

## FINANCING THE UNITED STATES AIRLINE INDUSTRY IN THE 1980s

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This important subject area will be broken down as follows: 1) A summary of what happened in airline financing during 1981 and 1982; 2) A look at how 1983 is developing as a pivotal year in airline finance; and 3) a few predictions on the future of airline financing for the balance of the 1980s.

### 1981 and 1982 Revisited

1981 and 1982, and probably 1983, will go down as the most traumatic in United States airline history. The disruptive structural effects of deregulation and the reorganization of the air traffic control system on the industry were overlaid with the economic results of a tight monetary policy designed to break the back of the worst inflation in modern times. The effects on the U.S. majors and national airlines were a disaster, and are summarized in Table 1.

Table 1. U.S. airline industry: operating and financial statistics (\$'000,000).

	1981	1982	1983*	1984*
Revenues	38541	37700	39900	44900
Load Factor	58.8%	47.5%	58.9%	59.0%
Operating Margin	5.6%	5.5%	8.0%	10.5%
Depreciation	2195	2275	2450	2650
Net Profit	(113.7)	(545)	200	800
Cash from Operations	2081.3	1730	2650	3450
Long-Term Debt	11052	12100	11250	13200
Net Worth	7815	7560	8500	9200
% Earned on Total Capital	2.4%	-	3.5%	6.5%
% Earned on Net Worth	-	-	2.5%	9.0%

SOURCE: Composite Airline Industry Statistics (majors and national carriers) by The Value Line Investment Survey

\* 1983 & 1984 projections

On the mistaken assumption that fuel costs were going to continue to escalate at an unpredictable rate and that staying in business in a deregulated airline industry depended on replacing their fleets with fuel efficient airplanes, United, Delta, Eastern, and American ordered 227 of the fuel efficient B0767 and B-757 aircraft in 1981. Shortly thereafter, the price of fuel dropped and in 1982, it stabilized at under a dollar a gallon. The airlines were then faced with their worst two back-to-back years of losses in history. Capital expenditures as a percent of net internal funds generation increased from 224 percent in 1981 to 279 percent in 1982. Predictably, debt as a percentage of total capital of the airlines increased from 59 percent to 63 percent from 1981 to 1982. Additionally, the economic environment of rising interest rates and tight money resulted in less revenue for the airlines, as business and personal travel was sharply reduced and the airlines responded with ticket price cutting. Liquidity became very serious for some of the major carriers, including Pan American, Eastern, Western, Continental and Republic.

The response by the airlines was to stretch out and even cancel new equipment on order, arrange new bank credit facilities and renegotiate existing ones, sell or lease back flight equipment

and cut costs. Employee groups made large concessions which cut wage costs and improved productivity, saving several hundreds of millions of dollars for some of the majors. The two Reagan Administration tax bills allowed the airlines to enter into tax leases which reduced the effective purchase price of new aircraft by an average of 25 percent.

This growing bull equity market also enabled the airlines to sell new stock and equity related debt totaling almost \$3 billion in 1982 and so far in 1983, as compared with just \$374 million in 1981 when the new issue market almost died.

### 1983 - A Pivotal Year for Airline Finance

Time is now running out for traditional airlines to restructure themselves as viable businesses as the deregulation of the airline industry shifts into high gear. Traditional carriers face a constant erosion of their revenue base. Pressure from start-ups, competition from more efficient regional airlines, and the continuing overcapacity in wide

body markets keeps fares at a level at which many traditional carriers cannot cover operating let alone fully allocated costs.

### Management

Managements of the traditional airlines have for the most part been slow to adopt to the challenge of deregulation. Traditional management viewed airline deregulation as something to be temporarily endured. Their objective has seemed to be to survive the shake-out of the weaker carriers, await the resumption of strong traffic growth, and a return to rational pricing with higher yields -- in short, a return to business as usual in the airline industry with the past three years regarded as a bad cyclical aberration which they somehow survived. Some traditional airline managements, however, faced with the prospect of a terminal financial crisis, such as Pan American, reacted rapidly and effectively to slash bureaucracy, streamline decision-making and communication, cut administrative and operating costs, and improve productivity.

Most importantly, they sought to redefine, repackage, and effectively market a product that they could make money with in the future. In the case of Pan American, the focus has been on selling a superior business and first class international

transportation service. Pan American now flies domestically mostly to pick-up or drop-off its international passengers and has thus avoided the pitfall of Trans World Airlines, which is trying to be both a domestic and international airline without the cost and route structure to do either profitably. One prediction, that is not uniquely mine, is that managements of traditional airlines that do not rapidly adapt to the market discipline of non-regulated industry will continue to lose a lot of money, the confidence of their employees, their bankers, the market place and ultimately their own jobs.

#### Labor

The unionized labor force of the traditional airlines can often be found in the same bed as traditional management. Years of working in a regulated industry, where the steady introduction of new jet and wide body aircraft produced reasonable increases in productivity, resulted in some of the highest paid workers in the world. The average airline employee now makes over \$32,000 annually. Naturally, the spectre of widespread loss of jobs and permanent rollback of wage scales is not enthusiastically received by traditional airline unions. Even so, far reaching concessions in wage increases and major work rule changes have been agreed to by labor at most of the majors in order to get their airlines through this rough period and most important, preserve their jobs. Unfortunately, many airline workers and their union leaders do not realize that permanent changes in labor productivity, form of organization, and head count will be required to even maintain their high wage levels and that the resumption of the high rate of wage growth that has been the norm, may not continue.

