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Historical Default Rates of Corporate Bond Issuers, 1920-1999

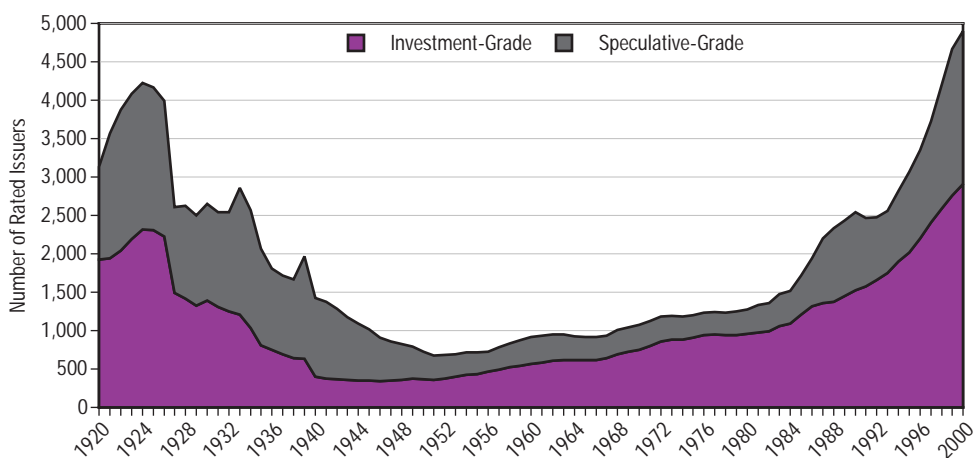
Summary

This report, Moody's 13th annual corporate bond default study, extends our default research to cover the period from 1920 through 1999. Highlights from this year's study include:

- Worldwide, a record 106 Moody's-rated issuers defaulted on \$35.6 billion of long-term, publicly held corporate and sovereign debt in 1999. Including unrated defaulters brings the totals to 147 and \$44.6 billion respectively.
- The US continues to be the largest single source of defaults, contributing 99 defaults on \$23.5 billion of publicly held long-term corporate bonds in 1999.
- Moody's issuer-based trailing 12-month default rate for speculative-grade issuers ended 1999 at 5.51%. The 1999 all-corporate trailing 12-month default rate finished the year at 2.19%.
- Moody's dollar-weighted trailing 12-month default rate for speculative-grade issuers ended 1999 at 7.78%.
- Average recovery rates, as measured by defaulted bond prices, fell for all seniority/security classes in 1999. Overall, recovery rates averaged 42% of par, down from 43% last year but almost exactly equal to their post-1970 average.
- Moody's universe of rated corporate and sovereign long-term debt issuers grew to over 4,900 in 1999

The appendix to this study contains statistical tables of default rates that serve both to document the performance of Moody's ratings and to quantify their meaning in terms of the frequency of default.

Moody's Corporate & Sovereign Long-Term Debt Issuer Universe, 1920-2000



continued on page 5

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Introduction

Moody’s corporate bond default research began in 1986 in our structured finance group, as part of an effort to ensure the consistency of our long-term debt ratings across asset classes. Since then, we have continued to upgrade and expand that research annually to examine more closely the performance of our ratings as indicators of credit quality over a wider variety of economic conditions and events.

This report presents a general overview of defaults, default rates, and recovery rates, as well as statistics describing the industrial and geographic evolution of Moody’s-rated universe. While some components of this report explore the default experience over the entire period from 1920 through 1999, we continue to pay special attention to the period extending from 1970 to the present, under the rationale that more recent experience is of greater interest to investors.

We begin with a summary of 1999’s default activity.

1999 Default & Bond Market Activity

Number of Defaults Sets New Record

Nineteen-ninety-nine saw a record 147 defaults on \$44.6 billion of long-term publicly held debt. Of these defaulters, 106 held Moody’s ratings. In dollar terms, this represents a 52% increase over 1998. The year’s largest default was by the Republic of Ecuador, the only sovereign default of the year, affecting over US \$6.6 billion. Other large defaulters included AMF Bowling Inc. and AMF Bowling Worldwide Inc., whose distressed exchange default affected over US \$1.8 billion, and TransAmerican Refining Corp., TransTexas Gas Corp., and TransAmerican Energy Corp. which defaulted on a combined US \$1.7 billion. Daewoo Corp. defaulted on US \$5.6 billion worth of long-term debt, although none of these issues carried Moody’s ratings.

Ninety-nine defaulters were US-domiciled and 48 were domiciled outside the US. The distribution of 1999’s defaulters by country of domicile is presented in Exhibit 1. As discussed in detail in the section on hazard rates below, 1999’s defaulters were dominated by issuers who were recent entrants into the public debt markets. Almost half of these issuers had held Moody’s ratings for less than three years and had initial ratings of single-B or lower.

Exhibit 33 in the appendix presents a complete chronological list of 1999’s corporate and sovereign defaulters. Exhibit 34 in the appendix provides additional detail for 1999’s defaulters, including descriptions and values of the defaulted instruments, the type of business activities in which the issuers were involved, the circumstances surrounding the default event, and whether or not the issuer’s debt held a Moody’s rating.

Exhibit 1

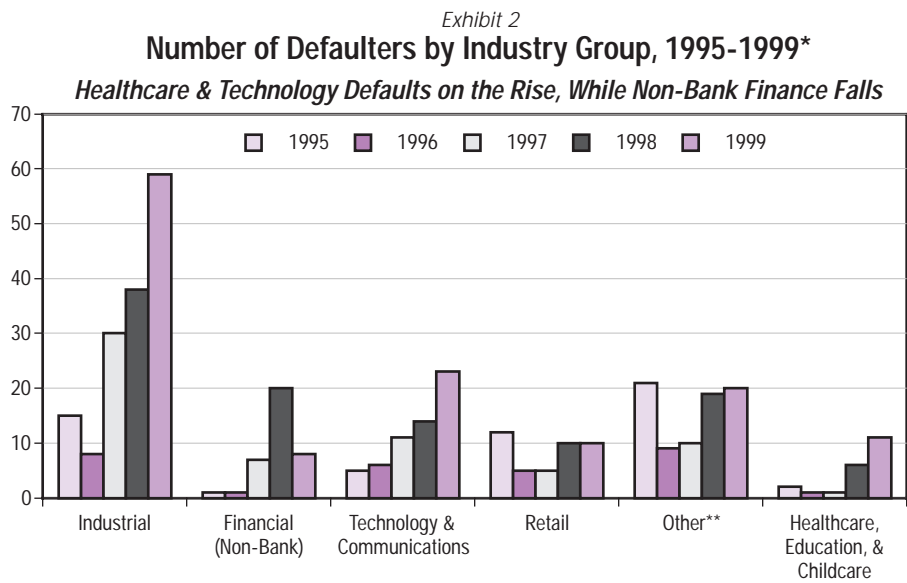
1999 Defaulters by Domicile*	
United States	99
Mexico	6
Canada	5
Argentina	4
Hong Kong	4
Taiwan	3
Bermuda	3
Netherlands	3
Brazil	3
Indonesia	2
United Kingdom	2
Thailand	2
Korea	2
Czech Republic	1
Ecuador	1
Greece	1
Guernsey	1
Isle of Man	1
Liberia	1
Malaysia	1
Singapore	1
India	1
.....	
*Includes Moody's-rated and unrated defaulters.	

Industrial Issuers Remain the Largest Contributors

Most major industries were represented among 1999’s universe of defaulters, but the industrial sector continued to contribute the lion’s share of defaults, with 63.9%. The industrial composition of defaulters remained scattered in 1999. Increases in the number of defaulters coming from the healthcare and technology sectors continued trends of the past few years, while defaults by non-bank financial institutions fell.

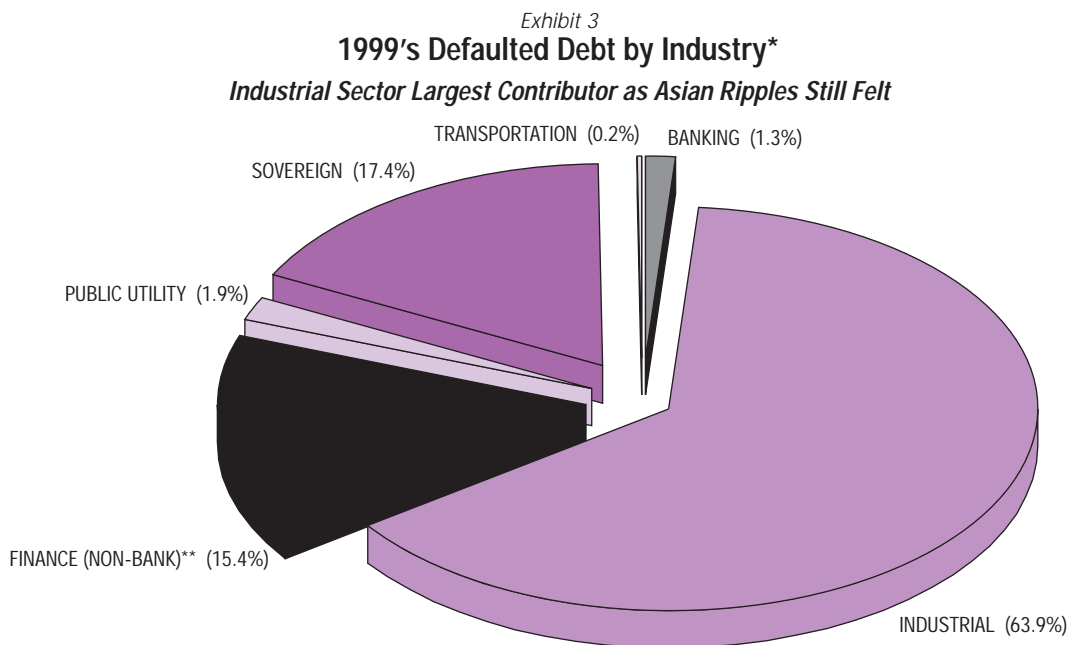
Within the industrial sector, concentrations of defaults largely reflected the after-shock of the 1997 Asian crisis: weakness in commodities prices and international trade. Hard hit sectors included oil & gas (18 defaults), ocean shipping (8 defaults), and steel/metals (6 defaults).

Exhibit 2 below presents default counts by broad industry since 1995, while Exhibit 3 breaks down the dollar amount of 1999's defaulted debt by broad sector.



*Includes rated and unrated defaulters.

**includes Sovereign, Transportation, Banking, Media, and Utilities.



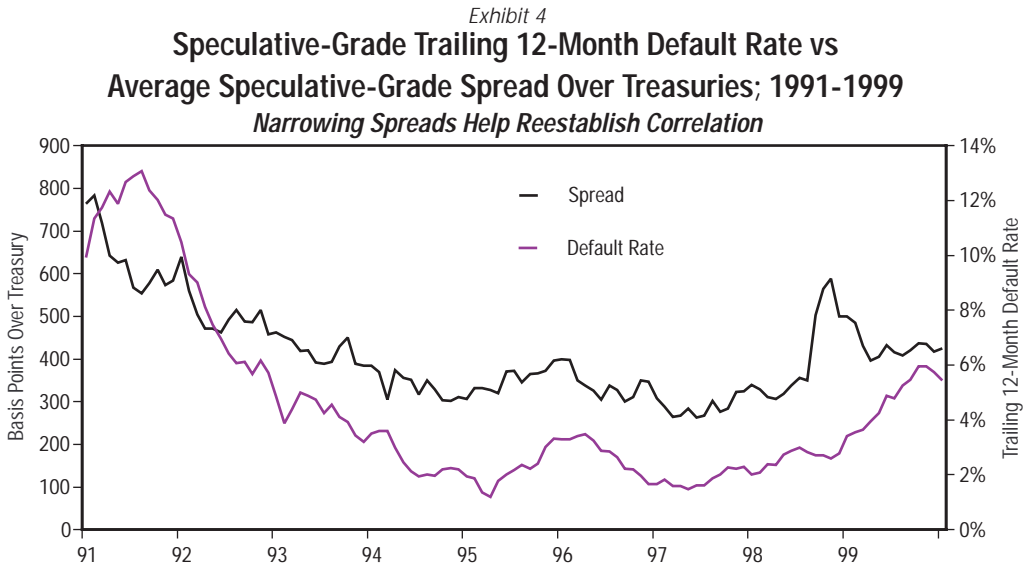
*($\$44.6$ billion=100%) Includes rated and unrated defaulters.

**Includes Insurance

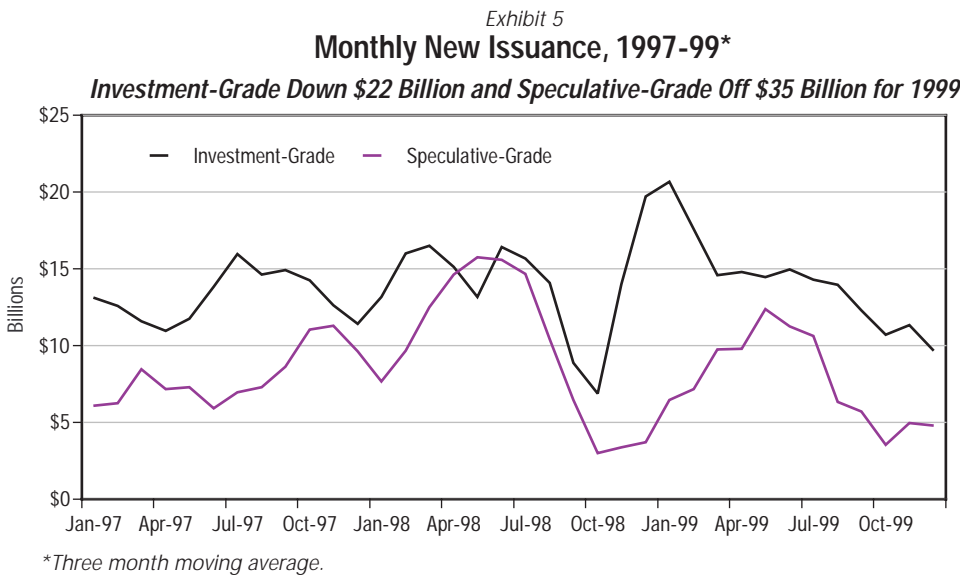
New Issuance Down Sharply

The long-term debt market in 1999 was characterized by gradually narrowing spreads and a lackluster pace of new issuance particularly for speculative-grade categories. The year saw steadily increasing Treasury yields, with the 7-year Treasury rising about 180 basis points (bps) from 4.73% in January to 6.53% in December. Corporate yields fared better in comparison rising only about 120 bps for 7-year speculative-grade issues, from 9.57% to 10.53%, respectively. This further narrowed corporate spreads by about 60 bps, with the 7-year speculative-grade spread finishing the year at 425 bps, after peaking in October of 1998 at about 588 bps.

As shown in Exhibit 4 below, these narrowing spreads have helped to reestablish the rough proportionality and high correlation between the speculative-grade spread and the speculative-grade default rate, which broke down in the fall of 1998 as low liquidity and shifting investor preferences shook the speculative-grade market.



While a sense of normalcy returned to spreads relative to the default rate, investor demand for corporate bonds remained slack for the year as a whole. As shown in Exhibit 5, issuance began the year strong after a weak fourth quarter in 1998. However, the pace of investment-grade issuance trended lower immediately, while speculative-grade issuance peaked in April before trending lower over the remainder of the year. Total corporate issuance for 1999 was \$249.5 billion, a decrease of over 16% from last year, with investment-grade issuance falling by \$22 billion to \$155 billion and speculative-grade issuance falling by \$35 billion to \$98 billion.



Data and Methodology

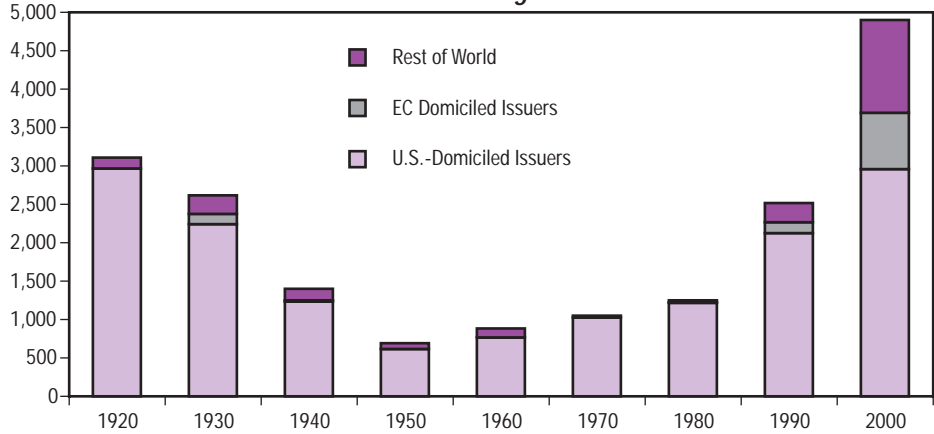
The Moody's-Rated Universe

Moody's bases the results of this study on a proprietary database of ratings and defaults for industrial and transportation companies, utilities, financial institutions, and sovereigns that have issued long-term debt to the public. Municipal debt issuers, structured finance transactions, private placements, and issuers with only short-term debt ratings are excluded. In total, the data cover the credit experiences of over 15,700 corporate and sovereign issuers that sold long-term debt publicly at some time between 1919 and the start of 2000. As of January 1, 2000, over 4,900 of those issuers held Moody's ratings. 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.

As shown on the cover of this report, issuers holding investment-grade ratings at the senior unsecured level comprise the bulk of currently-rated issuers: nearly 60% as of January 1, 2000. The proportion of issuers holding speculative-grade ratings has fluctuated dramatically over the decades, reaching an all-time high of 73% in 1941, and an all-time low of 23% in 1977. The proportion of speculative-grade issuers has been growing slowly but quite steadily since then, with the exception of a temporary blip in the 1989-91 period.

Exhibit 6 details the total number of issuers in our database by broad geographic region as of the start of each decade since 1920. The downward trend from 1920 through 1950 reflects the public bond market's retrenchment following the Great Depression and World War II, increasing financial intermediation, and consolidation in the railroad and utilities industries. Since 1950, however, the number of rated issuers has increased steadily, with sharp increases during the 1980s and 1990s, due in part to the development of the junk bond market in the U.S. and Moody's expansion into non-U.S. markets. It was not until 1994 that Moody's again rated as many corporate issuers as it did in 1920

Exhibit 6
Moody's-Rated Corporate Bond Issuers, 1920-2000
US Junk Bonds & Non-US Ratings Drive Growth Since 1980



Non-U.S. issuers comprised a significant percentage of the Moody's-rated universe, 15% as of January of 1930, a level not exceeded until the late 1980s, reaching 18% as of January of 1990. By January of 2000, this proportion had grown to 40%, with much of the recent growth coming from European-domiciled issuers which now account for nearly 16% of the total.

Currently, the non-U.S. countries in which the largest number of Moody's-rated issuers are domiciled include the United Kingdom (6.1% of the total), Japan (5.2%), Canada (3.8%) and Australia (2.2%). Two countries which specialize in providing havens for corporate residence -- the Netherlands and the Cayman Islands -- are also large contributors of rated bond issuers, at 3.9% and 1.7% of the total, respectively.

Historically, the industrial composition of Moody's-rated bond issuers has shifted with broad patterns in the capital formation process. In the early part of the century, railroads commanded large amounts of investment capital. As of 1920, more than half of the issuers Moody's rated were railroad companies, followed by utilities, industrials, and financial companies. Since then industrials have become the largest sector representing 39% of the total number of rated firms. Non-bank financial companies have risen to the number two spot and now comprise 17% of the Moody's rated universe. Banking institutions are now in third at 14%, as of the start of 2000.

Moody's Definition of Default

Moody's default database covers over 3,350 long-term bond defaults by issuers both rated and unrated by Moody's. We compiled these default histories from a variety of sources, including our own Industrial, Railroad, and Public Utilities Manuals; reports of the National Quotation Service; various issues of *The Commercial and Financial Chronicle*; 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, and the American Stock Exchange.

Moody's defines a bond default as any missed or delayed disbursement of interest and/or principal, bankruptcy, receivership, or distressed exchange 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) or (ii) the exchange had the apparent purpose of helping the borrower avoid default.

Moody's Default Rate Calculation Methodology

Moody's ratings incorporate assessments of both the likelihood and the severity of default. So, in order to calculate default rates, which are estimates of the default probability component of ratings, we must hold severity considerations constant. We do this by considering the rating on each company's senior unsecured debt or, if there is none, by 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. We dub these ratings "implied senior unsecured ratings" or, more concisely, "implied senior ratings." It is important to note that because implied senior ratings are derived statistically and are not associated with an actual debt instrument, they do not directly benefit from the full scope of analysis that a regular Moody's bond rating would enjoy.

To calculate default rates, we use the issuer as the unit of study rather than individual debt instruments or outstanding dollar amounts of debt. Because Moody's intends its ratings to support credit decisions, which do not vary with either the size or number of bonds that a firm may have outstanding, we believe this methodology produces more meaningful estimates of the probability of default. In summary, because the likelihood of default is essentially the same for all of a firm's public debt issues, irrespective of size, weighting our statistics by the number of bond issues or their par amounts would simply bias our results towards the characteristics of large issuers.

The default rates we calculate 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 potentially could have defaulted on Moody's-rated debt. Hence, if all of an issuer's ratings are withdrawn, it is subtracted from the denominator. Failing to correct the denominator in this way generates artificially low estimates of the risk of default. 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.

We define default rates for any rating classification in a manner analogous to that used for calculating overall corporate default rates. For the B rating, for example, the one-year default rate is the number of Moody's-B-rated issuers that defaulted over the following one-year period divided by the number of Moody's-B-rated issuers that could have defaulted over that period. The issuer-weighted average of default rates (defined as of the start of each year) represents an estimate of the risk of default within any one-year period. (The underlying one-year default rates for each rating category from 1970 through the present are included in Exhibit 32 of the appendix.)

Moody's employs a cohort approach to calculating multi-year default rates. A cohort consists of all issuers holding a given senior implied 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 for non credit-related reasons (e.g., maturing of debt). Thus, the cohorts are dynamic and allow the estimation of cumulative default risk over multi-year horizons. For each cumulation period, default rates based on dynamic cohorts express the ratio of issuers who did default to issuers who were in a position to default over that period. This allows for the comparison and averaging of default rates over different periods. Also, by forming and tracking cohorts of all Moody's-rated issuers with debt outstanding as of January 1 of each year, we replicate the experience of a portfolio of both seasoned and new-issue bonds purchased in a given year.

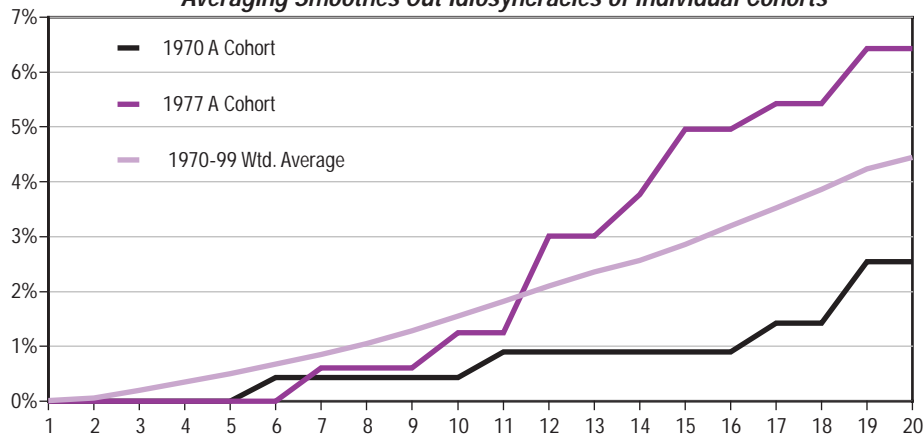
Cohort-based default rates can answer questions like "What was the probability that a Baa-rated issuer with bonds outstanding as of January 1, 1985 would default by the end of 1999?" The answer to this question -- 8.46% -- is found in Exhibit 32 (appendix), in the last row and last column headed "15" of the section labeled "Cohort Formed January 1, 1985." In cases in which an investor feels that the business conditions of the current year are similar to those of some previous year, she may consult that year's cohort directly to ascertain what default patterns to expect.

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 issuer-weighted average of each cohort's one-year default rate forms the average cumulative one-year default rate. The issuer-weighted 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.

To illustrate how the weighted average smoothes out the variations and irregularities in the default experience of individual cohorts, Exhibit 7 presents cumulative default rates from one to 20 years for two cohorts of A-rated issuers, 1970 and 1977, as well as for the weighted average cumulative default rate from 1970-present.

From Exhibit 7 it can be seen how each cohort formed produces a different credit history in response to different economic and market conditions. For example, the default rate for the 1977 A cohort jumped sharply above 2% 12 years after it was formed. Twelve years out occurred in 1989, the beginning of the infamous credit crunch and one of the highest default episodes in modern history. The 1970 A cohort didn't reach a 2% cumulative default rate until 19 years out, and this was again, 1989. By averaging these curves together, we obtain a cumulative default profile that averages over all economic conditions at each time horizon. The two separate cohorts embed the 1989 credit shock at two different points along the weighted average curve, but in fact, every point on the average curve contains the 1989 shock as contributed by a different cohort.

Exhibit 7
Cumulative Default Rates For A-Rated Issuers
Averaging Smoothes Out Idiosyncracies of Individual Cohorts



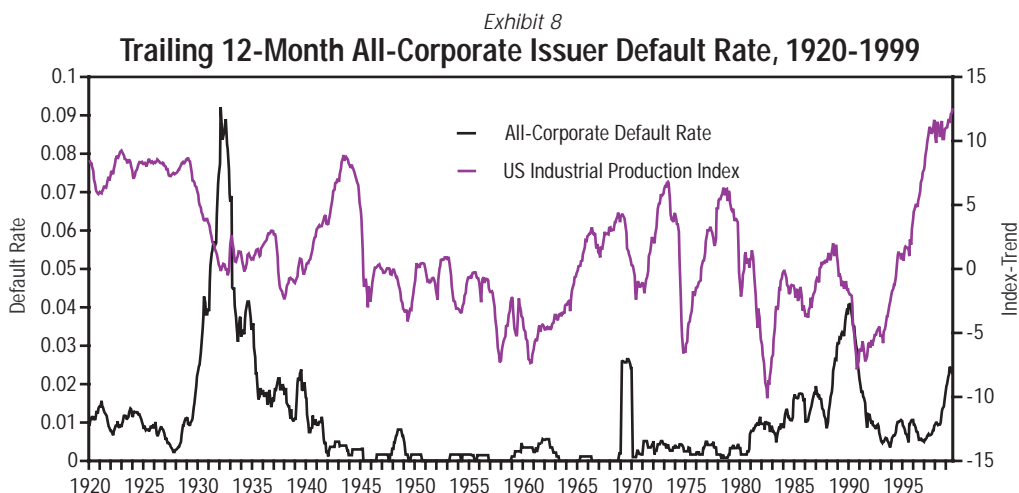
Default Activity Since 1920

The incidence of default by both rated and unrated issuers is spread unevenly over this century, with large numbers of defaults in the 1920s, the depression of the 1930s, and again in the late 1980s and early 1990s. Exhibit 8, which portrays a monthly time-series of the 12-month trailing default rate for all Moody's-rated corporate issuers, provides an overall picture of how aggregate corporate default risk has ebbed and flowed since 1920. January 1920 through mid-1929 was a period of cyclical and declining default risk that resembled the 1980s in terms of the average default rate. However, the next period, from mid-1929 through December 1939, produced the heaviest default activity of this century. The Great Depression generated an 80-year high, one-year corporate default rate of 9.2% in July 1932, indicating that nearly one in 10 Moody's-rated corporate issuers defaulted over the following year.

For the eight-year period beginning in January 1930, the default rate averaged 3.7% -- nearly as high as the recent 4.1% peak set in July 1991. The default rate again jumped at the beginning of World War II, reflecting the war-related defaults of Italian, German, French, Japanese, Czechoslovakian, and Austrian companies. Following the war, however, default risk subsided to very low levels. These low levels persisted until 1970, when the defaults of Penn Central Railroad and 25 of its affiliates shook fixed-income markets. After 1970, default risk again ebbed and was moderate-to-low by historical standards until 1982, when the modern period of relatively high default risk began.

Exhibit 8 also plots the US Industrial Production Index (IP) in terms of its deviation from trend¹, which exhibits a correlation with the all-corporate default rate that is a fairly weak -0.14. From 1920 through 1965, significant increases in the default rate were typically preceded by weakness in the overall economy as

1 The trend here is estimated as a smooth function of time. The correlation between the index and this trend is 0.993.



reflected in total IP. Since 1965, it has more often been the case that increases in the default rate occur in advance of a weakening in the general economy. For example, in the worst episode of the post war era, the default rate began to rise in June 1988 from 0.85% to its peak of 4.08% in July of 1990. IP, on the other hand, peaked in January of 1989 but did not fall below trend until July of 1989. While the default rate was back to its pre-junk bond collapse levels by July of 1991, IP remained weak through the end of 1993.

Over the past several years, robust economic growth and low default rates have gone hand in hand, however 1999 saw a sharp increase in the default rate while worldwide economic activity continued its steady pace of expansion. The shifting of this lead-lag relationship exemplifies the statistical fact that the relationship between corporate bond default rates and macroeconomic variables is quite loose and inexact.

