

Domestic Airlines Initiation of Coverage

“Cash and Burn...”

Industry: Airline

Date: September 23, 2002

Companies Covered:

Air Tran (AAI)
Atlantic Coast (ACAI)
Alaska Air (ALK)
AMR Corp. (AMR)
ATA Holdings (ATAH)
America West (AWA)
British Airways (BA)
Continental (CA)
Delta (DA)
Frontier (FRNT)
JetBlue (JBLU)
Southwest (LUV)
Midwest Express (MEH)
Northwest (NWAC)
United (UAL)

Recommendation:

SELL

Time Frame:

12 Months



The aircraft caught fire after a fuel line was severed during its takeoff roll. The takeoff was successfully aborted, and all occupants were evacuated.

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Bottom Line: Business and Leisure passenger travel has declined due to the faltering economy, the travel scare and increased security costs that resulted from Sept. 11. On September 17, 2002, Peter Morris, chief economist at the International Air Transport Association, warned that the losses could extend into 2003 as the industry digests rising costs for fuel, labor, security and insurance, while traffic remains depressed on transatlantic and transpacific routes.

Airlines Index

Last Trade (Sep 20) · \$36.54

52-wk Range \$36.28 - \$116.97

12-Month Return – 46%

12 Month S&P 500 Return -16%



Highlights Summary

- **Load Factors Improving Due to Capacity Reductions but Pricing Below Break-Even.** In the carriers' reports, load factors -- an important measure of the percentage of available seats filled -- improved on average to 73%. Immediately after Sept. 11th, the airline industry in the United States was losing \$340 million a day. Adjusting to depressed demand, airlines cut their flying capacity by 18 to 20 percent through a reduction of available seat miles on certain flight routes (flight frequency on certain routes). The airlines retired fleet either through selling aircraft, releasing them at operating cost to other carriers or using bankruptcy appeals to cancel and/or restructure terms of aircraft leases. In general, carriers have retired older, less fuel-efficient aircraft prior to scheduled maintenance. On average, these retirements have resulted in earnings charges/write-offs of \$200 million to \$400 million charges for major carriers¹. These charges are expected to be offset by increased load factors and subsequent revenue increases. However, despite the resultant workforce reduction of 80,000 and increased loads, seats are priced far below break-even. Domestic airfares declined 16 percent in aggregate since November 2000. As a result of the higher costs and lower ticket prices, airlines must fill more than 78 percent of their seats, on average, to make a profit this year. By comparison, the break-even load factor for the industry was 65 to 66 percent from 1994 through 1999. Even though passenger traffic is coming back, airlines as a group won't breakeven this year².
- **Steep Discounts.** Before September 11th, average domestic airfares were already down sharply in response to the weakening economy, reduced business travel, and rising percentage of low-margin leisure travelers. By June 30, 2002, the average one-way domestic fare for a thousand-mile trip had declined to \$118.50, down 10% from \$131.31 a year earlier, and down 19% from \$146.52 in January 2001, as tracked by the Air Transport Association. Since September 11, business travel has not recovered, and airlines have continued efforts to stimulate passenger volumes with deep fare discounts and fare sales³. Since September 11th, average fares were widely expected to continue falling, as business travel fell further and airlines attempted to stimulate passenger volumes at any cost. Discounting, combined with the increased security measures discussed above, have largely succeeded in getting passenger levels to improve each month since September. However, the fare sales contributed to a sharp decline in yields, exacerbating industry losses. We expect average fares to rise modestly in 2003 over 2002 levels, as both the industry and the economy improve later in the year, helping to stimulate demand. Given the recent capacity reductions, airlines may be able to implement fare hikes for both business and leisure customers, provided traffic levels approach pre-September 11th levels. However, negative consumer sentiment, which drives passenger volume, will not recover until the economy improves. Industry analysts estimate that this will take at least one year⁴.
- **High Margin Business Demise.** We expect business travel to stabilize at the current (September) weak levels in 2002, as most companies have sharply cut travel. As the economy improves, people will need to fly more frequently. However, any increase here could be partly offset by business travelers whose habitual indifference toward ticket price may have been broken.

¹ "American Goal: Cut 7000 jobs, reduce flights. Miami Herald. August 4, 2002.

² Standard & Poor's, Industry Surveys, September, 2002

³ Standard & Poor's, Industry Surveys, September, 2002

⁴ Merrill Lynch, Airline Industry Quarterly Review, August 2002

- **Labor Strife Continues.** Labor costs, which account for more than one third of the major carrier expenses on average, will be tough to bring down due to the need for highly skilled personnel, to the large unionized workforces at most airlines and to past union concessions and management missteps. Although staring into the abyss of bankruptcy could make labor more flexible, recent second quarter results indicate that this battle will be a hard one to win.
- **Regulatory Bailouts Aren't Timely.** The airline industry received a \$15 billion bailout package from the U.S. government. It consists of \$5 billion in direct cash grants, along with \$10 billion in loan guarantees, much of which is yet to be allocated. Of the nine largest carriers, only America West has been granted a loan guarantee, for \$380 million. U.S. Airways has applied for \$1 billion in loan guarantees but hasn't yet received approval. United Airlines is also said to be considering applying for a loan guarantee. One reason for the delay is that the Air Transportation Stabilization Board, the federal authority dispensing post-Sept. 11th aid to airlines, requires from the airlines significant cost reductions before granting the aid.

Business Overview

A. The Top Line: Revenues

Airlines derive their revenues from three sources:

- **Passenger Travel.** The majority of airline revenues come from the fares charged to transport passengers (90%). Passengers can be subdivided into business purpose (includes business and coach class seating) and leisure segments. Business accounts for roughly 30% of passenger revenues and 15% revenue seat miles (traffic). Leisure accounts for 85% of traffic and generates 70% of passenger revenues.
- **Cargo and Mail.** Another source of revenues is transporting mail and cargo from one location to another (4%). Passenger airlines view freight transport as a by-product of their main business, and charge discounted rates compared with those charged by specialized airfreight carriers. Lacking sales forces to pursue this business, the airlines often accept freight from only a few air forwarders. Some airlines, having more cargo demand than belly space, lease freighter aircraft to their customers. Among passenger airlines, Northwest generated the most revenue from cargo in 2001, about \$715 million. This represented about 7% of the carrier's 2001 revenues. Cargo and mail together accounted for just 3.7% of the industry's total revenues in 2001.
- **Other.** Airlines have recently generated some income by selling (rather than providing as a complementary service) alcoholic beverages and in-flight entertainment and services to passengers and by selling frequent-flier credits to hotels, auto rental agencies, credit card issuers, and other organizations that offer these credits as premiums or as a way to build goodwill (6%).

While Cargo and Other supplementary sales carry high margins, they account for a relatively small portion of industry revenues.

Revenue Break-Down					
\$ Billions, 10 Largest Carriers in U.S.					
	2000	2001	2002E	Average	Proportion
Passenger Revenues	88.61	78.42	73.72	80.25	90%
Cargo Revenues	4.08	3.48	3.65	3.74	4%
Other	4.98	5.28	5.01	5.09	6%
Total	97.67	87.18	82.38	89.08	100%
Percent Change	8%	(11%)	(6%)	(3%)	

Source: Department of Transportation, Air Transport Association

Cargo and Other revenues have remained stable over the last three years, while passenger travel, accounting for the majority of airline revenues (albeit low margins), has dipped substantially because of a weakened economy, lack of leisure traveler confidence, and reduced convenience due to heightened security procedures instituted in the wake of the September 11th attacks.

