A CASE STUDY IN CORPORATE RESTRUCTURING:
TRANS WORLD AIRLINES

by

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Doctor en Ciencias Fisicas
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Submitted to the Sloan School of Management and
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and
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ABSTRACT

The purpose of this thesis is to study the reorganization of Trans World Airlines under the Chapter 11 of the US Bankruptcy Code.

The thesis, first, assesses several factors which contributed to TWA's financial distress: Carl Icahn's 1988 leveraged buy out, the increase in fuel prices and the decrease in international traffic following the Kuwait invasion, and the increase in competition from other US carriers in the North Atlantic. Second, it studies the dynamics which generated the reorganization of the company, and in particular two leading players in the process: Carl Icahn, and the creditors. Third, it discusses the choice of in-court versus out-of-court reorganization and justifies it in terms of the non-unanimity requirement of the Chapter 11 bankruptcy, among other considerations. Fourth, it describes the operational and marketing turnaround of the reorganized TWA, and evaluates the long term probability of survival. Unfortunately, the study concludes that, despite its successful emergence from bankruptcy, there is no guarantee that TWA will survive in the extremely competitive US airline industry at a time when this industry is seeing a continuous polarization into global full-service airlines on one side, and low-cost carriers on the other.

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Introduction

The Strategic Management Journal devoted its Summer 93 special issue to the topic of corporate restructuring\(^1\). In the introduction of this issue, his editor stated that the decade of the eighties was well known for the amount and nature of restructuring among large corporations, and that the nineties would follow suit; threatened blue chips would have to restructure to survive as competitive circumstances kept on changing around the world. The importance of these processes, the editor argued, called for research that responded to this kind of broad restructuring events. This thesis tries to contribute to this effort.

Following Porter\(^2\), we argue that a case study is an appropriate approach to study complex problems like restructuring for which cross-sectional data is tremendously difficult to obtain. In-depth case studies allow to identify significant variables, explore relationships among them, and at the same time, cope with firm and industry specificity. This thesis is a case study of the reorganization of TWA from 1991 to 1993. During that time TWA, weakened by a previous leveraged buy out, and victim of external shocks such as increases in fuel prices and the Gulf war, embarked in a major reorganization effort, first out of court and later through Chapter 11. As we will see in the following chapters, during that process TWA changed its financial structure, its management, and its competitive strategy.

One of the disadvantages of a case study versus, say, a econometric study, is that the latter allows stating one or more hypotheses, and then establishing the likelihood of these

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hypotheses being true (or false) in precise quantitative terms. Nonetheless, a case study allows to surface facts which not only are relevant to the situation studied, but that are likely to be generalizable to similar cases. In particular, case studies are fertile ground for new hypotheses which sometimes are testable by econometric methods.

These are some characteristics of the reorganization which we have studied that are good candidates for generalizable lessons:

- The 1988 leveraged buy-out (LBO) was material in the subsequent bankruptcy of TWA. The high sensitivity of the airline industry to external economic shocks leads to highly variable cash flows which can lead to serious liquidity problems when an important part of that cash flow has to be dedicated to service the debt resulting from an LBO. Northwest Airlines for example (another airline taken public through an LBO) has experienced problems similar to those of TWA.

- The conflicting interests of multiple stakeholders make the reorganization of a company with the size of TWA an extremely complex problem. TWA was supposed to stay in bankruptcy between one and six months: it took them almost two years to complete the Chapter 11 proceedings. It is this complexity which led TWA to choose to reorganize itself under Chapter 11 instead of outside the bankruptcy court. Looking at TWA's reorganization it is difficult to imagine that TWA, or any other company similar in size and complexity, could have gone through such a profound reorganization out-of-court, where unanimity is necessary to conclude an agreement.

- A traumatic process such as this reorganization may be able to trigger impressive turnarounds in some aspects of a company. TWA managed to turn around its image among business travelers and to change its quality of service ranking from the worst
position to the best position (according to some surveys and in particular categories) in less than a year. An interesting question is up to what point this would have been possible without a traumatic catalyzer change such as TWA bankruptcy.

- The successful completion of a reorganization process does not guarantee long term survival. In the case of TWA, currently it faces the risk of being squeezed between two groups of players in the airline industry: on the one side, the big three (American, Delta, and United), which due to their size and network structure can offer global full service; on the other side, the low cost carriers, which can charge prices unbearable for TWA. At this time its long term survival is still an open issue.

The following chapters deal in detail with the topics that we have just sketched. The structure of this thesis is as follows. Chapter 1 provides some background for the study. First, it describes the environment surrounding the beginning of TWA's reorganization: the major events which affected the airline industry from 1987 to 1992. Second, it presents a brief history of TWA and a chronology of relevant recent events. Chapter 2 analyzes several factors which contributed to TWA's financial distress: Carl Icahn's 1988 leveraged buy out, the increase in fuel prices and the decrease in international traffic following the Kuwait invasion, and the increase in competition from other US carriers in the North Atlantic. Given the situation presented in Chapter 2, Chapter 3 studies the dynamics which generated the reorganization of the company. In particular, this chapter studies the role that different stakeholders - Carl Icahn, creditors, unions, local politicians - played in the reorganization. Chapter 4 describes the formal reorganization. It describes the characteristics of a bankruptcy process, and presents the formal Plan of Reorganization agreed upon by the different stakeholders. The strategy for the reorganized company is presented in the next two chapters. Chapter 5 studies the strategic choices in the area of operations, in particular route structure and fleet
modernization. Chapter 6 studies the marketing strategy, including aspects such as computer reservation systems and strategic alliances. Finally, the thesis ends with a brief Outlook.

There have been multiple sources of information for this thesis. First, conversations with members of TWA management and counsel. Second, court documents filed during the Chapter 11 process. Third, SEC filings such as Forms 10-K and 10-Q, and Proxy statements. Fourth, DOT filings such as Form 41. We have also used information from the business press, aviation press, academic journals, equity research studies, and consulting reports. Sources are referenced in detail when the corresponding information is presented.
Chapter 1: Historical Background

The purpose of this chapter is to provide some background for the reorganization process that we are going to analyze. The first part of the chapter analyzes several aspects of the airline industry which are relevant to TWA's process of reorganization. The second part of this chapter reviews the history of TWA, and presents a chronology of the most relevant events in its reorganization. This chronology will be a useful reference in the following chapters.

1.1 The US Airline Industry

This first part of this chapter is divided in two sections. The first section considers the structure of the airline industry, while the second presents a summary of the more relevant events for this industry in the period 1988-1992.

Structure of the Industry

The structure of the US airline industry, particularly after deregulation, has been the subject of numerous studies. A classic book on the subject is "Deregulating the Airlines" by Bailey, Graham, and Kaplan. Levine's "Airline Competition in Deregulated Markets: Theory, Firm Strategy and Public Policy" provides a very complete description of the air-transportation market structure (and the efforts by the airlines to change it.) An excellent summary of the characteristics of the industry is provided by Donohue and Ghemawat in their Harvard Business School case. More recent analyses are those of

Borenstein, and Vietor. The structure of the industry was also analyzed in detail in a Report to Congressional Requesters by the General Accounting Office.

The US Airline Industry 1987-1992

Although some of the elements which led to TWA's financial distress were internal, TWA was also seriously affected by external factors. This section reviews the changes in TWA's environment from 1987 to 1992. We have chosen 1987 as the first year of this review because it is the year which preceded Carl Icahn's LBO. What follows is a description year by year of the state of the US airline industry, and to some extent, the world airline industry.

1987

This was a remarkably good year for the airline industry all over the world. Airlines broke records of traffic, revenue and operating profit. The engine of this activity was traffic growth. The US airline industry saw an increase in yield and domestic and international traffic. Domestic RPMs increased 7.9% while international RPMs increased 24.6%. Fuel prices also helped because they did not recover from the 1987 30% drop, and stayed at 56 ¢/gall. Gains in traffic growth plus low fuel prices led to some impressive financial results: for example, American Airlines and Delta Airlines had more than $400 million in operating profit. One reflection of the airlines good situation was the number of airplane purchases: world wide airlines ordered planes from Airbus

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9 June issues of Air Transport World (ATW) from 1988 to 1993. Also, several issues of ATW and Aviation Week and Space Technology.
industrie, Boeing and McDonnell Douglas, a 10% increase with respect to 1986.

1988 This was again a very good year for the world airline industry in general and for the US airline industry in particular. As a group, the US majors had an operating profit of $3.2 billion, almost a 20% increase with respect to 1987. Net income was $1.4 billion, almost three times higher than that of 1987. The most important trends in the airline industry were (1) international traffic growth both in terms of passengers (16.2%) and RPMs (17.9%), (2) system yields increase of approximately 8%, and (3) fuel price decrease to 53.5 ¢/gall (the lowest price in a decade). This combination of factors led to extraordinary performances for some US carriers: American Airlines for example had $801 million in operating profit which was the highest ever recorded for an airline (excluding Aeroflot). On the low side, the North Atlantic showed only a small increase (4.1%) in traffic carried by world carriers.

1989 The world airline industry financial results for this year were neutral. They were not as good as the previous two years, but there were much better than the ones to come. The most remarkable development was the increase in fuel prices, which went up to 60.5 ¢/gall from 53.5 ¢/gall in 1988. At the same time traffic did not increase very much, with international traffic outgrowing domestic traffic. In the US, domestic traffic in terms of passengers decreased by a 0.7% while international passenger boardings increased by a 5.5%. Also, during 1989 the US carriers increased yields aggressively (7%) which led to a marked decrease in traffic. The number of leisure travelers in the US, the ones specially sensitive to the higher yields, decreased in four million from 1988 to 1989.
1990  Air Transport World called 1990 the "Worst Year Ever". The combination of a poor economy, particularly in the US, and the invasion of Kuwait, led to dramatic losses for the world airline industry. As a result of the Kuwait invasion fuel prices increased from 60.5 \$/gall on average for 1989, to 78.4 \$/gall for 1990. At some point the airlines paid up to $1.40 per gallon. The invasion brought a reduction of international traffic for some routes, although thanks to the very good performance of the Pacific routes total RPMs increased by 16.2%. Another factor contributing to the poor financial results was the low yields resulting partially from the operations of several airlines under bankruptcy protection: Eastern, Pan Am and Continental. The result of all these factors was an operating loss of $1.37 billion for the US industry as a whole (without including Pan Am) and a net loss of $3.1 billion.

1991  Worst year ever, again. The recession in the US, which lasted for the whole year, plus the Gulf war led, again, to dramatic losses for the US carriers. The US industry as a whole had an operating loss of $1.7 billion. The effect of the Gulf war on some international routes was especially important: North Atlantic passenger boardings fell 33.9% in the first quarter. Fuel prices, although high compared to pre-1990 levels, decreased with respect to 1990 from 78 \$/gall to 69.1\$/gall. During 1991 Pan Am and Eastern ceased operations, and TWA defaulted in some payments. The big three - American, Delta, and United - increased their presence in international markets thanks to the acquisition of routes from Pan Am and TWA.

1992  For the US airline industry it was, again, the worst year ever. It suffered an operating loss of $2.2 billion. Net loss was much worse, $4.6 billion, although this figure is distorted by a one-time charge resulting from the introduction of
the FAS106 accounting standard. Traffic increased both in terms of passengers and RPMs. One of the most important events of the year was the introduction of "Value Pricing" by American Airlines and the fare war it sparked. This resulted in an increase of 1.2% for the average load factor, and a reduction of the average yield to 12.7¢/mile, the lowest since 1988. International traffic increased 7.5% in terms of passengers, and 13.3% in terms of RPMs. The big three increased capacity in the North Atlantic: American, 33.7%; Delta, 116%; and United, 67%. Finally, fuel prices helped the industry and decreased more than 5%.

1.2 History of TWA

In the previous section we reviewed the external factors which affected the airline industry in general and TWA in particular. In this section we are going to review some elements of the history of TWA. First, we will look at the early days and how TWA evolved from those days to the recent past. Second, we will present a chronology of the major events in the history of TWA from 1988 to 1993. This chronology will be a useful reference in the following chapters.

The Early Days

The history of TWA is completely intertwined with the history of commercial aviation in the US. There are several excellent accounts of the history of the US aviation and that of TWA. In this section we have used, apart from newspaper and magazine articles, two
books by R.E.G Davies on aviation history\textsuperscript{10,11}, the "Encyclopedia of American Business History and Biography"\textsuperscript{12}, and R. Serling's book on TWA\textsuperscript{13}.

Commercial aviation in the US was born on January first 1914 in St. Petersburg, Florida. That was the day of the first flight of St. Petersburg-Tampa Airline Boat. A one-plane airline which flew, as it name indicated, from St. Petersburg to Tampa. However, the critical push for the US airline industry came through the air mail. The US Air Mail service began on May 15, 1918, flying from New York city to Washington, D.C. Two years later, in September 1920, the first transcontinental link was set up. The initial westbound trip was flown at 80 mph.

The Kelly Air Mail Act of 1925 transferred primary responsibility for the carriage of airmail to private firms organized for this purpose. This act provided for competitive bidding for short term contracts. At that time is was almost impossible to operate an airline without an airmail contract, and therefore, the Post Office controlled de facto the route system being created in the US. As awards were made on competitive bids, and at that time (1) entry costs were low and (2) efficiency was almost completely unrelated to size, the result was a chaotic route system. To fix this situation Postmaster General Brown called a conference with the purpose of creating at least two transcontinental routes to compete with United Aircraft and Transport Co. (the predecessor of United Airlines) which was flying the original New York-San Francisco route through Chicago.

\begin{flushright}
\textsuperscript{11} R.E.G. Davies, "Airlines of the United States since 1914", Smithsonian Institution Press, Washington D.C., 1972.  \\
\end{flushright}
Postmaster General Brown made it clear that he was not going to allow two airlines, both with mail contracts, to operate competitively over the same route. However, in the central route, New York-St. Louis-Los Angeles, there were two airlines in that situation: Transcontinental Air Transport (TAT) and Western Air Express. The solution to this problem was a shotgun marriage between the two carriers, and actually a third one, Pittsburgh Aviation Industries Corporation (PAIC). This merger resulted, in July 1930, in Transcontinental and Western Air Inc. or TWA. Figure 1.1 shows the genealogy of TWA, and figure 1.2 shows the three transcontinental air-rail routes which shaped the final air-mail routes (note the central one operated by TAT one year before the merger).

TAT, which counted Charles Lindbergh among its founders, had contributed significantly to the development of the airline industry's technology. TWA maintained this attitude through the years and did pioneering work in radio navigation and high altitude research with the Northrop Gamma. TWA also pushed aircraft manufacturers to build newer and better planes.

