

# Corporate Distress: Introduction and Statistical Background

**C**orporate distress, including the legal processes of corporate bankruptcy reorganization (Chapter 11 of the Bankruptcy Code) and liquidation (Chapter 7), is a sobering economic reality reflecting the uniqueness of the American way of corporate “death.” The business failure phenomenon received some exposure during the 1970s, more during the recession years of 1980 to 1982, heightened attention during the explosion of defaults and large firm bankruptcies in the 1989–1991 period, and an unprecedented interest in the 2001–2002 corporate debacle and distressed years. In the 1989–1991 period, 34 corporations with liabilities greater than \$1 billion filed for protection under Chapter 11 of the Bankruptcy Code, and in the three-year period 2001–2003 as many as 100 so-called billion-dollar babies, including the top five, filed for protection under the Code (see Appendix 1.1).

The lineup of major corporate bankruptcies was capped by the mammoth filings of Consecro (\$56.6 billion in liabilities), WorldCom (\$46.0 billion), and Enron (\$31.2 billion—actually almost double this amount once you add in the enormous amount of off-balance liabilities, making it the largest bankruptcy in the United States). Two of these three largest bankruptcies were fraud-related (see our discussion of corporate governance issues in distressed companies in Chapter 10). Incidentally, we believe that it is more relevant to list and discuss the size of bankruptcies in terms of liabilities at the time of filing rather than assets. For example, WorldCom had about \$104 billion in book value of assets but its market value at the time of filing was probably less than one-fifth of that number. It is the claims against the bankruptcy estate, as well as the going-concern value of the assets, that are most relevant in a bankrupt company. We list the largest corporate bankruptcies in the United States over the period 1970–2005 (Q1) in Appendix 1.1—the so-called billion-dollar babies. Actually, only two of the

228 entries in this list were from the 1970–1979 decade—Penn Central (1970) and W. T. Grant (1975)—and only 21 occurred in the 1980s. The majority of the largest bankruptcies in the 1970–2004 period were from the first four years of the new millennium. Even adjusting for inflation, it is clear that size is no longer a proxy for corporate health, and there is little evidence, except in very rare circumstances, of the old adage “too big to fail.” Lately, that question has been asked about General Motors and Ford.

The unsuccessful business enterprise has been defined in numerous ways in attempts to depict the formal process confronting the firm and/or to categorize the economic problems involved. Four generic terms that are commonly found in the literature are *failure*, *insolvency*, *default*, and *bankruptcy*. Although these terms are sometimes used interchangeably, they are distinctly different in their formal usage.

*Failure*, by economic criteria, means that the realized rate of return on invested capital, with allowances for risk consideration, is significantly and continually lower than prevailing rates on similar investments. Somewhat different economic criteria have also been utilized, including insufficient revenues to cover costs and where the average return on investment is continually below the firm’s cost of capital. These economic situations make no statements about the existence or discontinuance of the entity. Normative decisions to discontinue operations are based on expected returns and the ability of the firm to cover its variable costs. It should be noted that a company may be an economic failure for many years, yet never fail to meet its current obligations because of the absence or near absence of legally enforceable debt. When the company can no longer meet the legally enforceable demands of its creditors, it is sometimes called a legal failure. The term *legal* is somewhat misleading because the condition, as just described, may exist without formal court involvement.

The term *business failure* was adopted by Dun & Bradstreet (D&B), which for many years until recently supplied relevant statistics on businesses to describe various unsatisfactory business conditions. According to D&B, business failures included “businesses that cease operation following assignment or bankruptcy; those that cease with loss to creditors after such actions or execution, foreclosure, or attachment; those that voluntarily withdraw, leaving unpaid obligations, or those that have been involved in court actions such as receivership, bankruptcy reorganization, or arrangement; and those that voluntarily compromise with creditors.”<sup>1</sup>

---

<sup>1</sup>In the prior editions of this book (Altman 1983 and 1993) we used the D&B “failure rate” definition to explore the macro and micro determinants of failure. Since D&B has discontinued its business failure coverage, we no longer will focus on this statistic.

*Insolvency* is another term depicting negative firm performance and is generally used in a more technical fashion. *Technical insolvency* exists when a firm cannot meet its current obligations, signifying a lack of liquidity. Walter (1957) discussed the measurement of technical insolvency and advanced the theory that net cash flows relative to current liabilities should be the primary criterion used to describe technical insolvency, not the traditional working capital measurement. Technical insolvency may be a temporary condition, although it often is the immediate cause of formal bankruptcy declaration.

*Insolvency in a bankruptcy sense* is more critical and usually indicates a chronic rather than temporary condition. A firm finds itself in this situation when its total liabilities exceed a fair valuation of its total assets. The real net worth of the firm is, therefore, negative. Technical insolvency is easily detectable, whereas the more serious bankruptcy insolvency condition requires a comprehensive valuation analysis, which is usually not undertaken until asset liquidation is contemplated. Finally, a relatively recent concept that has appeared in judicial courts concerns the condition known as *deepening insolvency*. This involves an eventually bankrupt company that is alleged to be kept alive unnecessarily and to the detriment of the estate, especially the creditors. This concept is explored in Chapter 13 of this book.

