Moody's Investors Service
Global Credit Research

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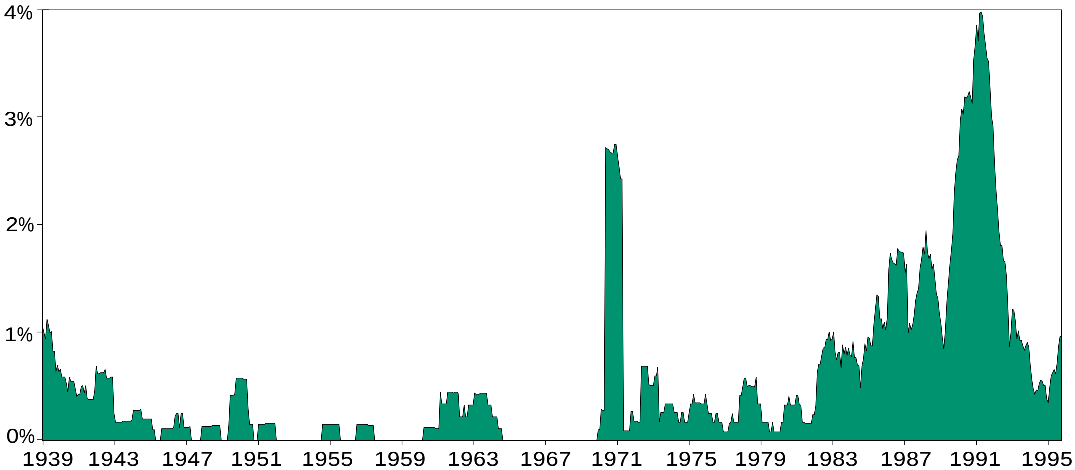
Corporate Bond Defaults and Default Rates 1938-1995

Summary

Moody's 1996 corporate bond default study draws upon a newly expanded default and rating history database that covers the 58-year period from 1938 through 1995. The new default database includes 833 defaults involving over $106 billion of public, long-term corporate debt. Various aspects of these defaults, including rating histories, default rates by Moody's rating, recovery estimates, and loss rates are examined in this report. Highlights of the study are:

- Worldwide, 46 issuers defaulted on $8.2 billion of long-term, publicly held corporate debt in 1995. This marks a sharp increase from 1994, in which 24 issuers defaulted on $2.3 billion, and 1993 in which 39 issuers defaulted on $3.4 billion.
- Nineteen-ninety five generated a 3.2% one-year speculative-grade default rate, nearly double that of 1994's 1.8%, which had marked a 13-year low.
- The hardest hit in 1995 were the retail and the casino/lodging/entertainment industries, which added seven companies each to the year's list of defaulters. The total of $3.4 billion in defaulted debt for the two industries in 1995 surpasses the total dollar amount of defaulted debt for all industries in 1994.
- Historical average credit losses over a one-year time horizon for the Aaa, Aa, A, Baa, Ba, and B rating categories have been 0, 2, 0, 7, 77, and 414 basis points respectively.
- Of the 560 issuers that defaulted on rated debt since 1938, only three carried investment-grade ratings at the time of default.
- The estimated recovery rate for bonds that default is 43% of par.

Trailing 12-Month Corporate Bond Default Rate, 1938-1995



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Introduction

Moody's corporate bond default research began in 1987 as part of an effort to ensure the uniformity of our long-term debt ratings across asset classes. At that time, structured finance transactions were relatively new instruments and the demand for credit ratings on them was high. In order to ensure that the ratings assigned to such structured instruments were consistent with our ratings on the more familiar long-term corporate bonds, we initiated the first corporate bond default study to quantify the risks historically associated with Moody's ratings on long-term corporate debt.

Since then, the bond default research has grown to serve a much wider spectrum of interests. Its estimates of the risk of default and loss in the event of default provide investors with objective measures of the credit risks they face in fixed income markets. This research can be used in the pricing of debt, the calculation of reserve provisions, and in the management of corporate bond portfolios. It also helps investors to understand more fully the meaning of Moody's ratings and to evaluate our track record. Moody's ratings are ultimately opinions based upon both quantitative and qualitative analyses. The most direct way to determine whether these opinions have consistently differentiated securities on the basis of credit risk is to examine the historical record.

An important characteristic of Moody's ratings is that they incorporate both the likelihood of default and the severity of loss in the event of default. This characterization governs the overall structure of the report. After the first two sections, which detail recent default activity and major historical defaults and rating histories, the next three sections examine the default, recovery and credit loss experience of long-term debt markets worldwide. The "Corporate Default Rates" section addresses the notion of the likelihood of default. The section immediately following, "Severity of Default Loss," concerns itself with the severity of loss in the event of default. Finally, the last section, "Loss Rates," combines these two notions to estimate the loss that has historically been associated with Moody's rating categories. That the estimated losses increase with a decline in Moody's opinion of the issuer's credit quality is an affirmation that Moody's ratings have, on average, achieved their goal.

1995 Default Overview

Nineteen-ninety-five heralded the first year-over-year increase in the volume of defaults since 1990. Last year, 46 issuers worldwide defaulted on over $8.2 billion of long-term, publicly held corporate debt. This marks a sharp increase from the previous year's totals of 24 defaulters and $2.3 billion dollars. Corporate bond investors have not seen this volume of nonperforming public debt since 1992, when 50 issuers defaulted on $8.3 billion. Because the number of issuers in the speculative-grade bond market has risen from 814 as of the beginning of 1994 to 940 as of the start of 1995, larger volumes of distressed and defaulted debt are not surprising. However, even after controlling for the increase in the size of the market, the data clearly show an increase in the risk of default. The speculative-grade default rate—the fraction of issuers carrying a speculative-grade senior long-term debt rating that defaulted over the course of the year—registered 3.2% in 1995. This is a significant increase over 1994's 1.8%, a 13-year low.

Moody's trailing twelve-month, issuer-based speculative-grade default rate indicates that default risk, which had slowly declined since the meltdown of the junk bond market in the early '90s, began to increase again in the second quarter of 1995. Although December 1995's reading of 3.2% is still a long way from the high of 12.0% set in July 1991, it is nearly triple the 1.2% at which the rate bottomed out in March 1995 (See Chart 2). Moody's trailing-twelve-month, dollar-based default rate has followed the same pattern. The dollar-based figure also trended lower from a July 1991 high of 13.7% through May 1994, when it registered 0.6%. Since then, it has increased more than fivefold to 3.6%.

Last year's largest bond default was by supermarket operator Grand Union Company, which had incurred excessive debt through two leveraged buy-outs (LBOs), one in 1989 and the second in 1992. Including Grand Union Capital Corp.'s default on $239 million of long-term public debt, Grand Union added over $1.3 billion to 1995's total.

A significant portion of last year's defaulted debt was issued during the refinancing frenzy of 1992 and 1993. Falling interest rates, moderate economic growth, a benign default environment, and pent-up demand stemming from the near-zero speculative-grade bond issuance of 1990 and 1991 generated the market conditions that enabled 1993's all-time high speculative-grade bond issuance of $62 billion. Many of the weaker credits admitted to the market during 1992 and 1993 began to default last year. Of last year's total dollar amount of defaulted debt, over 60% was initially sold in during that two-year period.

In the rush to capture yield, investors allowed many fundamentally weaker credits to issue public debt. New issuance of B1 or lower rated securities outpaced that of Ba3 or higher rated speculative-grade securities in each of the last four years. This risky pattern of new issuance swamped relatively positive trends in rating changes and refinancings. As a result, the percentage of total speculative-grade outstandings carrying the lower credit quality ratings B1, B2, B3, Caa, Ca and C has trended upward from 45% in 1992 to 53% in 1995.

Another factor leading to last year's increase in default risk was the ineffectiveness of many Chapter 11 bankruptcy resolutions. While only 21 companies had defaulted twice on public debt from 1970 through the end of 1994, 1995 added 10 companies to the two-time defaulter list. Of these 10 defaults, 7 of the initial defaults occurred within the last 6 years. The second- and third-largest defaults were passenger airline operator Trans World Airlines, Inc. and video entertainment provider Spectravision, Inc. on $562 million and $472 million, respectively. Both of these defaults constituted the issuers' second trips through the Chapter 11 process. TWA last filed for protection from creditors in 1991 and Spectravision did so in 1992.

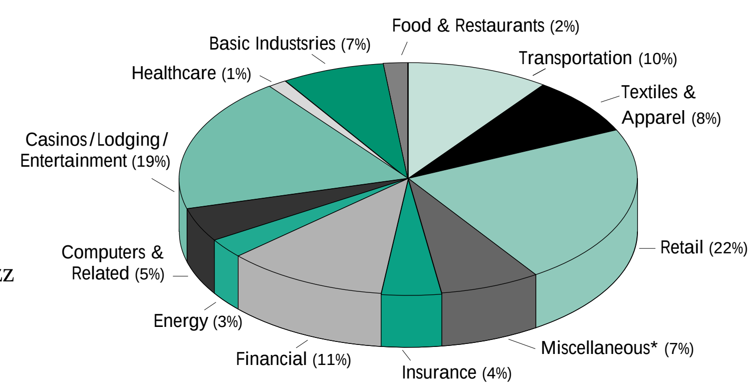
Industries Affected

The hardest hit in 1995 were the retail and the casino/lodging/entertainment industries, which added seven companies each to the year's list of defaulters. These industries accounted for $1.8 billion, or 22%, and $1.6 billion, or 19%, respectively, of 1995's $8.2 billion in defaulted debt. The total of $3.4 billion in defaulted debt for the two industries in 1995 surpasses the total dollar amount of defaulted debt for all industries in 1994.

Continuing weakness in retail is also reflected in the performance of a related industry, textile and apparel, which represented 8% of the total dollar default amount and 13% of defaulting issuers in 1995. Six textiles and apparel companies missed bond payments last year, up from one in 1994. Part of this increase in industry defaults can be attributed to the fact that as the U.S. population has aged, (the Baby Boomers are now over 35), there has been a shift in consumer demand away from clothing and shoes. At best, the decline in textile and apparel sales volume may indicate inventory realignment at the retail level, but it may also signal another round of defaults in 1996 by weakly positioned and/or highly leveraged retailers.

While retail persists as a struggling industry year over year, the gaming industry started to become jittery in 1994 when two casinos defaulted on $200 million of debt. Last year, another four companies defaulted on $705 million, with two companies, Capital Gaming International, Inc. and Harrah's Jazz Company, defaulting primarily because the New Orleans gaming market proved shallower than expected.

Chart 1
1995's Defaulted Debt by Industry



* includes consumer products, telecommunications, food and restaurants

Other Aspects

Event risk struck hard in 1995. Of particular note is Dow Corning Corporation's strategic Chapter 11 filing to avoid liabilities related to the use of the company's silicon products in breast implants. The action, which threw $160 million of long-term public debt into default, recalls Johns Manville Corporation's 1982 default. While technically solvent, Manville chose Chapter 11 in a bid to protect its assets from massive and potentially ruinous liabilities stemming from suits related to the firm's asbestos production. The Manville default required five years to resolve completely, but extended virtually no economic loss to bond investors. Dow Corning's bonds were on average trading hands at $69 per $100 face amount as of one-month after the Chapter 11 filing and $75 as of the end of the year. This is substantially higher than the average price for defaulted corporate bonds and may indicate that investors expect a default of very mild severity for this once double-A-rated company.

Two other event risk defaults from last year were those of the British investment bank Barings plc and its subsidiary, Barings B.V., and the Argentinean pulp and paper producer Alto Parana. Barings' dramatic default stemmed from excessive trading losses, while Mexico's peso devaluation led to Alto Parana's default.

Another interesting feature of last year's defaults is that the percentage of defaulting companies that had issued their debt through an LBO transaction dropped considerably to 24% from an average of 30% over the period from 1990 through 1994. This much smaller percentage of defaults involving LBO debt strengthens the notion that 1995's defaulters are largely from a new cohort of issuers that emerged subsequent to the tumultuous 1989-1991 period.

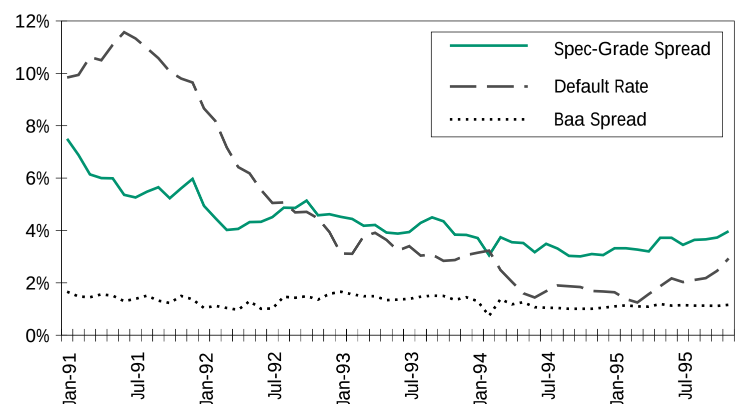
The appendix provides greater detail for each of 1995's defaults.

Market Conditions and Credit Trends

In response to the increase in default activity, yield spreads have widened, snapping a downward trend that began in 1990. The spread between Moody's speculative-grade yield index and the seven-year Treasury Note widened by over 85 basis points during the 1995. As Chart 2 indicates, 1995 was the first year since 1991 that spreads widened year-over-year for the speculative grade rating categories. Within the speculative-grade market, spreads for the lowest rated issues saw the greatest jump. Spreads for the B rating category widened 119 basis points, three times as much as the 36 basis points spread increase for Ba-rated securities. The investment-grade bond market, on the other hand, remained unperturbed by the defaults. Chart 2 illustrates that over the course of 1995, the spread between the median Baa bond yield and the seven-year note remained flat.

More than double the amount of Ba-rated securities entered the market than B ($8.3 billion Ba vs $4.1 billion B) in the first half of 1995. However, the tables turned in the second half of 1995, with $7.7 billion of Ba-rated debt and $11.0 billion of B-rated debt issued. The increase in low-rated debt issuance in the second half of the year will put upward pressure on the speculative-grade default rate in 1996. All in all, last year saw a nearly even distribution of junk issuance, with half the total debt entering at the higher credit quality range of Ba and the other half consisting of 46.9% B's and 3.6% Caa's. This contrasts sharply with 1994, when only 26% of new junk issuance was rated Ba, and 69% and 5% rated B and Caa, respectively.

Chart 2
Trailing 12-Month Spec-Grade Default rate vs. Spreads Over 7-Year Treasury



Average changes in credit quality were split between the investment-grade and speculative-grade markets. The speculative-grade bond market experienced a slight weakening of credit quality while the investment-grade bond market enjoyed a slight strengthening of credit quality. Globally, more companies were downgraded than upgraded (301 vs 266), however, more debt was upgraded than downgraded ($418 billion vs $329 billion). These figures reflect the fact that investment-grade companies issue heavier volumes of debt while smaller junk issuers issue smaller amounts.

Globally, "Rising Stars" (once speculative-grade debt that was upgraded to investment-grade) outpaced "Fallen Angels" (investment-grade debt downgraded to speculative-grade). The subsidiaries of The News Corporation Limited contributed $6.5 billion to the $19.6 billion of rising star debt. The upgrade of this Australian company was based upon stable profits, debt reduction, and their newly formed relationship with MCI, which is expected to give the company more financial flexibility.

Two U.S. electric utilities, Niagara Mohawk Power Corporation, once rated A in 1957, and Ohio

Table 1
Rating History Summary for 560 Defaulting Issuers

		Rating at Default	Calendar Years Prior to Default 1	2	3	4	5	10	15	20
Investment	Aaa	0	0	0	0	1	2	2	1	1
Grade	Aa	0	2	1	4	8	7	3	2	3
	A	1	1	9	19	18	14	16	11	9
	Baa	2	19	27	31	42	35	36	32	21
Speculative	Ba	60	120	184	165	145	132	55	33	26
Grade	B	305	309	230	170	119	84	27	15	7
	Caa /Ca/C	192	113	57	46	38	38	28	21	12

Table 2
Senior Rating Histories of Defaulting Issuers Rated Investment Grade at January 1 of Year of Default, 1/7/38 through 12/31/95

Issuer	Default Date	Rating at Default	Year 1	2	3	4	5	10	15	20
A.C.F.-Brill Motors Company	06/30/49	B	Baa	Baa	Baa	Baa	Baa			
Arlan's Department Stores Inc.	05/13/73	Ba	Baa	Baa	Baa	Baa	Baa	Baa		
B & O Railroad Co., Pitts, L. Erie & W. Va.	09/02/38	B	Baa							
Boston Terminal Company	11/01/39	B	Baa	A	Aa	Aa	Aa			
Columbia Gas System, Inc.	06/20/91	Baa1	Baa1	Baa1	Baa2	Baa2	Baa1	A	A	A
DFC Financial (Overseas) Ltd.	10/03/89	Ba1	Aa3	Aa3						
DFC Overseas Investment Ltd.	10/03/89	Ba1	Aa3	A1						
Equitable Lomas Leasing	09/01/89	B1	Baa2	Baa1	A2	A2	A2			
Green Bay & Western R.R.	02/18/38	Baa	Baa	Baa	Baa	Baa				
Johns Manville Corporation	08/26/82	A3	A	A	A	Aa	Aa			
Kaneb Services/Moran Brothers Inc.	11/01/86	Ba3	Baa3	Baa3	Ba3	Ba3	Ba			
Kaneb Services/ Moran Energy Inc.	11/01/86	Ba3	Baa3	Baa3	Ba3					
Kaneb Services/ Moran Energy Int'l	11/01/86	Ba3	Baa3	Baa3						
Lomas Financial Corporation	09/01/89	B2	Baa3	A3	A3	A3				
Pacific Railway of Missouri	07/01/38	Ba	Baa	A	A	A				
Pacific Railroad of Mo., Carondelet Branch	10/01/38	Ba	Baa							
Parkview-Gem Inc.	11/01/73	B	Baa	Baa	Baa	Baa	Baa	Ba		
Penn Central/Phil. Balt. & Wash. Railroad	06/21/70	Ba	Baa	Baa	Baa	Baa	Baa	Baa	Baa	A
Revere Copper & Brass Company	10/27/82	Ba1	Baa	Baa	Baa	Baa	Baa	Baa	Baa	
Smith International Inc.	03/07/86	Caa	Baa3	A3	A1	A	A			
Storage Technology Corp.	10/31/84	B2	Baa3	Baa3	Baa	Baa				
United Merchants & Manufacturers Inc.	07/12/77	B	Baa	Baa	Baa	Baa	Baa	Baa		

Edison Company, comprised more than half of 1995's $11.5 billion in fallen angel debt, reflecting the impact of the imminent deregulation of this industry. Niagara Mohawk was downgraded on $4.7 billion of debt after signaling its willingness to consider a restructuring under Chapter 11 should its current negotiations with regard to legally restructuring its operations into an unregulated generating company not succeed. Growing concerns about collateral value in a deregulated environment, coupled with certain technical legal questions pertaining to the interpretation of a lease in bankruptcy, prompted the downgrade of Ohio Edison Company for $1.7 billion of debt.