Already there has been some management reaction to the pervasive labor cost problem. For example, the response of Frontier Holdings Inc.'s management to high labor costs has been to start a non-union airline to expand into new markets and to make Frontier a more effective competitor to the all-union United at its Denver hub. Continental has taken an equally radical approach to a strike over unreasonable demands for more pay from its mechanics - break the strike and replace all mechanics who do not come to work. Traditional airline management will increasingly be driven to implement radical solutions to drive down labor costs which now represent the most serious deterrent to turning a profit in a future deregulated airline industry.

#### Aircraft

1983 has also been a year of acute realization by management of traditional airlines and aircraft builders that fuel prices might stabilize for the balance of the 1980s. The expectation of near term fuel prices approaching \$3 per gallon can no longer be used as justification for buying a \$35 million B-757 when a used B-727-200 can do the job almost as well and can be had for \$6 million. Likewise, it is becoming clear that with the surplus of DC-10s and L-1011s selling for around \$12 million, the purchase of a new semi-wide body B-767 at \$55 million can not be justified. Just ask any first class passenger flying between New York and Chicago which cabin is preferred.

The result has been the cancellation and stretch-out of B-767 orders by United, American, Delta, Trans World Airlines and Western. Most purchase commitments and near term deliveries of new aircraft have focused on the lower priced twin engine jet (\$15-\$22 million) such as the B-737-200 and the MD-80. Of the some 314 new jet aircraft on order

at the end of 1982, 58 were B-737-200s and 51 were MD-80s.

Some 30 of the former and 34 of the latter were delivered in 1983. Other principal buyers of these lower cost, highly productive twin engine aircraft are Delta, Pacific Southwest Airlines, Southwest Airlines, USAir, and Piedmont. A few of the established nationals, and most of the start-up airlines have been astute buyers of bargain-priced used jet aircraft including People Express, Piedmont, Muse, Pacific Southwest, and Ozark (a carrier that has historically purchased its fleet of DC-9s from Delta). 1983 truly was a year when airline management began to focus on the real capital cost of aircraft. They woke up to the fact that buying the wrong aircraft at too high a price could literally put them out of business, and that they could no longer count on inflation to bail them out.

#### Finance

1983 has been a year of considerable anxiety for the banks and insurance companies that historically have lent the airlines the money to buy aircraft. Who will ever forget all those Braniff planes sitting on the ground at the Dallas/Fort Worth Airport?

Traditional unsecured airline credit appears to be all but dead. As a matter of record, the level of loans and commitments of the 12 largest insurance company lenders to the airlines peaked out in 1980 at \$3.282 billion and thereafter declined to \$3.158 billion in 1981 and dropped sharply to \$2.698 billion in 1982. There are no figures available on aggregate bank commitments to the airlines. However, Pan American and Western have no bank credits and other majors such as Eastern, Continental and Republic are operating with much reduced and highly restricted bank credits. Trans World Airlines and American have been the beneficiaries of a \$500 million "fly before you buy" program by McDonnell Douglas that will require them to find and guarantee financing for their customers.

Boeing has provided Delta with a similar "Rent before you buy" deal for the purchase of a fleet of B-737-200 aircraft.

The carriers who are having little trouble putting together secured bank credits are the more profitable airlines such as Piedmont, Ozark, USAir, and People Express. Traditional lending is a thing of the past for the traditional airlines. If they do not reduce costs and earn money they may find it hard to even rent aircraft.

#### Competition

1983 was also the year that traditional airlines discovered that competition in the form of low fares and yields had become a permanent feature of the airline business. What competition means for the traditional majors is that the lower cost national airlines and the well-managed and financed start-up carriers can make good money with low fares and can take all the revenue they have the capacity to handle from the high-cost majors. Witness what Piedmont is doing to Delta and Eastern, and what People Express is doing to Eastern, USAir and Delta. The traditionals have extolled the virtues of their big hubs such as Atlanta, O'Hare, Dallas/Fort Worth, and Denver. This obscures the fact that these mega-hubs may have become the lairs of their dinosaur inhabitants. Note, the flying public prefers to overfly big hubs and is gravitating to the regional carriers with their direct and through plane service and low ticket prices. The traditional majors may have begun to realize in 1983 that their future lies in being wide body, long-haul, point-to-point

carriers with high quality front cabin service for which business travellers are willing to pay a premium.

Other than this well-defined, but limited market niche, the traditionals should concentrate on related service activities in such areas as computer (reservations) services, food service, aircraft maintenance, flight training, hotel management, and almost any other service business that effective management and a well capitalized company might find profitable to undertake.

#### Airline Finance In The Future

Future finance for the airlines will focus more on the financing of aircraft by banks, insurance companies, finance companies and pension funds who will increasingly see themselves as providing specific aircraft to airlines rather than lending to airlines in the traditional manner to buy aircraft. Further financing for the airlines will be accomplished in other ways which will have wide ranging implications for the asset and capital structures and the ownership of airlines in the future.