I. Demand Characteristics

- **Airlines are Plagued by Weak Demand for Business Travel.** Traditionally, business travelers have paid full fare, whether in coach or first class because most business trips are scheduled within seven days of the flight. Because their firms pick up the tab, these travelers tended to be relatively price-insensitive seeking convenience, efficiency and comfort. What was traditionally a profitable, robust source of revenues is now dwindling due to a lagging economy, corporate downsizing and cost containment, airport inconveniences and substitute travel.
 - *Lagging Economy and Corporate Cost Containment.* Corporations have become more **cost-conscious** in recent years **as business fares have climbed** significantly faster than leisure fares. Accordingly, most professional service companies are directing employees to travel coach or to switch to low-fare carriers. In addition, recent corporate downsizing has left leaner organizations, with **fewer managers and executives authorized to travel**. To reduce travel costs further, many companies enter into **negotiated travel deals**, under which they promise to do most of their travel with a certain airline in exchange for sharp fare discounts. Accordingly, business travel generated about 30% of revenues in 2001, down from as much as 52% in 1981. As a percentage of total traffic, business travel is small, currently accounting for an estimated 15% of total revenue passenger-miles (RPMs) and some 10% of capacity⁵.
 - *Convenience/Service Compromise.* Airlines compete for business passengers by offering priority check-in, expedited baggage handling, luxurious airport lounges, and in-flight amenities, such as faxes, telephones, and power outlets for recharging laptop computers. To appeal to this class of traveler, airlines must provide frequent

⁵ Standard & Poor's, Industry Surveys, June 5, 2002

flights, reliable on-time performance, and top safety records. In the wake of the September 11th attacks, the government recently federalized airport security and hired about 28,000 workers in an effort to alleviate security concerns. **The result: Airline travel has become less appealing amid new security requirements, frequent procedure changes**, and a rush to get trained personnel in place.

- *Availability of Substitute Travel.* Executives looking to cheaper, more convenient alternative travel will rent a car or take a high-speed inter-city train. Short-haul airline shuttle routes, traditionally profitable due to high proportions of business travel, are now being over run by rental and regional rail due to cumbersome airport checks and delays. According to the Travel Industry Association (TIA), automobiles, trucks, and recreational vehicles (RVs) were used for 77% of all trips in 2000; airplanes for 18%; and buses, trains, and other for 5%.

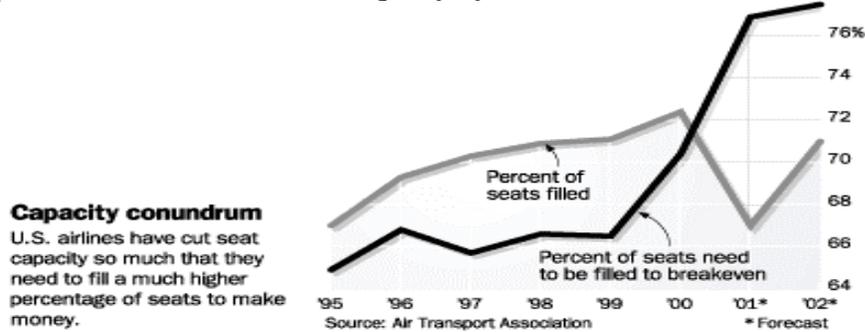
For short trips, airline travel is now neither practicable nor economical. The TIA reports that some 70% of auto trips are less than 600 miles, compared with only 11% of airline trips. For long distances, however, air travel is preferred. Some 75% of airline trips exceed 1,000 miles, compared with only 13% of auto trips. Airlines also face competition from intercity railroads, specifically Amtrak, whose fares are partly subsidized by the U.S. government (though Amtrak has been mandated to reach self-sufficiency by December 2, 2002). While Amtrak operates some long-distance routes, its passengers use it for an average journey length of about 280 miles.

- **Leisure Travelers Continue to Look for Price.** In marked contrast to the traditional business traveler, the leisure traveler is highly price-sensitive. The cheaper fares resulting from deregulation have allowed people from all walks of life to travel by air. First, low fares are available to individuals who book flights at least 21 days in advance. Second, deeply discounted fares are also available (mainly through the Internet) a few days before departure. Commonly, leisure travelers defer making any trip arrangements until a fare sale is offered. The upshot of these patterns is that over short periods, leisure travel can be erratic. Over the longer term, **leisure travel is more cyclical than business travel; it waxes and wanes together with consumer sentiment and disposable income levels.** Given the current post-attack sentiment, economic climate and consumer confidence and unemployment levels, the leisure traveler's willingness to pay has gone down even further since September 2001.

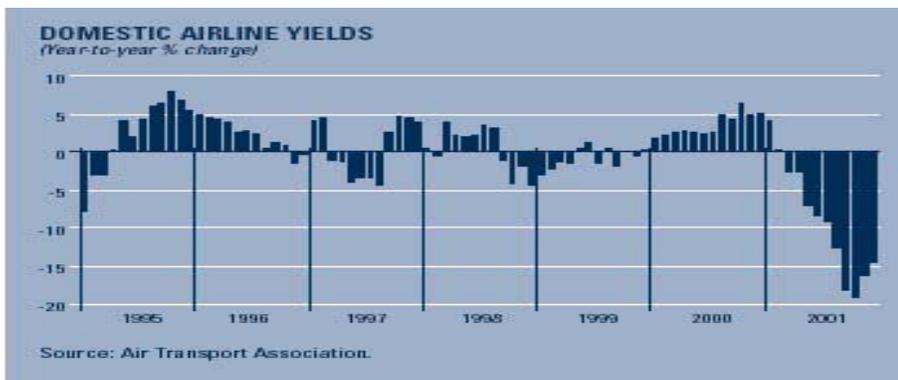
II. Pricing Trends

- **Competitive Fare Wars.** Since deregulation, the airline industry has experienced very unstable, short-lived price equilibriums. It has been prone to periodic bursts of destructive fare wars. Some of the blame lies in the aggressive pricing tactics of start-up carriers, which operate with substantially lower costs than the major airlines. Recently, Southwest Airlines (though no longer a start-up) has been the source of much of the fare pressure. Generally, the industry is susceptible to fare wars when capacity levels far exceed demand. Because airlines have high fixed costs (for equipment and maintenance facilities) relative to their marginal costs (the cost of flying one additional passenger), fare wars to fill seats can reach extremes before order is restored.
- **Improved Yield Management to Minimize Perishable Inventory at The Expense of Margins.** Airline seats are perishable inventory, once a plane is aloft, its empty seats can no longer be sold. To minimize such losses, the industry has developed sophisticated computer

programs to help determine how much demand there will be for each route at different times of the day, days of the week, and seasons of the year. Airlines also attempt to calculate how much of a flight should be booked by a given point in time through a practice known as yield management. Yield management alerts the carrier to abnormal booking patterns, to which it can react by either cutting or raising fares well before a flight is scheduled to depart. Thus, airlines can now fill seats that otherwise would have gone empty. They often do this by offering last minute, deep-discount sales via the Internet. Fare differentials of just a few dollars can persuade leisure travelers to select one airline over another or to make their journey by a different mode. **The downside is that the Internet is making consumers even more price conscious, which is exerting some downward pressure on yields.** Airline yields, therefore, will remain in a downtrend. Between 1991 and 1995, real (inflation-adjusted) yields dropped 2.9% annually; from 1996 to 2000, the average annual decline was 1.2%. Yields increased a stronger-than-usual 3.9% in 2000, although the increase was only 0.5% once adjusted for inflation. Yields dropped sharply in 2001, reflecting reduced business travel and the impact of the September 11th attacks. U.S. airlines have cut seat capacity to improve load factors but at current depressed pricing of \$118 per thousand-mile roundtrip ticket, companies still need to fill a much higher proportion of seats to break even⁶.



To further illustrate this dilemma, profits per available-seat-mile are shown below. While profits increased in 2001, they were and still remain below break-even/negative in 2002:



Web-based Distribution Channels Reduce Costs AND Prices. Forrester Research estimates that total online travel bookings (which we assume includes cruises, hotels, and car rentals as well as air travel) will reach \$29 billion by 2003, up from \$14.2 billion in

⁶ Standard & Poor's, Industry Surveys, September, 2002

2001. Indeed, a big incentive for airlines to distribute tickets via the Internet is to eliminate travel agent commissions. In 2001, these commissions cost the leading airlines some \$3.0 billion and accounted for about 3.9% of their expenses, down from \$5.2 billion (6.2%) in 1999. A recent cut in commission rates and increased Internet sales are the major reasons behind the trend towards lower commissions. According to United Airlines, electronic booking and ticketing costs just \$1 per ticket, versus \$8 for paper tickets, because it eliminates agent booking costs/commissions and 14 accounting and processing procedures. Currently, e-tickets may account for close to 50% of all tickets, although Southwest issues 75% of its tickets electronically.