Corporate Bond Defaults

Definition of Default

Moody's defines default as any missed or delayed disbursement of interest and/or principal. We include as defaults distressed exchanges where (i) the issuer offered bondholders a new security or package of securities that amount to a diminished financial obligation (such as preferred or common stock, or debt with a lower coupon or par amount) and (ii) the exchange had the apparent purpose of helping the borrower avoid default.

Moody's also includes as a default a delayed payment made within the grace period provided in the indenture. Our rationale for including grace period defaults is straightforward: that a contractual payment was not made when due. Over the course of last year, two companies, Datapoint Corp. and Kloster Cruise, missed interest payments only to make good within the 30-day grace period. These delays amounted to involuntary one-month loans to the companies, a clear abuse of bondholders' legitimate expectations as to payment.

Major Defaults and Historical Ratings

This report extends Moody's default study to cover the 58-year period from 1938 through 1995. Our research uncovered more than 800 corporate bond defaults involving over 1,700 bond issues, aggregating to over $106 billion ($150 billion in constant 1995 dollars). Of these defaults, 560 issuers carried Moody's ratings. Over the 58-year period, all but three Moody's rated defaulters had actual or implied senior unsecured ratings at the speculative-grade level at the time of default. The three exceptions — Johns Manville Corporation, Columbia Gas System, and Green Bay & Western Railroad—were rated A3, Baa1, and Baa, respectively, at the time of default. Other defaulting issuers, although speculative-grade at the time of default, may have held investment-grade ratings at various times prior to default.

Table 1 traces the senior unsecured or implied senior unsecured rating history of all rated defaulting issuers from one to 20 years prior to default. For example, as of January 1st, four years before default, 145 of the 560 rated defaulters carried actual or implied Ba ratings at the senior unsecured level (145 is the entry in the row labeled "Ba" under the column labeled "4"). It reveals that the vast majority of Moody's-rated issuers that defaulted over the past 58 years held speculative-grade ratings long before default occurred. It also indicates that those issuers that did hold investment-grade ratings prior to default were typically downgraded, thereby signaling investors of the increased risk, well in advance of default.

Although only three issuers held investment-grade ratings at the time of default, Table 1 shows that 22 issuers carried investment-grade ratings on January 1 of the year they defaulted, and 37 were rated investment grade at the start of the second year before default. The company with the Aaa rating as of the fourth January prior to default was Getty Oil, a subsidiary of Texaco. The default of Texaco and its affiliates stemmed from the parent's litigation with Pennzoil over the purchase of Getty Oil. As of the fifth January prior to default, both Texaco and Getty Oil were rated Aaa. Texaco and Federated Department Stores, the latter of which had completed a leveraged buyout two years prior to default, were the two companies with Aaa ratings 10 years prior to default. The 22 defaulting issuers rated investment grade as of January 1 of the year of default are presented along with their ratings up to 20 years before default below in Table 2.

When examining Tables 1 and 2, it is important to keep in mind that Moody's ratings are not simply statements about the probability of a default, but rather are statements about protection against credit loss. Credit loss also depends on the severity of the loss incurred in the event of default. Higher ratings correspond to better investor protection against credit loss and, for a particular economic environment, to lower expected credit loss. Two issues with different chances for default may have the same rating because of differences in their respective prospects for recovery.

Table 2 lists practical examples of this distinction. While Texaco is an example of an issuer defaulting within five years of holding the Aaa rating, bondholders suffered essentially no loss, as principal, interest, and the interest on the interest was returned. In the cases of investment-grade rated defaulters Johns Manville Corporation and Columbia Gas System, Inc., investors also retrieved, albeit after substantial delays, their entire investments with interest. These examples highlight the relation between the probability of default, the severity of default, and Moody's long-term bond rating system.

Corporate Default Rates

Methodology and Data

To calculate default rates, which are estimates of the default probability component of ratings, we use the issuer as the unit of study rather than individual debt instruments or outstanding dollar amounts of debt. This is because the likelihood of default is essentially the same for all of a firm's public debt issues. Weighting our statistics by the number of bond issues or their par amount would simply bias our statistics towards the characteristics of those issuers with multiple or large issues. Our approach places equal weight on large and small issuers, under the rationale that the number of rating decisions (or in the case of an investor, credit decisions) does not rise with the size of the issuer. Also, different issuers within an affiliated group of companies are counted separately because not all subsidiaries have cross-default provisions nor are affiliated companies always rated the same.

Default rates are fractions in which the numerator represents the number of issuers that defaulted in a particular time period and the denominator represents the number of issuers that could have defaulted in that time period. In this study, the numerators are the numbers of issuers defaulting on Moody's-rated debt. The denominators are the numbers of issuers that could, potentially, have defaulted on Moody's-rated debt. Hence, if all of an issuer's ratings are withdrawn, it is subtracted from the denominator. This is a departure from the methodology employed in previous Moody's default studies, for which detailed rating withdrawal data was not available for all issuers. This new methodology has the effect of lowering the denominators used in the default rate calculations and therefore increasing default rate estimates. It is important to note that Moody's does not withdraw ratings because of a deterioration in credit quality. In such cases, the issuer's bonds are simply downgraded.

As Moody's ratings incorporate both the likelihood and the severity of default, to calculate the default probability component we must back severity considerations out of the rating. We do this by taking the rating on each company's senior unsecured debt or, if there is none, statistically implying such a rating on the basis of rated subordinated or secured debt. In most cases, this will yield an assessment of risk that is relatively unaffected by special considerations of collateral or of position within the capital structure.

The senior unsecured or implied senior unsecured rating histories are drawn from Moody's proprietary database of public, long-term debt ratings on U.S. and non-U.S. industrial companies, utilities, financial institutions, and sovereign issuers. Municipal debt issuers were excluded, as were issuers with short-term debt ratings only. In a departure from the methodologies employed in earlier Moody's default studies, structured finance transactions were also excluded from consideration in order to base our results on a more homogeneously defined asset class. This exclusion has had the effect of substantially lowering our denominators for the default rates calculated for some of the higher rating categories, especially those in the Aa and A range, since the mid-1980s, and further increasing our estimates of the default risk associated with these rating categories. Finally, corporate issuers all of whose rated debt is backed by an entity outside of its corporate family, have been excluded. The simple reason being that the rating reflects that backing and not the underlying issuer's credit quality.

Moody's compiled the default histories used in this study from a variety of sources, including our own Industrial, Railroad, and Public Utilities Manuals; our library of financial reports; press releases; press clippings; internal memoranda; and records of analyst contact with rated issuers. We also examined documents from the Securities and Exchange Commission, The Dun & Bradstreet Corp., the New York Stock Exchange, the American Stock Exchange, and the National Quotation Service.

The data used for this study include more than 7,400 issuers that met these criteria over the past 58 years. As of January 1, 1995, the database used in this study contains long-term ratings for over 3,000 non-defaulted issuers. These issuers account for the bulk of the outstanding dollar amount of U.S. public long-term corporate debt and a substantial part of public issuance abroad. Moody's database also contains information about defaults of public issuers not rated by Moody's.

The chart on the cover of this report shows that the overall default experience of the public debt markets since 1938 can be broken into three broad epochs: a period of low default risk extending from 1938 to 1969, a period of moderate default risk extending from 1970 through 1981, and a period of high default risk extending from 1982 through the present. For many purposes, recent experience is of more interest than that of the distant past. For this reason, we will focus primarily on the moderate- and high-risk periods since 1970 in much of the following discussion.

Chart 3
Number of Rated Isuers by Year, 1970-1995

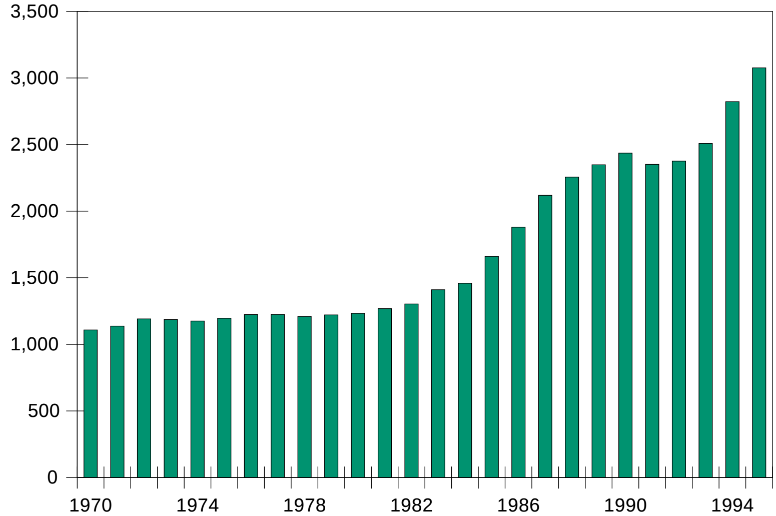


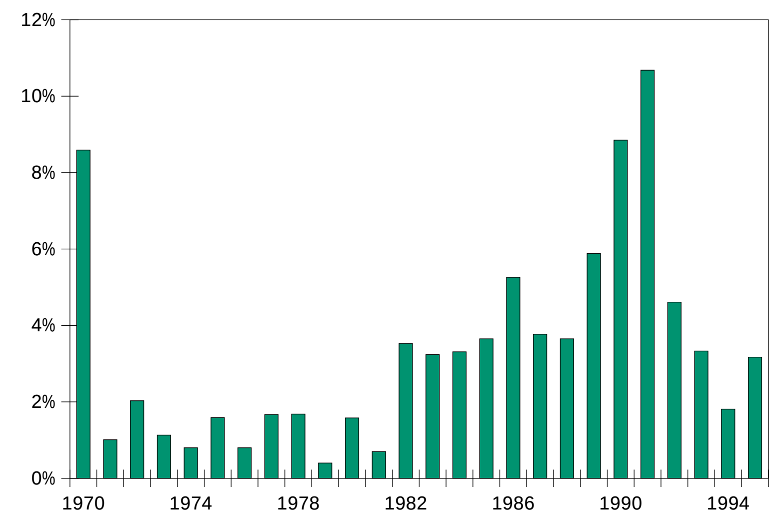
Chart 3 details the number of rated issuers in each of the 26 years since 1970. The rapid growth in the number of issuers rated beginning in the second half of the 1980s reflects several trends. Over this time period, Moody's began assigning a large number of first-time ratings on the debt of non-U.S. issuers, predominantly in Europe and Japan. Within the United States, the speculative-grade market's rapid development attracted scores of first-time issuers. After a short pause in the beginning of the 1990s, the sharp decline in interest rates of 1992 and 1993 attracted another round of first-time issuers, further expanding the number of rated issuers.

One-Year Default Rates

A widely reported default statistic is the one-year speculative-grade default rate. Moody's calculates this rate by dividing the number of rated issuers defaulting over a calendar year by the number of (non-defaulted) speculative-grade rated issuers outstanding at the beginning of the year, adjusted downward to reflect issuers withdrawn from the sample over the course of the year.[1] Chart 4 plots these one-year speculative-grade default rates from 1970 through 1995.

The peak in 1970 corresponds to the then market-shaking default of Penn Central Railroad and its 25 affiliates. The most recent peaks, 1990's 8.7% and 1991's 10.5%, reflect the effects of both a recession and the fall-out of the eight-year corporate borrowing binge that began in 1982. In 1994, the speculative-grade one-year default rate subsided to just 1.8%—the lowest rate of default for speculative-grade issuers since 1981's 0.7%. Since then, however, the speculative-grade default rate has clearly been on the rise.

Chart 4
One-Year Speculative-Grade Default Rates, 1970-1995



We can define one-year default rates for any rating classification in a manner analogous to that used for calculating one-year

1 The downward adjustment for the denominator is a correction for the withdrawal of issuers from the set of issuers at risk of defaulting. The resulting effective denominator is simply the number of issuers rated speculative-grade at the start of the year less one-half of the issuers withdrawn over the course of the year.

Chart 5
One-Year Default Rates, 1970-1995

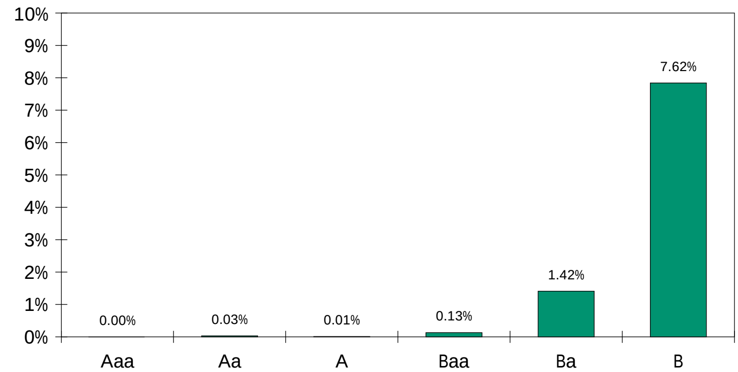
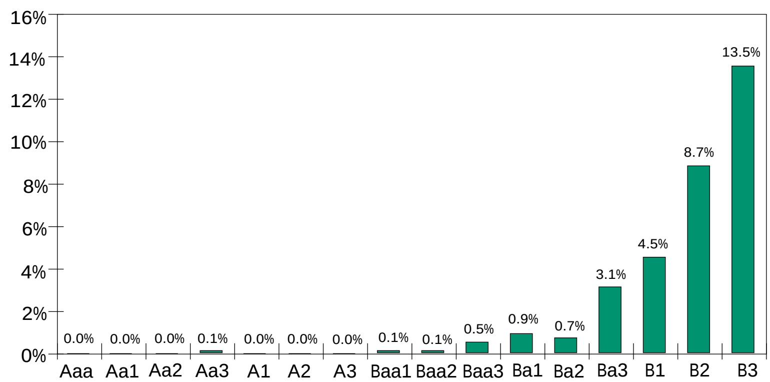


Chart 6
One-Year Default Rates by Modified Ratings, 1983-1995



speculative-grade default rates. The result for the B rating category, for example, is 26 observations on the one-year default rate—one for each year from 1970 through 1995. The issuer-weighted average of these observations represents an estimate of the risk of default within one year associated with Moody's ratings. Chart 5 presents these average default rates.

The default rates clearly show an increased risk of default associated with lower rating categories. The underlying one-year default rates for each rating category from 1970 through the present are included in Table 6 of the appendix.

The last three rows of Table 6 give the one-year default rates for investment-grade issuers, speculative-grade issuers, and all corporate issuers. There is a clear pattern of higher risk of default associated with the speculative-grade rating categories. Note that for all but eight of the past 25 years, the one-year default rate for the investment-grade sector was zero. By the methodology outlined above, an average of 4.0% of speculative-grade issuers defaulted per year over the last 25 years, compared with 0.05% of investment-grade issuers.

Moody's refined its rating scale in April 1982 by adding numerical modifiers. The ratings from Aa to B were expanded to include three numerical modifiers each in order to provide finer gradations of credit risk. Table 7 and Chart 6 present one-year and average one-year default rates for each of these rating categories. These default rates are drawn from the high default risk period extending from 1983 through the present. The results suggest that the relationship between ratings and default likelihood holds for numerically modified rating categories as well as for the non-modified categories. Average one-year default rates climb from 0.0% for Aaa to 13.5% for B3.

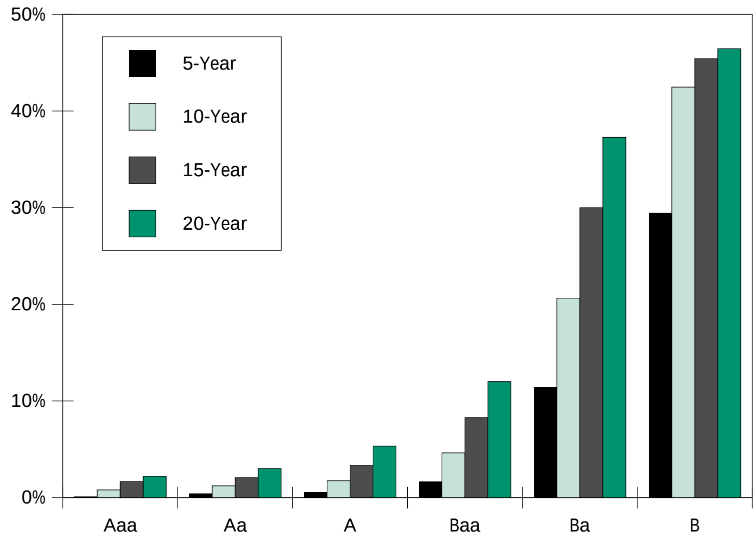
Multi-Year Default Rates

Although one-year default rates are the most commonly reported, some investors find default rates for longer time horizons more relevant. A 10-year default rate, for example, estimates the share of a portfolio of bonds that can be expected to default over a 10-year period. To quantify the risk of default over time horizons longer than one year, we formed cohorts of issuers as of the start of each year since 1938. A cohort consists of all issuers holding a given senior rating at the start of a given year. These issuers are then followed through time, keeping track of when they default or leave the rated universe, in order to estimate the cumulative risk of default over multi-year horizons.