Post-War Developments
Partially as a reward for its major contribution to military air transportation during World War II, TWA was authorized to begin scheduled transatlantic service in 1945. From 1945 to 1947 it extended its routes to Paris, Rome, Cairo, and Athens. Figure 1.3 shows the extent of its international system by 195114, one year after changing its name to Trans World Airlines.

During the fifties, newer, faster and longer-range aircraft were introduced. In 1953 TWA flew Lockheed Super Constellations from Los Angeles to New York, in 1956 it flew the long-range Lockheed 1649A non-stop between New York and Rome, and in 1959 it began jet service from New York to San Francisco with the Boeing 707. Again, in 1963, it was at the vanguard of technology: it took options on six Concorde and it reserved delivery positions on six Boeings SSTs. However, it never exercised its options on the Concorde, and the Boeing SST never flew.

At the end of the sixties and under the presidency of Charles Tillinghast, TWA began to diversify to offset the cyclical nature of the airline industry. It bought Hilton International, the Canteen Corporation (a vending machine company), Spartan Food Services (a restaurant operator), and Century 21 (a real state firm). In 1979 a holding company - Trans World Corporation - assumed ownership of the airline and the other subsidiaries.

Also at the end of the sixties, in 1968, TWA inaugurated its round-the-world service. In 1970 it flew its first Boeing 747. During the seventies, following the first OPEC crisis, TWA went through difficult times, and in 1975 it had to sell several Boeing 747s to raise cash. Also in 1975, it entered a swap with Pan Am by which TWA gave up its Pacific routes and abandoned service to Frankfurt, Hong Kong, Bombay and Bangkok.

In 1984 TWA underwent a major route expansion. In May 1985 Carl Icahn disclosed that he controlled 23% of TWA stock, and in September 1985 he won effective control of TWA after a bitter takeover fight with Frank Lorenzo, head of Texas Air Corp., then parent company of Continental Airlines.
In January 1986 Mr. Icahn became TWA chairman. In March that year five-thousand TWA flight attendants struck over concessions demanded by Icahn to save money. Icahn replaced all the strikers at lower cost, and the walkout failed after a few months. In April a bomb exploded on a TWA jet over Greece, killing four people and furthering TWA's troubles. Finally, in October, TWA bought St. Louis-based Ozark Airlines as part of Mr. Icahn's promise to expand the airline.

TWA After Privatization

In this section, for ease of future reference, instead of a narrative style we will use a list format to present the main events in TWA's history since it was taken private by Carl Icahn:

- September 1988  C. Icahn takes TWA private
- January 1989  C. Icahn moves TWA headquarters from New York to suburban Mt. Kisco, NY, near his home.
- January 1991  TWA sells its Chicago-London route to American Airlines for $110 million. TWA defaults on interest payments to some debt-holders, marking the first serious deterioration in its relations with its creditors.
- May 1991  American Airlines buys three more TWA London routes for $445 million, seriously diminishing TWA's preeminence as a transatlantic carrier but providing it with cash to survive.
- July 1991  Negotiations with creditors intensify and speculation increases that TWA will be forced to seek bankruptcy court protection. Icahn announces an accord with creditors that will put TWA under federal bankruptcy protection briefly in 1992, cut its debt from $1.7 billion to $700 million and provide another $400 million in cash.

15 Part of this chronology is from Jesus Sanchez and Victor Zonana, "TWA Seeks Bankruptcy Protection", Los Angeles Times, February 1, 1992, page 1.
• Dec 12 1991  TWA and Continental Airlines disclose they have been discussing a possible merger. Some industry analysts say TWA would make a good fit with Continental, which had been under bankruptcy court protection for a year.

• Dec 20 1991  TWA agrees to sell two of its last three London routes to USAir Group Inc. for $50 million. TWA employees say the sale proves their suspicion that Icahn is trying to dismember the airline.

• January 31 1992  TWA seeks federal bankruptcy court protection.

• March 1992  TWA announces that its operating losses in 1991 were $365.3 million.

• August 1992  TWA announces it and creditors are negotiating a sale to creditors and unions.

• January 1993  Icahn leaves and R.H.H. Wilson and G. Zander are appointed responsible persons

• July 1993  Mr. Howard is chosen as CEO, effective after TWA’s emergence from bankruptcy.

• November 1993  TWA emerges from bankruptcy

• January 1994  Mr. Howard leaves and is replaced by D. Craib, member of TWA board of directors.
Figure 1.1: Genealogy of TWA

Source: R.E.G. Davies (1972)
Figure 1.2: Transcontinental Air-Rail Services (1929)

Source: R.E.G. Davies (1972)
Figure 1.3: TWA International System by 1951

Source: Civil Aeronautics Board (1951)
Chapter 2: Factors Contributing to TWA's Financial Distress

In this chapter we are going to present some of the events, both external and internal to TWA, which had a direct impact in TWA's financial distress. The events that we are going to consider are (1) the 1988 leveraged buy-out (LBO) by Carl Icahn, (2) the rises in fuel prices in 1989 and 1990, (3) the international expansion of other US carriers, and (4) the decrease in traffic from the Gulf war.

2.1 Carl Icahn's LBO

In September 1988 Carl Icahn took Trans World Airlines through a leveraged buy out which increased TWA's annual interest expense by more than $200 million, and diminished TWA's ability to tolerate external shocks. In this section we are going to describe this LBO and analyze its consequences. This section is divided in three parts: (1) the 1987 failed merger attempt, (2) the 1988 proposal, and (3) forecasts of post-LBO economic performance.

1987 Failed Merger Proposal

During the summer of 1987 Carl Icahn proposed to take private TWA by offering shareholders a combination of $20 in cash and $20 face amount of a debenture for each share of TWA common stock. TWA's stock price varied between a maximum of $35 and a minimum of $23 in the first three quarters of 1987. To finance the intended buy-out, approximately $798 million aggregate principal of (i) Senior Increasing Rates Notes due 1992, (ii) 16% Senior Fixed Rate Notes due 1992, and (iii) Senior Bridge Notes due 1992.

16 All the information included in this section is public. The two main sources for this section were the 1988 Proxy Statement/Prospectus filed with the Securities Exchange Commission (SEC), and the forms 10-K filed with the SEC from 1987 to 1991.
1989 were privately placed in September 1987. In mid-October Carl Icahn increased the original offer to $20 in cash and $25 face amount of a debenture. However, in light of the change in market conditions caused by the stock market crash of October 19, 1987 the proposal was withdrawn.

**1988 Buy-out Proposal**

In May 1988 C. Icahn made a new offer to buy TWA. Under the revised offer common stockholders not affiliated with C. Icahn would receive, for each share of common stock, $20 in cash and $30 in face amount of 12% junior subordinated debentures due in 2008 (during the first quarter of 1988 TWA stock had moved between $19 and $29 per share.) The following two points describe (1) the financing of the cash portion and (2) the new debentures.

- **Cash Portion**

  It was estimated that funds in the approximate amount of $800 million would be required (1) to pay the cash portion of the consideration to be received by the public stockholders and holding, (2) to repay certain TWA obligations which might mature upon the occurrence of the buy-out (due to some covenants), and (3) to pay for costs and expenses in connection with the buy-out. These funds were obtained from the 1987 placement and from other private placements in the first two quarters of 1988 (part of the proceeds of the second placement was used to repay part of the principal amount of the first placement). As of June 1988 there was approximately $345 million principal amount of 1993 Notes, $215 million principal amount of Increasing Rate Notes, $88 million principal amount of Fixed Rate Notes, $122 million principal amount of Senior Bridge Notes, and $30 million principal amount of other borrowings outstanding.
Debentures

The debentures had a final maturity date of December 15, 2008, and bore an interest of 12% payable semiannually. An aggregate amount of approximately $200 million principal amount was issued to the public stockholders. These stockholders were urged to consider at that time several factors related with the default risk 17:

1. The financing of the buy-out resulted in significant additional interest expense, a significantly higher debt-to-equity ratio, and a significantly increased shortfall of earnings required to cover fixed charges on a pro-forma basis.
2. The securities issued to finance the cash portion would come due prior to the time the principal became payable on the debentures.
3. The debentures were unsecured general obligations of TWA and ranked junior to all other indebtedness of TWA for borrowed money, purchase money obligations (other than obligations to trade creditors), capitalized leases or sale-leaseback transactions or guaranties by TWA of the foregoing including all indebtedness issued in connection with the buy-out.
4. TWA's cash flow was not expected to be sufficient to enable to repay the principal amount of the financing securities at or prior to maturity although TWA claimed that it had no reason to think that it would not be able to refinance them.
5. Any interest payment made with respect to the debentures during the first two years following the date of the buy-out would not be made in cash, but it would be made issuing additional debentures in a principal amount equal to the amount of interest not paid in cash.

17 1988 Proxy Statement/Prospectus, "Certain Other Special Factors", page xvi; and "Availability of Cash to Pay for TWA Indebtedness; Shortfall of Earnings to cover Fixed Charges", page 14.
Forecasts for Post-LBO Economic Results

At the time of the buy-out it was clear the impact that the interest expense on the new
debt could have on TWA's financial situation (the increase in annual interest expense was
approximately $211 million). In particular, the proponents of the buy-out evaluated the
effect that this buy-out would have had in TWA's balance sheet and income statement
had this buy-out been completed either on January 1, 1987, or on January 1, 1988. The
results were as follows:\(^{18}\):

i) If the buy-out had been consummated as of January 1, 1987, TWA would have
reported, on a pro-forma basis, a net loss of approximately $22.3 million for the year
ended December 31, 1987, as compared with TWA's historical net income of
approximately $106.2 million for the same period.

ii) If the buy-out had been consummated as of January 1, 1988, TWA would have
reported, on a pro-forma basis, a net loss of approximately $99 million for the three
months ended March 31, 1988, as compared with TWA's historical net loss of
approximately $52.5 million for the same period.

iii) If the buy-out had been consummated as of April 1, 1988, TWA would have had a
total pro-forma consolidated long term indebtedness and capital lease obligations of
approximately $2.528 billion and a $14.5 million deficit in shareholders' equity as
compared with $2.285 billion of long term indebtedness and capital lease obligations
and $225 million of shareholders' equity as of March 31, 1988.

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\(^{18}\) 1988 Proxy Statement/Prospectus, "Higher Debt to Equity Ratio; Lower Pro-Forma
Net Income", page 13; and "Trans World Airlines Inc. and Subsidiaries Unaudited
Consolidated Pro Forma Statement of Operations", pages 52-54.
Despite these negative effects stemming from the LBO, the Icahn entities were optimistic with respect to the future of TWA. This optimism is clear from their forecast of TWA's operating profit for the five years 1987-1991. According to the proxy filed with the SEC, the Icahn entities prepared two sets of five-year forecasts\(^\text{19}\). The first one was "extremely optimistic" and was given to the investment bankers involved in the buy-out. This forecast assumed lower fuel costs because of less international flying and more efficient aircraft (due to changes in the fleet mix). The second forecast, less optimistic, was used internally by the Icahn entities. This second forecast included the possibility of a recession and a reduction of 10% of passenger revenues during 1989.

The forecasts, along with the actual results, are presented in Figure 2.1. Had the actual operating profit being close to the forecasted value, TWA would have been able to service its debt. However, the actual operating results made impossible to service the debt, and TWA ended up defaulting on some payments in January 1991.

2.2 Increase of Fuel Prices

Fuel cost is the second most important piece of the total cost of operating a major airline, and it represents between 15% and 20% of the total cost. Only labor has a higher share of the total cost. Figure 2.2 compares the breakdown of total operating expenses for TWA, American Airlines, and United Airlines in 1990. From the graph we see that at TWA fuel costs represent a higher fraction of the total operating costs than at the other two airlines. Although the difference does not seem very big, we will see later that it has relevant consequences.

As we can see in Figure 2.3, during the period 1987-1991, the price of fuel varied from 53.5 $/gallon in 1988 to 78.4 $/gallon in 1990, both in nominal terms. In 1990 dollars the 1988 price was 58 $/gallon. A simple back-of-the-envelope calculation is enough to understand the impact that such variation in fuel price might have on the financial results of an airline. Let us consider TWA. TWA's best operating result ever\textsuperscript{20} was achieved in 1988 and it was approximately $260 million. That year TWA's revenues were $4,360 million, and therefore the operating profit was 6% of total revenues. Now, let us see the effect of an increase in price such as the one from 58 $/gallon to 78.4 $/gallon. This represents a 35% increase in fuel costs. In 1988 fuel costs represented a 15% of the total operating expenses for TWA, and therefore, the increase in fuel cost represented an increase of 0.35x15% =5.25% in total operating expenses. Thus, an increase from 58 $/gallon to 78.4 $/gallon would have almost wiped out the best operating profit ever (it would have transformed a 6% operating profit in less than a 1% operating profit, resulting in a major income loss).

Figure 2.4 addresses in more detail the impact of fuel prices on TWA's operating income. In this figure we show what the 1990 operating income would have been as a function of the possible fuel prices. For a fuel price of 78.4 $/gallon, the actual price in 1990, we simply see the actual operating loss of $160 million. But had the fuel price in 1990 been what it was in 1989 (in real terms), and had TWA revenue stayed the same, the operating result would have been a profit of $11 million. Analogously, had the fuel price in 1990 been what it was in 1988 (in real terms), and had TWA revenue stayed the same, the operating result would have been a profit of $72 million.

\textsuperscript{20} 1987 TWA Annual report, page 1.
Figure 2.4 also shows, for comparison, the analogous analysis for what we call "Scaled American" and "Scaled United". Scaled American refers to the fact that we have re-scaled American operating profits by a factor equal to the ratio of TWA revenues to American revenues. In other words, scaled American would be an airline with the revenues of TWA but with the ratio of operating profit to revenue that American had. Scaled United has the same interpretation. From the figure not only we see that both American and United did better that TWA, but more important, we see that these two airlines are noticeably less sensitive to fuel prices changes than TWA. The sensitivity of operating income to fuel prices under the hypothesis that revenue is independent of fuel price is reflected by the slope of the lines. Note however that in reality revenue does not stay constant (due to fare changes) when fuel prices change, and therefore the sensitivities implied by the slopes in the figure overestimate the real sensitivities of the airlines operating income to fuel prices\(^{21}\).

The higher sensitivity of TWA expenses to fuel prices comes from the fact that it has a very old fleet, and the difference in operating costs between old and new planes can be very high. Figure 2.5 shows fuel and oil consumption for two planes of comparable size used in the North Atlantic: the L-1011, used by TWA (and Delta); and the Boeing 767-300, used by American, Delta, and United. As we see in the figure, oil and fuel consumption is almost 50% higher for the L-1011. Although not shown in Figure 2.5, crew costs are also approximately 50% higher for the L-1011 because it needs three crew members versus two for the B-767.