#### Leasing

The fact that new airplanes are financed over a period of eighteen years and that the airline industry is in chaos in its fourth year of deregulation, with perhaps the worst to come, has not been lost on the providers of aircraft finance. They want to own the aircraft; the stock market can own the airlines. Tax leases and guideline leveraged leases separate tax benefits and the benefits of ownership from the operations of aircraft. For start-up and troubled traditional airlines, an operating lease with renewals at the option of the lessor, may be as far as a provider of flight equipment is prepared to go. Equity kickers in the form of warrants to buy the carriers' common stock may be required.

Today, banks and insurance companies prefer to provide debt on leveraged leases, and finance companies such as General Electric Credit Corporation and private tax leasing partnerships own the aircraft. In the future, it is likely that pension funds will form ventures with tax lessors to provide long term fixed rate funding in return for a share of the residual value of the aircraft, and that these ventures will be managed by professionals skilled in the trading and operation of used aircraft and knowledgeable about specific airlines.

#### Trading

Another option is trading. The job of remarketing used aircraft now appears to be shifting towards the sellers of new aircraft. In 1983, both McDonnell Douglas and Boeing set up impressive organizations to deal in used aircraft. Delta in effect said to Boeing, "O.K. you want to sell us a fleet of 767s. We have to sell our L-1011s to buy your plane. We have no buyers and we can't enter into a commitment without a buyer for our old equipment. You be the buyer." McDonnell Douglas completed a similar deal in the sale of MD-80s to Alitalia, agreeing to take back seventeen 727s and three DC-10-30s. Additionally, large numbers of DC-9s and 727s will be coming off their original leases over the next few years. The banks who own these aircraft are reselling them to leasing partnerships or simply reselling them to the original lessee airline, with conditional sales financing over five or seven years.

#### Capital Markets in 1983

The capital markets have again become an important factor in airline finance. Almost \$2 billion of equity or equity-related securities were sold to the public in the first half of 1983.

Most of these securities sold by the traditional airlines, especially those with liquidity problems, were at knock-down prices and were purchased by "junk" bond funds or by individual speculators. An entirely different class of investments is the quality start-up airlines, such as Muse Air or People Express, which the market is valuing highly for their growth potential as efficient, low-cost airlines with well-defined market objectives. People Express purchased 44 used B-727-200 aircraft in 1983. In 1982 People Express earned \$1 million; in 1983 it could earn \$18 million; and in 1985 it could earn \$50 million.

Several of the nationals, including Southwest, Piedmont, and Ozark, are growing rapidly under the impetus of deregulation, adding large amounts of new and used equipment to their fleets. A few commuters, such as Empire Airlines, have become jet regionals and appear to have a profitable future. Over a dozen commuters, at last count, have or are in the process of making an initial public offering of their stock, including one of the oldest and best known - Provincetown-Boston Airline.

The large amount of new venture capital looking for a home will soon become disenchanted with high-tech (translated: high-risk and very high-risk) and begin to focus on regional jet airlines as attractive investment opportunities in the growing service sector of the economy. Airlines will join other service industries benefiting from an absence of the high inflation which so recently put cost driven businesses in the back seat in favor of asset-based investments. The future is very bright in the stock market for low-cost, profitable, regional airlines, and very poor for the traditional airlines who fail to restricture themselves as lower cost operators in an increasingly competitive market.

#### Takeovers

The future may also see a succession of takeovers of asset-rich traditional airlines generating marginal profits with weak balance sheets and poorly valued by the stock market, who become tempting targets for well-managed large public companies with proven consumer marketing skills in the service industries. The outcome of Hyatt with Braniff is being watched with more than a passing interest. What is next? Philip Morris with Republic? Proctor & Gamble with Continental? 3M with Western? All these airlines could probably be bought for the value of their tax loss carry forward and the market equity in their flight equipment. The acquirer would get the chance to make or lose a large amount of money gratis.

#### Banking

Finally, here are some comments on where the banks are going with the airline industry. Banks too are going through their own very far-reaching trauma of deregulation. Those banks with weak management and many bad loans will find that loans to airlines are the least of their problems. Those banks who have a strong capital base, are well managed, and which clearly define their future lending opportunities as the BAA credits where they can take an acceptable credit risk and earn a meaningful return over their cost of funds will find great opportunity lending to low-cost airlines.

Airlines offer a basic service which the low-cost carriers such as People Express have proven has vast market potential. Airplanes are a high technology product whose use and maintenance continues to be regulated by the FAA (i.e., the government guarantees the quality and safety of the product - the airline seat).

In spite of anxious moments like Braniff, the fact is that airline lending groups within banks have the highest profitability and lowest loan write-offs (after counting recoveries and profits from the sale of aircraft) of all large-scale corporate lending. Bank lending criteria will focus on the operation of specific types of aircraft by specific airlines and banks will be plugged into the airline's own operating management system to monitor operating results of "their" aircraft by the airline as near real time as possible. Risk

will be further reduced by banks concentrating their lending activities on financing lower cost, used jet equipment which can be moved quickly from an unsuccessful airline, to a successful carrier.

