs significantly during its first and second bankruptcies, while TWA was far less successful and saw its unit costs rise faster than the rest of the

³GAO, *Commercial Aviation: Legacy Airlines Must Further Reduce Costs to Restore Profitability*, GAO-04-836 (Washington, D.C.: Aug. 11, 2004).

industry's during its first bankruptcy. Since deregulation in 1978, there have been 162 airline bankruptcies, 22 of them in the last 5 years. While most of these bankruptcies affected small airlines that eventually liquidated, four of the more recent bankruptcies (Delta, Northwest, United, and US Airways) are among the largest corporate bankruptcies ever, excluding financial services firms. The airline industry is characterized by intense competition, high fixed costs, cyclical demand, and vulnerability to external shocks. As a result, airlines have performed worse financially and are more prone to failure than most other industries. For airlines in bankruptcy, the process, while well developed, can be contentious as the numerous stakeholders, such as airline employees and creditors, fight for pieces of a diminishing pie. We found some indication that airline bankruptcies differ from those in many other industries: for example, they tend to last longer and are more likely to terminate in liquidation.

There is no clear evidence that airlines in bankruptcy harm the industry by contributing to overcapacity or underpricing their competitors. We found that although an airline's liquidation may reduce capacity in the near-term, capacity returns relatively quickly. Even when a dominant carrier retreats from an individual market because it has liquidated or changed its business strategy (by, for example, dropping a hub city), other carriers quickly expand capacity to compensate with little or no increase in fares. For example, in Nashville, after American Airlines dismantled their hub there, other airlines increased their capacity and total origin-and-destination capacity actually increased. Several studies have also found that airlines in bankruptcy have not reduced fares and rival airlines were not harmed financially. Furthermore, bankruptcy is not a panacea for airlines, and few have emerged from it.

While bankruptcy may not harm the financial health of the airline industry, it has become a considerable concern for the federal government and legacy airline employees and retirees because of the recent terminations of pension plans by US Airways and United Airlines. These terminations resulted in claims on PBGC's single-employer program of \$9.7 billion, and plan participants (employees, retirees, and beneficiaries) are estimated to have lost more than \$5.3 billion in benefits that were not covered by PBGC. At termination in May 2005, United's pension plans were underfunded by \$9.8 billion; while the plans promised \$16.8 billion in benefits, they were backed by only \$7 billion in assets. PBGC guaranteed \$13.6 billion of the promised benefits, resulting in a net claim on the agency of \$6.6 billion and an estimated loss of \$3.2 billion in benefits to participants. The defined benefit pension plans of the remaining legacy airlines with active plans are

underfunded by approximately \$13.7 billion (according to data from SEC), raising the potential for additional sizeable losses to PBGC and plan participants. Since Delta and Northwest declared bankruptcy on September 14, 2005, PBGC released estimates stating that their plans are underfunded by a combined total of \$16.3 billion on a termination basis, of which PBGC estimates it would be liable for \$11.2 billion. Legacy airlines face an estimated minimum of \$10.4 billion in pension contributions over the next 4 years, significantly more than some of them may be able to afford given continued losses and their other fixed obligations. If the remaining legacy airlines with defined benefit plans were to spread their contributions over more years, as some airlines have proposed, they would relieve some of the liquidity pressure but would not necessarily stay out of bankruptcy because this approach does not fully address their fundamental cost structure problems.

In its written comments on a draft of this report, PBGC generally agreed with our findings and conclusions. PBGC noted that the report makes a strong case for pension funding reform, demonstrating the possible consequences of the weak funding rules now in place. DOT did not provide any written comments. Both PBGC and DOT provided technical comments and suggestions that we incorporated as appropriate.

Background

In 1978, under the Airline Deregulation Act, the United States deregulated its domestic airline industry. The main purpose of deregulation was to remove government control and open the air transport industry to market forces. Previously, the Civil Aeronautics Board regulated all domestic air transport, controlling fares and setting routes. In this regulated market, airlines competed more through advertising and onboard services than through fares. When the industry was deregulated, “legacy” airlines carried over the cost structures that had been protected by price regulation. Similar to other highly regulated industries, the airline industry was heavily unionized, with a highly trained and stable workforce. By contrast, carriers that started operations after deregulation sought to attract passengers from legacy network carriers and to stimulate new passenger traffic—and did

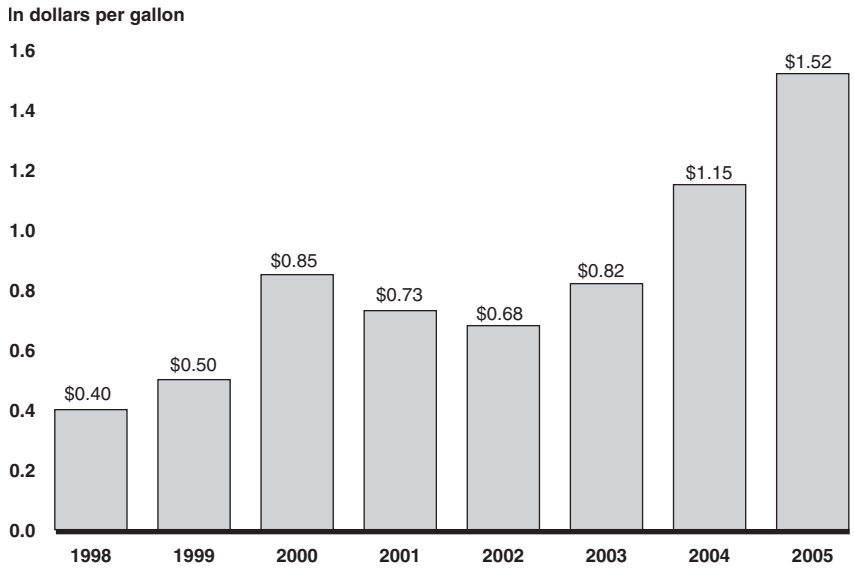
so—by offering lower fares. These airlines generally paid less for labor, on a unit cost basis, which helped them keep their overall operating costs low.⁴

In August 2004, we reported on the financial condition of the airline industry. High-end demand for air travel had begun weakening in 2000 because of an economic turndown, and demand dropped significantly following the September 11, 2001, terrorist attacks; the war in Iraq; and the outbreak of SARS.⁵ We found that in response to changing market conditions, legacy airlines had reduced costs, but mostly by reducing capacity and not nearly enough to be competitive with low cost airlines. Low cost airlines experienced significant growth and a fall in their unit costs as measured by cost per available seat-mile (CASM), whereas legacy airlines' unit costs did not improve. In addition, we found that neither legacy nor low cost airlines possessed much pricing power and suffered declining unit revenue. As a result of their weak financial performance and mounting losses, legacy airlines saw their financial liquidity and solvency seriously deteriorate even as their debt and pension obligations mounted. Since our 2004 report was issued, losses have continued to mount for airlines even though traffic levels have returned to pre-9/11 levels. One of the primary culprits has been record fuel prices, nearly doubling since 2003 (see fig. 1).

⁴Despite variation in the size and financial condition of the airlines in each of these categories, there are more similarities than differences for airlines in each group. Each of the legacy airlines adopted a hub-and-spoke network model that can be more expensive to operate than a simple point-to-point service model. Low cost airlines have generally entered the market since 1978, are smaller, and generally employ the less costly point-to-point service model. The seven low cost airlines (AirTran, America West, ATA, Frontier, JetBlue, Southwest, and Spirit) have had consistently lower unit costs than the seven legacy airlines (Alaska, American, Continental, Delta, Northwest, United, and US Airways).

⁵Severe acute respiratory syndrome.

Figure 1: Average Annual Spot Price for Gulf Coast Jet Fuel, 1998-2005

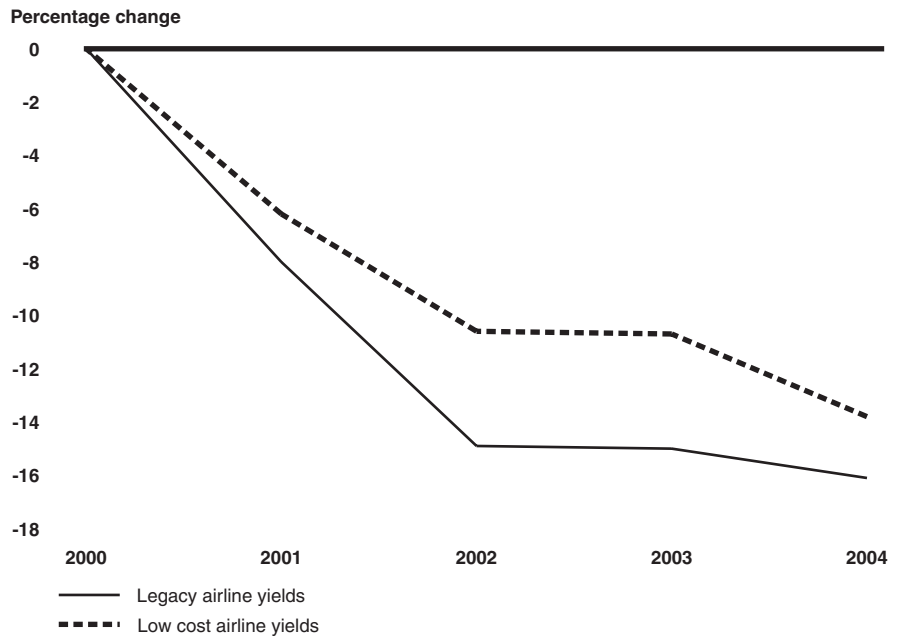


Source: U.S. Department of Energy, Energy Information Administration.

Note: 2005 prices reflect average through August 16.

Low fares have affected revenues for both legacy and low cost airlines. Yields, the amount of revenue airlines collect for every mile a passenger travels, fell for both low cost and legacy airlines from 2000 through 2004 (see fig. 2). However, the decline has been greater for legacy airlines than for low cost airlines. Only during the first half of 2005 has stronger demand allowed airlines to increase fares sufficiently to boost their yields.

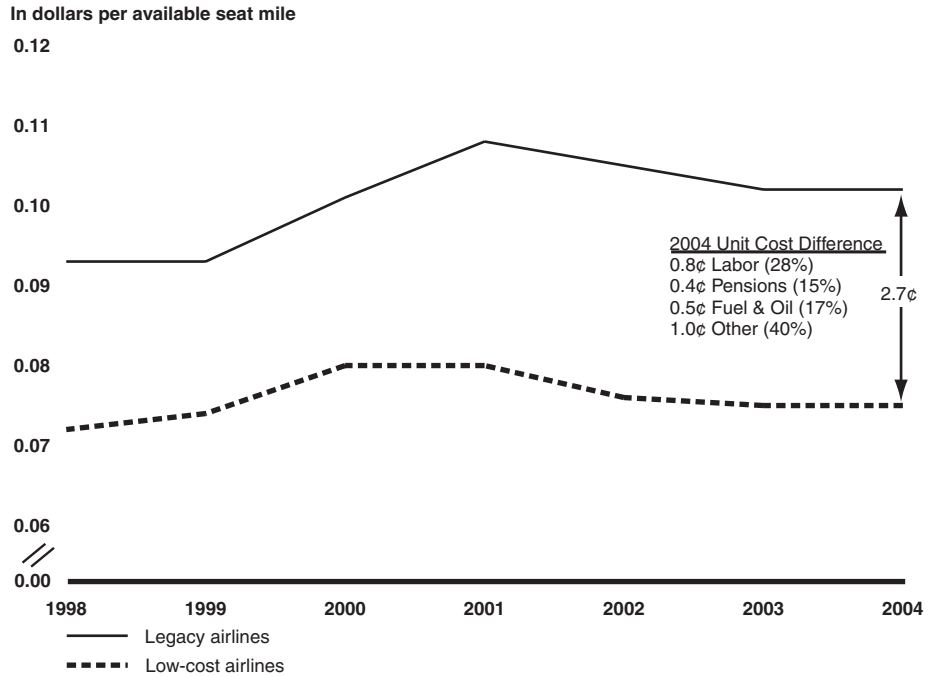
Figure 2: Percentage Change in Passenger Yields Since 2000



Source: GAO analysis of Department of Transportation (DOT) Form 41 data.

Legacy airlines, as a group, have been unsuccessful in reducing their costs to become more competitive with low cost airlines. Unit-cost competitiveness is essential to profitability for airlines after years of declining yields. While legacy airlines have been able to reduce their overall costs since 2001, they have done so largely by reducing capacity and without improving their unit costs as compared to low cost airlines. Meanwhile, low cost airlines have been able to maintain low unit costs by continuing to grow and maintaining high productivity. As a result, low cost airlines have been able to sustain a unit-cost advantage over their legacy rivals (see fig. 3). In 2004, low cost airlines maintained a 2.7 cent advantage per available seat mile over legacy airlines. This advantage is attributable to lower overall costs and greater labor and asset productivity. Thus far in 2005, airlines have been able to trim most of their nonfuel-related costs, but high fuel prices and debt interest charges have kept airlines' costs from falling.

Figure 3: Difference in Unit Costs between Legacy and Low Cost Airlines, 1998-2004

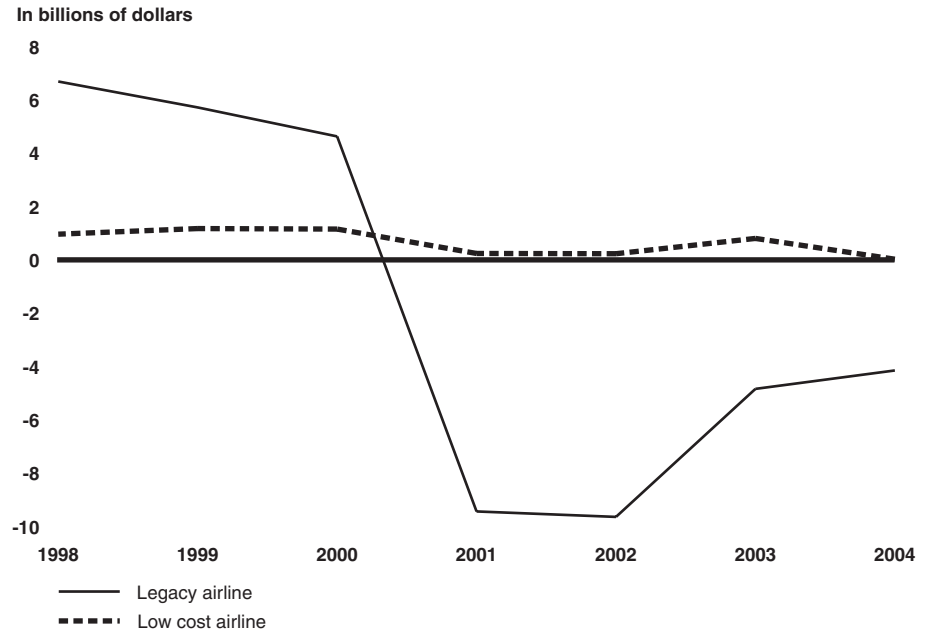


Source: GAO analysis of DOT Form 41 data.

Note: "Other" costs include costs of aircraft, supplies, and facilities.

Weak revenues and the inability to realize greater unit-cost savings have combined to produce unprecedented losses for legacy airlines. At the same time, low cost airlines have been able to continue producing modest profits (see fig. 4). Legacy airlines have incurred a cumulative \$28 billion in operating losses since 2001. Despite a modest recovery for some airlines during the first half of 2005, analysts predict the industry will lose another \$5 billion to \$9 billion in 2005.

Figure 4: Airline Operating Profits and Losses, 1998-2004



Source: GAO analysis of DOT Form 41 data.

Owing to continued losses, legacy airlines built cash balances not through operations but by borrowing. Legacy airlines have lost cash from operations and compensated for operating losses by taking on additional debt, relying on creditors for more of their capital needs than in the past. In doing so, several legacy airlines have used all, or nearly all, of their assets as collateral, potentially limiting their future access to capital markets.

Airlines (and other businesses) that are unable to operate profitably over time may seek recourse under the U.S. Bankruptcy Code.⁶ In general, two major provisions of the bankruptcy code govern actions taken by airlines and other businesses:

- Chapter 7 of the code governs liquidation of the debtor’s estate and is often referred to as a “straight bankruptcy.” A trustee is appointed to sell off available assets to repay creditors.

⁶11 U.S.C. § 101 et seq.

-
- Chapter 11 of the code governs business reorganizations. This chapter is designed to accommodate complicated reorganizations of publicly held corporations. Among other things, it allows companies, with court approval, to reject agreements made under collective bargaining and renegotiate contracts with other creditors. With the approval of the bankruptcy courts (which administer the bankruptcy laws), companies may also modify retiree benefits.

Airline bankruptcies⁷ typically include a large number of stakeholders. The primary stakeholder is the airline itself, known as the debtor-in-possession. Federal stakeholders include the bankruptcy judge, who presides over the administration of the case and decides contested aspects, and the U.S. Trustee,⁸ whose duties include ensuring the integrity of the process and approving the retention of professionals (e.g., bankruptcy attorneys).⁹ During this most recent round of airline bankruptcies, two additional governmental entities have become major stakeholders in airline bankruptcies: the Air Transportation Stabilization Board (ATSB), which was formed after September 11 to administer a \$10 billion loan guarantee program for airlines, and PBGC, which insures defined benefit pension plans. Both agencies have taken ownership stakes in bankrupt and nonbankrupt airlines through ATSB's loan guarantees and PBGC's taking over defined benefit pension plans terminated in bankruptcy.¹⁰ The entities that provide the financing while an airline is in bankruptcy (known as debtor-in-possession financing) and upon its exit (exit financing) are also major stakeholders, as are airline employees, many of whom are

⁷Henceforth, unless otherwise specified, references to airline "bankruptcies" will mean bankruptcies filed under chapter 11 of the bankruptcy code.

⁸Currently, bankruptcy cases in Alabama and North Carolina are not within the jurisdiction of the U.S. Trustee Program.

⁹U.S. Trustees, upon order of the bankruptcy court, may also appoint a private trustee to run the airline if it is determined that the airline's current management has operated fraudulently or incompetently, or if such action is deemed to be in the interests of the creditors. A private trustee was appointed in the March 2003 Hawaiian Airlines bankruptcy case.

¹⁰ATSB ultimately provided \$1.608 billion in loan guarantees to 6 airlines (Aloha, World, Frontier, US Airways, ATA, and America West).

represented by labor unions.¹¹ Other secured and nonsecured creditors and shareholders are also stakeholders in an airline bankruptcy. The interests of unsecured creditors (including labor) and shareholders are represented in the process by committees appointed by the U.S. Trustee.

Among the largest cost elements for both legacy airlines and low cost airlines are those associated with employee compensation and benefits. As part of the retirement benefits offered, legacy airlines have tended to offer “defined benefit plans” and supplemental defined contribution plans, whereas low cost airlines tend to provide only “defined contribution plans.”

- Defined benefit plans typically provide participants with an annuity at retirement—a series of periodic payments over a specified period of time or for the life of the participant. As designed, defined benefit plan annuities are generally based on a participant’s retirement age, number of years of employment, and salary. As of December 31, 2004, nine major airlines sponsored defined benefit plans for their employees: Aloha, Alaska, American, Continental, Delta, Hawaii, Northwest, US Airways, and United. These airlines generally offered different pension plans for different groups of employees—pilots, machinists, and flight attendants, for example—with varying levels of promised benefits.
- Defined contribution plans base pension benefits on the contributions to and investment returns on individual accounts. Contributions may consist of pretax or after-tax employee contributions, employer matching contributions that require employee contributions, and other employer contributions that may be made independent of any participant contributions. In a defined contribution plan, the employee bears the investment risk and often controls how the individual account assets are invested.

¹¹Since 1936, airline employees have fallen under the jurisdiction of the Railway Labor Act (RLA), 45 U.S.C. section 151, et seq. Under RLA, collective bargaining agreements do not expire; they instead become amendable. The act provides for a lengthy process before employees are allowed to strike and even at the point of a strike, a presidential intervention could preclude a strike. In recent airline bankruptcy cases, airlines gained permission from the courts to abrogate collective bargaining agreements and unions have threatened strikes in response. There is uncertainty as to whether a strike by airline employees whose contract has been abrogated in bankruptcy would violate RLA.

PBGC was established to encourage the continuation and maintenance of voluntary private pension plans and to insure the benefits of workers and retirees in defined benefit plans should plan sponsors fail to pay benefits.¹² However, if a pension plan's assets are insufficient to pay accrued benefits, the plan can be terminated under certain conditions, and PBGC then assumes responsibility for paying retiree pensions. PBGC may pay only a portion of the benefits originally promised to employees and retirees. For 2005, the maximum statutory limit of annual benefits guaranteed by PBGC is \$45,613.68 per participant, for retirement at age 65. The amount paid decreases at earlier retirement ages.