On the down side, however, the Internet may hurt airlines by making travelers too price-sensitive. With airfares changing at lightning speed and the Internet keeping customers apprised of them, airlines must respond quickly to match rivals' fare cuts. Consequently, **the range of fares that competing airlines can charge on a point-to-point route will tend to be extremely compressed**⁷.

Southwest Airlines introduced Internet booking and ticketing in 1996 and now leads the industry in this area, obtaining 40% of its revenues from Internet sales. Southwest's secret is to offer customers one free round-trip ticket for every four round-trip tickets booked through its Web site. America West does about 12% of its business online, while Continental Airlines and United are the industry laggards at only 3% and 4%, respectively.

The Internet's appeal for airlines is apparent. A commercial Web site can be kept open for business 24 hours, seven days a week. It allows an airline to reduce the number of customer service agents, since fewer such employees are needed to field flight information questions. Southwest Airlines reported in 2002 that its Internet bookings and ticketing cost it about \$1 per passenger ticket to make, while its cost to book with a travel agent and issue a paper ticket is between \$6 and \$8. Tickets booked through Southwest's own agents cost several dollars.

B. Cost Drivers

The airline industry is labor and energy-intensive.

- **Labor.** In 2001 FAA-related labor costs increased sharply to 40.8% of total industry revenues from 34.9% in 2000. Although the industry had reacted promptly after September 11th with lay-offs of more than 80,000 employees, the rise in labor costs can be explained by lower revenues, and by the normal time lag between employee layoffs and realization of cost savings⁸.

Airlines have traditionally suffered from exorbitant FAA-labor union contracts that we believe will be difficult to eradicate from the industry. United Airlines is burdened with the highest labor costs in the industry, and employees, (who hold 55% ownership in the airline), have a strong say in setting salary increases⁹. However, we believe that the pressure that the financial distress (and threat of bankruptcy) is placing on the industry,

⁷ Standard & Poor's, Industry Surveys, June 5, 2002

⁸ Standard & Poor's, Industry Surveys, March 28, 2002

⁹ Business Week, September 2, 2002

may help the airlines in the near term obtain better results in future negotiations with the unions. Also, the fact that loan guarantees from Congress have been linked to the progress achieved in cost reduction supports the airlines' position when negotiating pay cuts with the major unions.

Ticketing and booking back-office labor currently constitutes less than 5% of overall costs. Airlines have been quite successful at containing these costs primarily because they do not employ unionized labor. As alluded to earlier, electronic ticketing and booking initiatives have substantially reduced issuing, production and accounting costs and third-party commissions from \$8 per ticket to \$1 per ticket.

Despite some positive factors that might place some downward pressure on labor costs, the results in the second quarter of 2002 do not indicate any improvement. Hence, we remain conservative on the labor costs in 2002, and keep an optimistic outlook going into 2003.

Salaries and Benefits 2001 - 2003E
(\$ millions)

	2001			2Q 2002 (YTD)			2002E			2003E		
	Revenues	Labor Cost	% Revenues	Revenues	Labor Cost	% Revenues	Revenues	Labor Cost	% Revenues	Revenues	Labor Cost	% Revenues
AirTran Holdings	665	159	23.9%	383	97	25.3%	808	198	24.5%	990	247	25.0%
Alaska Air Group	2,141	798	37.3%	1,071	417	38.9%	2,284	863	37.8%	2,659	991	37.3%
America West Airlines	2,021	604	29.9%	987	288	29.2%	2,086	606	29.1%	2,238	648	29.0%
AMR Corporation	18,963	8,032	42.4%	8,615	4,206	48.8%	16,578	8,103	48.9%	18,721	8,458	45.2%
Continental Airlines	8,968	3,021	33.7%	4,185	1,478	35.3%	8,729	3,039	34.8%	8,734	3,039	34.8%
Delta Airlines	13,879	6,147	44.3%	6,577	3,064	46.6%	13,773	6,259	45.4%	14,813	6,461	43.6%
JetBlue Airways	320	85	26.6%	282	72	25.5%	612	156	25.5%	902	230	25.5%
Midwest Express	457	167	36.5%	220	78	35.5%	442	158	35.7%	545	187	34.3%
Northwest Airlines	9,905	3,843	38.8%	4,586	1,860	40.6%	9,592	3,797	39.6%	10,347	3,909	37.8%
Southwest Airlines	5,555	1,828	32.9%	2,730	963	35.3%	5,637	1,982	35.2%	6,295	2,094	33.3%
UAL Corporation	16,138	7,079	43.9%	7,081	3,379	47.7%	14,894	6,973	46.8%	16,684	7,390	44.3%
US Airways	8,288	3,551	42.8%	3,612	1,632	45.2%	7,517	3,357	44.7%	8,278	3,486	42.1%
Average	7,275	2,943	40.5%	3,361	1,461	43.5%	6,913	2,958	42.8%	7,600	3,095	40.7%

Source: Merrill Lynch, August 2002

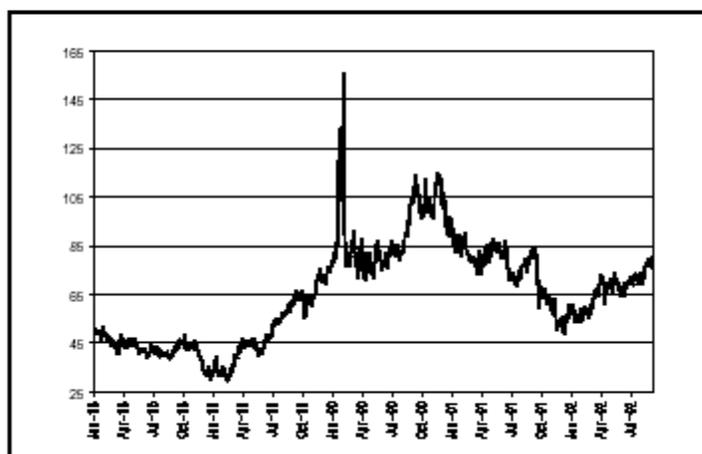
- **Fuel.** In 2001, fuel costs accounted for about 14.9% of total expenses, down from 15.4% in 2000. Energy expenses depend on the fuel prices as well as on the age of its aircraft and its average flight length¹⁰. After September 11th, the industry made an effort to rationalize the flight schedule, which meant a reduction in takeoffs, landings, and fleet size. By reducing the number of old planes, the airlines gained some efficiency in fuel consumption and in maintenance costs.

The oil price reduction during 2001 also helps explain the decrease in fuel expenses. However, the prospects of oil prices in 2002 do not look as positive as those in 2001. Fuel costs have risen approximately 50% (\$.25 / gal) since January this year. We believe that the possibility of the US declaring war on Iraq will keep oil prices high during 2002, and a long conflict could lead to even higher prices through 2003. Hence, although we are aware that some carriers hedge their fuel costs by striking deals with suppliers or by buying futures on the commodity, we prefer to stay cautious on this front until some of the event risk (potential invasion of Iraq) has dissipated.¹¹

¹⁰ Standard & Poor's, Industry Surveys, March 28, 2002

¹¹ Merrill Lynch, Airline Industry Quarterly Review, August 2002

	09/05/2002	Week/Week Chg.	Month/Month Chg.	Year/Year Chg.
Jet Kerosene Cent/Gal.	79.99	3.1%	12.1%	-1.4%



Source: Merrill Lynch and Bloomberg

- Regulation.** Under pressure from the airline industry in the aftermath of September 11th, the US Congress passed the Air Transportation Safety and System Stabilization Act. The act was intended to compensate for losses associated with the 9/11 attacks and included \$5 billion in direct cash grants and \$10 billion in industry loan guarantees. In absence of the cash grants, several of the major carriers¹² would have been forced into bankruptcy. Even with this cash injection, the industry registered \$11 billion losses in 2001, the worst losses in aviation history¹³.