#### Conclusion

Forecasting the future of the United States airline industry is a difficult task. Ed Acker, upon becoming Chairman of Pan American during the dark days, was asked by a reporter why he would undertake such an apparently hopeless job. He was reported to have replied that airlines were like dope and he was hooked. The transformation of the airline industry over the next few years will be a very creative and stimulating experience. What will happen to the dinosaurs?

Table 2. How airlines have fared since deregulation, operating profit (loss) including interest expense 1979-1982 (all data in (000) ).

<u>Airline</u>	<u>1979-81 Total</u>	<u>1982 Result</u>	<u>1979-1982 Total</u>
<u>THE WINNERS</u>			
USAir	\$ 143,769	\$ 54,981	\$ 198,750
Delta	321,516	(127,169)	194,347
Federal Express	140,567	-131,080	271,647
Southwest	99,693	33,142	132,835
Frontier	88,471	( 5,854)	82,617
Piedmont	60,468	( 1,144)	59,324
Transamerica	58,112	9,630	67,742
Air Wisconsin	16,257	5,622	21,879
Alaska Air	( 1,134)	18,801	17,667
Ozark	4,570	10,376	14,946
Subtotal	\$ 932,289	\$ 129,465	\$ 1,061,754
<u>THE BIG LOSERS</u>			
Midway	725	( 1,560)	( 835)
Northwest	12,257	( 15,591)	( 3,334)
Aloha	1,167	( 8,705)	( 7,538)
Muse Air	( 5,537)	( 9,049)	( 14,586)
People Express	( 11,115)	1,002	( 10,113)
Capitol Air	( 12,930)	( 16,204)	( 29,134)
Air Cal	1,340	( 32,885)	( 31,545)
New York Air	( 13,392)	( 19,953)	( 33,345)
Hawaiian	( 33,932)	( 21,717)	( 55,649)
World	(134,181)	( 70,730)	( 204,911)
Air Florida	( 33,406)	( 68,666)	( 102,072)
Republic	(145,358)	( 63,553)	( 208,911)
Flying Tiger	(143,340)	( 72,589)	( 215,929)
TWA	(232,465)	( 60,473)	( 292,938)
Eastern	(166,001)	(197,054)	( 363,055)
Braniff	(363,382)	( 50,477)	( 413,829)
Continental	(267,102)	(148,187)	( 415,289)
American	(357,476)	(158,746)	( 516,222)
United	(731,479)	(223,850)	( 955,329)
Pan American	(729,705)	(430,895)	( 1,160,600)
Subtotal	\$ (3,365,312)	\$ (1,669,852)	\$ ( 5,035,164)
<b>TOTAL</b>	<b>\$ (2,433,023)</b>	<b>\$ (1,540,387)</b>	<b>\$ ( 3,973,410)</b>

SOURCE: Avmark Newsletter July 1983.

Table 3. Airline industry financial and capital data, December 31, 1982 (\$ in millions).

Company	Capitalization				Total Capital	Debt % of Capital	Cash Items	Net Internal Funds(1)	Capital Expenditures	Expenditures % of Net Int. Funds
	Debt	Capitalized Leases	Total Debt	Equity						
American	\$751.8	\$764.8	\$1,516.6	\$976.8	\$2,463.4	61.6%	\$465.9	\$213.6	\$407.4	190.7%
Continental	439.1	144.8	583.9	49.9	633.8	92.1	37.1	45.2	6.7	14.8
Delta	670.8	1.7	672.5	982.0	1,654.5	40.6	27.7	218.2	684.8	313.8
Eastern	1,053.6	857.3	1,910.9	394.9	2,305.8	82.9	170.6	130.2	439.9	337.9
Frontier	210.3	0.2	210.5	177.9	388.4	54.2	22.7	46.1	179.0	388.3
Northwest	-0-	-0-	-0-	820.6	820.6	-0-	32.5	124.4	55.1	44.3
Ozark	53.3	6.7	60.0	105.6	165.6	36.2	19.2	23.2	45.7	197.0
PSA	372.8	22.7	395.5	190.9	586.4	67.4	47.1	53.3	161.8	303.6
Pan American	894.7	250.7	1,145.4	336.7	1,482.1	77.3	47.2	(244.4)	205.1	N.A.
Piedmont	249.9	119.0	368.9	254.4	623.3	59.2	51.4	69.2	292.9	423.4
Republic	647.3	149.9	797.2	55.9	853.1	93.4	125.5	24.3	44.8	184.4
Southwest	106.3	-0-	106.3	240.6	346.9	30.6	16.7	52.2	140.1	268.4
Trans World	624.1	474.0	1,098.1	584.6	1,682.7	65.3	85.1	174.2	378.3	217.2
UAL Inc	1,131.8	663.1	1,794.9	1,121.0	2,915.9	61.6	308.8	398.9	834.5	209.2
U S Air	236.6	79.2	315.8	459.1	774.9	40.7	149.4	110.5	158.6	143.5
Western	300.7	110.8	411.5	77.6	489.1	84.1	47.4	17.8	30.9	173.6
<b>Total</b>	<b>\$7,733.1</b>	<b>\$3,644.9</b>	<b>\$11,388.0</b>	<b>\$6,798.5</b>	<b>\$18,186.5</b>	<b>62.6%</b>	<b>\$1,654.3</b>	<b>\$1,456.9</b>	<b>\$4,065.6</b>	<b>279.1%</b>