\(^{21}\) We thank TWA for bringing this point to our attention.
2.3 International Expansion of US Carriers

During the eighties the US carriers increased notably their international presence, and in particular their European presence. For example, their share of the US-Germany market increased from 38.3% in 1978 to 54.2% in 1989. Increases even higher were common in other smaller markets. For example, during the same 1978-1989 period, US carriers market share went from 42.5% to 64.5% in France, from 7.9% to 37.8% in Switzerland, from zero to 43.8% in Scandinavia, and from 12.2% to 47.9% in Belgium. 22

Unfortunately for TWA, the strongest US carriers increased dramatically their presence in Europe. In April 4, 1991 United Airlines inaugurated simultaneously service to Heathrow from New York, Miami, San Francisco, and Washington D.C., serving routes it had bought from Pan Am. American at that time was not operating its future London Heathrow-New York, Los Angeles, and Boston, but it operated a fair-sized European network covering a dozen cities in eight countries (at that time 20% of American revenues came from international operations.)

Figure 2.6 presents the evolution of the North Atlantic traffic carried by some US majors at the end of the last decade. There we can see two different effects. First, the increase in traffic carried by US airlines as a whole. For example, from 1987 to 1988, and from 1989 to 1990, the five airlines in the figure - TWA, Pan Am, American, Delta, and United - increased simultaneously the traffic they carried across the Atlantic (in the case of United this is true only from 1989 to 1990 because before these dates it did not have transatlantic service). The second effect is the transfer of traffic among carriers. This is more clear in figure 2.7 which shows the same data but in terms of market share. Note that in figure 2.7 (as well as figures 2.8 and 2.9) market share refers to the ratio of TWA

RPMs to US-majors RPMs only, and not to industry RPMs. Going back to figure 2.7, we see for example how the gain in market share by United from 1990 to 1991 is essentially mirrored by the decrease in Pan Am's market share due to the sale of routes. The same applies to TWA and American in the same period.

Unfortunately for TWA the loss of market share in the transatlantic market (justified in some sense because of the sale of routes) also translated into a decline in domestic market share. Domestic market share for several US carriers is shown in figure 2.8. The effect on TWA market share is better seen in figure 2.9 which shows TWA's domestic and transatlantic market share.

2.4 Decrease in North Atlantic Traffic Due to the Gulf War

The Gulf war had a dramatic effect on the traffic across the North Atlantic. Figure 2.10 shows the sharp decline in RPMs flown by US carriers over the North Atlantic which occurred in 1991 as a consequence of the Gulf war.

The traffic decrease following the beginning of the Gulf war affected all US carriers. However, it hit particularly seriously those which were heavily dependent on North Atlantic traffic. Figure 2.11 shows the ratio of North Atlantic RPMs to Domestic RPMs for some major US carriers including TWA and Pan Am. From this figure is clear the enormous difference in exposure to traffic troubles in the North Atlantic. For Pan Am, from 1987 to 1991 the number of North Atlantic RPMs was on average more than twice that of domestic RPMs. TWA was in a distant second post in terms of this ratio, and consequently in terms of exposure to a traffic decline over the Atlantic. Finally, we see that despite the big increase in their North Atlantic presence, American, Delta, and United were far less sensitive to problems in the North Atlantic due to their vast domestic operations.
Actually, the ratio considered in the previous paragraph is really underestimating the impact of the North Atlantic traffic decline on TWA. This is so because, although from Figure 2.11 we see that TWA flew fewer North Atlantic RPMs than domestic RPMs, the international RPMs had been historically the most profitable ones. This is clear from Figure 2.12 which breaks down TWA net income (before taxes) into domestic and international. There we see that the North Atlantic operation had performed systematically better than the domestic one, and therefore the 1991 traffic decline in the Atlantic was a particularly tough blow for TWA.
Figure 2.1: Forecasted and Actual Operating Profit

Source: 1988 Proxy Statement/Prospectus and Forms 10-K
Figure 2.2: Distribution of Operating Expenses

Source: Annual Reports
Figure 2.3: Fuel Prices for US Carriers

Source: Air Transport World
Figure 2.4: 1990 Operating Profit Sensitivity to Fuel Price
Figure 2.5: Fuel & Oil Consumption (in $ per Block Hour)


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</tbody>
</table>
Figure 2.6: North Atlantic Traffic

Source: DOT Form 41
Figure 2.7: North Atlantic Market Share

Source: DOT Form 41
Figure 2.8: Domestic Market Share

Source: DOT Form 41
Figure 2.9: TWA Market Share

Source: DOT Form 41
Figure 2.10: North Atlantic RPMs (US Carriers)

Source: DOT Form 41
Figure 2.11: Ratio of North Atlantic to Domestic RPMs for US Carriers

Source: DOT Form 41
Figure 2.12: Domestic and Transatlantic TWA Net Income

Source: DOT Form 41
Chapter 3: Pre-Chapter 11 Reorganization Attempt

The factors analyzed in the previous chapter were material in the failure of TWA of making several payments in January 1991. This default triggered the beginning of a reorganization process which would take TWA to bankruptcy in January 1992, and which would not finish formally until November 1993, date in which TWA left bankruptcy. The purpose of this chapter is to analyze the roles that different stakeholders played in the dynamics of the reorganization. In order to do that, first we will describe several aspects of TWA's default, and then we will study the role that (1) Carl Icahn, (2) the creditors, and (3) local politicians played in the reorganization process. In particular, we will try to understand the reasons that led these stakeholders to participate in a lengthy reorganization process versus trying to liquidate the airline. Note that we will not discuss in detail the reasons that led labor to participate in the process because employees are, along with shareholders, the stakeholders which more clearly lose in case of liquidation.

3.1 Default and Need for Restructuring

As early as February 1990, the St. Louis Post-Dispatch run an article\textsuperscript{23} where it warned about the nervousness in the investment community about the possibility of default by TWA. At that time some of the airline bonds which were traded at the Pacific Stock Exchange had been selling for prices far below their face values. For example, the week before the article mentioned above was published, one series of bonds which were to come due in 2001 had closed at $440 per $1000 of face value, while another group which

\textsuperscript{23} C. Carey, "Money Worries Facing TWA Shake Investors", \textit{St. Louis Post-Dispatch}, February 20, 1990, page 7C.
were to come due in $2008 closed at $420 per $1000 of face value. The same bonds had been trading at roughly $600 per $1000 of face value a few weeks before.

On February 1, 1991, the Company announced it was withholding payment of approximately $75.5 million in principal and interest due under certain debt obligations, specifically $18 million in interest on its 15% Senior Secured Notes due 1994; $48.4 million in principal and $3.3 million in interest on its equipment trust certificates due 1991; and $5.8 million in interest on its equipment trust certificates due 1996. The news of this default drove down some TWA bonds by more than 20% in the Pacific Stock Exchange.

At that time TWA did have funds enough to make the payments: it had approximately $200 million in cash and $130 million in securities. However, according to Mr. Icahn, withholding payment from certain creditors was "imperative for the survival of TWA," because not doing that would have left TWA without the necessary cash to operate. He justified the default as a necessity in light of a 60% drop in advance bookings, and expectations for the worst summer travel season in decades. He also cited what he called the devastating effect of high fuel costs, a fall-off in leisure and business travel resulting from the recession, and fare wars that affected the entire industry.

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At that time, according to Mr. Mark Buckstein, the company's legal counsel, there was "absolutely no intention of [seeking Chapter 11 protection]". However, Mr. Icahn talked of "seeking creditors' cooperation" for a restructuring of TWA's massive debt\textsuperscript{26}.

In addition to the February withholdings, TWA withheld payment of approximately $23.8 million in interest due March 15, 1991 on its 17 1/4\% Senior Notes due 1993; approximately $12.1 million in interest due March 31, 1991 on its 12\% Junior Subordinated Debentures due 2001; approximately $13.9 million in interest due March 21, 1991 on its 12\% Junior Subordinated Debentures due 2008; and approximately $2.8 million in interest due April 1, 1991 on its 16\% Senior Notes due 1992\textsuperscript{27}.

A detailed picture of TWA's financial situation at the beginning of 1991 is obtained from the Form 10-K for 1990 filed on March 1991 with the Securities Exchange Commission (SEC). According to this 10-K, TWA's working capital position decreased $297.9 million in 1990 from its working capital position at December 31, 1989 due to the combined effect of a decrease in current assets of $255.5 million and an increase of current liabilities of $42.2 million. The decrease in current assets reflected a decrease of $248.9 million in cash, cash equivalents and marketable securities at December 31, 1990, compared to the date a year earlier. Net cash used by operating activities increased to $317.1 million in 1990 as compared to $104.7 million in 1989. The main reason for this increase was the $162.3 million operating loss experienced in 1990, which compares negatively with the previous year operating income of $24.3 million. The operating loss in 1990 reflected an operating loss experienced in the fourth quarter of 1990 of $164.2

\textsuperscript{26} N. Tait, "TWA Defaults on Dollars 75.5m Payment". \textit{The Financial Times}, February 2, 1991, Section I, page 10.

\textsuperscript{27} Form 8-K for the first quarter of the Fiscal Year Ended December 31, 1990, filed with the Securities Exchange Commission (SEC), Item 3, "Defaults Upon Senior Securities", page 27.
million. The increase in current liabilities of $42.4 million was principally due to the reclassification from long-term debt to current liability at December 31, 1990 of $60.7 million of indebtedness, which TWA was expected to become obligated to repurchase to satisfy minimum net worth covenants in certain long-term debt agreements at March 31, 199128.

As a result of these deficits and the continuing effects of the factors mentioned above by Mr. Icahn, TWA stated that "[it] believed that it must restructure and materially reduce its substantial obligations to debt holders, equipment lessors and employees in order to be a long-term competitor in the airline industry"29.

3.2 Carl Icahn

As we mentioned above, Carl Icahn stated that his motivation for missing debt payments in February 91 was to keep the cash necessary to operate the airline during what he foresaw as a dreadful summer for TWA. Along the same lines of taking drastic measures to conserve cash, TWA withheld rent payments in February and March on 46 jets: six Boeing 767, three Boeing 747, two Boeing 727, and 35 McDonnell Douglas DC-9s30.

As it was expected, creditors quickly took TWA to court, and obtained favorable court rulings. US District Judge Gerard L. Goettel in White Plains, N.Y. ruled that a group of noteholders could repossess 10 TWA jets and 62 engines31. However, analysts

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interpreted that the creditors had sought this ruling primarily as a prod in negotiations with the airline. 32 As we will discuss in detail in the section devoted to the role of the creditors, it was not in the interest of these creditors to repossess the planes because of the low value they could have obtained for them. A few days after this ruling, Carl Icahn presented to the creditors the first formal plan to restructure the debt.

The Debt Buy-Back Plan

On May 15, 1991, with TWA already in default on $300 million of its bonds, Carl Icahn made public an offer to buy back $1.2 billion worth of debt for approximately $500 million. The company said that for each $1,000 face amount of its debt, it would pay:

- $730 for its equipment trust certificates of 1991 and 1996;
- $650 for its 15% senior secured notes of 1994;
- $350 for its unsecured 16% and 17 1/4% notes; and
- $175 for its subordinated 12% notes.33 A summary of the plan showing the dollar amounts involved in the plan is presented in Figure 3.1.

The offer was not particularly attractive for many bondholders because virtually all of TWA’s issues were trading above their tender price at the time of the offer. However, some of TWA’s bonds that were trading at levels below their tender prices climbed on the news. The carrier’s 15% notes rose five points to 59 cents on the dollar, while its 12% subordinated debentures climbed 2 points to 16 3/8 cents on the dollar.34

Carl Icahn's argument for the offer was that creditors would face even larger losses if the airline were forced to file for bankruptcy. The funds necessary for this buy-back were going to come from the proceeds of the sale of London routes to American Airlines for $445 million.

At that time analysts argued that, despite Carl Icahn's estimates that he would lose $40 million with the buy-back (he owned $188.6 million in subordinated notes), the outcome of the reorganization could be much more beneficial for Mr. Icahn. According to these analysts, if Mr. Icahn had managed to recapitalize TWA (and gain union concessions), he would have been able to sell his own equity stake and obtain a big profit out of what "it looked like a financial black hole". The point was that without the burden of the debt TWA's stock price could increase substantially and therefore Mr. Icahn's capital gain in his equity could be much higher than the loss from selling low his subordinated notes.

As we will see in the section Local Politicians, this tender offer was fought by these stakeholders. Although labor was in favor of restructuring the debt, it was against the idea of paying with cash from the sales of routes because (1) it would leave TWA strapped of cash in the short term, and (2) it would have a tremendous negative impact on TWA's chances of survival in the long term.

Labor was not the only stakeholder which was against the tender offer. On June 16, a federal judge blocked TWA's offer. Judge Gerard Goettel granted a preliminary injunction at the request of Fleet National Bank. This bank had sued TWA because TWA had offered to pay 17.5 cents on the dollar for a portion of less senior bonds representing

36 A. Goodman, "TWA Offers to Buy Back its Debt", St. Louis Post-Dispatch, May 16, 1991, Business section, page 1B.
$670 million of its outstanding debt. Fleet, a senior note-holder, argued that if TWA paid even 17.5 cents on the dollar to the junior note-holders, then it would be less able to pay Fleet and others in its situation. Judge Goettel's order barred TWA from purchasing the junior bondholders' debt until it paid all defaults in its senior notes, the argument being that if the bondholders were to be paid, and the payment were found later to be inappropriate, it would be impractical to track them and get the money back\textsuperscript{37}.

The Debt for Equity Swap

On July 31, 1991, after the failure of the Debt Buy Back plan\textsuperscript{38}, and only hours before TWA faced the repossession of many of its planes, Carl Icahn presented a complex debt-equity swap plan by which Carl Icahn would give up majority control\textsuperscript{39}, and which was tentatively accepted by the creditors.

Under the preliminary agreements:\textsuperscript{40}

- TWA paid interest to date on equipment trust certificates and it would continue to discuss payment of principal (TWA had defaulted on about $57 million in payments on these certificates.)
- Each $1,000 of secured notes would be exchanged for $325 in cash and $650 in principal amount of new 8 percent senior secured five-year notes.