Some other studies look at cohorts of bonds issued during a given year and track the bonds' subsequent performance. In contrast, Moody's approach, by forming cohorts of all Moody's-rated issuers with debt outstanding at January 1 of each year, provides an indicator of the experience of a portfolio of both seasoned and new-issue bonds purchased in a given year.

Table 10 traces, for up to 20 years, the cumulative default rates of cohorts of Moody's-rated issuers formed at the beginning of each year from 1970 through 1995. This table answers the question, for example, "What was the risk that a B-rated issuer with bonds outstanding as of January 1, 1983 would default by 1995?" The answer is found in the last row and last column of the section labeled "Cohort Formed January 1, 1983": 57.9%. The first column of each subsection, by definition, is the one-year default rate and corresponds to that year's entry in Table 6. The cohort methodology has the advantage that year-over-year comparisons of actual default experience can be made. In cases in which an investor feels that the business conditions of the current year are similar to those of some previous year, he may consult that year's cohort directly to ascertain what default patterns to expect.

Chart 7
5, 10, 15, and 20-Year Default Rates



To estimate the average risk of default over time horizons longer than one year, we calculate the risk of default in each year since a cohort was formed. The average of each cohort's one-year default rates forms the average cumulative one-year default rate. The average of the second-year default rates cumulated with that of the first year yields the two-year average cumulative default rate. In this manner, we compute average cumulative default rates for one to 20 years for each rating category. Chart 7 presents default rates for 5, 10, 15, and 20-year time horizons. Table 8 in the appendix presents these data in detail, and Table 9 presents average cumulative default rates by numerically modified ratings for up to six years.

Chart 7 shows that higher default risk for lower rating categories remains evident over investment periods exceeding one year. For example, average default rates for five-year holding periods climb from 0.13% for issuers rated Aaa to 28.9% for issuers rated B. Chart 7 also shows that the pattern recurs for average default rates for 10-year and 15-year holding periods.

Throughout the study period, there is a sharp distinction between the experience of companies in the investment-grade categories and companies in the speculative-grade categories. In the past 25 years, the highest quality speculative-grade issuers (those rated Ba), have been two to ten times more prone to default than the lowest rated investment-grade companies (those rated Baa), over any time horizon. With a one-year investment horizon, B-rated companies have been over four times more prone to default than Ba-rated companies.

Default Rate Volatility

An examination of the cohorts presented in Table 10 reveals that default rates vary from one year to the next for a given rating category. For the B rating category in the period from 1970 through 1995, for instance, the one-year default rate ranged from a low of zero in years 1971, 1976, and 1979 to a high of 22% in 1970. The sources of this variation are many, but macroeconomic trends are certainly among the most influential factors. To quantify this variability, Moody's calculated the standard deviations of the one-year default rates for each letter rating category. Table 3 presents these figures for the 25-year period extending from 1970 to 1995.

Table 3
Default Rate Standard Deviations

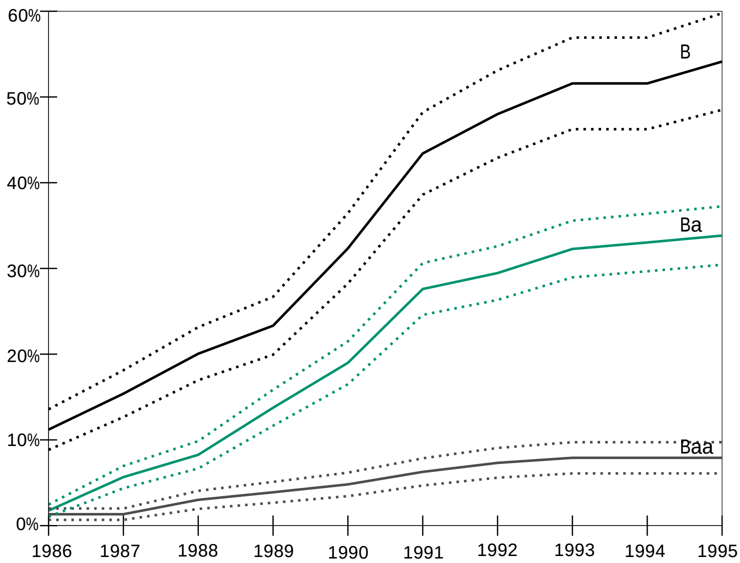
Rating / Classification	One-Year Default Rate	Ten-Year Default Rate*
Aaa	0.0%	0.0%
Aa	0.1%	0.9%
A	0.1%	0.7%
Baa	0.3%	1.8%
Ba	1.4%	3.4%
B	4.8%	5.6%
Investment-Grade	0.1%	0.5%
Speculative-Grade	2.7%	2.9%
All Corporates	0.9%	0.9%

*Based only upon the cohort formed in 1986.

Table 3 highlights a pattern of higher default rate volatility for lower credit ratings. That is, while the risk of default is higher, on average, for lower rating categories, the chances of the default rate differing significantly from the average in any given year is also higher. The volatility of default rates has important implications in bond pricing. The returns investors earn on lower-rated debt must not only compensate them for the higher average risk of default, but also for the increased risk that the default rate could differ substantially from its historical average.

An accurate measurement of default volatility over longer time frames is difficult because for periods of more than one year the cohorts are overlapping. That is, the issuers and defaults of one cohort may appear in the next. This generates a statistical dependence between cohorts that complicates the estimation of the standard deviation. However, the firms of any one cohort may be considered statistically independent and hence standard life table statistical methods will produce estimates of the variance of the cumulative default rate for that cohort.

Chart 8
Cumulative Default Rates and 95% Confidence Intervals
(based on data from cohort formed in 1986)



Consider a 10-year time horizon. In our entire dataset, there are 49 cohorts (those formed from 1938 through 1986) with 10 years of history, from which we may derive a 10-year cumulative default rate. However, only five cohorts, those formed in 1938, 1948, 1958, 1968, and 1978, are non-overlapping and could be considered statistically independent. Variance estimates based on just five data points would be unreliable. Consider, on the other hand, the most recent cohort formed for which there is 10 years of experience available, that formed in 1986. Table 3 presents estimates of the standard deviations of that cohort's 10-year cumulative default rates for each rating category in the second data column. The same pattern of higher variability for lower rating categories persists. Additionally, the multi-year default rate standard deviations are greater than the one-year default standard deviations. This indicates an increase in uncertainty as the time horizon expands. In order to see this graphically, Chart 8 plots the 1986 cohort's cumulative default rates for the Baa, Ba and B ratings along with upper and lower 95% confidence intervals.

Severity of Default Loss

A critical aspect of a corporate bond default is the severity of the loss incurred. Eventually, most bond defaults are resolved in a manner that provides bondholders with some amount of recovery, which may take the form of cash, other securities, or even a physical asset. The recovery rate, defined here as the percentage of par value returned to the bondholder, is a function of several variables. These variables include the seniority of the issue within the issuer's capital structure, the quality of collateral (if any), the overall state of the economy, and the market for corporate assets.

What may seem the most straightforward methodology for calculating recovery rates is not particularly practical. This methodology would track all payments made on a defaulted debt instrument, discount them back to the date of default, and present them as a percentage of the par value of the security. However, this methodology is problematic as it requires too many assumptions to be drawn. A separate assumption is made for the discount rate to apply to each payment made on the defaulted instrument. Furthermore, assumptions must be made concerning the values of certain payments. Various equity and derivative instruments, enhancements to the terms of the surviving debt instrument, or sometimes even an asset that may be delivered in lieu of cash. As there is frequently no market for such payments, there is no definitive measure of their value.

For these reasons, we use the trading price of the defaulted instrument as a proxy for the present value of the ultimate recovery. While it is only an estimate of the actual recovery, it has the advantage of being the definitive measure of the recovery realized by those debtholders who liquidate a position soon after default, and its use requires only the assumption that the defaulted bond market is informationally efficient.

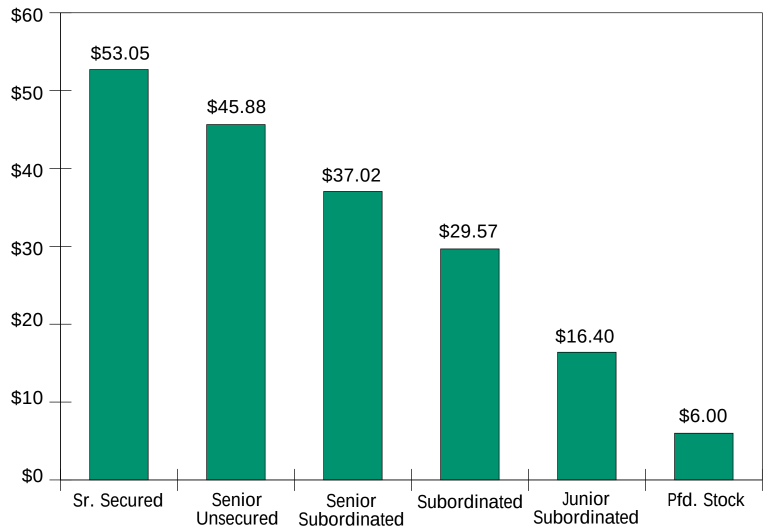
Our estimates of recovery can be translated into recovery rates by presenting them as percentages of par (not percentages of original issue prices or accreted values). Investors are entitled to receive face value at maturity, even though they may have paid somewhat less or more for the bond either at issuance or in the secondary market. Expressing recoveries as a fraction of some price other than par could improperly bias recovery rates. The exceptions are deferred interest debt and deep discount bonds, which we removed from the sample.

We collected from several sources prices for many of the bonds that defaulted between January 1, 1970 and December 31, 1995. For each nonconvertible, defaulted coupon-paying issue, we looked at the seniority, date of default, price one month after default, and the dollar amount outstanding at default. The entire sample comprised 798 defaulted bonds, aggregating to over $62 billion in face value. After adjusting for inflation, this amounts to $75 billion 1995 dollars.

We calculate our recovery estimates as the weighted (by real par amount outstanding at default) average of these prices.[2] Chart 9 breaks out these recoveries by seniority of claim and includes Moody's estimate of the recovery investors can expect to receive on preferred stock.[3] Based on prices for 115 senior secured bonds, our estimate of average recovery is $53.05 per $100 face amount. The 255 senior unsecured bonds sold for $45.88 on average; the 196 senior subordinated bonds sold for $37.02; the 226 subordinated bonds sold for $29.57; and the 9 junior subordinated bonds sold for $16.40. Preferred stock holders can only expect to retrieve about $6.00 per $100 par or the liquidation value of defaulted preferred stock.

Chart 9

Defaulted Bond Recovery Estimates by Seniority of Claim



Recoveries, on average, decline as priority of claim declines, lending support to Moody's practice of assigning lower ratings to an issuer's subordinated debt. Generally speaking, a bond default is an issuer-level event that will in time affect all of the issuer's outstanding debt obligations. That is, the probability of an issuer defaulting on a particular debt issue is independent of the seniority of that issue relative to the company's other obligations. However, holding all else constant, severity considerations suggest that while default likelihood is the same across an issuer's bonds, the greater expected losses for its subordinated issues should be reflected in lower ratings for these issues.

The recoveries presented in Chart 9 above are weighted averages of defaulted bond prices. They approximate the most likely bond price to arise from a particular default, but they do not convey the range of possible outcomes. For example, while the estimated recovery for senior subordinated bonds is $35 per $100 par amount, two of the underlying issues were priced at just $1 and at least one was priced at $107. In addition to the expected defaulted bond price, an important consideration is how likely are prices much higher or lower than average. In order to determine this likelihood, we look at the dispersion of defaulted bond prices, which is commonly measured by the sample standard devia-

2 We exclude Texaco's 1987 default from these calculations. The default amounted to delayed interest payments on over $7 billion of debt. These payments were subsequently made up along with accrued interest. Because the default was mild, Texaco bond prices never dipped very far. The high prices, combined with the massive amount of debt involved, bias the dollar-weighted averages upward significantly. Because of the extraordinarily large influence of this single highly atypical default, we believe that excluding it provides a more accurate estimate of likely recovery.

3 See the December 1994 Moody's Special Comment "Preferred Stock Dividend and Credit Risk."

tion. A high standard deviation indicates that many observations lie far away from the mean, and therefore outcomes far below or above the mean are relatively likely.

Table 5 (in the appendix) provides additional statistics on the distribution of prices for defaulted bonds of each level of seniority. The standard deviations for the senior secured, senior unsecured, and subordinated defaulted bond prices are $27, $25, and $20, respectively. The relative size of these standard deviations indicates that subordinated bond prices are more tightly distributed about their sample mean than are either senior unsecured or senior secured prices. While investors can expect defaulted subordinated bonds to be worth less than defaulted senior unsecured bonds, they can have greater confidence that the value of the subordinated issue will be close to its mean, $33. Senior secured bond prices, on the other hand, are the most dispersed. Even though investors can expect a senior secured issue to be worth more upon bankruptcy than subordinated bonds, there is greater uncertainty about the value of senior secured bonds after bankruptcy than about the values subordinated bonds.

The Value of Seniority

The recoveries above clearly show that bonds with higher claims to a firm's assets enjoy greater recoveries, on average. However, these rates are only indirect estimates of the relative value of a bond's seniority. The decision between investing at the senior versus the subordinated level for a particular issuer is largely dependent on a comparison of the incremental yield promised on the subordinated debt with the decreased recovery that can be expected in the event of a default. In order to more directly estimate the effect of a bond's seniority provisions on recovery, we compared the prices of bonds of different seniorities, but for the same issuing firm. Table 4 presents the average difference between the prices for a defaulted issuer's relatively senior (row) debt and relatively junior (column) debt.

Table 4
Average Difference Between Senior and Subordinated Defaulted Bond Prices

	Senior Unsecured	Subordinated
Senior Secured	$17	$30
Senior Unsecured	-	$20

The entry in the second row under the "Subordinated" column heading indicates that, for the 39 issuers in our database for which we have defaulted bond prices for both senior unsecured and subordinated issues, the average difference between the senior unsecured bond prices and the subordinated bond prices is $20. That is, the senior unsecured debt of an issuer can be expected to recover 20% more of principal than the subordinated issue. This is substantially more than the 16% indicated by Chart 9.

Loss Rates

As mentioned earlier in this report, Moody's long-term debt ratings are statements about protection against credit loss. For a given economic environment, the credit loss one can expect to incur is higher for lower ratings. Conceptually, expected credit loss is simply the probability of a default occurring times the loss investors can expect to incur upon default. Previous sections have detailed our estimation of the probability of default associated with each rating category, as well as recovery rates for debt of various seniority levels (the severity of loss is simply one less the recovery rate). Multiplying the estimates of the risk of default by our estimate of the severity of loss for senior unsecured debt is then an estimate of the credit loss that has been historically associated with each rating category. Chart 10 presents these estimates.

Chart 10
One-Year Loss Rates

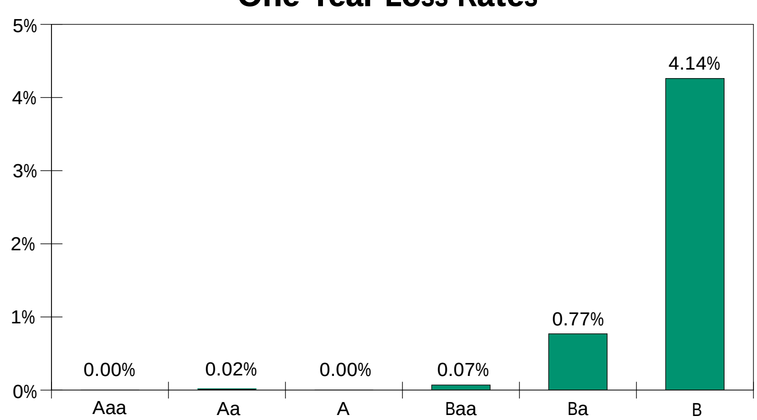
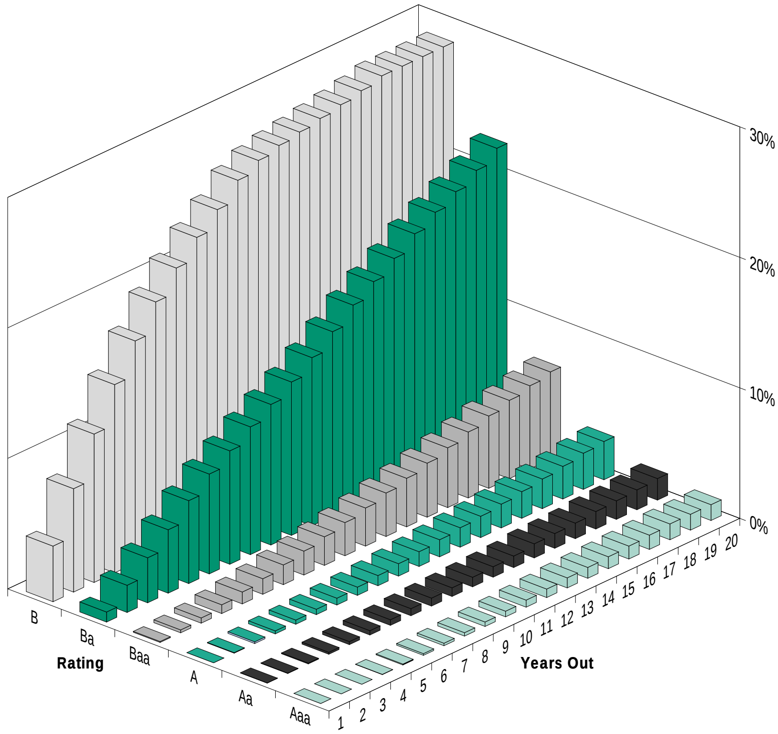


Chart 10 indicates that expected loss increases dramatically as a credit rating slips from investment-grade to speculative-grade. The safest speculative-grade rating category, Ba, is associated with 11 times the expected loss of the riskiest investment-grade rating category, Baa. Aside from the two basis points of loss associated with the Aa rating category and zero basis points associated with the A rating category, Chart 10 clearly shows an increase in the expected loss for lower rating categories. The Aa-A inversion is due entirely to the two (related) Aa defaults of DFC Financial (Overseas) Ltd. and DFC Overseas Investment Ltd. versus the one A default of Johns Manville Corporation. The small sample sizes render statistically meaningful ranking of these loss rates difficult. To obtain a better comparison, it is useful to consider a longer time horizon, over which more firms could have the opportunity to default.