Another corporate condition that is inescapably associated with distress is *default*. Defaults can be technical and/or legal and always involve the relationship between the debtor firm and a creditor class. *Technical default* takes place when the debtor violates a condition of an agreement with a creditor and can be the grounds for legal action. For example, the violation of a loan covenant, such as the current ratio or debt ratio of the debtor, is the basis for a technical default. In reality, such defaults are usually renegotiated and are used to signal deteriorating firm performance. Rarely are these violations the catalyst for a more formal default or bankruptcy proceeding.

When a firm misses a scheduled loan or bond payment, usually the periodic interest obligation, a legal default is more likely, although it is not always the result in the case of a loan. Interest payments can be missed and accrue to the lender in a private transaction, such as a bank loan, without a formal default being declared. For publicly held bonds, however, when a firm misses an interest payment or principal repayment, and the problem is not cured within the grace period, usually 30 days, the security is then in default. The firm may continue to operate while it attempts to work out a *distressed restructuring* with creditors and avoid a formal bankruptcy declaration and filing. It is even possible to agree upon a restructuring with a sufficient number and amount of claimants and then legally file for bankruptcy. This is called a *prepackaged Chapter 11* (discussed in Chapter 2).

Defaults on publicly held indebtedness have become a commonplace event, especially in the two major default periods, 1989–1991 and 2001–2002. Indeed, in 1990 and again in 1991, over \$18 billion of publicly held corporate bonds defaulted each year involving about 150 different entities. And in 2002, defaults soared to an almost unbelievable level of close to \$100 billion! Table 1.1 shows the history of U.S. public bond de-

**TABLE 1.1** Historical Default Rates—Straight Bonds Only Excluding Defaulted Issues from Par Value Outstanding, 1971–2004 (\$Millions)

Year	Par Value Outstanding <sup>a</sup>	Par Value Defaults	Default Rates
2004	\$933,100	\$11,657	1.249%
2003	825,000	38,451	4.661
2002	757,000	96,858	12.795
2001	649,000	63,609	9.801
2000	597,200	30,295	5.073
1999	567,400	23,532	4.147
1998	465,500	7,464	1.603
1997	335,400	4,200	1.252
1996	271,000	3,336	1.231
1995	240,000	4,551	1.896
1994	235,000	3,418	1.454
1993	206,907	2,287	1.105
1992	163,000	5,545	3.402
1991	183,600	18,862	10.273
1990	181,000	18,354	10.140
1989	189,258	8,110	4.285
1988	148,187	3,944	2.662
1987	129,557	7,486	5.778
1986	90,243	3,156	3.497
1985	58,088	992	1.708
1984	40,939	344	0.840
1983	27,492	301	1.095
1982	18,109	577	3.186
1981	17,115	27	0.158
1980	14,935	224	1.500
1979	10,356	20	0.193
1978	8,946	119	1.330
1977	8,157	381	4.671
1976	7,735	30	0.388
1975	7,471	204	2.731
1974	10,894	123	1.129
1973	7,824	49	0.626
1972	6,928	193	2.786
1971	6,602	82	1.242

**TABLE 1.1** (Continued)

			Standard Deviation
Arithmetic Average Default Rate	1971 to 2004	3.232%	3.134%
	1978 to 2004	3.567	3.361
	1985 to 2004	4.401	3.501
Weighted Average Default Rate <sup>b</sup>	1971 to 2004	4.836%	
	1978 to 2004	4.858	
	1985 to 2004	4.929	
Median Annual Default Rate	1971 to 2004	1.802%	

<sup>a</sup>As of midyear.

<sup>b</sup>Weighted by par value of amount outstanding for each year.

Source: Authors' compilations.

faults from 1971 to 2004, including the dollar amounts and the amounts as a percentage of total high yield bonds outstanding—the so-called junk bond default rate. Default rates are also calculated on leveraged loans, which are the private debt market's equivalent to speculative grade bond defaults (see Chapter 7 of this book).

Finally, we come to *bankruptcy* itself. One type of bankruptcy was described earlier and refers to the net worth position of an enterprise. A second, more observable type is a firm's formal declaration of bankruptcy in a federal district court, accompanied by a petition either to liquidate its assets (filing Chapter 7) or attempt a recovery program (filing Chapter 11). The latter procedure is legally referred to as a *bankruptcy reorganization*. The judicial reorganization is a formal procedure that is usually the last measure in a series of attempted remedies. We will study the bankruptcy process in depth and the evolution of bankruptcy laws in the United States in the next chapter.