Also as a consequence of the 9/11 attacks, the Aviation and Transportation Security Act intended to federalize the airport security in response to public worries about safety in flights. As a result of this bill, the Government would pay security workers while airlines would be responsible for additional costs such as equipment and airport charges. Although all airport security screening has been federalized as of February 17, 2002, airline security costs to the airlines have risen dramatically in the past year. The reason for the cost increase are the additional expenditures charged to the airlines, which range from the securing of all cockpit doors to the opening of extra security lanes to ease the logjam caused by stricter screening requirements. Furthermore, this federal mandate requires airlines to either screen all bags for explosives or to make sure each bag on a plane is matched up to a passenger seated on that flight, both time-consuming and expensive initiatives. By the end of 2002, all checked bags will have to pass through bomb detection machines, which cost up to \$1 million each and are currently in short supply¹⁴. While necessary to ensure passenger safety and ease fears, these expenses will cut into airline profits for the foreseeable future.

¹² According to S&P UAL, AMR, US Airways, and America West would have been forced to file for bankruptcy.

¹³ Standard & Poor's, Industry Surveys, September, 2002

¹⁴ Standard & Poor's, Industry Surveys, September, 2002

Industry Snapshot and Macro-environment Considerations

Global airline industry losses in 2001 were the worst in aviation history — an estimated \$11.0 billion, according to *Air Transport World (ATW)*, an industry trade magazine based in Washington, D.C. Losses in 2002 are expected to reach \$7.5 billion. For the United States, *ATW* estimates losses of \$9.0 billion in 2001 and \$6.0 billion in 2002. Standard & Poor's estimates that the nine major U.S. carriers lost \$7.3 billion in 2001 on revenues of \$85.7 billion, versus a profit of \$5.8 billion in 2000 on revenues of \$98.8 billion.

After September 11th, passenger levels slowly improved. The industry load factor rose to 64.8% in October, reflecting increased passenger levels and, more importantly, sharp cuts in capacity, resulting in fewer flights. Most airlines cut their flight schedules and many retired planes from service. Load factor improved again in November, to 68.2%, but dropped in December to 67.18%. For 2001, the domestic industry load factor was 69.5%, versus 71.2% in 2000. S&P Analysts expects traffic levels to slowly improve throughout 2002, but passenger levels will probably not return to pre-September 11th levels until 2003.

Domestic airline capacity, as measured by available-seat-miles (ASMs), declined 3.8% in 2001. Prior to September 11th, it was on pace to rise sharply for the year. ASMs declined 20% in September, year-over-year, and continued falling 16% in October, 15% in November, and 11% in December. This trend does indicate improvement, as ASMs slowly and steadily rose from September on, as increased passenger demand led carriers to reinstate some of the cut flights.

Along with the capacity cuts came layoffs for airline employees, as the industry reduced staffing. American and United led the group by furloughing 20,000 employees each, followed by US Airways (11,000), Northwest Airlines Corp. (10,000), and Continental Airlines Inc. (8,500). Of the major carriers, only Southwest Airlines Co. and Alaska Air Group Inc. did not announce layoffs.

Many carriers face sharp losses, and a few are at risk of bankruptcy in the wake of September 11th. Passenger volumes are off sharply amid customer concerns about security, and in most cases the bailout package wasn't sufficient to cover losses incurred after the attacks.

Also, the industry is plagued by weak demand for business travel and by labor strife. Given the large unionized workforces at most airlines and the need for highly skilled personnel, this is a difficult category to cut costs from because carriers are unlikely to get concessions from the unions.¹⁵

A. Competitors

Airlines confront a variety of competitors. In some markets, major airlines face competition from other majors and from national and regional airlines as well. All airlines compete with other transportation modes, such as automobiles, railroads, and buses.

The automobile is the airline industry's chief competitor. According to the Travel Industry Association (TIA), automobiles, trucks, and recreational vehicles (RVs) were used for 77% of all trips in 2000; airplanes for 18%; and buses, trains, and other for 5%. For short trips, airline travel

¹⁵ S&P Industry Report, June 5, 2002

is neither practicable nor economical. The TIA reports that some 70% of auto trips are less than 600 miles, compared with only 11% of airline trips. For long distances, however, air travel is preferred. Some 75% of airline trips exceed 1,000 miles, compared with only 13% of auto trips.

Airlines compete with each other on both service and price. For business travelers, flight frequency and reliability are critical, while frequent-flyer programs, cuisine, and other amenities also are influential. Small airlines that cannot obtain gate space during peak travel periods have difficulty attracting business travelers.

To differentiate themselves from their competitors, airlines may strive to build brand loyalty through frequent-flyer programs. Targeting mainly business travelers, frequent-flyer programs let travelers chalk up bonus miles by booking flights or by conducting business with other organizations that have tie-ins with the airlines. Bonus miles can be redeemed for free air tickets or service upgrades. Frequent-flyer programs are designed to promote repeat business for an airline; members tend not to defect to other carriers to reap minor price savings.

More Low cost Providers could lead increased Price Competition. Eleven of twenty North American Air Lines managed to turn a profit (negligible as it may be) in the June Quarter. Nine of those eleven were low cost carriers. Most major airlines are looking into starting low cost subsidiaries. As additional low cost infrastructure and services come on line price competition will become even more intense and may result in larger future losses.

B. Merger Activity

Since the Department of Justice (DOJ) blocked and effectively ended the United/US Airways merger agreement in July 2001, no new merger agreements have been announced by the major domestic carriers. The industry's dramatic downturn after September 11th has diverted management attention toward restoring industry profitability, making near-term deals unlikely, in our view.

In January 2001, American had agreed to purchase TWA for \$500 million in cash and lease assumptions of \$3 billion. The DOJ approved the American/TWA transaction on March 16, 2001. One likely reason for its approval was that TWA's management and employees supported American's offer. This deal was completed in December 2001, ending TWA's 70 years in the skies. All TWA planes were rebranded as American flights.

Standard & Poor's puts a low probability on future merger deals being struck between any of the nation's largest air carriers. Given the industry's overcapacity, weakened balance sheets, and high debt levels, they feel that the largest carriers will seek to shrink capacity, conserve cash, and restore profitability before chasing market share gains.

C. Consequences of Globalization

The Department of Transportation released a report in late 1999 saying that multinational airline alliances had stimulated demand and increased competition in thousands of markets. The report also found that fares fell 17.5% between 1996 and 1998 in open skies markets, but declined only 3.5% where such pacts were not in place.