Chart 11
Average Cumulative Loss Rates, 1 to 20 Years



In order to consider a longer time horizon and to calculate average cumulative loss rates, we make some simplifying assumptions. First, we do not consider in any way the differences in coupon payment typically associated with bonds of various rating categories. That is, while default losses are higher for lower rated bonds, they also pay a higher coupon rate on average. Also, we make no attempt to account for the timing of losses. Consequently, we do not make an assumption about or apply discount factors to losses incurred in future time periods. The resulting expected loss figures represent estimates of the gross amount of loss investors have incurred over various ratings and time horizons.

Chart 11 presents average cumulative loss figures. At the two-year time horizon, the Aa-A loss "inversion" corrects itself as the respective loss estimates are three and four basis points. After 10 years, the difference between these average cumulative loss rates increases to 29 basis points and after 20 years it further widens to 128 basis points. This chart illustrates that Moody's long-term credit ratings are consistently ranked according to increasing loss for periods up to 20 years. This is an indication that Moody's has on average successfully differentiated the credit risks faced by investors.

Conclusion

Nineteen-Ninety Five saw the first year-over-year increase in the volume of defaults since 1990. 46 issuers worldwide defaulted on over $8.2 billion of long-term, publicly held corporate debt. Last year's one-year speculative-grade default rate correspondingly rose to 3.2% from the previous year's 13-year low—1.8%. Moody's expects that patterns in credit revisions of recent years and the rating composition of new issuance will support the rise in default risk through the end of next year.

Holding constant the severity of loss in the event of default, the probability of default is higher for lower rating categories. Average one-year default rates estimated over the period stretching from 1970 through the present, show that the probability of default increases as our opinion of the credit quality decreases. Estimates of the severity of loss drawn from our database of defaulted bond prices indicate that recovery decreases with the seniority of the bond. Severity considerations then suggest that while default likelihood is the same across all of an issuer's bonds, the greater expected losses for its subordinated issues should be reflected in lower ratings for these issues.

Moody's practice of assigning lower ratings to an issuer's subordinated debt can then be understood in the context of expected credit loss. That the average loss associated with our long-term credit ratings increases as our opinion of the credit quality decreases is an indication that Moody's has consistently differentiated securities on the basis of the actual credit risks investors have faced.

APPENDIX

Table 5: Descriptive Statistics for Defaulted Bond Prices (1/1/70 through 12/31/1995)

Level of Securitization	Number	Average	Median	Standard Deviation	Inter-Quartile Range	Minimum	10th Percentile	90th Percentile	Maximum
Senior Secured	115	$53.80	$55.13	$26.86	$42.31	$8.00	$18.80	$95.00	$125.00
Senior Unsecured	278	$51.13	$49.00	$25.45	$40.68	$4.13	$15.85	$87.23	$108.25
Senior Subordinated	196	$38.52	$35.00	$23.81	$28.87	$1.00	$12.00	$75.38	$106.50
Subordinated	226	$32.74	$30.23	$20.18	$23.60	$1.00	$9.67	$62.00	$101.00
Junior Subordinated	9	$17.09	$17.50	$10.90	$9.75	$3.63	$3.74	$29.70	$36.50
All Subordinated Securitizations	431	$35.04	$31.81	$22.77	$24.50	$1.00	$10.00	$66.00	$106.50
All Securitizations	824	$43.06	$38.69	$26.60	$36.25	$1.00	$11.30	$83.59	$125.00

Table 6: One-Year Default Rates by Year and Rating, 1970-1995 (Percent)

	1970	1971	1972	1973	1974	1975	1976	1977	1978	1979	1980	1981	1982	1983	1984	1985	1986	1987	1988	1989	1990	1991	1992	1993	1994	1995	Wtd Avg
Aaa	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Aa	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.59	0.00	0.00	0.00	0.00	0.00	0.00	0.03
A	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.26	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.01
Baa	0.26	0.00	0.00	0.43	0.00	0.00	0.00	0.27	0.00	0.00	0.00	0.00	0.30	0.00	0.36	0.00	1.33	0.00	0.00	0.59	0.00	0.27	0.00	0.00	0.00	0.00	0.13
Ba	2.83	0.41	0.00	0.00	0.00	0.95	0.47	0.49	1.03	0.47	0.00	0.00	2.73	0.91	0.83	1.75	1.75	2.47	1.43	2.97	3.30	5.51	0.30	0.55	0.24	0.45	1.42
B	21.74	0.00	2.90	3.28	6.25	3.03	0.00	6.45	5.48	0.00	4.76	4.65	4.60	6.14	6.50	7.33	10.78	5.20	6.04	8.68	13.79	15.11	7.68	5.24	3.76	4.83	7.62
Investment-Grade	0.13	0.00	0.00	0.22	0.00	0.00	0.00	0.10	0.00	0.00	0.00	0.00	0.21	0.00	0.09	0.00	0.31	0.00	0.00	0.28	0.00	0.06	0.00	0.00	0.00	0.00	0.05
Speculative-Grade	8.78	1.03	2.07	0.76	0.81	1.60	0.80	1.67	1.69	0.40	1.57	0.70	3.51	3.17	3.24	3.60	5.19	3.70	3.58	5.76	8.71	10.53	4.55	3.30	1.81	3.19	4.01
All Corporates	2.66	0.27	0.51	0.34	0.17	0.34	0.17	0.42	0.34	0.08	0.33	0.16	1.01	0.79	0.90	0.98	1.75	1.31	1.36	2.31	3.08	3.28	1.23	0.87	0.51	0.96	1.16

Table 7: One-Year default rates by year and numerically modified rating, 1983-1995 (Percent)

	1983	1984	1985	1986	1987	1988	1989	1990	1991	1992	1993	1994	1995	Avg
Aaa	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Aa1	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Aa2	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Aa3	0.00	0.00	0.00	0.00	0.00	0.00	1.39	0.00	0.00	0.00	0.00	0.00	0.00	0.09
A1	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
A2	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
A3	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Baa1	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.75	0.00	0.00	0.00	0.00	0.06
Baa2	0.00	0.00	0.00	0.00	0.00	0.00	0.80	0.00	0.00	0.00	0.00	0.00	0.00	0.06
Baa3	0.00	1.06	0.00	4.82	0.00	0.00	1.06	0.00	0.00	0.00	0.00	0.00	0.00	0.45
Ba1	0.00	1.14	0.00	0.88	3.73	0.00	0.79	2.67	1.05	0.00	0.80	0.00	0.00	0.85
Ba2	0.00	1.64	1.64	1.20	0.94	0.00	1.79	2.74	0.00	0.00	0.00	0.00	0.00	0.73
Ba3	2.60	0.00	3.77	2.75	2.44	2.97	4.69	3.88	10.24	0.74	0.76	0.61	1.17	3.12
B1	0.00	5.84	4.38	6.49	4.90	4.32	6.30	7.24	6.15	1.06	3.45	1.95	3.27	4.50
B2	10.00	18.75	3.70	16.67	3.96	6.90	8.22	22.64	12.74	1.56	4.80	3.53	7.34	8.75
B3	16.44	2.60	12.84	14.29	6.62	9.09	15.48	20.11	28.29	18.99	8.63	7.45	5.46	13.49

Table 8: Average Cumulative Default Rates from 1 to 20 years (Percent)

	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20
Aaa	0.00	0.00	0.00	0.04	0.13	0.24	0.35	0.48	0.63	0.79	0.98	1.18	1.40	1.52	1.66	1.81	1.99	2.20	2.20	2.20
Aa	0.03	0.05	0.11	0.27	0.43	0.61	0.79	0.98	1.12	1.22	1.34	1.47	1.62	1.97	2.07	2.19	2.45	2.60	2.79	3.01
A	0.01	0.07	0.25	0.42	0.58	0.75	0.95	1.16	1.44	1.75	2.07	2.40	2.72	2.97	3.33	3.73	4.14	4.56	5.05	5.33
Baa	0.13	0.40	0.73	1.22	1.66	2.18	2.77	3.35	4.00	4.63	5.32	6.05	6.75	7.49	8.27	9.11	9.97	10.78	11.45	12.00
Ba	1.42	3.83	6.31	8.82	11.45	13.72	15.50	17.38	19.04	20.67	22.53	24.58	26.68	28.36	30.01	31.81	33.22	34.50	35.85	37.29
B	7.62	13.97	19.78	24.73	28.87	32.30	35.09	37.46	39.47	41.62	42.71	43.29	43.68	44.10	44.53	45.01	45.55	45.55	45.55	45.55
Investment-Grade	0.05	0.16	0.35	0.61	0.85	1.12	1.43	1.76	2.12	2.49	2.90	3.32	3.74	4.17	4.62	5.12	5.64	6.15	6.62	6.97
Speculative-Grade	4.01	7.77	11.30	14.49	17.52	20.10	22.13	24.09	25.77	27.44	29.05	30.69	32.31	33.62	34.90	36.29	37.43	38.31	39.23	40.19
All Corporates	1.16	2.25	3.28	4.25	5.14	5.93	6.60	7.26	7.88	8.50	9.13	9.77	10.41	11.01	11.61	12.27	12.91	13.48	14.03	14.49

Table 9: Average Cumulative Default Rates from 1 to 6 years (Percent)

	1	2	3	4	5	6
Aaa	0.00	0.00	0.00	0.07	0.23	0.33
Aa1	0.00	0.00	0.00	0.31	0.31	0.54
Aa2	0.00	0.00	0.09	0.29	0.65	0.79
Aa3	0.09	0.15	0.27	0.42	0.60	0.83
A1	0.00	0.04	0.49	0.79	1.01	1.27
A2	0.00	0.04	0.21	0.57	0.88	1.16
A3	0.00	0.20	0.37	0.52	0.61	0.81
Baa1	0.06	0.39	0.79	1.17	1.53	1.82
Baa2	0.06	0.26	0.35	1.07	1.70	2.47
Baa3	0.45	1.06	1.80	2.87	3.69	4.70
Ba1	0.85	2.68	4.46	7.03	9.52	12.45
Ba2	0.73	3.37	6.47	9.43	12.28	14.68
Ba3	3.12	8.09	13.49	18.55	23.15	27.16
B1	4.50	10.90	17.33	23.44	29.05	34.11
B2	8.75	15.18	22.10	27.95	31.86	35.63
B3	13.49	21.86	27.84	32.08	36.10	38.60

Table 10: Cumulative Default Rates for Cohorts Formed Since 1970

Years:	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20
Cohort formed January 1, 1970																				
Aaa	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	2.6	2.6	2.6
Aa	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1.5	1.5	1.5	3.0	3.0	3.0	3.0
A	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.5	0.5	0.5	0.5	0.5	0.5	1.0	1.0	2.2	2.2
Baa	0.3	0.3	0.3	0.8	0.8	0.8	1.1	1.8	2.4	2.4	2.8	2.8	4.0	4.4	4.9	5.8	7.2	8.2	9.3	9.9
Ba	2.8	3.2	3.2	3.7	4.6	5.1	5.1	5.7	6.8	6.8	6.8	8.4	10.8	11.7	11.7	14.7	19.0	20.2	20.2	21.7
B	21.7	21.7	24.1	24.1	24.1	24.1	24.1	27.0	27.0	27.0	27.0	27.0	30.1	30.1	30.1	30.1	30.1	30.1	30.1	30.1
Cohort formed January 1, 1971																				
Aaa	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	2.6	2.6	2.6	2.6
Aa	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1.9
A	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.4	0.4	0.9	1.3	1.3	1.3	1.7	1.7	2.7	2.7	2.7
Baa	0.0	0.0	0.5	0.5	0.5	0.8	1.4	2.0	2.0	2.3	2.3	3.5	3.8	4.2	5.1	6.4	7.3	8.4	8.9	10.0
Ba	0.4	0.4	0.8	1.8	2.7	2.7	3.3	4.4	4.4	4.4	5.9	8.3	9.1	9.1	12.0	17.2	18.4	18.4	19.8	19.8
B	0.0	3.4	3.4	3.4	3.4	3.4	7.6	7.6	7.6	7.6	7.6	12.2	12.2	12.2	12.2	12.2	12.2	12.2	12.2	12.2
Cohort formed January 1, 1972																				
Aaa	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	2.5	2.5	2.5	2.5	2.5
Aa	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1.8	1.8
A	0.0	0.0	0.0	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.7	1.1	1.1	1.1	1.6	1.6	2.5	2.5	3.0	3.5
Baa	0.0	0.5	0.5	0.5	0.7	1.3	1.8	1.8	2.5	2.5	3.1	3.5	3.9	4.6	5.8	6.7	7.6	8.6	10.2	12.4
Ba	0.0	0.4	1.3	2.2	2.2	2.8	3.9	3.9	3.9	5.3	8.3	9.1	9.9	13.5	18.4	19.5	19.5	20.8	20.8	28.1
B	2.9	2.9	2.9	2.9	2.9	6.7	6.7	6.7	6.7	6.7	10.8	10.8	10.8	10.8	10.8	10.8	10.8	10.8	10.8	10.8
Cohort formed January 1, 1973																				
Aaa	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	2.4	2.4	2.4	2.4	2.4	2.4
Aa	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1.6	1.6	1.6
A	0.0	0.0	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.7	1.1	1.1	1.1	1.5	1.5	2.4	2.4	2.9	3.4	3.9
Baa	0.4	0.4	0.7	0.9	1.4	1.9	1.9	2.5	2.5	3.1	3.8	4.5	5.6	6.7	7.5	8.3	9.3	11.2	13.3	13.3
Ba	0.0	0.9	1.4	1.4	2.0	3.1	3.1	3.1	4.6	8.4	9.2	9.2	11.8	16.7	18.8	18.8	20.1	20.1	28.6	30.1
B	3.3	3.3	3.3	3.3	7.4	7.4	7.4	7.4	7.4	11.7	11.7	11.7	11.7	11.7	11.7	11.7	11.7	11.7	11.7	11.7
Cohort formed January 1, 1974																				
Aaa	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	2.2	2.2	2.2	2.2	2.2	2.2	2.2
Aa	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1.3	1.3	1.3	1.3	1.3	1.3	1.3	1.3	2.8	2.8	2.8	2.8
A	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.4	0.8	0.8	0.8	1.2	1.2	2.1	2.1	2.6	3.1	3.6	3.6
Baa	0.0	0.4	0.7	1.2	1.7	1.7	2.3	2.3	2.9	3.5	4.2	5.3	5.6	6.4	7.3	8.2	9.7	11.7	11.7	11.7
Ba	0.0	0.5	0.5	1.1	2.3	2.3	2.3	3.0	6.9	7.7	7.7	10.4	17.2	19.3	19.3	20.6	22.0	30.6	32.2	33.9
B	6.3	6.3	6.3	10.1	10.1	10.1	10.1	14.7	19.2	19.2	19.2	19.2	19.2	19.2	19.2	19.2	19.2	19.2	19.2	19.2

Table 10 (cont.)