December 31, 1981										
Total (2)	\$6,775.5	\$3,845.0	\$10,620.5	\$7,339.9	\$17,960.3	59.1%	\$1,514.2	\$1,834.8	\$4,115.5	224.3%

December 31, 1980										
Total (2)	\$6,671.8	\$3,287.4	\$9,959.2	\$7,304.8	\$17,264.0	57.1%	\$1,600.9	\$1,725.1	\$4,356.4	252.5%

(1) Depreciation and Net Income, minus Dividends.  
 (2) Includes Braniff.  
 NA = Not applicable

SOURCE: Merrill Lynch Airline Research Group.

Figure 1. Airline industry financing.

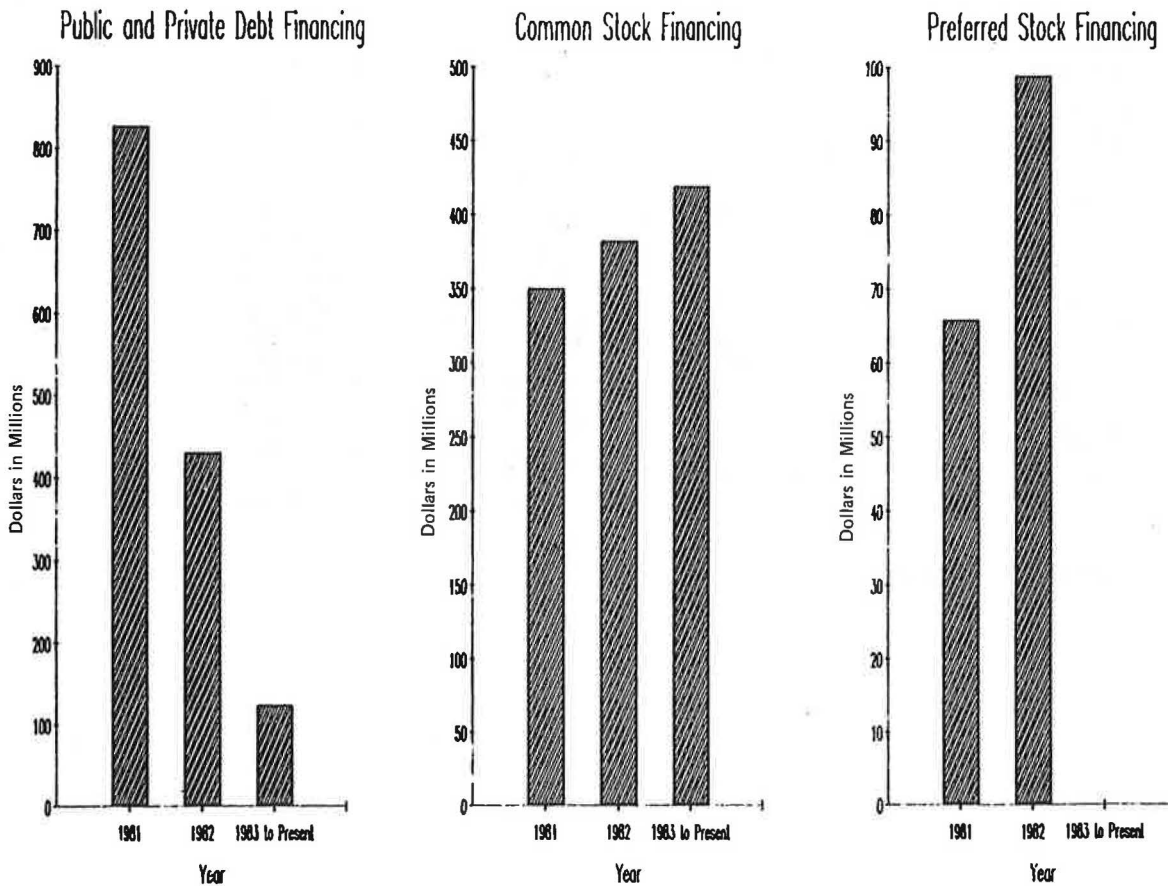


Figure 2. Airline industry financing (continued).