Default Rate Trends Mirror Raw Default Totals for '99

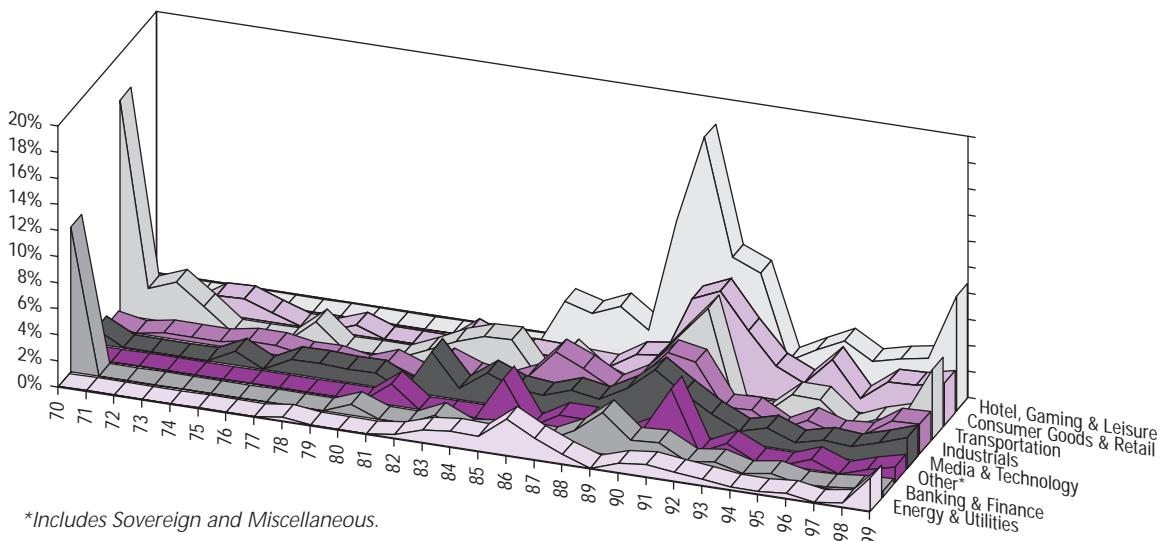
As described above, default activity in 1999 was scattered across industrial groups, with most of the increase over the previous year's default totals coming from industrial issuers. Oil & gas, shipping, and healthcare in particular, saw an increased number of defaults.

When we translate default totals into default rates, we see that virtually all industry groups experienced an increase in default rates, with energy, transportation, and consumer goods and services seeing the largest increases, in conformity with the increases in raw default totals. Hotels, gaming and leisure also saw higher default rates in 1999, however part of this increase is attributable to a smaller issuer pool than in 1998 as a result of mergers and acquisitions.

Exhibit 9

Default Rates by Broad Industry Group, 1970-1999

Energy, Transportation, Consumer Goods & Services See Largest Increase in '99



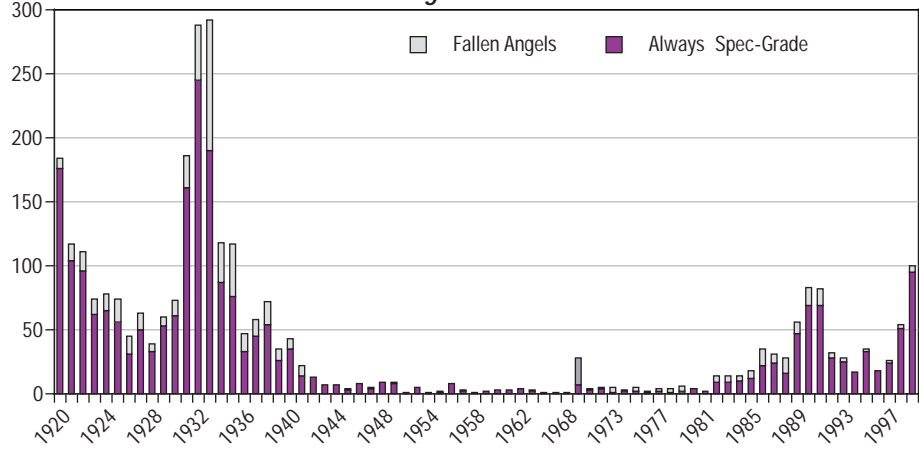
*Includes Sovereign and Miscellaneous.

Low-Rated Issuance Grows, Spurring Defaults

Changes in the default rate reflect both changes in the size of the issuer pool (which affect the denominator), and changes in the number of defaults (which affect the numerator). While the size of the issuer pool tends to change gradually², the flow of defaults is more volatile, and gives rise to the episodic quality of the overall default rate.

Exhibit 10 below plots annual default counts since 1920. Notice that by this measure, the railroad-dominated default episode of 1970 is less prominent. In fact, this group of defaulters had a disproportionately high impact on the default rate as a result of the decrease in the size of the rated issuer pool during the '50s and '60s. In this Exhibit, we have divided defaulters into two groups, those that once held investment-grade ratings (the so-called “fallen angels”), and those that never held an investment-grade rating. What we can see from this particular disaggregation is that periods with abnormally high default rates and systemic deterioration in credit quality are marked by significant numbers of fallen-angel defaults; 12% or more per year. In contrast, the increased default activity notwithstanding, 1998 and 1999 have seen 5% or fewer fallen-angel defaults.

Exhibit 10
Annual Default Counts; 1920-1999
Few Fallen Angel Defaults in '98 & '99



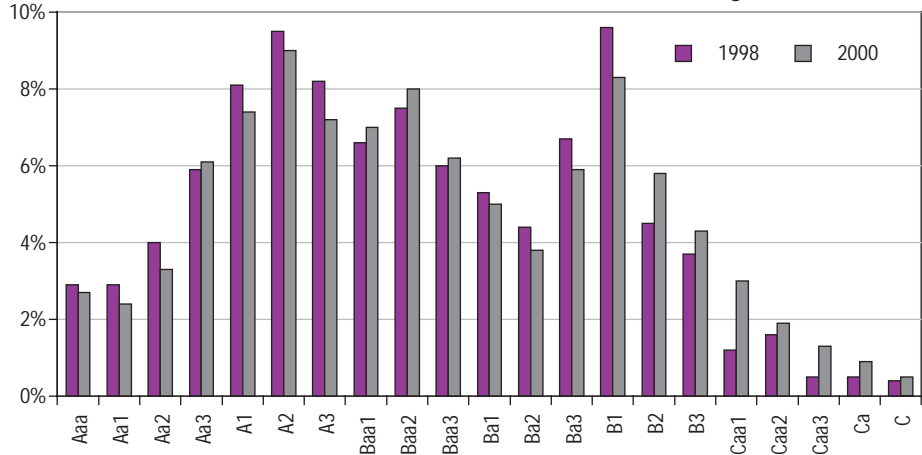
Overall, the credit quality of outstanding corporate debt continued to deteriorate in 1999, both as a result of more first-time speculative-grade issuers entering the market than first-time investment-grade new issuers, and as a result of an upgrade/downgrade ratio of less than one. The combination of these trends over the past two years is summarized in Exhibit 11 which plots the proportion of Moody's-rated issuers by rating category as of January 1.

The two most striking features in Exhibit 11 are the proportional decline in highly-rated investment-grade issuers, and the sharp proportional increase in lowly-rated speculative-grade issuers --- the result of two different trends in different market segments. First, on the investment-grade side, a recent increase in overall corporate leverage, partly driven by large stock buy-back programs and an acceleration in acquisition activity, suggest a willingness by management to exchange high long-term bond ratings for higher growth potential and/or higher current share prices. Secondly, on the speculative-grade side, a weaker flow of new entrants into the market in 1997 and 1998, led to higher default rates, higher downgrade rates, and an overall increase in the number of issuers rated B2 and below. A shift in investor risk tolerance during 1999, which slowed the flow of new lowly-rated issuers into the pool, has -- at least temporarily -- slowed the growth in this tail of the ratings distribution, a change which suggests stable to lower for future default rates.³

2 See Exhibit 6.

3 See Keenan, Sobehart, and Hamilton (1999)

Exhibit 11
Ratings Composition, January 1, 1998 vs January 1, 2000
Distribution Continues to Shift to the Lower End of the Ratings Scale



A more detailed view of rating migration is provided by rating transition matrices. These matrices summarize the size and direction of rating movements, including defaults, for the entire Moody’s-rated universe, over specific time horizons. Exhibits 25 and 26 in the appendix compare rating transition and default rates for 1999 with averages for the twenty-year period 1980-1999 for broad rating categories, and the 1983-1999. In spite of the higher default rates in 1999, overall rating volatility was lower than its average since 1980, as can be seen by comparing the bolded diagonal elements of the two matrices which indicate the frequency with which ratings have remain unchanged over respective periods. The exception is the Baa category, which experienced a downgrade rate of almost 9.4% compared to an average downgrade rate of 7.9% over the 1980-99 period.

Time to Default to Default Drops for Weaker Entrants

As reported in last year’s annual default study, Moody’s estimated that for new speculative-grade issuers, the hazard rate (or default likelihood as a function of time in the market) reaches a maximum at about three years after first issuing debt. This estimate was based on the period 1988-1998. However, as can be seen in Exhibit 12, issuers who defaulted in 1999 had rating histories considerably shorter than that recent historical average. In fact, nearly 50% of these defaulters have had rated debt outstanding for less than three years and over 30% had been rated for less than two years. Low default rates and narrow spreads in 1996 and 1997 prompted an increase in investor demand for these higher-yielding but low-rated credits. Many of these defaulters could only have entered the public debt market under conditions of exceptional risk tolerance by investors.

Exhibit 12
Length of Rating History Prior to Default by Year; 1988-1999
Of 1999 Defaults, Over 50% Were Outstanding Less than Three Years

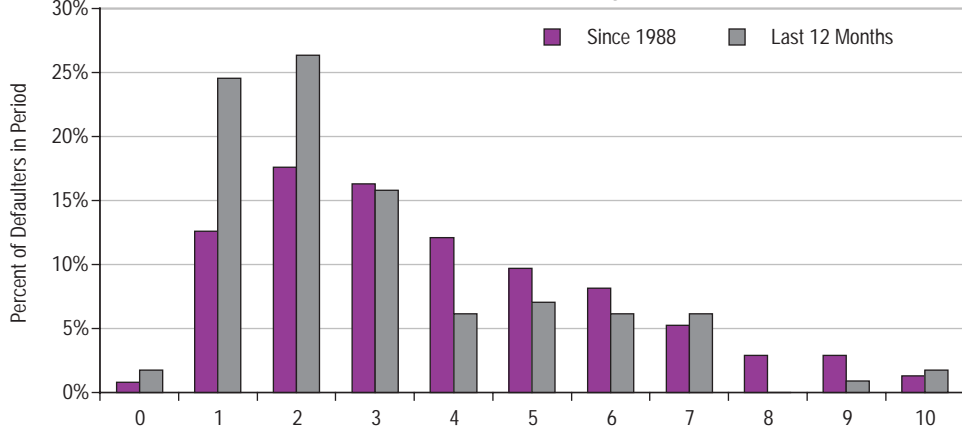


Exhibit 23 in the appendix presents a table of 1999 defaulters, whose rating histories prior to default spanned less than 2.5 years. For these issuers, the median initial rating was just B2. This group of issuers, who came to the market for the first time in late 1997 and 1998 and most of whom had initial ratings of B1 or lower, contributed nearly 40% of 1999s defaults.

Ratings as Indicators of Default Probability

Over 3,280 of the more than 15,700 corporate issuers that Moody’s has rated since 1920 defaulted at some point in time. One year prior to default, less than 9% of these carried actual or implied senior unsecured ratings at the investment-grade level. However, at various lengths of time before default, more issuers carried investment-grade ratings.

To summarize the extent of rating decay in advance of default, we calculated the median and average senior or implied senior unsecured rating of issuers between zero and 60 months before default, shown in Exhibit 13. The average rating is constructed by translating Moody’s rating symbols onto a scale from 1 to 21 where Aaa=1 and C=21 and simply taking the average of the numbers to produce a smooth series.⁴ While the value of this “average rating” has no simple interpretation, it can be translated back onto the original symbolic scale and its changes do reflect improvement and deterioration in the underlying pool of future defaulters, capturing finer gradations than does the median rating.

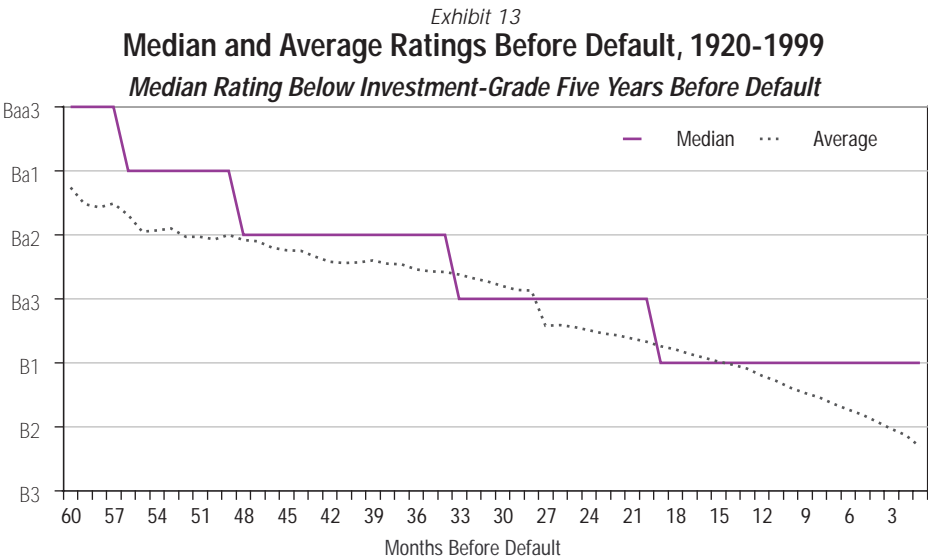


Exhibit 13 shows that, nearly five years prior to default, the median rating of defaulting companies is speculative-grade. The downward slope of the average shows that, as a group, these future defaulters are already seeing downward rating pressure five years in advance of default. At 33 months before default, the median rating has fallen to Ba3 and falls further to B1 eighteen months prior to default.

The average rating falls more gradually and farther than the median rating, reaching the B2 level four months prior to default. The average and median level of rating prior to default has continued to fall in recent years, as precipitous rating drops prior to default have been rare. For issuers defaulting in 1999, the median rating both one and two years prior to default was B2, well below the historical average.

Default Rates by Rating Category

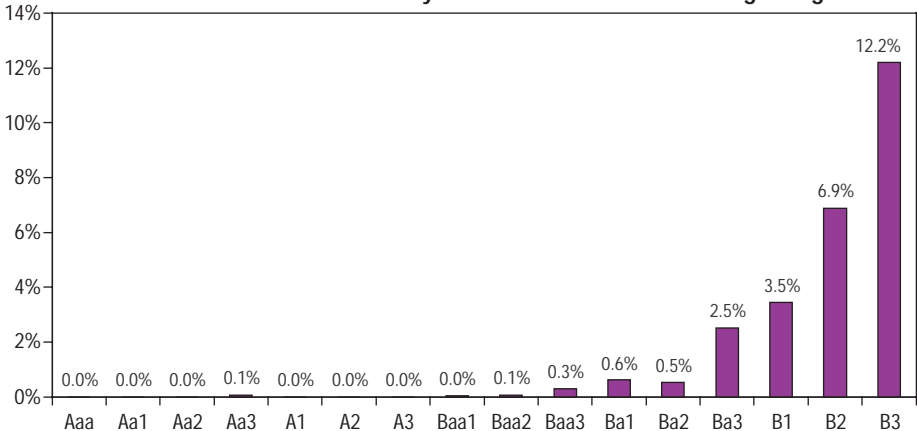
Weighted average default rates shown in Exhibit 14 clearly show an increased risk of default associated with lower rating categories. Since 1970, an average of 3.45% of speculative-grade issuers have defaulted per year, compared with just 0.05% of investment-grade issuers. For all but 28 of the past 80 years, the one-year default rate for the investment-grade sector was zero.

Exhibit 28 in the appendix likewise demonstrates a clear pattern of higher default risk associated with the speculative-grade rating categories. The last four rows of the exhibit give the one-year default rates for investment-grade issuers, speculative-grade issuers, US only speculative-grade issuers, and all corporate issuers since 1970.

4 A linear mapping is used here for simplicity only.

The results presented in Exhibit 14 suggest that the relationship between ratings and default likelihood holds for numerically modified rating categories as well as for the non-modified categories. Exhibit 14 and Exhibit 29 (in the appendix) present one-year one-year default rates for each of these rating categories, for the relatively high default risk period extending from 1983 through the present. Over that time period, average one-year default rates climbed from 0.0% for Aaa to 12.2% for B3. The default rate for US domiciled speculative-grade issuers has remained slightly above the total speculative-grade rate since 1992.

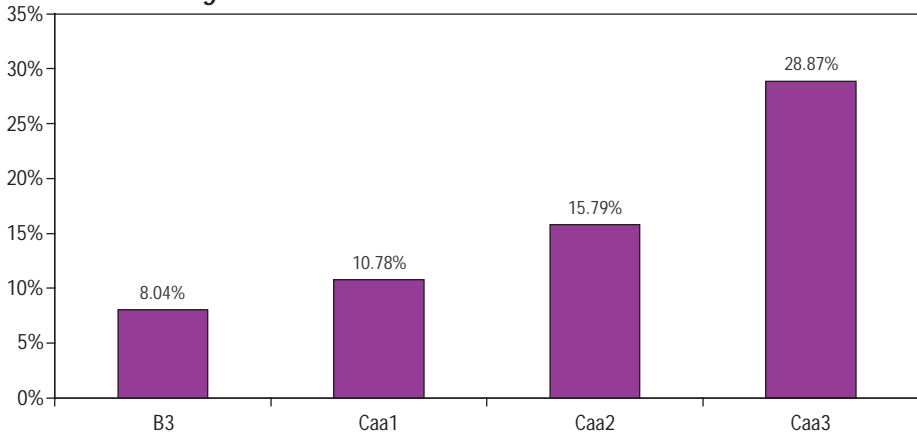
Exhibit 14
One-Year Default Rates by Alpha-Numerical Ratings, 1983-1999
Increased Risk of Default Clearly Associated with Lower Rating Categories



In June of 1997, Moody’s announced the assignment of numerical modifiers to long-term issues rated Caa. These rating categories were expanded to include three numerical modifiers each in order to provide finer gradations of credit risk evaluation. Caa-rated issues are characterized by high levels of risk with respect to principle and interest payments. Issuers include both young companies whose credit histories are sparse, as well as established players with declining fundamentals. The Caa category also encompasses defaulted obligations with high expected recoveries.

Exhibit 15 shows weighted average one-year default rates for the numerically modified Caa ratings for 1998 and 1999, the only two cohort years we have so far for these sub categories. Also included is the average for the B3 category for the same period. The default rates increase smoothly over the entire range, from B3 through Caa3.

Exhibit 15
Average One-Year Default Rates For B3 and Numerically Modified Caa Ratings; 1998-99
Progression in Default Risk Demonstrated from B3 to Caa3

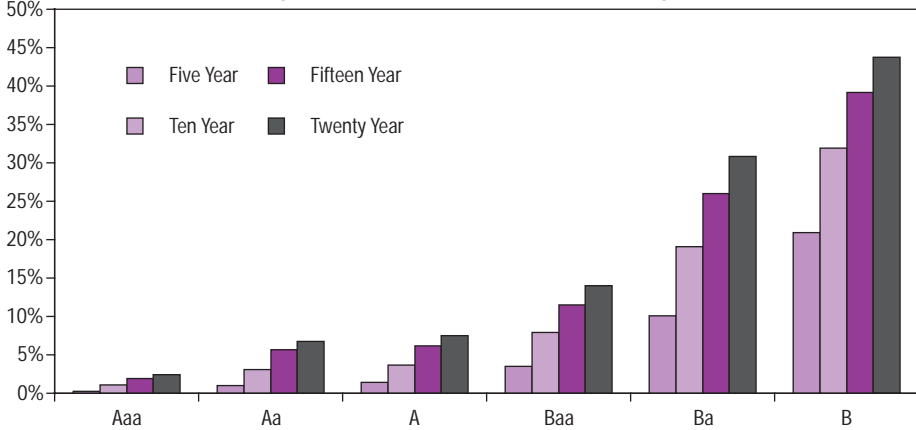


Multi-Year Default Rates

Although the one-year default rates presented up to this point are of greatest interest to many market participants, some 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.

Exhibit 16 presents average cumulative default rates for 5-, 10-, 15-, and 20-year time horizons based on all data available since 1920. Exhibit 16 also shows that higher default risk for lower rating categories remains evident over investment periods as long as 20 years. For example, average default rates for five-year holding periods climb from 0.2% for the Aaa rating category to 20.9% for the B rating category. Exhibit 16 also shows that the pattern recurs for average default rates for 10-year and 15-year holding periods. Exhibit 32 in the appendix presents these data in detail for the period from 1970 to the present, and Exhibit 31 presents average cumulative default rates by numerically modified ratings for up to eight years.

Exhibit 16
5-, 10-, 15- and 20-Year Average Cumulative Default Rates, 1920-1999
Correlation Between Ratings and Default Risk Holds for Holding Periods up to 20 Years



Default Rate Volatility by Rating

Moody’s ratings represent expectations about the likely credit conditions of issuers going forward. Average default rates provide an indication of the relative consistency of those ratings over time. However, unforeseen economic and political events, and changes in the dynamics of capital markets will cause default rates to vary over time, even within a given rating category. An examination of the individual cohorts presented in Exhibit 32 (in the appendix) reveals the extent to which aggregate default rates vary from one year to the next for a given rating category. For the B rating category in the period from 1920 through 1998, for instance, the one-year default rate ranged from a low of zero in several years to a high of 22.8% in 1970.

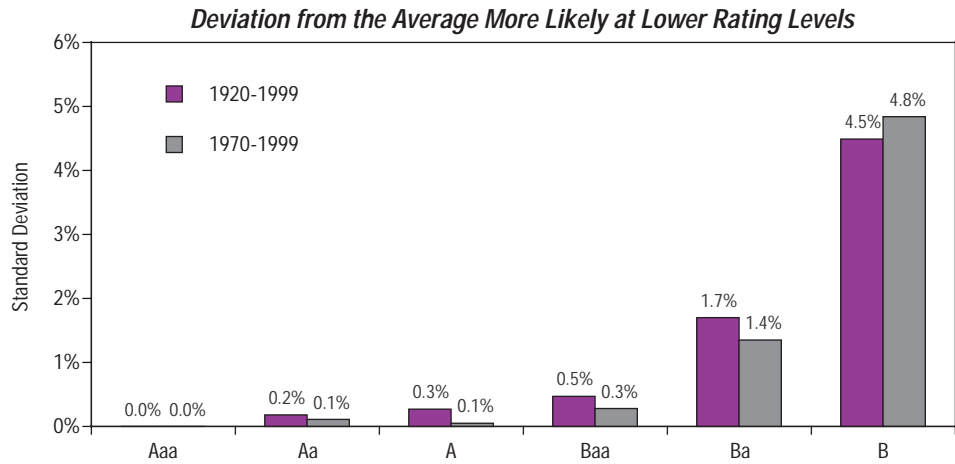
To quantify this variability, Moody’s calculated the standard deviations of the one-year default rates for each letter rating category. Exhibit 17 presents these statistics defined over the periods from 1920 and from 1970 to the present.

Clearly, default rate volatility has been systematically higher for lower credit ratings for both time periods examined. That is, while the average risk of default is higher 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 for 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.

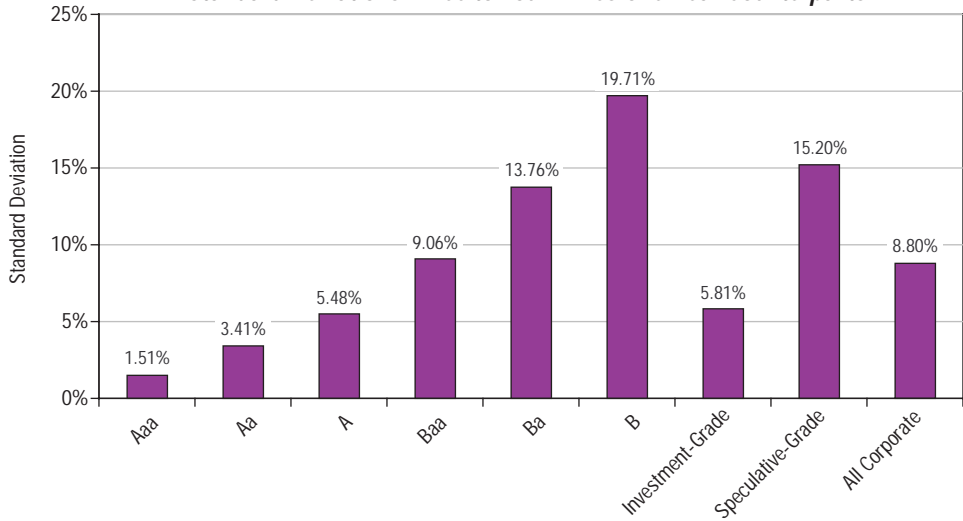
While Exhibit 17 shows the relationship between ratings and default-rate volatility, standard deviations can be misleading for asymmetric distributions like default rates. For example, for a distribution of 100 observations with only one observation greater than zero, 99% of the observations will lie below the mean. To better quantify this volatility, Exhibit 27 in the appendix characterizes volatility by rating category in terms of quartiles (ranges containing 25% of the data) and extreme values, from 1970-1999.

Exhibit 17
One-Year Default Rate Volatilities



Volatility increases for cumulative default rates at horizons greater than one-year, with standard deviations for 10-year cumulative default rates being three to four times higher than the one-year volatilities. Exhibit 18 plots 10-year cumulative default rate standard deviations for broad rating categories as well for the aggregate groupings of all investment-grade, all speculative-grade, and all corporate.

Exhibit 18
Ten-Year Cumulative Default Rate Volatilities, 1920-1999
Standard Deviations Three to Four Times One-Year Counterparts



Default Severity and Recovery Rates

A critical aspect of corporate bond defaults is the severity of the loss incurred. Most bond default resolutions eventually provide bondholders with some amount of recovery, which may take the form of cash, other securities, or even a physical asset. Quite often, default resolutions consist of a package of these assets, with a large equity component.

The recovery rate, defined here as the percentage of par value returned to the bondholder, is a function of several variables. Foremost among these variables is the seniority of the issue within the issuer’s capital structure and the quality of its collateral (if any). The overall state of the economy, the market’s economic outlook, and the liquidity of the market for corporate assets are also factors affecting the expected recovery rate.

One methodology for calculating recovery rates 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, while not infeasible, presents a number of calculation problems and relies on a variety of assumptions. For example, one must make a separate estimate of the discount rate to apply to each payment generated by the defaulted instrument. Furthermore, one often must make assumptions concerning the values of certain payments. The resolution may hand bondholders various equity and derivative instruments, enhancements to the terms of the surviving debt, or sometimes a physical asset in place of cash. As there is frequently no market for such payments, ascertaining their values is extremely difficult.

For these reasons, we use the trading price of the defaulted instrument as a proxy for the present value of the ultimate recovery. To do so, we collected from several sources prices approximately one month after default for many of the bonds that defaulted between January 1, 1920, and December 31, 1999. Although this information provides only an estimate of the actual recovery, it has the advantage of being the definite measure of the recovery realized by those debtholders who liquidated a position soon after default, either because they were unable or unwilling to hold the defaulted credit.

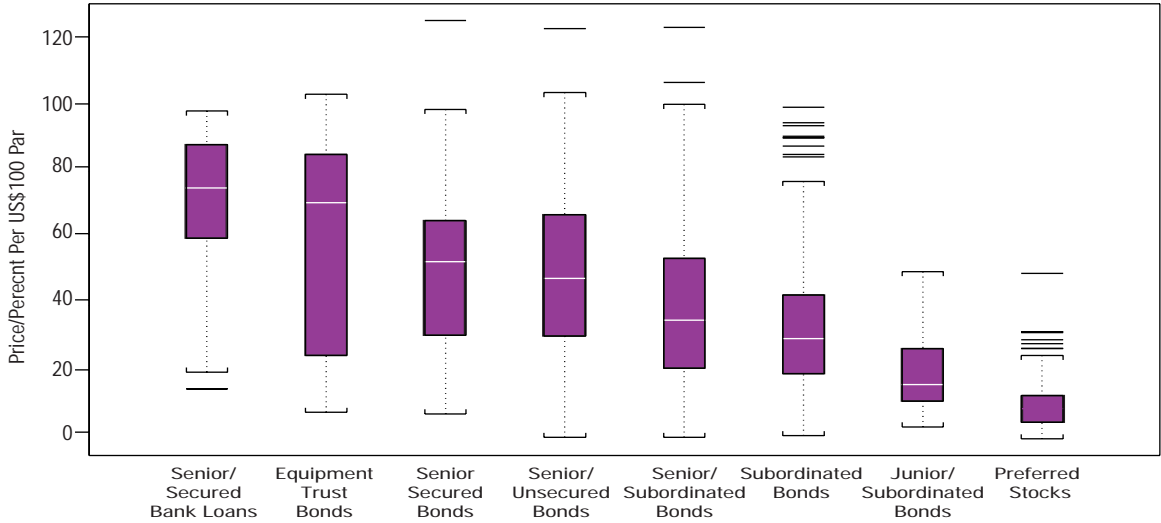
We translate defaulted debt prices into recovery rate estimates by presenting them as percentages of par, not as percentages of original issue prices or accreted values. Investors are entitled to receive face value at maturity, even though they may have paid somewhat less or more for the bond either at issue or in the secondary market. Expressing recoveries as a fraction of some price other than par could improperly bias recovery rates. Because discount bonds and convertible bonds have unique pricing features, we have removed them from the sample.