Years:	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20
Cohort formed January 1, 1975																				
Aaa	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1.8	1.8	1.8	1.8	1.8	1.8	1.8	1.8
Aa	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1.1	1.1	1.1	1.1	1.1	1.1	2.3	2.3	3.6	3.6	3.6	3.6	3.6
A	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.4	0.4	0.4	0.8	0.8	1.6	1.6	2.1	3.1	3.6	4.2	4.2
Baa	0.0	0.0	0.2	0.8	0.8	1.3	1.3	2.3	2.9	3.6	4.6	5.0	5.8	6.2	7.1	9.0	11.0	11.0	11.0	11.0
Ba	1.0	1.5	2.5	3.1	3.1	3.1	3.8	7.5	8.3	8.3	10.9	17.4	19.5	20.7	21.9	23.2	28.7	30.2	31.8	31.8
B	3.0	3.0	6.3	9.7	9.7	9.7	13.6	17.4	17.4	17.4	17.4	17.4	17.4	17.4	17.4	17.4	26.1	26.1	26.1	26.1
Cohort formed January 1, 1976																				
Aaa	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1.4	1.4	1.4	1.4	1.4	1.4	1.4	1.4	1.4
Aa	0.0	0.0	0.0	0.0	0.0	0.0	1.0	1.0	1.0	1.0	1.0	1.0	2.1	2.1	3.3	3.3	3.3	3.3	3.3	3.3
A	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.3	0.3	0.3	1.0	1.0	2.1	2.1	2.5	3.8	3.8	4.3	4.3	5.4
Baa	0.0	0.3	0.5	0.5	0.9	0.9	2.2	2.9	3.6	4.7	5.1	6.0	6.0	6.9	9.0	10.6	11.2	11.2	11.2	11.2
Ba	0.5	1.5	2.5	2.5	3.1	3.7	6.4	7.1	7.1	9.5	15.3	17.2	18.2	19.3	20.4	26.4	27.7	29.1	29.1	29.1
B	0.0	3.6	7.1	7.1	7.1	11.5	15.8	15.8	15.8	15.8	15.8	15.8	15.8	15.8	15.8	25.1	25.1	25.1	25.1	25.1
Cohort formed January 1, 1977																				
Aaa	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1.4	1.4	1.4	1.4	1.4	1.4	1.4	1.4	1.4	
Aa	0.0	0.0	0.0	0.0	0.0	0.9	0.9	0.9	0.9	0.9	0.9	2.0	2.0	3.1	3.1	3.1	3.1	3.1	3.1	
A	0.0	0.0	0.0	0.0	0.0	0.0	0.3	0.3	0.3	1.0	1.0	2.7	2.7	3.5	4.7	4.7	5.2	5.2	6.2	
Baa	0.3	0.5	0.5	0.5	0.5	1.9	2.6	3.3	4.4	4.8	5.7	5.7	6.7	8.2	9.8	10.4	10.4	10.4	10.4	
Ba	0.5	1.5	1.5	2.1	2.7	5.4	6.1	6.1	8.5	14.2	16.0	17.1	18.1	19.3	25.2	26.4	27.8	27.8	27.8	
B	6.5	9.8	9.8	13.8	18.2	22.9	22.9	22.9	22.9	22.9	22.9	22.9	22.9	22.9	32.5	32.5	32.5	32.5	32.5	
Cohort formed January 1, 1978																				
Aaa	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1.2	1.2	1.2	2.5	2.5	2.5	2.5	2.5	2.5		
Aa	0.0	0.0	0.0	0.0	0.8	0.8	0.8	0.8	0.8	0.8	1.8	1.8	1.8	1.8	1.8	1.8	1.8	1.8		
A	0.0	0.0	0.0	0.0	0.0	0.3	0.3	0.3	1.0	1.0	2.4	2.4	3.6	4.4	4.4	4.9	4.9	6.0		
Baa	0.0	0.0	0.0	0.0	1.3	1.7	2.4	3.5	3.9	4.7	5.1	6.1	7.6	9.7	10.3	10.3	10.3	10.3		
Ba	1.0	1.0	1.0	1.7	4.4	5.8	5.8	8.9	14.6	16.4	17.4	18.5	20.7	26.6	27.9	30.7	30.7	30.7		
B	5.5	5.5	12.0	15.5	19.2	19.2	23.6	23.6	27.4	31.4	31.4	31.4	31.4	40.6	40.6	40.6	40.6	40.6		
Cohort formed January 1, 1979																				
Aaa	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1.2	1.2	1.2	2.3	2.3	2.3	2.3	2.3	2.3			
Aa	0.0	0.0	0.0	0.8	0.8	0.8	0.8	0.8	0.8	1.7	1.7	1.7	1.7	1.7	1.7	1.7	1.7			
A	0.0	0.0	0.0	0.0	0.3	0.3	0.3	0.9	0.9	2.4	2.4	3.2	4.0	4.0	4.4	4.4	5.4			
Baa	0.0	0.3	0.3	1.6	1.9	2.3	3.4	3.4	4.2	4.6	5.6	8.1	10.2	10.8	10.8	10.8	10.8			
Ba	0.5	0.5	1.0	3.3	5.8	9.0	11.6	17.9	19.5	20.3	21.2	24.1	30.2	31.3	33.6	33.6	33.6			
B	0.0	6.3	9.8	13.4	13.4	17.2	20.9	27.8	31.5	31.5	31.5	31.5	35.3	35.3	35.3	35.3	35.3			

Table 10 (cont.)

Years:	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
Cohort formed January 1, 1980																
Aaa	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1.0	1.0	1.0	2.1	2.1	2.1	2.1	2.1	2.1
Aa	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.9	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.9
A	0.0	0.0	0.3	0.6	0.6	0.6	1.5	1.8	2.9	2.9	3.6	4.4	4.4	4.9	4.9	5.8
Baa	0.0	0.0	0.9	1.3	1.6	3.0	3.0	3.4	4.3	5.6	8.0	10.0	11.0	11.0	11.0	11.0
Ba	0.0	0.5	3.8	5.0	8.6	11.8	17.8	19.3	20.9	23.7	25.6	32.9	35.2	37.7	37.7	37.7
B	4.8	7.3	12.6	18.2	23.9	26.8	35.0	38.0	38.0	38.0	40.9	46.5	46.5	46.5	46.5	46.5
Cohort formed January 1, 1981																
Aaa	0.0	0.0	0.0	0.0	0.0	0.0	1.0	1.0	1.0	2.1	2.1	2.1	2.1	2.1	2.1	
Aa	0.0	0.0	0.0	0.0	0.0	0.0	0.8	2.5	2.5	2.5	2.5	2.5	2.5	2.5	2.5	
A	0.0	0.3	0.3	0.3	0.3	1.2	1.5	2.2	2.2	3.0	3.8	3.8	4.2	4.2	5.2	
Baa	0.0	0.6	1.2	1.9	2.9	2.9	3.3	4.1	5.4	7.8	9.2	10.2	10.2	10.2	10.2	
Ba	0.0	3.5	4.9	7.9	12.0	18.5	19.7	21.1	24.1	27.3	34.6	36.7	38.9	38.9	38.9	
B	4.7	9.2	14.1	21.6	23.9	30.5	30.5	30.5	30.5	32.7	39.2	39.2	39.2	39.2	39.2	
Cohort formed January 1, 1982																
Aaa	0.0	0.0	0.0	0.0	0.0	1.0	1.0	1.0	2.1	2.1	2.1	2.1	2.1	2.1		
Aa	0.0	0.0	0.0	0.0	0.0	0.8	2.3	2.3	2.3	2.3	2.3	2.3	2.3	3.4		
A	0.3	0.3	0.3	0.3	1.2	1.2	1.8	1.8	2.9	3.7	3.7	4.1	4.1	4.1		
Baa	0.3	0.3	1.3	2.3	2.7	3.5	4.3	5.6	8.0	9.4	10.4	10.4	10.4	11.1		
Ba	2.7	5.2	7.9	12.0	18.8	19.9	21.1	23.8	26.0	31.0	32.9	35.0	35.0	35.0		
B	4.6	11.6	16.2	18.4	24.5	24.5	24.5	24.5	26.8	39.0	39.0	39.0	39.0	39.0		
Cohort formed January 1, 1983																
Aaa	0.0	0.0	0.0	0.0	1.8	1.8	1.8	2.8	2.8	2.8	2.8	2.8	2.8			
Aa	0.0	0.0	0.0	0.0	0.5	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.7			
A	0.0	0.0	0.0	0.3	0.3	0.8	0.8	1.8	2.8	3.5	3.8	3.8	3.8			
Baa	0.0	1.2	1.6	3.3	3.8	4.3	5.4	6.5	7.8	7.8	7.8	7.8	7.8			
Ba	0.9	2.4	5.6	13.2	13.9	17.1	20.8	24.9	31.8	31.8	33.3	33.3	34.9			
B	6.1	10.7	17.4	23.4	25.5	27.9	30.6	37.0	49.6	54.9	57.9	57.9	57.9			
Cohort formed January 1, 1984																
Aaa	0.0	0.0	0.0	1.0	1.0	1.0	2.2	2.2	2.2	2.2	2.2	2.2				
Aa	0.0	0.0	0.0	0.9	1.8	1.8	1.8	1.8	1.8	1.8	1.8	2.5				
A	0.0	0.2	0.5	0.7	1.5	1.8	2.6	3.5	4.1	4.1	4.1	4.1				
Baa	0.4	0.4	0.8	1.2	1.7	2.8	4.0	5.8	5.8	6.5	6.5	6.5				
Ba	0.8	4.4	13.0	14.1	17.8	22.1	26.0	33.8	34.8	35.9	35.9	37.1				
B	6.5	12.3	17.7	20.5	24.5	28.2	37.1	46.6	49.0	54.5	54.5	54.5				

Table 10 (cont.)

Years:	1	2	3	4	5	6	7	8	9	10	11
Cohort formed January 1, 1985											
Aaa	0.0	0.0	0.0	0.0	0.0	1.1	1.1	1.1	1.1	1.1	1.1
Aa	0.0	0.0	0.0	0.8	0.8	0.8	0.8	0.8	0.8	0.8	1.4
A	0.0	0.2	1.3	2.3	2.5	3.6	4.4	4.7	4.7	4.7	4.7
Baa	0.0	1.2	1.2	1.7	2.8	3.4	5.1	5.8	6.5	6.5	6.5
Ba	1.8	6.7	8.8	12.3	18.4	22.7	30.2	31.7	32.5	32.5	34.5
B	7.3	15.8	20.3	24.5	27.7	37.3	46.7	49.2	55.2	55.2	55.2
Cohort formed January 1, 1986											
Aaa	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
Aa	0.0	0.0	0.8	0.8	1.2	1.2	1.2	1.2	1.2	1.8	
A	0.0	0.2	0.8	1.2	1.9	2.3	2.3	2.3	2.3	2.3	
Baa	1.3	1.3	3.0	3.9	4.8	6.3	7.3	7.9	7.9	7.9	
Ba	1.7	5.7	8.3	13.7	19.0	27.6	29.5	32.3	33.0	33.8	
B	10.8	14.8	19.3	22.4	31.2	42.4	47.0	50.7	50.7	53.3	
Cohort formed January 1, 1987											
Aaa	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		
Aa	0.0	0.0	0.0	0.4	0.4	0.4	0.4	0.4	0.9		
A	0.0	0.0	0.4	1.2	1.7	1.7	1.7	1.7	1.7		
Baa	0.0	1.0	1.8	3.0	4.6	5.9	6.9	6.9	6.9		
Ba	2.5	4.5	9.5	15.6	23.7	27.1	30.1	31.2	32.5		
B	5.2	12.2	18.3	28.5	40.4	43.8	45.9	45.9	47.3		
Cohort formed January 1, 1988											
Aaa	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0			
Aa	0.0	0.3	0.7	0.7	0.7	0.7	0.7	1.1			
A	0.0	0.4	1.0	1.4	1.4	1.4	1.4	1.4			
Baa	0.0	0.3	1.0	2.5	3.7	4.5	4.5	4.5			
Ba	1.4	7.1	12.9	20.4	23.4	26.1	27.0	28.5			
B	6.0	12.4	22.4	35.1	39.3	44.5	45.4	47.4			
Cohort formed January 1, 1989											
Aaa	0.0	0.0	0.0	0.0	0.0	0.0	0.0				
Aa	0.6	0.6	0.6	0.6	0.6	0.6	1.0				
A	0.0	0.2	0.6	0.6	0.6	0.6	0.6				
Baa	0.6	1.2	1.9	3.2	3.2	3.2	3.2				
Ba	3.0	9.7	17.6	20.4	23.2	23.6	25.0				
B	8.7	20.1	31.9	36.1	41.8	43.9	45.5				

Table 10 (cont.)

Years:	1	2	3	4	5	6
Cohort formed January 1, 1990						
Aaa	0.0	0.0	0.0	0.0	0.0	0.0
Aa	0.0	0.0	0.0	0.0	0.0	0.4
A	0.0	0.0	0.0	0.0	0.0	0.0
Baa	0.0	0.6	0.6	0.6	0.6	0.6
Ba	3.3	11.9	14.4	17.1	17.8	19.5
B	13.8	25.6	32.2	37.4	39.2	40.5
Cohort formed January 1, 1991						
Aaa	0.0	0.0	0.0	0.0	0.0	
Aa	0.0	0.0	0.0	0.0	0.3	
A	0.0	0.0	0.0	0.0	0.0	
Baa	0.3	0.3	0.3	0.3	0.3	
Ba	5.5	6.8	8.2	8.6	10.0	
B	15.1	24.2	31.0	33.2	35.7	
Cohort formed January 1, 1992						
Aaa	0.0	0.0	0.0	0.0		
Aa	0.0	0.0	0.0	0.3		
A	0.0	0.0	0.0	0.0		
Baa	0.0	0.0	0.0	0.0		
Ba	0.3	1.0	1.0	1.9		
B	7.7	15.1	17.9	21.2		

Years:	1	2	3
Cohort formed January 1, 1993			
Aaa	0.0	0.0	0.0
Aa	0.0	0.0	0.0
A	0.0	0.0	0.0
Baa	0.0	0.0	0.3
Ba	0.5	0.5	2.3
B	5.2	8.5	12.7
Cohort formed January 1, 1994			
Aaa	0.0	0.0	
Aa	0.0	0.0	
A	0.0	0.0	
Baa	0.0	0.2	
Ba	0.2	1.3	
B	3.8	8.6	
Cohort formed January 1, 1995			
Aaa	0.0		
Aa	0.0		
A	0.0		
Baa	0.0		
Ba	0.5		
B	4.8		

Chronological List of 1995 Public Corporate Bond Defaults
($Millions)

Company	Defaulted Debt	Not Defaulted	Status
January			
Grand Union Company	$1,075.0		Emerged from Chapter 11
Sam Houston Race Park, Ltd.	$75.0		In Chapter 11
Defaulted Debt (mil):	*$1,150.0*		
Number of Companies:	*2*		
February			
Trans World Airlines, Inc.	$562.1		Emerged from Chapter 11
Barings plc	$158.4		Under Administration
Barings B.V.	$300.0		Purchased by ING
Grand Union Capital Corp.	$238.6		Emerged from Chapter 11
Defaulted Debt (mil):	*$1,259.1*		
Number of Companies:	*4*		
March			
Alto Parana S.A.	$60.0		Negotiating with Bondholders
Presidio Oil Company	$225.0		Negotiating with Bondholders
Defaulted Debt (mil):	$285.0		
Number of Companies:	2		
April			
The Bibb Company	$159.8		Negotiating with Bondholders
UDC Homes, Inc.	$115.0		Emerged from Chapter 11
Anacomp, Inc.	$310.0		In Chapter 11
Defaulted Debt (mil):	*$584.8*		
Number of Companies:	*3*		
May			
Americold Corporation	$441.3		Emerged from Bankruptcy
Dow Corning Corporation	$159.5		In Chapter 11
Vendell Healthcare, Inc.	$75.0		Negotiating with Bondholders
Equitable Bag Company	$50.0		In Chapter 11
Defaulted Debt (mil):	*$725.8*		
Number of Companies:	*4*		
June			
Spectravision, Inc.	$471.9		In Chapter 11
Aerovias de Mexico, S.A. de C.V.	$100.0		Exchange offer completed
Bradlees, Inc.	$225.0		In Chapter 11
Burmeister & Wain Holding A/S	$61.0		Filed for Voluntary Receivership
Datapoint Corp.	$78.7		Made interest payment within grace period
Defaulted Debt (mil):	*$936.5*		
Number of Companies:	*5*		
July			
Porta Systems Corporation	$36.1		
Plaid Clothing Group Inc.	$75.0		In Chapter 11
The Baldwin Company	$155.0		In Chapter 11
Defaulted Debt (mil):	*$266.1*		
Number of Companies:	*3*		

August		
Seven-Up/RC Bottling Co. of S. Cal., Inc.	$140.0	Exchange offer completed
Capital Gaming International, Inc.	$135.0	
Wherehouse Entertainment, Inc.	$113.8	In Chapter 11
Physicians Clinical Laboratory Inc.	$40.0	
Gold River Hotel & Casino Corporation	$75.0	
Defaulted Debt (mil):	*$503.8*	
Number of Companies:	*5*	
September		
New Almac's Inc.	$11.0	In Chapter 11
Forstmann & Company, Inc.	$56.6	In Chapter 11
Victory Markets, Inc.	$59.5	In Chapter 11
Defaulted Debt (mil):	*$127.1*	
Number of Companies:	*3*	
October		
Lomas Financial Corporation	$139.9	In Chapter 11
Lomas Mortgage USA, Inc.	$340.0	In Chapter 11
Southwestern Life Corporation	$347.3	In Chapter 11
Elsinore Corp.	$60.0	In Chapter 11
Grupo Synkro S.A. de C.V.	$50.0	
Defaulted Debt (mil):	*$937.2*	
Number of Companies:	*5*	
November		
Burlington Motors Holding Inc.	$100.0	In Chapter 11
Drypers Corp.	$45.0	
Kloster Cruise Limited	$300.0	Made interest payment within grace period
Harrah's Jazz Company	$435.0	In Chapter 11
Bankhaus Fischer	$41.6	Under Moratorium
Color Tile, Inc.	$200.0	
Defaulted Debt (mil):	*$1,121.6*	
Number of Companies:	*6*	
December		
Rickel Home Centers Inc.	$126.5	In Chapter 11
Ithaca Industries, Inc.	$125.0	
Huarte S.A	$40.6	
Grupo Fosforera S.A	$16.0	
Defaulted Debt (mil):	*$308.0*	
Number of Companies:	*4*	

Year-to-Date Thru December 31	*1995*	*1994*	*1993*	*1992*
Defaulted Debt (mil):	$8,205.0	$2,331.7	$3,426.3	$8,334.1
Number of Companies:	46	24	39	50

1995 Public Corporate Bond Defaults

Aerovias De Mexico

Passenger airline

$100.0 million 9.75% Notes due 1995

Aerovias de Mexico SA de CV (Aeromexico), Mexico's leading airline, provides air transportation services within Mexico, the United States, and Europe. The company also owns almost 55% of the Corporacion Mexicana de Aviacion (Mexicana), the second largest carrier in the Mexican market. The two companies' debt totals some $1 billion. The company, hammered by more efficient competitors, has been in a financial tailspin for over a year. In addition, the company discovered in the fall of 1994 that $50 million in cash was missing, apparently having been embezzled by a former chairman who had fled the country. As a large portion of Aeromexico's total debt is dollar denominated, the devaluation of the Mexican peso in December of 1994 effectively increased the amount of debt by about 40% (the amount of the devaluation). This proved to be the final blow for the company, which was already in negotiations with its lenders

- 06/10/95 – Missed interest and principal payments.
- 08/09/95 – Exchange offer completed.

(Contact: Rene Shaker, Tel: 553-1318)

Alto Parana S.A.

Pulp and paper manufacturer

$40.0 million 12% Euronotes due 1995

$20.0 million 12% Euronotes due 1995

Alto Parana S.A. is one of the three largest pulp and paper manufacturers in Argentina. In 1977, fourteen Argentinean papermakers founded the company in an effort to replace Chilean pulp imports. Although originally intended to meet domestic pulp demand, the company now exports to other South American countries, Europe and Asia. The company's operations are essentially sound, with net sales increasing by 47% in the last six months of 1994 over the same period in 1993. Net income for the last half of 1994 was $14.2 million in comparison to a net loss of $26.2 million the previous year. However, the devaluation of the Mexican peso and the consequent increase in Argentinean interests rates restricted Alto Parana's access to capital. Unable to refinance its two issues, the company missed principal and interest payments due on March 4, 1995.