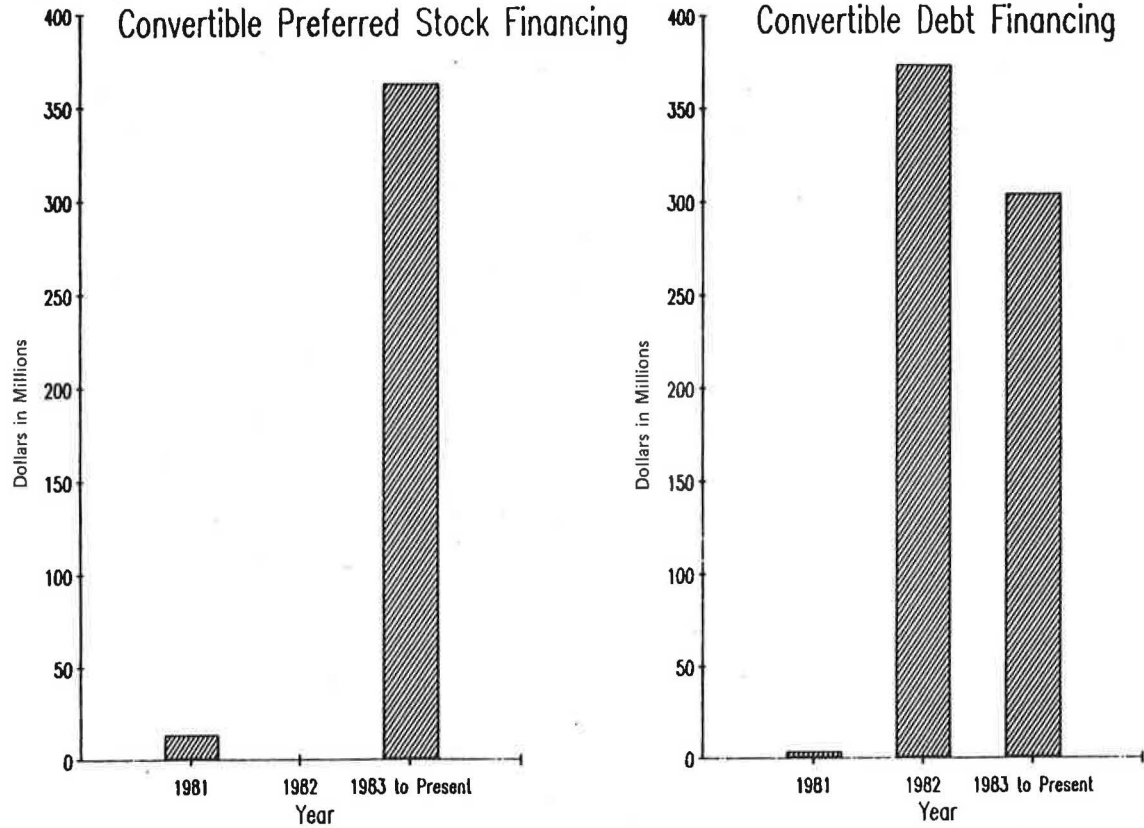


Figure 3. Airline industry financing (continued).

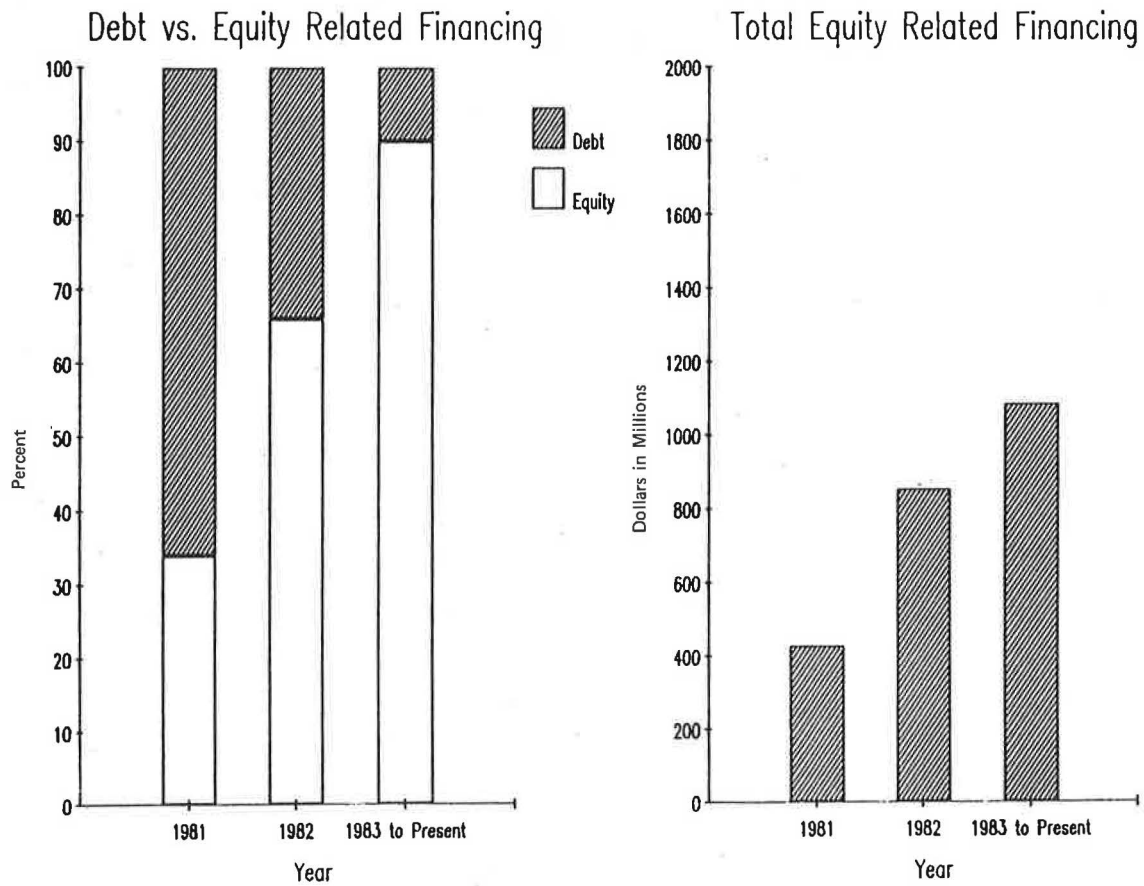


Table 4. Airline industry,  
new aircraft on order as  
of December 31, 1982.