Seniority/Security Strong Determinants of Recovery

The data reveal a strong long-run correlation between the seniority/security of a defaulted bond and its expected recovery rate. Exhibit 19 plots distributions of recovery rates by the seniority/security of claim, as measured by their market prices, between 1970 and 1998. In these plots, the darkened boxes contain the central 50% of the observations, while the “whiskers” cover the range of the outer 50% of the observations, and statistical outliers are plotted as discrete bars. The solid white lines within the boxes of the chart represent the medians (or the centers) of the distributions.

The median recovery rate for senior secured bank loans is US\$75 (US\$70 average) of par; for senior secured bonds, the median price is US\$53 (US\$52 average). The recovery value falls to US\$48 for senior unsecured bonds (US\$49 average), and to US\$30 for subordinated bonds (US\$33 average). Preferred stocks recover only US\$9 (US\$11 average). Equipment trust obligations, on the other hand, have median post-default prices significantly higher than other debt classes. This reflects, in part, bankruptcy statutes that accelerate the transfer of assets pledged as security when those assets consist of transportation equipment, the main type of asset used to support equipment trust issues. Exhibit 24 in the appendix provides additional detail on the statistical characteristics of defaulted bond recovery distributions.

Exhibit 19
Defaulted Debt Recovery Estimates By Seniority of Claim, 1970-1998
Median Recovery Rates Highest on Obligations with Priority of Claim



The fact that median recovery rates decline as the priority of claim declines lends support to Moody's practice of assigning lower ratings to an issuer's subordinated debt than to its senior issues. 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/security of that issue relative to the firm's other obligations. However, severity considerations suggest that although default likelihood is the same across an issuer's debts, Moody's should reflect the greater expected losses for subordinated issues with lower ratings.

While defaulted bond prices exhibit stable long-run relationships between seniority/security classes, there is nevertheless considerable variation in those prices, as also shown in Exhibit 19. While the median is a useful indicator to approximate the most likely bond price to arise from a particular default, it does not convey the range of possible outcomes. For example, while the estimated recovery for all subordinated bonds is \$33 per \$100 par amount, one of the underlying issues had a price of just \$1 while several had prices above par.

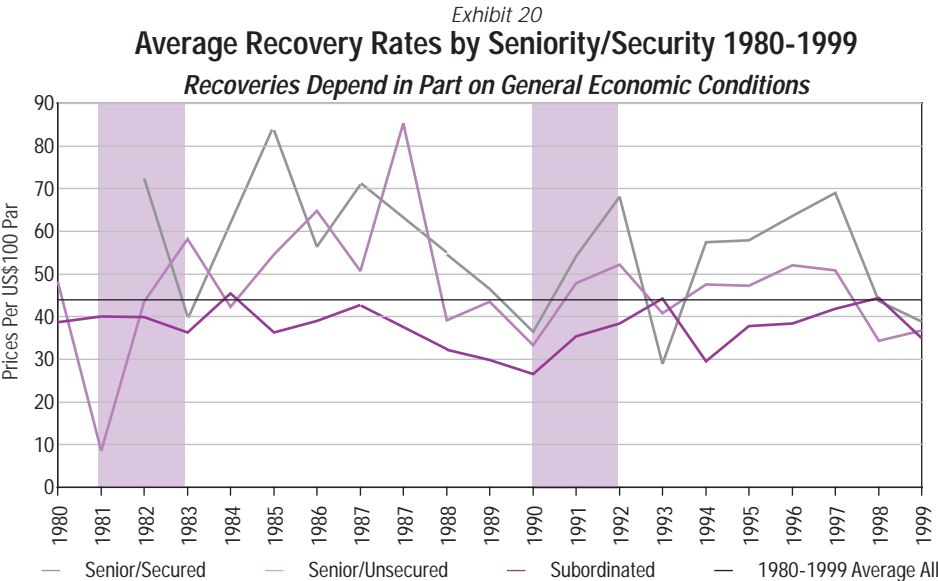
Across debt types, median prices of defaulted bonds tend to fall as seniority declines, while variances first widen and then tighten. This pattern of greater variance on senior unsecured bonds reflects, in part, the greater number of defaults involving this type of bond relative to equipment trusts and junior subordinated bonds. It also suggests that although the more subordinated investor can expect to receive less in the event of default, there is less uncertainty as to how much the defaulted bond price will vary from its mean. Subordinated debt prices also exhibit a number of high value outliers, indicating that subordination by itself does not always lead to economic loss in the event of default.

Correlations Also with Macroeconomic Conditions, Risk of Default

In addition to seniority and security, variations in recovery rates for defaulted bonds are correlated with macroeconomic conditions and the aggregate risk of default. Exhibit 20 breaks out average recovery rates by seniority/security for the 1980-1999 period. The chart reveals two key facts: defaulted bond prices are correlated with the economic cycle; and average recovery rates generally maintain, with temporary exceptions, their correlation with the seniority/security of the claim.⁵

Since 1980, recovery rates have bottomed out near the beginning of business cycle contractions (as indicated by the gray bars in the graph) in 1981 and again in 1990. Similarly, recovery rates have increased, sometimes far exceeding the post-1980 average of US\$43, in economic expansions, as in the mid-1980s and mid-1990s. As in Exhibit 19 above, it is also clear from Exhibit 20 that senior/unsecured issues show the highest variability relative to senior/secured and subordinated claims.

Defaulted bond recovery rates seem to have anticipated the build-up to the 1990-1991 peak in the default rate as early as 1987, when defaulted bond prices began a steady and in some cases sharp drop. Most recently, defaulted bond prices began to slide again in 1997 in anticipation of the Asian financial crisis and Russian default.



5 While the data may sometimes suffer from small samples, particularly for senior/secured issues, they are nonetheless representative of defaulted bond prices at the time.

Slight Deterioration Seen in 1999 Recovery Rates

Nineteen ninety-nine followed 1998 as a year in which recovery rates deteriorated, though not as severely. As was shown in Exhibit 20 above, recovery rates have fallen from above-average levels since 1997 and, following investor flight after the Asian financial crisis and Russia’s default, have weakened even further.

Defaulted bond prices began 1999 already off their peaks, and the events of the year did nothing to reverse the downward trend or to restore investor confidence. The quickly escalating default rate, thought to be the product of troubled emerging market issuers, was actually concentrated in the U.S., unnerving domestic fixed income markets. Ecuador’s default also shattered some widely-held beliefs about the tolerance for default.

As discussed earlier, the defaulting class of 1999 was a relatively low-rated pool of speculative-grade credits. From an expected loss perspective, this suggests both a higher likelihood of default and a higher expected loss in the event of default. As it turned out, both default risk and loss severity was indeed higher. Exhibit 21 shows that median defaulted bond prices were sometimes significantly below their historical values.

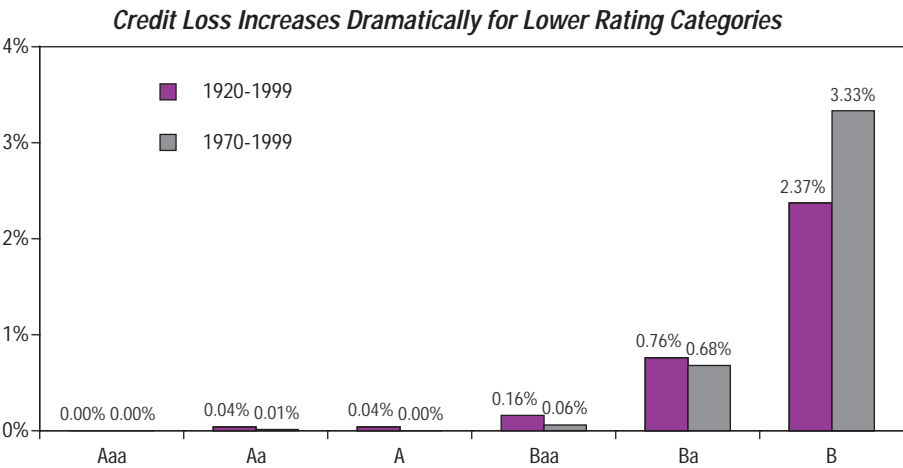
Although recovery rates were below average throughout 1999, the decline is neither drastic from a historical point of view, nor of excessive concern to high yield investors. That 63% of the bonds defaulting in 1999 were senior/unsecured bonds, which as we saw above exhibit more highly variable prices, further explains 1999’s defaulted bond price swing below historical average. While below trend, recovery rates still lie within one standard deviation of the 1970-1998 historical average (refer to Exhibit 24).

Sharp declines in defaulted bond prices have often preceded a peak in the default rate. The fall-off in values is the result of the uncertainty of how severe defaults will actually be. Once expected defaults occur, this uncertainty is resolved, and defaulted issues are more rationally priced. Since the default rate seems to have peaked in this credit cycle, the reduction in uncertainty about defaults should be a positive factor for defaulted bond prices. Amid continuing economic growth, recovery rates for defaulted bonds should improve, returning to their historical values in 2000.

From Default Probability and Recovery Rates to Loss Rates

Moody’s long-term debt ratings are statements about protections against credit loss. Conceptually, expected credit loss depends upon both the probability of a default occurring and the extent of the loss investors can expect to incur upon default. As Moody’s ratings are designed to capture both default probability and severity, the credit loss one can expect to incur is higher for lower ratings.

Exhibit 22
Average One-Year Loss Rates



Previous sections have detailed Moody's estimation of the historical average probability of default associated with each rating category. They have also detailed average recovery rates for secured debt and unsecured debt of various seniority levels (the severity of loss is simply one less the recovery rate). By multiplying Moody's estimates of the risk of default by our estimate of the severity of loss for senior unsecured debt, we can now derive estimates of the credit losses historically associated with each rating category. Exhibit 21 presents these estimates using both the 1920-1999 and 1970-1999 average default rates and the 1989-1999 average recovery rate estimate for senior unsecured debt. (The 51% recovery rate implies a 49% loss rate.)

Exhibit 22 indicates that expected credit loss increases dramatically as Moody's credit opinion slips from investment-grade to speculative-grade. The safest speculative-grade rating category, Ba, has generated more than four times the credit loss of the riskiest investment-grade rating category, Baa.

Conclusion & Forecast

Our methodology for calculating both the likelihood and the severity of default permit the estimation of the default losses that have historically been associated with each of our ratings over time. Over the post-1970 period, default rates and average default losses have increased with lower rating categories, reaching averages of 6.47% in terms of default rate and a 3.33% loss rate for the single B category. Average default rates increase smoothly even when measured over numerically modified ratings from 1983-1999. Finally, the comparability of default rates over long and short time horizons is evidence that Moody's has consistently differentiated debt on the basis of the credit risks facing investors for the better part of this century.

Along with average default rates, default rate volatility increases with lower rating categories, with the standard deviation of one-year default rates ranging from zero for the Aaa category to about 5% for the B category. These volatilities have been quite stable over long time horizons.

Average prices for defaulted debt vary with the seniority and security of the instrument and have fluctuated considerably over time. Since 1992, however, average defaulted bond prices have been fairly stable, hovering slightly above their post-1970 average of \$41 per \$100 par value.

Last year witnessed a 60% rise in the speculative-grade default rate to end the year at 3.45%, including a September peak of 5.95% which represented a 75% increase over the January 1, 1999 rate of 3.4%. Continuing fallout from the Asian crisis in the form of weakness in commodities prices and international trade volume contributed to the rise. Another contributing factor was the dramatic slowdown in the growth of the rated issuer pool, which began in late 1998. This slowdown is reflected in the default rate denominator, which implies upward pressure on the default rate itself. However, the most important factor underlying the recent rise in the default rates was the surge in low-rated first-time issuers that entered the market in late 1997 and 1998. This group of issuers exhibited a faster-than-average rate of financial deterioration prior to default, and produced 40% of 1999's rated bond defaults.

Moody's believes that 2000 is likely to see a movement back towards the historical trend in the growth of the rated universe that preceded the Asian crisis. Default activity peaked in the first half of 1999 and has continued at a moderate pace since, suggesting that default rates will hold steady or creep lower in the first half of 2000. We believe that, barring any major economic or political disturbance, a likely range of fluctuation for the speculative-grade default rate in 2000 is between 6.0% to 4.5%.

The factors that led to the rise in the default rate in 1999 were also largely responsible for the simultaneous decline in recovery rates. Similarly, the reasons for our outlook for a moderating and slightly declining default rate in 2000 also suggest a rebound in defaulted bond prices and therefore lower overall expected credit loss on those issues that do default throughout 2000.

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Keenan, Sean C., Carty, Lea V., Shtogrin, Igor, and Fons, Jerome S., (1998), “Moody’s Preferred Stock Ratings and Credit Risk”, Moody’s Special Comment, March.

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Appendix

Statistical Tables of Defaults, Default Rates and Recovery Estimates

EXHIBIT 23 – 1999 DEFAULTERS WITH SHORT RATING HISTORIES

Company Name	Initial Rating Date	Initial Rating	Default Date	Years Rated Prior to Default
Favorite Brands International, Inc.	13-May-98	B3	30-Mar-99	0.9
NSM Steel (Delaware), Inc.	20-Feb-98	B3	01-Feb-99	0.9
Eagle Geophysical, Inc.	14-Jul-98	B2	15-Jul-99	1.0
ICO Global Communications (Holdings) Limited	22-Jul-98	B3	29-Jul-99	1.0
Vencor Operating, Inc.	23-Apr-98	B1	03-May-99	1.0
Premier Cruises, Ltd.	02-Mar-98	B3	15-Mar-99	1.0
Ermis Maritime Holdings Limited	02-Mar-98	Caa1	15-Mar-99	1.0
Planet Hollywood International, Inc.	16-Mar-98	Ba3	29-Mar-99	1.0
Bayard Drilling Technologies, Inc.	15-Jun-98	B2	30-Jun-99	1.0
TBS Shipping International Limited	13-Apr-98	Caa1	30-Apr-99	1.0
Alpha Shipping Plc	23-Jan-98	B1	15-Feb-99	1.1
Cathay International Limited	20-Mar-98	Ba3	15-Apr-99	1.1
PanOceanic Bulk Carriers Limited	03-Dec-97	Caa1	25-Jan-99	1.1
Fine Host Corporation	21-Oct-97	B1	07-Jan-99	1.2
AMF Bowling, Inc.	29-Apr-98	B3	28-Jul-99	1.2
Grupo Azucarero Mexico, S.A. de C.V.	16-Jan-98	B3	13-May-99	1.3
FWT, Inc.	11-Nov-97	B1	16-Apr-99	1.4
Breed Technologies, Inc.	16-Apr-98	B1	20-Sep-99	1.4
Hurricane Hydrocarbons Ltd.	30-Oct-97	B3	01-May-99	1.5
Hollywood Theaters, Inc.	23-Jul-97	B1	01-Feb-99	1.5
USN Communications, Inc.	08-Aug-97	Caa1	18-Feb-99	1.5
Anker Coal Group, Inc.	19-Sep-97	B3	01-Apr-99	1.5
Brazos Sportswear, Inc.	17-Jun-97	B2	01-Jan-99	1.5
Coho Energy, Inc.	19-Sep-97	Ba3	15-Apr-99	1.6
UNEXIM International Finance B.V.	03-Jul-97	Ba3	27-Jan-99	1.6
Dailey International, Inc.	13-Aug-97	B1	21-May-99	1.8
FIRSTPLUS Financial Group, Inc.	13-May-97	B1	19-Feb-99	1.8
Sun Healthcare Group, Inc.	26-Jun-97	Ba3	29-Apr-99	1.8
Teletrac, Inc.	31-Jul-97	Caa2	09-Jun-99	1.9
Mariner Post-Acute Network, Inc.	27-Oct-97	B1	01-Oct-99	1.9
Altos Hornos de Mexico, S.A. de C.V.	18-Apr-97	B1	16-Apr-99	2.0
Global Ocean Carriers Limited	14-Jul-97	B3	15-Jul-99	2.0
DecisionOne Corporation	28-Jul-97	B1	02-Aug-99	2.0
DecisionOne Holdings Corporation	28-Jul-97	Caa1	02-Aug-99	2.0
ICON Fitness Corporation	02-Jul-97	Caa3	15-Jul-99	2.0
Iridium LLC	02-Jul-97	B3	15-Jul-99	2.0
SBS-Agro Finance B.V.	11-Jun-97	B1	21-Jul-99	2.1
Golden Ocean Group Limited	28-Jul-97	B3	14-Sep-99	2.1
Hvide Marine, Inc.	20-Jun-97	B1	16-Aug-99	2.2
PRIMESTAR Satellite, Inc.	12-Feb-97	B1	28-Apr-99	2.2
Forcenergy Inc.	22-Nov-96	Ba3	21-Mar-99	2.3
Bufete Industrial, S.A.	29-Jan-97	B3	13-Jul-99	2.5

EXHIBIT 24 – DESCRIPTIVE STATISTICS FOR DEFAULTED BOND PRICES, 1970-1999

Seniority/Security	Minimum	1st Quartile	Median	Mean	3rd Quartile	Maximum	StDev
Senior/Secured Bank Loans	15.00	60.00	75.00	69.91	88.00	98.00	23.47
Equipment Trust Bonds	8.00	26.25	70.63	59.96	85.00	103.00	31.08
Senior/Secured Bonds	7.50	31.00	53.00	52.31	65.25	125.00	25.15
Senior/Unsecured Bonds	0.50	30.75	48.00	48.84	67.00	122.60	25.01
Senior/Subordinated Bonds	0.50	21.34	35.50	39.46	53.47	123.00	24.59
Subordinated Bonds	1.00	19.62	30.00	33.17	42.94	99.13	20.78
Junior/Subordinated Bonds	3.63	11.38	16.25	19.69	24.00	50.00	13.85
Preferred Stocks	0.05	5.03	9.13	11.06	12.91	49.50	9.09
All	0.05	21.00	38.00	42.11	61.22	125.00	26.53

EXHIBIT 25 – ALL-CORPORATE AVERAGE RATING TRANSITION MATRIX, 1980-1999(PERCENT)

Rating to:		Aaa	Aa	A	Baa	Ba	B	Caa-C	Default	WR
Rating from:	Aaa	85.88%	9.76%	0.48%	0.00%	0.03%	0.00%	0.00%	0.00%	3.84%
	Aa	0.92%	84.87%	9.64%	0.36%	0.15%	0.02%	0.00%	0.04%	4.01%
	A	0.08%	2.24%	86.24%	6.09%	0.77%	0.21%	0.00%	0.02%	4.36%
	Baa	0.08%	0.37%	6.02%	79.16%	6.48%	1.30%	0.11%	0.19%	6.30%
	Ba	0.03%	0.08%	0.46%	4.02%	76.76%	7.88%	0.47%	1.40%	8.89%
	B	0.01%	0.04%	0.16%	0.53%	5.86%	76.07%	2.74%	6.60%	7.98%
	Caa-C	0.00%	0.00%	0.00%	1.00%	2.79%	5.38%	56.74%	25.35%	8.73%

EXHIBIT 26 – ALL-CORPORATE RATING TRANSITION MATRIX, 1999 (PERCENT)

Rating to:		Aaa	Aa	A	Baa	Ba	B	Caa-C	Default	WR
Rating from:	Aaa	95.41%	2.75%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	1.83%
	Aa	1.99%	88.05%	5.38%	0.00%	0.00%	0.00%	0.00%	0.00%	4.58%
	A	0.00%	2.28%	89.02%	5.87%	0.11%	0.33%	0.00%	0.00%	2.39%
	Baa	0.12%	0.36%	4.79%	86.11%	5.27%	1.08%	0.00%	0.12%	2.16%
	Ba	0.00%	0.14%	0.29%	7.07%	74.46%	9.38%	0.87%	1.01%	6.78%
	B	0.00%	0.00%	0.23%	0.35%	3.95%	77.24%	6.50%	5.46%	6.27%
	Caa-C	0.00%	0.00%	0.00%	0.00%	0.00%	5.26%	70.33%	18.66%	5.74%

EXHIBIT 27 – ONE-YEAR DEFAULT RATE VOLATILITY STATISTICS, 1970-1999 (PERCENT)

	Aaa	Aa	A	Baa	Ba	B	Caa-C
Minimum	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%
1st Quartile	0.00%	0.00%	0.00%	0.00%	0.27%	3.94%	7.08%
Median	0.00%	0.00%	0.00%	0.00%	0.84%	5.90%	21.34%
Mean	0.00%	0.03%	0.01%	0.18%	1.34%	6.75%	24.36%
3rd Quartile	0.00%	0.00%	0.00%	0.14%	1.84%	8.15%	38.33%
Maximum	0.00%	0.80%	0.35%	1.89%	5.32%	24.00%	67.50%

EXHIBIT 28 – ONE-YEAR DEFAULT RATES BY YEAR AND LETTER RATING, 1970-1999 (PERCENT)

Rating	1970	1971	1972	1973	1974	1975	1976	1977	1978	1979	1980	1981	1982	1983	1984
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%
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%
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%
Baa	0.27%	0.00%	0.00%	0.45%	0.00%	0.00%	0.00%	0.28%	0.00%	0.00%	0.00%	0.00%	0.31%	0.00%	0.36%
Ba	4.12%	0.42%	0.00%	0.00%	0.00%	1.02%	1.01%	0.52%	1.08%	0.49%	0.00%	0.00%	2.72%	0.91%	0.83%
B	22.78%	3.85%	7.14%	3.77%	10.00%	5.97%	0.00%	3.28%	5.41%	0.00%	4.94%	4.49%	2.41%	6.31%	6.72%
Investment-Grade	0.14%	0.00%	0.00%	0.23%	0.00%	0.00%	0.00%	0.11%	0.00%	0.00%	0.00%	0.00%	0.21%	0.00%	0.09%
Speculative-Grade	9.09%	1.10%	1.88%	1.24%	1.31%	1.73%	0.87%	1.34%	1.78%	0.42%	1.61%	0.70%	3.54%	3.82%	3.32%
US Only Speculative-Grade	9.72%	1.52%	1.94%	1.28%	1.36%	1.79%	0.89%	1.36%	1.80%	0.42%	1.62%	0.71%	3.58%	3.90%	3.40%
All Corporates	2.72%	0.28%	0.45%	0.45%	0.27%	0.36%	0.17%	0.35%	0.35%	0.09%	0.34%	0.16%	1.03%	0.95%	0.91%

Rating	1985	1986	1987	1988	1989	1990	1991	1992	1993	1994	1995	1996	1997	1998	1999
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%
Aa	0.00%	0.00%	0.00%	0.00%	0.61%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%
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%	0.00%	0.00%	0.00%
Baa	0.00%	1.33%	0.00%	0.00%	0.60%	0.00%	0.28%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.12%	0.11%
Ba	1.75%	2.04%	2.71%	1.24%	2.98%	3.34%	5.29%	0.30%	0.55%	0.24%	0.68%	0.00%	0.19%	0.61%	1.12%
B	8.22%	11.80%	6.25%	6.04%	9.21%	16.16%	14.71%	9.03%	5.79%	3.82%	4.83%	1.45%	2.12%	4.24%	5.69%
Investment-Grade	0.00%	0.32%	0.00%	0.00%	0.29%	0.00%	0.07%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.04%	0.04%
Speculative-Grade	3.90%	5.67%	4.23%	3.47%	6.02%	9.84%	10.50%	4.85%	3.51%	1.93%	3.32%	1.66%	2.04%	3.40%	5.51%
US Only Speculative-Grade	4.23%	5.81%	4.18%	3.53%	5.76%	9.88%	10.56%	5.14%	3.85%	2.07%	3.67%	1.94%	2.17%	3.99%	5.63%
All Corporates	1.06%	1.90%	1.49%	1.31%	2.42%	3.52%	3.29%	1.33%	0.96%	0.57%	1.07%	0.54%	0.68%	1.27%	2.19%

EXHIBIT 29 – ONE-YEAR DEFAULT RATES BY YEAR AND ALPHA-NUMERIC RATING, 1983-1999 (PERCENT)

	1983	1984	1985	1986	1987	1988	1989	1990	1991	1992	1993	1994	1995	1996	1997	1998	1999
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%
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%	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%	0.00%	0.00%	0.00%
Aa3	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	1.41%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%
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%	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%	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%	0.00%	0.00%	0.00%
Baa1	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.76%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%
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%	0.00%	0.00%	0.33%	0.00%
Baa3	0.00%	1.06%	0.00%	4.82%	0.00%	0.00%	1.07%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.35%
Ba1	0.00%	1.16%	0.00%	0.88%	3.73%	0.00%	0.79%	2.67%	1.06%	0.00%	0.81%	0.00%	0.00%	0.00%	0.00%	0.00%	0.46%
Ba2	0.00%	1.61%	1.63%	1.20%	0.95%	0.00%	1.82%	2.82%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.59%	0.00%
Ba3	2.61%	0.00%	3.77%	3.44%	2.95%	2.58%	4.69%	3.90%	9.84%	0.73%	0.74%	0.58%	1.71%	0.00%	0.48%	1.10%	2.25%
B1	0.00%	5.84%	4.38%	7.61%	4.93%	4.34%	6.24%	8.59%	6.04%	1.03%	3.32%	1.90%	4.39%	1.18%	0.00%	2.10%	2.77%
B2	10.00%	18.75%	7.41%	16.67%	4.30%	6.90%	8.28%	22.09%	12.74%	1.54%	4.96%	3.66%	6.36%	0.00%	1.51%	7.63%	6.59%
B3	17.91%	2.90%	13.86%	16.07%	10.37%	9.72%	19.55%	28.93%	28.42%	24.54%	11.48%	8.05%	4.15%	3.40%	7.46%	5.59%	9.84%
Investment-Grade	0.00%	0.09%	0.00%	0.32%	0.00%	0.00%	0.29%	0.00%	0.07%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.04%	0.04%
Speculative-Grade	3.82%	3.32%	3.90%	5.67%	4.23%	3.47%	6.02%	9.84%	10.50%	4.85%	3.51%	1.93%	3.32%	1.66%	2.04%	3.40%	5.51%
All Corporates	0.95%	0.91%	1.06%	1.90%	1.49%	1.31%	2.42%	3.52%	3.29%	1.33%	0.96%	0.57%	1.07%	0.54%	0.68%	1.27%	2.19%

EXHIBIT 30 – AVERAGE CUMULATIVE DEFAULT RATES BY LETTER RATING FROM 1 TO 20 YEARS (PERCENT) – 1920-1999

Rating	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%	0.02%	0.09%	0.20%	0.31%	0.43%	0.62%	0.83%	1.09%	1.33%	1.51%	1.74%	1.84%	1.89%	2.00%	2.12%	2.18%	2.31%	2.38%
Aa	0.08%	0.25%	0.41%	0.61%	0.97%	1.37%	1.81%	2.26%	2.67%	3.10%	3.60%	4.14%	4.65%	5.20%	5.61%	5.87%	6.08%	6.28%	6.55%	6.75%
A	0.08%	0.27%	0.60%	0.97%	1.37%	1.78%	2.23%	2.63%	3.10%	3.61%	4.15%	4.71%	5.18%	5.65%	6.13%	6.57%	6.79%	7.04%	7.27%	7.47%
Baa	0.30%	0.94%	1.73%	2.62%	3.51%	4.45%	5.34%	6.21%	7.12%	7.92%	8.70%	9.47%	10.21%	10.88%	11.46%	12.03%	12.61%	13.10%	13.51%	13.95%
Ba	1.43%	3.45%	5.57%	7.80%	10.04%	12.09%	13.90%	15.73%	17.31%	19.05%	20.59%	22.09%	23.57%	24.80%	25.95%	26.99%	28.09%	29.14%	29.98%	30.82%
B	4.48%	9.16%	13.73%	17.56%	20.89%	23.68%	26.19%	28.32%	30.22%	31.90%	33.53%	35.00%	36.41%	37.86%	39.17%	40.55%	41.67%	42.56%	43.33%	43.70%
Investment-Grade	0.16%	0.49%	0.93%	1.43%	1.97%	2.54%	3.12%	3.68%	4.27%	4.85%	5.44%	6.04%	6.60%	7.13%	7.59%	8.02%	8.36%	8.67%	8.97%	9.24%
Speculative-Grade	3.35%	6.76%	9.98%	12.89%	15.57%	17.91%	19.96%	21.89%	23.59%	25.31%	26.93%	28.48%	29.98%	31.34%	32.61%	33.81%	34.96%	36.04%	36.94%	37.74%
All	1.33%	2.76%	4.14%	5.44%	6.65%	7.76%	8.77%	9.71%	10.61%	11.49%	12.34%	13.18%	13.97%	14.70%	15.35%	15.95%	16.48%	16.97%	17.40%	17.79%