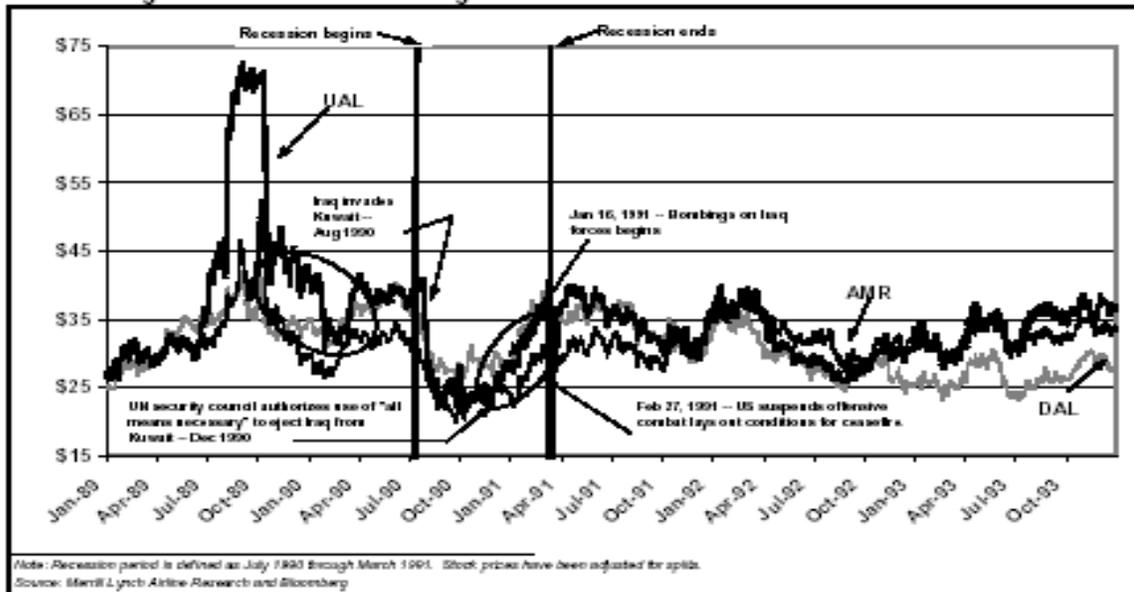
International deregulation is likely and may follow the pattern seen in the U.S. airline industry. The initial period will be chaotic and marked by declining fares and increased travel, possibly leading to steep losses and some bankruptcies. Governments can avoid anticipated market dominance by one airline group by making sure that sufficient takeoff and landing slots are available to competitors at international hub airport.

D. Political Factors

Airline industry experts say that war with Iraq poses the biggest threat to the industry's recovery; a threat more serious than the rising price of fuel, the hassles associated with airport security, the nationwide terrorist alerts or the sluggish economy. "If we, as a nation, decide going into Iraq is necessary, the probability that a lot of people would stop traveling is a concern," said Edmund Greenslet, a founder of Airline Capital Associates Inc.¹⁶

Threats of another war in the gulf are keeping stock prices depressed due to fears of rising fuel prices, and an increased risk of future terrorist attacks. This issue seems unlikely to be resolved during the horizon covered by this report. While some airlines might get additional revenue from government contracts to move personnel the military seems to have opted to give this business mostly to cargo and shipping air carriers. The total of these contracts was approximately \$600MM. ATAHH seemed to be the exception; they received a \$131M contract for charter services beginning October 1st. As Depicted below airlines were hit hard during the last war with Iraq.

Chart 1: "Big Three" Stock Prices During Persian Gulf War/Recession



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(Source Merrill Lynch, August 2002)

¹⁶ St. Louis Post-Dispatch, September 14, 2002

¹⁷ Merrill Lynch, Airline Industry Quarterly Review, August 2002

Valuation and Financial Indicators

Equity Valuation

Airline stocks are among the most cyclical on Wall Street. Investors tend to bid up shares of airlines when they're incurring substantial losses. Once profits are realized, investors typically dumping stocks with apparent disregard to price/earnings ratios or any value measurement. Speculators tend to trade airlines as plays on falling oil prices or the expectation of falling prices. The stock movements can exaggerate the effect that changes in fuel costs have on an airline company's bottom line.

The "best" airlines may not have the richest valuations. Investors tend to favor growth airlines with wide profit margins in lieu of strong service performance and a young fleet of planes. However, during a rally in airline stocks, the biggest stock percentage gains may go to the "worst" airline, because investors anticipate a bigger gain (off a depressed base) in that carrier's bottom line. Thus, an airline's quality is often the inverse of its stock performance — at least during a bull market. However, in a bear market (like the one we are currently enduring), there is a flight to quality airlines, if any.¹⁸

Adjusted Book Value Analysis

An adjusted book value analysis can be especially useful exercise in determining a "floor" value for an airline. The adjusted book value calculation ascribes current market values to assets and liabilities ("marking-to-market"), including major holdings. All of the different asset classes are summed up, and then associated debt and other claims against the company's assets (e.g. preferred stock at liquidation value) are subtracted-out, resulting in a *net asset value* for each airline. This is also referred to as an *asset transfer value*, which is what a financial buyer would be willing to pay for the company based on assets alone. Of course, such a buyer would consider many other characteristics about the company before reaching a "buy" decision, but the underlying asset base is certainly a key consideration. It is important to note that the analysis does not include professional fees and other transaction costs associated with a bankruptcy proceeding.

Merrill Lynch revalued each carrier's fleet to current market value ("marked-to-market") using Avmark aircraft valuations as of January 2002. The value of other assets like facilities and ground equipment is based on 2001 year-end balance sheet data which they believe significantly underestimates the "true" value of those assets (e.g. Northwest's facilities at Tokyo-Narita). They also included each company's working capital position, but excluded the unearned traffic liability given its relative size to other liabilities and the fact that there was a very high likelihood. that most of it would be converted into passenger revenue.

Balance sheets were penalized for under funded pensions. All carriers were treated similarly in this area. They compared projected future obligations ("PBOs") versus the fair value of pension assets at year-end 2001.¹⁹

¹⁸ Standard & Poor's, Industry Surveys, September, 2002

¹⁹ Merrill Lynch, Airline Industry Quarterly Review, August 2002

Airline	Current Share Price	Adjusted Book Value	Discount/ (Premium)	Stated Book Value
AMR	\$9.44	76.33	88%	\$31.45
Continental	9.10	21.22	57%	15.93
Delta	14.59	59.09	75%	27.68
Northwest	8.48	20.17	58%	(6.97)
UAL	5.22	40.10	87%	20.21

Daily Cash Flow and Cash Per Share – Most of the major airlines continue to burn cash at amazing rates. American is burning approximately \$3M a day while US Air and UAL are not far behind at \$2.6M and \$2.1M respectively. US Air has declared Chapter 11 as a result of their inability to meet cash flow requirements. Many analysts believe United may not be far behind.²⁰

Airline	Sep Q E Daily Cash Flow / Burn	June Q Cash Balance	June Q Cash Per Share	Current Share Price	Premium / (Discount) to Cash per Share
Alaska	.7	707	26.63	22.20	-16.6
AMR	-3.1	2563	16.52	9.80	-40.7
American West	-.1	487	14.44	2.12	-85.3
Continental	1.1	1311	20.55	9.00	-56.2
Delta	.7	1841	14.94	13.90	-6.9
Northwest	1.2	2807	32.64	8.19	-74.9
South West	2.1	2118	2.62	12.85	391.1
UAL	-2.1	2700	21.69	4.15	-80.9
US Air	-2.6	602	8.84	2.47	-72.0

Price/Cash Flows at Historical Lows

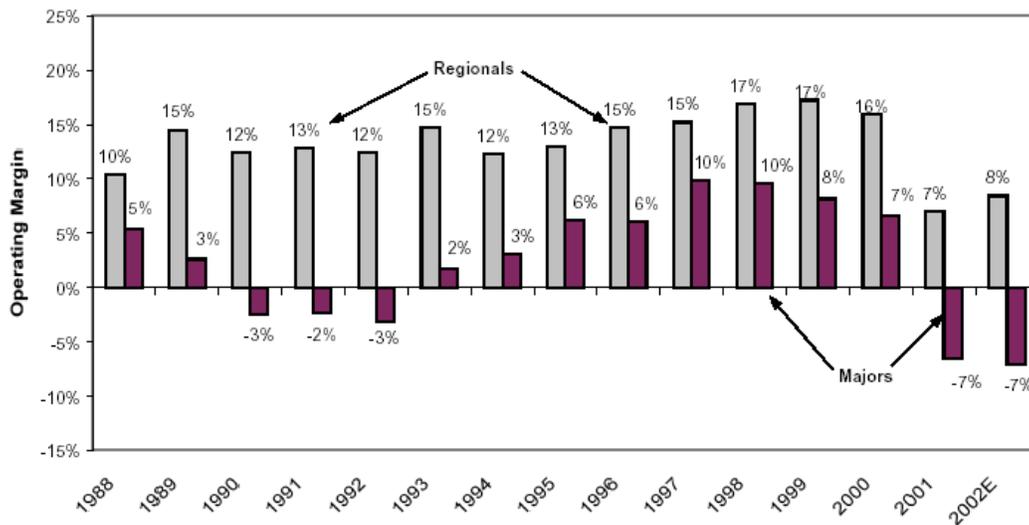
Unlike P/E multiples, which is the valuation metric of choice as the industry's earnings cycle approaches nirvana, price to cash flow multiples are most relevant as the earnings cycle approaches the lowest point. We use a simple definition of cash flow: net income plus depreciation and amortization. Historically, investors have made money buying airline stocks at around 3x cash flow, which is where they traded emerging from the last economic downturn. **Currently, Continental is trading at 0.9x 2003E cash flow, Delta is trading at 1.4x 2003E cash flow and Northwest is trading at 1.2x 2003E cash flow.**²⁰