\textsuperscript{38} C. Carey, "Icahn to Give Up Control of TWA. Bankruptcy Filing will Restructure Airline", \textit{St. Louis Dispatch}, July 14, 1992, Page 1A.
\textsuperscript{40} J. Wallace, "TWA to Enter Bankruptcy as Part of Restructuring", BC Cycle, United Press International, July 30, 1991; see also: Form 8-K for the Second Quarter of the Fiscal Year Ended December 31, 1990, filed with the Securities Exchange Comission (SEC), section "Other Information", page II-8.
- Each $1,000 of 16 percent notes and 17.25 percent notes would receive $650 in principal amount of a new 8 percent senior secured seven-year note and their proportional share of 37.5 percent of TWA’s equity.
- TWA would allocate proportionally 62.5 percent of the equity to holders of subordinated notes.
- Holders of preferred and preference stock would receive proportional shares, based on liquidation preferences, of warrants to buy 18 percent of the equity of TWA for a total consideration of $27 million, payable in cash or TWA debt securities.
- Common stockholders would receive nothing.

A summary of the plan showing the dollar amounts involved in the plan is presented in Figure 3.2.

According to TWA, this plan would require TWA Chairman Carl Icahn to personally invest $35 million and would reduce his stake in the airline from 90 percent to an estimated 20 to 45 percent. Mr. Icahn would invest $20 million to tender for the new five-year notes at $718 per $1,000 of principal, and $10 million to buy the new seven-year notes at $610 per $1,000 principal. He would also contribute $5 million to purchase 3.33 percent of the new equity of TWA, and the airline would apply that amount to increase cash payable to holders of the secured notes. Holders of subordinated notes and the employee stock ownership plans of TWA’s pilots and machinists unions would be allowed to participate in the $30 million portion of the investment. They would receive warrants to buy 18.75 percent of the new equity at an exercise price of $28.13 million, payable in cash or TWA debt securities.
This agreement with the creditors brought the possibility of filing for bankruptcy in 1992 with a "prepackaged bankruptcy" which should allow it to get out of bankruptcy quickly\(^41\).

Although the agreement was positively viewed by some airline analysts (because getting rid of the debt would have a major beneficial effect on TWA's cash flow), those same analysts pointed out that the deal had a critically beneficial side effect for Mr. Icahn: it insulated him from TWA's pension liabilities.\(^42\)

The Pension Benefit Guarantee Corporation, a US government agency that acts as a safety net for defined pension benefits, estimated that in 1989 TWA's liability was $139 million. This amount increased to several hundred millions in 1990, and was approximately $1.1 billion by May 1992. Under the Employee Retirement and Income Security Act, the PBGC can recover unfunded liabilities from "commonly controlled affiliates" of a pension fund sponsor. As Mr. Icahn's ownership in TWA exceeded an 80%, any other company in which he had an 80% interest was considered "commonly controlled" and could be seized by the PBGC to eliminate any deficiency in TWA's pensions. Moreover, the PBGC made public\(^43\) that although normally it goes after the owner's companies, and generally this does not extend to personal liability, there might be circumstances under which personal assets can be reached. In May 1992 Mr. Icahn's net worth was $660 million, and therefore if TWA had been liquidated and the PBGC had gone after his personal worth, Mr. Icahn could have found himself with a personal debt of $500 million.


\(^42\) P. Flint, "What Does Icahn Want?", \textit{Air Transport World}, October 91, page 93.

We should add that the PBGC, due partially to losses from the Eastern and Pan Am shutdowns, had in 1992 a deficit of $2.5 billion in its own pension obligations and therefore it was very interested in having access to Icahn's assets to keep TWA's deficit from growing. Figure 3.3 shows the dates and assets involved in major bankruptcies in the airline industry.

The situation would be finally settled with an agreement between Mr. Icahn and the PBGC within the bankruptcy proceedings which will be described in the next chapter.

3.3 The Creditors

In the previous section we have discussed the role that Mr. Icahn had in the early process of the reorganization, and we have presented what we consider elements which could make interesting for him to reorganize TWA instead of liquidating it, the most important of which was the threat of the PBGC. The purpose of this section is to analyze in some detail the reasons which led to the creditors to go along with the reorganization, instead of claiming their collateral or repossessing their properties.

In what follows we are going to distinguish between two different classes of creditors: (1) holders of notes secured by equipment, and (2) lessors of aircraft.

Holders of Notes Secured by Equipment

The fundamental problem of holders of notes secured by equipment (or equipment trust certificates) is that of the shrinking value of collateral. The value of these certificates is driven fundamentally by the resale price of the equipment (airframes, engines, etc.)

which serve as collateral\textsuperscript{46}. At the beginning of 1991 there were two factors which drove down the price of equipment, and in particular whole planes:

- The Gulf war. This conflict, merged with the recession, led to a downturn for the airline industry. The weak carriers were not in a position to buy or lease planes, and the healthy carriers preferred the new and more efficient planes. Unfortunately, TWA's fleet in 1991 was a very old one as it is clear from Figure 3.4.

- The shut-down of Eastern and Pan Am. These shut-downs exacerbated the problem of excess supply of old planes. For example, following Eastern cease of operations, Delta Air Lines bought 10 Eastern Lockheed L-1011 wide-body jets for $6 million apiece, about half normal market value\textsuperscript{47}.

The declining value of collateral led to situations in which the value of the collateral was lower than the appraised value of the notes. Instances of this situation are presented in Figure 3.5\textsuperscript{48}.

Another problem for ETC holders is that if the company goes into Chapter 11 the ETC must stand in line with all the other creditors while the court proceeds. Therefore, it can take easily more than a year before the ETC holder can recover its assets. In the meantime the ETC holder gets no interest and it can receive this interest at the end of the bankruptcy process, or not, depending on the court\textsuperscript{49}.


Morten Beyer, Chairman of Avmark, summarized eloquently the mood of the ETC holders with respect to repossessing planes: "Under no circumstances do they want any of those airplanes" 50.

Lessors of Aircraft

The fundamental reason why it may be unattractive for the lessor to get its aircraft back is essentially the same as in the case of ETC holders: if the aircraft are returned in times when there is an over-supply of aircraft it may be very difficult to re-lease the planes at advantageous rates. This was certainly the case in mid-91 51.

However, the reason just mentioned is not the only one. Close to the date of TWA's default, in a ruling in the case of Continental Holdings, the bankruptcy judge made a distinction between leases on new planes that expanded Continental's fleet and those on older planes that Continental had sold to leasing companies and rented back. In the case of the sale-leaseback leases the judge allowed Continental to stop paying without returning the aircraft. A similar rule was feared by TWA lessors that had participated in sale-leaseback transactions 52.

3.4 Local Politicians

At the beginning of 1991 TWA had close to 30,000 employees, most of them concentrated in St. Louis, Kansas city, and New York. In St. Louis, where TWA has its major hub, the influence of TWA's shut down would be very big. According to E.J. 53.

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50 C. Carey, "Creditors Unlikely to Seize TWA Jets", *St. Louis Post-Dispatch*, July 30, 1991, page 7B.
Hanlon, an associate city counselor, the loss of TWA would cost the region $1.8 billion a year and 23,000 jobs. In Kansas City, where TWA has a major maintenance base, the impact would be comparable. Therefore, it is not surprising that local politicians lobbied intensely during the reorganization of TWA to prevent its dismissal. In what follows we present three issues in which local politicians played an active role.

Sales of London Routes to American

In March 1991, a group of St. Louis politicians, businessmen, and civic leaders filed a complaint against the route sale to American with the DOT. Two months later, the St. Louis Partnership for Air Service went to court to insist that allowing TWA to sell the three routes to American would mean the dismemberment of TWA. The mentioned partnership included figures of such local high profile as St. Louis Mayor Vincent C. Schoemehl Jr., County Executive George R. "Buzz" Westfall, Reps. Richard A. Gephardt and Joan Kelly Horn - both St. Louis County Democrats - and Sens. John C. Danforth and Christopher S. Bond, both Missouri Republicans. Also in the group were officials of two key local business groups - Civic Progress and the Regional Commerce & Growth Association. At some point, stressing his willingness to keep TWA alive, Sen. John C. Danforth told the press: "If you know somebody who'd like to buy TWA, call me."

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53 T. Bryant, "TWA Route Sale Aired in Court Unions, City Try to Stop Deal", St. Louis Post-Dispatch, June 1, 1991, page 1A.
55 M. Schlinkmann, "Officials Optimistic on TWA Filing", St. Louis Post-Dispatch, February 1, 1992, page 8C.
56 M.M. Hamilton, "Trans World Files For Bankruptcy; Pact with Creditors, Union Is Part of Action", St. Louis Dispatch, February 1, 1992, page C1.
Carl Icahn-PBGC Agreement

According to some sources\textsuperscript{57}, the agreement between the PBGC and Carl Icahn by which they settled their differences with respect to the pension liabilities (we will discuss this agreement in the next chapter), was reached only after intense lobbying to persuade Administration officials and Congress to put pressure on the PBGC to finish months of tough negotiations. Well known politicians that participated in this effort were House majority Leader Richard Gephardt (D-Mo.) and Sen. John Danforth (R-Mo.) Also, the deal was helped by such high profile figures as Labor Secretary Lynn Martin, Commerce Secretary Barbara Franklin, DOT Secretary Andrew Card, and Treasury Secretary Nicholas Brady.

State-Tax Incentives

In April 1993 the Missouri House of Representatives passed an incentive package which would give TWA a three year break on taxes for goods purchased in-state such as equipment or fuel. This measure was supposed to save TWA about $7.5 million per year.\textsuperscript{58}

\textsuperscript{57} "TWA Pension Deal Allows Icahn To Leave Carrier", \textit{Aviation Daily}, December 8, 1992, page 391.
\textsuperscript{58} "Missouri House Passes Incentive package For TWA", \textit{Aviation Daily}, April 20, 1993, page 106.
Figure 3.1: Debt Buy-back Plan

Source: Business Week

<table>
<thead>
<tr>
<th>Issue</th>
<th>Face value ($ million)</th>
<th>Offer ($ million)</th>
</tr>
</thead>
<tbody>
<tr>
<td>16% senior unsecured notes, due 1992</td>
<td>$68.90</td>
<td>$24.10</td>
</tr>
<tr>
<td>17.25% senior unsecured notes, due 1993</td>
<td>265.8</td>
<td>93.0</td>
</tr>
<tr>
<td>15% senior secured notes, due 1994</td>
<td>239.0</td>
<td>155.4</td>
</tr>
<tr>
<td>12% junior subordinated debentures, due 2001</td>
<td>290.0</td>
<td>50.8</td>
</tr>
<tr>
<td>12% junior subordinated debentures, due 2008</td>
<td>181.2</td>
<td>31.7</td>
</tr>
</tbody>
</table>

DATA COMPANY REPORTS
Figure 3.2: Debt-Equity Swap Plan

Source: ATW

<table>
<thead>
<tr>
<th>ISSUE</th>
<th>AMOUNT OUTSTANDING *</th>
<th>EXCHANGE FOR: **</th>
</tr>
</thead>
<tbody>
<tr>
<td>15% Senior Secured Notes due 1994:</td>
<td>$239 Million</td>
<td>$77.6 million cash</td>
</tr>
<tr>
<td>16% Sr. Notes due 1992</td>
<td>$334.7 Million</td>
<td>$155.4 million in 8% Sr. secured 5-year notes</td>
</tr>
<tr>
<td>17.25% Sr. Notes due 1993</td>
<td></td>
<td>$217.6 million in 8% Sr. Secured 7-year notes and 35.5% of new equity</td>
</tr>
<tr>
<td>12% Junior Sub. Debentures due 2001 and 2008</td>
<td>$471.1 Million</td>
<td>No cash, no debt. 62.5% of TWA equity. ATW estimates Icahn holds 40% of this debt which translates into 25% of new equity</td>
</tr>
<tr>
<td>Preferred Stock</td>
<td>20 Million shares</td>
<td>Warrants to purchase 18% of new equity for $27 million. Icahn is believed to hold stock equal to 14% of new equity if warrants are exercised</td>
</tr>
<tr>
<td>Common Stock</td>
<td>Icahn holds 90%</td>
<td>-</td>
</tr>
<tr>
<td></td>
<td>10% reserved for employees ESOPs</td>
<td>-</td>
</tr>
</tbody>
</table>

* at Dec 31, 1990

** ATW estimates based on outstanding amounts at Dec. 31, 1990
Figure 3.3: Major Airline Bankruptcies (1989-1992)

Source: The 1992 Bankruptcy Yearbook and Alamanac

Bankruptcy Information

<table>
<thead>
<tr>
<th>Company</th>
<th>Bky. Date</th>
<th>Assets ( $ mill)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Continental Airlines</td>
<td>3 Dec, 90</td>
<td>7,656</td>
</tr>
<tr>
<td>Eastern Air Lines, Inc.</td>
<td>9 Mar, 89</td>
<td>4,037</td>
</tr>
<tr>
<td>Trans World Airlines</td>
<td>31 Jan, 92</td>
<td>3,277</td>
</tr>
<tr>
<td>Pan Am Corp</td>
<td>8 Jan, 91</td>
<td>2,441</td>
</tr>
<tr>
<td>American West Airlines</td>
<td>27 Jun, 91</td>
<td>1,165</td>
</tr>
</tbody>
</table>
Figure 3.4: TWA's Fleet As Of December 30, 1990

Source: Form 10-K

<table>
<thead>
<tr>
<th>Type</th>
<th>Owned</th>
<th>Leased</th>
<th>Total</th>
<th>Approximate Age in Years</th>
<th>Average Age of Aircraft</th>
</tr>
</thead>
<tbody>
<tr>
<td>Douglas DC-9-10</td>
<td>0</td>
<td>7</td>
<td>7</td>
<td>23 - 25</td>
<td>24.0</td>
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<tr>
<td>Douglas DC-9-30</td>
<td>2</td>
<td>36</td>
<td>38</td>
<td>11 - 24</td>
<td>20.5</td>
</tr>
<tr>
<td>Douglas DC-9-40</td>
<td>0</td>
<td>3</td>
<td>3</td>
<td>16 - 17</td>
<td>16.2</td>
</tr>
<tr>
<td>Douglas MD-80</td>
<td>4</td>
<td>29</td>
<td>33</td>
<td>3 - 8</td>
<td>5.6</td>
</tr>
<tr>
<td>Boeing 727-100</td>
<td>11</td>
<td>0</td>
<td>11</td>
<td>24 - 27</td>
<td>26.1</td>
</tr>
<tr>
<td>Boeing 727-200</td>
<td>33</td>
<td>22</td>
<td>55</td>
<td>11 - 23</td>
<td>18.2</td>
</tr>
<tr>
<td>Boeing 747</td>
<td>10</td>
<td>7</td>
<td>17</td>
<td>17 - 20</td>
<td>19.8</td>
</tr>
<tr>
<td>Boeing 767</td>
<td>4</td>
<td>7</td>
<td>11</td>
<td>7 - 8</td>
<td>7.6</td>
</tr>
<tr>
<td>Lockheed L-1011</td>
<td>8</td>
<td>24*</td>
<td>32*</td>
<td>8 - 18</td>
<td>15.6</td>
</tr>
<tr>
<td>Total at Dec 31, 1990</td>
<td>72</td>
<td>135*</td>
<td>207*</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