- 03/04/95 – Missed interest and principal payments on both Euronotes.

(Contact: Nelson Noel, Tel: 553-1611)

Americold Corporation

Refrigerated warehouse operator

$150.0 million 11.45% First Mortgage Bonds Series A due 2002
$176.5 million 11.5% First Mortgage Bonds Series B due 2005
$115.0 million 11.0% Senior Subordinated Debentures due 1997

Americold Corporation, based in Portland, Oregon, is principally engaged in food service storage and distribution. The company is the largest and one of the oldest operators of public refrigerated warehouse space in the U.S., with over 50 warehouse facilities in 15 states. Americold, already laboring under a high debt burden resulting from a 1986 leveraged buyout, suffered a drop in warehouse storage capacity as a result of a fire in its Kansas City underground warehouse in December 1991. Furthermore, widespread crop damage resulting from adverse weather conditions in 1993, weakened demand for Americold's services. Margins were negatively impacted by these factors which essentially shifted the company's product mix towards lower margin services. Although cash flows have been steady, high leverage remained a constraining factor, with the company's total debt to EBITDA ratio faring over 5.5 for the last five years and peaking at 6.45 for FY94. On April 14, 1995, Americold proposed an exchange offer to its debtholders through a prepackaged Chapter 11 Plan of Reorganization. The company did not make payments on its senior subordinated debentures on May 1, 1995, and subsequently the bondholders accepted the prepackaged filing on May 9, 1995.

- 05/01/95 – Missed interest payments on its senior subordinated debentures due 1997.
- 05/09/95 – Filed Prepackaged Chapter 11.
- 06/30/95 – Emerged from Chapter 11.

(Contact: Brian Oak, Tel: 553-4688)

Anacomp, Inc.

Produces and markets micrographic products

$65.0 million 12.25% Senior Secured Notes Series B due 1997
$225.0 million 15% Senior Subordinated Notes due 2000
$20.0 million 13.875% Convertible Subordinated Debentures due 2002

Anacomp, Inc., headquartered in Atlanta Georgia, is a world leader in micrographics products and services. The company's revenues and operating profits have been on a steady decline since 1990 due to intense price competition and the inroads made by competing advanced storage technologies. Despite this trend, however, Anacomp was able to maintain steady interest coverage and pay down some of its long-term debt with excess cash flow through cost cutting and new product introductions. In January 1995, the company tried to refinance its maturing debt with a secured debt offering, but was unsuccessful and withdrew the offer on April 6, 1995. As a result of liquidity problems due to operating losses and the inability to refinance, the company paid only $2.5 million of a scheduled $20 million principal payment on its series A and B senior secured notes on April 26, 1995. Anacomp also announced that it would not make interest payments due on May 1, 1995 on its 15% senior subordinated notes.

- 04/26/95 – Missed amortization payments on senior secured notes due 1997.
- 05/01/95 – Missed interest payments on senior subordinated notes due 2000.
- 07/15/95 – Missed interest payments on convertible subordinated debentures due 2002.
- 01/05/96 – Filed prepackaged Chapter 11.

(Contact: Wei Yen, Tel: 553-1649)

The Baldwin Company *Homebuilder*

$155.0 million 10.375% Senior Notes Series B due 2003

The Baldwin Company, incorporated in 1963 in California, builds homes primarily in master-planned communities located in the coastal areas of Southern California. Two brothers, James and Alfred Baldwin, are the sole owners of the company. Beginning 1990 and continuing through 1995, the demand for, and therefore prices of, houses fell in Southern California. Although revenues increased 68% from FY93 to FY94 as a result of land sales, cost of sales increased by 81% for the same period, thereby squeezing gross margins from 22% to 17%. The decrease in margins reflects competitive pressure on pricing primarily in the form of increased buyer incentives and an increase in construction costs. Beginning in the early 1990s, "third-party" financing for land acquisition, development and construction became increasingly difficult to obtain, requiring Baldwin to rely to a greater degree upon internally generated funds and on credit from subcontractors. Despite this trend, in 1993, the company managed to acquire a credit line from General Electric Capital Corp and concurrently issued this note to raise operating cash. However unlike builders in other parts of the country, those in the Californian region did not benefit from the economic recovery of 1994, and in order to meet burdensome interest payments Baldwin had to sell valuable undeveloped land. General Electric Capital Corp's termination of the company's line of credit, which GECC blamed on slow home sales and excessive spending by the Baldwin brothers on personal expenses, precipitated the company's filing for Chapter 11 on July 18, 1995.

- 07/18/95 – Filed Chapter 11.

(Contact: John Urquidi, Tel: 553-7494)

Bankhaus Fischer *Bank*

DM 40.0 million 7.25% Debentures due 1999 [$US 28.4 million]
DM 3.0 million 8.0% Debentures Series 1 due 2004 [$US 2.1 million]
DM 15.0 million 8.0% Debentures Series 2 due 2004 [$US 10.6 million]

Bankhaus Fischer, of Hamburg, is owned by personally-liable partner Guenter Fischer and the Jahr publishing family. It is a medium sized commercial bank with total assets of DM 2.3 billion. Bankhaus Fischer's problems started when its largest customer, HLS Leasinggesellschaft, was placed under moratorium on October 4, 1995. Over the past few years Bankhaus Fischer had purchased leasing receivables from HLS amounting finally to one half of its total leasing portfolio, totaling DM 1.2 billion. Upon the placement of LHS under moratorium, the charges to write-down the leasing portfolio exceeded the equity base of Bankhaus Fischer. Aware of the pending liquidity crisis, Bankhaus Fischer started paying back bank creditors. On November 2, 1995, in order to prevent preferential treatment of the creditors, the German Banking Supervisory Office declared a payment moratorium for Bankhaus Fischer and closed its offices. On November 21, 1995 the bank filed for creditor settlement with the local courts.

- 11/01/95 – Under payment moratorium.
- 11/21/95 -- Filed for settlement in court.

(Contact: Wolfgang Draack, Frankfurt Office Tel: 49 69 242 84 120)

Barings B.V. *Bank holding company*

$150.0 million Guaranteed Floating Rate Notes due 2001
$150.0 million Guaranteed Floating Rate Notes due 2001

See Accompanying critique of Barings plc.

- 02/26/95 – Placed under Administration.
- 03/06/95 – Purchased by ING.

(Contact: Nicholas Krasno, Tel: 553-1404)

Barings plc *Bank holding company*

£100.0 million 9.25% Perpetual Subordinated Notes [$158.4 million]

Barings plc, founded in 1762, is the oldest established merchant bank in the city of London. As of February 26, 1995, Barings was an international group of companies offering a wide range of financial services to governments, international agencies, investment institutions, and private individuals. In November 1985, Barings plc acquired the whole share capital of Baring Brothers & Co., Limited, a merchant bank and became the parent company of the Barings Group. The other two principal subsidiary companies of the Baring Group are Baring Asset Management, which provides a wide range of fund and asset management services, and Baring Securities Limited, which operates as a worldwide broker. Barings enjoyed improved profits of £68 million in 1993 and £38 million for the first half of 1994. This progress came to a sudden halt when a 28-year old trader, Nicholas Leeson, based in Singapore, is understood to have bought more than 16,000 Nikkei 225 futures contracts expiring in mid-March. The Nikkei 225 stock index subsequently fell from the 19,600 level at the beginning of 1995 to the 17,600 at the end of February, generating an estimated loss of $1 billion for Barings, unless the Japanese markets recover to their highs for 1995. Based on the unlimited exposure from the futures position, the Bank of England and related financial institutions were reluctant to rescue Barings and the company was subsequently placed under administration on Sunday, February 26, 1995.

- 02/26/95 – Placed under administration.

(Contact: Nicholas Krasno, Tel: 553-1404)

The Bibb Company

Manufacturer and marketer of textiles

$127.0 million 14% Senior Subordinated Notes due 1999
$32.8 million 13.875% Senior Subordinated Notes due 1999

The Bibb Company, headquartered in Macon, Georgia, manufactures and markets home textile products; sheets and towels used by the hospitality industry; chambray; and specially engineered textile products used in producing high-pressure hoses and conveyor belts. In 1993, the company's biggest sellers were its licensed Barney products. With the lack of a blockbuster licensed product in 1994, net sales dropped 6.4% for the first nine months versus the comparable period in 1993. Lower revenues for 1994 combined with rising raw materials prices to squeeze Bibb's gross margin from 21% for the first nine months of 1993 to 17% for the corresponding nine months of 1994. Moreover, the company's towel division, known as the Terry business, posted an operating loss of $10.2 million for the first nine months of 1994 due to high costs partially attributable to inefficient equipment. The division was put up for sale in August of 1994 with the intention of lowering the company's debt burden and providing cash for capital expenditures. However, by the end of the first quarter of 1995, no sale had been consummated and Bibb announced that it would retain the business. Simultaneously, it advised subordinated noteholders that it would not make interest payments due on April 3, 1995.

- 04/03/95 – Missed interest payment on 14% senior subordinated notes due 1999.
- 08/04/95 – Missed interest payment on 13.875% senior subordinated notes due 1999.

(Contact: Fran Schulman, Tel: 553-4542)

Bradlees, Inc.

Discount retailer

$100.0 million 9.25% Senior Subordinated Notes due 2003
$125.0 million 11% Senior Subordinated Notes due 2002

Bradlees, Inc., a leading discount retailer in the Northeast, operates 136 discount department stores in nine states. Its stores provide a broad spectrum of products, including basic apparel, fashion home furnishings, competitively priced brand name products, a large assortment of convenience hard goods, and extensive seasonal offerings. Since 1990, the company has embarked on a strategy of new store openings, expansions, and remodeling, resulting in capital expenditures of $50 million, $60.5 million, and $92.5 million for FY93, FY94, and FY95, respectively. However, despite initial efforts to differentiate its strategy from its major competitors, sales growth has been sluggish falling from 3.35% in FY93 to 1.92% for FY95. The company's operations are highly seasonal, with approximately one-third of its revenues and more than 75% of its operating profits being generated in the last quarter of the fiscal year, resulting in additional seasonal borrowings. Insufficient liquidity and vendors reluctance to ship merchandise, has limited the company's ability to withstand increased competition from better capitalized competitors, as well as weakening industry fundamentals. A weak capital structure, with total adjusted debt constituting 94% of book capital, left the company with few alternatives but to file for Chapter 11 protection on June 23, 1995.

- 06/23/95 – Filed Chapter 11.

(Contact: Filippe Goossens, Tel: 553-4126)

Burlington Motor Holdings Inc.

Trucking

$100.0 million 11.5% Senior Subordinate Notes due 2003

Burlington Motor Holdings Inc. is a motor carrier providing truckload services to customers throughout North America. Among the goods hauled are consumer products, paper, packaged chemicals, automotive parts, building materials and produce. Sluggish customer demand and a continued high level of competition reduced freight rates and squeezed margins during 1995. Since 1993, Burlington Motors has aggressively expanded and modernized its fleet. As part of this program, the company added approximately $70 million of new equipment during the first half of 1995. The combination of an overly aggressive modernization of equipment, amortization of debt, and an inability to raise freight rates generated a liquidity crisis at Burlington. Consequently, the company did not make payments on its senior subordinate notes on November 1, 1995.

- 11/01/95 – Missed interest on senior subordinate notes.
- 12/04/95 – Filed Chapter 11.

(Contact: Thomas Keller, Tel: 553-1027)

Burmeister & Wain Holding A/S

Shipbuilder

DKK 329.85 million 7% convertible unsubordinated bonds due 1998 [$60.97 million]

Burmeister & Wain Holding A/S, based in Copenhagen, Denmark, is one of Europe's leading shipbuilders. The company is descendant from Burmeister & Wain, Engineers and Shipbuilders, Ltd. founded in 1846. Burmeister and Wain is comprised of five companies and has a total workforce of 1,800. A cash squeeze, combined with unprofitable shipbuilding activities and the collapse of a key cooperation agreement with Sweden's shipbuilder Kockums, contributed to an after-tax loss of DKK 902 million ($148 million) for 1994, compared with an after-tax profit of DKK 132 million ($20 million) in 1993. The loss was due to the recognition of unrealized losses related to shipholding interests and provisions for losses on concluded contracts scheduled for 1995. A sell-off of shipping assets over the past six months could not revive the company. Failure to renegotiate terms with US investors over a $55 million loan precipitated the company's decision to file for voluntary receivership in Denmark on June 27, 1995.

- 06/27/95 – Filed for voluntary receivership.

(Contact: Thomas Keller, Tel: 553-1027)

Capital Gaming International, Inc. *Casino operator*

$135.0 million 11.5% Guaranteed Senior Secured Notes due 2001

Capital Gaming International, Inc., based in Atlantic City, New Jersey, operates casinos as well as manages casinos for Native American tribes. In August 1994, the company raised $135 million through a debt offering primarily to finance the development of its riverboat casino in New Orleans. The operation, River City was established through a joint venture with Hemmeter Enterprises, Inc. and consisted of two riverboats, the Crescent City Queen and Grand Palais. Poor management of the riverboat led to construction cost overruns of $15.3 million giving it an already higher-than-expected debt burden by its opening in early April 1995. New Orleans, which has yet to prove itself as a viable gaming market, brought fewer visitors to River City than was anticipated. After a meager three months of not-so-smooth cruising, lackluster operating performance, increased competition, and flooding in the New Orleans area forced Capital Gaming to close the Crescent City Queen on June 9, just three days after Hemmeter closed Grand Palais on June 6, 1995. Losses incurred through May 1995 pushed the company's net equity to a negative $9.3 million, below the minimum requirement of $1 million set by NASDAQ to maintain a listing. Unable to operate, Hemmeter's Grand Palais filed for voluntary Chapter 11 protection on July 28,1995. Subsequently, Capital Gaming failed to make interests payments on their senior secured notes on August 1, 1995.

- 08/01/95 – Missed interest payments on senior secured notes due 2001.

(Contact: Denis Girault, Tel: 553-4312)

Color Tile, Inc. *Textiles*

$200.0 million 10.75% Senior Notes due 2001

Color Tile, Inc., headquartered in Fort Worth, Texas, is a specialty retailer of floor covering products. The company operates or franchises 840 stores in 49 states under the trade name Color Tile and Floors A Plenty. The company also owns American Blind and Wallpaper Factory Inc., a direct-response seller of special order window treatments and wall coverings. Expansion by regional home improvement center chains has led to increased price competition for certain of the company's products. Even though revenues for FY94 increased by 21% due to the acquisition of American Blind and Wallpaper Factory Inc., expenses were up 26%, squeezing margins by 3% Color Tile's results for FY94 showed an improved EBITDA; however, a significantly higher interest expense lowered interest coverage to 1.7. Color Tile's third-quarter results for 1995 caused a covenant violation under its bank credit agreement. The bank agreed to provide a waiver of the covenant violation only under the condition that the company omit interest payments due December 15 on the outstanding senior notes.

- 11/15/95 – Announced it would not make December 15 interest payment.

(Contact: Fran Schulman, Tel: 553-4542)

Datapoint Corporation *Computers & peripherals*

$78.7 million 8.875% Convertible Subordinated Debentures due 2006

Datapoint Corporation, including its subsidiaries, is principally engaged in the development, manufacture, acquisition, marketing and servicing of computer and communications products -- both hardware and software -- for integrated network systems in 49 countries worldwide. Incorporated in 1976, the company failed throughout the 1980's to successfully meet the challenges posed by new competitors and meet new market demands for "Open Systems" and standardized interfaces. These shortfalls continued throughout the 1990s, with revenues dropping steadily each year from $265 million in FY91 to $172 million in FY94. Moreover, the company has reported a net loss for the last 4 years. During 1995, while the company was able to maintain revenue level from $172 million in FY94 to $174 million for FY95, rising costs made inroads into the relatively flat revenue level, generating a 5% decrease in operating profits. A cost restructuring initiated in early 1995 proved to be too little and too late. Datapoint delayed interest payments on its convertible subordinated debentures in June and again in December 1995.

- 06/1/95 – Missed interest payments on Convertible Subordinated Debentures due 2006.
- 06/13/95 – Made interest payments on Convertible Subordinated Debentures due 2006.
- 12/1/95 – Missed interest payments on Convertible Subordinated Debentures due 2006.
- 12/28/95 – Made interest payments on Convertible Subordinated Debentures due 2006.

(Contact: Wei Yen, Tel: 553-1649)

Dow Corning Corporation *Producer of silicone-based products*

$75.0 million 9.375% Debentures due 2008
$50.0 million 8.15% Debentures due 2029
$34.5 million Medium Term Note Program due 2003

Dow Corning Corporation is a leading producer of silicone-based polymers. The company, headquartered in Midland, Michigan, is a 50%-50% joint venture between Corning, Inc. and Dow Chemical Company. Prior to January, 1992, Dow Corning was one of the largest producers of silicone breast implants and of the raw material components of these products in the U.S.. On January 6, 1992, the United States Food and Drug Administration requested implant producers and medical practitioners to halt the sale and use of silicone gel breast implants pending further review of their safety. Consequently, the company discontinued the production and sale of silicone breast implants. Since then, a number of lawsuits have been filed against Dow Corning in connection with the implants leading the company to pledge $2 billion dollars towards a $4.3 billion settlement pool, referred to as the "Global Settlement". However, the court reached the preliminary determination that the amount of the $4.3 billion settlement and its structure was inadequate and did not provide participants with current ailments the full amount of the proposed settlement award. Moreover, the high number of lawsuits filed outside of the Global Settlement ("Opt-Outs") substantially increased the company's expected liability related to implants. Though technically solvent, on May 15, 1995 the company filed for Chapter 11 bankruptcy protection in the face of unknown and potentially huge liabilities.

- 05/15/95 – Filed Chapter 11.