Company	Type of Aircraft	Total		Deliveries by Year		
		Orders	Options	1983	1984	1985 & beyond
American	767-200	27	-0-	5	2	20
	DC-9-80	20	-0-	20	-0-	-0-
Delta	737-200	33	-0-	5	28	-0-
	757-200	60	10	-0-	6	54
	767-200	16	22	9	4	3
	L-1011	2	-0-	2	-0-	-0-
Eastern	757-200	25	24	13	6	6
	A-300	4	5	4	-0-	-0-
Frontier	737-200	2	-0-	2	-0-	-0-
PSA	DC-9-80	8	-0-	2	3	3
Piedmont	737-200	9	-0-	9	-0-	-0-
Republic	DC-9-80	8	-0-	3	-0-	5
Southwest	737-200	5	-0-	5	-0-	-0-
	737-300	10	30	-0-	1	9
Trans World	767-200	7	10	7	-0-	-0-
	DC-9-80	15	15	9	6	-0-
United	767-200	32	-0-	12	5	15
U S Air	737-200	9	-0-	9	-0-	-0-
	737-300	10	20	-0-	1	9
	727-200	3	-0-	3	-0-	-0-
Western	737-300	3	-0-	-0-	-0-	3
	767-200	6	6	-0-	-0-	6
Totals	727-200	3	-0-	3	-0-	-0-
	737-200	58	-0-	30	28	-0-
	737-300	23	50	-0-	2	21
	DC-9-80	51	15	34	9	8
	757-200	85	34	13	12	60
	767-200	88	38	33	11	44
	A-300	4	5	4	-0-	-0-
	L-1011	2	-0-	2	-0-	-0-
		<u>314</u>	<u>142</u>	<u>119</u>	<u>62</u>	<u>133</u>

No Orders:  
Continental  
Northwest  
Pan American

Used Aircraft on Order:  
Piedmont 727-200 6  
Ozark DC-9-40 1

SOURCE: Merrill Lynch Airline Research Group

Table 5. 1982 system-wide results and percentage changes from 1981 for sixteen large airlines.

	RPM's (000,000)		Employees		ATM's (000) Per Employee		Average Pay Per Employee (\$)	
		% Chng.		% Chng.		% Chng.		Rank
1. United	38.5	12.1	41,582	(8.6)	197.5	15.7	33,118	(4)
2. American	30.9	11.2	35,962	(0.3)	191.5	7.6	34,061	(3)
3. Pan Am	27.2	(6.0)	29,386	(3.6)	251.3	11.8	31,056	(11)
4. Eastern	26.1	0.0	40,863	(2.7)	135.7	(0.7)	28,358	(14)
5. TWA	25.5	(0.8)	29,994	(2.2)	181.6	3.3	31,421	(8)
6. Delta	24.4	0.7	36,151	(0.1)	165.6	1.0	32,545	(5)
7. Northwest	15.7	10.0	13,638	3.8	351.5	1.6	30,881	(12)
8. Continental	11.2	10.8	14,470	(5.6)	187.7	13.9	29,000	(13)
9. Republic	9.2	21.4	14,324	(2.6)	146.3	14.7	31,362	(9)
10. Western	8.9	4.1	9,914	2.3	201.7	5.2	31,218	(10)
11. USAir	6.1	12.1	10,981	2.8	117.0	10.7	35,274	(1)
12. Piedmont	3.9	20.2	7,061	19.4	122.3	4.3	25,655	(15)
13. Frontier	3.5	2.0	5,286	(10.5)	135.7	12.2	32,363	(6)
14. Southwest	3.0	30.8	2,615	22.1	260.0	11.4	24,600	(16)
15. Pacific Southwest	2.6	23.3	3,563	(3.7)	167.4	13.3	34,210	(2)
16. Ozark	2.2	15.6	3,995	5.1	129.4	11.2	31,923	(7)

AIRLINE FINANCES

The airlines as a group are one of the most highly leveraged industries in the U.S.. As a regulated, capital intensive business, the airlines in the past took on large amounts of debt to finance new equipment with little or no penalty. Investors relied on the CAB's regulatory process as a kind of equity substitute that assured the ability of the airlines to service their debt. Consequently, at the end of 1978, the airlines' best year ever, long-term debt to equity at the airlines was 63% against 32% for all manufacturing companies.

Capitalization Figures for All Major and National Airlines

	9/82	12/78
LTD/equity	106%	63%
LTD+capital leases/equity	167%	103%
Capital spending	\$4.1B	\$3B
Internal sources/capital spending	44%	66%
NI (most recent twelve months)	\$(898)MM	\$1.2B

Since deregulation, the airlines have become even more highly leveraged, to the point that many financial institutions are unwilling to make any new commitments to the industry. By the third quarter of 1982, for example, when airline debt to equity had soared to 106%, the same ratio for manufacturing companies was 37%.