* Excludes long-term seasonal lease of two Lockheed L-1011 aircraft
### Figure 3.5: Appraised and Collateral Value of Some Equipment Trust Certificates

Source: New York Times

<table>
<thead>
<tr>
<th>Airline and Issue</th>
<th>Maturity</th>
<th>Appraised Value</th>
<th>Collateral Value</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Continental</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>10% '92</td>
<td>$187.7</td>
<td>$149.3</td>
<td></td>
</tr>
<tr>
<td>12 1/8% '96</td>
<td>83.7</td>
<td>42.6</td>
<td></td>
</tr>
<tr>
<td>11 3/4% '96</td>
<td>48.0</td>
<td>26.5</td>
<td></td>
</tr>
<tr>
<td><strong>Eastern</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>11 3/4% '96</td>
<td>$636.7</td>
<td>$394.1</td>
<td></td>
</tr>
<tr>
<td><strong>TWA</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>15% '94</td>
<td>$415.5</td>
<td>$138.6</td>
<td></td>
</tr>
<tr>
<td>14 1/4% '96</td>
<td>180.4</td>
<td>134.2</td>
<td></td>
</tr>
</tbody>
</table>
Chapter 4: Chapter 11 Reorganization

On January 31, 1992 TWA filed for Chapter 11 protection, after reaching agreements with both its secured and unsecured bondholders\textsuperscript{59}. At that point TWA had $200 million in cash.\textsuperscript{60} It may not be obvious why TWA filed for Chapter 11 \textit{after} reaching an agreement with its creditors, and with $200 million in cash on hand. Part of the purpose of this chapter is to analyze this point. Section 4.1 will present the rationale of bankruptcy law, section 4.2 will discuss the advantages and disadvantages of a Chapter 11 filing versus a private agreement between the debtor and the creditors, section 4.3 will briefly describe the general format of a bankruptcy proceeding, and section 4.4 will present the reorganization plan agreed upon by TWA and its creditors.

4.1 Rationale of Bankruptcy Law

The history of bankruptcy law in the US goes along two different lines. First, the idea of a "fresh start"\textsuperscript{61} for individuals. That is, the belief that an "honest but unfortunate individual" who found himself or herself unable to pay his or her debts should be given an opportunity for a fresh start. The second line has to do with the use of bankruptcy law as a debt-collection device. That is, it deals with the issue of how to decide rights among creditors when there are not enough assets to fulfill all the obligations. The goal is to permit the creditors to use those assets in a way which is most productive to them as a group, in the face of incentives by individual owners to maximize their own positions.

\textsuperscript{59} "TWA Surprises Industry With Early Chapter 11 Bankruptcy Filing", \textit{Aviation Daily}, February 3, 1992.
\textsuperscript{60} C. Carey, "TWA Files for Bankruptcy, Schedule Will Be Unaffected, Tickets Honored, Airline Says", \textit{St. Louis Post Dispatch}, page 1A.
A useful way of thinking about bankruptcy is to see it as improving the "common pool" problem created by a system of individual creditor remedies. The "common pool" problem gets its name from the analogy to the situation in which a group of people own a pool where they can fish, but if they fish too much they will deplete the fish. If each owner is guided by self-interest the result will be a depleted lake which will serve poorly the interest of the group. Analogously, if a debtor has more obligations than assets, each creditor has an incentive to act quickly. General creditors have an incentive to satisfy immediately their claims. Secured creditors may exercise their rights to repossess collateral. Assets may be sold for far less than if a single individual or property had controlled their disposition. This action by creditors may destroy the value of the debtor's business as a going concern. Had the creditors acted collectively however, they might have been able to sell the business intact to a third party and split the proceeds among themselves. Although collective action of course does not guarantee that all the creditors will be paid, if (1) a person or entity acts on behalf of the group and (2) individual creditors are restrained from pursuing their self interest, it may be more likely that creditors will derive the most benefit possible from the existing assets62.

4.2 Bankruptcy versus Private Renegotiation

For most companies, bankruptcy proceedings are governed by the Chapter 11 of the US Bankruptcy Code. Under this chapter filings are considered as corporate reorganizations and companies are supposed to leave the bankruptcy process as on-going concerns. Chapter 11 imposes an automatic stay that prevents creditors from collecting their debt or foreclosing their collateral until the firm leaves bankruptcy. The reason for this action is to prevent the firm from creditor harassment.

In Chapter 11 an exchange of securities is formally proposed in the Plan of reorganization. The various claims are classified in several classes and a separate exchange is proposed for each class. Note that this exchange could be done in principle without the necessity of a bankruptcy filing. Whether the reorganization is carried as a bankruptcy process or as a private Renegotiation depends on two factors. First, stockholders and creditors will collectively benefit from settling out of court when the cost of this settling is lower than that of bankruptcy. Second, the lower-cost alternative will be followed only if the creditors agree on how to split the cost savings, and therefore attempts to settle privately are more likely to fail when individual creditors have stronger incentives to hold out for more favorable treatment under the debt restructuring plan.

In analyzing the cost of financial distress two kinds of costs can be considered: direct and indirect costs. Direct costs are out-of-pocket transactions such as fees for legal or financial advice. Indirect costs are all other costs related to the bankruptcy such as the investment opportunities forgone by the managers because they are distracted by dealings with creditors or the bankruptcy court. It is widely believed that direct costs are significantly higher for firms reorganizing under Chapter 11 because of the complexity of Chapter 11 proceedings. Formal legal motions to decide any action which lies outside the ordinary course of the firm business have to be drafted and argued before the court. Also, the bankruptcy lawyers and investment bankers do not have an incentive to finish the bankruptcy proceedings because their compensation is treated as a priority claim which entitles them to be paid before any of the firm's unsecured creditors or shareholders. The indirect costs are also higher for the Chapter 11 proceeding because

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the process is longer and more complex and therefore leads to more management distraction.

However, the relative cost disadvantage of the bankruptcy is offset by several factors:

- There are no unanimity requirements under Chapter 11. That is, in order for the Plan of Reorganization to be confirmed, it is enough that it be accepted by (1) a strict majority in each creditor class by number, and (2) two thirds in dollar amount of allowed claims. Minority holdouts may be bonded if the court estimates that these creditors receive under the plan of reorganization at least as much as they would have received had the firm been liquidated. Note that for private renegotiation, and under the Trust Indenture Act of 1937, changing the principal amount, interest, or maturity date of a publicly held bond requires approval of 100 percent of the bondholders. This leads to a free rider problem because some creditors may not want to renegotiate the terms of their debt waiting for other creditors to do it.

- As we mentioned above, Chapter 11 forces an automatic stay against any creditor collection activity, avoiding the possibility of creditor harassment during the reorganization.

- Chapter 11 provides several incentives for lenders to give credit to the debtor-in-possession during the reorganization. First, postpetition unsecured credit transactions during the ordinary business of the debtor-in-possession have priority over all prepetition unsecured creditors. Second, to facilitate the funding of the organization the new securities are exempt from state and federal registration requirements. And

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third, creditors can resell securities received during the reorganization without being subject to state or federal registration requirements.

- The use of Net Operating Losses for tax purposes is much less restrictive under Chapter 11 than under private renegotiation. Also, under private renegotiation forgiveness of indebtedness is a taxable event, while it is not under Chapter 11.

- The debtor in possession may reject a labor union contract if it does so with court approval after attempting in good faith to renegotiate its current labor agreement. The rejection of labor contracts is however tightly controlled by a 1984 amendment to the Bankruptcy Code of 1978. This amendment was passed shortly after Continental Airlines used its Chapter 11 filing primarily to abolish a collective bargaining agreement.

- Under the Bankruptcy code the debtor-in-possession has until the confirmation of a plan of reorganization to assume or reject unexpired leases of personal property.

- The information asymmetry between management and shareholders on one side, and creditors on the other side, is smaller under Chapter 11 than under a private agreement. This better information reduces the "lemons problem" in which bondholders expect management to misrepresent the firm's prospects to cut a good deal in the private restructuring\(^{65}\).

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4.3 The Chapter 11 Proceedings of the US Bankruptcy Law

This section discusses several aspects of the Chapter 11 proceeding\textsuperscript{66}.

**Chronology**

A typical Chapter 11 proceeding has the following steps:

- Bankruptcy is filed (either voluntarily or involuntarily.)
- The automatic stay takes effect.
- The debtor in possession continues to operate the business.
- The debtor asks the court to use cash collateral.
- The court notifies creditors of the bankruptcy.
- The debtor files schedules of assets and debts.
- The creditors hold the First Meeting of Creditors.
- Each creditor file its claim or claims.
- Creditors' committees may be formed.
- Claims are allowed or disallowed.
- The court appoints a trustee or examiner if the debtor has engaged in mismanagement or fraud.
- A disclosure statement is filed.
- The debtor or the creditors file a plan of reorganization.
- The creditors decide whether to object to the disclosure statement and/or the plan of reorganization.
- The court approves or disapproves the disclosure statement.
- Creditors and stockholders vote on the plan of reorganization.
- The court confirms or denies the plan of reorganization.

• If the court confirms the plan of reorganization, the court retains control over the case only for purposes of implementing the plan.

• The court closes the case.

Financing
The debtor in possession has two ways of obtaining financing for operation during the bankruptcy process:

• Use Cash Collateral.
  The debtor in possession pledges its account receivable, cash on hand, and other cash collateral to a bank in return for a line of credit.

• Obtain New Credit.
  If the debtor is unable to get credit in any other way, the court can grant a lender a super-priority lien in the property of the debtor. This super-priority lien is paid during a bankruptcy before administrative expense claims or any other claims. The super-priority lien is a very effective mechanism of the Bankruptcy code to induce banks to lend money to businesses in bankruptcy.

The Plan of Reorganization
The plan of reorganization is the goal of the Chapter 11 proceeding and the mechanism for completing the bankruptcy. The plan is like a very big promissory note by which the debtor promises to make certain payments to the creditors which are classified in certain classes. The plan is also a court order which defines rights and obligations of the debtor to its creditors, and it is binding for both debtor and creditors. This plan extinguishes some (or all) of the original creditors' claims, and replaces them with new provisions for payment.
Classification of Claims.

One of the purposes of the plan is to classify the whole group of claims in several classes. Claims that are substantially similar, if they have the same level of priority, may be grouped together by a plan as a class. The classification has to be consistent with the priorities established by the Bankruptcy Code.

The highest level of priority in a bankruptcy is reserved for those who lend to the firm after filing for bankruptcy. In this case, as we mentioned above, the lender is granted super-priority.

The next level of claims, secured claims, involves security interests in specific property such as mortgages on real state or equipment trust certificates that we discussed in the previous chapter. We should note however that if the loan is secured by collateral which is worth less that the amount of the loan, only the portion of the loan which is covered by the collateral is considered to be a secured claim. The portion not covered by the collateral must be filed as a general unsecured claim.

After the secured claims we find the priority claims. Some of the most relevant priority claims are the following: (1) claims for expenses related to the development of the bankruptcy proceeding such as fees for legal or financial advice, (2) claims for expenses incurred during the normal course of business after filing for bankruptcy, and (2) claims for most taxes.

Finally, the last group of claims is that of the general unsecured claims.

Contents of the Plan

The Bankruptcy code determines that the following be included in a plan of reorganization\(^\text{67}\): (1) a designation of each class of claims, (2) a statement as to whether the claim or class of claims is impaired, (3) a statement of treatment of any

claim that will not receive full payment, (4) provisions for uniform treatment of claims of the same class (unless the opposite is agreed upon by the holder of a particular claim), and (5) arrangements for the adequate implementation of the plan.

- The Disclosure Statement

The disclosure statement is a document which must accompany the plan of reorganization. The disclosure statement should provide information about (1) the reasons why the debtor filed for bankruptcy, (2) the financial condition of the debtor, (3) the reasons for the proposed plan, and (4) a summary of the plan.

The information provided in the disclosure statement must be adequate for a creditor to decide whether to vote or not for the plan. It is similar to a prospectus for an initial public offering filed with the Securities Exchange Commission although the Bankruptcy Code explicitly exempts the disclosure statement from the securities laws.

4.3 TWA's Plan of Reorganization

On August 1993, more than one a half years after filing for bankruptcy, TWA's Plan of Reorganization was approved by the bankruptcy court. According to the disclosure statement, the purpose of the plan was to

"(i) reduce the amount of debt in TWA's capital structure and alter certain other obligations of TWA, (ii) maximize the value of the ultimate recoveries to all creditor groups on a fair and equitable basis by permitting TWA to continue as a going concern, and (iii) settle compromise or otherwise dispose of certain Claims and Interests on terms that TWA and the Creditors' Committee believe to be reasonable."

In the words of the authors of the disclosure statement, the Plan provides, among other things\textsuperscript{69}, for:

(i) issuance of 45% of the New Common Stock to trusts established for the benefit of TWA's domestic unionized and domestic non-union and management employees in exchange for certain wage and benefit concessions and the forgiveness of certain Claims by TWA's employees,

(ii) payment of cash and issuance of certain New Debt, 100% of the New Preferred Stock and voting trust certificates ("VTCs") (evidencing the rights of the beneficiaries of the New Voting Trust, which [hold] the remaining 55% of the New Common Stock), to certain creditors of TWA in satisfaction of their Claims,

(iii) discharge of other Claims, except for certain Claims Reinstated under the Plan,

(iv) cancellation of all prepetition Interests in TWA (including TWA's Preferred Stock, Preference Stock and Common Stock) without any consideration being distributed on account of those Interests,

(v) settlement of certain contingent on unliquidated Claims, and

(vi) assumption or rejection of executory contracts and unexpired to which TWA is a party.

In what follows we will examine the three basic pieces of TWA's Plan of Reorganization\textsuperscript{70}: (1) the classification of the claims (and the resulting percentages of recovery), (2) the union agreements (which resulted in the unions owning 45% of the company in exchange for concessions), and (3) the Comprehensive Settlement Agreement between TWA, the unions, the creditors, the PBGC, and Carl Icahn, which led to (i) the settlement of the differences with respect to the pension plans, and (ii) the departure of Carl Icahn.