Bankruptcy Is a Response to the Airline Industry's Structural Challenges

Bankruptcy filings are prevalent in the U.S. airline industry because of long-standing economic structural issues that have led to historically weak financial performance for the industry. Structurally, the airline industry is characterized by high fixed costs, cyclical demand for its services, intense competition, and vulnerability to external shocks. As a result, airlines have been more prone to failure than many other businesses, and the sector's financial performance has continually been very weak. Airlines frequently seek bankruptcy protection because of severe liquidity pressures, but while bankruptcy may provide some immediate protection from creditors, airlines in bankruptcy have not always been able to reduce their costs or avoid liquidation. Owing to the long history of airline bankruptcies, the process is well developed, and the code includes provisions applicable just to airline bankruptcies. Even so, the process can be lengthy and contentious—for example, United is in its third year of bankruptcy, and its process to date has included litigation over aircraft repossessions as well as employee pensions.

Bankruptcies Are Endemic to the Airline Industry, and Airlines Fail at a Higher Rate Than Most Other Industries

Since the 1978 economic deregulation of the U.S. airline industry, airline bankruptcy filings have become prevalent in the United States, and airlines fail at a higher rate than companies in most other industries. This has been particularly true for small, new entrant carriers. Since 1978, there have been 162 airline bankruptcy filings in the United States, 22 of them since

¹²The Employee Retirement Income Security Act of 1974 (ERISA) and the Internal Revenue Code of 1986 set forth standards and requirements that apply to defined benefit plans.

2000.¹³ Most of these bankruptcies were chapter 11 filings by small, new-entrant airlines that eventually liquidated. Only 24 of the filings were by airlines with over \$100 million in assets; however, 12 of these large bankruptcies were filed after 2000 (see table 1).

Table 1: Airline Bankruptcy Filings Since 2000

Filing date	Airline	Chapter filed	Outcome
2/29/2000	Tower Air	11	Ceased operations
5/1/2000	Kitty Hawk	11	Emerged from bankruptcy
9/19/2000	Pro Air	11	Ceased operations
9/27/2000	Fine Air Services	11	Emerged from bankruptcy
12/3/2000	Legend Airlines	11	Ceased operations
12/6/2000	National Airlines	11	Ceased operations
8/13/2001	Midway Airlines	11	Ceased operations in 2002 before filing for chapter 7 in 2003
11/10/2001	Trans World Airlines	11	Acquired by American Airlines
1/2/2002	Sun Country Airlines	7	Liquidated; new owners acquired assets and resumed operations
7/30/2002	Vanguard Airlines	11	Ceased operations
8/11/2002	US Airways	11	Emerged but later refiled
12/9/2002	United Airlines	11	Still in bankruptcy
3/21/2003	Hawaiian Airlines	11	Emerged from bankruptcy
10/30/2003	Midway Airlines	7	Ceased operations
1/23/2004	Great Plains Airlines	11	Ceased operations
1/30/2004	Atlas Air/Polar Air Cargo	11	Emerged from bankruptcy
9/12/2004	US Airways	11	Merged with America West
10/26/2004	ATA Airlines	11	Still in bankruptcy
12/01/2004	Southeast Airlines	7	Ceased operations
12/30/2004	Aloha Airlines	11	Still in bankruptcy
9/14/2005	Delta Air Lines	11	Still in bankruptcy
9/14/2005	Northwest Airlines	11	Still in bankruptcy

Sources: Air Transport Association, Department of Transportation, Lynn M. LoPucki's Bankruptcy Research Database, and media reports.

Note: **Bold** indicates airlines with over \$100 million in assets.

¹³This number includes repeat filings (e.g., US Airways in 2002 and 2004) as well as filings by different incarnations of airlines (e.g., Pan Am in 1991 and 1998).

Airline Bankruptcies Are the Result of Long-Standing Structural Issues and Weak Financial Performance

Because of certain structural characteristics, including its susceptibility to external shocks and historically weak financial performance, the airline industry is more prone to failure than many other types of businesses. Airlines have high fixed costs and are subject to highly cyclical demand and intense competition. Compounding these other structural problems is the industry's vulnerability to external shocks—such as terrorist attacks or war—that decrease demand and increase costs. The result is that the airline industry has had the worst financial performance of any major industry.

Structural Issues Hinder the Airline Industry

Structural characteristics of the airline industry have resulted in repeated cycles of boom and bust as its high fixed costs and particular sensitivity to seasonal and business cycle changes strain declining revenues. External shocks such as the Iraq War and the SARS epidemic have exacerbated the situation. Operating an airline requires expensive equipment and facilities as well as large numbers of people to operate them. Aircraft are very expensive—for example, the 2005 list price for a Boeing 777 ranges from \$171 million to \$253 million—and, therefore, airlines use outside financing to acquire a fleet. In the United States, airlines typically use operating leases, loans, or public financing instruments to fund their aircraft. Servicing these leases or debt instruments requires considerable and regular cash payments regardless of how extensively the aircraft are used. Airlines also rely on specialists like pilots and mechanics who cannot be easily replaced, making labor force adjustments to changes in demand more difficult. In addition, the workers of many carriers, particularly those of the legacy carriers, are covered by multiyear collective bargaining agreements. While such agreements may provide important protections to employees, they may limit carriers' ability to respond quickly to cyclical changes in demand, much less unanticipated shocks like the September 11 attacks or SARS. Together, these characteristics result in long-term high fixed costs for an industry whose fortunes fluctuate with the business cycle.

The airline industry is very competitive and has become increasingly so with the emergence of low cost airlines and the relative ease with which new airlines gain access to capital and enter the industry. It is difficult for airlines to reduce their capacity because of the high fixed costs and low variable costs of providing service. Capacity increases by individual airlines are frequently matched by competitors. Low cost airlines grew over the last 5 years, from 10.8 percent of domestic capacity in 1998 to 17.5 percent of domestic capacity in 2004. Low cost airlines have been able to maintain their low costs by continuing to grow. Finally, despite historic losses in the industry, new airlines are still willing to enter the market. As of July 2005, seven carriers were obtaining operating certificates, while at least one other had obtained its operating certificate but was not yet operating. It is uncertain if and when these carriers will actually begin service. These carriers plan to provide domestic and international scheduled and charter service.¹⁴ These new airlines are indicative of the willingness of capital providers to finance aircraft despite the industry's continued losses.

Demand for air travel is closely tied to the business cycle and is subject to external shocks. So while airlines' most prominent costs—for aircraft and labor—are locked into fixed payments and multiyear contracts, airline revenues fluctuate because demand is cyclical. External demand shocks can have a devastating impact on airline finances. For example, beginning in 2000, an economic downturn precipitated a decrease in high-end demand for air travel, while the terrorist attacks of September 11, the Iraq War, and the outbreak of SARS compounded that trend. These events contributed to the 22 airline bankruptcy filings since 2000.

The Airline Industry's Financial Performance Has Historically Been Poor

The structural issues discussed in the previous section have contributed to the airline industry's historically poor financial performance and higher-than-average industry failure rate. This performance is illustrated by the industry's weak revenues and lack of profitability. In particular, legacy airlines in aggregate have experienced operating losses in all quarters but one since September 11, 2001. A return to profitability that some financial analysts expected for legacy airlines in 2004 and 2005 has not materialized, in large part because of historically high oil prices.

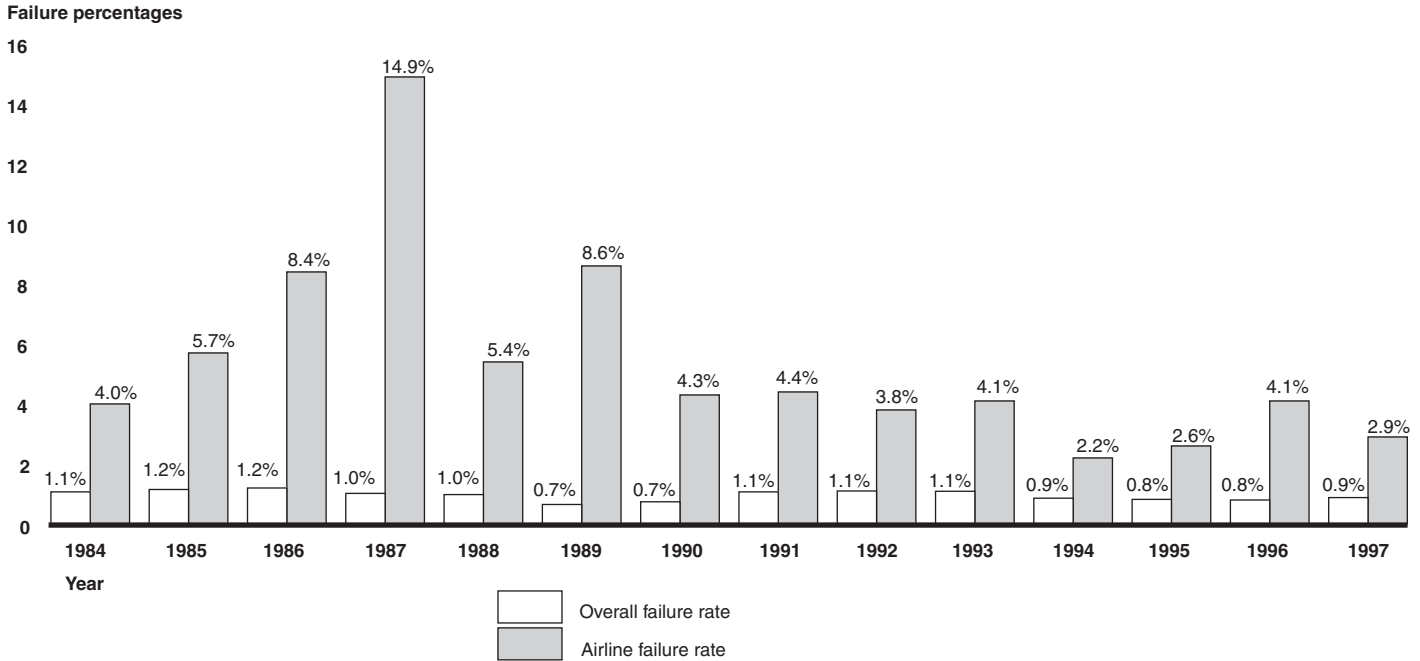
¹⁴Additional applicants are requesting certification to provide cargo, charter, and helicopter services.

One way to measure the inherent instability of the airline industry is to compare its operating ratio with that of other industries. The operating ratio is the ratio of a company's operating expenses to its operating revenues. One study found that from 1983 through 2001, the airline industry had the highest risk in relation to return of any industry sector when measured using this ratio.¹⁵ This study found that the airline industry had an operating ratio of 97 percent, well above the average of 83.5 percent for all other industries.

Evidence of the volatility and weak financial performance of the airline industry can also be found by comparing airline failure rates with overall U.S. business failure rates. For 1997, the last year in which Dun & Bradstreet produced these data, the overall U.S. business failure rate was 0.9 percent, while the failure rate for the airline industry was three times greater, at 2.9 percent. Although we do not have overall business failure rates for more recent years, there is no reason to believe that the disparity between the rates has changed significantly since 1997 (see fig. 5).

¹⁵Richard D. Gritta *et al.*, "The Instability of the Profitability of the Major U.S. Domestic Airlines: Risk and Return Over the Period 1983-2001—A Comparison to Other Industrial Groups," *Credit and Financial Management Review*, Vol. 11, No. 1 (Spring Quarter 2005).

Figure 5: Comparison of Airline and Overall Business Failure Rates, 1984-1997



Source: GAO analysis of DOT and Dun & Bradstreet data.

Note: Dun & Bradstreet data were available only through 1997.

Airlines Seek Bankruptcy as a Means to Restructure, but Are Not Always Successful in Reducing Costs

Bankruptcy has played a prominent role in the U.S. airline industry since deregulation because many carriers have used the bankruptcy code in an effort to restructure their operations and cut costs—by, for example, terminating defined pension benefit plans and rejecting high-cost aircraft leases. These carriers have met with varying degrees of success. Prominent examples include US Airways, which has entered chapter 11 twice since 2002 and has merged with America West Airlines, which itself went through bankruptcy 11 years before; United Airlines, which is hoping to emerge from bankruptcy in 2006 after more than 3 years in bankruptcy; and TWA, which entered bankruptcy three times before its assets were eventually acquired by American Airlines in 2001.

Generally, major airlines have been able to reduce their costs during bankruptcy. Reductions in operating expenses were generally achieved through reductions in wages and in capacity. In eight of the nine largest airline bankruptcies over the last 25 years, operating expenses and capacity were reduced (see table 2).¹⁶ The exception was the first Continental Airlines bankruptcy, when the airline's capacity doubled but expenses rose by only one-third. Typically, cost savings were achieved disproportionately by cutting wages—in six of the nine cases, reductions in wages were greater than the overall reduction in operating expenses. Most critically, however, unit costs were reduced in only five of the nine cases, and in two cases (TWA 1 and US Airways 1) unit costs went up and by more than the industry average, perhaps explaining why those airlines filed for bankruptcy again within 2 years.

¹⁶Excluding Delta and Northwest Airlines, both of which filed for chapter 11 just before this report was issued.

Table 2: Cost Reductions Achieved during Major Airline Bankruptcies

Airline bankruptcy	Date		Change in wages		Change in operating expense		Change in capacity (ASM) ^a		Change in unit costs (CASM) ^b	
	Entered	Emerged	Airline	Industry	Airline	Industry	Airline	Industry	Airline	Industry
Continental 1	9/24/83	6/30/86	1%	18%	31%	16%	103%	30%	-35%	-11%
Eastern	3/9/89	Failed ^c	-34%	19%	-17%	34%	-9%	13%	-9%	19%
Continental 2	12/3/90	4/27/93	-1%	2%	-20%	-4%	-3%	9%	-18%	-12%
America West	6/27/91	8/25/94	-23%	9%	-20%	10%	-12%	9%	-9%	1%
TWA 1	1/31/92	11/3/93	-23%	2%	-18%	2%	-22%	1%	5%	1%
TWA 2	6/30/95	8/23/95	-22%	2%	-11%	2%	-10%	-5%	0%	7%
US Airways 1	8/11/02	3/31/03	-2%	-13%	-3%	-7%	-13%	-10%	12%	4%
United Airlines	12/9/02	Current ^d	-45%	-19%	-7%	14%	-7%	4%	0%	10%
US Airways 2	9/12/04	Current ^d	-23%	-8%	-7%	0%	-3%	-5%	-5%	6%

Source: GAO analysis of Department of Transportation data.

^aASM = available seat mile.

^bCASM = cost per available seat mile.

^cChange measured through fourth quarter of 1990, the last quarter for which data were reported.

^dChange measured through first quarter of 2005.

The Airline Bankruptcy Process Is Well Developed and Understood

Most airlines file to reorganize their operations and finances under chapter 11 of the bankruptcy code, some sections of which will change under the new bankruptcy law that comes into effect in October 2005. Given the number of airline bankruptcies that have occurred over the last 20 years, the process is well developed and understood by those involved, but it can still be quite contentious.

Airlines Typically File for Chapter 11 Reorganization

Most U.S. airlines that are in financial distress and choose to file for bankruptcy protection file under chapter 11 of the U.S. bankruptcy code. Chapter 11 provides protection from creditors and allows a company to reorganize itself and become profitable again. Management—as the debtor-in-possession—continues to run the airline, but all significant decisions must be approved by the bankruptcy court. In a chapter 7 filing, the airline stops all operations and a trustee is appointed to sell the assets to pay off the debt. According to SEC, most publicly held companies will file under chapter 11 rather than chapter 7 because they can still run their business and control the bankruptcy process. For airlines, 148 of the 162 bankruptcy filings since 1978 were chapter 11 filings.

Several sections of the bankruptcy code have played a prominent role in airline bankruptcies. Section 362—the automatic stay provision—gives an airline breathing room from its creditors by stopping all collection efforts and foreclosure actions and permitting the debtor to attempt to develop a repayment plan.¹⁷ Under section 1121, the airline’s management—or the private trustee if one has been appointed—currently has the exclusive right to file a reorganization plan for 120 days following the filing of the bankruptcy petition; this period may be extended for cause. Other parties-in-interest may file a plan if 120 days have elapsed without the debtor’s filing a plan or if 180 days have elapsed and the debtor’s plan has not been accepted by each class of creditors. This period may also be extended for cause. Other sections of the code govern actions an airline might take to restructure its operations and lower its costs in order to emerge from bankruptcy. For example, section 1113 governs the rejection of labor contracts and requires that the airline complete certain steps before requesting that the court abrogate contracts. Section 1110 gives an airline 60 days to accept or reject aircraft leases, which allows the airline to continue to operate without fear that its chief assets will be repossessed. Additionally, several subsections of section 365 currently relate to airline leases of aircraft terminals and gates. For example, an airline that leases more than one terminal or gate may not assume or assign the leases unless it assumes or assigns all of them to the same entity, which limits the ability of an airline to realize the full value of its leases. To emerge from bankruptcy, the airline devises and obtains approval of a reorganization plan from the bankruptcy court and obtains exit financing, which is used to operate the company once it is no longer within the jurisdiction of the bankruptcy court.

Airline Bankruptcies Follow a Well-Practiced but at Times Disputed Process

The airline bankruptcy process has been honed over the past 27 years as carriers, large and small, have built on prior experiences and expertise. We interviewed numerous industry experts (attorneys, consultants, analysts, and current and former airline officials), many of whom have had experience in more than one airline bankruptcy. Additionally, several of these experts confirmed that the case law and documents produced by each bankruptcy case provide a body of expertise available for subsequent filers. They indicated that this documentation serves as precedent that is useful even though each bankruptcy case is unique.

¹⁷11 U.S.C. Sec. 362(a). Under certain circumstances, however, secured creditors, governmental bodies, and other interests can obtain relief from the automatic stay.

The process can also be contentious as the various stakeholders compete for their share of a dwindling pie. In recent airline bankruptcies, labor groups have disputed airlines' right to cancel collective bargaining agreements and terminate defined benefit pension plans while airlines have challenged creditors. For example, United Airlines has been involved in litigation with its flight attendants over its termination of their pension plan and with a group of aircraft lessors over their aircraft repossessions during its current bankruptcy.

Changes under New Bankruptcy Law Might Affect Future Airline Filings

On October 17, 2005, the first major overhaul of the nation's bankruptcy laws in 9 years will become effective. Many provisions of the Bankruptcy Abuse Prevention and Consumer Protection Act of 2005¹⁸ apply to consumer bankruptcies, but several important provisions apply to corporate bankruptcies. Some of these provisions may induce distressed airlines to seek bankruptcy before the new law takes effect while other provisions may provide more advantages to airlines in bankruptcy. The mid-September Delta and Northwest bankruptcy filings may be an indication that these carriers were seeking to avoid some portions of the new bankruptcy law.

First, the 2005 law limits the "exclusivity period" for the debtor to file a reorganization plan to 18 months after the bankruptcy filing. Currently, the debtor has the first 120 days to file a plan, and can obtain numerous extensions. The new limit will not force liquidations but will give other parties an opportunity to file a competing plan somewhat sooner, thereby limiting the debtor's "exclusive period" of control of the business. One bankruptcy expert we spoke with indicated that this change would not affect the majority of business bankruptcies, since most are concluded within 180 days. However, because airline bankruptcies tend to take longer than those in many other industries, this change may induce airlines considering bankruptcy to file before October 17, 2005.

Second, the new law eliminated two subsections of the code—365(c)(4) and 365(d)(5)-(9)—that limited bankrupt airlines' options when assuming or assigning terminal and gate leases. This change in the law will favor airlines that control gates and leases, because they will have the potential to realize greater value from these assets when in bankruptcy.

¹⁸P.L. 109-8.

Third, the 2005 act increases the time limits on assuming or rejecting unexpired commercial and real property leases but limits extensions. Under the current code, the debtor has 60 days from the commencement of the case to assume or reject commercial real property leases, and this time is often extended by the bankruptcy court. The 2005 act increases the initial decision period to 120 days but allows for only one extension (of up to 90 days) after that. Therefore, debtors will have a maximum of 210 days from the commencement of the bankruptcy case to make a decision on these leases. The court may grant a subsequent extension only upon prior written consent of the lessors in each instance.

In addition, the new law expands the grounds on which a chapter 11 case may be converted to chapter 7 and increases the circumstances under which a chapter 11 trustee may be appointed. The act also encourages fast-track chapter 11 cases by making it easier for debtors to implement prearranged plans. Finally, the new law regulates the circumstances for approval of key employee retention plans and related severance payments by requiring that (1) the debtor establish that the bonus is essential to retain the employee, (2) the employee have a bona fide job offer, and (3) the debtor prove that the employee's services are essential to the survival of the company. Additionally, these bonuses and severance packages are linked to those that are paid to nonmanagement employees. This provision also might induce pre-October 17, 2005, airline bankruptcy filings.