EXHIBIT 31 – AVERAGE CUMULATIVE DEFAULT RATES FROM 1 TO 8 YEARS (PERCENT) – 1983-1999

Rating	1	2	3	4	5	6	7	8
Aaa	0.00%	0.00%	0.00%	0.06%	0.20%	0.28%	0.37%	0.48%
Aa1	0.00%	0.00%	0.00%	0.23%	0.23%	0.39%	0.39%	0.39%
Aa2	0.00%	0.00%	0.06%	0.20%	0.45%	0.55%	0.66%	0.79%
Aa3	0.07%	0.10%	0.19%	0.29%	0.41%	0.55%	0.55%	0.55%
A1	0.00%	0.03%	0.33%	0.52%	0.66%	0.82%	0.89%	0.97%
A2	0.00%	0.03%	0.14%	0.39%	0.60%	0.79%	0.91%	1.24%
A3	0.00%	0.13%	0.25%	0.34%	0.40%	0.53%	0.78%	0.88%
Baa1	0.04%	0.26%	0.52%	0.90%	1.28%	1.55%	2.00%	2.27%
Baa2	0.07%	0.33%	0.60%	1.18%	1.80%	2.45%	2.79%	2.93%
Baa3	0.31%	0.81%	1.34%	2.15%	2.84%	3.82%	4.73%	5.66%
Ba1	0.62%	2.13%	3.86%	6.30%	8.49%	10.69%	12.19%	13.67%
Ba2	0.53%	2.58%	5.05%	7.32%	9.16%	10.51%	11.86%	12.76%
Ba3	2.52%	6.96%	11.89%	16.47%	20.98%	25.05%	28.71%	32.61%
B1	3.46%	9.29%	14.81%	19.63%	24.48%	29.79%	34.85%	38.35%
B2	6.88%	13.95%	20.28%	24.84%	28.45%	31.16%	32.57%	34.39%
B3	12.23%	20.71%	27.27%	32.53%	37.54%	40.66%	43.95%	47.84%
Caa1-C	19.09%	28.37%	34.23%	40.07%	43.37%	47.73%	47.73%	51.33%
Investment-Grade	0.04%	0.15%	0.33%	0.59%	0.82%	1.08%	1.27%	1.46%
Speculative-Grade	3.68%	8.26%	12.66%	16.56%	20.17%	23.38%	26.17%	28.73%
All Corporates	1.20%	2.65%	4.01%	5.22%	6.28%	7.19%	7.92%	8.57%

EXHIBIT 32 – CUMULATIVE DEFAULT RATES FOR COHORTS FORMED SINCE 1970 (PERCENT)

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	0.00	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	2.70	2.70	2.70
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	1.42	1.42	1.42	2.88	2.88	2.88	2.88
A	0.00	0.00	0.00	0.00	0.00	0.43	0.43	0.43	0.43	0.43	0.90	0.90	0.90	0.90	0.90	0.90	1.42	1.42	2.54	2.54
Baa	0.27	0.27	0.27	1.14	1.44	1.44	1.75	2.39	3.07	3.07	3.43	3.43	4.61	5.01	5.44	6.31	7.70	8.71	9.81	10.41
Ba	4.12	4.55	4.99	5.45	6.39	7.37	7.89	8.44	9.60	9.60	9.60	11.07	13.42	14.25	14.25	17.13	21.22	22.37	22.37	23.77
B	22.78	25.36	27.93	27.93	27.93	27.93	27.93	27.93	27.93	27.93	27.93	27.93	35.32	35.32	35.32	35.32	35.32	35.32	35.32	35.32
Investment-Grade	0.14	0.14	0.14	0.57	0.71	0.86	1.01	1.32	1.63	1.63	1.97	1.97	2.49	2.85	3.04	3.41	4.38	4.99	5.86	6.08
Speculative-Grade	9.09	10.13	11.91	12.66	13.43	14.23	14.65	15.54	16.48	16.48	16.48	17.64	20.74	21.40	21.40	23.64	26.88	27.79	27.79	28.90
All																				
Corporates	2.72	3.02	3.52	4.04	4.35	4.68	4.90	5.35	5.82	5.82	6.08	6.34	7.42	7.84	7.99	8.73	10.11	10.77	11.47	11.83
Cohort formed January 1, 1971																				
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	2.78	2.78	2.78	2.78
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	1.75
A	0.00	0.00	0.00	0.00	0.38	0.38	0.38	0.38	0.38	0.79	0.79	1.22	1.65	1.65	1.65	2.09	2.09	3.06	3.06	3.06
Baa	0.00	0.00	0.80	1.07	1.07	1.36	1.96	2.59	2.59	2.93	2.93	4.04	4.43	4.83	5.65	6.96	7.91	8.93	9.48	10.64
Ba	0.42	0.86	1.31	2.24	3.70	4.21	4.75	5.91	5.91	5.91	7.34	9.64	10.45	10.45	13.24	18.22	19.36	19.36	20.74	20.74
B	3.85	7.69	7.69	7.69	7.69	7.69	7.69	7.69	7.69	7.69	7.69	20.00	20.00	20.00	20.00	20.00	20.00	20.00	20.00	20.00
Investment-Grade	0.00	0.00	0.39	0.53	0.67	0.81	1.09	1.38	1.38	1.69	1.69	2.35	2.69	2.86	3.21	3.93	4.50	5.30	5.51	6.16
Speculative-Grade	1.10	3.01	3.80	4.62	5.91	6.36	7.31	8.32	8.32	8.32	9.57	12.90	13.60	13.60	16.00	20.31	21.28	21.28	22.48	22.48
All																				
Corporates	0.28	0.77	1.26	1.56	1.98	2.19	2.63	3.08	3.08	3.33	3.58	4.76	5.17	5.31	6.02	7.36	7.99	8.66	9.01	9.56
Cohort formed January 1, 1972																				
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	2.70	2.70	2.70	2.70	2.70
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	1.67	1.67
A	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.39	0.78	0.78	0.78	1.19	1.19	2.08	2.08	2.57	3.07
Baa	0.00	0.73	0.98	1.24	1.50	2.06	2.63	2.63	3.26	3.26	3.96	4.31	4.68	5.45	6.66	7.53	8.48	9.49	11.11	13.36
Ba	0.00	0.45	1.37	2.80	3.31	3.84	4.96	4.96	4.96	6.34	9.28	10.06	10.89	14.40	19.11	20.16	20.16	21.42	22.74	29.64
B	7.14	7.14	7.14	7.14	7.14	7.14	7.14	7.14	7.14	7.14	18.07	18.07	18.07	18.07	18.07	18.07	18.07	18.07	18.07	18.07
Investment-Grade	0.00	0.37	0.49	0.62	0.74	1.01	1.28	1.28	1.57	1.57	2.03	2.34	2.50	2.82	3.49	4.02	4.77	5.16	6.18	7.22
Speculative-Grade	1.88	2.65	3.46	4.71	5.15	6.08	7.06	7.06	7.06	8.24	12.02	12.70	13.41	16.45	20.53	21.44	21.44	22.53	23.71	29.86
All																				
Corporates	0.45	0.92	1.20	1.59	1.79	2.20	2.62	2.62	2.85	3.09	4.19	4.57	4.83	5.63	6.88	7.46	8.09	8.58	9.61	11.38

EXHIBIT 32 – CONTINUED

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, 1973																				
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	2.70	2.70	2.70	2.70	2.70	2.70
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	1.56	1.56	1.56
A	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.38	0.76	0.76	0.76	1.16	1.16	2.03	2.03	2.50	2.99	3.51
Baa	0.45	0.69	1.16	1.41	1.92	2.46	2.46	3.04	3.04	3.69	4.35	5.04	6.11	7.23	8.03	8.91	9.85	11.85	13.97	13.97
Ba	0.00	0.97	1.99	2.52	3.09	4.27	4.27	4.27	5.70	9.49	10.29	10.29	12.94	17.70	19.85	19.85	21.11	22.44	30.67	32.15
B	3.77	3.77	3.77	3.77	3.77	3.77	3.77	3.77	3.77	15.09	15.09	15.09	15.09	15.09	15.09	15.09	15.09	15.09	15.09	15.09
Investment-Grade	0.23	0.35	0.59	0.71	0.96	1.22	1.22	1.49	1.49	1.93	2.37	2.67	3.14	3.78	4.28	4.99	5.37	6.53	7.53	7.74
Speculative-Grade	1.24	2.09	2.98	3.45	4.44	5.48	5.48	5.48	6.72	11.30	11.99	11.99	14.33	18.53	20.41	20.41	21.54	22.75	30.28	31.62
All																				
Corporates	0.45	0.73	1.11	1.30	1.70	2.11	2.11	2.33	2.56	3.75	4.24	4.49	5.26	6.46	7.17	7.78	8.25	9.41	11.30	11.66
Cohort formed January 1, 1974																				
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	2.44	2.44	2.44	2.44	2.44	2.44	2.44
Aa	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	1.24	1.24	1.24	1.24	1.24	1.24	1.24	1.24	2.74	2.74	2.74	2.74
A	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.38	0.76	0.76	0.76	1.16	1.16	2.02	2.02	2.48	2.96	3.47	3.47
Baa	0.00	0.47	0.72	1.22	1.75	1.75	2.33	2.33	2.97	3.63	4.31	5.37	5.74	6.54	7.42	8.35	9.85	11.94	11.94	11.94
Ba	0.00	1.06	1.62	2.22	3.47	3.47	3.47	4.22	8.18	9.01	9.01	11.75	18.62	20.83	20.83	22.14	24.87	33.30	34.81	36.53
B	10.00	10.00	10.00	10.00	10.00	10.00	10.00	14.39	23.65	23.65	23.65	23.65	23.65	23.65	23.65	23.65	23.65	23.65	23.65	23.65
Investment-Grade	0.00	0.24	0.36	0.60	0.85	0.85	1.12	1.12	1.69	2.13	2.43	2.88	3.20	3.69	4.39	4.75	5.70	6.68	6.89	6.89
Speculative-Grade	1.31	2.22	2.70	3.72	4.78	4.78	4.78	6.05	10.73	11.45	11.45	13.84	19.84	21.76	21.76	22.92	25.41	33.19	34.58	36.14
All																				
Corporates	0.27	0.65	0.84	1.24	1.64	1.64	1.86	2.09	3.38	3.87	4.11	4.88	6.07	6.77	7.36	7.83	8.98	10.83	11.19	11.39
Cohort formed January 1, 1975																				
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	1.96	1.96	1.96	1.96	1.96	1.96	1.96	1.96
Aa	0.00	0.00	0.00	0.00	0.00	0.00	0.00	1.04	1.04	1.04	1.04	1.04	1.04	2.23	2.23	3.47	3.47	3.47	3.47	3.47
A	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.37	0.37	0.37	0.37	0.75	0.75	1.59	1.59	2.04	2.97	3.47	4.01	4.01
Baa	0.00	0.00	0.26	0.79	0.79	1.37	1.37	2.33	2.99	3.67	4.73	5.10	5.90	6.33	7.26	9.22	11.27	11.27	11.27	11.27
Ba	1.02	2.10	3.23	3.83	3.83	3.83	4.54	8.35	9.14	9.14	11.77	18.34	20.46	21.63	22.88	24.19	30.90	32.34	33.93	33.93
B	5.97	5.97	5.97	9.27	9.27	9.27	13.13	21.21	21.21	21.21	21.21	21.21	21.21	21.21	21.21	31.06	42.55	42.55	42.55	42.55
Investment-Grade	0.00	0.00	0.12	0.36	0.36	0.62	0.62	1.16	1.58	1.86	2.29	2.59	3.06	3.72	4.06	5.14	6.24	6.43	6.65	6.65
Speculative-Grade	1.73	2.64	4.07	5.07	5.07	5.07	6.26	10.70	11.37	11.37	13.63	19.31	21.12	22.11	23.19	25.48	32.64	33.91	35.30	35.30
All																				
Corporates	.36	0.54	0.92	1.31	1.31	1.52	1.74	2.97	3.43	3.66	4.39	5.51	6.18	6.88	7.32	8.55	10.45	10.78	11.15	11.15

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, 1976																				
Aaa	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	1.59	1.59	1.59	1.59	1.59	1.59	1.59	1.59	1.59
Aa	0.00	0.00	0.00	0.00	0.00	0.00	0.97	0.97	0.97	0.97	0.97	2.09	2.09	2.09	3.26	3.26	3.26	3.26	3.26	3.26
A	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.64	0.64	0.64	1.31	1.31	2.43	2.43	2.83	4.08	4.08	4.57	4.57	5.62
Baa	0.00	0.27	0.56	0.56	0.87	0.87	2.22	2.92	3.64	4.76	5.15	5.99	5.99	6.97	9.06	10.69	11.25	11.25	11.25	11.25
Ba	1.01	2.07	3.19	3.19	3.81	4.47	7.31	8.05	8.05	10.49	16.57	18.54	19.63	20.79	21.99	29.48	30.82	32.29	32.29	32.29
B	0.00	0.00	3.64	3.64	3.64	8.12	17.54	17.54	17.54	17.54	17.54	17.54	17.54	17.54	30.23	45.73	45.73	45.73	45.73	45.73
Investment-Grade	0.00	0.11	0.23	0.23	0.35	0.35	0.98	1.50	1.77	2.18	2.60	3.04	3.67	3.99	5.01	6.05	6.24	6.44	6.44	6.88
Speculative-Grade	0.87	2.25	3.68	3.68	4.22	5.37	9.02	9.67	9.67	11.84	17.28	19.02	19.98	21.02	23.20	31.22	32.46	33.81	33.81	33.81
All																				
Corporates	0.17	0.53	0.90	0.90	1.10	1.30	2.46	3.00	3.22	3.91	5.10	5.73	6.40	6.82	7.98	9.93	10.25	10.60	10.60	10.98
Cohort formed January 1, 1977																				
Aaa	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	1.59	1.59	1.59	1.59	1.59	1.59	1.59	1.59	1.59	1.59
Aa	0.00	0.00	0.00	0.00	0.00	0.90	0.90	0.90	0.90	0.90	0.90	1.96	1.96	3.05	3.05	3.05	3.05	3.05	3.05	3.05
A	0.00	0.00	0.00	0.00	0.00	0.00	0.60	0.60	0.60	1.24	1.24	3.01	3.01	3.77	4.96	4.96	5.43	5.43	6.43	6.43
Baa	0.28	0.57	0.57	0.57	0.57	1.93	2.64	3.36	4.50	4.90	5.74	5.74	6.73	8.31	9.94	10.51	10.51	10.51	10.51	10.51
Ba	0.52	1.62	1.62	2.23	2.88	5.63	6.36	6.36	8.73	14.62	16.50	17.54	18.64	19.79	27.03	28.33	29.77	29.77	29.77	29.77
B	3.28	6.73	6.73	10.97	15.54	25.78	25.78	25.78	25.78	25.78	25.78	25.78	25.78	39.27	56.62	56.62	56.62	56.62	56.62	56.62
Investment-Grade	0.11	0.22	0.22	0.22	0.22	0.84	1.34	1.60	2.00	2.41	2.84	3.75	4.07	5.05	6.07	6.25	6.44	6.44	6.88	6.88
Speculative-Grade	1.34	2.75	2.75	3.80	4.93	8.52	9.16	9.16	11.29	16.60	18.29	19.22	20.21	22.31	30.08	31.29	32.61	32.61	32.61	32.61
All																				
Corporates	0.35	0.71	0.71	0.90	1.10	2.22	2.75	2.97	3.64	4.80	5.41	6.32	6.73	7.86	9.75	10.06	10.40	10.40	10.78	10.78
Cohort formed January 1, 1978																				
Aaa	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	1.39	1.39	1.39	2.80	2.80	2.80	2.80	2.80	2.80	2.80	2.80
Aa	0.00	0.00	0.00	0.00	0.82	0.82	0.82	0.82	0.82	0.82	1.74	1.74	1.74	1.74	1.74	1.74	1.74	1.74	1.74	1.74
A	0.00	0.00	0.00	0.00	0.00	0.61	0.61	0.61	1.27	1.27	2.73	2.73	3.92	4.74	4.74	5.23	5.23	6.27	6.27	6.27
Baa	0.00	0.00	0.00	0.00	1.32	1.67	2.38	3.49	3.87	4.70	5.14	6.09	7.60	9.70	10.24	10.24	10.24	10.24	10.24	10.24
Ba	1.08	1.08	1.08	1.74	4.50	5.96	5.96	9.12	14.95	16.81	17.84	18.94	21.24	28.45	29.75	32.62	32.62	32.62	32.62	32.62
B	5.41	5.41	11.71	15.04	22.27	22.27	26.72	26.72	32.35	38.50	38.50	38.50	47.29	60.47	60.47	60.47	60.47	60.47	60.47	60.47
Investment-Grade	0.00	0.00	0.00	0.00	0.60	0.97	1.22	1.61	2.01	2.43	3.31	3.62	4.73	5.72	5.89	6.08	6.08	6.50	6.50	6.50
Speculative-Grade	1.78	1.78	2.78	3.86	7.28	8.49	9.13	11.80	18.21	20.58	21.44	22.37	25.34	32.75	33.91	36.46	36.46	36.46	36.46	36.46
All																				
Corporates	0.35	0.35	0.54	0.73	1.82	2.33	2.64	3.40	4.75	5.46	6.34	6.73	8.09	9.93	10.23	10.72	10.72	11.08	11.08	11.08

EXHIBIT 32 – CONTINUED

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, 1979																				
Aaa	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	1.30	1.30	1.30	2.61	2.61	2.61	2.61	2.61	2.61	2.61	2.61	2.61
Aa	0.00	0.00	0.00	0.00	0.80	0.80	0.80	0.80	1.71	1.71	1.71	1.71	1.71	1.71	1.71	1.71	1.71	1.71	1.71	1.71
A	0.00	0.00	0.00	0.00	0.60	0.60	0.60	1.25	2.69	2.69	3.47	3.47	4.27	4.27	4.75	4.75	5.77	5.77	5.77	5.77
Baa	0.00	0.30	0.30	1.60	1.94	2.29	3.38	3.38	4.19	4.63	5.58	8.11	10.22	10.77	10.77	10.77	10.77	10.77	10.77	10.77
Ba	0.49	0.49	1.05	3.39	5.84	9.09	11.79	18.19	19.75	20.61	21.52	24.41	31.56	32.65	35.02	35.02	35.02	35.02	35.02	35.02
B	0.00	6.45	9.85	17.21	17.21	21.69	26.58	38.33	45.18	45.18	45.18	56.14	56.14	56.14	-	-	-	-	-	-
Investment-Grade	0.00	0.11	0.11	0.70	1.06	1.18	1.56	1.82	2.23	3.10	3.40	4.65	5.62	5.79	5.98	5.98	6.39	6.39	6.39	6.39
Speculative-Grade	0.42	1.30	2.25	5.23	7.33	10.69	13.62	21.10	23.16	23.91	24.72	28.16	34.69	35.71	37.93	37.93	37.93	37.93	37.93	37.93
All																				
Corporates	0.09	0.35	0.54	1.58	2.27	2.97	3.80	5.31	5.99	6.84	7.22	8.80	10.57	10.86	11.34	11.34	11.69	11.69	11.69	11.69
Cohort formed January 1, 1980																				
Aaa	0.00	0.00	0.00	0.00	0.00	0.00	0.00	1.14	1.14	1.14	2.31	2.31	2.31	2.31	2.31	2.31	2.31	2.31	2.31	2.31
Aa	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.91	1.83	1.83	1.83	1.83	1.83	1.83	1.83	1.83	1.83	1.83	1.83	1.83
A	0.00	0.00	0.28	0.86	0.86	0.86	1.78	2.11	3.14	3.14	3.89	4.66	4.66	5.12	5.12	6.10	6.10	6.10	6.10	6.64
Baa	0.00	0.00	0.96	1.29	1.63	3.05	3.05	3.45	4.29	5.65	8.05	10.05	11.10	11.10	11.10	11.10	11.10	11.10	11.10	11.10
Ba	0.00	0.53	3.83	4.99	8.64	11.81	17.85	20.05	20.86	23.55	26.38	34.50	36.74	39.15	39.15	39.15	39.15	40.55	40.55	40.55
B	4.94	7.54	15.82	21.73	28.12	31.63	44.06	48.72	48.72	48.72	60.11	68.09	68.09	68.09	68.09	68.09	68.09	68.09	68.09	68.09
Investment-Grade	0.00	0.00	0.45	0.80	0.92	1.40	1.78	2.31	3.14	3.57	4.77	5.70	6.02	6.20	6.20	6.60	6.60	6.60	6.60	6.82
Speculative-Grade	1.61	2.46	6.49	8.37	12.36	15.50	22.78	25.23	25.91	28.12	32.05	39.84	41.78	43.88	43.88	43.88	43.88	45.08	45.08	45.08
All																				
Corporates	0.34	0.51	1.69	2.34	3.20	4.18	5.82	6.69	7.49	8.21	9.83	11.77	12.33	12.78	12.78	13.11	13.11	13.29	13.29	13.48
Cohort formed January 1, 1981																				
Aaa	0.00	0.00	0.00	0.00	0.00	0.00	1.14	1.14	1.14	2.32	2.32	2.32	2.32	2.32	2.32	2.32	2.32	2.32	2.32	2.32
Aa	0.00	0.00	0.00	0.00	0.00	0.00	0.84	2.52	2.52	2.52	2.52	2.52	2.52	2.52	2.52	2.52	2.52	2.52	2.52	2.52
A	0.00	0.27	0.27	0.27	0.27	1.19	1.51	2.20	2.20	2.94	3.71	3.71	4.18	4.18	5.17	5.17	5.17	5.17	5.71	5.71
Baa	0.00	0.61	1.88	2.55	3.58	3.58	3.96	4.77	6.08	8.39	9.81	10.80	10.80	10.80	10.80	10.80	10.80	10.80	10.80	10.80
Ba	0.00	3.59	5.00	7.98	12.14	18.81	20.66	21.35	24.36	28.38	36.44	38.47	40.67	40.67	40.67	40.67	41.98	43.32	43.32	43.32
B	4.49	11.57	16.55	24.50	27.35	40.26	40.26	40.26	40.26	50.22	56.44	56.44	56.44	56.44	56.44	56.44	56.44	56.44	56.44	56.44
Investment-Grade	0.00	0.32	0.77	1.00	1.35	1.72	2.23	3.04	3.46	4.63	5.38	5.70	5.87	5.87	6.26	6.26	6.26	6.26	6.47	6.47
Speculative-Grade	0.70	4.75	6.69	10.38	14.25	22.11	24.14	24.71	27.18	31.88	39.44	41.17	43.06	43.06	43.06	43.06	44.16	45.30	45.30	45.30
All																				
Corporates	0.16	1.33	2.11	3.09	4.20	6.13	6.95	7.70	8.50	10.28	12.14	12.67	13.10	13.10	13.42	13.42	13.59	13.76	13.94	13.94

Years	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18
Cohort formed January 1, 1982																		
Aaa	0.00	0.00	0.00	0.00	0.00	1.13	1.13	1.13	2.31	2.31	2.31	2.31	2.31	2.31	2.31	2.31	2.31	2.31
Aa	0.00	0.00	0.00	0.00	0.00	0.75	2.28	2.28	2.28	2.28	2.28	2.28	2.28	3.37	3.37	3.37	3.37	3.37
A	0.26	0.26	0.26	0.26	1.14	1.14	1.81	1.81	2.89	3.65	3.65	4.10	4.10	4.10	4.10	4.10	4.10	4.62
Baa	0.31	0.31	1.32	2.37	2.74	3.52	4.36	5.70	8.05	9.51	10.52	10.52	10.52	11.14	11.14	11.14	11.14	11.14
Ba	2.72	5.20	7.83	11.94	18.75	20.36	20.95	23.59	27.91	32.80	34.67	36.68	36.68	36.68	36.68	37.97	39.35	39.35
B	2.41	9.92	15.14	17.92	30.31	30.31	30.31	30.31	35.67	60.18	60.18	60.18	60.18	60.18	60.18	60.18	60.18	60.18
Investment-Grade	0.21	0.21	0.54	0.88	1.36	1.86	2.65	3.07	4.36	5.10	5.42	5.59	5.59	5.97	5.97	5.97	5.97	6.18
Speculative-Grade	3.54	7.63	10.52	14.29	21.95	23.72	24.22	26.41	30.65	37.52	39.09	40.79	40.79	40.79	40.79	41.87	43.01	43.01
All																		
Corporates	1.03	2.01	2.94	4.08	6.19	6.97	7.69	8.46	10.30	12.10	12.62	13.04	13.04	13.35	13.35	13.51	13.69	13.86
Cohort formed January 1, 1983																		
Aaa	0.00	0.00	0.00	0.00	2.06	2.06	2.06	3.20	3.20	3.20	3.20	3.20	3.20	3.20	3.20	3.20	3.20	3.20
Aa	0.00	0.00	0.00	0.00	0.49	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.71	2.71	2.71	2.71	2.71	2.71
A	0.00	0.00	0.00	0.26	0.26	0.83	0.83	1.76	2.73	3.42	3.79	3.79	3.79	3.79	3.79	3.79	3.79	3.79
Baa	0.00	1.16	1.57	3.28	3.75	4.27	5.37	6.53	7.74	7.74	7.74	7.74	7.74	7.74	7.74	7.74	7.74	8.68
Ba	0.91	2.39	5.58	13.22	14.59	17.74	21.36	26.46	32.08	32.08	33.51	33.51	35.09	35.09	36.92	38.80	38.80	38.80
B	6.31	11.01	17.86	25.14	28.42	29.60	32.33	40.29	50.25	55.22	58.02	58.02	58.02	58.02	58.02	58.02	58.02	58.02
Investment-Grade	0.00	0.30	0.40	0.94	1.39	2.11	2.36	3.14	3.82	4.11	4.26	4.26	4.44	4.44	4.44	4.44	4.44	4.64
Speculative-Grade	3.82	6.97	11.32	18.64	21.09	23.40	26.58	32.63	39.54	41.15	42.94	42.94	43.95	43.95	45.11	46.35	46.35	46.35
All																		
Corporates	0.95	1.93	3.03	5.10	5.98	7.03	7.83	9.52	11.19	11.67	12.06	12.06	12.35	12.35	12.51	12.67	12.84	12.84
Cohort formed January 1, 1984																		
Aaa	0.00	0.00	0.00	1.21	1.21	1.21	2.57	2.57	2.57	2.57	2.57	2.57	2.57	2.57	2.57	2.57	2.57	2.57
Aa	0.00	0.00	0.00	0.89	1.82	1.82	1.82	1.82	1.82	1.82	1.82	2.46	2.46	2.46	2.46	2.46	2.46	2.46
A	0.00	0.22	0.46	0.70	1.47	1.74	2.58	3.46	4.07	4.07	4.07	4.07	4.07	4.07	4.07	4.07	4.07	4.07
Baa	0.36	0.36	0.77	1.23	1.74	2.81	3.94	5.73	5.73	6.43	6.43	6.43	6.43	6.43	6.43	6.43	7.35	7.35
Ba	0.83	4.38	13.05	14.68	18.42	22.66	27.39	34.27	35.23	36.31	36.31	37.54	37.54	39.01	39.01	39.01	39.01	39.01
B	6.72	12.77	20.11	23.99	27.13	32.07	42.30	49.51	51.76	56.83	56.83	56.83	56.83	56.83	60.94	60.94	60.94	60.94
Investment-Grade	0.09	0.19	0.39	0.93	1.61	1.97	2.71	3.48	3.76	3.91	3.91	4.08	4.08	4.08	4.08	4.08	4.27	4.27
Speculative-Grade	3.32	7.69	15.87	18.30	21.81	26.29	32.92	39.83	41.16	43.40	43.40	44.24	44.24	45.26	46.37	46.37	46.37	46.37
All																		
Corporates	0.91	2.07	4.21	5.19	6.51	7.72	9.59	11.46	11.91	12.40	12.40	12.67	12.67	12.82	12.97	13.13	13.13	13.13

EXHIBIT 32 – CONTINUED

Years:	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15
Cohort formed January 1, 1985															
Aaa	0.00	0.00	0.00	0.00	0.00	1.38	1.38	1.38	1.38	1.38	1.38	1.38	1.38	1.38	1.38
Aa	0.00	0.00	0.00	0.79	0.79	0.79	0.79	0.79	0.79	0.79	1.39	1.39	1.39	1.39	1.39
A	0.00	0.21	1.32	2.27	2.52	3.56	4.38	4.67	4.67	4.67	4.67	4.67	4.67	4.67	4.67
Baa	0.00	1.20	1.20	1.71	2.79	3.35	5.13	5.77	6.47	6.47	6.47	6.47	6.47	6.47	8.46
Ba	1.75	7.05	9.64	12.62	18.72	23.71	30.55	32.06	32.90	32.90	34.84	34.84	35.97	35.97	35.97
B	8.22	17.65	23.84	27.26	31.51	43.36	50.12	52.39	57.68	57.68	57.68	57.68	57.68	61.91	61.91
Investment-Grade	0.00	0.36	0.85	1.59	1.92	2.61	3.34	3.60	3.74	3.74	3.90	3.90	3.90	3.90	4.27
Speculative-Grade	3.90	10.55	14.41	17.84	23.25	30.32	36.98	38.62	40.46	40.46	42.59	42.59	43.41	44.32	44.32
All															
Corporates	1.06	3.11	4.48	5.89	7.40	9.47	11.37	11.88	12.34	12.34	12.85	12.85	12.99	13.14	13.44
Cohort formed January 1, 1986															
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
Aa	0.00	0.00	0.79	0.79	1.23	1.23	1.23	1.23	1.23	1.82	1.82	1.82	1.82	1.82	1.82
A	0.00	0.19	0.79	1.20	1.86	2.31	2.31	2.31	2.31	2.31	2.31	2.31	2.31	2.31	2.31
Baa	1.33	1.33	3.01	3.89	5.27	6.72	7.77	8.36	8.36	8.36	8.36	8.36	8.36	10.04	10.04
Ba	2.04	6.27	8.50	13.97	20.13	28.14	29.99	32.76	33.51	34.31	34.31	36.22	36.22	36.22	36.22
B	11.80	17.20	21.22	25.28	35.11	44.73	49.21	52.71	52.71	55.14	55.14	55.14	58.34	62.13	62.13
Investment-Grade	0.32	0.40	1.22	1.60	2.30	2.82	3.04	3.16	3.16	3.30	3.30	3.30	3.30	3.62	3.62
Speculative-Grade	5.67	10.25	13.31	18.23	25.45	33.77	36.32	39.22	39.76	41.51	41.51	42.87	43.64	44.46	44.46
All															
Corporates	1.90	3.29	4.73	6.27	8.53	10.76	11.45	12.13	12.23	12.67	12.67	12.91	13.03	13.42	13.42
Cohort formed January 1, 1987															
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		
Aa	0.00	0.00	0.00	0.39	0.39	0.39	0.39	0.39	0.93	0.93	0.93	0.93	0.93		
A	0.00	0.00	0.41	1.25	1.69	1.69	1.69	1.69	1.69	1.69	1.69	1.69	1.69		
Baa	0.00	1.04	1.78	3.33	4.96	6.26	7.21	7.21	7.21	7.21	7.85	7.85	9.21		
Ba	2.71	4.47	9.54	15.93	23.66	27.09	30.58	31.70	32.93	33.63	35.20	36.08	36.08		
B	6.25	13.11	20.01	31.60	42.88	46.34	48.41	48.41	49.78	49.78	49.78	51.75	53.95		
Investment-Grade	0.00	0.25	0.59	1.39	1.95	2.25	2.47	2.47	2.59	2.59	2.72	2.72	3.01		
Speculative-Grade	4.23	7.99	13.63	21.75	30.55	33.93	36.89	37.64	39.30	39.76	40.80	41.99	42.63		
All															
Corporates	1.49	2.94	5.01	8.04	10.89	11.97	12.85	13.03	13.49	13.59	13.89	14.11	14.44		