\textsuperscript{70} Disclosure Statement, Dated May 28, 1993, various pages.
Classification of the Claims and Percentages of Recovery

Figure 4.1 presents a summary of the claims and how they were treated under the plan. The main features are:

i) Holders of secured claims had a high percentage of recovery, ranging from 100% to 85%.

ii) Holders of unsecured claims suffered important losses due to percentages of recovery which ranged from 32% (for senior claims) to 3.3% (for junior claims).

iii) Holders of preferred, preference, and common stock did not receive anything.

A critical evaluation of the plan is the comparison between (1) the percentages of recovery under the plan for the different classes, and (2) the percentages of recovery that would have resulted from a liquidation through Chapter 7 of the Bankruptcy Code. The liquidation analysis is presented in Exhibit 3 of the Disclosure Statement and summarized in figures 4.2 and 4.3 of this thesis. Figure 4.2 presents the percentage of book value that TWA would recover under liquidation. Note that one of the reasons why the liquidation analysis leads to lower percentages of recovery is because it assumes (we consider that quite realistically) that the price obtained by selling TWA assets would reflect a "distress sale value". This value is lower than that which would prevail in a transaction between a willing buyer and a willing seller.

Figure 4.3 presents how the proceedings from TWA liquidation would be distributed among the creditors. Comparing figures 4.1 and 4.3 we see that creditors are better off with the Plan of Reorganization although the relative advantage of reorganizing under the Plan versus liquidating depends on the class. In particular, holders of senior unsecured claims, who under the Plan get between a 32% and 3% of their claims, would get nothing under liquidation.
Union Concession Agreements

The Union Concession Agreements resulted in a 15% reduction in wages and benefits along with certain work-rule concessions for the three-year concession period, which began in September 1, 1992. These agreements also provided for a 15% reduction in wages and benefits on TWA's domestic non-union employees and management employees for the same period. It was estimated that these employee concessions would result in cost savings of approximately $177 million per year during the concession period. It was also agreed that the collective bargaining agreements with each union would be extended to incorporate the agreed wage concessions, work-rule changes and other provisions.

In return for these concessions and according to the Plan of Reorganization, 45% of the new stock would be distributed to trusts established for the benefit of TWA's domestic unionized and domestic non-union and management employees. Following the agreement the unions would be able to elect directors to the board of directors of TWA. The various partial agreements which form the Union Concession Agreements are:

- **The International Association of Machinists and Aerospace Workers (IAM) Concession Agreement.**

  This agreement was estimated to result in $91 million in annual concessions through reductions of wages and medical benefits and modification of overtime arrangements and other arrangements. The agreement included a release by IAM of claims for stock, warrants, etc. under the old bargaining agreement, and a promise by TWA to issue certain bonds to pay for 1991 back pay claims.
According to this concession agreement several wages and benefits increases agreed-upon under the bargaining agreement were postponed for periods ranging from one year to one and a half years.

- **The Independent Federation of Flight Attendants (IFFA) Concession Agreement.**
  This agreement was estimated to provide for approximately $21 million in annual concessions during the concession period. Actually this agreement included an initial 10% wage increase in exchange for certain work-rule changes, with half of the increase and the work-rule changes to be phased in September 92, and the other half in March 93.

- **The Air Line Pilots Association International (ALPA) Concession Agreement.**
  This agreement was calculated to result in $41 million of annual savings. However, similarly to the IFFA agreement, it includes several wage increases totaling 10% by September 1994, upon achieving verifiable cost savings from work-rule changes to be implemented by the pilots. The agreement includes another 10% wage increase in September 1995.

- **The Transport Workers Union of America (TWU) and employees affiliated with the International Brotherhood of Teamsters (IBT) Concession Agreement.**
  These are minor agreements in terms of cost benefits, leading to savings close to half a million dollars during the concession period.

The union concession agreements included several job security clauses. Particularly stringent were those related to the pilots. These clauses regulated which pilots would be transferred in case of fleet sales, the wages they would get, and the seniority transfer rules that would apply.
Comprehensive Settlement Agreement

The main points of this agreement among TWA, the unions, the creditors, the PBGC, and Carl Icahn are the following:

- **Financing**
  
  As part of the agreement TWA obtained $200 million of financing from the Icahn entities. This $200 million were broken-down in two pieces: (1) the "Receivables Facility", a $115 portion secured by TWA's account receivables, and (2) the "Asset-Based Facility", a $80 million portion secured by certain of TWA's aircraft, engines and related equipment, and all the shares (including options and other rights) of Midcoast, a TWA subsidiary.

- **Pension Plans**
  
  According to the agreement Mr. Icahn agreed to put $80 million into TWA's plans over four years. Also, Mr. Icahn agreed to provide up to $240 million in guarantees for future TWA pension contributions. In addition, TWA agreed to contribute two 15-year notes worth $300 million into the plans. These notes are backed by the airline's international routes and its Kansas City maintenance facility. The agreement will cap the airline's liability in the event of a plan termination.

The PBGC estimated the present value of the commitments from TWA and Mr. Icahn at $350 million to $500 million. This compares with the agency's estimate of TWA's unfunded pension liability of approximately $1 billion. About $730 million of the liabilities would be guaranteed by the PBGC if the plans shut down.

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However, TWA officials believed the plans' underfunding was between $500 million and $600 million, which meant the PBGC could obtain nearly a full recovery on any losses. According to TWA officials the PBGC used an artificially low interest rate and assumed everyone would take early retirement, thus swelling liabilities.

- **Surrender of Icahn Interests and Mutual Releases**

According to the agreement, Mr. Icahn surrendered all equity and debt securities of TWA. Also, he released any claims against TWA. Correspondingly, he received a release from TWA, the unions, the creditors and the PBGC. The agreement also provided for mutual releases among TWA, the unions, the creditors and the PBGC.
Figure 4.1: Summary of the Classification and Treatment of the Claims under the Plan of Reorganization

Source: Disclosure Statement
Note: The following table is only an incomplete summary and is qualified in its entirety by reference to the Plan of Reorganization.

<table>
<thead>
<tr>
<th>Class</th>
<th>Type of Claim</th>
<th>Estimation of Claim</th>
<th>Estimated Percentage of Recovery</th>
</tr>
</thead>
<tbody>
<tr>
<td>Class 1</td>
<td>Administrative Priority Claims</td>
<td>$0</td>
<td></td>
</tr>
<tr>
<td>Class 2</td>
<td>Reinstated Intercompany Claims</td>
<td>$1,925,000</td>
<td>100%</td>
</tr>
<tr>
<td>Class 3</td>
<td>Back Pay Claims</td>
<td>$19,000,000</td>
<td>100%</td>
</tr>
<tr>
<td>Class 4</td>
<td>Fully Insured Claims, Worker's Compensation Claims, etc.</td>
<td>$158,563,000</td>
<td>100%</td>
</tr>
<tr>
<td>Class 5</td>
<td>Secured Claims under or evidenced by the Aircraft Financing Agreements</td>
<td>$129,444,000</td>
<td>100%</td>
</tr>
<tr>
<td>Class 6</td>
<td>Secured Claims under Equipment Trust Certificates</td>
<td>$38,038,000</td>
<td>100%</td>
</tr>
<tr>
<td>Class 7</td>
<td>Senior Secured Note Claims</td>
<td>$322,000,000</td>
<td>85%</td>
</tr>
<tr>
<td>Class 8</td>
<td>Senior Unsecured Claims</td>
<td>$534,035,000</td>
<td>32%</td>
</tr>
<tr>
<td>Class 9</td>
<td>Subordinated Unsecured Claims</td>
<td>$412,767,000</td>
<td>3%</td>
</tr>
<tr>
<td>Class 10</td>
<td>Other Unsecured Claims</td>
<td>$196,774,000</td>
<td>20%</td>
</tr>
<tr>
<td>Class 11</td>
<td>Waived Intercompany Complaints</td>
<td>$47,672,000</td>
<td>None</td>
</tr>
<tr>
<td>Class 12</td>
<td>Other Unsecured Claims</td>
<td>Not Available</td>
<td>None</td>
</tr>
<tr>
<td>Class 13</td>
<td>Other Unsecured claims</td>
<td>$367,000</td>
<td>None</td>
</tr>
<tr>
<td>Class 14</td>
<td>Interests of holders of Preferred Stock</td>
<td>None</td>
<td></td>
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<tr>
<td>Class 15</td>
<td>Interests of holders of Preference Stock</td>
<td>None</td>
<td></td>
</tr>
<tr>
<td>Class 16</td>
<td>Interests of holders of Common Stock</td>
<td>None</td>
<td></td>
</tr>
</tbody>
</table>
Figure 4.2: Liquidation Analysis

Source: Disclosure Statement
Note: All dollar amounts are in thousands

<table>
<thead>
<tr>
<th>Estimated Book Value at 11/30/92 (Unaudited)</th>
<th>Estimated Liquidation Value at 7/31/93 (Unaudited)</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>%</td>
</tr>
<tr>
<td>Total Current Assets</td>
<td>44.5%</td>
</tr>
<tr>
<td>Cash and Cash Equivalents</td>
<td>76.9%</td>
</tr>
<tr>
<td>Accounts Receivable</td>
<td>40.7%</td>
</tr>
<tr>
<td>Spare Parts, Materials &amp; Supplies</td>
<td>50.6%</td>
</tr>
<tr>
<td>Prepaid Expenses and other Current Assets</td>
<td>0.0%</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Owned Property and Equipment:</th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Land, Building and Improvements</td>
<td>14.4%</td>
<td>16,729</td>
</tr>
<tr>
<td>Other Property and Equipment</td>
<td>11.7%</td>
<td>6,932</td>
</tr>
<tr>
<td>Total Property and equipment</td>
<td>37.5%</td>
<td>297,292</td>
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</table>

<table>
<thead>
<tr>
<th>Other Assets:</th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Other Miscellaneous Assets</td>
<td>0.0%</td>
<td>0</td>
</tr>
<tr>
<td>Other Investments and Receivables</td>
<td>38.2%</td>
<td>110,576</td>
</tr>
<tr>
<td>Investments in Affiliates, Including Intercompany</td>
<td>31.0%</td>
<td>85,900</td>
</tr>
<tr>
<td>Off Balance Sheet Assets</td>
<td>-</td>
<td>467,563</td>
</tr>
<tr>
<td>Total Other Assets</td>
<td>112.9%</td>
<td>664,039</td>
</tr>
</tbody>
</table>

TOTAL ASSETS                                   | 62.6%    | 1,196,866 |

II. APPLICATION OF ESTIMATED LIQUIDATION PROCEEDS

Estimated Liquidation Proceeds $1,196,866
Plus: Estimated Interest Income 14,961
Less: Secured Claims -754,550
Less: Administrative and Corporate Wind-Down E -245,389
Less: Estimated Trustee Fees -11,969
Total Estimated Assets Available for Distribution to Superior & Administrative Claims $199,919
Figure 4.3: Summary of the Classification and Treatment of the Claims under Liquidation

Source: Disclosure Statement
Note: The following table is only an incomplete summary and is qualified in its entirety by reference to the Disclosure Statement.

<table>
<thead>
<tr>
<th>Class</th>
<th>Type of Claim</th>
<th>Estimation of Claim</th>
<th>Estimated Percentage of Recovery</th>
</tr>
</thead>
<tbody>
<tr>
<td>Class 1</td>
<td>Administrative Priority Claims</td>
<td>$410,950</td>
<td>46.8%</td>
</tr>
<tr>
<td>Class 2</td>
<td>Intercompany Claims</td>
<td>N/A (1)</td>
<td>0%</td>
</tr>
<tr>
<td>Class 3</td>
<td>Back Pay Claims</td>
<td>$19,000,000</td>
<td>100%</td>
</tr>
<tr>
<td>Class 4</td>
<td>Fully Insured Claims, Worker's Compensation Claims, etc.</td>
<td>$158,563,000</td>
<td>80%</td>
</tr>
<tr>
<td>Class 5</td>
<td>Secured Claims under or evidenced by the Aircraft Financing Agreements</td>
<td>$129,444,000</td>
<td>80%</td>
</tr>
<tr>
<td>Class 6</td>
<td>Secured Claims under Equipment Trust Certificates</td>
<td>$38,038,000</td>
<td>100%</td>
</tr>
<tr>
<td>Class 7</td>
<td>Senior Secured Note Claims</td>
<td>$287,508,000</td>
<td>69.6%</td>
</tr>
<tr>
<td>Class 8</td>
<td>Senior Unsecured Claims</td>
<td>N/A (1)</td>
<td>0%</td>
</tr>
<tr>
<td>Class 9</td>
<td>Subordinated Unsecured Claims</td>
<td>N/A (1)</td>
<td>0%</td>
</tr>
<tr>
<td>Class 10</td>
<td>Other Unsecured Claims</td>
<td>N/A (1)</td>
<td>0%</td>
</tr>
<tr>
<td>Class 11</td>
<td>Waived Intercompany Complaints</td>
<td>N/A (1)</td>
<td>0%</td>
</tr>
<tr>
<td>Class 12</td>
<td>Other Unsecured Claims</td>
<td>N/A (1)</td>
<td>0%</td>
</tr>
<tr>
<td>Class 13</td>
<td>Other Unsecured claims</td>
<td>N/A (1)</td>
<td>0%</td>
</tr>
<tr>
<td>Class 14</td>
<td>Interests of holders of Preferred Stock</td>
<td>N/A (1)</td>
<td>0%</td>
</tr>
<tr>
<td>Class 15</td>
<td>Interests of holders of Preference Stock</td>
<td>N/A (1)</td>
<td>0%</td>
</tr>
<tr>
<td>Class 16</td>
<td>Interests of holders of Common Stock</td>
<td>N/A (1)</td>
<td>0%</td>
</tr>
</tbody>
</table>

(1) According to the liquidation analysis there would be no recovery on account of prepetition and non-priority Unsecured Claims, and therefore, for purposes of the liquidation analysis TWA did not need to estimate the amount of its prepetition unsecured indebtedness.
Chapter 5: Operations Strategy

The purpose of this chapter is to analyze the operations strategy of TWA from 1991 to February 1994, period which covers from the first payment defaults (February 1991) to the first months after its emergence from bankruptcy (November 1993). We have divided this chapter in three different sections, each of which considers a different aspect of TWA's operations. Section 5.1 considers the evolution of TWA's system capacity, section 5.2 addresses the evolution of its route structure, and section 5.3 studies the evolution of TWA's fleet during this time and the plans for the future. Note that the boundaries between the sections are sometimes quite blurry because, for example, a major change in the system capacity might be associated with major changes in the route structure, or the other way around.