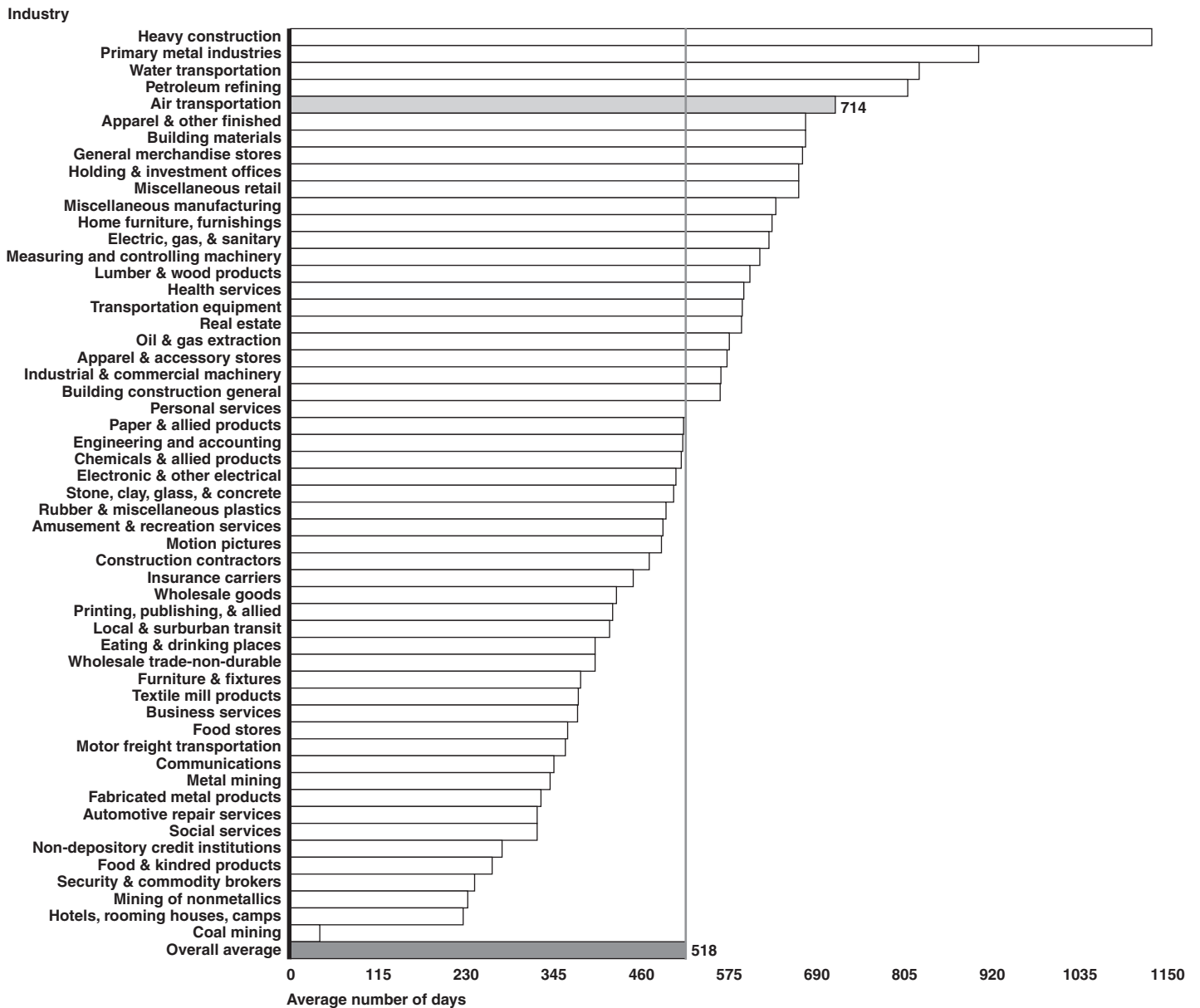
Airline Bankruptcies Can Differ Significantly from Bankruptcies in Other Industries

Airline bankruptcies can differ notably from bankruptcies in other industries along a number of dimensions. However, it is hard to determine whether the differences are directly attributable to the unique sections of the bankruptcy code specific to airlines or are the result of factors unique to the airline industry.

Airline bankruptcies can take a long time to resolve. According to our analysis of the Bankruptcy Research Database,¹⁹ airline bankruptcies ranked fifth in overall duration (averaging 714 days), behind bankruptcies in such industries as water transportation and petroleum refining, and lasted significantly longer than the average for bankruptcies in all of the industries in the database, which was 518 days. (See fig. 6).

¹⁹For this comparison, we relied on two different but complementary databases: Professor Lynn M. LoPucki's Bankruptcy Research Database and New Generation Research's bankruptcydata.com. The Bankruptcy Research Database contains data—for such factors as duration, number of employees, and assets—on the chapter 11 filings of public companies with assets over \$100 million that are required to file a form 10-K (annual report) with SEC. Bankruptcydata.com provides information on public companies with more than \$50 million in assets that file for bankruptcy.

Figure 6: Average Duration of Bankruptcies, by Industry, 1980-2004



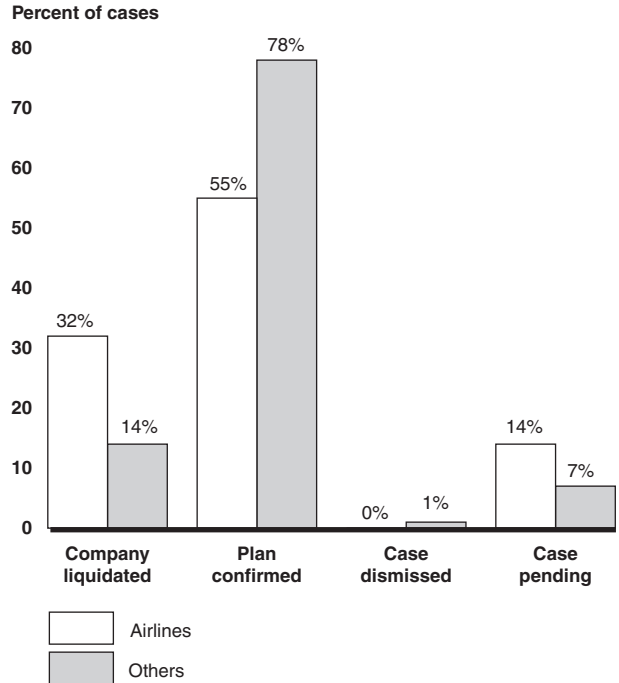
Source: Lynn M. LoPuck's Bankruptcy Research Database.

Airlines in bankruptcy also appeared to retain assets better than other industries, but at the cost of much greater debt; however, a limited number of observations precludes firm conclusions. According to available data for 19 of the top 50 bankruptcies since 1970,²⁰ which involved 3 airlines and 16 other companies, the airlines' assets were 0.8 percent lower on average after bankruptcy, while the other companies' assets were 47.2 percent lower on average. At the same time, the airlines' liabilities decreased 32.1 percent while the liabilities of companies in the other industries decreased 56.9 percent.

Outcomes also differed for airline and other industry bankruptcies, according to Bankruptcy Research Database. The airlines were more likely than the other industries in our analysis to liquidate. (See fig. 7.) However, airlines are also more likely than other industries to start bankruptcy in chapter 11, which may account for their greater tendency to liquidate once in chapter 11. For each group, a majority of the companies had reorganization plans confirmed by the court (i.e., the companies had exited or emerged from bankruptcy), though for airlines this majority was smaller because of the larger percentage of liquidations.

²⁰PricewaterhouseCoopers' 2004 *Phoenix Forecast: Bankruptcy Barometer*. Comparable data for assets and liabilities before and after bankruptcy were not available for 31 of the 50 companies (2 airlines and 29 other companies).

Figure 7: Comparison of Airlines' and Other Industries' Bankruptcy Outcomes, 1980-2004



Source: Lynn M. LoPucki's Bankruptcy Research Database.

Note: "Company liquidated" means that the company sold its assets either in chapter 11 or chapter 7; "plan confirmed" means that the company obtained approved of a reorganization plan from the bankruptcy court; "case dismissed" means that the bankruptcy case was rejected by the bankruptcy court; and "case pending" means that the case is still in progress.

Our analysis of the Bankruptcy Research Database also revealed no discernable difference between airlines' and other industries' likelihood of reentering bankruptcy within 5 years. The rates at which airlines and other industries filed again for bankruptcy were just under 15 percent. However, these rates should be accepted with some caution and perhaps viewed as conservative because the database captured only refilings that occurred within 5 years and excluded companies with assets of less than \$100 million.²¹ As a result, filings by companies not meeting one or the other criterion were not counted.

²¹As measured in 1980 dollars.

No Evidence That Bankruptcy Protection Harms the Industry or Hurts Competitors

There is no clear evidence that airlines in bankruptcy are harming the industry or their rivals or that bankruptcy is a panacea for airlines seeking an easy path to profitability. Some have asserted that protecting airlines in bankruptcy, rather than forcing liquidation, contributes to overcapacity in the industry. They further contend that bankrupt airlines underprice their rivals, hurting the financial well-being of healthier competitors. We found no evidence to support either contention and some evidence to the contrary. For example, despite many airline liquidations since deregulation in 1978, some of which were quite large, industry capacity has continued to grow unabated thanks to the growth of existing airlines and new entrants, often using the just-liquidated airline's planes. We also found that capacity rebounded quickly in individual markets that experienced the liquidation or retreat of a significant airline, as other carriers quickly expanded capacity to compensate with little or no increase in overall average fares. Several studies have also found that airlines in bankruptcy have not reduced fares and did not harm rival airlines financially. Bankruptcies are not a panacea for airlines, as some might believe. Bankruptcy entails significant costs, loss of management control, and damaged relations with employees, investors, and suppliers. Of the 162 airlines that have filed for bankruptcy, 142 (88 percent) are no longer in operation.

No Evidence That Bankruptcy Protection Contributes to Overcapacity or Lower Fares

Contrary to some assertions, we found no evidence that bankruptcy protection has led to overcapacity and lower fares that have harmed healthy airlines, either in individual markets or in the industry overall. In 1993, a national commission to study airline industry problems cited bankruptcy protection as a cause for the industry's overcapacity and fare problems.²² Airline executives have also cited bankruptcy protection as a reason for industry overcapacity and low fares. However, we found no evidence to support these views and some evidence to the contrary. Notably, both in individual markets and industrywide, the liquidation of major airlines has had only a very temporary or negligible effect on capacity, as other airlines have quickly replenished capacity. In part, this short-term effect can be attributed to the fungibility of aircraft and the notion that industry capacity is determined by the entire aviation supply chain and not solely by individual airlines. Finally, separate academic

²²The National Commission to Ensure a Strong Competitive Airline Industry, "Change, Challenge and Competition: *A Report to the President and Congress*," August 1993.

studies have found that airlines in bankruptcy have not lowered their fares or harmed the financial standing of their rivals.

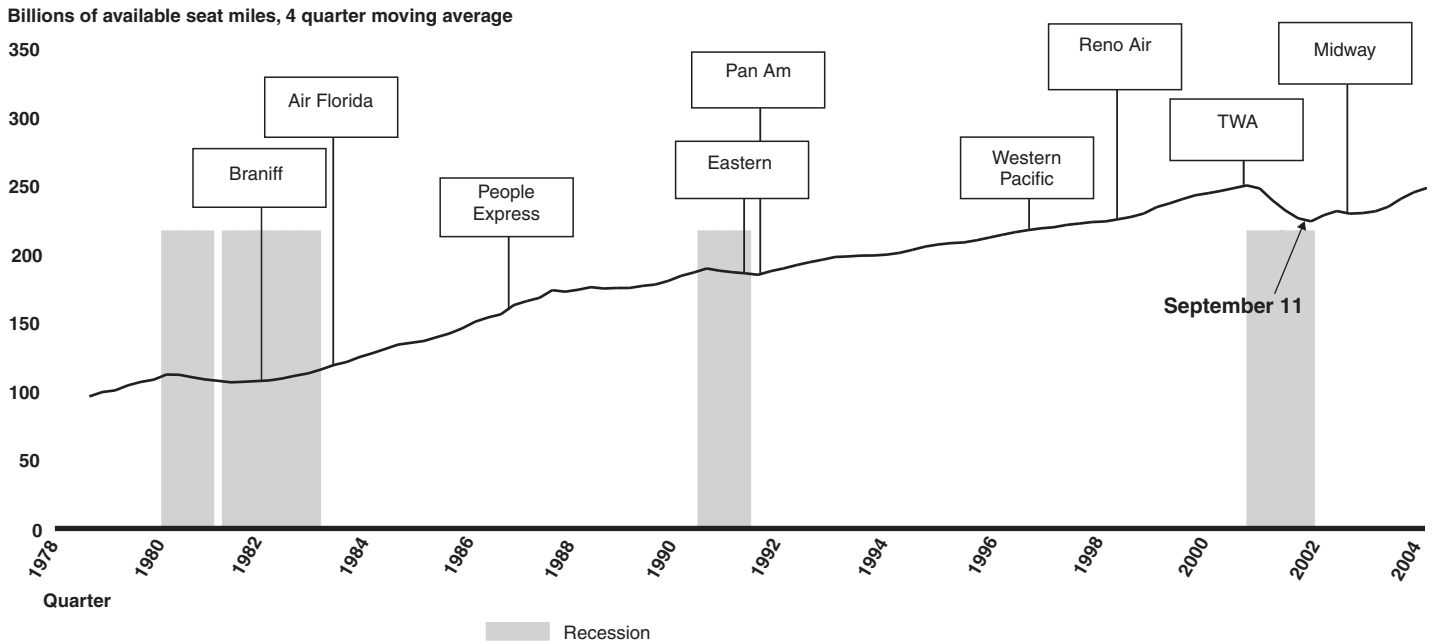
Both a national commission and airline executives have asserted, but without specific evidence, that bankruptcy protection allows airlines to avoid liquidation, thus contributing to industry overcapacity and underpricing that harms bankrupt carriers' rivals. According to a 1993 report by the National Commission to Ensure a Strong Competitive Airline Industry, one of the causes of the industry's financial problems was bankrupt airlines. Industry executives and some publications have gone further, stating that bankrupt airlines damage the entire industry.²³ For example, a former Chairman of American Airlines asserted that bankrupt airlines contribute to industry overcapacity and are able to underprice rivals by virtue of their bankruptcy protection. However, very little evidence has been cited in any of these claims. In 1993, we testified that claims and counterclaims concerning the underpricing of bankrupt airlines had not been substantiated or considered in a larger context.²⁴

There is little evidence that bankruptcy protection has contributed to industry overcapacity, at least in the long term. If it did, then some evidence that liquidation permanently removes capacity from the market should also exist. All indications are that this has not occurred. For example, industry capacity, as measured by available seat miles (ASM), grew two and one-half times from 1978 through 2004. Growth has slowed or declined just before and during recessions, but not as a result of large airline liquidations (see fig. 8).

²³ "[B]ankrupt carriers severely damage the economic health of the entire airline industry. They transmit their financial condition to other, solvent carriers much like a virus is transmitted from the sick to the healthy" *Aviation Week & Space Technology*, 3, May 1993, p. 66.

²⁴ GAO, *Airline Competition: Industry Competitive and Financial Issues*. [GAO-T-RCED-93-49](#) June 9, 1993.

Figure 8: Growth of Airline Industry Capacity and Major Airline Liquidations



Source: Bankruptcy filings, SEC filings, National Bureau of Economic Research media reports, and DOT Form 41 data.

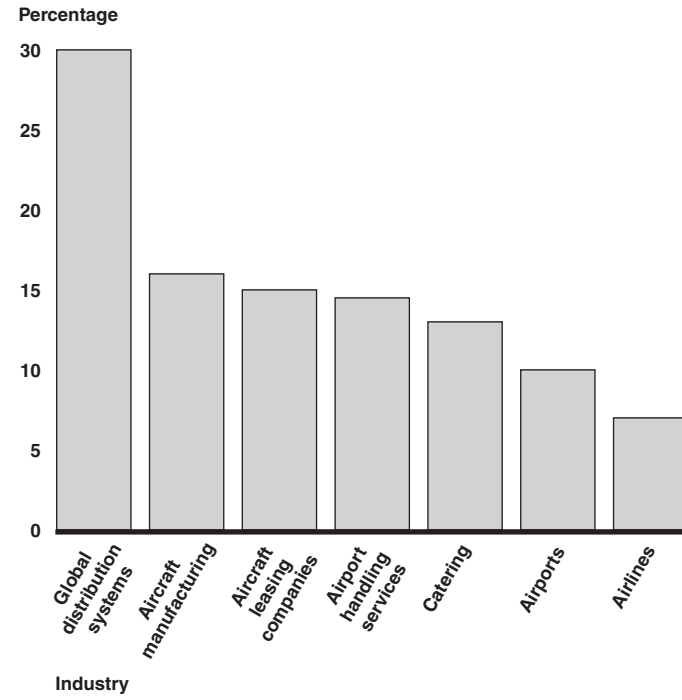
Note: Figure does not show liquidations of smaller airlines.

Capacity has continued to grow despite liquidations for a variety of reasons, including the fungibility of aircraft and the ease of entry, but ultimately capacity in any industry can be traced to the flow of capital into and out of the industry. For the airline industry, in which the chief asset (aircraft) is easily resold (fungible) and heavily leveraged, capital flows have supported the continued expansion of capacity even during industry downturns. Except for government subsidies to airlines or manufacturers, capital would flow to airlines only if the providers of that capital received a return on their investments. Evidence suggests that capital providers have profited and helps explain why airlines in bankruptcy continue to receive substantial capital support from other members of the value chain. Experts have espoused the notion of the value chain in understanding the

role of companies in an industry.²⁵ In the airline industry, the value chain includes aircraft and engine manufacturers, such as Boeing, General Electric, and Airbus; lessors, such as GE Commercial Aviation Service and International Lease Finance Corporation; global ticket distribution systems, like Sabre and Worldspan; credit card companies; airports; suppliers; and others. There is considerable evidence that these other members of the value chain have earned a good return on capital while airlines have not (see figs. 9 and 10). Those companies further up the value chain face less competition and are able to impose higher costs on airlines. Accordingly, these companies have a vested interest in ensuring that airlines survive and that capacity not leave the industry.

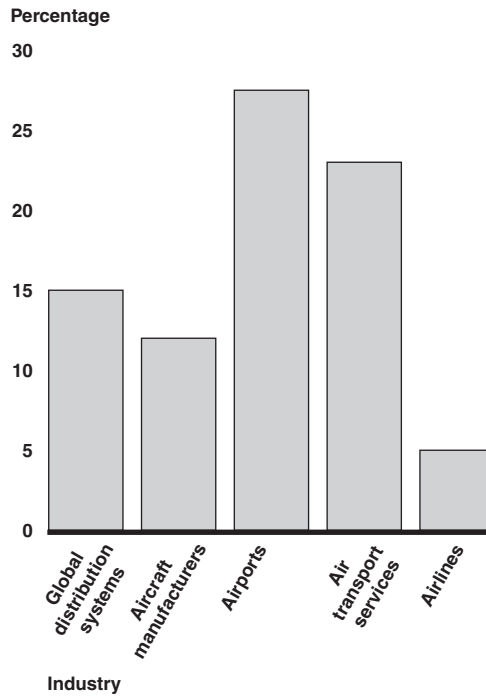
²⁵The value chain is based on the process view of organizations, the idea of seeing a manufacturing or service organization as a system made up of subsystems, each with inputs, transformation processes, and outputs. The inputs, transformation processes, and outputs involve the acquisition and consumption of resources – e.g., money, labor, materials, equipment, and management – and how the value chain activities are carried out determines costs and revenues. Airlines, to adopt Porter’s terminology, can be seen as being at the end of a chain of vertical linkages that supply the ultimate air transport service. Michael E. Porter, “Competitive Advantage: Creating and Sustaining Superior Performance” and Kenneth Button, “Wings Across Europe: Towards An Efficient European Air Transport System.”

Figure 9: Return on Capital Invested, 1992-1996



Source: McKinsey.

Figure 10: Operating Profits, 2000-2001



Source: Airline Business.

Data from sources of financing to airlines that are in bankruptcy or financial trouble provide some evidence of the vested interests of value chain members in keeping troubled airlines alive. Table 3 lists some of the major injections of capital into airlines since 2004.

Table 3: Recent Examples of Airline Financing

Dollars in millions

Airline	Amount	Year	Sources
US Airways	\$740	2002	Retirement Systems of Alabama
Delta	1,100	2004	American Express, GE Commercial Aviation Services
US Airways	140	2004	GE Commercial Aviation Services
Independence Air	20 60	2005	GE Commercial Aviation Services Airbus
US Airways/America West merger	1,500	2005	Regional airline, Airbus, hedge funds, credit card companies
Hawaiian	\$60	2005	RC Aviation

Source: Airline and media reports.