Years:	1	2	3	4	5	6	7	8	9	10	11	12
Cohort formed January 1, 1988												
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
Aa	0.00	0.33	0.67	0.67	0.67	0.67	0.67	1.14	1.14	1.14	1.14	1.14
A	0.00	0.39	0.99	1.40	1.40	1.40	1.40	1.40	1.40	1.40	1.40	1.40
Baa	0.00	0.33	1.03	2.48	3.64	4.48	4.48	4.48	4.48	5.04	5.04	5.65
Ba	1.24	6.96	12.79	20.54	23.57	26.75	27.66	28.67	29.78	31.03	31.73	33.26
B	6.04	13.11	25.75	37.02	41.20	46.32	47.18	50.23	50.23	51.50	57.47	57.47
Investment-Grade	0.00	0.31	0.81	1.32	1.59	1.79	1.79	1.90	1.90	2.02	2.02	2.16
Speculative-Grade	3.47	9.64	17.99	26.92	30.32	34.12	35.00	36.96	37.69	38.92	41.24	42.26
All Corporates	1.31	3.75	6.96	10.18	11.37	12.56	12.79	13.36	13.53	13.90	14.37	14.67
Cohort formed January 1, 1989												
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
Aa	0.61	0.61	0.61	0.61	0.61	0.61	1.05	1.05	1.05	1.05	1.05	1.05
A	0.00	0.18	0.56	0.56	0.56	0.56	0.56	0.56	0.56	0.56	0.56	0.56
Baa	0.60	1.23	1.88	2.92	2.92	2.92	2.92	2.92	3.39	3.39	3.92	3.92
Ba	2.98	9.98	18.09	20.79	23.96	24.37	25.28	26.81	28.54	30.50	31.95	31.95
B	9.21	23.05	33.52	38.60	44.25	46.31	50.31	50.31	52.45	56.31	56.31	56.31
Investment-Grade	0.29	0.51	0.82	1.06	1.06	1.06	1.17	1.17	1.28	1.28	1.40	1.40
Speculative-Grade	6.02	15.85	24.94	28.52	32.57	33.58	35.57	36.53	38.35	40.86	41.79	41.79
All Corporates	2.42	6.06	9.29	10.57	11.76	12.03	12.62	12.85	13.34	13.85	14.12	14.12

EXHIBIT 32 – CONTINUED

Years:	1	2	3	4	5	6	7	8	9	10	Years:	1	2	3	4	5	6
Cohort formed January 1, 1990											Cohort formed January 1, 1994						
Aaa	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	Aaa	0.00	0.00	0.00	0.00	0.00	0.00
Aa	0.00	0.00	0.00	0.00	0.00	0.36	0.36	0.36	0.36	0.36	Aa	0.00	0.00	0.00	0.00	0.00	0.00
A	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	A	0.00	0.00	0.00	0.00	0.00	0.00
Baa	0.00	0.63	0.63	0.63	0.63	0.63	0.63	0.63	0.63	1.13	Baa	0.00	0.21	0.21	0.43	0.67	1.88
Ba	3.34	11.77	14.30	17.25	18.00	19.26	20.17	22.17	23.85	25.09	Ba	0.24	1.77	2.05	2.97	4.71	7.03
B	16.16	27.88	34.84	39.98	41.67	44.37	45.17	47.11	50.72	52.17	B	3.82	9.17	12.36	14.23	18.22	22.95
Investment-Grade	0.00	0.14	0.14	0.14	0.14	0.23	0.23	0.23	0.23	0.34	Investment-Grade	0.00	0.06	0.06	0.12	0.18	0.51
Speculative-Grade	9.84	19.65	23.96	27.73	28.83	30.85	31.69	33.58	35.76	36.99	Speculative-Grade	1.93	5.34	7.21	8.45	10.92	14.21
All											All						
Corporates	3.52	6.91	8.28	9.41	9.72	10.32	10.53	10.97	11.44	11.77	Corporates	0.57	1.58	2.10	2.46	3.10	4.07
Cohort formed January 1, 1991											Cohort formed January 1, 1995						
Aaa	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	Aaa	0.00	0.00	0.00	0.00	0.00	0.00
Aa	0.00	0.00	0.00	0.00	0.31	0.31	0.31	0.31	0.31	0.31	Aa	0.00	0.00	0.00	0.00	0.00	0.00
A	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	A	0.00	0.00	0.00	0.00	0.00	0.00
Baa	0.28	0.28	0.28	0.28	0.28	0.28	0.28	0.28	0.70	0.70	Baa	0.00	0.00	0.00	0.43	1.55	1.55
Ba	5.29	6.54	8.34	8.76	10.14	11.15	12.80	14.67	16.76	16.76	Ba	0.68	0.92	2.00	3.81	6.48	6.48
B	14.71	23.93	30.86	33.09	36.39	37.17	39.94	43.31	44.63	44.63	B	4.83	7.37	10.27	13.98	17.47	17.47
Investment-Grade	0.07	0.07	0.07	0.07	0.15	0.15	0.15	0.15	0.25	0.25	Investment-Grade	0.00	0.00	0.00	0.11	0.41	0.41
Speculative-Grade	10.50	15.19	19.11	20.26	22.61	23.49	25.46	27.73	29.46	29.46	Speculative-Grade	3.32	5.07	6.92	9.77	12.98	12.98
All											All						
Corporates	3.29	4.66	5.75	6.05	6.69	6.89	7.32	7.77	8.16	8.16	Corporates	1.07	1.62	2.16	3.03	4.07	4.07
Cohort formed January 1, 1992											Cohort formed January 1, 1996						
Aaa	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	Aaa	0.00	0.00	0.00	0.00	0.00	0.00
Aa	0.00	0.00	0.00	0.28	0.28	0.28	0.28	0.28	0.28	0.28	Aa	0.00	0.00	0.00	0.00	0.00	0.00
A	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	A	0.00	0.00	0.00	0.00	0.00	0.00
Baa	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.39	0.39	0.39	Baa	0.00	0.00	0.00	0.18	0.73	0.73
Ba	0.30	1.00	1.00	2.35	2.84	3.92	5.74	7.11	7.11	7.11	Ba	0.00	0.70	2.28	5.45	5.45	5.45
B	9.03	17.54	20.90	24.90	27.21	29.87	33.04	35.45	35.45	35.45	B	1.45	4.47	9.52	12.57	12.57	12.57
Investment-Grade	0.00	0.00	0.00	0.08	0.08	0.08	0.08	0.17	0.17	0.17	Investment-Grade	0.00	0.00	0.05	0.21	0.21	0.21
Speculative-Grade	4.85	8.94	10.31	12.89	14.04	15.97	18.18	19.86	19.86	19.86	Speculative-Grade	1.66	3.83	7.40	11.14	11.14	11.14
All											All						
Corporates	1.33	2.39	2.72	3.37	3.62	4.02	4.44	4.80	4.80	4.80	Corporates	0.54	1.21	2.28	3.41	3.41	3.41

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Years:	1	2	3	4	5	6	7	
Cohort formed January 1, 1993								Cohort formed January 1, 1997
Aaa	0.00	0.00	0.00	0.00	0.00	0.00	0.00	Aaa
Aa	0.00	0.00	0.00	0.00	0.00	0.00	0.00	Aa
A	0.00	0.00	0.00	0.00	0.00	0.00	0.00	A
Baa	0.00	0.00	0.26	0.26	0.26	0.55	1.16	Baa
Ba	0.55	0.55	2.95	3.69	4.94	6.36	7.41	Ba
B	5.79	10.02	14.90	16.77	19.66	22.24	27.10	B
Investment-Grade	0.00	0.00	0.07	0.07	0.07	0.14	0.30	Investment-Grade
Speculative-Grade	3.51	5.14	8.81	10.16	11.95	13.72	16.04	Speculative-Grade
All								All
Corporates	0.96	1.38	2.34	2.66	3.05	3.47	4.03	Corporates
Cohort formed January 1, 1998								Cohort formed January 1, 1999
Aaa	0.00	0.00						Aaa
Aa	0.00	0.00						Aa
A	0.00	0.00						A
Baa	0.00	0.62						Baa
Ba	0.61	3.09						Ba
B	4.24	11.21						B
Investment-Grade	0.04	0.20						Investment-Grade
Speculative-Grade	3.40	8.89						Speculative-Grade
All								All
Corporates	1.27	3.32						Corporates

Exhibit 33 – Chronological list of 1999 defaults

CHRONOLOGICAL LIST OF 1999 PUBLIC CORPORATE BOND DEFAULTERS

Company	Defaulted Amount	Default Description
January		
Brazos Sportswear, Inc.	\$100.0	Missed interest payment
County Seat Stores, Inc.	\$85.0	Chapter 11
Fine Host Corporation	\$175.0	Prepackaged Chapter 11
Guangdong Enterprises (Holdings) Ltd.	\$900.0	Suspension of payments
Mobile Energy Services Company, L.L.C.	\$323.1	Chapter 11
PanOceanic Bulk Carriers Limited	\$100.0	Distressed exchange
SmarTalk TeleServices, Inc.	\$150.0	Chapter 11
UNEXIM International Finance B.V.	\$300.0	Missed interest payment
Defaulted Debt (US millions):	\$2,133.1	
Number of Defaulting Companies:	8	
February		
Alpha Shipping Plc	\$175.0	Missed interest payment
Complete Management, Inc.	\$69.0	Missed interest payment
FIRSTPLUS Financial Group, Inc.	\$100.0	Missed interest payment
Hollywood Theaters, Inc.	\$110.0	Missed interest payment
NSM Steel (Delaware), Inc.	\$505.6	Missed interest payment
Telegroup, Inc.	\$97.0	Chapter 11
Universal Standard Healthcare, Inc.	\$11.6	Missed interest payment
USN Communications, Inc.	\$152.7	Chapter 11
Wireless One, Inc.	\$389.3	Prepackaged Chapter 11
Defaulted Debt (US millions):	\$1,610.2	
Number of Defaulting Companies:	9	
March		
Edison Brothers Stores, Inc.	\$110.0	Chapter 11
Ermis Maritime Holdings Limited	\$150.0	Missed interest payment
Favorite Brands International, Inc.	\$395.0	Chapter 11
Forcenergy Inc.	\$375.0	Chapter 11
Grupo Tribasa, S.A. de C.V.	\$109.8	Missed principal payment
Indorayon International Finance B.V.	\$150.0	Missed interest payment
P.T. Inti Indorayon Utama	\$170.0	Missed principal and interest payments
Planet Hollywood International, Inc.	\$250.0	Missed interest payment
Premier Cruises, Ltd.	\$160.0	Missed interest payment
Thorn Apple Valley, Inc.	\$17.3	Chapter 11
United Companies Financial Corporation	\$375.0	Chapter 11
Defaulted Debt (US millions):	\$2,262.1	
Number of Defaulting Companies:	11	
April		
Altos Hornos de Mexico, S.A. de C.V.	\$510.0	Missed principal payment
Anker Coal Group, Inc.	\$125.0	Missed interest payment
Cathay International Limited	\$350.0	Grace period default
Chuntex Electronics Corporation Ltd.	\$8.1	Receivership
Coho Energy, Inc.	\$150.0	Missed interest payment
Continucare Corporation	\$46.0	Missed interest payment
CTX Opto-Electronics Corp.	\$25.0	Receivership
Discovery Zone, Inc.	\$105.0	Chapter 11
FWT, Inc.	\$105.0	Chapter 11
Gulf States Steel, Inc.	\$190.0	Missed interest payment
Health-Chem Corporation	\$8.0	Missed principal payment
Hidroelectrica Piedra del Aguila S.A.	\$200.0	Missed interest payment
International Engineering Public Company Limited	\$6.6	Missed interest payment
Leasing Solutions, Inc.	\$71.9	Missed interest payment
MediPLEX Group, Inc.	\$25.0	Missed interest payment
Pacific Can Investment Holdings Ltd.	\$12.3	Missed principal and interest payments
PRIMESTAR Satellite, Inc.	\$475.0	Distressed exchange
PT Bank Mashill Utama Tbk.	\$8.7	Missed interest payment
Sociedad Comercial del Plata S.A.	\$230.3	Missed principal payment
Sri Thai Superware Public Company Limited	\$60.0	Bankruptcy
Sun Healthcare Group, Inc.	\$853.3	Missed interest payment
TBS Shipping International Limited	\$110.0	Missed interest payment
TransAmerican Energy Corporation	\$1,496.0	Chapter 11
TransAmerican Refining Corporation	\$200.0	Chapter 11
TransTexas Gas Corporation	\$115.8	Chapter 11
Zenith Electronics Corporation	\$158.5	Missed principal and interest payments
Defaulted Debt (US millions):	\$5,645.4	
Number of Defaulting Companies:	26	

CHRONOLOGICAL LIST OF 1999 PUBLIC CORPORATE BOND DEFAULTERS (CONTINUED)

CompanyDefaulted AmountDefault Description

May

American Banknote Corporation	\$159.5	Missed interest payment
AMNEX, Inc.	\$15.0	Chapter 11
Central Termica Guemes S.A.	\$60.0	Missed interest payment
Consorcio G Grupo Dina, S.A. de C.V.	\$164.0	Missed interest payment
CONXUS Communications, Inc.	\$100.0	Chapter 11
Dailey International, Inc.	\$275.0	Distressed exchange
DeGeorge Home Alliance, Inc.	\$50.0	Chapter 7
Dina Trucks (USA), L.L.C.	\$35.0	Missed interest payment
Fitzgeralds Gaming Corporation	\$205.0	Missed interest payment
General Media, Inc.	\$80.0	Distressed exchange
Grupo Azucarero Mexico, S.A. de C.V.	\$145.0	Distressed exchange
Hechinger Company	\$318.8	Missed interest payment
Hurricane Hydrocarbons Ltd.	\$180.5	Missed interest payment
Kelley Oil & Gas Corporation	\$290.4	Distressed exchange
Kelley Oil & Gas Partners, Ltd.	\$14.9	Distressed exchange
Loehmann's, Inc.	\$95.0	Missed interest payment
MCII Holdings (USA), Inc.	\$206.5	Missed interest payment
Shin Yen Textile Company, Ltd.	\$0.6	Receivership
Stuart Entertainment, Inc.	\$100.0	Missed interest payment
Supercanal Holding S.A.	\$300.0	Missed interest payment
Traffic Stream (BVI) Infrastructure Company, Ltd.	\$119.0	Missed interest payment
Tultex Corporation	\$185.0	Distressed exchange
Vencor Operating, Inc.	\$300.0	Missed interest payment
XCL Ltd.	\$64.0	Missed interest payment
Defaulted Debt (US millions):	\$3,463.3	
Number of Defaulting Companies:	24	

June

Bayard Drilling Technologies, Inc.	\$100.0	Missed interest payment
Harnischfeger Industries, Inc.	\$460.9	Chapter 11
ICF Kaiser International, Inc.	\$140.0	Grace period default
Joy Technologies, Inc.	\$12.6	Chapter 11
Loewen Group International, Inc.	\$909.8	Bankruptcy
Loewen Group, Inc.	\$135.7	Bankruptcy
Specialty Foods Acquisition Corporation	\$319.3	Distressed exchange
Specialty Foods Corporation	\$575.0	Distressed exchange
Teletrac, Inc.	\$105.0	Chapter 11
Tevecap S.A.	\$250.0	Distressed exchange
TRISM, Inc.	\$86.2	Missed interest payment
TV Filme, Inc.	\$120.0	Missed interest payment
Vitkovice A.S.	\$28.2	Missed interest payment
Defaulted Debt (US millions):	\$3,242.6	
Number of Defaulting Companies:	13	

July

AMF Bowling Worldwide, Inc.	\$701.5	Distressed exchange
AMF Bowling, Inc.	\$1,125.0	Distressed exchange
Bufete Industrial, S.A.	\$100.0	Missed principal and interest payments
Daewoo Corporation	\$5,641.0	Suspension of payments
Eagle Geophysical, Inc.	\$100.0	Missed interest payment
Essar Gujarat Limited	\$250.0	Missed principal and interest payments
Global Ocean Carriers Limited	\$126.0	Missed interest payment
Goss Graphic Systems, Inc.	\$225.0	Prepackaged Chapter 11
ICO Global Communications (Holdings) Limited	\$567.1	Missed interest payment
ICON Fitness Corporation	\$162.0	Missed interest payment
ICON Health & Fitness, Inc.	\$101.3	Missed interest payment
IHF Holdings, Inc.	\$123.7	Missed interest payment
Iridium LLC	\$1,100.0	Missed interest payment
Iridium Operating LLC	\$350.0	Missed interest payment
KCS Energy, Inc.	\$275.0	Missed interest payment
Pyosa, S.A. de C.V.	\$30.0	Missed interest payment
RainTree Healthcare Corporation	\$26.0	Missed interest payment
SBS-Agro Finance B.V.	\$250.0	Missed interest payment
Defaulted Debt (US millions):	\$11,253.6	
Number of Defaulting Companies:	18	

CHRONOLOGICAL LIST OF 1999 PUBLIC CORPORATE BOND DEFAULTERS (CONTINUED)

Company	Defaulted Amount	Default Description		
August				
DecisionOne Corporation	\$150.0	Missed interest payment		
DecisionOne Holdings Corporation	\$148.4	Missed interest payment		
Ecuador, Republic of	\$6,603.9	Missed interest payment		
Filene's Basement Corporation	\$10.8	Chapter 11		
Greenstone Resources Ltd.	\$67.4	Suspension of payments		
Hvide Marine, Inc.	\$300.0	Missed interest payment		
Defaulted Debt (US millions):	\$7,280.5			
Number of Defaulting Companies:	6			
September				
Breed Technologies, Inc.	\$330.0	Chapter 11		
Costilla Energy, Inc.	\$180.0	Chapter 11		
Golden Ocean Group Limited	\$200.0	Distressed exchange		
Purina Mills, Inc.	\$350.0	Missed interest payment		
Semi-Tech Corporation	\$334.6	Chapter 11		
Singer Company N.V.	\$150.0	Chapter 11		
Defaulted Debt (US millions):	\$1,544.6			
Number of Defaulting Companies:	6			
October				
Family Golf Centers, Inc.	\$115.0	Missed interest payment		
Jitney-Jungle Stores of America, Inc.	\$400.0	Chapter 11		
Mariner Health Group, Inc.	\$150.0	Missed interest payment		
Mariner Post-Acute Network, Inc.	\$569.0	Missed interest payment		
Michael Petroleum Corporation	\$135.0	Missed interest payment		
MOA Hospitality, Inc.	\$80.0	Grace period default		
OpTel, Inc.	\$425.0	Chapter 11		
Orion Electric Company Ltd.	\$258.4	Suspension of payments		
Sabratek Corporation	\$85.0	Missed interest payment		
Sharp Do Brazil S.A., Equipamentos Eletronicos	\$120.0	Missed interest payment		
Southern Mineral Corporation	\$41.4	Missed interest payment		
Vista Eyecare, Inc.	\$125.0	Missed interest payment		
Defaulted Debt (US millions):	\$2,503.8			
Number of Defaulting Companies:	12			
November				
American Pad & Paper Company of Delaware, Inc.	\$130.0	Missed interest payment		
Axiohm Transaction Solutions, Inc.	\$120.0	Prepackaged Chapter 11		
Integrated Health Services, Inc.	\$1,343.8	Missed interest payment		
Just For Feet, Inc.	\$200.0	Missed interest payment		
Pacific & Atlantic Holdings, Inc.	\$125.0	Grace period default		
Pegasus Shipping (Hellas) Limited S.A.	\$144.0	Missed interest payment		
Reliant Building Products, Inc.	\$70.0	Missed interest payment		
Technology Resources Industries Bhd.	\$175.0	Missed principal and interest payments		
Defaulted Debt (US millions):	\$2,307.8			
Number of Defaulting Companies:	8			
December				
Abraxas Petroleum Corporation	\$337.5	Distressed exchange		
Altiva Financial Corporation	\$31.0	Missed interest payment		
ClimaChem, Inc.	\$105.0	Missed interest payment		
Fruit of the Loom, Inc.	\$675.0	Chapter 11		
Graham-Field Health Products, Inc.	\$100.0	Chapter 11		
Petsec Energy, Inc.	\$100.0	Missed interest payment		
Defaulted Debt (US millions):	\$1,348.5			
Number of Defaulting Companies:	6			
Totals				
Defaulted Debt (\$US millions):	\$44,595.5			
Number of Defaulting Companies:	147			
Year-to-date through December 31,	1999	1998	1997	1996
Defaulted Debt (\$US millions):	\$44,595.5	\$21,216.6	\$9,315.3	\$5,927.7
Number of Defaulting Companies:	147	134	71	31
Moody's Trailing Twelve-Month, Issuer-Based Default Rate (Spec. Grade)	5.51%	3.47%	2.04%	1.66%
Moody's Trailing Twelve-Month, Dollar-Based Default Rate (Spec. Grade)	7.78%	3.32%	2.95%	1.61%

Exhibit 34 – Detailed Description of 1999 defaults (alphabetical)

1999 PUBLIC CORPORATE BOND DEFAULTS

Abraxas Petroleum CorporationOil and gas company

\$63.5 million 12.875% Guaranteed Senior Secured Notes, Ser. B due 3/15/2003
\$274.0 million 11.5% Senior Notes, Ser. D due 11/1/2004

On December 17, 1999 holders of Abraxas Petroleum Corporation’s 11.5% senior notes due 2004 agreed to exchange their notes for new notes having a face value equal to 70% of the existing notes, shares of common stock representing 72% of the company’s equity, and contingent value rights for additional equity. Abraxas has a track record of reasonable business performance but has pursued aggressive financial strategies. As a result, Abraxas has not generated visible internal funding of capital expenditures since 4Q98, and barring exploration success and/or a prolonged period of strong commodity prices, is likely to remain susceptible to declining reserves and pressure on liquidity. Abraxas Petroleum Corporation, located in San Antonio, Texas, is an independent oil and gas company with operations primarily in the Texas Gulf Coast, the Permian Basin in West Texas, and Western Canada.

11/18/1999 Distressed exchange offer
12/17/1999 Holders agreed to receive \$700 for each \$1,000 par amount of the 11.5% senior notes due 2004 in exchange of new 11.5% senior notes due 2004, plus 16.1 million shares of common stock and 16.1 million contingent value rights
12/22/1999 Distressed exchange completed
(Contact: Helen Calvelli, 553-7295)

Alpha Shipping PlcShipping company

\$175.0 million 9.5% Guaranteed Senior Notes due 2/15/2008

Alpha Shipping Plc (Alpha), incorporated in the Isle of Man with management based in Athens, Greece, is an international shipping company which owns and operates a diversified fleet of drybulk carriers, crude oil, product and chemical tankers, and reefer vessels. Recent depressed freight rate environment in most of the sectors in which the company operates combined with continued high debt burden, not to mention an aging fleet with little realization value, have been detrimental to Alpha’s liquidity condition. In spite of a relatively diversified fleet, the company could not generate sufficient cash flows. For the six months ended April 30, 1998, it reported a net loss of \$4.5 million compared to a net income of \$12 million during the same period a year earlier. Severe liquidity constraint due to unfavorable freight rate volatility led Alpha on February 15, 1999 to abort a 9.5% interest payment on its \$175 million senior notes maturing in 2008.

02/15/1999 Missed interest payment
04/30/1999 Distressed exchange offer
06/16/1999 Sought relief under Section 304 of the United States Bankruptcy Code
07/28/1999 Distressed exchange completed: holders of which CSFB, agreed to receive 37 cents on the dollar of the \$175 million notes; Alpha’s bonds are exchanged for shares in a new company, Eumenides, established to acquire Alpha’s vessel-owning subsidiaries
(Contact: Per Regnarsson, 553-1653)

Altiva Financial CorporationSpecialized consumer finance company

\$31.0 million 12.5% Subordinated Notes due 12/1/2001

Pending the implementation of a debt-restructuring plan, Altiva Financial Corporation, formerly Mego Mortgage Corporation (which defaulted in 1998), failed to make the first interest payment on its bonds due December 1, 1999 and issued the same year. The company’s ill-timed debt-funded acquisitions in 1999 coincided with a depressed market for sales of sub-prime home equity loans, which subsequently contributed to continuous losses and aggravated its cash position. Altiva, headquartered in Atlanta, Georgia, is a specialty financial services company that originates, purchases and sells sub-prime mortgage loans through its 20 branch offices nationwide.

12/01/1999 Missed interest payment and distressed exchange offer
(Contact: Steve Nelson, 553-3781)

Altos Hornos de Mexico, S.A. de C.V.**Steel company**

\$200.0 million 11.375% Global Notes, Ser. A due 4/30/2002

\$225.0 million 11.875% Global Notes, Ser. B due 4/30/2004

\$85.0 million 5.5% Convertible Senior Notes due 12/15/2001

Based in Monclova, Mexico, Altos Hornos de Mexico, S.A de C.V. (AHMSA) is the largest integrated steel producer in Mexico. The company's high leverage became an insurmountable burden after its revenues plummeted following sharp declines in global steel prices. On April 16, 1999 AHMSA missed payments on a \$330 million bank credit facility and on April 30, 1999 it failed to make interest payments on its \$425 million euronotes maturing in 2002 and 2004. At the same time, the company has engaged The Blackstone Group to advise it on a debt restructuring.

04/16/1999 Missed principal payment on a \$330 million credit facility

04/30/1999 Missed interest payment on its \$425 million euronotes maturing in 2002 and 2004

05/26/1999 Suspension of payments

(Contact: Steven Oman, 553-1673)

American Banknote Corporation**Provider of secure transaction solutions**

\$95.0 million 11.25% Guaranteed Senior Subordinated Notes due 12/01/2007

\$8.0 million 11.625% Senior Notes due 8/1/2002

\$56.5 million 10.375% Senior Secured Notes due 6/1/2002

American Banknote Corporation (ABN), headquartered in New York, is a leading global provider of secure transaction solutions, documents and systems. The company's disappointing operating performance stems from its relatively small size domestic operations and its disproportionate reliance on non-domestic cash flows to meet its U.S. denominated debt obligations. Current adverse currency movements have strained ABN's ability to reduce its high leverage. Similarly, restrictions on repatriated cash flows from certain indebted overseas operations (due to restrictive debt covenants) have intensified its reliability on Brazilian and U.S. operations for dividends. Tightened liquidity led to ABN's decision on May 28, 1999 to not make the interest payment due June 1, 1999 on its senior subordinated notes maturing in 2007.

05/28/1999 Announced that it would miss interest payment on its 11.25% senior subordinated notes due on June 1, 1999 and maturing in 2007

06/01/1999 Missed interest payment

08/01/1999 Missed interest payment on its 11.625% senior notes maturing in 2002

(Contact: Michael West, 553-4807)

American Pad & Paper Company of Delaware, Inc.**Manufacturer of office products**

\$130.0 million 13% Senior Subordinated Notes, Ser. B due 11/15/2005

American Pad & Paper Company's repeated violations of covenants contained in its revolving credit facility precluded the company from making the November 15, 1999 interest payment to its subordinated note holders. The company has suffered declining sales volume, partly due to the recent loss of a major superstore customer and retailer inventory de-stocking. Combined with rising paper costs and a more commodity-like sales mix, this has resulted in very low profit margins, weak cash flow and insufficient interest coverage. American Pad & Paper Company, based in Dallas, Texas, manufactures and distributes writing pads, file folders, machine papers, envelopes and other stationary products.

11/15/1999 Missed interest payment

(Contact: Kevin Kusnierek, 553-3835)

AMF Bowling Worldwide, Inc.**Operator of bowling centers**

\$451.5 million 12.25% Senior Subordinated Discount Notes, Ser. B due 3/15/2006

\$250.0 million 10.875% Guaranteed Senior Subordinated Notes, Ser. B due 3/15/2006

A unit of AMF Bowling, Inc. See accompanying critique under AMF Bowling, Inc.