## **BANKRUPTCY AND REORGANIZATION THEORY**

In an economic system, the continuous entrance and exit of productive entities are natural components. Since there are costs to society inherent in the failure of these entities, laws and procedures have been established (1) to protect the contractual rights of interested parties, (2) to provide for the orderly liquidation of unproductive assets, and (3) when deemed desirable, to provide for a moratorium on certain claims in order to give the debtor time to become rehabilitated and to emerge from the process as a

continuing entity. Both liquidation and reorganization are available courses of action in most countries of the world and are based on the following premise: If an entity's intrinsic or economic value is greater than its current liquidation value, then from both a public policy and the entity ownership viewpoints, the firm should be permitted to attempt to reorganize and continue. If, however, the firm's assets are "worth more dead than alive"—that is, if liquidation value exceeds the economic going-concern value—liquidation is the preferable alternative.

The theory of reorganization in bankruptcy is basically sound and has potential economic and social benefits. The process is designed to enable the financially troubled firm to continue in existence and maintain whatever goodwill it still possesses, rather than to liquidate its assets for the benefit of its creditors. Justification of this attempt is found in the belief that continued existence will result in a healthy going concern worth more than the value of its assets sold in the marketplace. Since this rehabilitation process often requires several years, the time value of money should be considered explicitly through a discounted cash flow procedure. If, in fact, economically productive assets continue to contribute to society's supply of goods and services above and beyond their opportunity costs, the process of reorganization has been of benefit, to say nothing of the continued employment of the firm's employees, revenues for its suppliers, and taxes paid on profits. These benefits should be weighed against the costs of bankruptcy to the firm and to society. We will explore further those costs in Chapters 4 and 6.

The primary groups of interested parties are the firm's creditors and owners. The experience of these parties is of paramount importance in the evaluation of the bankruptcy reorganization process, although the laws governing reorganization reflect the legislators' concern for overall societal welfare. The primary immediate responsibility of the reorganization process is to relieve the burden of the debtor's liabilities and restructure the firm's assets and capital structure so that financial and operating problems will not recur in the foreseeable future.

## **BANKRUPTCY FILINGS**

The two broad categories of bankruptcy filings are business and consumer filings. Although the vast majority are consumer bankruptcies, with close to 98 percent of the total filings in recent years (e.g., 97.9 percent in 2004), this book deals almost exclusively with large business filings, primarily Chapter 11. Table 1.2a and b and Figure 1.1 list the bankruptcy filings for business and nonbusiness entities from 1980 to 2004. Our focus will be on the larger firm Chapter 11 proceedings. Note that while the absolute num-

**TABLE 1.2a** Bankruptcy Filings by Type, 1980–2004

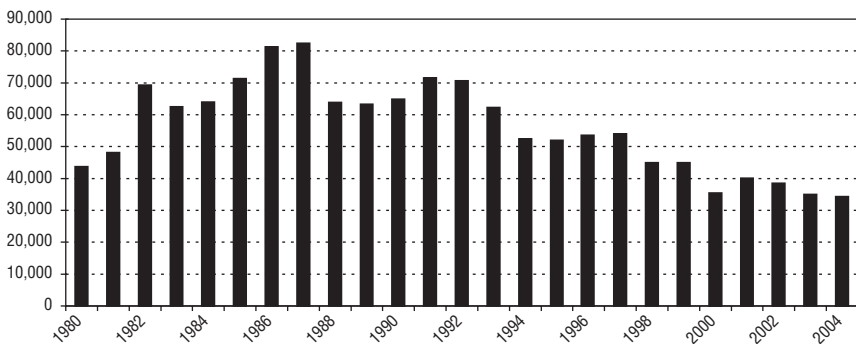
Year	Business	Nonbusiness	Total	Nonbusiness Percent of Total
2004	34,317	1,563,145	1,597,462	97.85%
2003	35,037	1,625,208	1,660,245	97.89
2002	38,540	1,539,111	1,577,651	97.56
2001	40,099	1,452,030	1,492,129	97.31
2000	35,472	1,217,972	1,253,444	97.17
1995	51,959	874,642	926,601	94.39
1990	64,853	718,107	782,960	91.72
1985	71,277	341,233	412,510	82.72
1980	43,694	287,570	331,264	86.81

Source: Bankruptcydata.com, www.abiworld.org/stats.

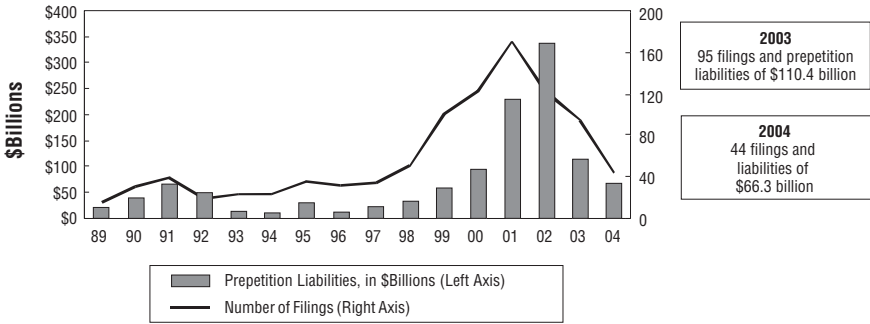
**TABLE 1.2b** Bankruptcy Filings by Bankruptcy Chapter, 2000–2004

Year	Chapter 7	Chapter 11	Chapter 12	Chapter 13
2004	1,137,958	10,132	108	449,129
2003	1,176,905	9,404	712	473,137
2002	1,109,923	11,270	485	455,877
2001	1,054,975	11,424	383	425,292
2000	859,220	9,884	407	383,894

Source: Bankruptcydata.com, www.abiworld.org/stats.