Our research indicates that the departure or liquidation of a carrier from a market does not necessarily lead to a long-term decline in local traffic (i.e., that which originates at or is destined for the particular airport) for that market. We contracted with InterVISTAS-ga2, an aviation consultant, to examine traffic to and from six cities that experienced the departure or significant withdrawal of service of an airline (see table 4). In most cases, while total capacity and passenger traffic decreased, the reduction was largely attributable to the loss of connecting passenger traffic from the departing carrier. There was little diminution in local passenger traffic for most of these markets because other carriers increased their capacity to replace the departing carrier's capacity. This research provides further evidence that demand drives capacity and that the departure of a carrier due to bankruptcy or a change in market strategy does not lead to a long-term decline in capacity. Appendix II contains additional detailed information on each case study.

Table 4: Case Examples of Markets' Response to Airline Withdrawals

Market	Year	Airline	Effect on passenger traffic
Greensboro, NC	1995	Continental Lite dismantled service.	Other airlines' traffic increased. Origin and destination traffic decreased.
Nashville, TN	1995	American Airlines eliminated hub.	Other airlines' traffic increased. Origin and destination traffic increased.
Colorado Springs, CO	1997	Western Pacific moved operations to Denver.	Other airlines' traffic decreased. Origin and destination traffic decreased.
St. Louis, MO	2001	TWA acquired by American Airlines.	Other airlines' traffic decreased. Little change in origin and destination traffic.
Kansas City, MO	2002	Vanguard Airlines suspended service.	Little change in other airlines' traffic. Little change in origin and destination traffic.
Columbus, OH	2003	America West eliminated hub.	Other airlines' traffic increased. Little change in origin and destination traffic.

Source: InterVISTAS-ga2 and Department of Transportation.

Note: "Little change" means that origin and destination traffic increased or decreased less than 10 percent. Changes in passenger traffic are measured from 4 quarters before to 8 quarters after the airline's departure.

A major study of airline bankruptcies' effects on air service also found that bankruptcy generally does not harm individual airline markets. This April 2003 study examined all major chapter 11 bankruptcies from 1984 through 2001 to determine if and how they affected air service.²⁶ The study found that the effect of bankruptcies on large and small airports was insubstantial and not separable from normal fluctuations in air traffic. However, for medium-sized airports, the study found the bankruptcy of an airline with a significant share of flights reduced service by amounts that were statistically significant.

²⁶Severin Borenstein and Nancy L. Rose, *Do Airline Bankruptcies Reduce Air Service?*, National Bureau of Economic Research Working Paper 9636, April 2003.

Two major academic studies have found that airlines under bankruptcy protection do not lower their fares or hurt competitor airlines, as some have contended. A 1995 study found that an airline typically reduces its fares somewhat before entering bankruptcy.²⁷ However, the study found that other airlines do not lower their fares in response and, more important, do not lose passenger traffic to their bankrupt rival and therefore are not harmed by the bankrupt airline. Another study came to a similar conclusion in 2000, this time examining the operating performance of 51 bankrupt firms, including 5 airlines.²⁸ Rather than examine fares as did the 1995 study, this study examined the operating and financial performance of bankrupt firms and their rivals. The study found that the performance of a bankrupt firm deteriorates before the firm files for bankruptcy and its rivals' profits also decline during this period. However, once the firm is in bankruptcy, its rivals' profits recover.

Bankruptcies Are Not a Panacea and Few Airlines Have Emerged Successfully

With very few exceptions, airlines that entered bankruptcy did not emerge from it. Many of the advantages of bankruptcy stem from the legal protection afforded the debtor airline from its creditors, but this protection comes at a high cost in loss of control over airline operations and damaged relations with employees, investors, and suppliers.

Bankruptcy Involves Costs

Bankruptcy involves many costs for airlines that file. The financial costs include the consultant and legal fees of managing a lengthy bankruptcy. For example, United, which filed for bankruptcy in December 2002, had spent nearly \$260 million in legal fees as of June 2005. A study of bankruptcy fees found that large companies generally spend an average of 2.2 percent of their assets on legal fees while in bankruptcy.²⁹ The fees for United are high for a company of its size, and they are rising as the company continues to operate under chapter 11. These fees, thus far, make United's bankruptcy the seventh most costly bankruptcy of all time. Bankruptcy also wipes out

²⁷Severin Borenstein and Nancy L. Rose, *Do Airlines in Chapter 11 Harm Their Rivals?: Bankruptcy and Pricing Behavior in U.S. Airline Markets*, National Bureau of Economic Research Working Paper 5047, February 1995.

²⁸Robert E. Kennedy, "The Effect of Bankruptcy Filings on Rivals' Operating Performance: Evidence From 51 Large Bankruptcies," *International Journal of the Economics of Business*; February 2000; pp. 5-25.

²⁹Lynn M. LoPucki and Joseph W. Doherty, "The Determinants of Professional Fees in Large Bankruptcy Reorganization Cases," UCLA School of Law, Law & Econ Research Paper No. 3-14, *Journal of Empirical Legal Studies*, Vol. 1, January 2004.

shareholders' equity, which may mean significant losses for the original owners, and leaves them without a financial interest in the company. Finally, airlines in bankruptcy do not immediately receive all the cash from credit card ticket sales because credit card companies protect themselves against liquidation by withholding a large percentage of receipts until travel is actually taken. For the cash-flow-intensive airline business, this wait is difficult.

In addition to financial costs, there are many negative factors to be considered by firms filing for bankruptcy. Notably, airline officials told us, loss of control over the airline's operations can be significant, because the courts must approve important changes, such as sales of assets or significant changes in fare structures or schedules. Rival airlines are able to learn of strategic changes well before they may occur. There may also be damage to public and customer perceptions of the airline. Finally, bankruptcy damages, sometimes permanently, relations with employees if they are made to bear a significant portion of the bankruptcy costs. In other cases, an airline may suffer a "brain drain" when its most talented employees seek employment elsewhere.

Very Few Airlines Have Emerged Successfully from Bankruptcy

Very few airlines have emerged from bankruptcy and are still operating. Many others have gone out of business through liquidation or merger. Of the 162 airline bankruptcy filings by 142 different airlines since 1978, 148 were for chapter 11 reorganization and 14 were for chapter 7 liquidation (see table 5). Of the 148 chapter 11 reorganization filings, in only 18 cases does the airline still hold an operating certificate from the Federal Aviation Administration (FAA).

Table 5: Bankruptcy Filings, 1978-2004

Filing for chapter 7 liquidation	14
Filing for chapter 11 reorganization	148
• Airline no longer certificated by FAA	112
• Airline refiled for bankruptcy and is no longer certificated by FAA	18
• Airline is still certificated and operating	18
Total filings	162

Source: Air Transport Association and Department of Transportation.

Airlines Have Shed Billions in Pension Obligations, but Structural Cost Problems Remain

Market factors, management-labor decisions, and pension law provisions have played a role in airline pension underfunding of approximately \$13.7 billion, with an estimated \$10.4 billion in minimum funding requirements due from 2005 through 2008 as a result. These pension obligations contribute to the liquidity problems faced by legacy airlines that still operate pension plans, and may help cause additional airlines to declare bankruptcy. Remaining airline pensions expose PBGC to \$23.7 billion in unfunded pension obligations and would result in significant benefit reductions to participants if their pension plans are terminated. PBGC has taken over a combined \$24.9 billion in pension obligations from US Airways and United within the last 3 years, at a cost of over \$9.7 billion to the agency. While eliminating or easing pension plan obligations may help ease legacy airlines' immediate liquidity pressures, they do not eliminate the structural cost imbalance between legacy and low cost airlines, or guarantee that the legacy airlines will avoid bankruptcy. Pension reform proposals—including extending payment time frames, changing premium rules, and using a yield curve to calculate liabilities—would have differential effects among airlines and implications for PBGC.

Pension Underfunding Will Require Airlines to Contribute a Minimum of \$10.4 Billion to Plans between 2005 and 2008

Airline defined benefit pensions are underfunded by approximately \$13.7 billion, according to airline financial reports filed with SEC.³⁰ This underfunding is down from \$21 billion at the end of 2004 as a result of the termination and transfer of US Airways' remaining pension plans and all of United's pension plans to PBGC. Under existing law, minimum pension contribution requirements for the remaining legacy airlines that still operate plans are estimated to be at least \$10.4 billion from 2005 through 2008. These minimum contribution requirements contribute to airline liquidity problems. Estimates suggest the combined costs of the minimum pension contribution requirements, long-term debt, capital leases, and operating leases will exceed available cash.

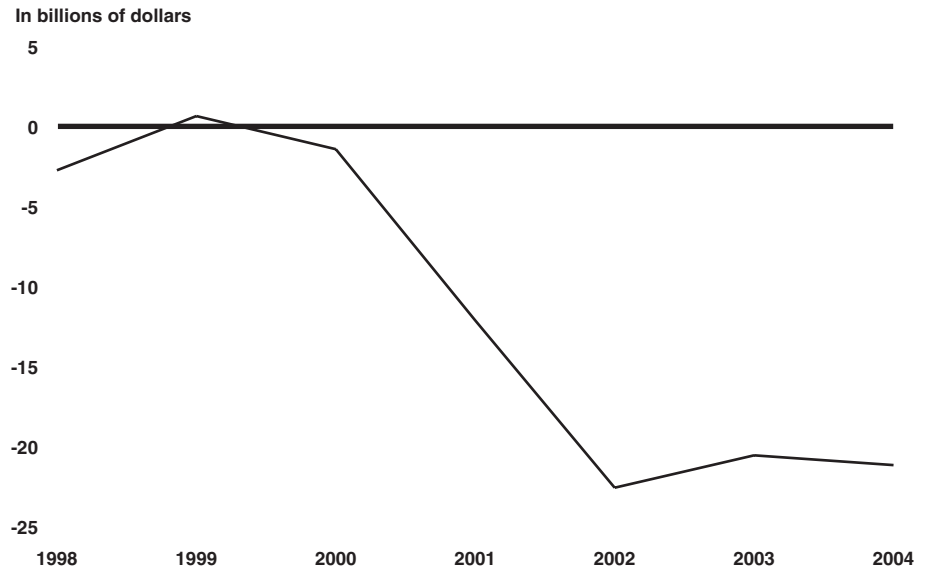
³⁰Exact pension underfunding varies daily because pension assets change with market factors, and liabilities change with, among other things, market factors and changes to labor agreements. This underfunding estimate is based on year-end 2004 SEC filings, and does not include pension data from United and US Airways because their plans have been or are being terminated.

Overfunded in 1999, Legacy Airlines' Pensions Were Underfunded by \$21 Billion at the End of 2004

The magnitude of legacy airlines' future pension funding requirements is attributable to the size of the pension shortfall that has developed since 2000. As recently as 1999, airline pensions were overfunded by \$700 million, according to SEC filings; by the end of 2004, legacy airlines reported a deficit of \$21 billion (see fig. 11), despite the termination of the US Airways pilots' plan in 2003. Since these filings, the total underfunding has declined to approximately \$13.7 billion, in part because of the termination of the remaining US Airways plans and all of the United plans.³¹

³¹SEC data and PBGC data on the funded status of plans can differ because they serve different purposes, provide different information, and are calculated differently. Corporate financial statements show the aggregate effect of all of a company's defined benefit pension plans on its overall financial position and performance. These data show airline defined benefit plans were underfunded by \$21 billion at the end of 2004; excluding the US Airways and United plans lowers this figure to \$13.7 billion. The PBGC data focus, in part, on the funding needs of each pension plan. The two sources may also differ in the rates assumed for investment returns on pension assets, how these rates are used, and the rates used to calculate the values of pension liabilities. As a result, the information available from the two sources often may appear to be inconsistent. According to data filed on Form 4010 with PBGC ("4010" data), airline pension plans were underfunded by \$33.2 billion at the end of 2004; excluding the data for US Airways and United plans lowers this figure to \$23.7 billion. For more information on which agency's data we used in different sections of this report, see app. I. See also GAO, *Private Pensions: Publicly Available Reports Provide Useful but Limited Information on Plans' Financial Condition*, [GAO-04-395](#) (Washington, D.C.: Mar. 31, 2004) and GAO, *Pension Benefit Guaranty Corporation: Single-Employer Pension Insurance Program Faces Significant Long-Term Risks*, [GAO-04-90](#) (Washington, D.C.: Oct. 29, 2003).

Figure 11: Funded Status of Legacy Airline Defined Benefit Plans, 1998-2004



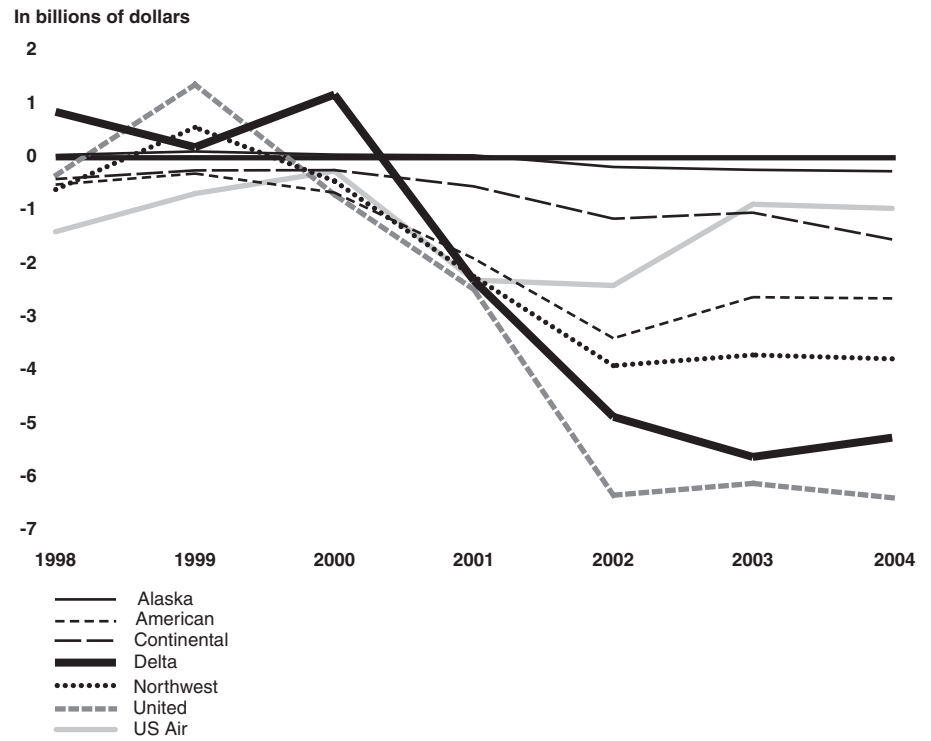
Source: GAO analysis of SEC filings.

Note: The termination of the United Airlines and remaining US Airways defined benefit pension plans in 2005 reduced the total shortfall to approximately \$13.7 billion, according to 2004 year-end data. The SEC liability data used in this report may include some pension plans not guaranteed by PBGC.

Extent of Pension Underfunding Varies Significantly by Airline

The extent of pension underfunding varies significantly by airline. At the end of 2004, before terminating its pension plans, United reported underfunding of \$6.4 billion, an amount equal to over 40 percent of its total operating revenues in 2004. In contrast, Alaska reported pension underfunding of \$303 million at the end of 2004, equal to 13.5 percent of its operating revenues. Since United terminated its pension plans, Delta and Northwest have the most significant pension funding deficits—over \$5 billion and nearly \$4 billion, respectively—which represent about 35 percent of each airline’s 2004 operating revenues (see fig. 12). PBGC released estimated after Delta and Northwest declared bankruptcy on September 14, 2005, stating that on a termination basis Delta’s defined benefit plans were underfunded by \$10.6 billion, while Northwest’s underfunding totaled \$5.7 billion.

Figure 12: Pension Funding Status, 1998-2004



Source: GAO analysis of SEC 10K filings.

Note: Funding status is based on projected benefit obligation data and aggregates all plans sponsored by an airline into one measure.

Over \$10 Billion Needed to Meet Minimum Pension Contribution Requirements over the Next 4 Years

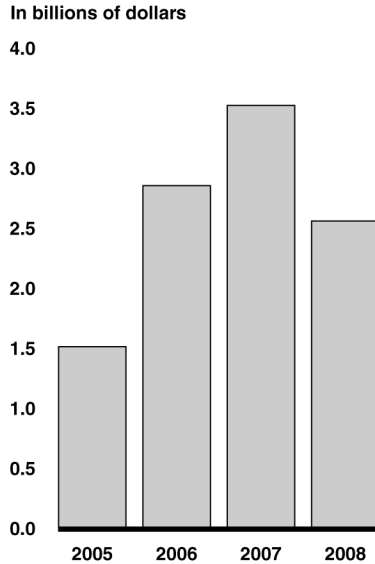
Under current law, companies whose pension plans fail certain funding benchmarks and are underfunded by more than 10 percent on a current liability basis must make deficit reduction contributions (DRC), in addition to other contributions, to remedy the underfunding.³² Minimum contribution requirements, including DRCs, are estimated to total a minimum of \$10.4 billion from 2005 through 2008.³³ These estimates assume the expiration of the Pension Funding Equity Act (PFEA) at the end of this year.³⁴ PFEA permitted airlines to defer the majority of their DRCs in 2004 and 2005. If this legislation is allowed to expire at the end of 2005, payments due from legacy airlines will significantly increase in 2006. According to PBGC data, legacy airlines are estimated to owe a minimum of \$1.5 billion this year, nearly \$2.9 billion in 2006, \$3.5 billion in 2007, and \$2.6 billion in 2008 (see fig. 13).

³²If a single-employer plan is at least 90 percent funded on a current liability basis, the sponsor is not required to make any contributions because of a “full funding limit” exemption. If the value of plan assets is less than 90 percent of the sponsor’s current liability, a plan may be subject to a deficit reduction contribution. However, a plan is not subject to this requirement if the value of plan assets (1) is at least 80 percent of current liability and (2) was at least 90 percent of current liability for each of the 2 immediately preceding years or for each of the second and third immediately preceding years. To determine whether the additional funding rule applies to a plan, the Internal Revenue Code requires sponsors to calculate current liability using the highest interest rate allowable for the plan year. See 26 U.S.C. 412(1)(9)(C). See GAO, *Private Pensions, Recent Experiences of Large Defined Benefit Plans Illustrate Weaknesses in Funding Rules*, [GAO-05-294](#) (Washington, D.C.: May 31, 2005).

³³These estimates are based on 4010 filings and include data only for legacy airlines that currently sponsor defined benefit pension plans and reported their estimated pension obligations to PBGC. Pension law provisions prohibit publicly identifying the airlines and other plan sponsors that have reported 4010 information.

³⁴Pension Funding Equity Act of 2004 (P.L. 108-218, Apr. 10, 2004). A provision of this act changed the interest rate used to calculate future liability from the 30-year Treasury bond rate to a corporate bond rate, which effectively reduced the measured value of future liabilities.

Figure 13: Legacy Airlines' Projected Minimum Contribution Requirements, 2005-2008



Source: PBGC data.

Market Factors, Management-Labor Decisions, and Pension Law Provisions Have Played a Role in Airline Pension Underfunding

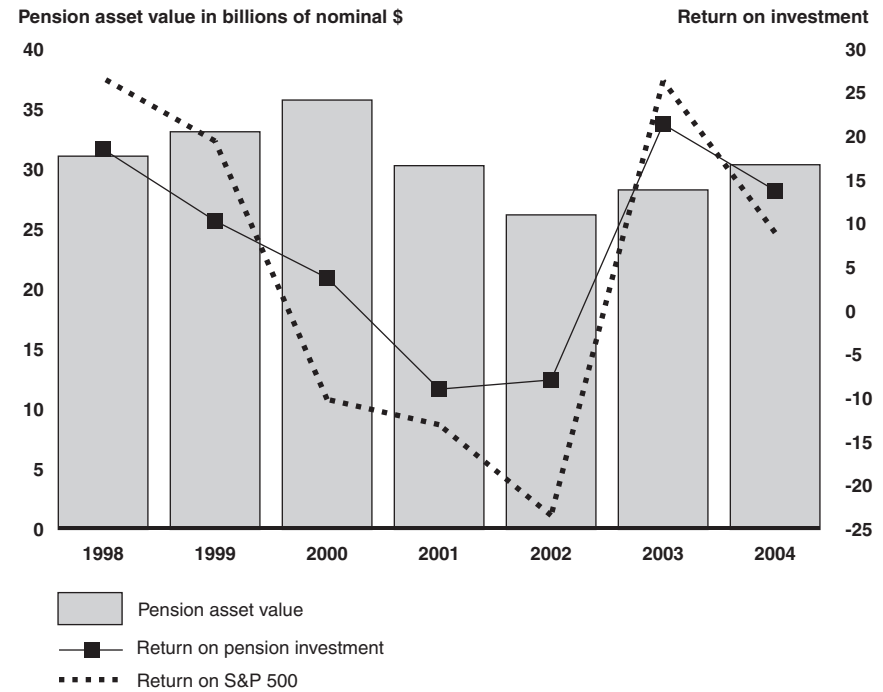
Declines in pension plan assets from investment losses and low interest rates have been significant factors in current pension underfunding. Airline pension asset values dropped nearly 15 percent from 2001 through 2004 because of the decline in the stock market, while future obligations have steadily increased because of (1) declines in the yields on the fixed-income securities used to calculate the liabilities of plans, and (2) new benefit accruals. Management and labor decisions increased pension obligations in profitable years, but much less was contributed to the pension funds than could have been. In addition to these factors, pension funding rules have not prevented plans from becoming significantly underfunded. Even though U.S. Airways and United Airlines were in full compliance with the minimum funding rules for pension plans prior to bankruptcy, their plans, in aggregate, were underfunded by nearly \$15 billion at termination.