5.1 Capacity

Within the years 1991-1993 we can distinguish (somehow arbitrarily) three different periods with respect to the evolution of TWA's capacity: (1) Pre-chapter 11 (1991), (2) early and middle Chapter 11 (1992), (3) Later Chapter 11 and After Chapter 11 (after 1992). We consider that there was no long-term strategy dictating the developments in the first period, while there was such a strategy during the second and third periods. Let us analyze these periods.

Pre-Chapter 11 (Route Sales)

As we mentioned in chapter 3, Carl Icahn tried to raise cash to offset TWA losses by selling valuable assets. On January 30, 1991 the DOT approved the sale of the Chicago /London route authority to American. On April 25, 1991 TWA received DOT approval to transfer to American three London routes: New York, Los Angeles, and Boston to
Heathrow. This sale was completed on May 3, 1991\(^2\). On December 20, 1991 TWA entered into an agreement to sell Philadelphia/London and Baltimore/London to USAir. The sale of these routes became effective May 1, 1992.\(^3\)

These sales reported an important amount of cash to TWA: it received $110 million for the Chicago/London route, $445 million for the New York, Los Angeles, and Boston to Heathrow routes, and $50 million for Philadelphia and Baltimore to London routes, or a total of $705 million. However, according to TWA\(^4\), the scheduled air transportation service provided by TWA on these London route authorities represented approximately 10\% to 13\% of the average annual system aggregate of TWA's revenue, or $300 million to $400 million.

It is clear that we do not have information to decide whether from a strict discounted cash flow approach the selling price made sense for TWA. Even if it made sense from that perspective, strategically it was a tremendous blow: TWA sold the "crown jewel" of its network. However, we consider that these route sales were never meant to be long-term strategic decisions but survival maneuvers to get cash on hand to allow the airline to operate.

**Early and Middle Chapter 11 (The October 92 Schedule Decrease)**

As we saw before, during 1992 TWA got wage and work rule concessions in an effort to reduce costs and assure long-term survival. According to the Disclosure Statement, TWA's strategy was, (1) first to shrink its operations while in bankruptcy to eliminate

\(^2\) Form 10-K for the Fiscal Year Ended December 31, 1991, section "International Market".


unprofitable routes and re-configure its fleet, and (2) thereafter to grow moderately over a five-year period\textsuperscript{75}. The first phase of this two-phase project was implemented on October 25, 1992 when TWA introduced a new schedule which represented an important reduction of TWA operations\textsuperscript{76}:

- Internationally, ASMs were reduced by a 38\% and service to 4 out of 22 international destinations was suspended.
- Domestically, ASMs were reduced by a 13\% and service to 8 out of 70 cities was suspended.

The number of planes was also reduced. TWA ended 1992 with 172 planes, twenty fewer than exactly one year before.

According to TWA the new schedule "was designed to maximize operational efficiency and increase profitability"\textsuperscript{77}. Unfortunately, despite the schedule reduction, TWA had an operating loss of $127 million for the fourth quarter of 1992, which was bigger than the loss experienced in the fourth quarter of 1991, $98 million\textsuperscript{78}. Figure 5.1 can help us to understand this poor result. This figure shows the system-wide load factor from January 1991 to February 1994. There we see that the capacity reduction of October 1992 was not accompanied by the expected higher load factors. On the contrary, load factors decreased because the percentage decrease in RPMs was greater than the percentage decrease in ASMs. For example, TWA flew 21\% fewer ASMs in November 92 than in November 91, but it flew 30\% fewer RPMs in November 92 than in November 91; as a result, its average load factor decreased from 65.4\% to 55.5\% for those same months.

\textsuperscript{75} Disclosure Statement, page 51.
\textsuperscript{76} A.L. Velocci, "TWA cutting capacity in an effort to survive", \textit{Aviation Week and Space Technology}, September 14, 1992, page 34.
\textsuperscript{77} Form 10-K for the Fiscal Year Ended December 31, 1992, section "Results of Operations", page 73.
\textsuperscript{78} Form 10-K for the Fiscal Year Ended December 31, 1992, note 17 to the consolidated financial statements, page F-49.
Later Chapter 11 and After Chapter 11 (Capacity Increase)

As we mentioned in the previous point, TWA's strategy called for moderate growth after the October 92 streamlining. Faithful to its plan, TWA entered in early 1993 in negotiations to expand its capacity with the lease of six MD-80s and around ten DC-9s\(^{79}\), and obtained approval from its board of directors for further expansion in 1994\(^{80}\).

Figure 5.2 shows the monthly evolution of TWA's ASMs from January 1991 to February 1994. Note the very sharp increase during the first months of 1991, after the end of the Gulf war. The October 92 schedule reduction is also clearly seen in the figure. Figure 5.3 shows the same information in a different format which allows a better comparison from year to year. From there we can see that at the end of 1993 capacity declined less that we could have expected due to seasonal variation, and it remained very robust at the beginning of 1994.

5.2 Route Structure

According to its Disclosure Statement, the strategy of the reorganized TWA would be to "eliminate unprofitable routes", and "to continue to utilize the hub concept", with Lambert Field as its primary hub, and JFK as its main international gateway\(^{81}\). Although not stated that way, we consider that the underlying strategy was, apart from eliminating unprofitable routes, to strengthen TWA's domestic route structure (TWA route structure and feeder operations are shown in figures 5.4 and 5.5). We consider that the most important initiatives along the lines of strengthening its domestic network during the 1991-1993 period were: (1) the expansion of its JFK operation, (2) the set-up of the Atlanta mini-hub (recently shut-down), and (3) the expansion of its feeder operations.

\(^{79}\) "TWA Will Lease Six MD-83s, Up to 12 DC-9-50s", *Aviation Daily*, April 27, page 145.


\(^{81}\) Disclosure Statement, page 51.
Expansion to Two Daily Banks at JFK

As early as November 1991, TWA was reported to be considering expanding its domestic operation at JFK (i.e. domestic flights neither feeding international flights nor taking passengers from them) by increasing its morning flights. The new morning flights would be aimed at business travelers, with the new schedule allowing them to make one-day trips to a number of cities from New York, and therefore greatly improving service to these cities. In particular, TWA decided to add new flights to Chicago, Atlanta, New Orleans, Pittsburgh, Washington D.C., and Boston. As of December 15, 1993 TWA maintained morning flights from JFK to all the mentioned cities except Pittsburgh.

Set up of the Atlanta Mini-Hub

Another early move to strengthen its domestic network was to set-up a mini-hub in Atlanta. In July 1991, TWA announced it had discussions with Harstfield Atlanta Airport about the issue. It seems that the negotiations were successful because for almost two years TWA grew its Atlanta operation. In April 1992 TWA offered 29 flights a day to nine cities from Atlanta. Also, despite the overall capacity reduction brought by the October 1992 schedule, that schedule increased the number of daily departures at Atlanta from 36 to 41.

86 "Harstfield Atlanta to Open Portion of Concourse C for TWA", Airports, April 28, 1992, page 165.
This expansion strategy in Atlanta was abruptly cut very recently when TWA announced
that - following a strategy of concentration around its core St. Louis hub - it would
dismantle its Atlanta hub, reducing the number of daily departures from Atlanta an 80%
while increasing the daily flights at St. Louis a 17%87. The emergence of ValuJet at
Atlanta seems to have contributed to the change, although according to TWA, the Atlanta
operation was already under review when ValuJet launched operations88. Another factor
which may have affected TWA's decision to reinforce its St. Louis hub is the fact that
TWA lost market share in 1993 to Southwest and USAir in St. Louis. TWA's market
share went from 65.5% in 1992 to 60.2% in 1993 while Southwest's went from 10% to
13.6% in the same period89.

Feeder Operations

Another way of strengthening its domestic route is by increasing its feeder operations. In
December 1991 TWA acquired the assets of Pan Am Express to feed its JFK operation.
TWA had been searching for a regional airline to feed its Kennedy operation since its
affiliate Metro Airlines ceased operations in early 199190. This feeder operation is small
in terms of revenue (it generates only around 2% of TWA's total revenue, and recently it
was unprofitable91), but it fed more than 400,000 passengers through TWA's domestic and
international system in 1992. A bigger feeder operation is the one at St. Louis where

88 "TWA Sharply Reducing Atlanta Operations, Concentrating On St. Louis", Airports,
March 22, 1994, page 111.
89 "TWA Loses Market Share To Southwest, USAir In St. Louis", Aviation Daily,
90 "TWA Seeks Boost At Kennedy by Buying Pan Am Express", Aviation Week and
91 Form 10-K for the Fiscal Year Ended December 31, 1992, section "Domestic
Market", page 18.
TWA has a marketing agreement with TSA which brought 1.1 million passengers in 1992\textsuperscript{92}.

A recent expansion (albeit small) of TWA's feeder system occurred at the end of 1993, when TWA signed a code-sharing agreement with Alpha Air to feed its system at Los Angeles\textsuperscript{93}.

With respect to its international system we consider that during 1991 and 1992 TWA international strategy was to serve Europe exploiting the hub economies at Charles de Gaulle. However, according to the Disclosure Statement its future strategy will focus more on direct long-haul service: "The Business Plan contemplates additional non-stop trans-Atlantic service, including the replacement of Paris Europe connections by direct long-haul service to additional points in the middle east\textsuperscript{94}." Note that this strategy is consistent with the acquisition of smaller and more efficient wide-bodies such as B-767s and A-330s that we will discuss later on.

TWA has still rights to some locations in Asia (although not Japan) but does not plan to exercise these rights in the near future\textsuperscript{95}.

### 5.3 Fleet Evolution

TWA entered the period 1991-1993 with a steadily shrinking and aging fleet. However, if the reorganized TWA is able to achieve the fleet profile described in its business plan, then the reorganized TWA will have managed to achieve an impressive turnaround in the profile of its fleet. Figure 5.6 presents the planned fleet profile according to TWA's

\textsuperscript{92} Disclosure Statement, page 54.
\textsuperscript{93} "TWA", Aviation Daily, October 25, 1993, page 123.
\textsuperscript{94} TWA Disclosure Statement, page 52.
\textsuperscript{95} Interview with Mr. J. Crowe, TWA VP Operations Administration, March 1994.
business plan\textsuperscript{96}. To see the extent to which this planned fleet is different to that of the recent years, we have plotted both historical and planned values for four key fleet parameters: (1) total number of aircraft, (2) breakdown of total aircraft into leased and owned, (3) average age, and (4) fraction of narrow-bodies. Let us analyze historical and planned variation of these parameters and their strategic implications.

- Number of Aircraft

Figure 5.7 shows the historical and planned number of aircraft. As we see, after reaching a minimum in 1992 (year in which TWA returned leased aircraft and introduced the reduced October 25 schedule), TWA plans to grow steadily in terms of number of aircraft.

- Leased versus Owned Aircraft

This buildup of TWA will be possible because TWA plans to lease all new aircraft added to its fleet\textsuperscript{97}. Although TWA did not disclose the breakdown of leased and owned aircraft in its planned fleet, we can obtain a fairly accurate picture of the breakdown of its planned fleet in leased and owned aircraft simply assuming that when aircraft of a given aircraft type are retired the first to go are the leased ones. The result of this leasing policy is shown in figure 5.8, where we see how the fraction of owned aircraft decreases steadily (actually this figure is not very sensitive to the strategy for retiring aircraft within a given aircraft type). Leasing all the new aircraft has the advantage of avoiding the huge capital expenditure that would be involved in buying all those new aircraft. Actually, if TWA renews its fleet according to its plan,

\textsuperscript{96} TWA Disclosure Statement, page 53.
\textsuperscript{97} TWA Disclosure Statement, page 51.
it will achieve an impressive fleet build-up with an average capital expenditure from 1993 to 1997 of only $60 million per year\(^98\).

- **Average Age**
  One of the results of this buying activity would be a dramatic reduction of the average age of TWA's fleet. Figure 5.9 shows the historical and planned average age. There we can see how these new acquisitions would transform a fairly old fleet into a more modern and efficient fleet.

- **Fraction of Narrow-bodies**
  Another element of the strategy of reorganized TWA is "increasing the proportion of narrow-body aircraft in TWA's fleet to raise load factors, eliminate low-yield traffic and enhance operating efficiencies"\(^99\). This shift towards narrow-bodies after 1992 is clear from figure 5.10. There however we see a decrease of the fraction of narrow-bodies after 1994. Although this seems to contradict the emphasis of narrow-bodies, we should mention that the new wide-bodies planned to be introduced after 1994 are B-767s and A-330s which are very efficient two engine aircraft which will replace much older and less efficient B-747s and L-1011s.

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\(^{98}\) TWA Disclosure Statement, page 54.

Figure 5.1: TWA System-wide Load Factor

Source: Aviation Daily
Figure 5.2: TWA Available Seat Miles

Source: Aviation Daily
Figure 5.3: TWA Available Seat Miles

Source: Aviation Daily
Figure 5.4: TWA Route Structure as of December 15, 1993

Source: TWA Worldwide Timetable
Figure 5.5: Trans World Express Routes (12/15/93)

Source: TWA Worldwide Timetable

Routes from/to St Louis
independently operated by
Trans World Airlines, Inc.

Routes from/to New York (JFK)
independently operated by
Trans World Airlines, Inc.

Routes from/to Los Angeles
independently operated by
Alpha Air
Figure 5.6: TWA Fleet Projection

Source: Disclosure Statement

<table>
<thead>
<tr>
<th>Number of Aircraft</th>
</tr>
</thead>
<tbody>
<tr>
<td>As of December 31,</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
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<th></th>
<th></th>
<th></th>
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</tr>
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<tbody>
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<td>0</td>
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<td>0</td>
</tr>
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<td>48</td>
<td>49</td>
<td>49</td>
<td>48</td>
<td>40</td>
</tr>
<tr>
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<td>42</td>
<td>72</td>
<td>80</td>
<td>93</td>
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</tr>
<tr>
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<td>27</td>
<td>36</td>
<td>40</td>
</tr>
<tr>
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<td>10</td>
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<td>5</td>
</tr>
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<td>0</td>
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<td>10</td>
<td>9</td>
<td>6</td>
</tr>
<tr>
<td></td>
<td>168</td>
<td>186</td>
<td>197</td>
<td>207</td>
<td>218</td>
<td>228</td>
</tr>
</tbody>
</table>
Figure 5.7: Number of Aircraft in TWA Fleet

Source: Forms 10-K and Disclosure Statement
Figure 5.8: Leased versus Owned Planes in TWA Fleet

Source: Forms 10-K, Disclosure Statement, and author’s estimates
Figure 5.9: Average Age of Aircraft in TWA Fleet

Source: Forms 10-K and Disclosure Statement
Figure 5.10: Fraction of Narrow-bodies in TWA Fleet

Source: Forms 10-K and Disclosure Statement
Chapter 6: Marketing Strategy

The purpose of this chapter is to study the most relevant aspects of TWA's marketing strategy from the beginning of 1991 to the end of 1993. In particular, we will consider the evolution of TWA's strategy with respect to: (1) pricing and quality of service, (2) distribution channels, and (3) marketing agreements.