**FIGURE 1.1** Business Bankruptcy Filings, 1980–2004

Source: Bankruptcydata.com.



**FIGURE 1.2** Filings for Chapter 11: Number of Filings and Prepetition Liabilities of Public Companies, 1989–2004

Note: Minimum \$100 million in liabilities.

Source: New York University Salomon Center Bankruptcy Filings Database.

bers of business filings have receded to between 35,000 and 40,000 per year in 2000–2004, the size in terms of total liabilities at the time of filing rose to record levels, especially in 2002 when more than \$330 billion of liabilities were impacted. Certainly, the massive fraud-related bankruptcies had an important influence on the 2001–2002 numbers, but it is also fair to say that no longer does the term *bankruptcy* have the same ultranegative connotation that it once did for larger companies.

Some observations are worth mentioning. First, the incredible increase in nonbusiness (consumer) bankruptcies is apparent, reflecting the huge increase in personal indebtedness in the United States. These personal bankruptcies have increased almost fivefold over the past 25 years. With the tougher conditions for consumers under the Bankruptcy Abuse Prevention and Consumer Protection Act of 2005 (see Chapter 2), most observers are expecting a significant decrease after the new Act goes into effect on October 17, 2005. Second, the number of business filings has actually decreased since the peak period of 1991–1992 (see Figure 1.1). Third, despite the decrease in the number of filings since the early 1990s, total liabilities of the larger business bankruptcies have swollen to record levels in the 2000–2004 period, especially in 2001 and 2002 (see Figure 1.2).<sup>2</sup> These trends have fed the distressed debt investment sector and have given unprecedented importance to this new alternative asset class (see our discussion in Chapters 8 and 9).

<sup>2</sup>Figure 1.2 shows the time series of total liabilities of Chapter 11 bankruptcies from 1989 to 2004. These statistics are restricted to bankruptcies with a minimum of \$100 million in liabilities.

## **THE BANKRUPTCY INDUSTRY PLAYERS**

---

The fact that corporate bankruptcy in the United States is a major industry can be documented by the size and scope of activities that are associated with bankruptcy and distress. While the sheer volume of corporate bankruptcy filings peaked in the early 1990s, bankruptcies now (2005) attract a record number of practitioners and researchers. Perhaps the main reason is the size of the entities in recent years that have found it necessary to file for bankruptcy. As noted earlier, firms with liabilities and assets of at least \$1 billion are now fairly commonplace. And, just as important to strategists and researchers, is the availability of data on distressed firms from many sources. The major players in the bankruptcy and related distressed firm industry are:

- Bankrupt and failed firms—the debtors.
- Bankruptcy legal system (judges, trustees, etc.).
- Bankruptcy law specialists.
- Bankruptcy-insolvency accountants and tax specialists.
- Bankrupt firm creditors and committees.
- Distressed firm securities traders and analysts.
- Distressed firm turnaround specialists.
- Financial restructuring advisers.
- Public relations firms specializing in troubled firms.
- Bankruptcy and workout publications.

Most of these bankruptcy and distressed firm players are discussed in Chapter 13 of this book.

## **THE DEBTORS**

---

As we discussed in prior versions of this book, during the 1970s, about 29,000 to 35,000 business entities filed for protection to either liquidate or reorganize under the bankruptcy laws of the United States each year. As shown earlier in Table 1.2a and b and Figures 1.1 and 1.2, under the Bankruptcy Code that went into effect in October 1979 and was recently amended in 2005, the number of business bankruptcy filings increased to nearly 44,000 in 1980, were well over 60,000 per year from 1982 to 1993, then receded to between 35,000 and 55,000 from 1993 to 2004.

Although the amendments to the Bankruptcy Code in 2005, the Bankruptcy Abuse Prevention and Consumer Protection Act of 2005 (BAPCPA), dramatically changed the provisions dealing with individuals, we do not focus on consumer bankruptcies in this book. The new Act in 2005 also did change some important corporate provisions, which we review in the next chapter.