Asset Declines Have Contributed to Pension Underfunding

Pension asset values for legacy airlines reached a high in 2000 of \$35.8 billion. Investment returns turned negative in 2001 and caused the value of airline pension assets to decline. By 2002, the value of legacy airline pension assets dropped to \$26.2 billion—a loss of over \$9 billion (26.7 percent). By 2004, pension asset values recovered to \$30.4 billion, about 15 percent below the high in 2000 (see fig. 14). If PBGC takes over an underfunded plan after it has been terminated, the plan's liabilities and assets are transferred to PBGC. If the plan's assets are insufficient to cover the plan's liabilities, PBGC, and sometimes plan participants, must assume the loss. While the Employment Retirement Income Security Act³⁵ provides some standards of conduct for the plan sponsor's investment practices, the sponsor's chosen plan fiduciary has discretionary control over the management of plan assets. We did not examine the investment practices of airlines or other companies; however, one union has suggested that airline investment practices may have contributed to plan failure and has requested that PBGC conduct an audit to ensure the integrity of asset investment practices. PBGC, however, does not have the authority to conduct this type of audit; this responsibility falls under the authority of the Department of Labor.

³⁵29 U.S.C. Sec. 1104.

Figure 14: Legacy Airlines' Pension Assets and Returns, 1998-2004



Source: SEC 10K filings.

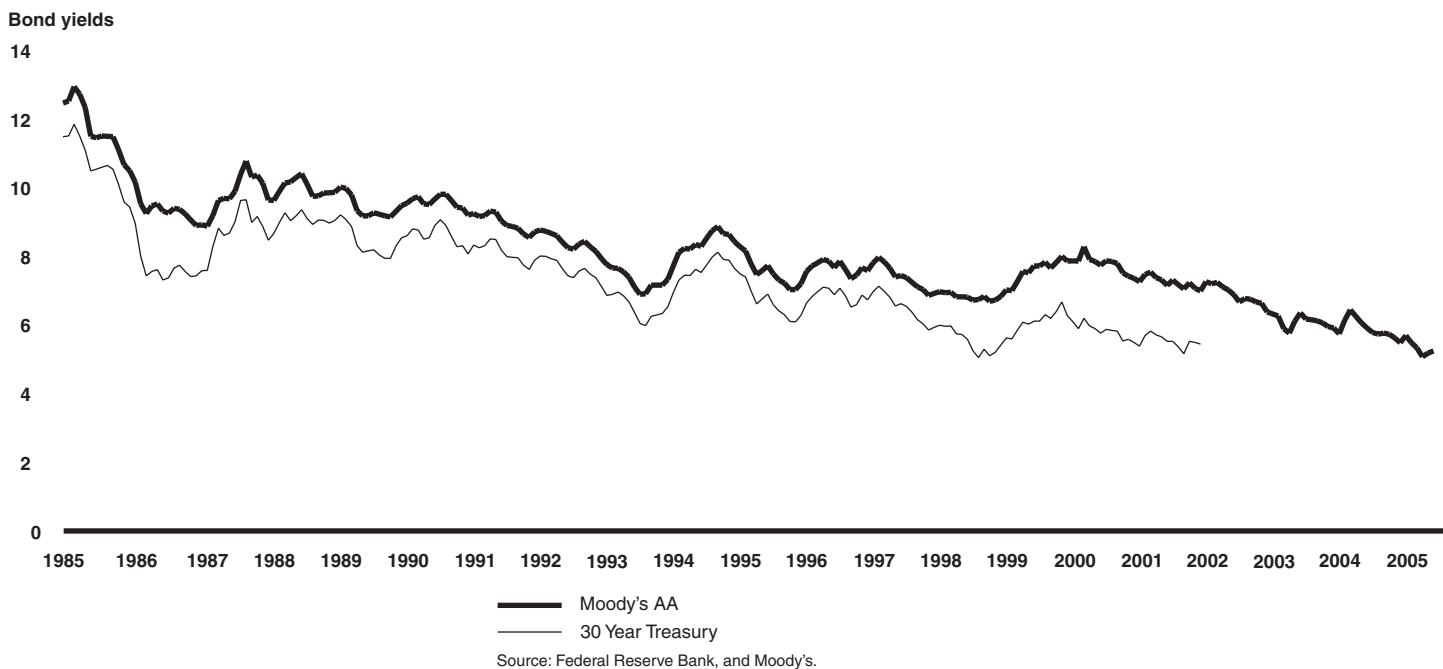
Falling Interest Rates Have Increased the Value of Pension Liabilities

The decline in key interest rates compounded the loss in asset value by increasing the value of pension liabilities. Interest rates are critical factors in calculating the level of plan assets needed today in order to fulfill promised benefits. When interest rates are lower, projected returns on assets are lower, requiring more money to be invested today to finance promised future benefits. At a 6-percent interest rate, for example, a promise to pay \$1 per year for the next 30 years has a present value of \$14. If the interest rate is reduced to 1 percent, however, the present value of the promise to pay \$1 per year for the next 30 years increases to \$26.

Bond yields underpinning the interest rates used to calculate pension liabilities on a current liability basis have been trending lower since the early 1980s, causing the value of future liabilities to grow. Until 2004, the interest rate used to calculate liabilities on a current liability basis was based on the 30-year Treasury bond rate. PFEA changed the basis of this interest rate from the 30-year Treasury bond rate to a composite index of high-grade corporate bonds for years 2004 and 2005. As figure 15 shows,

the two rates track each other fairly closely, but the 30-year Treasury rate is lower.

Figure 15: Corporate and 30-Year Treasury Bond Yields, 1977-2005



Management and Labor Decisions Contributed to the Size of Underfunding

In addition to market forces, decisions made by management and labor have increased pension liabilities. Although management and labor unions have agreed to a number of changes to collective bargaining agreements that have limited pension and other benefits in recent years, labor agreements have also increased pension liabilities in a number of instances since the late 1990s. In some instances, pension benefits increased beyond what financially weak airlines could reasonably afford. For example, in the spring of 2002, United's management and mechanics reached a new labor

agreement that increased the mechanics' pension benefit by 45 percent, but the airline declared bankruptcy the following December.³⁶

In addition, legacy airlines have funded their pension plans far less than they could have, even during the airlines' profitable years. PBGC examined 101 cases of airline pension contributions from 1997 through 2002 and found that while airlines made the maximum deductible contribution in 10 cases, they made no contributions in 49 cases when they could have contributed.³⁷ When airlines did make tax deductible contributions, the contributions were often far less than permitted. For example, in 2000, the airlines PBGC examined could have made a total of \$4.2 billion in tax-deductible contributions, but they contributed only about \$136 million despite recording profits of \$4.1 billion (see fig. 16).³⁸

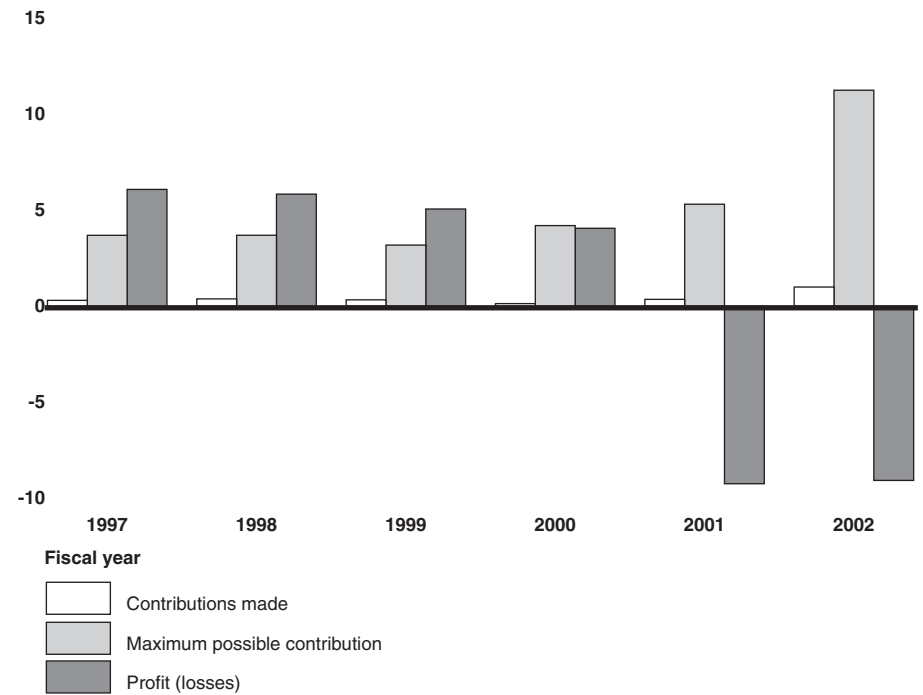
³⁶The increase in benefits was not fully guaranteed by PBGC because PBGC phases in benefit increases made through plan amendments over 5 years. PBGC guarantees the greater of 20 percent of the benefit increase or \$20 per month of the increase on the anniversary of the date the increase was effective. For example, if the plan was terminated more than 3 years but less than 4 years after the benefit increase, then PBGC would guarantee the greater of 60 percent of the increase or \$60 per month in increased benefits. The exact date of the termination may not be important for the phase-in except to the extent that it affects the guaranteed benefit amount.

³⁷These 101 cases covered 18 pension plans sponsored by five airlines.

³⁸Pension funding rules permit sponsors to choose the interest rate used to measure the plan's current liability from a specified range of interest rates. The interest rate, in conjunction with other factors, determines the maximum deductible pension contribution. Currently, the interest rate must be chosen from an interest rate "corridor" that is based on an index of investment-grade corporate bonds. In calculating the maximum deductible contribution, a higher interest rate produces a lower liability value and a lower deductible contribution limit. The maximum deductible contributions referred to in this paragraph and in figure 16 are calculated using the lowest interest rate permissible from the interest rate corridor.

Figure 16: Legacy Airlines' Maximum Allowable Pension Contributions, Actual Pension Contributions, and Operating Profits, 1997-2002

In billions of dollars



Source: PBGC.

Pension Funding Rules Have Not Prevented Pension Underfunding

PBGC has taken over a number of pension plans that have been substantially underfunded even though their sponsors were in full compliance with the minimum funding requirements. Existing laws governing pension funding and premiums have not protected PBGC from accumulating a significant long-term deficit and have not minimized the impact of PBGC's exposure to the moral hazard³⁹ arising from insuring pension plans. The minimum funding rules depend on the plan sponsor being in good financial health and continuing operations indefinitely; the rules do not ensure that the plan sponsor will have the means to meet the plan's benefit obligations if the plan sponsor meets financial distress. Meanwhile, in the aggregate, premiums paid by plan sponsors under the pension insurance system have not adequately reflected the financial risk to which PBGC is exposed. Accordingly, defined benefit plan sponsors, acting within the rules, have been able to turn significantly underfunded plans over to PBGC, thereby creating PBGC's current deficit. This section addresses three aspects of the rules—the current liability measure, the use of credit balances in meeting funding requirements, and PBGC's premium structure.⁴⁰

- The current liability measure, which measures the value of a plan's accrued liabilities to date for funding purposes, may provide an overly optimistic picture of a plan's financial status and the sponsor's ability to fulfill its obligations. Such a picture is possible because the current liability measure tacitly assumes, among other things, that the plan and its sponsor are financially healthy, viable entities. For a plan whose sponsor is in financial trouble, a more conservative measure, the termination liability, is likely to present a more realistic picture of the liabilities the plan has accrued to date.⁴¹ From 1998 through 2002, airline pensions were consistently funded above 90 percent on a current liability basis. By that measure, the plan sponsors were not required to

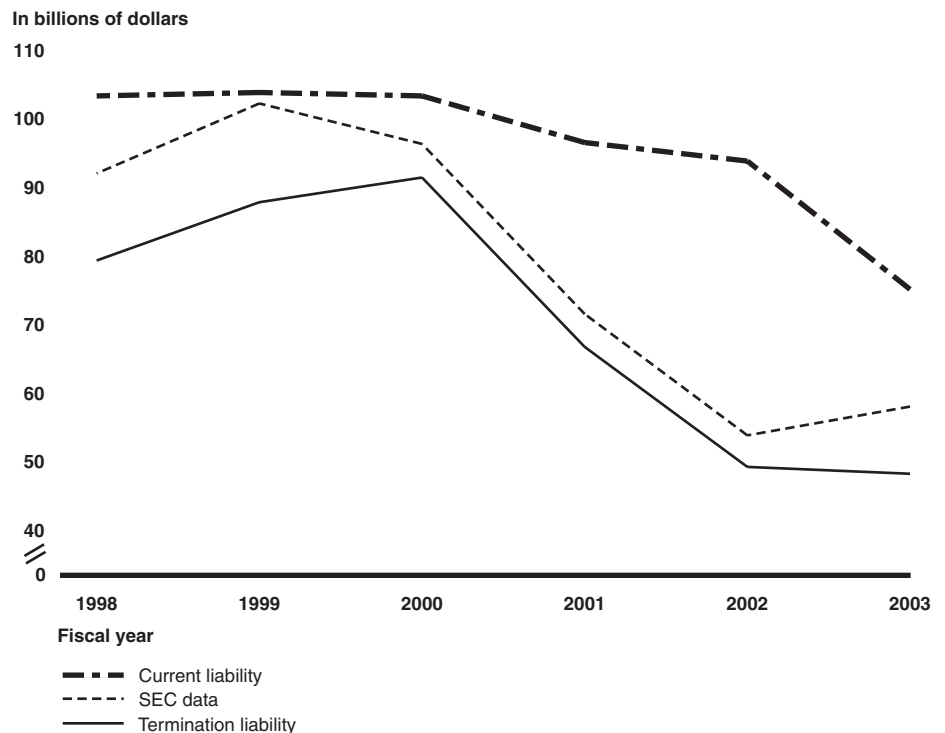
³⁹Moral hazard emerges when the insured parties—in this case, plan sponsors and participants—engage in behavior that they would not otherwise have engaged in had they not been insured against certain losses. In the case of the pension insurance system, such behavior might include the willingness of parties to enter into agreements that increase pension liabilities, rather than taking wage increases.

⁴⁰An ongoing body of GAO work addresses these and other related issues more comprehensively. See, for example, GAO, *Private Pensions, Recent Experiences of Large Defined Benefit Plans Illustrate Weaknesses in Funding Rules*, [GAO-05-294](#), (Washington, D.C.: May 31, 2005).

⁴¹The termination liability measures the value of accrued benefits using assumptions appropriate for terminating a plan.

make contributions because the “full funding limitation” exemption applied. In contrast, the funding status of airline pensions on a termination basis during this time was under 90 percent in each year except 2000, with a spread of more than 25 percent between the two measures in 2003. Figure 17 illustrates the difference in aggregate funding status shown by each measure.

Figure 17: Legacy Airline Pension Assets as a Percent of Liabilities, 1998-2003



Source: PBGC data and SEC 10K filings.

The result is that pensions often are significantly more underfunded when plans are terminated than the current liability measure indicates. US Airways’ and United Airlines’ recent pension plan terminations illustrate this point. When these airlines terminated their pension plans, the plans’ combined benefit liability was \$24.9 billion. Combined assets in the funds totaled \$10 billion—a 60 percent shortfall.

-
- The ability of sponsors to use funding credits to fulfill minimum contribution requirements has also contributed to pension plan underfunding. Plan sponsors accumulate funding credits when they contribute more than the minimum contribution requirement in a plan year or when the plan's actual experience, including investment returns on assets, exceed expectations; these credits can then be substituted in later years for cash contributions. In this way, funding credits can act as a buffer against potentially volatile funding requirements and allow sponsors flexibility in managing their annual level of pension contributions.

If the market value of a plan's assets declines, however, the value of funding credits may be significantly overstated. This overstatement occurs because credits are not measured at their market value and are credited with interest each year. For example, a sponsor can accrue a \$1 million credit by making a \$1 million contribution above the minimum contribution requirement. Even if the \$1 million in assets loses all value in the following year, the \$1 million credit balance remains and may be used as a credit toward the plan's minimum contribution requirement. In addition, the sponsor would have to report only a portion of that lost \$1 million in asset value as a plan charge the following year because of smoothing rules that allow losses to be amortized over multiple years.

Over the past 5 years, airlines have used funding credits to fulfill minimum contribution requirements despite significant levels of pension underfunding. For example, starting in 2000, United used funding credits to avoid making cash contributions to its pilots' plan, even though the true funded status of the plan had deteriorated. The plan was only 50 percent funded at termination. Similarly, US Airways avoided contributing cash to its pilots' plan by applying funding credits to fulfill its minimum contribution requirements. At termination, this plan was only 33 percent funded.

- Finally, the premium structure in PBGC's single-employer pension insurance program does not reflect the agency's exposure to financial risk. Although PBGC premiums may be partially based on plan funding levels, they do not consider other relevant risk factors, such as the economic strength of the sponsor or the plan's asset investment strategies, benefit structure, or demographic profile. The current premium structure relies heavily on flat-rate premiums, which are unrelated to risk. PBGC also charges plan sponsors a variable-rate

premium based on the plan's level of underfunding; however, underfunded plans are not required to pay this premium if they satisfy the full funding limit or another exemption.

In addition, current pension funding and pension accounting rules—especially those that permit assets to be smoothed rather than valued at their market rate—may encourage sponsors to invest in riskier assets and potentially benefit from higher expected long-term rates of return. In determinations of funding requirements, a higher expected rate of return on pension assets means that a plan needs to hold fewer assets to meet its future benefit obligations. Under current accounting rules, the greater the expected rate of return on plan assets, the greater the plan sponsor's operating earnings and net income. However, higher expected rates of return require riskier investments that lead to greater investment volatility and risk of losses.

Airline Pension Underfunding Contributes to Airline Liquidity Problems, Threatens Employee Retirement Benefits, and Is Costing PBGC Billions

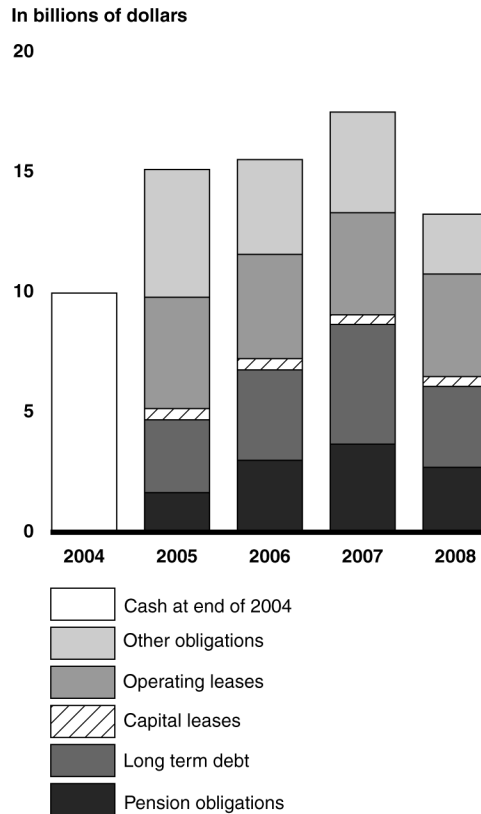
Estimated minimum pension contribution requirements of \$10.4 billion over the next 4 years, combined with other fixed obligations, threaten the liquidity position of the remaining legacy airlines with pension plans. As a result, some airlines have suggested they will be forced to declare bankruptcy and terminate their pension plans if they are not granted some form of pension relief. Pension plan terminations often result in significant benefit cuts to participants and cost PBGC billions. When United and US Airways terminated their pension plans and transferred \$19.6 billion in pension obligations to PBGC, participants lost a total of \$5.3 billion in benefits, and PBGC incurred costs of \$9.7 billion to cover the gap between guaranteed benefits and available assets. Remaining airline pension plans expose PBGC to an additional \$23.7 billion in unfunded benefit obligations.⁴² Although pension plan terminations provide airlines with significant liquidity relief in the near term, these terminations alone will not make legacy airlines cost competitive with low cost airlines, which offer 401(k)-type defined contribution plans.

⁴²These estimates include only legacy airlines that currently sponsor defined benefit pension plans and reported their estimated pension obligations to PBGC. Pension law provisions prohibit publicly identifying the airlines that have reported 4010 information.