6.1 Pricing and Quality of Service

On September 24, 1992 and following the "Agreements in Principle" between TWA, unions, and creditors, TWA announced the formation of a management committee which assumed responsibilities equivalent to those of the Chief Operating Officer of the company. The management committee would be integrated by R.H.H. Wilson and G. Zander. At this time Carl Icahn relinquished day-to-day control of the airline. The appointment of this committee marked a dramatic change in the positioning of TWA in terms of pricing-service. To talk about TWA's positioning in 1991-1993 we have to distinguish two periods totally different: (1) pre-appointment of the Committee, and (2) Post-Appointment. Let us consider both of them:

Pre-Management Committee

During this period Carl Icahn exercised control on the day-to-day operations of the airline. Those days TWA had low fares and low quality of service. The following facts give and idea of the level of service in 1992:

100 We thank TWA management for detailed comments on this section.
• From January to December TWA had - for twelve times in a row - the highest number of complaints per 100,000 passengers among US majors according with DOT figures (the same was true for 1991)\textsuperscript{101}.

• The same year a Zagat survey found that TWA had the worst customer service among the US majors\textsuperscript{102}.

• A quite sophisticated quality rating which incorporated 19 weighted categories of information such as on-time performance, flight problems and baggage complaints, and which was carried out by researchers at the University of Nebraska at Omaha and Wichita State University concluded that TWA had, by far, the worst service among the majors\textsuperscript{103}.

• It was below average in the J.D. Power customer satisfaction survey for 1992\textsuperscript{104} (J.D. Power does not rank participants which are below average, it simply lists them by alphabetical order).

With respect to yields, Carl Icahn's most relevant strategy was trying to offer deep discounts to business travelers. However, the implementation of the program which required payment up-front - an unattractive feature particularly at a time when TWA was clearly headed towards bankruptcy - diminished its effectiveness\textsuperscript{105}. At a time when Robert Crandall, CEO of American Airlines, was stating vehemently that fares had to be raised to save the airline industry, Carl Icahn was taking the opposite strategy. His strategy proved quite successful in stimulating demand (pointing out that the business

\textsuperscript{101} Data compiled by \textit{Aviation Daily}, multiple issues.
\textsuperscript{102} "Majors Get Low Grades In Second Zagat Airline Survey", \textit{Aviation Daily}, December 22, 1992, page 470.
\textsuperscript{103} C. Carey, "TWA: Poor Grades On Service Near End, Airline Ranks Last In Survey", \textit{St. Louis-Dispatch}, April 13, 1993, page 5B.
\textsuperscript{104} T. Maxon, "Northwest, Alaska Rate as Favorite Airlines", \textit{The Dallas Morning News}, December 25, 1992, page 3D.
traveler was very receptive to lower fares) but the situation was complicated by the introduction of American's Value Pricing. TWA did not go along with Value Pricing and suffered in the sadly famous fare-war of the summer of 1992, which was one the causes of TWA's dramatic losses in 1992.

Post-Appointment of the Management Committee

Shortly after the new management committee was appointed, TWA moved to replace key marketing, advertising, and sales executives in an effort to move from a low price, fare-cutting strategy to one that placed more emphasis on service. At that time Robert Cozzi, former Sr. VP Marketing was brought as a consultant to the management committee, and later retained again as Sr. VP Marketing. In January 93, to better transmit the message of a New TWA, the company replaced its advertising agency and hired Backer Spielvogel Bates Worldwide (BSBW) to handle its $60 million global advertising and direct marketing activities.

In order to analyze the changes in quality of service, we have to elaborate on what we consider the components of quality. In the spirit of Juran, we distinguish (1) quality of design (e.g. we consider that a service which includes interline baggage handling is of higher quality than one which does not offer it), and (2) quality of conformance (e.g. if an airline offers on-board phone service but the phones often do not work, then this is bad quality.)

106 "TWA To Drop Marketing Executives, As Employees Hold First Committee Meeting", Aviation Daily, October 28, 1992, page 158.
Within the area of **quality of design**, TWA announced a major change in the seating of all its aircraft giving passengers "a unique reason to fly with TWA" instead of other carriers. The new program was called "The Most Comfortable Way To Fly" and it added significantly leg-room in every economy and business class cabin (it added approximately four inches of knee-room)\(^ {109}\). In March 93 TWA went one step further and began to add footrests to seats in the back of its wide-bodies, as well as introducing new amenities\(^ {110}\). The program was extremely successful in terms of changing business traveler's perception of TWA's service. Less than a year after the service was introduced, TWA ranked number one in consumer satisfaction on long haul operations (defined as 500 miles or more), and number two in short haul. The survey was based on 24,000 evaluations by frequent business travelers of domestic carriers\(^ {111}\).

With respect to **quality of conformance**, we can have an estimate of the improvement by using the average number of complaints as a proxy for lack of quality of conformance. Figure 6.1 shows the average number of complaints per 100,000 passengers (as reported by DOT) for TWA and for the average of the US majors from January 1991 to January 1994. There we see very clearly a decreasing trend in the number of complaints which allowed TWA to reduce the number of complaints from more than seven per 100,000 passengers to slightly above one per 100,000. Similarly, figure 6.2 shows the ranking of TWA among the majors in terms of on-time performance. Again, we see an improvement from 1991 to 1994.


Another way of looking at the change in marketing strategy after the appointment of the management committee is to study the variation of the average yield from 1991 to 1994. Figure 6.3 shows the variation of the system yield for TWA and for the majors as a group. Unfortunately, the comparison is obscured by the fact that there is a very strong cyclical pattern. To eliminate the cyclical effect, figure 6.4 shows the ratio of TWA’s yield to the average yield of the majors from 1991 to 1994. There we see clearly that the time at which the new committee was appointed (September 1992) approximately divides the graph in two areas with different ranges of average yield. Yields tend to be lower before the appointment and higher afterwards. Note that the fact that TWA yields are always lower than the average is partially originated by the fact that TWA’s average stage length is greater than that of the majors as a group, and therefore both its yield and its cost per ASM tend to be lower than the average of the majors.

Looking at the future, TWA seems committed to keep on improving the quality of its service. Recently, it announced plans to improve its on-time performance record\textsuperscript{112} (this may have to do with the fact that TWA may have lost the number-one position in the J.D. Power survey for short-haul trips due to its on-time performance record.) On a different line, TWA is trying to attract travelers with new services such as on-board phones which allow callers from the ground to reach passengers in the air\textsuperscript{113}, and a cobranded credit card which allows customers to earn frequent flight bonus miles when they charge purchases on their cards\textsuperscript{114}.

\textsuperscript{112} C. Carey, "TWA Spends Time Trying To Improve Its On-Time Performance Record", \textit{St. Louis Post-Dispatch}, February 17, 1994, page 1C.
\textsuperscript{113} R. Manor, "TWA Jets To Take Telephone Calls", \textit{St. Louis Post-Dispatch}, February 8, 1994, page 6C.
A recent development is that TWA has returned to the practice of aggressive discounting, although it claims that it has been only as an incentive for the travelers to try "Comfort Class" after the successful - and very publicized by TWA - J.D. Power award.\textsuperscript{115}

6.2 Distribution Channels

By far the most important distribution channel for the airline industry is travel agencies. And travel agencies overwhelmingly use a computer reservation system (CRS) or a system with access to a CRS to make the reservations. This section discusses TWA's strategy with respect to both travel-agent relations and CRSs.

Travel Agents

Similarly to what we saw in the case of price-service positioning, there has been a clear difference between the Icahn and post-Icahn periods at TWA. R.H.H. Wilson, vice chairman of TWA, in a presentation to delegates at the Society of Travel Agents in Government annual conference in February 1994, recognized that agents and tours firms had not been high in Mr. Icahn's list, and said that TWA had made "a complete change of direction" to focus on trade relations.\textsuperscript{116} As an example of this new direction, TWA, along with American, did not follow United, Delta and Northwest when they introduced a "simplified" commission structure which the travel agents claimed reduced their revenue. Travel agents at the conference heartily applauded TWA and American because of their decision.\textsuperscript{117}

\textsuperscript{115} "Fare Sale Encourages Flyers To See Why TWA is Ranked First", Business Wire, December 2, 1993.
\textsuperscript{116} F. Durbin, "Can You Profit on 10% Atlantic Pay?", \textit{Travel Weekly}, February 24, 1994, page 49.
The case mentioned in the previous paragraph is only an example of the behavior of TWA directed at improving its relations with the travel-agency community. However, more spectacular examples of this were the increases in the commissions paid to travel agents. For example, on December 3, 1992, Travel Weekly reported that TWA had increased the commission on first class, business class, and full fare from 8% to 18%. For lower-yield fare classes the commissions increased from 8% to 11% or 13% depending on the class. This increase was introduced shortly after TWA Getaway Vacations introduced an improved commission schedule by which travel agents could obtain up to 20% commissions on certain international vacation products. Also, TWA speeded up the mechanism to pay the commissions.

Computer Reservation Systems

The advantages of owning a CRS versus buying the use of a CRS owned by another airline have been widely discussed in the literature. However, TWA, despite its early entry in the field, has not shown a clear policy with respect to its CRS.

In the seventies TWA developed its version of IBM/PARS, a computer reservation system which also offers support in areas such as flight operations, scheduling, maintenance and inventory. In 1986 TWA sold half of the interest in the system to Northwest. Later, in May 1993 TWA sold its half of PARS service partnership to Worldspan, a general partnership of TWA, Delta, Northwest and the Singapore based

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118 "TWA To Pay 18% on Higher Fare International Round trips", Travel Weekly, December 3, 1992.
121 C. Jouzaitis, "Two Airlines To Team Up by Computer", Chicago Tribune, July 8, 1986, page 1C.
Abacus distribution systems\textsuperscript{122}. Still in bankruptcy, TWA sought to sell part of its stake in Worldspan. Actually it is not clear from the comments to the press if TWA wanted to sell its whole stake or only part of it. According to one source\textsuperscript{123} the at the time Chief Financial Officer declared "TWA is trying to sell its stake in Worldspan and other non-core assets to raise cash"; on the other hand, nine days before, other source\textsuperscript{124} had quoted him saying "We continue to believe that we need to maintain an interest in Worldspan but not at the level that we currently have." Already out of bankruptcy, TWA changed its mind and according to its Chief Executive Officer Donald Craib, TWA has no immediate plans to sell its stake in Worldspan.

6.3 Marketing Agreements and Strategic Alliances

As we mentioned in Chapter 5 when we discussed feeder operations, TWA has Trans World Express code-sharing agreements with commuter airlines. Internationally, TWA has a joint marketing agreement with Malev Hungarian Airlines which allows TWA to codeshare over that carrier's routes and to offer service to Budapest\textsuperscript{125}. Also, TWA has a marketing agreement with Philippine Airlines.

There has been considerable speculation about the possibility of a global alliance between TWA and a foreign carrier. Until recently TWA just acknowledged that it had retained the investment firm Salomon Brothers to study this possibility. However, more recently, D. Craib, TWA's CEO, has said that TWA hopes to form an alliance with a

\textsuperscript{123} "Bankruptcy Court Approves Reorganization Plan", \textit{Aviation Daily}, August 12, 1993, page 235.
\textsuperscript{125} Form 10-K for the Fiscal Year ended December 31, 1992, section "Joint Marketing Agreements", page 23.
foreign carrier by the end of the year, and that "the sooner the better"\textsuperscript{126}. We think however that forming an alliance will not be easy until TWA stops its continuous losses.

\textsuperscript{126} "TWA Seeks International Alliance By Year End", \textit{The Reuter Asia-Pacific Business Report}, February 9, 1994.
Figure 6.1: Number of Complaints per 100,000 Passengers for TWA and Average US Majors

Source: Aviation Daily
Figure 6.2: TWA Position In On-Time Performance Ranking Among US Majors

Source: Aviation Daily
Figure 6.3: TWA Average System Yield and US Majors Average System Yield

Source: Aviation Daily
Figure 6.4: Ratio of TWA System Yield to US Majors System Yield

Source: Aviation Daily
Outlook

The reorganization of TWA that we have analyzed in the previous chapters can be evaluated from different points of view.

First of all, we consider that this reorganization was an impressive feat in terms of the size and complexity of the issues that had to be agreed upon by parties with such opposing interests as (1) Mr. Icahn, (2) the creditors, (3) the employees, (4) and the PBGC. That an agreement avoiding liquidation was finally worked out among the parties seems to us truly remarkable.

Second, the change in image that TWA underwent during this reorganization was also impressive. TWA went from having an extremely poor service and image to be number one in service (long haul domestic flights) in a year.

However, the fact that TWA survived its reorganization does not assure that it will survive in the long term. TWA bears the risk of being squeezed between two groups of players in the airline industry. On the one side, the big three (American, Delta, and United), which due to their size and network structure can offer global full service. On the other side, the low cost domestic carriers. These carriers have low cost structures which allow them to charge prices unbearable for TWA. We consider that a clear example of this process was the set-up and later dismantling of TWA's Atlanta mini-hub that we discussed in Chapter 5. TWA, which does not have a network (either domestic or international) comparable to Delta's network, tried to compete in price in Atlanta, but it was undercut by a local low-cost carrier, Valujet, and wound up dismantling its Atlanta mini-hub.
At the time of this writing TWA has just made public that it had an operating loss of $280 million in 1993. Although this figure means a 30% improvement with respect to 1992, it is clearly worrisome. At the time of this writing we do not have information about TWA's cash position at the beginning of 1994. However, from the operating profit figure and the historic relation between operating loss and burnt cash at TWA, we estimate that TWA burnt more than $100 million in the fourth quarter of 1993 - again, a very worrisome figure.

The improvements that TWA achieved in terms of lower debt, better service, and more modern fleet were enough to stop the historical increase in losses and transform it into a decrease in loses. Given enough time we would expect TWA to keep reducing its losses and eventually become profitable. However, at this point it is far from clear that TWA will have that time, and the medium-term survival of TWA is an open issue.