**CHAPTER 22 DEBTORS AND BANKRUPTCY SUCCESS**

The bankruptcy reorganization process is, unfortunately, not always successful even if the firm emerges as a continuing entity. It is certainly possible for the emerged firm to fail again and file a second time (or even a third time and so on) for protection under the code. We first coined the term *Chapter 22* (Altman 1983) to illustrate those companies that have filed twice. These Chapter 22s were saddled with too much debt and/or the business outlook was overly optimistic at the time of emergence the first time. We will explore the postbankruptcy performance of firms in Chapter 3 of this volume in much greater depth. Table 1.3 lists the esti-

**TABLE 1.3** Chapter 22s and 33s in the United States, 1984–2004

Year	Number of Chapter 22s	Number of Chapter 33s
1984	2	0
1985	2	0
1986	4	0
1987	1	0
1988	5	0
1989	4	0
1990	10	0
1991	9	0
1992	6	0
1993	8	0
1994	5	0
1995	9	0
1996	12	2
1997	5	0
1998	2	1
1999	10	0
2000	12	1
2001	17	2
2002	11	0
2003	17	1
2004	6	0
Total:	157	7

*Source:* E. Hotchkiss, Boston College, and the *Bankruptcy Almanac*, annually, Boston: New Generation Research.

mated number of Chapter 22s and 33s each year since 1984. As one can observe, the totals are nontrivial and indicate some problems in our distressed restructuring process. We argue later in Chapter 13 for some further tests to increase the probability of a firm's successful emergence from Chapter 11.

## **REASONS FOR CORPORATE FAILURES**

---

Without question, the most pervasive reason for a firm's distress and possible failure is some type of managerial incompetence. In its earlier annual publication of *The Failure Record* (no longer published), D&B itemized the many reasons for failure, and those related to management invariably totaled about 90 percent. Of course, most firms fail for multiple reasons, but management inadequacies are usually at the core of the problems. The ultimate cause of failure is usually simply running out of cash, but there are a variety of means-related reasons that contribute to the high number of bankruptcies and other distressed conditions in which firms find themselves.

These reasons include:

- Chronically sick industries (e.g., agriculture, textiles, department stores).
- Deregulation of key industries (i.e., airlines, financial services, health care, energy).
- High real interest rates in certain periods.
- International competition.
- Overcapacity within an industry.
- Increased leveraging of corporate America.
- Relatively high new business formation rates in certain periods.

Several of these reasons are obvious (e.g., high interest rates, overleveraging, and competition).

Deregulation removes the protective cover of a regulated industry and fosters larger numbers of entering and exiting firms. Competition is far greater in a deregulated environment, such as the airline industry. Hence, airline failures multiplied in the 1980s following deregulation at the end of the 1970s and have continued virtually unabated since. New business formation is usually based on optimism about the future. But new businesses fail with far greater frequency than do more seasoned entities, and the failure rate can be expected to increase in the years immediately following a surge in new business activity. The aggregate new business formation determinant of business failures, as well as other macroeconomic factors, was

modeled in an earlier edition of this book (Altman 1983) in a distributed-lag econometric framework.

## **THE JUDICIAL SYSTEM**

---

The legal structure whereby businesses of all sizes and in most economic sectors settle their financial difficulties and in many cases attempt to reorganize is our nation's federal bankruptcy courts. The intricate and sometimes complex evolution of the bankruptcy laws and the courts that administer them is discussed in detail in Chapter 2. The bankruptcy laws are designed either to rehabilitate a distressed debtor or to liquidate its assets for distribution to claimants.

At the end of 2004, there were about 360 bankruptcy judge positions nationwide authorized to guide the debtors and their various creditors through the bankruptcy process. These are federal judges who serve in 90 judicial districts encompassing the 50 states, Puerto Rico, and the District of Columbia. No district includes more than one state, although several districts can be found in the same state. Bankruptcy statistics, gathered by the Administrative Office of the U.S. Courts, Bankruptcy Division, in Washington, D.C., are assembled by district and then aggregated. Bankruptcy judges are assisted by U.S. trustees who play a major role in the scheduling of hearings and record keeping of the huge flow of cases in the system. Trustees are appointed by the U.S. attorney general's office. This trusteeship function should not be confused with either the old bankruptcy trustees under Chapter X of the previous bankruptcy law (1938), whereby individuals were appointed by bankruptcy judges to both manage the bankrupt debtor and propose a plan of reorganizing, or the new (2005) law's stipulation that a Chapter 11 trustee may be appointed by the court if incompetence, gross mismanagement, fraud, or dishonesty by current management is found (not just suspected).

Finally, the nation's large core of bankruptcy lawyers make up an important constituency in the bankruptcy process. These lawyer-consultants represent the many stakeholders in the process, including the debtor, creditors, equity holders, employees, and even tax authorities. An educated guess as to the number of practicing bankruptcy lawyers in recent years (e.g., 2002–2005) is at least 5,000, especially during periods when the number of large firm failures is at a peak. Martinsdale.com lists 4,991 bankruptcy lawyers in 2005 (see [www.martinsdale.com](http://www.martinsdale.com)). Some of the larger firms with specialization in the bankruptcy area are Weil Gotshal, Stroock, Stroock and Lavan; Kirkland & Ellis; Skadden, Arps, Slate, Meagher & Flom; Davis Polk & Wardell; and Wilkie-Farr, among others.

We now turn to the nation's bankruptcy laws themselves and how they have evolved over the years.