Pensions Obligations Contribute to Airlines' Liquidity Problems, but Terminations Alone Do Not Solve Legacy Airlines' Structural Cost Disadvantage

The size of legacy airlines' future fixed obligations (including pensions, long-term debt, and capital and operating leases) relative to their financial position suggests these airlines will have trouble meeting their various financial obligations, regardless of whether they terminate their pension plans. Legacy airlines' fixed obligations in each year from 2005 through 2008 significantly exceed the total year-end 2004 cash balances of these same legacy airlines. Legacy airlines carried a combined cash balance of just under \$10 billion going into 2005 (see fig. 18) and have used cash to fund their operating losses. These airlines' fixed obligations are estimated to be over \$15 billion in both 2005 and 2006, over \$17 billion in 2007, and about \$13 billion in 2008. Fixed obligations exceed total year-end 2004 cash by an average of \$2.7 billion during this time even when pension obligations are not included. While cash from operations can fund some of these obligations, continued losses and the size of these obligations put these airlines in a sizable liquidity bind. Fixed obligations in 2008 and beyond will likely increase as payments due in 2006 and 2007 may be pushed out and as new obligations are assumed. If these airlines continue to lose money this year, as analysts predict, their position will become even more tenuous.

Figure 18: Comparison of Legacy Airlines' Year-end 2004 Cash Balances with Fixed Obligations, 2005-2008



Source: PBGC data and SEC 10K filings.

Nor will easing required pension contribution requirements fix the legacy airlines' underlying structural cost disadvantage. Pension costs, while substantial, are only a small portion of legacy airlines' overall unit costs. The cost of legacy airlines' defined benefit plans accounted for approximately 0.4 cent per available seat mile, a 15 percent difference between legacy and low cost airline unit costs (see fig. 3). The remaining 85 percent of the unit cost differential between legacy and low cost airlines is attributable to factors other than defined benefit pension plans. Furthermore, even if legacy airlines terminated their defined benefit plans, this portion of the unit cost differential would not be fully eliminated because, according to PBGC staff and industry labor officials we interviewed, other plans would replace the defined benefit plans.

Airline Pensions Have Cost PBGC Billions and Expose the Agency to \$23.7 Billion in Benefit Liabilities

The cost to PBGC and participants of defined benefit pension plan terminations has grown in recent years as the level of pension underfunding has deepened (see table 6). When Eastern Airlines defaulted on its pension obligations of nearly \$2.2 billion in 1991, for example, the net claim against PBGC totaled \$701 million.⁴³ By comparison, US Airways' and United's pension plan terminations cost PBGC \$9.7 billion in combined claims against the agency.

Table 6: Costs of Terminating Airline Pension Plans

In millions of constant 2005 dollars

Airline	Date of termination	Benefit liability^a	PBGC liability^b	Net claim on PBGC^c	Cost to participants^d
Eastern Airlines	1991	\$2,228	\$2,080	\$701	\$148
Pam Am	1991	1,674	1,602	995	72
TWA	2001	1,885	1,836	728	49
US Airways	2003, 2005	8,085	6,022	3,062	2,062
United Airlines	2005	16,800	13,600	6,600	3,200
Total		\$30,671	\$25,140	\$12,086	\$5,531

Source: PBGC.

Notes: Bureau of Economic Analysis GDP price indexes were used to calculate constant dollars.

^aThe full value of the benefits promised to participants prior to termination.

^bThe amount of the original benefit insured by PBGC after agency limits are imposed.

^cThe difference between the PBGC liability and the assets transferred at termination.

^dThe difference between the original benefit and the amount insured by PBGC that the participants lose when PBGC takes over a plan.

The remaining legacy airlines' defined benefit plans expose PBGC to billions more in potential losses. At the end of 2004, these legacy airlines reported \$23.7 billion in total termination liabilities for their defined benefit plans, with assets to cover 48 percent of these obligations.

Effect of Pension Plan Terminations on Airline Employees Varies

When US Airways and United terminated their pension plans, active and high-salaried employees generally lost more of their promised benefits than did retirees and low-salaried employees because of statutory limits. For example, PBGC generally does not guarantee benefits above a certain

⁴³This dollar figure and other data in this section have been converted to constant 2005 dollars.

amount, currently \$45,614 annually per participant retiring at age 65.⁴⁴ For participants who retire before age 65, the guaranteed benefit amounts are less; for instance, participants who first receive benefits from PBGC at age 60 are guaranteed benefits of \$29,649. Commercial pilots often end up with substantial benefit cuts when their plans are terminated because, according to PBGC, their benefits generally exceed PBGC's maximum guaranteed amount. In addition, if they elect to begin receiving benefits from PBGC at age 60—the age at which FAA requires pilots to retire from operating commercial service flights—their benefits are cut further. While the loss of a defined benefit plan can be substantial for pilots, they typically have additional and sometimes sizable retirement plans, such as 401(k) plans, that supplement their pension plans. Nonpilot retirees are not as often affected by the maximum payout limits. For example, at US Airways, fewer than 5 percent of the retired mechanics and flight attendants faced benefit cuts when their pension plans were terminated. Retirees generally fare better than active employees because they receive higher priority when PBGC allocates existing assets at plan termination. For example, PBGC estimates that the pension benefits of all United's active ground employees will be cut, with 71 percent of these employees facing estimated cuts of between 1 percent and 25 percent. Of United's retired ground employees, an estimated 39 percent will face benefit cuts; of these retired employees, an estimated 93 percent will see reductions of between 1 to 25 percent. Tables 8 and 9 summarize the expected cuts in benefits for different groups of United's active and retired employees.

⁴⁴This guarantee level applies to plans that are terminated in 2005. The amount guaranteed is adjusted actuarially (1) for the participant's age when PBGC first begins paying benefits and (2) if benefits are not paid as a single-life annuity. Because of the way the Employee Retirement and Income Security Act of 1974 (ERISA), as amended, allocates plan assets to participants, certain participants can receive more than the PBGC-guaranteed amount.

Table 7: Estimated Benefit Cuts for United Airlines Active Employees

Plan	Active employees in plan	Actives employees with benefit cuts	Extent of benefit cuts		
			1% to <25%	25% to <50%	50% or more
Management, administrative, and public contact employees	20,784	19,231	1,696	15,885	1,650
Ground employees	16,062	16,062	11,448	3,441	1,173
Flight attendants	15,024	11,109	1,305	7,067	2,737
Pilots	7,360	7,270	3,927	2,039	1,304

Source: PBGC.

Note: Estimates calculated using January 1, 2005, PBGC data.

Table 8: Estimated Benefit Cuts for United Airlines Retirees

Plan	Retirees in plan	Retirees with benefit cuts	Extent of benefit cuts		
			1% to <25%	25% to <50%	50% or more
Management, administrative, and public contact employees	11,360	2,996	2,816	104	76
Ground employees	12,676	4,961	4,810	121	30
Flight attendants	5,108	29	27	1	1
Pilots	6,087	3,041	1,902	975	164

Source: PBGC.

Note: Estimates calculated using January 1, 2005, PBGC data.

In addition to reducing pension plan benefits, airlines have made significant cuts to active employees' health care benefits. For example, American Airlines increased its active pilots' monthly contributions for family health care coverage by 162 percent and began to require contributions by disabled pilots for health care coverage. Before 2003, United's ramp service employees did not have to make monthly contributions for family health care coverage; however, these employees now must contribute \$173 a month for their coverage. While active

employees' health benefits have been cut, retirees' health care plans have not changed significantly. Union officials said that reductions in retirees' health care benefit would not produce the savings sought by the airlines and were not considered foremost during contract negotiations.

Congress Is Currently Considering Various Pension Reform Proposals

The decline of PBGC's financial condition, the expiration of PFEA at the end of the year, and pension plan terminations at US Airways and United have prompted congressional consideration of various reform proposals for defined benefit pensions. Currently, the three most prominent proposals are the administration's plan; H.R. 2830, "The Pension Protection Act of 2005;" and S. 219, "The National Employee Savings and Trust Equity Guarantee Act of 2005."⁴⁵ All three are broad reform proposals that seek to strengthen the defined benefit pension system in the long term and attempt to resolve fundamental problems with the system, as highlighted in this report and other GAO reports.⁴⁶ For example, all three proposals contain, among others, provisions that a) modify the measurement of pension assets and liabilities, b) increase the premiums paid to PBGC, c) restrict lump-sum distribution provisions, and d) adjust disclosure requirements.

From the airlines' perspective, an important difference among the bills concerns the length of time over which they can amortize the large minimum contribution requirements currently due over the next 4 years. The administration's proposal and H.R. 2830 would use a 7-year payment period. According to a document issued by the Joint Committee on Taxation, S. 219 would extend the amortization payment period to 14 years, but only for airlines that "freeze" their defined benefit plans.⁴⁷ Table 9 suggests how this provision could significantly reduce the airlines' minimum contribution requirements in 2006. Amortizing these obligations over 14 years would have an immediate impact on the airlines' liquidity.

⁴⁵According to a Senate Finance Committee press release (9/27/05), agreement has been reached on a compromise bill, the "Pension Security and Transparency Act", which would include elements of S. 219, including a special provision for airlines that would extend the amortization period for paying unfunded pension liabilities to 14 years.

⁴⁶See list of GAO reports in appendix V.

⁴⁷See Joint Committee on Taxation, *Modifications To The Senate Finance Committee Chairman's Mark Of The "National Employee Savings And Trust Equity Guarantee Act Of 2005"* (JCX-57-05), July 26, 2005.

Table 9: 2006 Estimated Deficit Reduction Contribution Payments under Different Amortization Periods

Dollars in millions

Amortization period	Alaska	American	Continental	Delta	Northwest	Total
4 years	7	149	156	936	562	1,810
7 years	4	85	89	535	321	1,034
15 years	2	40	42	250	150	483
20 years	1	30	31	187	112	362
25 years	1	24	25	150	90	290

Source: Bear Stearns.

Note: Bear Stearns' report did not include estimates for the 14-year amortization period proposed for the airlines in S. 219.

The rationale for extending the amortization period is that unless airlines receive funding relief, existing minimum contribution requirements may have such an adverse effect on their liquidity that they will be forced into bankruptcy. The airlines then could terminate their pension plans and transfer billions in obligations to PBGC. To prevent such terminations, according to the Joint Committee on Taxation, S. 219 would decrease the required annual contribution by allowing the airlines to extend their payments over a longer period. Requiring the airlines to “freeze” their existing plans is designed to limit PBGC’s exposure in case the airlines cannot recover financially and terminate the plans before fully funding them over the 14-year period.

Although extending the amortization period would provide some liquidity relief to the remaining legacy airlines with defined benefit plans, it would not solve those airlines’ overall financial problems, and the extent to which it would limit PBGC’s exposure to additional pension liabilities is unclear. As shown in figure 18, pension obligations are only part of a much larger set of fixed obligations through 2008. Given these other fixed obligations and persistent high fuel prices, pension relief alone will not solve those airlines’ financial problems, nor can it guarantee that airlines will not declare bankruptcy in the future. Furthermore, there is no assurance that PBGC’s financial exposure will be limited. According to a summary by the Joint Committee on Taxation, S. 219 requires pensions to be frozen for the extended amortization period to apply; however, liabilities could still increase. For example, liabilities may increase with salary increases for existing participants because pension benefits are based on participants’ salaries. Even if liabilities are frozen, a plan’s assets could decrease, leaving

PBGC with fewer assets to cover obligations. In the short term, extending the amortization period might prevent airline pension plan terminations, allow employees to collect more benefits than they might otherwise collect, and allow PBGC to avoid taking over plans that are significantly underfunded. In the long term, however, special treatment of airlines could potentially expose PBGC to even greater costs.

Concluding Observations

After 27 years, deregulation continues to affect the structure of the airline industry. Dramatic changes in the level and nature of demand for air travel, combined with an equally dramatic evolution in how airlines meet that demand, have forced a drastic restructuring of the industry. Airlines have experienced greatly diminished pricing power since 2000. Profitability, therefore, depends on which airlines can most effectively compete on cost. This development has created inroads for low cost airlines and forced wrenching change on legacy airlines that long competed using a high-cost business model.

The historically high number of airline bankruptcies and liquidations is a reflection of the industry's inherent instability. However, these events should not be misinterpreted as a cause of the industry's instability. There is no clear evidence that bankruptcy has contributed to the industry's economic ills, including overcapacity and underpricing, and there is some evidence to the contrary. Equally telling is how few of the airlines that have filed for bankruptcy protection are still doing business. Clearly, bankruptcy has not afforded these companies a special advantage.

Bankruptcy has become a well-traveled path by which some legacy airlines are seeking to shed some of their costs and become more competitive. However, the termination of pension plan obligations by US Airways and United Airlines has had substantial and widespread effects on PBGC and on thousands of airline employees, retirees, and other beneficiaries. The recent filings by Delta Air Lines and Northwest Airlines only exacerbate these concerns. Liquidity problems, including \$10.4 billion in near-term pension contributions, may force additional legacy airlines to follow suit. Some airlines are seeking legislation to allow more time to fund their pensions. If their plans are frozen so that their liabilities do not continue to grow, allowing an extended payback period may reduce the likelihood that these airlines will file for bankruptcy and terminate their pension plans in the coming year. However, unless these airlines can reform their overall cost structures and become more competitive with low cost competition, this change will be only a temporary reprieve.

We have previously reported that Congress should consider broad pension reform that is comprehensive in scope and balanced in effect.⁴⁸ Revising plan funding rules is an essential component of comprehensive pension reform. For example, we recently testified that Congress should consider the incentives that pension rules and reform may have on other financial decisions within affected industries. Under current conditions, the presence of PBGC insurance may create certain “moral hazard” incentives—struggling plan sponsors may place other financial priorities above “funding up” their pension plans because they know PBGC will pay guaranteed benefits. Furthermore, because PBGC generally takes over underfunded plans of bankrupt companies, PBGC insurance may create an additional incentive for troubled firms to seek bankruptcy protection, which in turn may affect the competitive balance within the industry.

Agency Comments

We provided a draft of this report to DOT and PBGC for their review and comment. DOT and PBGC officials provided some technical and clarifying comments that we incorporated as appropriate. DOT declined to provide written comments, and PBGC’s written comments appear in appendix III. We also provided selected portions of a draft of this report to the Air Transport Association to verify the presentation of factual material. We incorporated their technical clarifications as appropriate.

We are providing copies of this report to the Secretary of Transportation, the Executive Director of PBGC, and other interested parties and will make copies available to others upon request. In addition, this report will be available at no charge on the GAO Web site at <http://www.gao.gov>. If you have any questions about this report, please contact me at 202-512-2834, or heckerj@gao.gov. Contact points for our Offices of Congressional Relations

⁴⁸See [GAO-04-90](#); [GAO-05-108T](#); GAO, *Pension Benefit Guaranty Corporation: Single-Employer Pension Insurance Program Faces Significant Long-Term Risks*, [GAO-03-873T](#) (Washington, D.C.: Sept. 4, 2003); *Pension Benefit Guaranty Corporation: Long-Term Financing Risks to Single-Employer Insurance Program Highlight Need for Comprehensive Reform*, [GAO-04-150T](#) (Washington, D.C.: Oct. 14, 2003); *Private Pensions: Changing Funding Rules and Enhancing Incentives Can Improve Plan Funding*, [GAO-04-176T](#) (Washington, D.C.: Oct. 29, 2003).

and Public Affairs may be found on the last page of this report. Other key contributors are listed in appendix IV.

A handwritten signature in black ink, reading "JayEtta Z. Hecker". The signature is fluid and cursive, with a long horizontal stroke at the end.

JayEtta Z. Hecker
Director, Physical Infrastructure Issues

List of Congressional Committees

The Honorable Ted Stevens
Chairman
The Honorable Daniel K. Inouye
Co-Chairman
Committee on Commerce, Science, and Transportation
United States Senate

The Honorable Conrad Burns
Chairman
The Honorable John D. Rockefeller
Ranking Minority Member
Subcommittee on Aviation
Committee on Commerce, Science, and Transportation
United States Senate

The Honorable Don Young
Chairman
The Honorable James L. Oberstar
Ranking Democratic Member
Committee on Transportation and Infrastructure
House of Representatives

The Honorable John L. Mica
Chairman
The Honorable Jerry F. Costello
Ranking Democratic Member
Subcommittee on Aviation
Committee on Transportation and Infrastructure
House of Representatives

Scope and Methodology

To examine the role of bankruptcy in the airline industry, we drew on information from a variety of sources. We interviewed airline officials, representatives of airline trade associations, representatives of law firms with significant experience in representing different parties involved in airline bankruptcies, credit and equity analysts, academic experts, and private consultants. We reviewed relevant research obtained from these and other sources. We interviewed government experts from the Department of Transportation (DOT) and its agencies—the Federal Aviation Administration (FAA) and the Bureau of Transportation Statistics (BTS). To determine the financial state of the airlines and the extent to which airlines were able to reduce costs during bankruptcy, we analyzed DOT Form 41 data. We obtained these data from BACK Aviation Solutions, a private contractor that GAO has contracted with to provide DOT Form 41 and other aviation data. To assess the reliability of these data, we reviewed the quality control procedures applied to the data by DOT and BACK Aviation Solutions and subsequently determined that the data were sufficiently reliable for our purposes. To examine the prevalence and length of airline bankruptcies and make comparisons with other industries, we obtained data from two databases: New Generation Research's bankruptcydata.com and Professor Lynn M. LoPucki's Bankruptcy Research Database. To assess the reliability of these data, we reviewed the quality control procedures applied to each data source and subsequently determined that the data were sufficiently reliable for our purposes.

To assess whether bankruptcies are harming the airline industry, we reviewed relevant research, interviewed experts, and analyzed historical data on bankruptcies. We interviewed airline officials, representatives of airline trade associations and law firms with significant experience in representing different parties involved in airline bankruptcies, airline industry credit and equity analysts, academic experts, and private consultants. We also reviewed relevant research obtained from these and other sources. In addition, we interviewed government experts from DOT, FAA, and BTS. We also contracted with InterVISTAS-ga2, a private consulting firm, to analyze changes in air service and fares at six hub cities where an airline exited or significantly reduced its service. The cities were Colorado Springs, Colorado; Columbus, Ohio; Greensboro, North Carolina; Kansas City, Missouri; Nashville, Tennessee; and St. Louis, Missouri. InterVISTAS-ga2's analysis included an examination of changes in capacity (as measured by available seat miles, a common measure of the available capacity in a market) and in passenger traffic (from 4 quarters before to 8 quarters after the airline left a given market or significantly reduced its operations there). InterVISTAS-ga2 used DOT airline data for this analysis;

we reviewed the quality control procedures InterVISTAS-ga2 and DOT applied to these data to assess their reliability and determined that they were sufficiently reliable for our purposes.

To assess the effect of airline pension underfunding on employees, airlines, and the Pension Benefit Guaranty Corporation (PBGC), we relied on a variety of sources. We drew on an extensive body of work that we have completed on private pension issues. We also interviewed airline officials, representatives of airline trade associations and airline labor unions, airline industry credit and equity analysts, academic experts, and officials from PBGC, DOT, FAA, and BTS. We reviewed relevant research obtained from these and other sources. To examine the current and historical financial status of airline pensions plans, we reviewed data from PBGC (from Forms 5500 and 4010) and Securities and Exchange Commission (SEC) filings, including funding contributions, funding status, and estimated future funding contribution requirements. To examine the effect of pension funding requirements on the financial status and cost competitiveness of airlines, we analyzed DOT Form 41 data obtained from BACK Aviation Solutions. To assess the reliability of these data, we reviewed the quality control procedures applied to the data by DOT and BACK Aviation Solutions and subsequently determined that the data were sufficiently reliable for our purposes.

We performed our work from September 2004 through September 2005 in accordance with generally accepted government auditing standards.

Case Studies Describing Market Responses to Airline Withdrawals

For more in-depth information on what has occurred at hubs when carriers have significantly reduced their presence, we contracted with InterVISTAS-ga2,¹ an aviation consulting firm, to collect and analyze data on changes in capacity, as measured in available seat miles (ASM),² and traffic, including both local (origin and destination) and total traffic.³ During preliminary analysis and consultations, we screened out cases older than 10 years and eliminated others for which sufficient data were not available (thereby excluding, for example, the actions taken by US Airways at Pittsburgh in the latter half of 2004, because not enough time had passed to review these actions' possible effects on the market). Consequently, we selected the following six cases for examination:

- Colorado Springs, Colorado—Western Pacific moved its operations to Denver (1997).
- Columbus, Ohio—America West eliminated its hub (2003).
- Greensboro, North Carolina—Continental Lite service was dismantled (1995).
- Kansas City, Missouri—Vanguard Airlines ceased service (2002).
- Nashville, Tennessee—American Airlines eliminated its hub (1995).
- St. Louis, Missouri—TWA was acquired by American Airlines (2001).

To eliminate the effects of seasonality, changes were measured from 4 quarters before to 8 quarters after an event for a total of 12 quarters of data. We asked InterVISTAS-ga2 to provide us with benchmark industry data for the same periods.

¹InterVISTAS-ga2 is an aviation consulting firm specializing in policy, regulatory, and economic analysis and planning.