²⁰ Merrill Lynch, Airline Industry Quarterly Review, August 2002

Importance of Feeder Infrastructure

Airlines with feeder fleets are better poised to weather the current decrease in passenger demand. Many players are shifting their routes from larger capacity planes to smaller more efficient feeder planes. This serves dual purposes. First they are able to fill the smaller planes with fare paying customers as opposed to sending out half empty jumbos, which improves load factors. Second it helps decrease their costs because the smaller planes are cheaper to operate because they are more fuel efficient, have lower labor costs and are designed for fast turnarounds. As can be seen below, regionals have sustained operating margins approximately twice those of majors and more importantly, have remained positive over the 1988-2002 timeframe. It is particularly impressive that they have managed returns during the post 9/11 timeframe.²¹

Regional Airline Margin Performance
1988 - 2002E



WEAKENED BALANCE SHEETS: A KEY METRIC

Most U.S. airlines currently face a potential liquidity crisis due to the rapid rate at which they burned through cash after September 11th — including the four days of forced shutdowns and subsequent months of mounting industry losses. Many took on large new debt burdens, used up their credit lines, or issued new bonds using some of their planes as collateral. Such actions helped the carriers survive the most difficult part of the downturn that followed September 11th through the end of the year, a time when passenger levels declined dramatically, and industry and carrier-specific losses increased sharply.

²¹ Merrill Lynch, Airline Industry Quarterly Review, August 2002

Increasing costs and decreasing revenues have led to sustaining large losses, which have forced the airlines to take on additional debt to survive, increasing the LT Debt –to – Capital ratio to 92% and 65% in 2001 and 2002, respectively. The carrier’s future earnings power will be weakened by the resulting higher interest expense and lower interest and investment income. The losses have also constrained airlines’ ability to increase capital expenditures, add to their networks, or to survive another downturn.

For example, AMR Corp. ended 2001 with total debt of \$16.1 billion and a debt to total capital ratio of 76%, both sharply higher than at the end of 2000. US Airways Group Inc. also had a sharp increase in debt, which totaled \$3.7 billion at the end of 2001, and pushed its debt to total capital ratio well over 100%.

Given the high debt levels carried by many airlines, and the frequency of large operating losses due to industry cycles, it is important to assess the strength of an airline’s balance sheet. Metrics such as debt-to-equity and debt-to-total-capitalization should be, examined, as should cash on hand to cover interest payments and other liquidity needs. In addition, during times of industry losses, it is important to determine how quickly an airline may be using its available cash (its cash burn rate). In late 2001 and early 2002, for example, many airlines were burning through millions in cash a day. In such cases, it is important to gauge how long an airline can withstand a downturn and remain solvent. **Many airlines are left with extremely high debt levels at a time when investors are increasingly worried about balance sheet stability in the wake of the collapse of Enron Corp.**

Pension Funding Status

All of the major airlines have under funded pension programs. Delta went from being over funded by \$1.1 billion in 2000 to being under funded by \$2.4 billion in 2001. The returns on asset plans have been well below the expected returns. Most carriers have used slightly aggressive discount rates to value their pension obligations. These high rates have the effect of making projected benefit obligations appear smaller.

WINNERS AND LOSERS

The airlines that were already weak before September have since weakened further, while the strongest took the opportunity to gain on their competitors. United Airlines, for example, posted the largest loss in airline history in 2001 (\$2.1 billion, which includes the \$650 million it received from the U.S. government). Labor disruptions and a costly and distracting failed attempt to acquire US Airways had hobbled the company.

Although United ended 2001 as the industry leader in terms of revenue passenger miles, it was significantly behind American in terms of passenger revenues. But American, like US Airways and America West, found itself weakened by the industry downturn. All three companies posted large losses, used up precious cash, and were forced to take on significant new debt to maintain liquidity.

Of the nine major airlines, only Southwest posted a profit in 2001. Southwest earned \$511 million in 2001, a 19% decline from the \$627 million profit the company posted in 2000. The company was the only carrier that kept its capacity and employee count intact after September 11th, a decision made possible by the airline’s high efficiency levels, low-cost operating structure, and

profitable route schedule. Industry analysts believe Southwest will remain profitable in 2002 and expect its growth rate to outpace the industry.

1. Valuation Statistics

Valuation Statistics

United States	Ticker	8/7/02 Share Price	52 Week		Equity Market Capitalization	Dividend Yield	P/E			Price/Cash Flows			Ent. Val. ^(a) /EBITDAR ^(b)		
			High	Low			2001	2002E	2003E	2001	2002E	2003E	2002E	2003E	
Alaska (D-2-1-9)	ALK	\$22.56	\$33.90	\$17.40	\$599	--	NM	NM	11.3x	12.5x	5.6x	2.8x	6.35x	4.33x	
America West (D-3-3-9)	AWA	2.06	10.71	1.45	69	--	NM	NM	NM	NM	NM	3.4	8.88	7.11	
AMR (D-2-1-9)	AMR	9.40	34.90	8.95	1,452	--	NM	NM	NM	NM	NM	2.4	23.78	8.00	
Continental (D-1-1-9)	CAL	8.80	48.40	8.60	514	--	NM	NM	8.8	2.5	2.0	0.9	6.01	5.57	
Delta (D-1-1-8)	DAL	14.75	44.60	13.20	1,818	0.7%	NM	NM	NM	7.6	4.3	1.5	8.74	6.36	
Frontier (D-3-2-9)	FRNT	5.42	23.75	4.75	157	--	2.9	NM	6.4	2.6	13.6	3.4	7.58	4.76	
JetBlue (D-2-1-9)	JBLU	44.70	55.15	37.46	1,877	--	NM	37.3	27.9	38.2	25.5	19.0	12.91	8.64	
Midwest Express (D-2-1-9)	MEH	8.00	21.28	7.40	111	--	NM	NM	10.0	NM	7.8	2.9	4.91	3.04	
Northwest (D-1-1-9)	NWAC	8.00	26.00	7.61	682	--	NM	NM	20.0	NM	2.8	1.2	6.11	4.61	
Southwest (B-1-1-7)	LUV	12.34	22.00	10.90	9,462	0.1%	24.2	41.1	22.4	13.7	17.8	12.3	8.00	6.38	
UAL (D-3-3-9)	UAL	4.61	35.02	3.47	583	--	NM	NM	NM	NM	NM	1.3	17.78	8.48	
US Airways (D-3-3-9)	U	2.35	19.05	2.05	159	--	NM	NM	NM	NM	NM	NM	NM	11.99	
AirTran Holdings (D-2-1-9)	AAI	3.70	8.89	2.60	256	--	11.6	37.0	8.2	10.6	10.6	4.4	6.79	4.04	
Average (ex growth carriers)															
								NM	NM	13.4x	7.5x	3.7x	1.9x	11.09x	7.06x
S&P 500	SPX	1,154.09					26.2x	25.6x	22.9x						
Premium (Discount)							NM	NM	(41.8%)						
U.S. Regionals															
Atlantic Coast (D-1-1-9)	ACAI	\$16.00	\$30.23	\$8.04	640	--	17.2	13.3	11.0	14.5	10.0	7.6	5.78	5.19	
Mesa Air (D-2-1-9)	MESA	6.31	15.66	2.80	208	--	17.1	11.5	7.4	12.6	6.3	4.9	6.11	5.22	
Mesaba Holdings (D-3-2-9)	MAIR	5.66	9.49	4.95	115	--	28.3	22.6	18.9	3.1	4.5	4.2	5.50	5.47	
SkyWest (C-1-1-7)	SKYW	18.09	33.06	9.75	1,034	0.4%	19.2	13.9	11.3	10.1	7.5	5.8	5.13	4.37	
ExpressJet (D-1-1-9)	XJT	12.63	17.40	9.55	808	--	19.1	10.5	9.4	11.6	7.2	6.5	5.04	4.47	
Average															
								20.2x	14.4x	11.6x	10.4x	7.1x	5.8x	5.51x	4.94x
Canada															
Air Canada (D-2-2-9)	YAC	C\$6.57	C\$8.10	C\$1.64	C\$790	--	NM	NM	8.2	NM	4.7	1.7	8.12	6.52	
WestJet (C-2-1-9)	YWJA	C\$20.52	C\$21.95	C\$8.33	C\$1,534	--	38.7	31.6	26.6	18.8	14.7	11.4	10.65	8.76	