(Contact: Joseph Princiotta, Tel: 553-4886)

Drypers Corporation

Baby products

$45.0 million 12% Senior Notes due 2002

Drypers Corporation, based in Houston, Texas, is a regional manufacturer and marketer of disposable diapers, training pants and baby wipes. Drypers is a small, low-cost producer, whose strategy is to minimize research and development and advertising and to follow the market leaders, Procter & Gamble and Kimberly-Clark Corporation, swiftly in successfully introduced products. From its inception in 1987 and through 1991, Drypers distributed its products primarily in the southern and southwestern regions of the U.S. In 1992, the company acquired the other two leading regional diaper producers, VMG Holdings Corp., in the Northwest and UltraCare Products Inc. in the Northeast and Midwest. These acquisitions not only gave the company nationwide production and distribution capabilities, but also left it highly leveraged. An increase in raw material prices impaired the company's operating income in 1995. Facing continued price pressure from its major competitors, the company experienced ongoing losses and operating cash flow difficulties. Consequently, Drypers missed interest payments on its senior notes on November 1, 1995.

- 11/01/95 – Missed interest on senior notes.

(Contact: Pamela Stumpp, Tel: 553-1311)

Elsinore Corp.

Casino

$60.0 million 12.5% First Mortgage Notes due 2000

Elsinore Corporation develops, owns, and operates casinos and casino/hotels in the U.S. The company's principal property is the Four Queens Hotel and Casino in downtown Las Vegas, Nevada. Elsinore has had no sales growth over the last five years, and since FY91 has had negative net income. Although Elsinore has attempted to diversify its revenue stream by investing in 7 Cedars and Spotlight 29, two other casino resorts, these establishments have had little success. The Spotlight 29 project ended with a $1 million cash expense in the first quarter of 1995, and 7 Cedars has not had time to recoup the $9 million invested in the project. Disruptions caused by construction of the Fremont Street Experience sound and light attraction in downtown Las Vegas and new casino openings along the strip led to a 7.4% reduction in casino revenues for Elsinore's money spinner, the Four Queens. In August 1995, the company announced that current cash flows would not be sufficient to cover the $3.7 million interest payment due on October 1, 1995.

- 10/1/95 – Missed interest payments.
- 10/31/95 – Filed Chapter 11.

(Contact: Denis Girault, Tel: 553-4321)

Equitable Bag Co., Inc.

Shopping bag manufacturer

$50.0 million 11% Senior Notes due 2004

Incorporated in New York in 1919, Equitable Bag is a leading designer, manufacturer, and distributor of plastic and paper shopping bags. In January 1988, the Equitable Bag Holding Co. and its subsidiary EBC Services Corp., acquired Equitable Bag Co., Inc. through a primarily debt-financed transaction. Equitable Bag derives revenues principally from department stores and its ten largest customers account for over half of sales. The company's vertical integration through ownership of a paper mill and resin extrusion capabilities affords a significant competitive edge, allowing it to provide custom-design products, flexible manufacturing, and just-in-time store delivery. Yet the advantages of a strong market position and an established client base have been offset by the burden of the acquisition debt and the revenue volatility associated with an over-reliance on a relatively few retail and department store sales. Revenues have weakened since the acquisition and EBITDA/Interest expense has remained below one for the last three years. A 1992 recapitalization, which included the sale of $105 million 12.375% Senior Notes due 2002, did little to relieve the onerous debt burden. The company filed a prepackaged Chapter 11 on October 14, 1994 where it exchanged its $105 million 12.375% Senior Notes due 2002 for the above issue. The exchange was of no avail and on May 18, 1995, just over seven months later, the company again filed for Chapter 11 protection.

- 05/18/95 – Filed for Chapter 11.

(Contact: Brian Oak, Tel: 553-4688)

Forstmann & Company, Inc.

Textiles producer

$56.6 million 14.75% Senior Subordinated Notes due 1999

Forstmann & Company, Inc., headquartered in New York City, designs, manufactures, and markets apparel fabrics produced from pure wool, wool blends, and blends of natural and synthetic fibers. The company also produces specialty fabrics for use in billiard tables, sports caps, and career uniforms. Forstmann's struggles began when it was taken private in a leveraged 1988 MBO. By 1990, the debt load incurred in the MBO had taken its toll, and the company missed interest payments on $100 million of 14.75% senior subordinated notes, due 1999. However, the company avoided bankruptcy through an out-of-court bond restructuring and an equity infusion. Commencing FY92, Forstmann embarked on a $100 million capital investment program to modernize its vertically integrated manufacturing facilities and by FY94 was halfway to completing the project. However, as a result of higher than anticipated borrowings and a rise in interest paid on its floating rate debt, the company slowed the program to meet higher pending debt service requirements. A rise in the cost of raw materials resulting from an extended drought in Australia, caused operating profits to decline 15.5% from FY93 to FY94 as competitive pressures limited the company's ability to pass along the full price increases. Fiscal 1995 saw sales to apparel and outwear manufacturers weaken. As of July 30, 1995 the company was in violation of certain financial covenants. Despite the appointment of a new president with turnaround experience in August 1995, the company filed for Chapter 11 protection a month later on September 22, 1995.

- 09/22/95 – Filed Chapter 11.

(Contact: Fran Schulman, Tel: 553-4542)

Gold River Hotel & Casino Corporation

Casino operator

$75.0 million 11.5% First Mortgage Bonds due 1999

Gold River Hotel & Casino Corporation, through its wholly owned subsidiary, Gold River Operating Corporation, owns and operates the Gold River Gambling Hall & Resort, a 1,000-room hotel/casino in Laughlin, Nevada. The company is the successor to the Goldriver Finance Corporation, which filed for Chapter 11 in February 1991 and emerged under its present name in September 1992. Through the filing the company reorganized debt incurred in 1989 to fund development of the casino and hotel. However, the reorganization proved ineffective. Since emerging from bankruptcy, the company has not experienced a positive net income and has struggled to meet its indenture requirements with regard to interest coverage ratios and the EBITDA minimum, which the bondholders have waived. A general downturn in gaming revenues caused by intense competition in the Laughlin, Nevada market in late 1993, deepened the company's net loss from $3 million in FY93 to $4.4 million for FY94. The first quarter of 1995 provided little relief as revenues slid 13.4%, compared to an average industry decline of 2.5%. On August 29, 1995, Gold River withdrew and terminated a consent solicitation after it failed to receive the approval of more than two-thirds of its bondholders to modify the indentures on its $75 million first mortgage notes, due 1999. In default of several other financial covenants, the company missed interest payments of its mortgage notes on August 31, 1995.

- 08/31/95 – Missed interest payments on first mortgage bonds due 1999.

(Contact: Denis Girault, Tel: 553-4312)

The Grand Union Capital Corp.

Supermarket operator

$150.5 million Zero Coupon Senior Notes due 2004 [$343.0 million principal amount]

$88.1 million Zero Coupon Senior Subordinated Notes due 2007 [$745.0 million principal amount]

See last month's critique of Grand Union Company.

- 02/06/95 – Filed for Chapter 11.

(Contact: Fran Schulman, Tel: 553-4542)

The Grand Union Company

Supermarket operator

$350.0 million 11.25% Guaranteed Senior Secured Notes due 2000

$175.0 million 11.375% Senior Notes due 1999

$500.0 million 12.25% Guaranteed Senior Subordinated Notes due 2002

$50.0 million 12.25% Guaranteed Senior Subordinated Notes due 2002

The Grand Union Company, a Delaware corporation, currently operates 236 supermarkets and food stores in six northeastern states under the "Grand Union" name. In 1992, the company recapitalized, issuing $800 million of notes to refinance debt incurred in the 1989 LBO and to repurchase Salomon Brothers Holding Company Inc.'s equity in the company. The transaction added $150 million of additional debt to an already highly leveraged balance sheet. Its parent company, Grand Union Capital Corporation, also issued $200 million of zero coupon notes to successfully complete the recapitalization. During the next two years, revenues, operating profits, and cash flow continuously declined, reflecting competitive pressures, continued economic weakness in the Hudson Valley region, and a 22-day strike during 1994. As a result of the decreasing cash flow, the company's ratio of EBITDA to interest expense, including the parent company's, remained below 1, highlighting the excessive debt burden relative to earning power. Moreover, high capital requirements ($81 million during 1994) for store renovations, new stores, and maintenance further reduced the company's available cash for interest coverage from already unsustainable levels. In November 1994, the company announced that cash flow would be insufficient to meet interest payments due in early 1995. As anticipated, Grand Union missed interest payments on January 15, 1995, and 10 days later filed a pre-arranged consensual plan under Chapter 11.

- 01/15/95 – Missed interest payments on Senior Secured Notes due 2000 and Senior Subordinated Notes due 2002.
- 01/25/95 – Filed pre-arranged consensual plan under Chapter 11.
- 06/15/95 – Emerged from Chapter 11.

(Contact: Fran Schulman, Tel: 553-4542)

Grupo Fosforera S.A.

Miscellaneous

2,000.0 million Pta 9% Debentures due 1998 [US$16.5 million]

Grupo Fosforera, based in Madrid, Spain, is a privately owned financial holding company involved mainly in agri-foods, distribution, camping accessories, sale of gas, and production of matches. Under sales pressure in recent years, the company omitted the interest payment due in December 1995.

- 12/28/95 – Missed interest payments on debentures due 1998.

(Contact: Carlos Winzer, Tel, London Office 44-171-621-5307)

Grupo Synkro S.A. de C.V.

Apparel manufacturer

$50.0 million Guaranteed Euronotes due 1995

Grupo Synkro S.A. de C.V. is a holding company whose subsidiaries are engaged in the manufacture and sale of hosiery, clothing, and stockings. Its products are sold under brand names, and it exports mainly to Latin America and Europe. In January 1994, the company purchased the second-largest U.S. hosiery player, Kayser-Roth. Although Grupo Synkro reported an increase in revenues for the third quarter of 1995, it was attributable primarily to the December 1994 devaluation of the Mexican peso. A difficult retail environment in the Mexican, Argentinean, and U.S markets negatively impacted Grupo Synkro's operating results. Its newly purchased U.S. subsidiary, Kayser-Roth, as well as subsidiaries in Argentina and Mexico, Legwear Argentina and Legwear Mexico , suffered from slack demand in the U.S., and the volatile economic environment prevailing in Central and South America following Mexico's Peso devaluation. Grupo Synkro approached its banks in September 1995 with the hope of restructuring its debt. Less than a month later on October 7, 1995, it missed principal and interest payments on its Euronotes due 1995.

- 10/07/95 – Missed interest and principal payments.

(Contact: Richard Mercier, Tel: 553-7885)

Harrah's Jazz Company

Casino operator

$435.0 million 14.25% First Mortgage Notes due 2001

Harrah's Jazz Company, a joint venture between Harrah's Entertainment Company, Louisiana Development Corporation and Grand Palais Casino, Inc., was organized to build the world's largest casino in downtown New Orleans. The casino was scheduled to open in April 1996. In May 1995, the company opened a temporary casino, which was supposed to contribute at least $72 million to the construction budget. But continuing poor results by the temporary casino, far below initial projections, left the company short of cash, and also posed doubts about the depth of New Orleans as a gaming market. Unable to obtain funds from its bank group led by Bankers Trust Company without some support from Harrah's Entertainment, the company filed for bankruptcy on November 22, 1995.

- 11/22/95 – Filed Chapter 11.

(Contact: Denis Girault, Tel: 553-4312)

Huarte S.A.

Construction

1,750.0 million Pta 9% Debentures due 1995 [US$14.2 million]

3,250.0 million Pta 9% Zero Coupon Debentures due 1995 [US$26.4 million]

Huarte S.A., headquartered in Madrid, Spain and 50.3% owned by Hasa, is primarily engaged in the construction of builidings, motorways, bridges and hydraultic works. In July 1995 directors of the company were accused of making illegal payments to the former Civil Guard chief in order to obtain public works contracts. Consolidated pretax profits for the first nine months of 1995 were 985 million Pta (US$ 8.0 million) compared with 2,693 million Pta (US$20.6 million) for the same period of 1994. On October 27, 1995, the company put its Madrid headquarters on the market in order to obtain liquidity. On December 7, the company failed to reach an agreement with its bondholders and subsequently missed interest and principal payments on both its debentures on December 10,1995.

- 12/10/95 – Missed interest and principal payments on both debentures due 1995.

(Contact: Carlos Winzer, Tel, London Office 44-171-621-5307)

Ithaca Industries, Inc.

Apparel

$125.0 million 11.125% Senior Subordinated Notes due 2002

Ithaca Industries, Inc. designs, manufactures and sells private label and branded women's and girls' underwear, men's and boys' underwear, hosiery and T-shirts products. Its products are sold through a broad range of U.S. retail distribution channels and are offered to the public through more than 10,000 customer outlets, including discount stores, department stores, specialty stores, drug stores and supermarkets. The company is the result of a management and Merril Lynch Capital Partners led LBO in 1983. Sales declined from July 1994 to July 1995 due to lower pricing for women's and girl's underwear and hosiery that more than offset the reported sales increase in the men's and boy's underwear and T-shirts divisions. Inventory days increased to 117 in FY95 from 94 days in FY94 reflecting the slowdown in sales at the retail level and an accumulation of finished goods at certain offshore locations. Reduced operating earnings, a greater need for working capital and higher capital expenditures led to an increase in borrowings under the company's bank credit facility in the second half of 1995. By July 28, 1995, Ithaca was not in compliance with two financial bank covenants. On December 15, 1995, the company omitted the interest payments due on its senior subordinated notes due 2002.

- 12/15/95 – Missed interest payments on Senior Subordinated Notes due 2002.

(Contact: Catherine Guinee, Tel: 553-4385)

Kloster Cruise Limited

Cruise ship operator

$300.0 million 13% Senior Secured Notes due 2003

Kloster Cruise Limited, a wholly owned subsidiary of Vard A/S, is one of the largest cruise ship operators in the world. It operates in two major markets, serving the standard market through its Norwegian Cruise Line division and the premium market through its wholly owned subsidiary, Royal Cruise Line. The company abandoned the luxury market in June 1994 when it sold its Royal Viking trademark and one of two luxury ships. Kloster has in the past effectively used debt restructurings and asset sales to offset financial pressures. However, throughout 1995, the company's operating performance has continued to slide, and despite cost cutting, the revenue base has deteriorated without a significant reduction in debt service obligations. After months of unsuccessful attempts to infuse equity, the company missed interest payments on its senior secured notes.

- 11/01/95 – Missed interest payment on senior secured notes.
- 11/30/95 – Made interest payment within grace period.

(Contact: Martine Nowicki, Tel: 553-0831)

Lomas Financial Corporation

Mortgage bank

$139.9 million 9% Convertible Senior Notes due 2003

See Accompanying critique of Lomas Mortgage USA, Inc.

- 10/10/95 – Filed Chapter 11.

(Contact: Shunsaku Sato, Tel: 553-4321)

Lomas Mortgage USA, Inc.

Mortgage bank

$150.0 million 9.75% Senior Notes Tranche 1 due 1997

$190.0 million 10.25% Senior Notes Tranche 2 due 2002

Lomas Mortgage USA, Inc. (LMUSA) is principally engaged in producing, servicing, and selling residential mortgage loans. It is the principal operating subsidiary of its holding company, Lomas Financial Corporation (LFC), which previously filed for Chapter 11 protection in September 1989, however LMUSA was not included in the filing. In response to difficult market conditions and severe losses, LMUSA sold its network of retail mortgage origination in June 1989. Since 1989, LMUSA has relied mainly on its servicing portfolio for revenue generation. However, steadily falling interest rates in the early nineties, the consequent upsurge in mortgage refinancing and a high level of prepayments depleted the stock of the LMUSA's servicing portfolio, resulting in a net loss of $182 million by June 1994. In the face of intense competition, the parent, Lomas Financial Corporation, considered asset sales. By December 1994, LFC sold a subsidiary, Lomas Information Systems and in January 1995, the company restructured itself and LMUSA, laying off approximately 200 employees. However, these measures proved insufficient, and LMUSA missed interest payments on both of the above-listed senior notes on October 1, 1995.

- 10/01/95 – Missed interest payments on both tranches.
- 10/10/95 – Filed Chapter 11.

(Contact: Shunsaku Sato, Tel: 553-4321)

New Almac's Inc.

Supermarket operator

$11.0 million 11.5% Senior Subordinated PIK Notes due 2004

New Almac's Inc., a wholly owned subsidiary of Victory Holdings Corp., operates 27 supermarkets in Rhode Island and Southern Massachusetts. The company was incorporated in September 1994, as a special purpose subsidiary of Victory Holdings, which acquired Almac's Inc . Almac's Inc. filed for bankruptcy protection on August 6, 1993 prompted by a sharp drop in sales in FY92 and FY93. In September 1994, under Almac's reorganization plan, New Almac's Inc., acquired Almac's Inc through purchases of assets and the assumption of liabilities of Almac's. As of July 1995, New Almac's reported $56 million in assets and $57 million in liabilities. New Almac's Inc. filed for Chapter 11 protection again on September 20, 1995.

- 09/20/95 – Filed Chapter 11.

(Contact: Fran Schulman, Tel: 553-4542)

Physicians Clinical Laboratory Inc.