²Available seat miles are the number of seats offered by an airline multiplied by the number of scheduled miles flown. This is a typical measure of capacity in the airline industry.

³Origin and destination traffic is local traffic that originates at or is destined for a particular hub but does not connect through the hub. Total traffic is the combination of a carrier's enplanements and deplanements and thus includes passenger traffic that connects to another flight at the airport.

To determine changes in capacity and traffic, InterVISTAS -ga2 used data reported by airlines to DOT. InterVISTAS-ga2 calculated 4-quarter averages for each data element and determined percentage changes in these averages 1 and 2 years after the event. Because dehubbing, or withdrawing from a market, might occur over a period of time, however, there was no single “bright line” when the withdrawal occurred for most of these cases, so InterVISTAS -ga2 determined that the effective quarter of the withdrawal was generally the quarter with the greatest downturn in traffic.

To determine whether a destination received service from a hub, we obtained and reviewed the number of departures reported to DOT for the first 4 quarters and the last 4 quarters of the period under review for each hub city and for each carrier. If a destination received at least 80 departures in a quarter from any one carrier (roughly the equivalent of daily service, allowing for less service on weekends), we counted it as having received service. To determine whether small community destinations suffered losses of service when these hub cities were deemphasized, we assigned hub sizes to community airports on the basis of the Federal Aviation Administration’s (FAA) hub designation list for the corresponding calendar year. We defined small community airports as small and nonhub airports that are not located in major metropolitan areas.⁴

Colorado Springs: Western Pacific Moved Its Operations to Denver

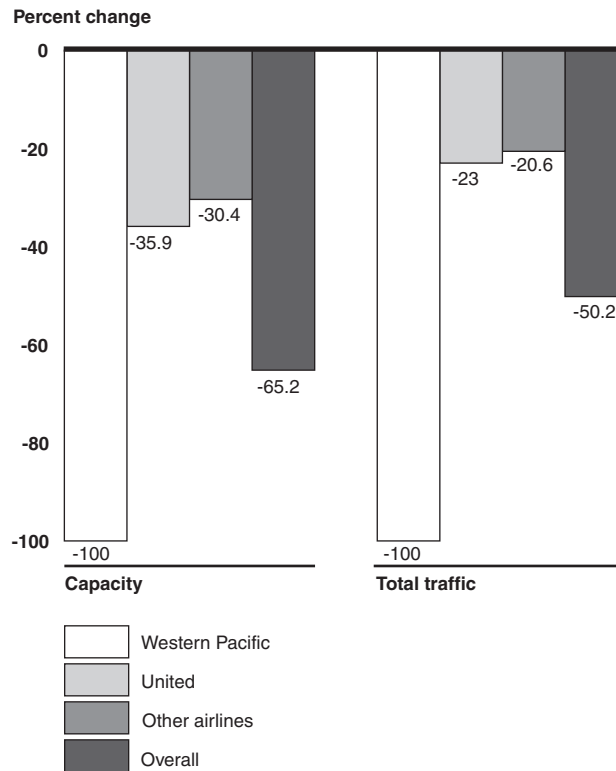
Colorado Springs served as the hub for Western Pacific Airlines, a low fare airline that flew medium-haul routes from April 1995 to June 1997. By June 1995, the airline was flying an average of 14 departures daily. Western Pacific chose Colorado Springs because it believed the airport could be an effective alternative to Denver International. In June 1997, Western Pacific, which was then operating 32 departures daily from Colorado Springs, left Colorado Springs to establish a hub at Denver. However, the airline filed for chapter 11 bankruptcy protection on October 5, 1997, and shut down in February 1998.

⁴The categories of airports—large hub, medium hub, small hub, and nonhub—are defined by statute. Small hubs and nonhubs are defined in 49 U.S.C. 41731. The categories are based on the number of passengers boarding an aircraft (enplanements) for all operations of U.S. carriers in the United States. A small hub enplanes 0.05 to 0.249 percent of all passengers, and a nonhub less than 0.05 percent. In 2003, the latest year for which FAA had data, there were 68 small hubs and 236 nonhubs.

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Western Pacific's departure from Colorado Springs in June 1997 resulted in significantly lower capacity and traffic. When Western Pacific left, a significant amount of capacity was taken from the market, resulting in decreased total traffic. (See fig. 19.) Local traffic also decreased significantly, by 43.6 percent. No small communities had received nonstop service out of Colorado Springs during this period, so none were directly affected by Western Pacific's move to Denver. (See fig. 20.)

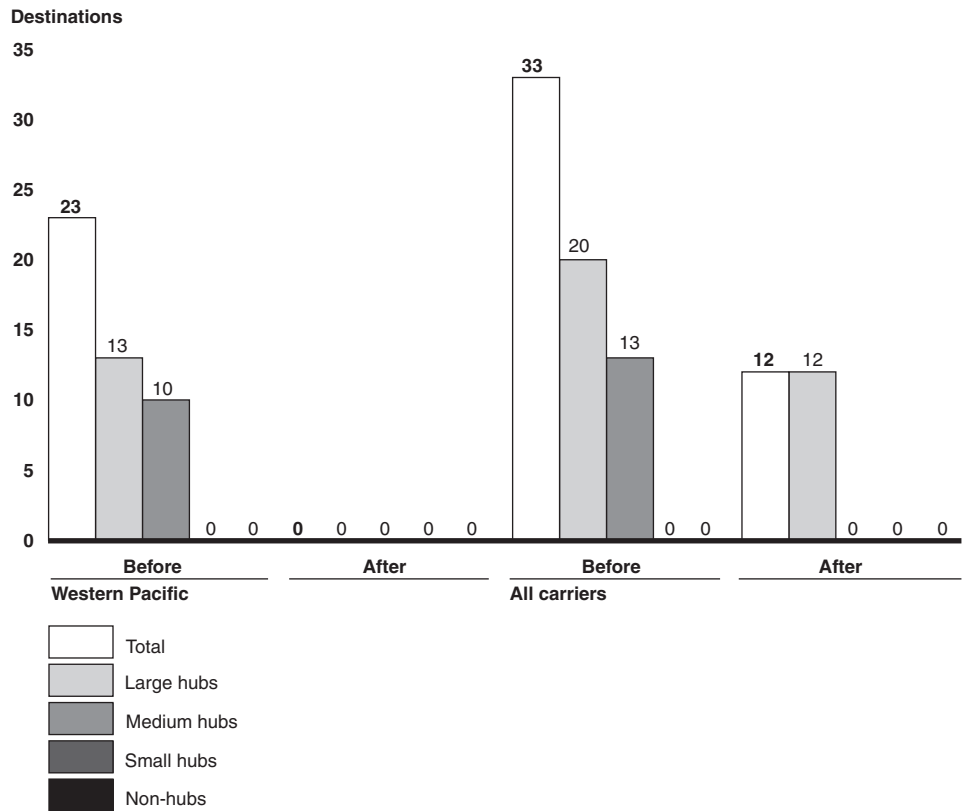
Figure 19: Percentage Change in Colorado Springs Capacity and Total Traffic



Source: InterVISTA-ga2.

Note: Percentage changes are calculated for the year beginning the third quarter of 1996 compared with the 2-year period beginning the third quarter of 1997.

Figure 20: Number of Destinations Served from Colorado Springs



Source: GAO analysis of DOT T-100 segment and FAA enplanement data.

Note: We defined the period “before” Western Pacific’s withdrawal as the third quarter of 1996 through the second quarter of 1997. The period “after” includes the third quarter of 1998 through the second quarter of 1999.

Columbus: America West Eliminated Its Hub

America West began service at Columbus, Ohio, in December 1991—6 months after its June 1991 chapter 11 bankruptcy filing⁵—with 5 daily departures. During February 2003, America West announced its plans to eliminate the Columbus hub operations. At that time, America West

⁵America West emerged from bankruptcy on August 25, 1994.

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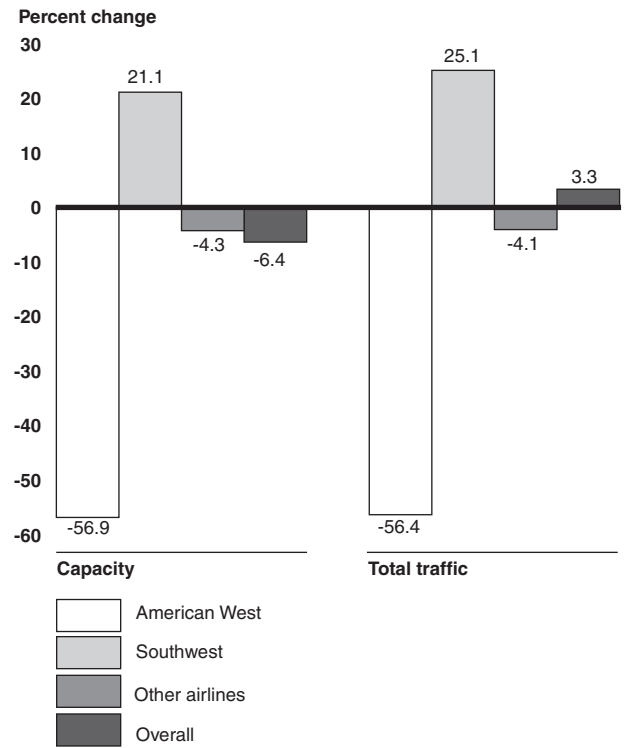
mainline was operating 9 daily departures out of Columbus.⁶ The airline reported the hub had lost \$25 million annually and indicated that the elimination of the hub was part of America West's response to difficult economic conditions. By February 2004, America West mainline was operating 4 daily departures from Columbus.

The elimination of America West's hub operations at Columbus, Ohio, had little effect, since the carrier's mainline had captured less than 15 percent of total traffic before it withdrew. Therefore, decreases in capacity and increases in total traffic were negligible. Total traffic increased slightly overall because Southwest was increasing its capacity. (See fig. 21.) However, this increase did not offset the 4.2 percent decline in local traffic. No small communities were served nonstop out of Columbus by America West mainline. (See fig. 22).

⁶Although America West Express also provided service out of Columbus during this time, we did not include Express capacity, traffic, and departure data in this analysis.

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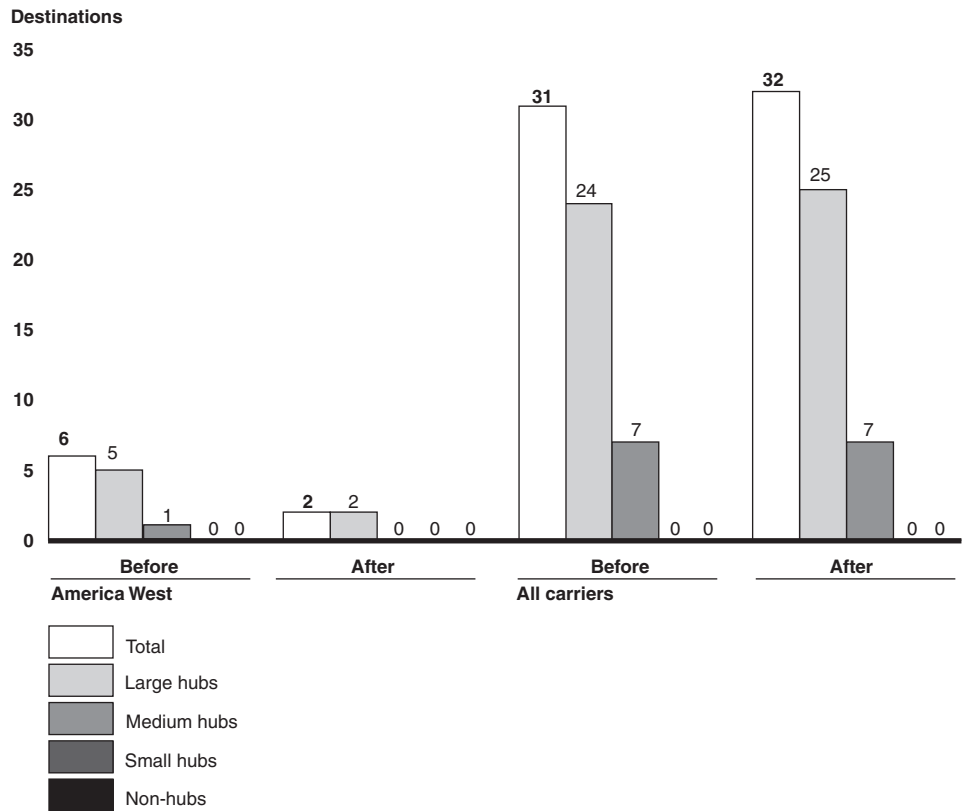
Figure 21: Percentage Change in Columbus Capacity and Total Traffic



Source: InterVISTA-ga2.

Note: Percentage changes are calculated for the year beginning the first quarter of 2002 compared with the 2-year period beginning the first quarter of 2003.

Figure 22: Number of Destinations Served from Columbus



Source: GAO analysis of DOT T-100 segment and FAA enplanement data.

Note: We defined the period “before” America West’s hub elimination as the first quarter of 2002 through the fourth quarter of 2002. The period “after” includes the first quarter of 2004 through the fourth quarter of 2004.

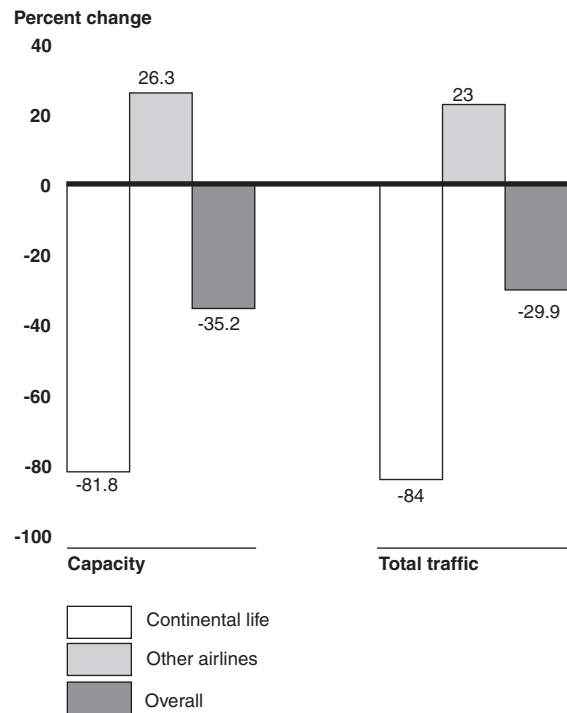
Greensboro: Continental Lite Service Was Dismantled

Greensboro was one of the focus cities for Continental’s point-to-point, short-haul, no-frills, low-fare “Continental Lite” (CALite) service initiated in the eastern United States in October 1993. Continental quickly ramped up service from 3 departures per day to a high of 74 per day by September 1994. However, after operational problems and financial losses, Continental decided to dismantle the CALite service in 1995. In June 1995, the airline was offering 52 daily departures from Greensboro. By June 1998, Continental had reduced that number to 6.

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Dismantling the CALite service resulted in less overall capacity and traffic at Greensboro.⁷ Greensboro's overall capacity decreased despite capacity increases by other airlines. Total traffic decreased nearly 30 percent with the reduction of the CALite service. (See fig. 23.) Local traffic decreased 10.7 percent.

Figure 23: Percentage Change in Greensboro Capacity and Total Traffic



Source: InterVISTA-ga2.

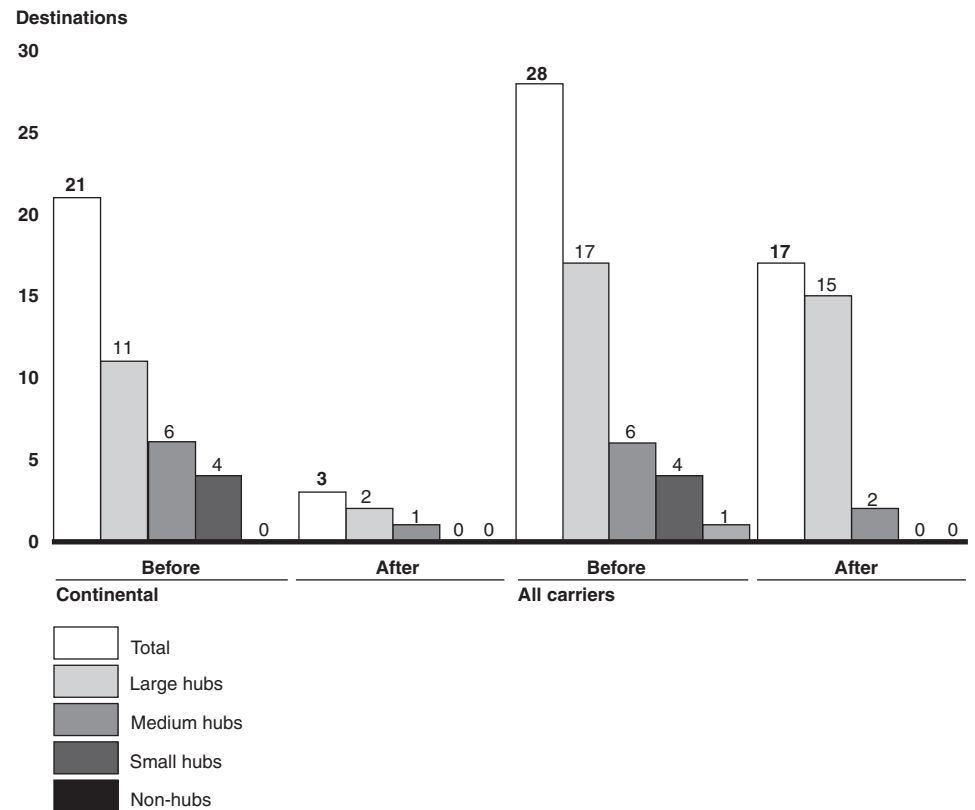
Note: Percentage changes are calculated for the year beginning the third quarter of 1995 compared with the 2-year period beginning the third quarter of 1996.

⁷Continental Express capacity and traffic changes out of Greensboro are not included in this analysis.

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Continental served 21 markets nonstop before it dismantled the Greensboro hub; four of these were small community markets.⁸ After the airline decreased its capacity at Greensboro, it continued nonstop service to its three hubs but cancelled nonstop service to the small communities. (See fig. 24.)

Figure 24: Number of Destinations Served from Greensboro



Source: GAO analysis of DOT T-100 segment and FAA enplanement data.

Note: We defined the period “before” Continental’s dismantling of CALite service in Greensboro as the third quarter of 1995 through the second quarter of 1996. The period “after” includes the third quarter of 1997 through the second quarter of 1998.

⁸Continental Express, then Continental’s wholly owned regional affiliate, also provided service out of Greensboro, and its destinations are included in the tallies for Continental.

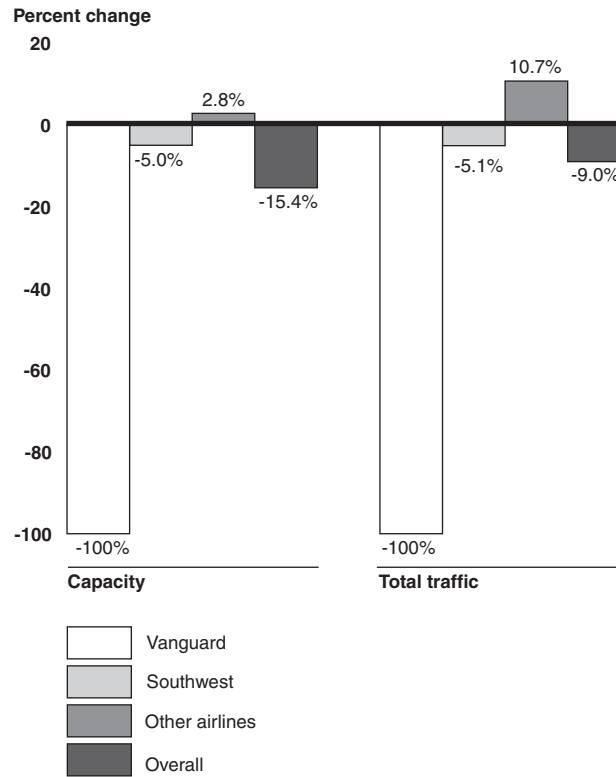
Kansas City: Vanguard Ceased Operations

Vanguard Airlines began operating in 1994 as a low fare carrier and eventually operated a hub in Kansas City, Missouri, with 2 departures daily. Vanguard eventually served 13 percent of the passengers in Kansas City. On July 30, 2002, the airline ceased operations and filed for chapter 11 bankruptcy protection after being denied a federal loan guarantee by the Air Transportation Stabilization Board. When the company stopped operating, it had been flying 33 departures daily out of Kansas City.