(a) Enterprise Value = Market Value of Equity + Long-Term Debt + Capital Leases + Operating Leases (capitalized at 7x) + Preferred Stock + Minority Interest - Cash and Marketable Securities.

(b) EBITDAR = Earnings before taxes, net interest expense, depreciation, amortization of goodwill and rentals.

(Merrill Lynch, Airline Industry Quarterly Review, August 2002)

Please see the important disclosures at the end of this report.

Valuation Statistics

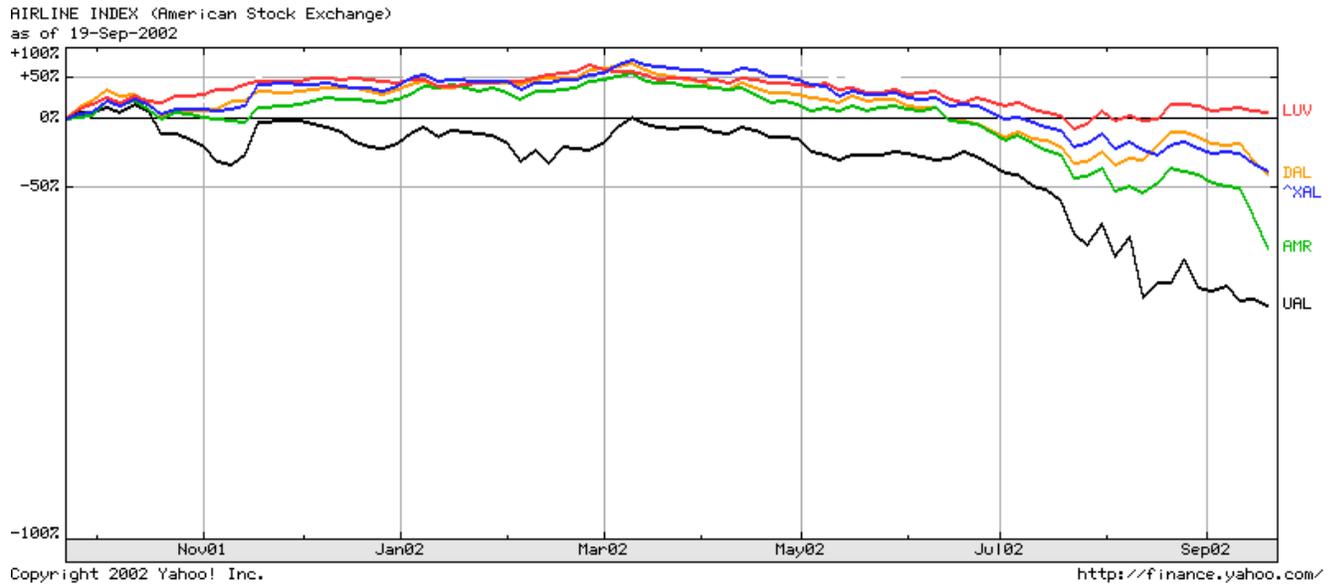
United States	8/7/02 Share Price	Earnings Per Share			P/E Ratio			Price/ 12/01 Book	Operating Cash Flow ^(a)			Price/Operating Cash Flow			2001E CF - Capex (\$ mm)	Enterprise Value ^(b) 2002 Sales	12/01 LT Debt/ Capital ^(c)	
		2001	2002E	2003E	2001	2002E	2003E		2001	2002E	2003E							
Alaska (D-2-1-9) pv	\$22.56	(\$3.19)	(\$1.00)	\$2.00	NM	NM	11.3	75%	\$1.80	\$4.00	\$8.10	12.5x	5.6x	2.6x	\$48	1.1x	77%	
America West (D-3-3-9) psv	2.06	(5.68)	(3.00)	(1.00)	NM	NM	NM	16%	(3.20)	(0.95)	0.60	NM	NM	3.4	(\$128)	1.8	90%	
AMR (D-2-1-9) sv	9.40	(9.13)	(11.50)	(4.50)	NM	NM	NM	27%	(0.02)	(3.35)	3.90	NM	NM	2.4	(\$3,643)	1.2	80%	
Continental (D-1-1-9) sgv	8.80	(4.79)	(3.15)	1.00	NM	NM	8.8	44%	3.90	4.60	9.60	2.5	2.0	0.9	(\$608)	1.5	92%	
Delta (D-1-1-8) psv	14.75	(8.46)	(6.00)	0.00	NM	NM	NM	68%	1.95	3.40	10.10	7.6	4.3	1.5	(\$2,156)	1.4	84%	
Frontier (D-3-2-9) qv	5.42	1.90	(0.20)	0.85	2.9	NM	6.4	95%	2.05	0.40	1.60	2.6	13.6	3.4	\$23	1.4	79%	
JetBlue (D-2-1-9) psgr	44.70	0.86	1.20	1.60	NM	37.3	27.9	NM	1.17	1.75	2.35	38.2	25.5	19.0	(\$1,060)	4.5	103%	
Midwest Express (D-2-1-9) /w/	8.00	(1.42)	(0.50)	0.80	NM	NM	10.0	95%	0.09	1.05	2.75	NM	7.6	2.9	\$1	0.8	72%	
Northwest (D-1-1-9) qpv	8.00	(6.34)	(3.30)	0.40	NM	NM	20.0	NM	(0.30)	2.90	6.60	NM	2.8	1.2	(\$1,028)	0.9	105%	
Southwest (B-1-1-7) psgr	12.34	0.51	0.30	0.55	24.2	41.1	22.4	236%	0.90	0.70	1.00	13.7	17.6	12.3	\$726	2.0	49%	
UAL (D-3-3-9) sgv	4.61	(33.23)	(28.00)	(15.00)	NM	NM	NM	19%	(14.00)	(10.10)	3.65	NM	NM	1.3	(\$758)	1.1	86%	
US Airways (D-3-3-9) /w/	2.35	(17.35)	(16.70)	(7.00)	NM	NM	NM	NM	(11.75)	(12.35)	(2.35)	NM	NM	NM	(\$789)	1.1	138%	
AirTran Holdings (D-2-1-9) /w/	3.70	0.32	0.10	0.45	11.6	37.0	8.2	NM	0.35	0.35	0.85	10.6	10.6	4.4	NA	NM	90%	
Average (excludes Southwest and AirTran)					NM	NM	13.4x					7.5x	3.7x	1.9x		1.5x	92%	
S&P 500	1,154.09	\$45.16	\$50.30	\$57.52	26.2x	25.6x	22.9x											
U.S. Regionals																		
Atlantic Coast (D-1-1-9) qv	\$16.00	0.93	1.20	1.45	17.2	13.3	11.0	264%	1.10	1.60	2.10	14.5	10.0	7.6	(\$11)	1.8	77%	
Mesa Air (D-2-1-9) qv	6.31	0.37	0.55	0.85	17.1	11.5	7.4	185%	0.90	1.00	1.30	12.6	6.3	4.9	(\$112)	1.6	87%	
Mesaba Holdings (D-3-2-9) qv	5.66	0.20	0.25	0.30	28.3	22.6	18.9	66%	1.80	1.25	1.35	3.1	4.5	4.2	\$8	1.6	80%	
SkyWest (C-1-1-7) qv	18.09	0.94	1.30	1.60	19.2	13.9	11.3	182%	1.80	2.40	3.10	10.1	7.5	5.8	\$37	1.3	53%	
ExpressJet (D-1-1-9) psgr	12.63	0.66	1.20	1.35	19.1	10.5	9.4	NM	1.09	1.75	1.95	11.6	7.2	6.5	NA	2.1	103%	
Canada																		
Air Canada (D-2-2-9) qsv	C\$6.57	(C\$4.75)	(C\$2.00)	C\$0.80	NM	NM	8.2	NM	(C\$2.69)	C\$1.40	C\$3.80	NM	4.7	1.7	(\$1,934)	1.2	105%	
WestJet (C-2-1-9) qsgv	C\$20.52	C\$0.53	C\$0.65	C\$0.77	38.7	31.6	26.6	721%	C\$1.09	C\$1.40	C\$1.80	18.8	14.7	11.4	\$7	2.4	40%	