**APPENDIX 1.1** Bankrupt Companies—\$1 Billion in Liabilities or More, 1970–2005 (Q1)

Company	Liabilities (\$MM)	Date
1 Consec Inc.	\$56,639.30	Dec-02
2 WorldCom Inc.	45,984.00	Jul-02
3 Enron Corp.	31,237.00	Dec-01
4 Pacific Gas & Electric Co.	25,717.00	Apr-01
5 UAL Corporation	22,164.00	Dec-02
6 Texaco (incl. subsidiaries)	21,603.00	Apr-87
7 Consec Finance Corp.	20,278.50	Dec-02
8 Olympia & York (I)	19,800.00	May-92
9 Adelphia Communications Corp.	17,349.10	Jun-02
10 Mirant Corp.	16,460.00	Jul-03
11 Global Crossing, Ltd.	14,639.00	Jan-02
12 Executive Life Insurance	14,577.00	Apr-91
13 NTL, Inc.	14,134.00	May-02
14 Mutual Benefit Life	13,500.00	Jul-91
15 Reliance Group Holdings, Inc.	12,877.47	Jun-01
16 Finova Group, Inc.	11,822.21	Mar-01
17 Swissair	11,704.50	Oct-01
18 NRG Energy, Inc.	11,579.89	May-03
19 US Airways Group (I)	10,640.00	Aug-02
20 Kmart Corp.	10,263.00	Jan-02
21 United Pan-Europe Communications Nv	10,086.40	Dec-02
22 Campeau (Allied & Federated)	9,947.00	Jan-90
23 First Capital Holdings	9,291.00	May-91
24 Home Holdings, Inc.	9,132.00	Jan-98
25 Baldwin United	9,000.00	Sep-83
26 PG&E National Energy Group, Inc.	8,908.00	Jul-03
27 USAir Inc. (II)	8,383.00	Sep-04
28 Federal Mogul Corp.	8,232.70	Oct-01
29 Owens Corning	7,375.00	Oct-00
30 Williams Communications Group, Inc.	7,153.80	Apr-02
31 Comdisco, Inc.	6,742.00	Jul-01
32 ANC Rental Corp.	6,252.40	Nov-01
33 Continental Airlines (II)	6,200.00	Dec-90
34 Air Canada	6,182.00	Apr-03
35 Lomas Financial (I)	6,127.00	Sep-89
36 XO Communications, Inc.	5,851.06	Jun-02
37 Penncorp Financial Group, Inc.	5,595.46	Jan-00
38 Macy's	5,320.00	Jan-92
39 Montgomery Ward (II)	5,067.00	Dec-00
40 Trenwick Group Ltd.	5,017.19	Aug-03
41 Olympia & York Cos. (II)	5,000.00	Oct-95

*(Continued)*

**APPENDIX 1.1** (Continued)

Company	Liabilities (\$MM)	Date
42 Columbia Gas	\$4,998.00	Jul-91
43 LTV (incl. LTV Int'l NV (I))	4,700.00	Jul-86
44 LTV Corp. (II)	4,669.00	Dec-00
45 PSInet, Inc.	4,599.30	May-01
46 Exodus Communications, Inc.	4,446.00	Sep-01
47 Bethlehem Steel Corp.	4,420.00	Oct-01
48 McLeodUSA, Inc.	4,419.20	Jan-02
49 Winstar Communications, Inc.	4,379.20	Apr-01
50 Laidlaw, Inc.	4,377.10	Jun-01
51 Budget Group	4,333.61	Aug-02
52 Montgomery Ward & Co. (I)	4,271.00	Jul-97
53 Maxwell Communication	4,100.00	Dec-91
54 Integrated Health Services, Inc.	4,061.16	Feb-00
55 Metromedia Fiber Network, Inc.	4,007.00	May-02
56 Nextwave Personal Communications, Inc.	3,773.00	Jun-98
57 Loewen Group, Inc.	3,768.47	Jun-99
58 Touch America Holdings, Inc.	3,765.77	Jun-03
59 RCN Corp.	3,668.24	May-04
60 Solutia, Inc.	3,591.00	Dec-03
61 Armstrong World Industries, Inc.	3,485.30	Dec-00
62 TWA (I)	3,470.00	Jan-92
63 Dow Corning	3,450.00	May-95
64 Southland	3,380.00	Oct-90
65 Globalstar, LP	3,328.40	Feb-02
66 Penn Central Transportation	3,300.00	Jun-70
67 Amerco	3,274.35	Jun-03
68 Iridium LLC/Capital Corp.	3,261.73	Aug-99
69 Sunbeam Corp.	3,201.51	Feb-01
70 Eastern Airlines	3,196.00	Mar-89
71 Fleming	3,156.00	Apr-03
72 Safety-Kleen Corp.	3,141.32	Jun-00
73 Kaiser Aluminum Corp.	3,129.40	Feb-02
74 ICH Corp. (Southwestern Life)	3,111.00	Oct-95
75 Genuity Inc.	3,102.00	Nov-02
76 USG Corp. (I)	3,100.00	Mar-93
77 Warnaco Group, Inc.	3,078.35	Jun-01
78 Loral Space & Communications Ltd.	3,047.03	Jul-03
79 Flag Telecom Holdings, Ltd.	3,046.74	Apr-02
80 Covanta Energy Corp.	3,031.40	Apr-02
81 Nextel International Inc.	3,000.00	May-02
82 Pan Am World Airlines	3,000.00	Jan-91
83 Drexel Burnham Lambert	3,000.00	Feb-90