In addition to improving profits and cash flow, the airlines to strengthen their balance sheets will have to raise significant amounts of new equity. As Exhibits 10, 11, and 12 indicate, the recent bull market has in fact permitted the airlines to issue large amounts of new stock for the first time in several years. The airlines still have much more equity to raise, or earnings to retain, to bring the industry back into line with other competitors in the debt markets. Debt as a percent of total capital (debt plus equity) rose to 62.6% last year from 59.1% at the end of 1981, and 57.7% in 1980. This deterioration occurred despite the fact that Braniff has been eliminated, and in 1981 that company had \$600MM in debt and a negative \$55MM in equity. Total debt increased about \$1B to \$7.7B while capitalized leases declined slightly, from \$3.8B to \$3.6B. Equity declined \$540MM to \$6.8B.

Net internal funds (depreciation plus net income minus dividends) generated by the airlines in 1982 dropped to just under \$1.5B from \$1.8B in 1981, and \$1.7B in 1980. The capital spending level, although down modestly in each of the past two years, continued to exceed \$4B and amounted to 297.1% of the net internal funds last year compared to 224.3% in 1981 and 252.5% in 1980. Merrill Lynch estimates that the ratio of investment to net internal funds must, over time, be in the 175% to 190% range or else debt cannot be held below 55% of total capital (barring new equity), the level of debt at which an airline becomes a candidate for serious financial difficulties in a recession. Exhibit 13 shows that in 1982 eight of sixteen major and national airlines exceeded 200% in terms of investment relative to net internal funds. Only four companies reduced their debt in 1982: American, Northwest, Ozark, and USAir.

A favorable development for the financial health of the airlines has been the decline in the prime rate from over 20% in 1981 to 10.5% today. Due to new debt and high rates, interest expense for the domestic airlines reached \$1.4B in 1982. Consequently, every one point change in the prime rate is equivalent to \$30MM in annual interest payments, according to the ATA, even though most airline debt is fixed-rate financing. Two airlines with large amounts of floating debt are Republic and Continental, both of whom took on debt to finance merger and expansion costs. Republic has over \$400MM in floating rate debt, more than any other airline. Continental has \$180MM in loans tied to the prime rate.

Capital Spending

The table below lists the dollar amounts of firm aircraft capital commitments as of the end of last year; as a result of deliveries and order cancellations the total amount declined to \$9.2 billion from \$11.7 billion at the end of 1981, and \$13.5 billion at the end of 1980. The vast majority of the equipment on order is accounted for by four companies: American, Delta, Eastern, and United. In three of those cases, however, much of the equipment is scheduled for delivery after 1985 (these are American, Delta, and United).



There are a total of 314 aircraft on order, with 142 options, distributed among eight aircraft types but primarily 737's, 757's, 767's, and DC-9-80's. Included in this total of 314 units, but not part of the \$9.2 billion, are thirty-five DC-9-80's to be leased to American and Trans World, and thirty-three 737-200's to be leased by Delta.

<u>Company</u>	Firm Aircraft Capital Commitments <u>12/31/82</u>
American	\$1,360.0
Continental	-0-
Delta	2,900.0
Eastern	1,186.2
Frontier	21.8
Ozark	-0-
PSA	9.3
Pan American	190.0
Piedmont	125.0
Republic	180.0
Southwest	267.7
Trans World	245.5
UAL Inc.	1,920.0
U.S. Air	387.0
Western	430.0
Total	<u>\$ 9,232.5</u>
December 31, 1981	<u>\$11,728.9</u>
Total	
December 31, 1980	<u>\$13,474.5</u>
Total (1)	

(1) Includes Braniff

Capital spending by domestic airlines has been declining since 1980 (it was \$4.1B in 1982), and the Boeing Company estimates in its March, 1983, Current Market Outlook that U.S. airlines will spend \$46.5B, or \$4.65B per year, on new aircraft through 1992, in addition to the \$9.2B already sold but not delivered. This figure represents 40% of the world market for large commercial aircraft. Non-U.S. airlines, which had \$16.8B worth of aircraft sold but not delivered at December 1982, are predicted to take delivery of \$69.5B in new aircraft by 1992, for 60% of the market. Outside the U.S., Europe (\$35.3B) and the Far East (\$25.9B) are the two largest markets. Exhibits 14 and 15.

Other estimates are more conservative than Boeing's, predicting \$30B as necessary for replacement and expansion by the domestic industry in the next decade. Even so, these substantial sums require that the airlines return to profitability in order to finance them. A 5% return on revenues has been estimated as sufficient to pay for airline growth. On 1982's industry revenues of \$31.9B, this amount would be \$1.6B annually. (1982 depreciation for the industry was \$2.1B.) The trunk airlines have accomplished this level of return only once in the last ten years, when in 1978 they returned 5.5% of revenues. For the 1970's, their average ROS was 2.1%. These figures suggest that the airlines which do not earn a return on revenues sufficient to recycle their fleets, and many are in this category today, will lose ground steadily as their fleets become less and less competitive or as their debt service becomes an impossible burden.