Provider of medical testing services

$40.0 million 7.5% Convertible Subordinated Debentures due 2000

Physicians Clinical Laboratory (PCL), based in Sacramento and serving the Sacramento, San Francisco Bay Area, Central Valley, and Los Angeles markets, is California's second-largest provider of medical-testing services. The company, which for 1993 and 1994 ranked as the fastest growing company in the clinical laboratory industry, maintains three full-service laboratories and 203 patient service centers throughout California. PCL managed, through acquisitions and effective management, to grow revenues from $27 million when it was established in 1992 to $67 million for FY94, simultaneously maintaining operating profit margins of 12% or more. Moreover, the company maintained an EBIT/interest ratio of more than 3 throughout the same period. However, FY95 proved to be less successful for management, with the overly-aggressive acquisition of Damon Corp for $51 million. The high price paid for the difficult acquisition led to a fourth-quarter 1995 (period ending February 1995) loss of $9.6 million. Although that figure included a $9.25 million one time charge for the acquisition, the $3 million loss reported for the first quarter of FY96 (the period ending May 1995), highlighted the company's declining operating performance. The poor results, aggravated by the acquisition, was primarily caused by poor reimbursements by major medical agencies, as well as local rainy weather which impeded customer arrivals thereby reducing testing center usage. Continued poor operating results through the second quarter of FY96 placed the company in violation of certain creditor covenants. In addition, the company has been deficient in its SEC filings since November 1994, making it difficult to assess the company's financial condition. In May 1995, PCL defaulted on its bank loans and continued on to default on its convertible subordinated debentures, due 2000, by omitting the August 15, 1995 interest payments.

- 08/15/95 – Missed interest payments on convertible subordinated debentures due 2000.

(Contact: Randal Gaulke, Tel: 553-0814)

Plaid Clothing Group

Tailored clothing manufacturer

$75.0 million 11% Senior Subordinated Notes due 2003

Plaid Clothing Group Inc. is the second-largest manufacturer of men's and boys' tailored clothing in the United States. The company designs, manufactures, and sells clothing covering a broad range of price points and styles, including such nationally recognized brand names as Burberrys, Claiborne, and Christian Dior. Since its establishment in 1991, the company has grown through the acquisition of licenses by adding brand names and styles. Sales grew rapidly, reaching $287 million for FY93. However, in FY94 sales declined by 8.4% to $263 million, resulting in a net loss of $18.9 million. Depressed sales reflected overall lower unit demand for the company's specialty and department store brands at the retail level, as well as a shift in demand towards less profitable lines in the company's product mix. Higher raw material and per unit manufacturing costs due to lower production pressured margins further. In March 1994, the company incurred a restructuring charge of $14 million, after an unsuccessful attempt to acquire Gruppo Finanziario Tessile S.p.A., one of the world's largest manufacturers of men's and women's clothing. The overall weak market for men's tailored clothes continued through 1995, consequently the company reported a net loss of $418,000 for the first quarter. On July 17, 1995, the company voluntarily filed Chapter 11.

- 07/17/95 – Filed Chapter 11.

(Contact: Pamela Stumpp, Tel: 553-1311)

Porta Systems Corporation

Developer and manufacturer of telecommunications equipment

$36.1 million 6% Convertible Subordinated Eurodebentures due 2002

Porta Systems Corp., together with its subsidiaries, develops, designs, manufactures and markets a broad range of proprietary and standard telecommunications equipment. The company's two principal product categories are telecommunications connection equipment and operations support systems, both used primarily by telephone operating companies. The telephone equipment market is characterized by intense competition (with AT&T as Porta Systems' principal U.S. competitor), rapid technological change, and a movement to private ownership of telecommunications equipment. The company experienced no sales growth from FY92 to FY94, while the cost of sales rose from $44 million to $59 million for the same period, creating operating losses and draining working capital. An amended credit agreement with its banks in July 1993, resulted in a reduction in available credit and working capital, leading to additional operational problems, such as a shortage of parts and shipment delays. To compensate for the limited availability of working capital, the company embarked on an aggressive inventory reduction. Although inventories were reduced from $28 million to $20 million by the end of FY94, additional costs were incurred in the process, resulting in little improvement. In November 1994, the company secured additional financing of $10 million from a new senior creditor, Foothill Capital Corporation. As a result of Porta Systems violating certain of the non-monetary covenants of its agreement, Foothill required the company to refrain from making any payments on its $36 million of 6% convertible subordinated debentures due July 1, 1995.

- 07/1/95 – Missed interest payments on Eurodebentures.

(Contact: Dan Pakenham, Tel: 553-4578)

Presidio Oil Company

Explorer for and producer of oil and gas

$75.0 million 11.5% Senior Secured Notes Series B due 2000
$50.0 million 9% Convertible Subordinated Debentures due 2015
$99.8 million 13.25% Senior Gas Indexed Notes Series B due 2002
$0.2 million 13.25% Senior Subordinated Gas Indexed Notes due 1999

Presidio Oil, incorporated in Delaware, is an independent oil and gas company engaged in domestic, onshore oil and gas exploration, development and production. The company has produced continuos net losses since 1991. Recent weakness in gas prices has decreased Presidio's cash flows and the overall value of its reserves, restraining operating performance. Continued funding for reserve development has necessitated asset sales, decreasing the company's production and future revenue base. Heavy losses of $24.5 million in 1994 versus $7.2 million for 1993 have exacerbated Presidio's already negative equity value. The company announced in its 1994 annual report that it would be unable to meet all its interest payments as they come due in 1995. The interest payments on two issues due on March 15, 1995 were delayed one day.

- 03/15/95 – Missed interest payments on senior secured notes due 2000, and on convertible debentures due 2015.
- 03/16/95 – Made interest payments on senior secured notes due 2000, and on convertible debentures due 2015.
- 05/15/95 – Missed interest payments on senior subordinated indexed notes due 1999, and on senior unsecured gas indexed notes due 2002.

(Contact: Mihoko Manabe, Tel: 553-1942)

Rickel Home Centers Inc.

Retail home improvements

$126.5 million 13.5% Senior Unsecured Notes due 2001

Rickel Home Centers Inc., headquartered in South Plainfield, New Jersey, operates 92 home center stores in New Jersey, southern New York, and Pennsylvania. In July 1994, the company merged with Channel Home Centers in a leveraged transaction led by EOS Partners, L.P. Weaker than anticipated operating results in 1995 due to a downturn in the home remodeling market coupled with intense competition from home improvement warehouse chains, national mass merchandisers, and regional discount stores, as well as disruptions resulting from the conversion of the Channel stores to the Rickel format, were all contributing factors to the company's downfall. Seasonal peak business during the spring and summer of 1995 did not generate sufficient cash to fund the December 15 interest payment.

- 12/15/95 – Missed interest payments on Senior Unsecured Notes due 2001.

(Contact: Fran Schulman, Tel: 553-4542)

Sam Houston Race Park, Ltd.

Horse race park owner and operator

$75.0 million 11.75% Senior Secured Notes due 1999

Sam Houston Race Park, Ltd., located in Harris County, Texas, is the operator of the Sam Houston Race Park, a class 1 horse racing facility that commenced operations in April 1994. Since its inception in June 1990, the majority of the company's capital has been sunk into developing this facility. Poor daily attendance and declining per capita wagering during the most recent thoroughbred racing season caused lower results than the company originally expected. In November 1994, the company announced plans to meet with bondholders to discuss a capital restructuring. Although the company secured a $6.5 million capital infusion earmarked to meet its January 1995 interest payment, the funds were used to fund ongoing operations. Consequently, the company missed the interest payment due on January 15, 1995.

- 01/15/95 – Missed interest payment on senior secured notes due 1999.
- 04/17/95 – Filed for Chapter 11.

(Contact: Jeremy Hawes, Tel: 553-1495)

Seven-Up/RC Bottling Company of Southern California, Inc.

Bottler and beverage distributor

$140.0 million 11.5% Guaranteed Senior Secured Notes due 1999

Seven-Up/RC Bottling Company of Southern California, Inc. is one of the largest beverage bottlers and distributors in the U.S. The company owns the rights to bottle and distribute a large and well-diversified portfolio of leading trademark beverages including Seven-Up, Royal Crown, A&W, Sunkist, Schweppes, Evian, Perrier, Seagram's, Welch's, Country Time and Yoo-Hoo. Seven-Up/RC and its parent company, Beverage Group Acquisition Corporation, were formed by a $224 million debt-financed, management-led buyout from Westinghouse Electric Corporation in 1990. Although the company achieved a 11.5% increase in sales for FY94, the company's "new age" products, including Snapple and Mistic Ice Tea, did not perform up to expectations in FY1995. Moreover, increased price competitiveness in the soft drink sector resulted in slower sales and pressured the company's margins. Since the 1990 MBO, the company has sunk under the weight of its highly leveraged balance sheet. Earnings for the last three years have struggled to match the company's interest expense, with only FY94 producing a EBITDA/Interest ratio greater than 1. Consequently, the company has had a working capital deficiency since inception, and no ability to fund capital expenditures from cash flows or build any working capital reserves. The long-term outlook for the bottled soft-drinks market in Southern California is favorable, but Seven-Up/RC has a limited future without a sizable restructuring of its balance sheet. Citing their predicament, Seven-Up missed interest payments on its senior secured notes due 1999 on August 1, 1995.

- 08/01/95 – Missed interest payments on senior secured notes due 1999.
- 09/11/95 – Exchange offer completed.

(Contact: Dan Pakenham, Tel: 553-4578)

Southwestern Life Corporation

Life insurance holding corporation

$256.1 million 11.25% Senior Subordinated Notes due 1996
$91.2 million 11.25% Senior Subordinated Notes due 2003

Southwestern Life Corporation is a holding company with subsidiaries that market a broad range of life insurance, annuity products and accident and health insurance. In the 1980s, the company embarked on an aggressive growth strategy, acquiring established life and health insurance companies. These acquisitions left the company highly leveraged. In 1993, the company sold its wholly owned subsidiary, Bankers Life and Casualty Insurance Company. While the sale was undertaken in order to provide relief for the company's straining liquidity, it rather aided in depleting revenues by almost 53% ($1.6 billion for FY92 to $762 million for FY93). Along with its aggressive acquisition strategy, the company had invested in high risk collateralized mortgage obligations and collateralized mortgage-backed securities. During FY94, Southwestern endeavored to reduce its debt load; through retiring and repurchasing in the open market the company reduced the amount of its notes payable to $369 million in FY94 from a massive $1.2 billion in 1989. However, in early 1995, the company projected it would have insufficient capital resources to meet its 1995 cash needs, including interest and principal on its long term debt. On October 10, 1995, the company filed for Chapter 11 protection and changed its name to I.C.H Corporation.

- 10/10/95 – Filed Chapter 11.

(Contact: Patrick Finnegan, Tel: 553-4192)

SpectraVision, Inc.

Video entertainment provider

$294.8 million 11.65% Senior Subordinated Reset Notes due 2002
$177.1 million Senior Discount Notes due 2001

Founded in 1971, Spectravision Inc., formerly SPI Holdings, Inc., is the nation's leading provider of interactive in-room video entertainment services to the lodging industry. The company provides in-room television viewing of recently-released major and other motion pictures on a pay-per-view basis, predominantly to hotel chains. The present company is the result of two LBO's, one in 1987 and the second in 1989, which left the company highly leveraged. Consequently, in September 1992, the company had its first encounter with Chapter 11, where it restructured its debt into the above two issues. SpectraVision emerged from bankruptcy with some debt forgiveness and a lower coupon rate on the reset notes. The company further improved its balance sheet with a $78 million equity infusion from a public offering in October 1993. However, despite a major investment in state-of-the-art satellite technology, the company's market share dropped and revenues followed suit from $168 million in FY92 to $162 million in FY93 and to $143 million in FY94. Given an EBITDA/Interest expense ratio of 0.09 in FY94, it is not surprising that the company continued to exercise its PIK (Pay-in-Kind) options on its senior subordinated notes, deferring most of its cash interest payments. With negative equity of $373 million, and negative working capital, the company filed for Chapter 11 protection for the second time on June 8, 1995.

- 06/08/95 – Filed Chapter 11.

(Contact: Robert Konefal, Tel: 553-1603)

Trans World Airlines, Inc.
Passenger airline

$225.3 million 10% Senior Secured Notes due 1998

$336.8 million Senior Secured Pay-In-Kind Notes due 2000

Trans World Airlines, Inc. (TWA), the seventh-largest airline in the U.S., previously filed for bankruptcy protection in January 1992. The company had lost money consistently since Carl Icahn's aggressive 1985 LBO, which left the company overleveraged and with little working capital. Since emerging from bankruptcy in November 1993, TWA, has suffered from high labor costs and an aging aircraft fleet, which together boosted operating costs. These expenses, in conjunction with political and economic uncertainty, depleted the company's cash reserves thereby hindering its ability to compete with either the larger, more financially stable carriers or the growing discount carriers. As a result of all these factors, the airline has lost market share which has in turn, generated a continuous stream of red ink on its income statements. Through the 1992 bankruptcy filing, the company managed to reorganize some of its debt and issue pay-in-kind notes to ease the burden of cash interest payments. The industry's turnaround in the second half of 1994, helped TWA register a small third-quarter operating profit of $33.8 million, however this was still below the industry average. In anticipation of a cash shortfall in early 1995, the company has been attempting to restructure its debt since October 1994 and failed to make the interest payment due on its 10% senior secured on February 1, 1995.

- 02/01/95 – Missed interest payments on Senior Secured Notes due 1998.
- 06/30/95 – Filed a prepackaged Chapter 11.
- 08/23/95 – Emerged from Chapter 11.

(Contact: Renee Shaker, Tel: 553-1318)

UDC Homes, Inc.
Homebuilder

$115.0 million 11.75% Senior Unsecured Notes due 2003

UDC Homes, Inc. is a leading national builder and marketer of single family attached and detached homes in Arizona, California, Florida, Georgia and North Carolina. The company's strategic focus centers on the move-up family and retirement markets. At the end of the 1980s, the company entered an expansion phase and consequently embarked on distributions in the form of cash dividends. As a result, UDC was left with a weak capital structure, and consequently refinanced in 1993. While UDC's 1993 refinancing provided some relief, the company has remained weakly capitalized with a thin equity base and a mediocre fixed charge interest coverage. Throughout 1994, the company struggled to liquidate a land base, after paying a relatively steep price for it years earlier. UDC registered a net loss of $22.7 million for FY94 as compared to a net income of $5 million for FY93. Price concessions stemming from competitive pressures in the Californian market, a decrease in units closed in Arizona and the Southeast, and an 8% increase in costs decreased the company's gross margin by 0.32% from FY93 to FY94. Since the beginning of 1995, UDC has gradually been developing a cash crunch due to an increase in cash requirements to service debt and preferred stock obligations that started to accrue on a cash basis. Moreover, the company has been in violation of certain covenants since September 1994, and did not make interest payments on a private issue on December 31, 1994. UDC Homes, Inc. missed payments on its senior secured issue on April 30, 1995.

- 04/30/95 – Missed interest payments on senior unsecured notes due 2003.
- 05/17/95 – Filed for Chapter 11.
- 11/14/95 – Emerged from Chapter 11.

(Contact: Denis Girault, Tel: 553-4312)

Vendell Healthcare, Inc.
Owner and operator of psychiatric hospitals

$75.0 million 12% Senior Notes Series B due 2000

Vendell Healthcare, Inc. is a U.S. psychiatric hospital company with ten hospitals in eight states. The company formed in June 1989 to specialize in the treatment of adolescents and children. Vendell's hospitals have come under intense pressures as a result of two trends in the psychiatric industry. First, insurance companies' daily reimbursement rates for psychiatric services have dropped. Second, and more importantly, cost containment pressures from employers and insurance companies have caused a drastic decline in the industry's average length of stay per patient from 30 days for the quarter ended September 1992, to 16 days for the quarter ending June 1994. The company reacted by opening several outpatient clinics however, it was unable to offset the negative effects of these trends through greater outpatient utilization. Consequently, Vendell did not generate enough cash to cover its operating and financing expenses, with EBITDA over interest a dismal 0.84 for the fiscal year ending June 1994. Moreover, the company is extremely overleveraged; total debt constitutes 97% of total book capital for FY94. On May 15, 1995 facing a possible liquidity crunch, the company missed interest payments on its senior notes due 2000,

- 05/15/95 – Missed interest payments on its senior notes due 2000.

(Contact: Randal Gaulke, Tel: 553-0814)

Victory Markets, Inc.
Supermarket operator

$59.5 million 12.5% Notes due 2000

Victory Markets, Inc., a wholly owned subsidiary of Victory Holdings Corp., operates 57 Great American supermarkets in New York State. As of July 1995, Victory Markets reported $152 million in assets and $178 million in liabilities. High leverage and tight cash flow led to the company to omit a September 15 interest payment. Vendors reacted nervously and subsequently, the firm filed for protection from creditors on September 22, 1995.

- 09/15/95 – Missed interest payments on notes due 2000.
- 09/20/95 – Filed Chapter 11.

(Contact: Fran Schulman, Tel: 553-4542)

Wherehouse Entertainment, Inc.

Retailer of prerecorded music and videocassette rentals

$110.0 million 13% Senior Subordinated Notes Series A due 2002

$3.8 million 6.25% Convertible Subordinated Debentures due 2006

Wherehouse Entertainment, Inc., based in Torrance, California, is one of the largest retailers of prerecorded music and videocassettes rentals in the western U.S. The company operates 347 stores in 11 states. Wherehouse was acquired in June 1992 from its parent, WEI Holdings, through a highly leveraged management buy-out. Since 1994, the company's performance has been hampered by increased competition and declining margins as superstore retailers such as Best Buy, Musicland, and Blockbuster have expanded into the company's traditional markets. A move to lower margin product sales reduced the company's operating margin from 4.8% for FY92 to -5.0% for FY94. The heavy debt volume incurred in the MBO, together with poor operating margins generated an interest coverage of negative 1 for FY94. Meanwhile, debt maturities of $61 million loom for FY95 through to FY98. Following dismal operating results in the first quarter of 1995, the company announced that without additional waivers of, or amendments to, its $45 million bank credit facility and $49 million variable rate term note, its lenders could terminate the agreement and accelerate payment of the amounts outstanding. Consequently on June 16, 1995 Wherehouse signed a standstill agreement with its senior lenders, whereby Wherehouse would omit interest payments on its senior subordinated notes due 2002 on August 1, 1995.

- 08/01/95 – Missed interest payments on senior subordinated notes due 2002.
- 08/02/95 – Filed Chapter 11.

(Contact: Filippe Goossens, Tel: 553-4126)

Corporate Bond Defaults and Default Rates 1938-1995

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