**APPENDIX 1.1** (Continued)

Company	Liabilities (\$MM)	Date
84 Washington Group International, Inc.	\$2,914.50	May-01
85 360Networks, Inc.	2,806.00	Jun-01
86 Petroleum Geo-Services ASA	2,777.90	Jul-03
87 Global Telesystems, Inc.	2,760.20	Nov-01
88 Northwestern Corp.	2,748.41	Sep-03
89 AEI Resources, Inc.	2,746.20	Feb-02
90 CHS Electronics, Inc.	2,723.63	Apr-00
91 USG Corp. (II)	2,700.00	Jun-01
92 Viatel, Inc.	2,683.00	May-01
93 TWA (III)	2,659.00	Jun-95
94 Hayes Lemmerz International, Inc.	2,655.70	Dec-01
95 Mariner Post-Acute Network, Inc.	2,639.64	Jan-00
96 Flagstar Companies	2,639.00	Apr-97
97 Tower Automotive Inc.	2,621.00	Feb-05
98 W. R. Grace & Co.	2,574.89	Apr-01
99 Exide Technologies, Inc.	2,524.20	Apr-02
100 Spectrasite Holdings, Inc.	2,482.20	Nov-02
101 Leap Wireless International, Inc	2,469.00	Apr-03
102 Trans World Airlines, Inc. (II)	2,384.47	Jan-01
103 Farmland Industries	2,351.50	May-02
104 ICG Communications Corp.	2,345.16	Nov-00
105 Westpoint Acquisition	2,340.00	Jun-92
106 Archibald Candy Corp.	2,312.14	Jan-04
107 Regal Cinemas	2,293.98	Oct-01
108 Harnischfeger Industries, Inc.	2,276.06	Jun-99
109 Genesis Health Ventures	2,254.00	Jun-00
110 Century Communications Corp.	2,229.60	Jun-02
111 Interco	2,213.00	May-90
112 Paging Network, Inc.	2,212.39	Jul-00
113 Charter Medical Corporation	2,150.00	Jun-92
114 West Point Stevens, Inc.	2,147.20	Jun-03
115 Sun Healthcare Group, Inc.	2,142.40	Oct-99
116 National Steel Corp.	2,118.90	Mar-02
117 E-II Holdings	2,050.00	Jul-92
118 Arch Wireless, Inc.	2,045.40	Dec-01
119 Transamerica Energy Corp.	2,041.00	Apr-99
120 Grand Union (and G.U. Capital) (I)	2,039.00	Jan-95
121 Stelco, Inc. (Canada)	2,027.00	Jan-04
122 Trump Hotels & Casino Resorts, Inc.	2,026.00	Nov-04
123 Firstplus Financial Group, Inc.	2,017.06	Mar-99
124 Pathmark Stores, Inc.	2,005.42	Jul-00

(Continued)

**APPENDIX 1.1** (Continued)

Company	Liabilities (\$MM)	Date
125 Laventhol & Horwath	\$2,000.00	Nov-90
126 Wickes	2,000.00	Apr-82
127 Highlands Insurance Group, Inc.	1,978.70	Nov-02
128 Canadian Airlines Corp.	1,931.80	Mar-00
129 Pegasus Communications Corp.	1,929.42	Jun-04
130 NVR	1,911.00	Apr-92
131 Semi-Tech Corporation	1,888.60	Sep-99
132 Ameriserve Foods, Inc.	1,886.24	Jan-00
133 Asia Global Crossing Ltd.	1,868.80	Nov-02
134 Chiquita Brands International, Inc.	1,823.00	Nov-01
135 Dade Behring Holdings Inc.	1,808.60	Aug-02
136 Cardinal	1,800.00	Aug-92
137 Global Marine	1,800.00	Jan-86
138 JWP	1,780.00	Dec-93
139 Fruit of the Loom, Inc.	1,740.90	Dec-99
140 Encompass Services Corporation	1,725.30	Nov-02
141 Penn Traffic Company	1,723.40	Mar-99
142 Metropolitan Mortgage & Securities Co., Inc.	1,713.84	Feb-04
143 Memorex Telex, N.V. (I)	1,700.00	Jan-92
144 Public Service, New Hampshire	1,700.00	Jan-88
145 Itel	1,700.00	Jan-81
146 Ames Department Stores (II)	1,687.57	Aug-01
147 Spiegel Inc.	1,675.00	Mar-03
148 Continental Information Systems	1,669.00	Jan-89
149 Adelphia Business Solutions, Inc.	1,654.30	Mar-02
150 Covad Communications Group, Inc.	1,652.53	Aug-01
151 Breed Technologies, Inc.	1,649.95	Sep-99
152 Teligent, Inc.	1,649.40	May-01
153 Polaroid	1,634.40	Oct-01
154 Service Merchandise	1,614.96	Mar-99
155 Integrated Resources	1,600.00	Feb-90
156 Zale Corporation	1,594.00	Jan-92
157 Republic Technologies International Holdings, LLC	1,578.75	Apr-01
158 Philip Services Corp.	1,540.81	Jun-99
159 Wilshire Financial Services Group, Inc.	1,529.39	Mar-99
160 Magellan Health Services	1,506.00	Mar-03
161 Loews Cineplex Entertainment Corp.	1,505.65	Feb-01
162 Revco	1,500.00	Jul-88
163 Placid Oil	1,488.00	Apr-85
164 At Home Corp.	1,468.20	Sep-01
165 Atlas Air Worldwide Holdings, Inc.	1,467.83	Jan-04
166 Acterna Corporation	1,451.30	May-03