06/28/1999 Distressed exchange offer

07/28/1999 Distressed exchange completed on 45.7% of the \$1.125 billion convertible zero coupon notes maturing in 2018 (issued through AMF Bowling, inc., the parent company): bondholders received \$140 in cash for each \$1,000 par amount of the notes

(Contact: Kevin Kusnierek, 553-3835)

1999 Public Corporate Bond Defaults

AMF Bowling, Inc.

Operator of bowling centers

\$1,125.0 million 0% Convertible Zero Coupon Notes due 5/12/2018

The combination of weak cash flow and high leverage prompted AMF Bowling's decision to restructure its debt on July 28, 1999. Noteholders agreed to receive \$140 in cash for each \$1,000 par amount or 45.7% of the \$1.125 billion convertible zero coupon notes maturing in 2018 (issued through AMF Bowling, Inc.). Persistent declines in the company's operating performance during fiscal 1998, as well as the first quarter of 1999, stems from lower league participation, declines in constant center revenue, high operating expenses, challenges in integrating newly acquired bowling centers, and softening in the Asia Pacific market for its bowling products. Selling prices for AMF's new center packages also came under pressure. AMF Bowling, Inc., headquartered in Richmond, Virginia, is the largest bowling center owner and operator in the world and is a leading manufacturer of bowling products.

06/28/1999 Distressed exchange offer

07/28/1999 Distressed exchange completed on 45.7% of the \$1.125 billion convertible zero coupon notes maturing in 2018: bondholders received \$140 in cash for each \$1,000 par amount of the notes or approximately half of the current accredited value

(Contact: Kevin Kusnierek, 553-3835)

AMNEX, Inc.

Telecommunications services company

\$15.0 million 8.5% Convertible Subordinated Notes due 9/25/2002

AMNEX, Inc., headquartered in New Rochelle, New York, is an integrated payphone and operator services telecommunications company. Significant losses at its operator services business due to higher network and collection costs prompted the company's decision to shift to the carrier services and payphone business. Restructuring and acquisitions costs led to recurring losses and various covenant violations under its bank facility. AMNEX was unable to obtain additional financing and on May 5, 1999 together with its subsidiary (American Network Exchange, Inc.) it filed for Chapter 11 with the White Plains Bankruptcy Court. At the time of the filing, the parent company reported assets and liabilities of \$77 million and \$82 million, respectively.

05/05/1999 Chapter 11

(Contact: Marcus Jones, 553-7721)

Anker Coal Group, Inc.

Coal producer

\$125.0 million 9.75% Guaranteed Senior Notes, Ser. B due 10/1/2007

Anker Coal Group, Inc. (Anker), headquartered in Morgantown, West Virginia, produces steam and metallurgical coal from a diverse portfolio of mines in West Virginia and Maryland. The company has reported operating losses for the last five quarters. Its coal mines have been beleaguered by a wide variety of problems that have forced Anker to close mines, modify its mining plans, take asset write-downs, and place assets up for sale. Its operating costs have risen at a time when eastern US coal prices have weakened. Anker recorded operating losses in 1997 and 1998 of \$7.6 million and \$103 million, respectively, after impairment and restructuring charges of \$8 million in 1997 and \$91 million in 1998. The company decided on April 1, 1999 not to make a 9.75% coupon payment on its \$125 million guaranteed senior notes maturing in 2007. Concurrently, Anker has been working on a restructuring proposal of the notes engineered by one of its largest bondholders, Rothschild Recovery Fund L.P.

04/01/1999 Missed interest payment

09/30/1999 Announced that it would not make interest payment on its senior notes due 10/1/99 and proposed a private distressed exchange to bondholders

10/01/1999 Missed interest payment

(Contact: Steven Oman, 553-1673)

Axiohm Transaction Solutions, Inc.**Manufacturer of printers and ancillary products**

\$120.0 million 9.75% Guaranteed Senior Subordinated Notes due 10/1/2007

Axiohm Transaction Solution, Inc. filed for a pre-packaged Chapter 11 on November 8, 1999. Axiohm's liquidity woes have strained its ability to implement its latest business plan, and precipitated the company's bankruptcy filing. The company's operating difficulties stem primarily from a transition to new products relying on advanced technologies and tight competition for its transaction products worldwide. Additionally, the company's debt-funded acquisitions of 1997, together with the delayed consolidation of its Ithaca, New York, manufacturing facility, resulted in both unsustainable leverage and higher operating costs. Mounting losses subsequently triggered various covenant violations under the company's credit facility as of April 1999. Axiohm Transaction Solutions, based in Blue Bell, Pennsylvania, is a worldwide leading designer and manufacturer of transaction printers and ancillary products.

11/08/1999 Prepackaged Chapter 11

(Contact: Howard Sitzer, 553-4312)

Bayard Drilling Technologies, Inc.**Provider of drilling services**

\$100.0 million 11% Guaranteed Senior Notes, Ser. B due 6/30/2005

On June 30, 1999 Bayard Drilling Technologies, Inc. failed to make the interest payment on its 11% senior notes due 2005. Already significantly leveraged and financially weak, the company sought to increase its market share in the Gulf Coast and South Texas markets in 1998 through the cash acquisition of 25 oil and gas drilling rigs, which were largely in idle condition. Drilling activity subsequently further declined due to low oil and natural gas prices. Bayard was acquired by Nabors Industries, Inc. in April 1999. Nabors did not guarantee or assume Bayard's debt. Nabors' economic self interest in protecting its investment, in combination with Bayard's weak financial condition on a stand-alone basis, resulted in a high risk to the timeliness of the interest payment but a low risk of ultimate loss. Under a cash tender offer from Nabors in July 1999, holders of the 11% senior notes received full recovery of interest and principal, plus a premium over face value, and the Bayard rating was withdrawn. Bayard Drilling Technologies, Inc. is a land rig operator with activities primarily in the U. S. mid-continent region, and is a wholly-owned subsidiary of Houston based Nabors Industries, Inc.

06/30/1999 Missed interest payment

(Contact: Daniel Gates, 553-7923)

Brazos Sportswear, Inc.**Sportswear apparel manufacturer**

\$100.0 million 10.5% Guaranteed Senior Notes due 7/1/2007

Brazos Sportswear Inc., headquartered in Cincinnati, Ohio, is principally a domestic designer, manufacturer, and marketer of decorated sportswear. The company has a diverse product line, including licenses for well-known cartoon characters and logos, proprietary products under company-owned brands and labels, private label products and wholesale blanks. Brazos's indebtedness increased substantially due to rapid expansion through debt financed acquisitions. Lower sales due to weak demand for decorated apparel and higher costs from operational inefficiencies due to integrating acquired businesses and high contractual royalty payments compared to expected sales, resulted in operating losses of \$10.4 million for the forty weeks ended October 3, 1998. During the comparable period of the last year the company had an operating income of \$12.9 million. Liquidity problems stemming from continuing losses led to the violation of certain covenants of its credit facility since early 1998. On January 1, 1999, as a result of high debt service requirements and insufficient financial resources, Brazos failed to make its interest payment on its \$100 million senior notes maturing in 2007.

01/01/1999 Missed interest payment

01/21/1999 Chapter 11

(Contact: Catherine Guinee, 553-4385)

1999 Public Corporate Bond Defaults

Breed Technologies, Inc. **Manufacturer of automotive systems**

\$330.0 million 9.25% Guaranteed Senior Subordinated Notes due 4/15/2008

The continuing deterioration of Breed Technologies, Inc.'s operating performance and lack of a substantial turnaround in the company's business led to a Chapter 11 filing with the US Bankruptcy Court for the District of Delaware on September 20, 1999. As a result of its uneconomic debt-funded acquisition program and lower sales in Europe and North America, primarily due to a series of negative events (such as the GM strike), difficulties related to numerous product launches, and loss of business at certain subsidiaries, Breed has experienced significant losses. These events have also resulted in onerous leverage, which has choked its cash flow flexibility. Breed Technologies, Inc., headquartered in Lakeland, Florida, designs, develops, manufactures and sells automotive systems and components globally.

05/15/1999 Breed Technologies, Inc., missed dividend payment on its TOPRS (issued through BTI Capital Trust)
09/20/1999 Chapter 11

(Contact: Christina Padgett, 553-4164)

Bufete Industrial, S.A. **Provider of construction services**

\$100.0 million 11.375% Eurobonds due 7/15/99

Unable to ease its short-term debt burden through a restructuring plan, on July 13, 1999 Bufete Industrial, S.A. announced it won't make payments on its eurobonds due and maturing July 15, 1999. Slow payment by some of its main customers, incremental borrowings to cover receivables buildup, and slower cash flow generation from new projects have resulted in high leverage and strained liquidity. The company's revenues have also declined as public spending in Mexico contracted following the financial turmoil that engulfed emerging market countries in 1998. At the same time, Bufete's dollar-denominated debt has become more expensive as exchange rates moved against the peso. Bufete Industrial, S.A., headquartered in Mexico City, Mexico, is a leading provider of integrated engineering, procurement and construction services to the public and private sectors in Mexico, the U.S., Europe, Asia and parts of Latin America.

07/13/1999 Announced that it would miss interest and principal payments on its bonds maturing July 15, 1999
07/15/1999 Missed interest and principal payments

(Contact: Teresa McCarthy, 553-3878)

Cathay International Limited **Bridge and toll road operator**

\$350.0 million 13% Eurobonds due 4/15/2008

Cathay International Limited (Cathay International), is headquartered in Hong Kong. The company, through its subsidiaries, holds interests in power, water treatment and toll road projects in Guangdong, Shangdong, and Jiangsu Province, the People's Republic of China (PRC). Cathay International's serious liquidity problems stem primarily from the delays in receiving dividends from its Guangzhou Bridge and Tunnel project because of the widely debated minimum return guarantee issue in the PRC. While the project has sufficient amount of local currencies ready to make the remittances to Cathay International, it has not received the required approvals from the State Administration for Foreign Exchange (SAFE) to convert the Renmibi dividends into US dollars. Left with virtually no liquidity, on April 15, 1999 Cathay International was unable to make interest payments on its \$350 million eurobonds maturing in 2008.

04/15/1999 Missed interest payment
05/12/1999 Made interest payment

(Contact: Takahiro Morita, 553-1653)

Central Termica Guemes S.A. **Electric power producer**

\$60.0 million 12% Notes due 11/26/2001

Located in Guemes, Argentina, Central Termica Guemes S.A. (Guemes), is an electric power producer. Operating problems at its relatively small plant have been intensified by lower energy prices and heightened competition. Being excessively leveraged and experiencing financial difficulties, Guemes engaged BT Alex. Brown Incorporated as its strategic advisor in March of 1999. On May 18, 1999 Guemes announced that it will not make interest payment on its bonds due on 5/26/99 and maturing in 2001.

05/18/1999 Announced that it would miss interest payment due on 5/26/99 on its notes maturing in 2001
05/26/1999 Missed interest payment
11/04/1999 Filed for protection from creditors

(Contact: A.J. Sabatelle, 553-4136)

Chuntex Electronics Corporation Ltd.**Computer monitor manufacturer**

Taiwan Dollar 600.0 million 7.35% Bonds due 5/26/2000 [\$8.1 million]

Chuntex Electronics Corporation Ltd. (Chuntex), headquartered in Hsinchu, Taiwan, is a computer monitor manufacturer. The 1998 losses of US\$43.8 million and the resultant difficulties meeting debt payments were caused by bitter price war with Asian rivals. Also, slower sales due to weak brand product diversification contributed to the losses. Given its weak financial condition, on April 21, 1999 Chuntex filed for court receivership.

04/21/1999 Filed for receivership

(Contact: Howard Sitzler, 553-4312)

ClimaChem, Inc.**Chemicals company**

\$105.0 million 10.75% Guaranteed Senior Notes, Ser. B due 12/1/2007

On December 1, 1999 ClimaChem, Inc. failed to make the semiannual coupon payment on its senior notes. The company's debt payment obligations coincided with an extended downturn in the nitrogen fertilizer industry, which had negative repercussions on selling prices and profit margins. Moreover, it has commitments to purchase certain raw materials at prices that are presently above the current market spot price which exacerbates its already tight liquidity position. ClimaChem, headquartered in Oklahoma City, produces nitrogen based fertilizers, chemicals for explosives and industrial acids, and fans and pumps for commercial and residential air conditioning systems.

12/01/1999 Missed interest payment

(Contact: Diane Vargas, 553-4318)

Coho Energy, Inc.**Oil and gas company**

\$150.0 million 8.875% Guaranteed Senior Subordinated Notes due 10/15/2007

Coho Energy, Inc. (Coho), headquartered in Dallas, Texas, is an independent oil and gas company, which operates primarily in Mississippi and Louisiana. The combination of extremely high leverage, current weak prices, high interest expense, necessary capital expenditures, and moderately declining production following the debt funded acquisition of oil reserves from Amoco in December of 1997, resulted in significant losses in 1998 and first quarter of 1999 and essentially eliminated cash flow. Lack of liquidity led to the company's failure in March 1999 to meet the first of five equal installments toward \$89.6 million it owes to the banks (through its subsidiary Coho Resources, Inc.) and the inability to make interest payment due on April 15, 1999 on its senior subordinated notes maturing 2007.

03/02/1999 Missed first installment payment on its borrowing base loan prepayments maturing in 2003 (issued through its subsidiary Coho Resources, Inc.)

04/15/1999 Missed interest payment

08/23/1999 Chapter 11

(Contact: Andrew Oram, 553-1649)

Complete Management, Inc.**Physician practice management company**

\$40.3 million 8% Convertible Senior Subordinated Debentures due 8/15/2003

\$28.8 million 8% Convertible Subordinated Debentures due 12/15/2003

Complete Management, Inc. (CMI), headquartered in New York, is a physician practice management company servicing medical practices and hospitals in the New York metropolitan area. From July 1996 through the beginning of 1998, the company rapidly grew using both cash and stock in its transactions. CMI has experienced persistent difficulty collecting accounts receivable from its full service clients which eventually led to its current distressed financial situation. Efforts to accelerate collections of management fees from some of its clients proved unsuccessful, forcing the company to write off some of past due accounts receivables as uncollectible and to terminate contracts with underperforming medical practices which resulted in further charges against earnings. On August 13, 1998, CMI announced a broad restructuring program to eliminate unprofitable activities and focus on its highest-growth businesses. Operating on a negative operating cash flow basis and not being able to obtain additional funding, on February 15, 1999 the company failed to make interest payment due on its 8% convertible subordinated debentures.

02/15/1999 Missed interest payment on 8% convertible subordinated debentures maturing in 2003

10/10/1999 Chapter 11

(Contact: Margaret Sunier, 553-4946)

1999 Public Corporate Bond Defaults

Consorcio G Grupo Dina, S.A. de C.V.

Bus and truck manufacturer

\$164.0 million 8% Convertible Subordinated Debentures due 8/8/2004

Consorcio G Grupo Dina, S.A. de C.V. (Grupo Dina), based in Mexico, manufactures medium and heavy trucks, tractor trailers, inter-city and transit coaches at 11 manufacturing sites in North and South America. Although Latin American operations represent only 30% of total revenues, the company has been negatively affected by the stringent regional economic environment. Declining operating results and the necessity to invest in new technologies both in North and South America resulted in a debt overload. On May 14, 1999 the company solicited a tender offer to its debtholders as part of its debt restructuring program. Concurrently, it decided to suspend interest payments on its \$206.5 million senior secured notes due May 15, 1999 (issued through its subsidiary MCII Holdings (USA), Inc.).

05/14/1999 Announced that it would miss interest payment on senior notes (issued through MCII Holdings (USA), Inc.) due May 15, 1999, and tendered a distressed exchange offer on all of its outstanding debt

05/15/1999 Missed interest payment

06/16/1999 Distressed exchange completed: Holders of the senior secured notes due 2002 (issued through Consorcio G Grupo Dina, S.A. de C.V.) and the guaranteed senior notes due 2000 (issued through Dina Trucks (USA), L.L.C.) received \$980 per \$1,000 of those notes

07/15/1999 Missed interest payment on its \$164 million convertible debentures maturing 2004

(Contact: Barbara Havlicek, 553-7259)

Continucare Corporation

Provider of healthcare services

\$46.0 million 8% Convertible Subordinated Notes due 10/31/2002

Continucare Corporation (Continucare), headquartered in Miami, Florida, provides outpatient medical services. Although the company's revenues increased ten fold over the past year, acquisition costs and costs integrating the newly acquired businesses grew even more. As a result, Continucare reported operating losses of \$6.6 million for the six months ended December 31, 1998. Being highly leveraged and having limited financial flexibility, on April 30, 1999 Continucare failed to make interest payment on its 8% convertible subordinated notes maturing 2000.

04/30/1999 Missed interest payment

09/29/1999 Distressed exchange offer

(Contact: Margaret Sunier, 553-4946)

CONXUS Communications, Inc.

Provider of voice messaging services

\$100.0 million 9% Convertible Senior Subordinated Notes due 5/15/2001

CONXUS Communications, Inc. (CONXUS), headquartered in Greenville, South Carolina, is a four-year-old paging company. Intensified competition and launching delays for its new product due to network problems have aggravated the company's liquidity position. CONXUS laid off more than half of its workforce in March as a result of disappointing subscription figures. On May 18, 1999 with liabilities exceeding two-fold its assets and deepening losses, it filed for Chapter 11 in the U.S. Bankruptcy Court in Wilmington, Delaware.

05/18/1999 Chapter 11

(Contact: Marcus Jones, 553-7721)

Costilla Energy, Inc.**Oil and gas company**

\$80.0 million 10.25% Senior Notes due 10/1/2006

\$100.0 million 10.25% Senior Notes due 10/1/2006

On September 3, 1999 Costilla Energy, Inc. filed for Chapter 11 with the US Bankruptcy Court for the Western District of Texas. The company's cash flow and liquidity became severely constrained in the low commodity price environment of late 1998/early 1999 due to its high unit costs, extremely high leverage and unit interest expense burden, and inability to internally fund reserve replacement. It curtailed its drilling program in 4Q98, and production has dropped during 1H99. Costilla also failed to complete a reserve acquisition from Pioneer Natural Resources, losing a non-refundable \$25 million payment, and has been unable to make required principal payments under its bank facility. Costilla Energy, Inc., headquartered in Midland, Texas, is an independent oil and gas company with operations primarily in the Gulf Coast region of South Texas and the Permian Basin of West Texas and Southeastern New Mexico.

09/03/1999 Chapter 11

(Contact: Helen Calvelli, 553-1649)

County Seat Stores, Inc.**Specialty apparel retailer**

\$85.0 million 12.75% Senior Notes due 11/1/2004

County Seat Stores, Inc. headquartered in New York, is a specialty apparel retailer selling both brand name and private-label jeans and jeanswear. The company currently operates 418 stores in 41 states. High indebtedness coupled with operating losses emanating principally from the integration of a new management information system and the relocation of the company's distribution center significantly deteriorated County Seat's liquidity condition. Furthermore, operating difficulties had a detrimental effect on retail sales as a result of 204 store shutdowns during 1997 and 1998. As of the 39 week period ended October 31, 1998 the company recorded a net loss of \$40.49 million compared to a net income of \$74.18 million for the same period in 1997. County Seat failed to overcome its liquidity crunch and consequently on January 22, 1999 filed for Chapter 11 for the second time since October, 17 1996.

01/22/1999 Chapter 11

(Contact: Marie Menendez, 553-4126)

CTX Opto-Electronics Corp.**Manufacturer of monitor modules**

\$25.0 million FLT% Guaranteed Euronotes due 7/18/2000

A unit of Chuntex Electronics Corporation Ltd.. See accompanying critique on Chuntex Electronics Corporation

04/21/1999 The parent, Chuntex Electronics Corporation Ltd., filed for receivership

(Contact: Howard Sitzler, 553-4312)

1999 Public Corporate Bond Defaults

Daewoo Corporation

Trading company

- KRW 200,000.0 million 7% Korean Bonds, Ser. 273 due 2/23/2002 [\$168.4 million]
- KRW 300,000.0 million 4% Convertible Korean Bonds, Ser. 276 due 12/31/2001 [\$252.6 million]
- KRW 300,000.0 million 7% Korean Bonds, Ser. 274 due 3/25/2002 [\$252.6 million]
- KRW 121,140.0 million 6% Korean Bonds, Ser. 275 due 4/28/2002 [\$102.0 million]
- KRW 700,000.0 million 7% Korean Bonds, Ser. 277 due 7/23/2002 [\$589.5 million]
- KRW 500,000.0 million 10% Korean Bonds, Ser. 261 due 8/10/99 [\$421.1 million]
- KRW 400,000.0 million 10% Korean Bonds, Ser. 263 due 9/11/99 [\$336.9 million]
- KRW 7,000.0 million 11% Korean Bonds, Ser. 178 due 9/16/99 [\$5.9 million]
- KRW 500,000.0 million 11% Korean Bonds, Ser. 264 due 9/28/99 [\$421.1 million]
- KRW 46,000.0 million 11% Korean Bonds, Ser. 184 due 11/22/99 [\$38.7 million]
- KRW 500,000.0 million 8% Korean Bonds, Ser. 271 due 11/24/99 [\$421.1 million]
- KRW 20,000.0 million 11% Korean Bonds, Ser. 191 due 1/17/2000 [\$16.8 million]
- KRW 50,000.0 million 11% Korean Bonds, Ser. 192 due 2/17/2000 [\$42.1 million]
- KRW 43,000.0 million 11% Korean Bonds, Ser. 199 due 4/2/2000 [\$36.2 million]
- KRW 100,000.0 million 11% Korean Bonds, Ser. 201 due 4/23/2000 [\$84.2 million]
- KRW 40,000.0 million 11% Korean Bonds, Ser. 203 due 5/26/2000 [\$33.7 million]
- KRW 60,000.0 million 11% Korean Bonds, Ser. 204 due 6/26/2000 [\$50.5 million]
- KRW 20,000.0 million 11% Korean Bonds, Ser. 205 due 7/25/2000 [\$16.8 million]
- KRW 10,000.0 million 11% Korean Bonds, Ser. 209 due 9/2/2000 [\$8.4 million]
- KRW 30,000.0 million 11.5% Korean Bonds, Ser. 211 due 9/23/2000 [\$25.3 million]
- KRW 14,998.9 million 11% Korean Bonds, Ser. 212 due 10/6/2000 [\$12.6 million]
- KRW 3,000.0 million 11% Korean Bonds, Ser. 213 due 10/8/2000 [\$2.5 million]
- KRW 98,852.0 million 11% Korean Bonds, Ser. 215 due 10/30/2000 [\$83.2 million]
- KRW 84,999.9 million 17% Korean Bonds, Ser. 249 due 6/1/2001 [\$71.6 million]
- KRW 50,000.0 million 0% Zero Coupon Korean Bonds, Ser. 240 due 4/30/2001 [\$42.1 million]
- KRW 40,000.0 million 10% Korean Bonds, Ser. 263 due 9/11/99 [\$33.7 million]
- KRW 200,000.0 million 16% Korean Bonds, Ser. 250 due 6/17/2001 [\$168.4 million]
- KRW 400,000.0 million 11% Korean Bonds, Ser. 262 due 8/26/2001 [\$336.9 million]
- KRW 494,900.0 million 9% Korean Bonds, Ser. 266 due 10/20/2001 [\$416.8 million]
- KRW 500,000.0 million 8% Korean Bonds, Ser. 268 due 11/5/2001 [\$421.1 million]
- KRW 100,000.0 million 4% Convertible Korean Bonds, Ser. 234 due 12/31/2001 [\$84.2 million]
- KRW 300,000.0 million 11% Korean Bonds, Ser. 260 due 7/27/2001 [\$252.6 million]
- DEM 200.0 million 5% Eurobonds due 10/18/2049 [\$111.3 million]
- \$50.0 million 0.25% Convertible Eurobonds due 12/31/2008
- \$55.0 million 0% Convertible Zero Coupon Eurobonds due 12/31/2007
- \$75.0 million 0% Convertible Zero Coupon Eurobonds due 12/31/2004
- \$100.0 million 0.5% Convertible Eurobonds due 12/31/2007

Pending the completion of a debt restructuring, on July 19, 1999 creditors of the cash-strapped conglomerate agreed to extend payment deadlines on domestic bonds, commercial paper and bank loans, and grant new col-lateralized loans in return for the disposal of certain assets within six months. Daewoo’s ill-timed expansion plan coincided with the Asian financial crisis that started in mid 1997, and resulted in severe liquidity problems. Based in South Korea, Daewoo Corporation is part of the second largest chaebol in the nation, the primary businesses of which are trading and construction.

- 07/19/1999 Suspension of payments on domestic debt
- 08/16/1999 Distressed debt restructuring plan approved by domestic creditors
- 08/26/1999 Daewoo Corporation agreed to suspend interest and principal payments on its domestic debt owed by 12 affiliates
- 10/18/1999 Missed principal and interest payments on its Eurobonds

(Contact: Gary Lau, 553-1653)

Dailey International, Inc.**Provider of specialty drilling services**

\$275.0 million 9.5% Guaranteed Senior Notes, Ser. B due 2/15/2008

Dailey International, Inc. (Dailey), located in Conroe, Texas, provides specialty drilling services to the oil and gas industry, and designs, manufactures, and rents proprietary tools for oil and gas drilling and workover applications worldwide. Lower energy prices and reductions of capital spending by the oil and gas sector (the principal market for Dailey's services) have adversely affected revenues and prevented the effective integration of its recent debt funded acquisitions. Mounting leverage, steep earnings declines in each quarter during 1998 and the subsequent liquidity shortfall led to a distressed exchange on May 21, 1999. Bondholders agreed to receive \$185 million of the \$275 million senior notes paid in common stock by Weatherford International, Inc., the acquiring company. As part of the terms of the acquisition, the company filed for a prepackaged chapter 11 on May 28, 1999.

05/21/1999 Prepackaged Chapter 11 announcement and distressed exchange completed: bondholders agreed to receive \$185 million of the \$275 million senior notes paid in common stock by Weatherford International, Inc., the acquiring company

05/28/1999 Prepackaged Chapter 11

08/19/1999 Reorganization plan confirmed

08/31/1999 Acquired by Weatherford International, Inc.

(Contact: Daniel Gates, 553-7923)

DecisionOne Corporation**Provider of computer services**

\$150.0 million 9.75% Senior Subordinated Notes due 8/1/2007

As part of its debt restructuring plan, DecisionOne Corporation announced that it would not make the interest payment, due August 2, 1999, on its 9.75% senior subordinated notes, due in 2007. The company has been implementing a revised operating and cost reduction plan since January, 1999 but, to date, DecisionOne has been unable to significantly improve operating performance and take advantage of its strong market position and favorable growth trends. The company's poor operating performance and sizable debt burden has forced management to reach an agreement, in principle, with its bank group to restructure its indebtedness. In addition, the agreement provides that holders of the senior subordinated notes would exchange their notes for equity in the company. Frazer, Pennsylvania-based DecisionOne Corporation, is an independent provider of multi-vendor computer maintenance and technology support services in the U.S.

08/02/1999 Missed interest payment

(Contact: Michael West, 553-4807)

DecisionOne Holdings Corporation**Provider of computer services**

\$148.4 million 11.5% Senior Discount Debentures w/warrants due 8/1/2008

Parent of DecisionOne Corporation. See accompanying critique under DecisionOne Corporation.

08/02/1999 Missed interest payment and announced debt restructuring

(Contact: Michael West, 553-4807)

DeGeorge Home Alliance, Inc.**Provider of mortgage loans**

\$50.0 million 12% Guaranteed Senior Notes due 4/1/2001

DeGeorge Financial Corporation (DeGeorge), headquartered in Cheshire, Connecticut, provides mortgage loans and financing to do-it-yourself borrowers who cannot qualify for conventional mortgage programs. Crippled by losses due to tight competition and significant restructuring costs following the recent business diversification, DeGeorge has depleted its cash reserves. The December 1998 withdrawal of funding by its principal lender dealt a last blow to DeGeorge's ability to continue as a going concern. On May 5, 1999 the company's management filed for liquidation under Chapter 7 together with its wholly owned operating subsidiary, DeGeorge Home Alliance, Inc.

05/07/1999 Filed for Chapter 7 along with DeGeorge Financial Corporation (the parent company)

(Contact: Teresa McCarthy, 553-3878)

1999 Public Corporate Bond Defaults

Dina Trucks (USA), L.L.C. Bus and truck manufacturer

\$35.0 million 10% Guaranteed Senior Secured Notes due 1/15/2000

A unit of Consorcio G Grupo Dina, S.A. de C.V.. See accompanying critique under Consorcio G Grupo Dina, S.A. de C.V.

05/14/1999 Consorcio G Grupo Dina, S.A. de C.V., the parent company, announced that it would miss interest payment on senior notes (issued through MCCI) due on May 15, 1999, and tendered a distressed exchange offer on all of its outstanding debt
05/15/1999 Missed interest payment
06/16/1999 Distressed exchange completed: Holders of the senior secured notes due 2002 (issued through Consorcio G Grupo Dina, S.A. de C.V.) and the guaranteed senior notes due 2000 (issued through Dina Trucks (USA), L.L.C.) received \$980 per \$1,000 of those notes
07/15/1999 Consorcio G Grupo Dina, S.A. de C.V., the parent company, missed interest payment on its \$164 million convertible debentures maturing

(Contact: Barbara Havlicek, 553-7259)

Discovery Zone, Inc. Operator of children’s entertainment centers

\$85.0 million 13.5% Guaranteed Senior Secured Notes due 8/1/2002

\$20.0 million 13.5% Guaranteed Senior Secured Notes due 5/1/2002

Discovery Zone, Inc., headquartered in Elmsford, New York, owns and operates 195 children’s entertainment centers across the U.S., Canada and Puerto Rico. Construction delays and higher than expected costs in completing its FunCenters renovation program along with declines in attendance negatively impacted the company’s operating performance and resulted in recurring losses. Inability to obtain additional financing prompted Discovery Zone’s decision on April 20, 1999 to file for Chapter 11 bankruptcy protection for the second time in the last 3 years.