(a) Net income + depreciation + amortization of goodwill + non-cash ESOP charge.

(b) Enterprise Value = Market Value of Equity + Preferred Equity at Liquidation Value + Minority Interest + Long-Term Debt + Capital Leases + Operating Leases (capitalized at 7x) - Cash and Marketable Securities.

(c) Debt/Capital ratio is a measure of permanent capital, hence it excludes short-term debt. Capital is calculated using shareholders' equity and debt includes operating leases capitalized at 7x.

(Merrill Lynch, Airline Industry Quarterly Review, August 2002)



U.S. AIRLINE OVERVIEW

(For the 10 largest U.S. passenger carriers, in billions of dollars except as noted)

	2000	2001	E2002
Passenger revenues	88.61	78.42	73.72
Cargo revenues	4.08	3.48	3.65
Other revenues	4.98	5.28	5.01
Total revenues	97.67	87.18	82.38
% change	8.4	(10.7)	(5.5)
Operating income	2.67	(9.52)	(4.50)
% change	(56.7)	NM	NM
Operating margin (%)	2.73	(10.92)	(5.46)
Revenue passenger-miles (bil.)	630.80	590.02	619.52
% change	3.9	(6.5)	5.0
Available seat-miles (bil.)	866.59	837.64	846.02
% change	1.8	(3.3)	1.0
Passenger load factor (%)	72.8	70.4	73.0
Yield (cents per RPM)	14.30	13.10	13.50
% change	7.2	(8.4)	3.1

E-Estimated by Standard & Poor's. NM-Not meaningful.

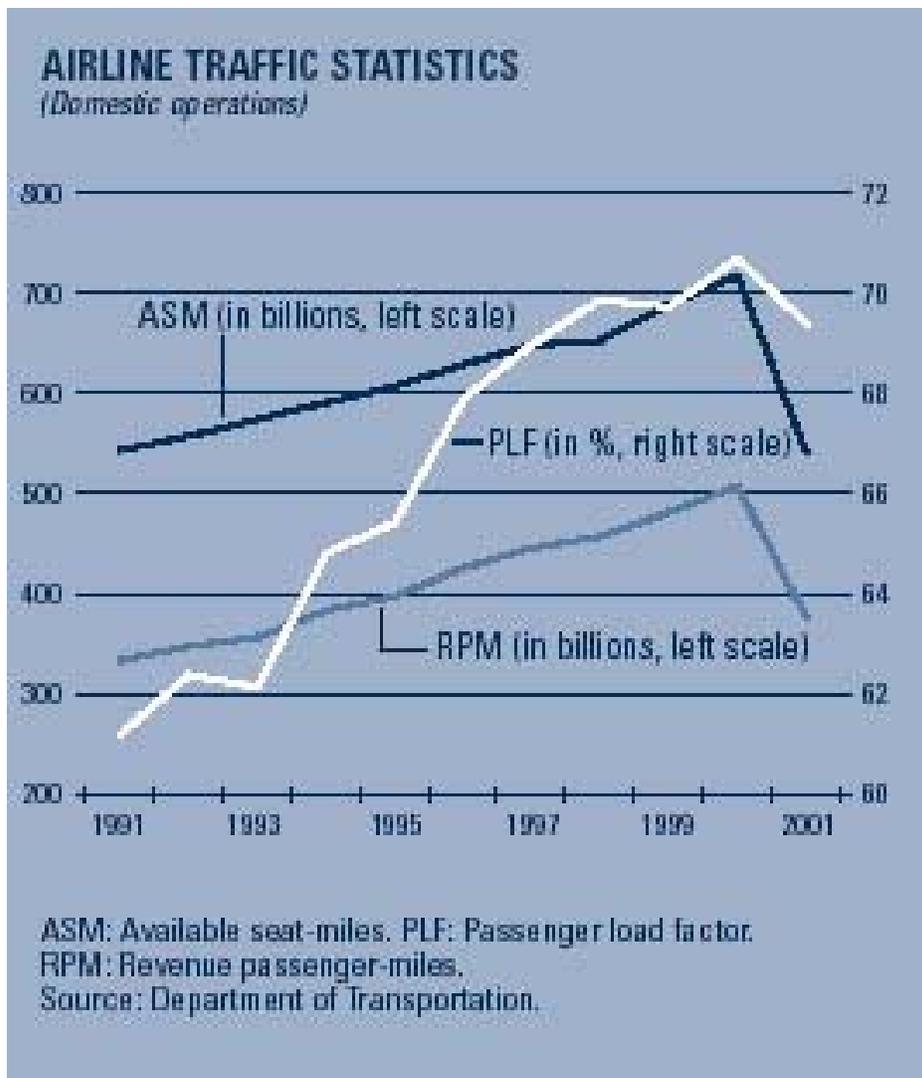
Source: Department of Transportation; Air Transport Association.

CONCENTRATION AMONG CARRIERS*(Based on revenue passenger-miles)*

2001*		%	1991		%
RANK	COMPANY	MARKET SHARE	RANK	COMPANY	MARKET SHARE
1.	United	19.0	1.	American	20.2
2.	American	17.3	2.	United	18.7
3.	Delta	15.0	3.	Delta	16.8
4.	Northwest	10.7	4.	Northwest	12.4
5.	Continental	9.6	5.	Continental	9.7
6.	Southwest	8.1	6.	USAir	8.0
7.	USAir	7.0	7.	TWA	6.7
8.	America West	2.9	8.	America West	2.9
9.	Alaska	2.1	9.	Southwest	2.6
10.	ATA	1.7	10.	Alaska	1.2
	Others	6.7		Others	0.8

*In November.

Sources: Department of Transportation.



Glossary of Relevant Terms

Available seat-miles (ASMs) — A measure of airline capacity; calculated as aircraft miles flown multiplied by the number of seats available for revenue passenger use.

Cost per available seat-mile (CASM) — Total operating costs divided by available seat-miles; a commonly used measure of unit operating costs.

Revenue passenger-mile (RPM) — A measurement representing one passenger transported one mile in revenue service.

Revenue per available seat-mile (RASM) — A measure of unit operating revenue, reflecting the total passenger revenues received per seat, per mile. It is computed by dividing total revenues by available seat-miles.

Load factor — Revenue passenger-miles as a percentage of available seat-miles in revenue passenger services; measures the proportion of aircraft seating capacity that is actually sold and used.

Yield — A unit revenue measure; computed by dividing passenger revenues by revenue passenger-miles.

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