When Vanguard abruptly exited the Kansas City market, overall capacity and thus traffic declined somewhat. Vanguard had a 13 percent market share to Southwest's 36 percent share, and Southwest had cut its capacity out of Kansas City during the same period while overall other carriers had increased their capacity slightly. (See fig. 25). Local traffic decreased 6.8 percent. Vanguard served only one small community at the time it exited Kansas City, and during the period of our review no other carriers served that community from Kansas City, so one small community lost air service to Kansas City as a result of Vanguard's demise. (See fig. 26).

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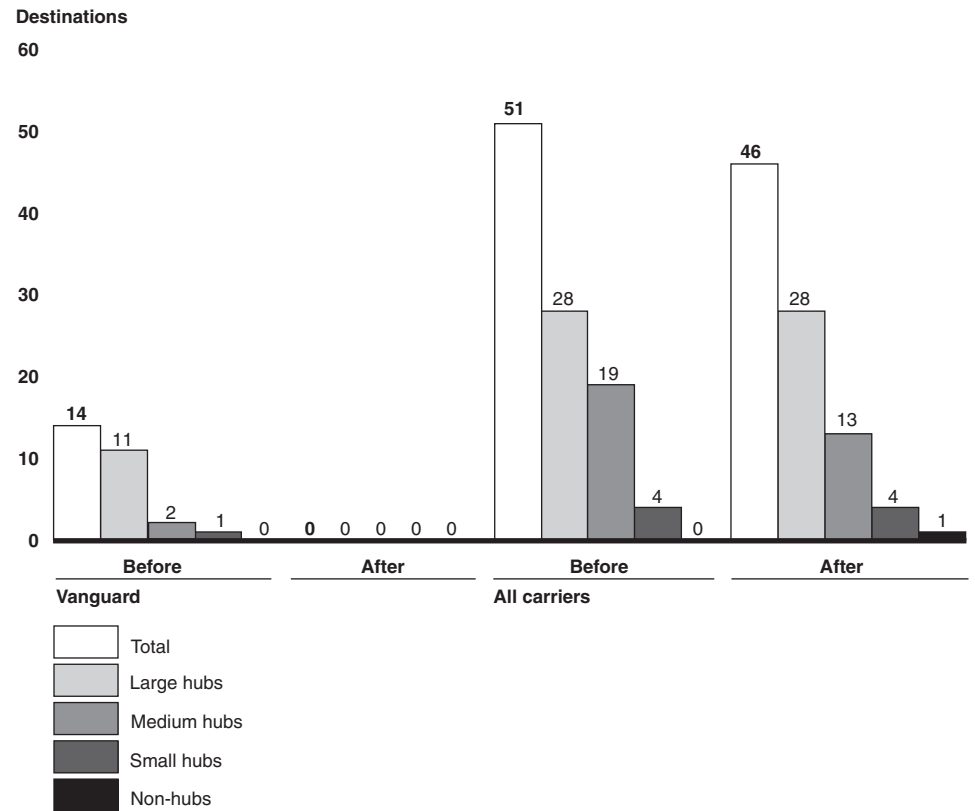
Figure 25: Percentage Change in Kansas City Capacity and Total Traffic



Source: InterVISTA-ga2.

Note: Percentage changes are calculated for the year beginning the third quarter of 2001 compared with the 2-year period beginning the third quarter of 2002.

Figure 26: Number of Destinations Served from Kansas City



Source: GAO analysis of DOT T-100 segment and FAA enplanement data.

Note: We defined the period “before” Vanguard’s demise as the third quarter of 2001 through the second quarter of 2002. The period “after” includes the third quarter of 2003 through the second quarter of 2004.

Nashville: American Dismantled a Hub

Nashville was one of six American Airlines hubs. The airline opened the hub in April 1986, and at its peak in January 1992, it operated 135 daily departures out of Nashville.⁹ In December 1994, just before it started dismantling the Nashville hub, it reduced daily departures to 80. By

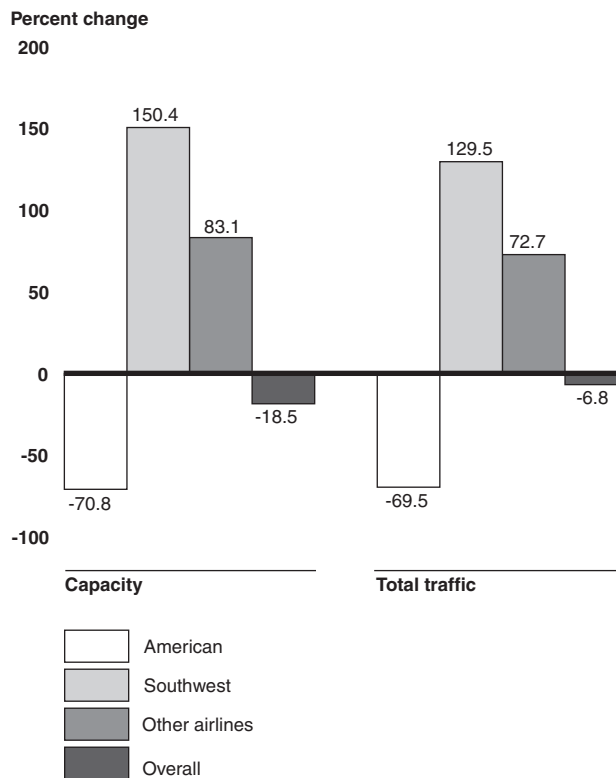
⁹American Eagle, the regional subsidiary owned by American’s parent company, AMR Corp., also provided service out of Nashville, and its traffic, capacity, and destinations are included in the tallies for American.

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December 1996, American had further reduced its service at Nashville to 22 daily departures.

When American dismantled its Nashville hub, overall capacity and total traffic declined. Other airlines increased their capacity and their traffic substantially when American decreased its service. However, because American had been so dominant at Nashville, a small decline in overall traffic occurred. (See fig. 27.) Local traffic, however, increased 28 percent. Southwest increased its share of Nashville’s traffic from 13 percent the year before American pulled out to 33 percent 2 years later.

Figure 27: Percentage Change in Nashville Capacity and Total Traffic



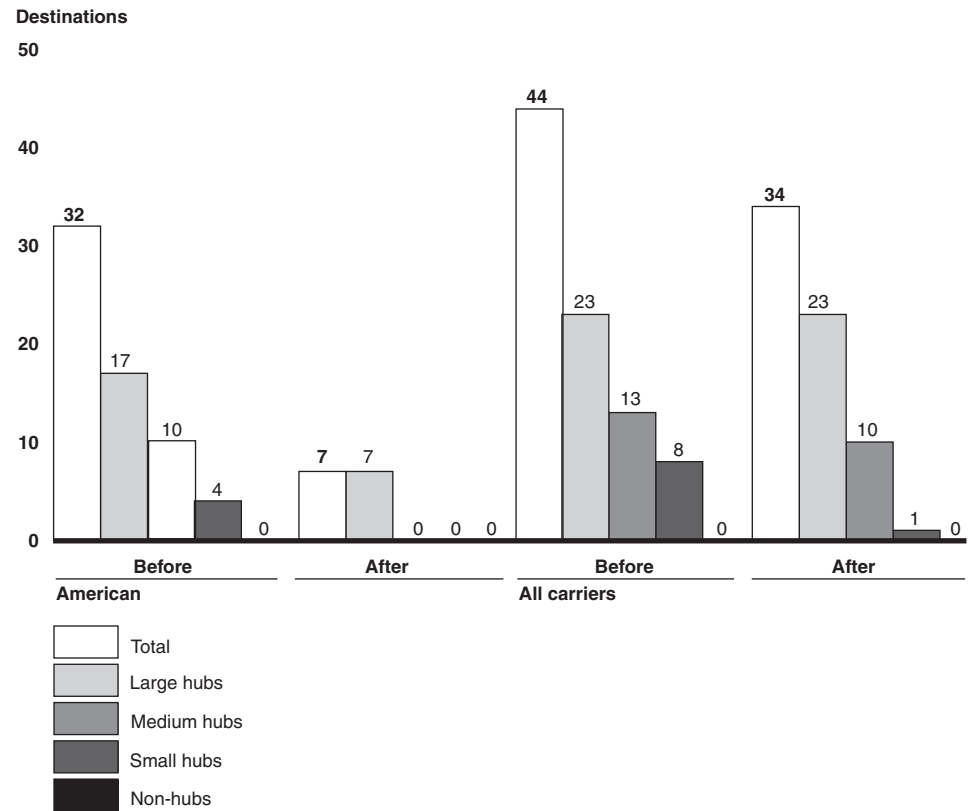
Source: InterVISTA-ga2.

Note: Percentage changes are calculated for the year beginning the first quarter of 1994 compared with the 2-year period beginning the first quarter of 1995.

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When American Airlines dehubbed at Nashville, few small communities were among those receiving service. As a result of the carrier's actions, fewer total destinations—and just one small community—received nonstop air service from that city. American and American Eagle had served 32 of the 44 total nonstop destinations out of Nashville, and 2 years later, American served 7 of 34 total destinations. In the year before American's dehubbing at Nashville, eight small hubs were served out of Nashville, five of which were served by American and American Eagle. Two years later, American and American Eagle had eliminated their small community service from Nashville; another carrier maintained service to one small community. (See fig. 28).

Figure 28: Number of Destinations Served from Nashville



Source: GAO analysis of DOT T-100 segment and FAA enplanement data.

Note: We defined the period "before" Continental eliminated its hub as the first quarter of 1994 through the fourth quarter of 1994. The period "after" includes the first quarter of 1996 through the fourth quarter of 1996.

St. Louis: American Acquired TWA

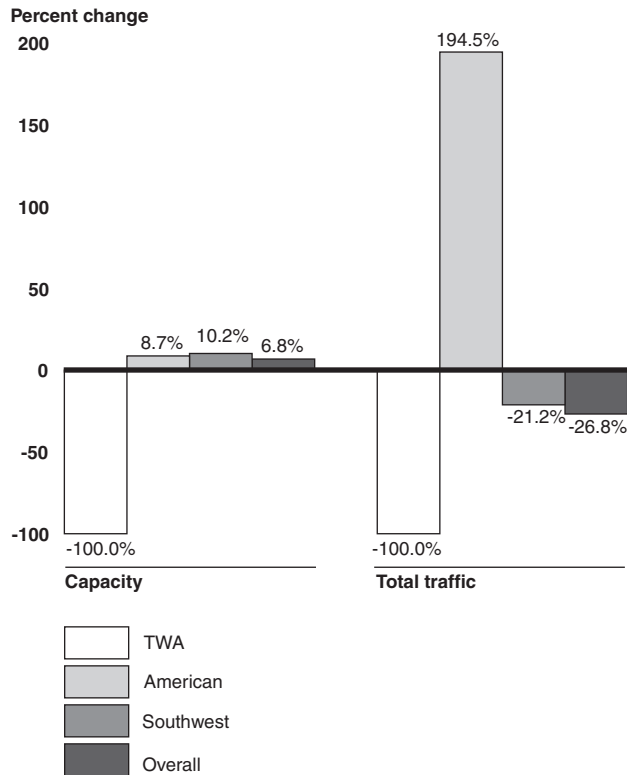
When Trans World Airlines (TWA) filed for bankruptcy protection for the third time on January 10, 2001, the airline had been operating a domestic hub out of St. Louis and offering 324 departures daily. By the end of that year, TWA—which had reduced its daily departures to 281—had been acquired by American Airlines. American departures out of St. Louis in 2001 decreased from 17 daily in January to 4 daily in December. In January 2002, American departures increased to 286 daily with the acquisition of TWA.¹⁰

With American's takeover of TWA, capacity rose slightly in St. Louis while total traffic decreased. The decrease in total traffic occurred in spite of American's dramatic increase in traffic as it took over TWA. (See fig. 29.) Local traffic, meanwhile, declined 6.1 percent overall.

¹⁰TWA capacity, traffic, and destinations served before its acquisition and American destinations served after it acquired TWA, includes service by TWA's and, later, American's regional partner, Trans States Airlines."

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Figure 29: Percentage Change in St. Louis Capacity and Total Traffic



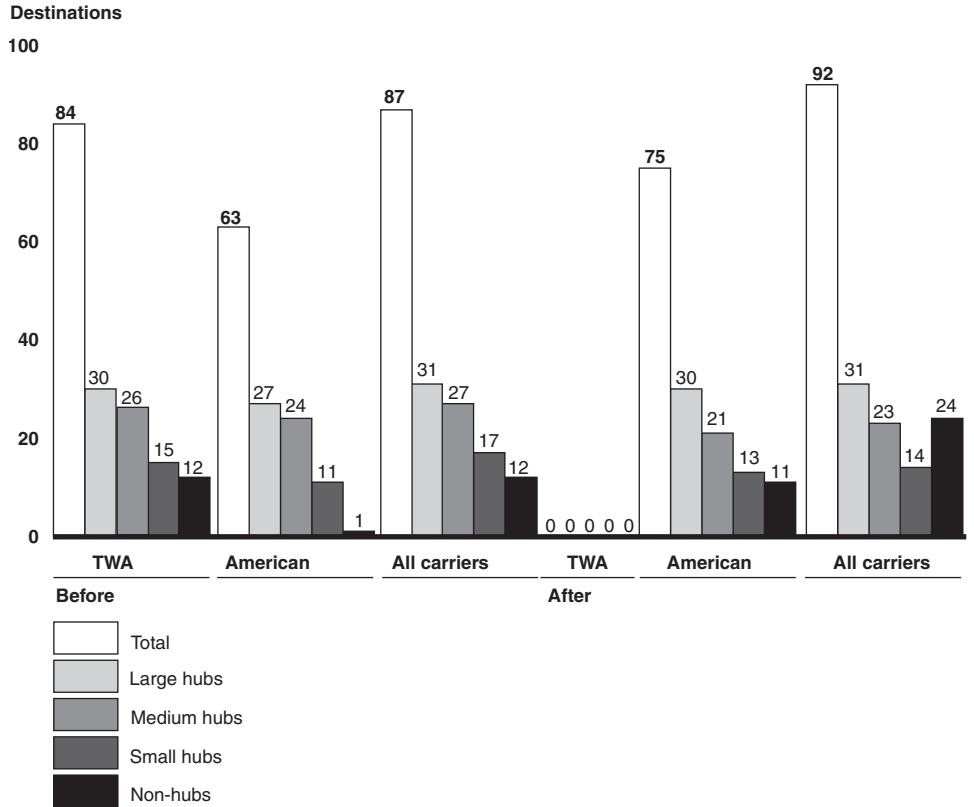
Source: InterVISTA-ga2 and GAO analysis of DOT Form 41 data.

Note: Percent changes are calculated for the year beginning the third quarter of 2001 compared with the 2-year period beginning the third quarter of 2002.

While TWA served a total of 27 small communities before the acquisition, 11 of these were also served by American Airlines. Of the 16 markets that TWA served alone, American maintained service to 13 after the acquisition. Overall, however, more small communities received nonstop service from St. Louis after American acquired TWA. (See fig. 30).

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Figure 30: Number of Destinations Served from St. Louis



Source: GAO analysis of DOT T-100 segment and FAA enplanement data.

Note: We defined the period “before” American’s acquisition of TWA as the third quarter of 2001 through the second quarter of 2002. The period “after” includes the third quarter of 2003 through the second quarter of 2004. The number of nonhubs served by all carriers after the acquisition includes 8 nonprimary airports. Nonprimary airports are commercial service airports enplaning 2,500 to 10,000 passengers annually. Primary airports (nonhubs, small hubs, medium hubs, and large hubs) have more than 10,000 enplanements annually and receive federal Airport Improvement Program funds.

Comments from the Pension Benefit Guaranty Corporation



Pension Benefit Guaranty Corporation
1200 K Street, N.W., Washington, D.C. 20005-4026

Office of the Executive Director

SEP 16 2005

JayEtta Z. Hecker
Director, Physical Infrastructure Issues
United States Government Accountability Office
441 G Street, NW
Washington, DC 20548

Dear Ms. Hecker:

Thank you for providing the PBGC the opportunity to review and comment on GAO's draft report, *Commercial Aviation: Bankruptcy and Pension Problems Are Symptoms of Underlying Structural Issues*. We commend you and your team for examining the many issues affecting the funded status of defined benefit pension plans and the special problems that face defined benefit plans sponsored by companies in the airline industry. The report is especially timely given the recent bankruptcy filings by Delta Air Lines and Northwest Airlines. This report complements other recent GAO reports that highlight problems with the current pension funding rules.¹

The report makes two important points regarding airlines' pension problems. First, the report highlights the fact that pension contribution requirements, large as they appear to be, represent a relatively small proportion of the airlines' future fixed costs (and an even smaller part of their total costs). Second, the report explains that the very high levels of pension underfunding in the airline industry are the result of flawed minimum funding requirements and decisions made by corporate management. Companies did not contribute as much cash as they could when times were good, and in certain cases contributed no cash at all when it was needed most. Too often, the airlines satisfied their pension funding requirements with so-called credit balances rather than cash payments that actually would have improved the plans' funding levels. While the existing levels of underfunding may result in financial and cash flow burdens on the

¹ See: *Pension Benefit Guaranty Corporation: Single-Employer Pension Insurance Program Faces Significant Long-Term Risks*, GAO-04-90 (Washington, D.C.: Oct. 29, 2003); *Private Pensions: Recent Experiences of Large Defined Benefit Plans Illustrate Weaknesses in Funding Rules*, GAO-05-294 (Washington, D.C.: May 31, 2005); *Private Pensions: Revision of Defined Benefit Pension Plan Funding Rules Is an Essential Component of Comprehensive Pension Reform*, GAO-05-794T (Washington, D.C.: June 7, 2005); and *Private Pensions: The Pension Benefit Guaranty Corporation and Long-Term Budgetary Challenges*, GAO-05-772T (Washington, D.C.: June 9, 2005).

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sponsors, they have the responsibility for ensuring that these pension promises are honored by adequately funding their plans.

The report clearly shows that pension underfunding can lead to harsh consequences for workers and retirees, as well as companies that have acted responsibly in honoring their pension promises. When the United Airlines and US Airways plans were terminated, participants lost \$5.3 billion of the \$24.9 billion in benefits they had earned and were expecting to receive in retirement. The plans of Delta and Northwest Airlines are underfunded by a combined \$16.3 billion. If these plans terminate, participants will lose over \$5 billion in earned benefits. Such losses can be devastating, especially for those in or near retirement. In addition, Plan sponsors face increased PBGC premiums as a result of the large losses the pension insurance program has incurred during the past four years. As a result, all plan sponsors will have to pay more to cover the claims from the plans of those sponsors who failed to properly fund their plans.

One aspect of the report we found confusing was the mixed use of underfunding data from two sources--the companies' 10-K filings with the SEC (which show \$13.7 billion in pension underfunding) and the reports some of these companies file with PBGC as required under section 4010 of ERISA (which show underfunding of about \$23.7 billion). From our perspective, the 4010 data are the more appropriate because the SEC data are aggregated across all defined benefit plans sponsored by the company (whether or not insured by PBGC) and because the SEC data are not based on the termination value of plan liabilities. We recognize that the Congress has restricted the ability of PBGC and GAO to disclose the 4010 data on a plan-by-plan basis. To provide better transparency on the funded status of defined benefit plans, the Administration's pension reform proposal includes a provision that would eliminate this restriction and make the 4010 data publicly available.

Again, I would like to thank GAO for preparing this timely report which strongly makes the case that pension funding reform is needed. Your report ably demonstrates the unfortunate consequences that can occur given the weak funding rules currently in place. We are looking forward to working with GAO and the Congress on measures to strengthen the defined benefit pension system and America's pension insurance program.

Sincerely,



Bradley D. Belt

GAO Contact and Staff Acknowledgments

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Related GAO Products

Private Pensions: The Pension Benefit Guaranty Corporation and Long-Term Budgetary Challenges. [GAO-05-772T](#). Washington, D.C.: June 9, 2005.

Private Pensions: Government Actions Could Improve the Timeliness and Content of Form 5500 Pension Information. [GAO-05-294](#). Washington, D.C.: June 3, 2005.

Highlights of a GAO Forum: The Future of the Defined Benefit System and the Pension Benefit Guaranty Corporation. [GAO-05-578SP](#). Washington, D.C.: June 1, 2005.

Private Pensions: Recent Experiences of Large Defined Benefit Plans Illustrate Weaknesses in Funding Rules. [GAO-05-294](#). Washington, D.C.: May 31, 2005.

Commercial Aviation: Legacy Airlines Must Further Reduce Costs to Restore Profitability. [GAO-04-836](#). Washington, D.C.: August 11, 2004.

Private Pensions: Publicly Available Reports Provide Useful but Limited Information on Plans' Financial Condition. [GAO-04-395](#). Washington, D.C.: March 31, 2004.

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Private Pensions: Timely and Accurate Information Is Needed to Identify and Track Frozen Defined Benefit Plans. [GAO-04-200R](#). Washington, D.C.: December 17, 2003,

Pension Benefit Guaranty Corporation: Single-Employer Pension Insurance Program Faces Significant Long-Term Risks. [GAO-04-90](#). Washington, D.C.: October 29, 2003.

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