04/20/1999 Chapter 11
06/25/1999 Assets to be acquired by CEC Entertainment, Inc.
07/28/1999 CEC Entertainment, Inc. completed the acquisition of certain assets of Discovery Zone, Inc.

(Contact: Catherine Guinee, 553-4385)

Eagle Geophysical, Inc. Provider of seismic data acquisition services

\$100.0 million 10.75% Guaranteed Senior Notes due 7/15/2008

On July 15, 1999 Eagle Geophysical failed to make the interest payment on its senior notes due 2008. Increased leverage arising from the upgrade and expansion of its offshore seismic fleet in the face of continued very weak industry conditions led to a liquidity contraction. Eagle Geophysical, Inc., headquartered in Houston, Texas, provides both onshore and offshore seismic data acquisition services for the petroleum industry.

07/15/1999 Missed interest payment
09/29/1999 Chapter 11

(Contact: Helen Calvelli, 553-7295)

Ecuador, Republic of

\$2,755.4 million FLT% Past Due Interest (PDI) Brady Bonds due 2/27/2015

\$1,434.7 million FLT% Discount Brady Bonds due 2/28/2025

\$1,913.9 million 4% PAR Brady Bonds due 2/28/2025

\$350.0 million 11.25% Eurobonds due 4/25/2002

\$150.0 million FLT% Floating Rate Eurobonds due 4/25/2004

Saddled by fiscal deficits and a heavy external debt burden, Ecuador announced that it would not be able to make interest payments due August 31, 1999 on its Discount and Past Due Interest (PDI) Brady bonds maturing in 2025 and 2015, respectively. The oil price crisis and El Nino flooding damage last year have intensified the negative pressure on the Ecuadorian economy and financial system. GDP growth has dropped dramatically and the country is going through a major banking crisis. The authorities’ so far unsuccessful efforts to redress the severe macroeconomic deterioration of the country, and to reach a reform program with the IMF, have also contributed to the present default.

08/25/1999 Announced that it would not make interest payments on its Discount and PDI Brady bonds due August 31, 1999 and maturing in 2025 and 2015, respectively; Announced that it would restructure approximately \$6 billion in Brady bonds
08/31/1999 Missed interest payments on its Discount and PDI Brady bonds
09/28/1999 Made interest payment under grace period on its non-collateralized PDI Brady bonds
10/01/1999 Bondholders voted to demand immediate payment of all principal and interest payments on the collateralized Discount Brady bonds
10/22/1999 Announced that it would not make interest payments on its Eurobonds due 10/25/99 and on its PAR Brady bonds due in November
10/25/1999 Missed interest payments on its Eurobonds

(Contact: Ernesto Martinez-Alas, 553-1077)

Edison Brothers Stores, Inc.**Chain of retail-specialty stores****\$110.0 million 11% Senior Notes due 9/26/2007**

Edison Brothers Stores, Inc. (Edison), headquartered in St. Louis, Missouri, owns chains of specialty retailing stores located in the U.S., Puerto Rico, the Virgin Islands and Canada. The company operates in the apparel and footwear business segment through stores which are primarily located in shopping malls. After emerging from Chapter 11 in September 1997, the company adopted new business strategies that subsequently faltered because of management reshuffling. Furthermore, industry competition and recent interruptions in the flow of merchandise due to worsening relationships with vendors harmed current sales and, together with expenditures on remodeling certain stores and installing a new information system, contributed to a net loss of \$55 million for the 39 period ended October 31, 1998. Disappointing operating performance necessitated the company's second foray into Chapter 11 reorganization. On March 9, 1999 Edison filed a Chapter 11 petition with the U.S. Bankruptcy Court in Delaware. At the same time, it appointed Houlihan Lokey Howard & Zukin and Gruppo, Levey, two investment banking firms, as its advisors during the restructuring.

03/09/1999 Chapter 11

(Contact: Fran Schulman, 553-4542)

Ermis Maritime Holdings Limited**Shipping company****\$150.0 million 12.5% Guaranteed First Preferred Mortgage Notes due 3/15/2006**

Ermis Maritime Holdings Limited, with its management based in Athens, Greece, is a Bermuda registered international shipping company operating a fleet of oil tankers primarily in the Mediterranean sea. The company became highly leveraged following a rapid predominantly debt-financed fleet expansion. Since late summer of 1998, the downturn in the shipping market arising from a decline in demand for oil contributed to Ermis's reduced earnings and cash flows. As a consequence of continued weak operating environment and the resultant cash shortage, the company was not able to make an interest payment due on first preferred ship notes on March 15, 1999. Concurrently, Ermis announced that it has reached an agreement in principle with a majority of its noteholders on a proposed distressed debt exchange where noteholders agreed to exchange their respective notes for about a 30% face amount of similar ranking debt, preferred stock and common equity.

03/15/1999 Missed interest payment and announced that it has reached an agreement in principle with noteholders on a distressed exchange offer

(Contact: Per Regnarsson, 553-1653)

Essar Gujarat Limited**Steel company****\$250.0 million FLT% Float Rate Euronotes due 7/20/99**

Unable to obtain additional financing from the Industrial Development Bank of India and other lenders, Essar Gujarat became the first Indian defaulter after it failed to make principal and interest payments on its maturing eurobonds due July 20, 1999. The company's aggressive expansion during the nineties left it unprofitable and highly leveraged as a slowdown in the Indian economy became more apparent, with declining sector prices and weaker demand for steel. Essar Gujarat Limited, is a steel manufacturing company that operates in Hazira, Gujarat in India.

07/19/1999 Announced that it would miss principal and interest payments on its maturing bonds due July 20, 1999

07/20/1999 Missed principal and interest payments

11/14/1999 Distressed Exchange offer

(Contact: Carol Cowan, 553-4999)

Family Golf Centers, Inc.**Operator of golf centers****\$115.0 million 5.75% Convertible Subordinated Notes due 10/15/2004**

Unsupportable leverage contributed to Family Golf Centers, Inc.'s inability to make the interest payment due October 15, 1999 on its convertible notes maturing in 2004. The company's financial woes stem from its aggressive acquisition and roll-up strategy in which cash requirements of funding acquisitions and follow-on construction activity have historically exceeded cash flow from operations. Weak results at recently acquired Eagle Quest facilities, greater than expected expenses, and escalating shop inventory levels also contributed to the company's financial difficulties. Family Golf Centers, Inc., headquartered in Melville, New York, currently operates 121 golf centers and 25 ice and family entertainment facilities in 25 states and 3 Canadian provinces.

10/15/1999 Missed interest payment

(Contact: Todd Gray, 553-4688)

1999 Public Corporate Bond Defaults

Favorite Brands International, Inc. Confections manufacturer

\$200.0 million 10.75% Guaranteed Senior Notes due 5/15/2006
\$195.0 million 10.25% Guaranteed Senior Subordinated Notes due 8/20/2007

Favorite Brands International, Inc., based in Lincolnshire, Illinois, is a leading US confections manufacturer of non-chocolate candy, including marshmallows, fruit snacks, gummi products and general line candy. The company faced significant turmoil in the past year with members of senior management team being replaced and from the challenge of integrating five acquisitions made in a nine month span. More specifically, the impact of ongoing business operating difficulties has adversely affected operating performance and strained liquidity as efficiencies and cost savings have been slow to be realized. The dramatic shortfall in performance, coupled with debt service requirements, planned capital expenditures and ongoing expenses related to the building of the company's infrastructure placed severe pressure on Favorite Brands and ultimately resulted in its decision to file for Chapter 11 protection on March 30, 1999.

03/30/1999 Chapter 11
(Contact: Phillip Li, 553-4578)

Filene's Basement Corporation Apparel discount retailer

\$10.8 million 12.75% Senior Subordinated Debentures due 7/15/2000
Filene's Basement Corporation filed for Chapter 11 bankruptcy on August 23, 1999. The company has suffered from operation and merchandising problems as a result of intense competition and inadequate store formats. Sluggish revenues over the past few quarters have strained Filene's financial flexibility. Filene's Basement Corporation, headquartered in Wellesley, Massachusetts, currently operates 55 discount apparel stores, primarily in the Northeast and Midwest.
08/23/1999 Chapter 11
(Contact: Marie Menendez, 553-4126)

Fine Host Corporation Provider of food and catering services

\$175.0 million 5% Convertible Subordinated Notes due 11/1/2004
Fine Host Corporation, headquartered in Greenwich, Connecticut, provides food, beverage concession, catering and other ancillary services at more than 900 facilities located in 41 states. In December of 1997, Fine Host announced that it had incorrectly capitalized certain costs that should have been expensed, restated its earnings for 1997, and commenced a review of prior year's financial statements. As a result the company restated its earning back to 1994 and incurred significant charges. With its accounting practices revised, the company reported operating losses and realized special charges related to impairment of its asset values. In the September 1998 quarter its gross profit did not cover its general and administrative expenses and EBITDA was less than interest expense. Fine Host's weak operating performance and high leverage led the company to file a voluntary Chapter 11 petition on January 7, 1999.
01/07/1999 Prepackaged Chapter 11
03/18/1999 Reorganization plan confirmed
(Contact: Michael Rowan, 553-4465)

FIRSTPLUS Financial Group, Inc. Diversified consumer finance company

\$100.0 million 7.25% Convertible Subordinated Notes due 8/15/2003
FIRSTPLUS Financial Group, Inc. (FIRSTPLUS), headquartered in Dallas, Texas, is a specialized consumer finance company that originates, securitizes, services, and sells consumer finance receivables. The company's aggressive growth in serviced loans and rapid rate of acquisitions have increased its effective leverage, making it more vulnerable to changes in market conditions. Relying heavily on securitization to obtain financing, FIRSTPLUS has faced a severe liquidity crunch after the asset-backed and mortgage-backed securities market cooled off during late summer-early fall of 1998. An inability to secure alternative sources of funds and/or to find astrategic partner left the company with no option but to fire the majority of its employees and sell off some of its assets in order to keep operating. Due to continued lack of liquidity, on February 19, 1999 FIRSTPLUS failed to disburse interest payment on 7.25% subordinated notes due in 2003.
02/19/1999 Missed interest payment
03/05/1999 Firstplus Financial, Inc. and Firstplus Special Funding Corp., subsidiaries of FIRSTPLUS Financial Group, Inc. filed for Chapter 11
(Contact: Steve Nelson, 553-3781)

Fitzgeralds Gaming Corporation**Operator of casinos**

\$205.0 million 12.25% Guaranteed Senior Secured Notes, Ser. B due 12/15/2004

Fitzgeralds Gaming Corporation (Fitzgeralds), headquartered in Las Vegas, Nevada, owns and operates casinos in Reno and downtown Las Vegas, Nevada, Tunica, Mississippi, and Black Hawk, Colorado. Reliance on revenues generated by its isolated Tunica, Mississippi location led to volatile operating results over the past few years, and competition in each of its markets has strained the company's cash flow flexibility. Pending a debt restructuring plan, Fitzgeralds announced on May 13, 1999 that the June 15, 1999 coupon payment on its 12.25% senior notes due 2004 will not be disbursed.

05/13/1999 Announced that it would miss interest payment due on 6/15/99 on its senior notes maturing in 2004

06/15/1999 Missed interest payment

(Contact: Todd Gray, 553-4688)

Forcenergy Inc.**Oil and natural gas company**

\$200.0 million 8.5% Guaranteed Senior Subordinated Notes, Ser. B due 2/15/2007

\$175.0 million 9.5% Senior Subordinated Notes due 11/1/2006

Forcenergy Inc., located in Miami, Florida, is an independent oil and gas company engaged in the exploration, acquisition, development, exploitation and production of oil and natural gas properties. Historically, the company has grown through mainly debt-financed acquisitions and by employing an aggressive drilling strategy. A principal risk was high debt leverage on short-lived reserves requiring substantial reserve replacement capex to avoid erosion of the asset base. Forcenergy's financial position deteriorated, as indicated by three rating downgrades, due to the combination of very high leverage, short-lived reserves, continued weak pricing affecting cash flow, and inherently high capital expenditures. This resulted in internal funding shortfalls of high capex and further increased the need for external financing. Having reached its borrowing limit under the bank revolver and not being able to arrange new private equity funding, on March 3, 1999 Forcenergy announced a new business plan and hired Donaldson Lufkin & Jenrette as its strategic advisor. Subsequently, on March 21, 1999 the company found it necessary to file for protection under Chapter 11.

03/21/1999 Chapter 11

(Contact: Hugh Scott, 553-1328)

Fruit of the Loom, Inc.**Apparel company**

\$150.0 million 6.5% Senior Notes due 11/15/2003

\$150.0 million 7.375% Debentures due 11/15/2003

\$250.0 million 8.875% Guaranteed Notes due 4/15/2006

\$125.0 million 7% Debentures due 3/15/2001

Seasonal working capital funding requirements, as well as already high leverage and strained liquidity, prompted Fruit of the Loom, Inc. to file for Chapter 11 protection from its creditors on December 29, 1999. The company has experienced significant operating difficulties particularly during the last five quarters. Production curtailments and inclement weather also resulted in an inability to meet customer demand in 1999. Fruit of the Loom, Inc., headquartered in Chicago Illinois, is the principal operating subsidiary of Fruit of the Loom, Ltd., a Cayman Islands company. The company is a major producer of underwear, active-wear, jeans-wear, and sports-wear sold under a variety of brand names, including Fruit of the Loom, BVD, Gitano and Pro Player.

12/29/1999 Chapter 11

(Contact: Richard Mercier, 553-7885)

FWT, Inc.**Manufacturer of wireless infrastructure**

\$105.0 million 9.875% Senior Subordinated Notes due 11/15/2007

Based in Fort Worth, Texas, FWT, Inc. designs, manufactures and markets wireless infrastructure products. The company's operations have been adversely affected by a significant slowdown in new business from wireless carriers, in addition to the sudden and unanticipated cessation of the tower building program by its largest customer in late 1998, as carriers have started to focus on co-locating their radio equipment on existing towers rather than on new tower construction. After acquiring the company from FWT Acquisition, Inc. on April 9, 1999, the new owners (the Moore family) decided on April 16, 1999 to file for Chapter 11 protection due to present liquidity difficulties.

04/16/1999 Chapter 11

(Contact: Marcus Jones, 553-7721)

1999 Public Corporate Bond Defaults

General Media, Inc. Publishing and entertainment company

\$80.0 million 10.625% Senior Secured Notes, Ser. B due 12/31/2000

General Media, Inc., headquartered in New York, publishes magazines, principally Penthouse and affiliated publications, and produces a number of adult-oriented services via telephone lines and the Internet. The company's operating results have been trending down since the issue of its notes in 1993 due to circulation declines and significant operating costs increases in its publishing sector. Given General Media's financial vulnerability, on May 21, 1999 bondholders agreed to receive \$950 in cash for each \$1,000 par amount of \$28 million of the \$80 million outstanding senior secured notes maturing in 2000. The company was able to complete the redemption of its notes thanks to the sale of its automotive magazines in March, 1999.

04/27/1999 Distressed exchange offer

05/21/1999 Distressed exchange completed: bondholders agreed to receive \$950 in cash for each \$1,000 par amount of \$28 million of the \$80 million outstanding senior secured notes maturing in 2000

(Contact: Elizabeth Tallmadge, 553-1027)

Global Ocean Carriers Limited Shipping company

\$126.0 million 10.25% Senior Notes due 7/14/2007

Global Ocean Carrier Limited decided on July 15, 1999 to not make the coupon payment on its 10.25% senior notes due 2007. Cash flow and debt coverage has been constrained due to higher indebtedness from its recent aggressive expansion program and burdensome fleet maintenance costs. In addition, revenues are suffering from weak market conditions, particularly the short term spot market in which the company operates most of its ships. Vessel values have also declined from the company's book value, eliminating a potential source of collateral for additional borrowing. Global Ocean Carrier Limited, headquartered in Athens, Greece, owns and operates a fleet of 10 container feeder vessels and two drybulk panamax vessels.

07/15/1999 Missed interest payment

(Contact: Richard Bittenbender, 553-0396)

Golden Ocean Group Limited Shipping company

\$200.0 million 10% Guaranteed Senior Notes due 8/31/2001

On September 14, 1999 Golden Ocean Group Limited completed its distressed debt restructuring. Bondholders agreed to exchange approximately half of the accreted value of the senior notes due 2001 for 90% of the company's book equity, and extend their maturity to three years. The adverse impact of continued depressed freight rates has caused the company to operate close to break-even on a cash flow basis. Moreover, highly competitive pricing at shipyards has pushed prices of new vessels down, eroding the fleet's value as collateral. The financing terms for new vessels delivery place the remaining unsecured bonds in an increasingly subordinated position in the company's debt structure. Golden Ocean Group Limited, incorporated in Liberia and headquartered in London, England, currently operates a fleet of 18 vessels, of which 10 are bulk carriers and 8, Very Large Crude Carriers (VLCCs).

09/14/1999 Bondholders agreed to exchange approximately half of the accreted value of the senior notes due 2001(\$291 million) of which \$47 million represents a portion of the principal amount, for 90% of the company's equity (less than \$59 million)

(Contact: Richard Bittenbender, 553-0396)

Goss Graphic Systems, Inc. Manufacturer of printing press systems

\$225.0 million 12% Senior Subordinated Notes due 10/15/2006

As a result of poor operating performance in 1998 and into fiscal 1999, primarily in the US, the company has continued to endure tightening liquidity and deteriorating protection in terms of being able to service its substantial debt burden. On July 30, 1999 Goss Graphic Systems voluntarily filed a prepackaged Chapter 11, including agreement to restructure its debt obligations. As part of the agreement, holders of the company's \$225 million subordinated notes, due 2006, agreed to receive \$500 in cash for each \$1,000 par amount plus additional equity in the restructured entity. Goss Graphic Systems, Inc., headquartered in Westmont, Illinois, makes web offset systems worldwide for the newspaper and commercial printing industries.

07/30/1999 Prepackaged Chapter 11 and distressed exchange: bondholders agreed to receive \$500 in cash for each \$1,000 par amount of the 12% subordinated notes due 2006

10/22/1999 Reorganization plan confirmed

(Contact: Michael West, 553-4807)

Graham-Field Health Products, Inc.**Provider of healthcare products**

\$100.0 million 9.75% Senior Subordinated Notes, Ser. A due 8/15/2007

Graham-Field Health Products, Inc. filed for Chapter 11 protection on December 27, 1999 with more than \$201 million in debts and \$182 million in assets. The company has been plagued by problems including integration issues (stemming from its acquisition last year of Fuqua Enterprises, Inc. a provider of medical products), as well as receivable and asset writedowns, senior management turnover, pricing pressure, regulatory investigations, and various lawsuits. Despite turnaround efforts, revenues have continued to decline and operating losses have persisted. Further, management has been unsuccessful in its recent attempts to secure refinancing for its credit facility and complete the sale of the company. Graham-Field Health Products, headquartered in Bay Shore, NY, manufactures, markets and distributes medical, surgical and a wide range of other healthcare products into the home healthcare and medical/surgical markets.

12/27/1999 Chapter 11

(Contact: Michael Murray, 553-7215)

Greenstone Resources Ltd.**Gold exploration and production company**

Can\$ 100.0 million 9% Senior Notes due 2/28/2002 [\$67.4 million]

Plagued by cash shortfalls, Greenstone Resources Ltd. has been unable to service its loan facility, which triggered a default under the company's bond indenture, and entitling its bondholders to exercise the right to receive accrued interest and principal payments on demand. On August 13, 1999 Greenstone failed to make the required payments on its 9% senior notes maturing in 2002. Subsequently, it also failed to make the scheduled interest payment due August 28, 1999 on those notes. The company's ill-timed transition during 1998 from an exploration to a production company coincided with inclement weather conditions, low gold prices, and construction delays stemming from engineering and operational changes, and the quality of certain properties. Liabilities were approximately 5 times higher than the revenues in 1998 as a result of continuous losses and the necessity to fund its expansionist and transitory program. Greenstone Resources Ltd., headquartered in Toronto, Canada, is a gold exploration and production company operating in Central America.

07/30/1999 Missed principal and interest payments on its maturing \$18.7 million revolving credit facility thus triggering an event of default under the note indentures which entitles the bondholders to accelerate maturity of the principal of the senior notes

08/13/1999 Holders of the 9% senior notes due 2002 decided to accelerate maturity of the notes due and payable immediately

08/28/1999 Missed interest payment on its senior notes maturing in 2002

(Contact: Steve Oman, 553-1673)

Grupo Azucarero Mexico, S.A. de C.V.**Sugar company**

\$145.0 million 11.5% Senior Notes due 1/15/2005

Grupo Azucarero Mexico, S.A. de C.V. (GAM), headquartered in Guadalajara, Mexico, is the second largest sugar company in the country. The company has been adversely impacted by the domestic and international oversupply of sugar as well as the peso depreciation against the dollar given its 90% dollar denominated debt. Relatively lower output and higher production costs at the two mills acquired in 1998 further deteriorated operating cash flows. On May 13, 1999 in an effort to restructure GAM's high indebtedness, bondholders agreed to a distressed exchange, receiving \$450 in cash for each \$1,000 par amount of the 11.5% senior notes maturing in 2005.

03/31/1999 Distressed exchange offer

05/13/1999 Distressed exchange completed: bondholders agreed to receive \$450 in cash for each \$1,000 par amount of the 11.5% senior notes maturing in 2005

(Contact: Phillip Li, 553-4578)

1999 Public Corporate Bond Defaults

Grupo Tribasa, S.A. de C.V.

Construction company

\$26.0 million FLT% Guaranteed Euronotes, Ser. A due 3/4/99

\$83.8 million 7.75% Guaranteed Eurobonds due 12/22/2000

Grupo Tribasa, S.A. de C.V. (Tribasa), headquartered in Mexico City, Mexico, is the country's second largest construction company. The company's operating performance was adversely affected by the modest growth of the Mexican economy since the peso devaluation and the government budget constraints due to slackened oil revenue. Although Tribasa has diversified into several industry sectors, it recorded substantial net losses over the past two years as a result of a slowdown in Mexican toll road restructuring payments. In an effort to alleviate its heavy debt burden, the company is undergoing a debt restructuring program; however, on March 4, 1999 Tribasa failed to make a \$26 million interest payment disbursement on its maturing floating rate euronotes.

03/04/1999 Missed a \$26 million payment on \$150 million maturing guaranteed floating rate euronotes

(Contact: Teresa McCarthy, 553-3878)

Guangdong Enterprises (Holdings) Ltd.

Commercial enterprise

\$150.0 million FLT% Floating Rate Eurobonds due 6/30/99

\$500.0 million 8.875% Senior Notes due 5/22/2007

\$250.0 million 8.75% Senior Notes due 12/15/2003

Guangdong Enterprises (Holdings) Limited (GDE) suspended all debt principal payments on January 5, 1999 and requested all creditors to standstill until the completion of a debt restructuring plan. Such restructuring largely depends on the substantiality of financial support obtained from its owner, the Guangdong government. The company's access to liquidity has been impaired by credit tightening in the commercial lending market that occurred in the aftermath of Guangdong International Trust and Investment Corporation's bankruptcy. GDE, incorporated in Hong Kong, is the Guangdong Provincial Government's largest commercial enterprise organized outside the People's Republic of China, engaging in six principal lines of business: trading, manufacturing, property development and investments, hotels, finance and infrastructure.

01/05/1999 Suspended all debt principal payments

07/01/1999 The Guangdong Provincial Government stopped interest payments to creditors of Guangdong Enterprises (Holdings) Ltd.

(Contact: Clara Lau, 553-1653)

Gulf States Steel, Inc.

Steel company

\$190.0 million 13.5% First Mortgage Notes due 4/15/2003

Headquartered in Gadsden, Alabama, Gulf States Steel, Inc., produces steel plate and sheet products from a fully integrated steel mill. The rapid deterioration of the steel market, as most clearly evidenced by recent price reductions for commodity grades of steel, has put a strain on Gulf States' operating performance. Its relatively high operating costs and competitive pressures from new minimills additionally contributed to the company's current losses. Despite drastic cost reduction measures, the company was unable to generate sufficient cash flow from operations in order to service its debt obligations. On April 15, 1999 Gulf States failed to make interest payment on its 13.5% first mortgage notes maturing in 2003.

04/15/1999 Missed interest payment

07/02/1999 Chapter 11

(Contact: Steven Oman, 553-1673)

Harnischfeger Industries, Inc.**Manufacturer of mining equipment**

\$75.0 million 8.9% Debentures due 3/1/2022

\$75.0 million 8.7% Debentures due 6/15/2022

\$150.0 million 7.25% Debentures due 12/15/2025

\$150.0 million 6.875% Debentures due 2/15/2027

\$2.8 million 5.9% Industrial Revenue Bonds, Ser. 1994 (City of Columbus, MS) due 12/1/2011

\$3.3 million 6% Industrial Revenue Bonds, Ser. 1993 (County of Aiken, SC) due 12/1/2011

\$2.9 million 6% Industrial Revenue Bonds, Ser. 1994 (Port of Seattle, WA) due 12/1/2017

\$2.1 million 6.05% Industrial Revenue Bonds, Ser. 1993 (City of Neenah, WI) due 12/1/2011

Harnischfeger Industries, Inc., headquartered in St. Francis, Wisconsin, is a holding company whose subsidiaries produce pulp and paper making equipment (Beloit), surface mining equipment (P&H Mining Equipment) and underground mining equipment (Joy). Harnischfeger's weak operating performance reflected continued depressed demand for its paper making machinery and mining equipment with few signs of a meaningful upturn in its businesses in the near term. Although the company had significantly cut costs, it was reporting operating losses and minimal cash flow from operations. At the same time, the company was having difficulty obtaining needed liquidity. In order to preserve the company's assets and to reverse its deteriorating financial condition, Harnischfeger and its US-based subsidiaries sought protection from creditors under US Chapter 11 on June 7, 1999.

06/07/1999 Chapter 11

(Contact: Barbara Havlicek, 553-7259)

Health-Chem Corporation**Manufacturer of medical products**

\$8.0 million 10.375% Convertible Subordinated Debentures due 4/15/99

Health-Chem Corporation, headquartered in New York, manufactures controlled release products for the pharmaceutical and cosmetic industries as well as products for laminating or coating fabrics and materials. Declining sales in synthetic fabrics, transdermal nitroglycerin patches and environmental products due to lower demand led to recurring losses and ultimately to a decision to cease operations at its synthetic fabric unit and put its environmental products units up for sale. While trying to restructure its businesses and improve current difficult financial situation, the company announced on April 12, 1999 that the principal payment on its convertible subordinated debentures due on April 15, 1999 will not be made.

04/12/1999 Announced that it would not make the \$8 million final payment on its maturing convertible subordinated debentures due on April 15, 1999

04/15/1999 Missed principal payment

(Contact: Robert McCreary, 553-0424)

Hechinger Company**Home improvement retailer**

\$100.0 million 9.45% Senior Debentures due 11/15/2012

\$100.0 million 6.95% Senior Notes due 10/15/2003

\$118.8 million 5.5% Convertible Subordinated Debentures due 4/1/2012

Hechinger Company, headquartered in Largo, Maryland, is a home improvement retailer that operates 206 stores primarily in the Eastern and Midwestern parts of the U.S.. The company is suffering because of its lack of competitive advantage. Increased competition, inadequate merchandise offering and numerous store closing charges led to widening losses and substantially deteriorated operating cash flows. Subsequently, on May 15, 1999 Hechinger failed to disburse a 9.45% coupon payment on its senior debentures maturing in 2012.

05/15/1999 Missed interest payment on its \$100 million senior debentures maturing in 2012

06/11/1999 Chapter 11

(Contact: Teresa McCarthy, 553-3878)

1999 Public Corporate Bond Defaults

Hidroelectrica Piedra del Aguila S.A. **Electricity company**

\$100.0 million 10.625% Eurobonds due 10/9/2001
\$100.0 million 10.875% Eurobonds due 5/29/99

Hidroelectrica Piedra del Aguila S.A. (HPDA), headquartered in Buenos Aires, Argentina, is a hydroelectric generation plant located on the Limay River. HPDA supplies electricity primarily to the spot market in Argentina’s National Interconnected System. Lower revenues due to two consecutive years of drought and reduced energy prices from increased competition led to operating losses and depleted HRDA’s cash reserves. Unable to obtain additional financing either from capital markets or banks, the company faced serious cash flow problems. While advised by Merrill Lynch on its debt restructuring, on March 31, 1999 the company missed a \$19.8 million amortization installment to Banco de la Nacion. Subsequently, on April 5, 1999 HPDA announced that it would not make interest payment due on April 9, 1999 on its 10.625% eurobonds maturing in 2001.