**APPENDIX 1.1** (Continued)

Company	Liabilities (\$MM)	Date
167 Ames Department Stores (I)	\$1,440.00	Apr-90
168 DVI Inc.	1,438.99	Aug-03
169 Criimi Mae, Inc.	1,428.30	Oct-98
170 Vencor, Inc.	1,404.65	Sep-99
171 Pillowtex Corp.	1,402.10	Nov-00
172 Allegiance Telecom. Inc.	1,397.49	May-03
173 Southmark	1,395.00	Jul-89
174 Carter Hawley Hale Stores	1,385.00	Feb-91
175 Best Products	1,367.00	Jan-91
176 Memorex Telex, N.V. (II)	1,363.00	Feb-94
177 Weirton Steel Corp.	1,361.00	May-03
178 US Office Products Co.	1,352.00	Mar-01
179 Venture Holdings Co. LLC	1,345.82	Apr-03
180 National Gypsum (Aancor)	1,345.00	Oct-90
181 El Paso Electric	1,344.00	Jan-92
182 Hechinger Co.	1,338.50	Jun-99
183 Zonic Corp.	1,327.03	Jun-01
184 GST Telecommunications, Inc.	1,326.30	May-00
185 Interstate Bakeries	1,322.00	Sep-04
186 Mobilemedia Communications	1,322.00	Jan-97
187 Wang	1,320.00	Aug-92
188 Royal Mortgage Partners, LP	1,312.33	Aug-00
189 Unicapital Corp.	1,310.60	Dec-00
190 Gentek	1,307.03	Oct-02
191 Alterra Healthcare Corporation	1,300.00	Jan-03
192 Rockefeller Ctr. Props.	1,300.00	May-95
193 America West	1,280.00	Jun-91
194 McLean Industries	1,270.00	Nov-86
195 AMF Bowling Worldwide, Inc.	1,265.61	Jul-01
196 Sterling Chemicals Holdings, Inc.	1,228.92	Jul-01
197 Impsat Fiber Networks, Inc.	1,216.00	Jun-02
198 Grand Union Co. (II)	1,214.00	Jun-98
199 Aurora Foods, Inc.	1,211.00	Dec-03
200 Hillsborough Holdings (Jim Walter)	1,204.00	Dec-89
201 Bell National	1,203.00	Aug-85
202 Boston Chicken, Inc.	1,202.00	Oct-98
203 Alphastar Insurance Group Ltd.	1,201.66	Dec-03
204 Hills Dept. Stores	1,200.00	Jan-91
205 LJ Hooker	1,200.00	Aug-89
206 GHR Energy	1,200.00	Jan-83
207 Nationsrent, Inc.	1,197.40	Dec-01

(Continued)

**APPENDIX 1.1** (Continued)

Company	Liabilities (\$MM)	Date
208 ICO Global Communications Services Corp.	\$1,184.29	Aug-99
209 Lomas Financial (Lomas Mort.) (II)	1,167.00	Oct-95
210 Wheeling-Pittsburgh Corp. (1)	1,160.00	Nov-00
211 Bruno's Inc.	1,121.60	Feb-98
212 Manville	1,116.00	Aug-82
213 e.spire Communications, Inc.	1,111.18	Mar-01
214 Choice One Communication	1,100.00	Oct-04
215 Circle K	1,100.00	May-90
216 Continental Airlines (I)	1,100.00	Sep-83
217 Braniff Airlines (I)	1,100.00	May-82
218 The IT Group, Inc.	1,086.55	Jan-02
219 American Business Financial Services Inc.	1,072.00	Jan-05
220 Envirodyne Industries	1,070.00	Jan-93
221 EOTT Energy Partners	1,062.40	Oct-02
222 Payless Cashways, Inc.	1,050.00	Jul-97
223 Levitz Furniture, Inc.	1,029.54	Sep-97
224 Wheeling-Pittsburgh (1)	1,010.60	Apr-85
225 WKI Holding Company, Inc.	1,002.35	May-02
226 Fox Meyer	1,000.00	Aug-96
227 Thermadyne Industries	1,000.00	Dec-93
228 WT Grant	1,000.00	Oct-75

Source: E. Altman and the New York University Salomon Center Bankruptcy Filings Database.