- 03/31/1999 Postponed a \$19.8 million amortization installment to Banco de la Nacion Argentina
- 04/05/1999 Announced that it would miss interest payment on its \$100 million eurobonds due on 4/9/99 and maturing in 2001
- 04/09/1999 Missed interest payment
- 05/24/1999 Announced that it would miss interest and principal payments on its 10.875% maturing eurobonds due on May 29, 1999
- 05/29/1999 Missed interest and principal payments

(Contact: A. J. Sabatelle, 553-4136)

Hollywood Theaters, Inc. **Operator of motion picture theaters**

\$110.0 million 10.625% Guaranteed Senior Subordinated Notes due 8/1/2007

Hollywood Theaters, Inc. (Hollywood), headquartered in Dallas, Texas, currently operates 75 first run and discount theaters with 471 screens located principally in Texas, Oklahoma, Kansas, and Missouri. Since its inception in 1995, the company pursued an aggressive acquisition program financed mainly through debt. Operating losses mainly due to difficulties in integrating newly acquired theaters coupled with increased competition resulted in a sharp liquidity shortfall. The company recorded a net loss of \$12.6 million for the nine month period ended September 30, 1998 compared to a net loss of \$6.1 million during the same period a year earlier. The losses led to multiple covenant violations under the bank credit facility for which the company did manage to receive waivers. Furthermore, Hollywood’s plan to issue a new senior note (which would have alleviated present liquidity problems) collapsed in late 1998 after bondholders refused to consent to the offering. Subsequently, on February 1, 1999 the company failed to make interest payment on \$110 million senior subordinated notes maturing in 2007.

- 02/01/1999 Missed interest payment
- 03/03/1999 Announced exchange offer
- 04/25/1999 Distressed exchange completed; bondholders received \$700 in cash for each \$1000 par amount of the guaranteed senior subordinated notes maturing in 2007

(Contact: Russell Solomon, 553-4301)

Hurricane Hydrocarbons Ltd. **Oil company**

\$105.0 million 11.75% Senior Notes due 11/1/2004
Can\$ 110.0 million 11% Notes due 3/27/2002 [\$75.5 million]

Hurricane Hydrocarbons Ltd. (Hurricane), headquartered in Calgary, Alberta, Canada, explores for and produces crude oil in the South Turgai Basin in Central Kazakhstan. The company’s effective dependence on one refinery (Shymkent) to take its production, increased competing domestic crude production, and general oil price weakness progressively translated into very poor local price realizations and prevented Hurricane from establishing a commercial footing sufficient to support debt service. Following fourth quarter 1998 coupon payments, cash liquidity was nil by December 1998. On May 1, 1999 Hurricane failed to make coupon payment on its 11.75% senior notes maturing in 2004. The company recently petitioned for protection from creditors under the Companies’ Creditors Arrangement Act in Canada.

- 05/01/1999 Missed interest payment on its \$105 million senior notes maturing in 2004

(Contact: Andrew Oram, 553-1649)

Hvide Marine, Inc.**Marine services provider**

\$300.0 million 8.375% Guaranteed Senior Notes due 2/15/2008

Inability to improve its cash position and inability to negotiate improved terms from its banks or unsecured noteholders precipitated Hvide Marine's decision to not make its interest payment due August 20, 1999 on its \$300 million unsecured notes maturing in 2008. The company suffers from the cumulative severe cash flow, leverage, and liquidity impact of an aggressive leveraged acquisition program whose subsequent deleveraging program was blocked by a sector equity market collapse after the oil price collapse of late 1997 through 1Q99. Hvide Marine, Inc., headquartered in Ft. Lauderdale, Florida, grew from a 23-vessel fleet in 1993 to 283 vessels as of 3/15/99 and provides marine support and transportation services primarily to the energy and chemical industries worldwide.

08/16/1999 Missed interest payment on its 8.375% senior notes maturing in 2008

09/09/1999 Chapter 11

12/09/1999 Reorganization plan confirmed

12/15/1999 Emerged from Chapter 11

(Contact: Andrew Oram, 553-1649)

ICF Kaiser International, Inc.**Engineering and consulting services company**

\$125.0 million 12% Senior Subordinated Notes w/warrants due 12/31/2003

\$15.0 million 12% Senior Notes, Ser. B due 12/31/2003

On June 30, 1999 ICF Kaiser International, Inc. missed interest payments on its senior notes and senior subordinated notes, both due 2003. Concurrently, it completed the sale of 90% of ICF Consulting, Inc. (its consulting unit and most profitable business), to focus on engineering project construction and program management services. Although the company recently embarked on a turnaround plan, it failed to alleviate its cumbersome debt-burden and generate sufficient operating income to cover interest expenses. The declining percentage of service revenue, principally due to recent cash contract losses and increased use of subcontractors has adversely affected ICF's performance. ICF Kaiser International, based in Fairfax, Virginia, is a leading engineering, construction, program management, and consulting services company with offices worldwide.

06/30/1999 Missed interest payment on the \$125 million senior subordinated notes and \$15 million senior notes both maturing in 2003; concurrently, it completed the sale of 90% of its Consulting Group to the unit's management and CM Equity Partners L.P.

07/30/1999 Made interest payment on the \$125 million senior subordinated notes and \$15 million senior notes both maturing in 2003 within the grace

12/23/1999 Announced that it would not make interest payments due 12/31/99 on both its senior notes maturing 2003

12/31/1999 Missed interest payment

(Contact: Catherine Guinee, 553-4385)

ICO Global Communications (Holdings) Limited**Provider of mobile communications service**

\$460.0 million 15% Senior Notes due 8/1/2005

EUR 100.0 million 15.25% Eurobonds due 8/1/2005 [\$107.1 million]

Unable to raise sufficient funds to implement its business plan, ICO chose on July 29, 1999 to invoke its 30-day grace period to make the interest payment due August 1, 1999 on its 15% senior notes maturing in 2005. Due to significant start-up costs, continuing operating losses and no meaningful cash flow generation expected before 2001, the debt-laden company is farther behind its project of becoming the third satellite-based mobile telephony after Iridium (which has also defaulted on its bonds this month) and Globalstar. ICO Global Communications (Holdings) Limited (ICO), registered in Bermuda and headquartered in London, United Kingdom, was established in 1995 as a private company to provide global mobile personal communications services by satellite.

07/29/1999 Announced that it would not make the interest payment due August 1, 1999 on its 15% senior notes maturing in 2005

08/01/1999 Missed interest payment

08/27/1999 Chapter 11

(Contact: Marcus Jones, 553-7721)

1999 Public Corporate Bond Defaults

ICON Fitness Corporation **Manufacturer of home fitness equipment**

\$162.0 million 14% Senior Discount Notes, Ser. B due 11/15/2006

A unit of IHF Holdings, Inc. and ICON Health & Fitness, Inc.. See accompanying critique under ICON Health & Fitness, Inc.

07/15/1999 Missed interest payment on its 13% senior subordinated notes maturing in 2002 (issued through ICON Health & Fitness, Inc.)

(Contact: Kevin Kusnierek, 553-3835)

ICON Health & Fitness, Inc. **Manufacturer of home fitness equipment**

\$101.3 million 13% Senior Subordinated Notes, Ser. B due 7/15/2002

ICON failed to make the interest payment due July 15, 1999 on its subordinated notes maturing in 2002 and is now looking to restructure its debt. The restructuring culminates from a series of events, the first of which dates back to 1994 when Bain Capital, Inc. recapitalized ICON through an LBO. The latter resulted in the creation of a very highly leveraged holding company structure. Weak sales in fiscal 1998 and 1999 contributed to a substantial decline in its cash flow, interest coverage and overall liquidity. ICON Health & Fitness, Inc.(ICON), headquartered in Logan, Utah, is a US manufacturer and marketer of home fitness equipment.

07/15/1999 Missed interest payment

(Contact: Kevin Kusnierek, 553-3835)

IHF Holdings, Inc. **Manufacturer of home fitness equipment**

\$123.7 million 15% Senior Subordinated Discount Notes, Ser. B due 11/15/2004

The parent of both ICON Health & Fitness, Inc. and ICON Fitness, Inc.. See accompanying critique under ICON Health & Fitness, Inc.

07/15/1999 Missed interest payment on its 13% senior subordinated notes maturing in 2002 (issued through ICON Health & Fitness, Inc.)

(Contact: Kevin Kusnierek, 553-3835)

Indorayon International Finance B.V. **Finance subsidiary**

\$150.0 million 10% Guaranteed Eurobonds due 3/29/2001

See accompanying critique under P.T. Inti Indorayon Utama.

03/19/1999 Announced it would miss 10% interest payment due on March 29, 1999 on \$150 million eurobonds maturing in 2001

03/29/1999 Missed interest payment

(Contact: Gary Lau, 553-1653)

Integrated Health Services, Inc. **Healthcare services provider**

\$500.0 million 9.25% Senior Subordinated Notes due 1/15/2008

\$450.0 million 9.5% Senior Subordinated Notes due 9/15/2007

\$150.0 million 10.25% Senior Subordinated Notes, Ser. A due 4/30/2006

\$143.8 million 5.75% Convertible Senior Subordinated Debentures, Ser. B due 1/1/2001

\$100.0 million 6% Convertible Subordinated Debentures due 1/1/2003

Integrated Health Services (HIS), Inc. failed to make the November 1, 1999 interest payment on its 10% senior subordinated notes due 2006. The healthcare industry's transition to the prospective payment system for Medicare dealt a blow in IHS' performance. Lower Medicare reimbursement rates and a decline in demand for contract therapy services contributed to its deteriorating financial condition. Given the company's high leverage, the decline in operating results has substantially eroded debt protection measures. Integrated Health Services, headquartered in Owings Mills, Maryland, is a diversified health services provider, offering a broad spectrum of post-acute medical and rehabilitative services through a nationwide network.

11/01/1999 Missed interest payment on its 10.25% senior subordinated notes due 2006

01/03/2000 Missed interest payment on its \$143.8 million 5.75% Convertible Senior Subordinated Notes due 2001

(Contact: Michael Murray, 553-7215)

International Engineering Public Company Limited Distributor of telecommunications equipment

Thai Baht 427.8 million 7% Convertible Debentures due 5/11/2000 [\$6.6 million]

International Engineering Public Company Limited (International Engineering), headquartered in Bangkok, Thailand, is a telecommunications company that distributes mobile phones and telecommunications equipment. International Engineering has not disbursed any dividends to its shareholders since March 1998 and has recently violated debenture covenants as a result of financial problems invoked by the regional economic crisis, lower demand for its products and stiff competition. On April 16, 1999 the company decided to stop making coupon payments on its convertible debentures maturing in 2000 starting with the 8th payment due on May 11, 1999 until a debt restructuring plan is reached with its creditors.

04/16/1999 Announced that it would miss interest payment on its convertible debentures due on 5/11/99

05/11/1999 Missed interest payment

(Contact: Doug Bontemps, 553-3779)

Iridium LLC**Satellite telecommunications company**

\$300.0 million 11.25% Guaranteed Senior Notes, Ser. C due 7/15/2005

\$300.0 million 13% Guaranteed Senior Notes, Ser. A due 7/15/2005

\$500.0 million 14% Guaranteed Senior Notes w/warrants, Ser. B due 7/15/2005

Iridium announced that it would miss interest payments due July 15, 1999 on all its outstanding bonds maturing in 2005 following the decision by its main investor, Motorola, Inc. not to contribute financially to the debt-laden satellite-phone venture, prior to any restructuring. Although the company recently became the world's first global satellite phone and paging company by launching its handheld mobile satellite service, it suffered from poorly timed marketing campaign that announced the service before handset and other equipment was available, as well as prohibitively high pricing for the service. Subsequently, Iridium fell short on its subscriber expectations and experienced liquidity problems. Iridium LLC, headquartered in Washington, D.C., is a global satellite telecommunications company.

07/15/1999 Missed interest payment on all of its outstanding notes

08/11/1999 Missed payments on more than \$1.5 billion in bank loans (issued through Iridium Operating LLC)

08/13/1999 Chapter 11

(Contact: Marcus Jones, 553-7721)

Iridium Operating LLC**Satellite telecommunications company**

\$350.0 million 10.875% Guaranteed Senior Notes, Ser. D due 7/15/2005

A unit of Iridium LLC. See accompanying critique under Iridium LLC.

07/15/1999 Missed interest payment on all of its outstanding senior notes

08/11/1999 Missed payments on more than \$1.5 billion in bank loans

08/13/1999 Chapter 11

(Contact: Marcus Jones, 553-7721)

Jitney-Jungle Stores of America, Inc.**Operator of supermarkets**

\$200.0 million 10.375% Guaranteed Senior Subordinated Notes due 9/15/2007

\$200.0 million 12% Guaranteed Senior Notes due 3/1/2006

Jitney-Jungle Stores of America's problematic acquisition of the Del Champ's supermarket chain in September 1997, weak operating performance, and declining vendor support prompted the company to file for Chapter 11 bankruptcy on October 12, 1999. For more than a year after the Del Champ's acquisition, Jitney-Jungle experienced severe difficulties in combining the distribution systems of the two companies so stores were often out-of-stock. The combination of a large number of competitor store openings and Jitney's marketing and operational miscues caused the company to suffer same store sales declines. Declines in cash flow compelled the company to draw down its revolving credit facility to pay vendors and meet interest payments. Withdrawal of vendor trade and marketing support due to liquidity concerns finally forced Jitney-Jungle to file for bankruptcy. Jitney-Jungle Stores of America, Inc., based in Jackson, Mississippi, currently operates 196 supermarkets and 54 gasoline stations across Mississippi, Tennessee, Arkansas, Louisiana, and Florida, as well as 10 liquor stores in Florida.

10/12/1999 Chapter 11

(Contact: Michael Rowan, 553-4465)

1999 Public Corporate Bond Defaults

Joy Technologies, Inc. Manufacturer of mining equipment

\$8.3 million 8.5% Industrial Revenue Bonds, Ser. 1992 (County of Mesa, CO) due 9/15/2006
\$4.3 million 8.75% Industrial Revenue Bonds, Ser. 1992 (County of Cuyahoga, OH) due 9/15/2007
A unit of Harnischfeger Industries, Inc.. See accompanying critique under Harnischfeger Industries, Inc.
06/07/1999 Chapter 11
(Contact: Barbara Havlicek, 553-7259)

Just For Feet, Inc. Operator of specialty retail stores

\$200.0 million 11% Senior Subordinated Notes due 5/1/2009
On November 4, 1999 Just For Feet, Inc. filed for Chapter 11. In 1998, Just for Feet purchased the Sneaker Stadium chain of superstores. The company took on additional debt to purchase and convert these locations into Just for Feet superstores. Over the late Spring and Summer, the company embarked on an inventory reduction program through its superstore locations to shed excess merchandise ordered earlier this year by its specialty store division. However, the clearance strategy was not able to generate sufficient liquidity to continue normal operations. Under its Chapter 11 plan, the interest payment due November 1 on its subordinated notes will not be disbursed, and the full amount of the notes will be converted into a 100% equity stake in the company. Just For Feet (JFF), headquartered in Birmingham, Alabama, is an operator of athletic shoe stores throughout the U.S. and Puerto Rico.
11/01/1999 Missed interest payment
11/04/1999 Prepackaged Chapter 11
(Contact: Marie Menendez, 553-4126)

KCS Energy, Inc. Energy company

\$150.0 million 11% Guaranteed Senior Notes, Ser. B due 1/15/2003
\$125.0 million 8.875% Guaranteed Senior Subordinated Notes due 1/15/2008
KCS' announced on July 13, 1999 that it will not make its July 15, 1999 interest payment on both its 8.875% and 11% notes maturing in 2008 and 2003, respectively, after its banks declared a payment default and blocked payment on the 8.875% subordinated notes. Weak hydrocarbon prices, increased reliance on the short-reserve-life volumetric production payment (VPP) program (whereby the company buys a fixed production stream at a predetermined price), and the production and cash flow consequences of a poor and suspended 1998 Rocky Mountain drilling program have increased leverage, largely eliminated liquidity, and eroded production and cash flow. KCS Energy, Inc., headquartered in Houston, Texas, is an independent energy company engaged in the acquisition, exploration, and production of natural gas and crude oil with operations in the Mid-Continent and Gulf Coast.
07/13/1999 Announced that it would not make interest payment due July 15, 1999 on both the 8.875% subordinated notes and the 11% senior notes; Further, the company did not make the payments on its revolving credit facility maturing in 2000
07/15/1999 Missed interest payment
(Contact: Andrew Oram, 553-1649)

Kelley Oil & Gas Corporation Oil and gas company

\$30.0 million 10.375% Guaranteed Senior Subordinated Notes, Ser. D due 10/15/2006
\$135.0 million 14% Senior Secured Notes, Ser. A due 4/15/2003
\$0.4 million 13.5% Guaranteed Senior Notes due 6/15/99
\$125.0 million 10.375% Guaranteed Senior Subordinated Notes due 10/15/2006
Kelley Oil & Gas Corporation, headquartered in Houston, Texas, engages in exploration and development of gas and oil, primarily in Louisiana, Texas, and the Gulf of Mexico. The impact of petroleum price weakness and production declines, drilling disappointments, and, as a result, capital expenditures disproportionately in excess of reserve replacement, resulted in extremely high leverage. Cash flows were further pinched by rising unit production costs after the debt-funded acquisition of SCANA Petroleum Resources, Inc. in late 1997. On May 15, 1999, bondholders agreed to a distressed exchange, receiving \$590 for each \$1,000 par amount of the 8.5% convertible debentures maturing in 2000 and 7.875% convertible notes maturing in 1999 (both issued through Kelley Oil & Gas Partners Ltd.).
04/19/1999 Distressed exchange offer
05/15/1999 Distressed exchange offer completed : bondholders agreed to receive \$590 for each \$1,000 par amount of the 8.5% convertible debentures maturing in 2000 and 7.875% convertible notes maturing in 1999 (both issued through Kelley Oil & Gas Partners, Ltd.)
(Contact: Andrew Oram, 553-1649)

Kelley Oil & Gas Partners, Ltd.**Oil and gas company**

\$9.7 million 8.5% Convertible Subordinated Debentures due 4/1/2000

\$5.2 million 7.875% Convertible Subordinated Notes due 10/15/99

A unit of Kelley Oil & Gas Corporation. See accompanying critique under Kelley Oil & Gas Corporation.

04/19/1999 Distressed exchange offer

05/15/1999 Distressed exchange offer completed : bondholders agreed to receive \$590 for each \$1,000 par amount of the 8.5% convertible debentures maturing in 2000 and 7.875% convertible notes maturing in 1999

(Contact: Andrew Oram, 553-1649)

Leasing Solutions, Inc.**Leasing company**

\$71.9 million 6.875% Convertible Subordinated Notes due 10/1/2003

Leasing Solutions, Inc. (LSI), headquartered in San Jose, California, is a leasing company that specializes in leasing information processing and communications equipment, principally to large international corporate customers. Losses on sales of equipment such as desktop and laptop computers that were previously on lease (due to reduced market value of such equipment) together with the management's decision to accelerate the depreciation rate of the company's lease accounting method adversely affected LSI's financial results. Because of insufficient funds, the company has been in default on payments on certain of its borrowing facilities since November of 1998. While under a 90-day forbearance agreement, LSI is precluded from making the interest payment due on April 1, 1999 on its convertible subordinated notes maturing in 2003.

04/01/1999 Missed interest payment

11/17/1999 Chapter 11

(Contact: Robert Young, 553-4122)

Loehmann's, Inc.**Apparel retailer**

\$95.0 million 11.875% Senior Notes due 5/15/2003

Loehmann's, Inc., headquartered in New York, is a discount apparel retailer with 69 stores throughout the U.S.. In 1996, the company expanded geographically into areas of the country where its name was not well known. The new stores did not achieve expected performance, and expenses remained high relative to sales volume. At the same time, Loehmann's faced competition from an increase in alternative discount channels and the more promotional posture taken by department stores. A series of operating losses followed, further increasing the company's debt burden and preventing it from disbursing interest payment on its senior notes due on May 17, 1999. On May 18, 1999 Loehmann's filed for protection under Chapter 11.

05/17/1999 Missed interest payment

05/18/1999 Chapter 11

(Contact: Marie Menendez, 553-4126)

Loewen Group International, Inc.**Funeral services company**

\$225.0 million 7.5% Guaranteed Senior Notes, Ser. 3 due 4/15/2001

\$9.3 million 7.75% Guaranteed Senior Notes, Ser. 3 due 10/15/2001

\$250.0 million 7.6% Guaranteed Senior Notes, Ser. 7 due 6/1/2008

\$225.0 million 8.25% Guaranteed Senior Notes, Ser. 4 due 10/15/2003

\$200.0 million 7.2% Guaranteed Senior Notes, Ser. 6 due 6/1/2003

\$0.5 million 8.25% Guaranteed Senior Notes, Ser. 2 due 4/15/2003

A unit of Loewen Group, Inc.. See accompanying critique under Loewen Group, Inc.

06/01/1999 Loewen Group, Inc., the parent company, filed for Chapter 11 of the U.S. Bankruptcy Code and applied for creditor protection under the Companies' Creditors Arrangement Act (CCAA) in Canada

(Contact: Christophe Razaire, 553-4780)

1999 Public Corporate Bond Defaults

Loewen Group, Inc. **Funeral services company**

Can\$ 200.0 million 6.1% Guaranteed Senior Secured Notes, Ser. 5 due 10/1/2002 [\$135.7 million]

Loewen Group, Inc., headquartered in Burnaby, British Columbia, is the second largest operator of funeral homes and cemeteries in North America. Acceleration of the pre-need cemetery sales program at a time of depressed asset prices in the industry created a cash flow drain as the payment of commissions and other general administrative expenses have exceeded installment payments by the purchasers of cemetery plots. Furthermore, the company's consolidation strategy during the last two years also has not been effective, and Loewen has not been successful in controlling its costs. In spite of a reduction in the pace of acquisitions, Loewen's negative cash flow has resulted in a sharp increase in debt levels. On June 1, 1999 Lowen Group, together with its subsidiaries, sought protection from creditors by filing bankruptcy under Chapter 11 of the U.S. Bankruptcy Code and under the Companies' Creditors Arrangement Act (CCAA) in Canada.

06/01/1999 Filed for Chapter 11 of the U.S. Bankruptcy Code and applied for creditor protection under the Companies' Creditors Arrangement Act (CCAA) in Canada

(Contact: Christophe Razaire, 553-4780)

Mariner Health Group, Inc. **Provider of healthcare services**

\$150.0 million 9.5% Senior Subordinated Notes, Ser. B due 4/1/2006

A unit of Mariner Post-Acute Network, Inc. See accompanying critique under Mariner Post-Acute Network, Inc.

10/01/1999 Missed interest payments on its senior subordinated notes due 2006 and its bank loans due 2000; Announced that it would not make interest payments due 11/1/99 on its senior subordinated notes due 2007 (issued through Mariner Post-Acute Network, Inc.)

(Contact: Michael Murray, 553-7215)

Mariner Post-Acute Network, Inc. **Provider of healthcare services**

\$275.0 million 9.5% Senior Subordinated Notes, Ser. B due 11/01/2007

\$294.0 million 0% Senior Subordinated Discount Notes, Ser. B due 11/1/2007

Mariner Post-Acute Network, Inc. failed to make the interest payment due October 1, 1999 on its senior subordinated notes due 2006 and its bank loans due 2000 (issued through Mariner Health Group, Inc.). In addition, coupon payments due November 1, 1999 on its senior subordinated notes due 2007 will not be made. Despite the company's significant restructuring measures (asset divestitures and corporate downsizing), the ensuing integration costs of its recent debt-funded acquisition plan, coupled with the industry's transition to the prospective payment system for Medicare, eroded its operating performance and decreased liquidity. Mariner Post-Acute Network, Inc., headquartered in Atlanta, Georgia, is a leading provider of post-acute care services.

10/01/1999 Missed interest payments on its senior subordinated notes due 2006 and its bank loans due 2000 (issued through Mariner Health Group, Inc.); Announced that it would not make interest payments due 11/1/99 on its senior subordinated notes due 2007

11/01/1999 Missed interest payments on its subordinated notes due 2007

(Contact: Michael Murray, 553-7215)

MCII Holdings (USA), Inc. **Bus and truck manufacturer**

\$206.5 million 12% Senior Secured Notes due 11/15/2002

A unit of Consorcio G Grupo Dina, S.A. de C.V.. See accompanying critique under Consorcio G Grupo Dina, S.A. de C.V.

05/14/1999 Consorcio G Grupo Dina S.A. de C.V., the parent company, announced that it would miss interest payment on senior notes (issued through MCCI) due on May 15, 1999, and tendered a distressed exchange offer on all of its outstanding debt

05/15/1999 Missed interest payment

07/15/1999 Consorcio G Grupo Dina, S.A. de C.V., the parent company, missed interest payment on its \$164 million convertible debentures maturing 2004.

(Contact: Barbara Havlicek, 553-7259)

Mediplex Group, Inc.**Healthcare provider**

\$25.0 million 6.5% Convertible Subordinated Debentures due 8/1/2003

A subsidiary of Sun Healthcare Group, Inc. See accompanying critique under Sun Healthcare Group, Inc.

04/13/1999 Sun Healthcare Group, Inc. announced that it would miss dividend payment on its 7% guaranteed trust preferred capital securities due on 5/1/99 and maturing in 2028 (through its subsidiary Sun Financing I)

04/29/1999 Sun Healthcare Group, Inc. missed interest payment on its 9.375% senior subordinated notes maturing in 2008

05/01/1999 Sun Healthcare Group, Inc. missed dividend payment (issued through Sun Financing I) and interest payment on its \$150 million subordinated notes maturing in 2008

10/14/1999 Chapter 11

(Contact: Michael Murray, 553-7215)

Michael Petroleum Corporation**Oil and gas company**

\$135.0 million 11.5% Senior Notes, Ser. B due 4/1/2005

Unable to obtain additional borrowing to fund its mandatory capital expenditures, on October 1, 1999 Michael Petroleum Corporation failed to make the coupon payment on its senior notes maturing in 2005. Michael's considerable operating and liquidity challenges during 1998 and 1999 progressed the company to this point. A very short reserve life on proven developed reserves, large capex needs to bring a disproportionately large amount of reserves in the proven but undeveloped category to production, a high interest expense burden, and the long period of price weakness, consumed liquidity. The company has a very high level of debt on proven developed reserves. Michael Petroleum Corporation, headquartered in Houston, Texas, is a natural gas development company operating principally in the Lobo Trend in South Texas.

06/29/1999 Distressed exchange offer

10/01/1999 Missed interest payment

12/10/1999 Chapter 11

(Contact: Andrew Oram, 553-1649)

MOA Hospitality, Inc.**Operator and owner of hotel chains**

\$80.0 million 12% Senior Subordinated Notes, Ser. B due 4/15/2004

MOA Hospitality, Inc. failed to make the semiannual interest payment due October 15, 1999 on its senior subordinated notes maturing 2004. The company's tightening liquidity position is the result of a combination of lower cash flow due to property divestitures completed in 1998 and current high debt levels. Furthermore, MOA's operations have suffered from increased competition in the budget and economy hotel markets. Based in Des Plaines, Illinois, MOA Hospitality and its subsidiaries own and operate about 117 properties throughout the United States focusing on the value oriented sectors of the hotel industry.

10/15/1999 Missed interest payment

11/15/1999 Made interest payment

(Contact: Todd Gray, 553-4688)

Mobile Energy Services Company, L.L.C.**Owner and operator of an energy complex**

\$85.0 million 6.95% Pollution Control Revenue Bonds, Ser. 1995 due 1/1/2020

\$238.1 million 8.665% Guaranteed First Mortgage Bonds due 1/1/2017

Mobile Energy Services Holdings Inc. and Mobile Energy Services Company, L.L.C. (together, "Mobile") are wholly-owned subsidiaries of the Southern Company. Mobile owns a Mobile, Alabama energy complex that processes black liquor (a pulp mill by-product) into green liquor (a pulp input) and manufactures electricity and steam which are sold to a pulp mill, a paper mill and a tissue mill all located adjacent to Mobile. Kimberly-Clark's (owner of the pulp mill) May 1998 announcement that it plans to shut down the pulp mill in 1999 has cast doubt upon Mobile's operating and financial viability. The pulp mill provides 85% of Mobile's fuel and 50% of Mobile's revenues. On January 14, 1999, the company filed for bankruptcy under Chapter 11 to secure additional time to pursue replacement fuel and electricity and steam sales arrangements. Embedded in the bankruptcy filing is a lawsuit against Kimberly-Clark pursuant to which Mobile alleges fraudulent transfer and breach of contract on the part of Kimberly-Clark.

01/14/1999 Chapter 11

(Contact: Andy Jacobyansky, 553-7819)

1999 Public Corporate Bond Defaults

NSM Steel (Delaware), Inc.

Finance subsidiary

\$203.5 million 12.25% Guaranteed Senior Subordinated Notes w/warrants, Ser. B due 2/1/2008

\$249.0 million 12% Guaranteed Mortgage Notes, Ser. A due 2/1/2006

\$53.1 million 12.75% Guaranteed Subordinated Mortgage Debentures, Ser. C due 2/1/2009

NSM Steel (Delaware), Inc., is a wholly-owned U.S. subsidiary of NSM Steel Company, Ltd., a Cayman corporation. In turn, NSM Steel Company, Ltd. is owned by Nakornthai Strip Mill Public Company Limited (NSM), a Thai steel company. Despite the technologically advanced systems employed at the mill and the planned exports of products designed to offset market risks, the Baht's consistent decline against the U.S. dollar since early 1997, coupled with local and regional recession and intensified competition from steel imports, derailed NSM's ability to operate as planned. Due to lightning damage to certain electrical equipment and funding constraints, NSM ceased production at its hot mill plant in Chonburi in December 1998. Subsequently, weakened by liquidity and adverse worldwide steel market conditions, on February 1, 1999 NSM failed to make a 12.25% interest payment on its \$203.5 million senior notes maturing in 2008.

02/01/1999 Missed interest payments on both the senior subordinated mortgage notes due 2008 and the subordinated mortgage debentures due 2009

08/01/1999 Missed interest payment on its 12% mortgage notes maturing in 2006

(Contact: Steven Oman, 553-1673)

OpTel, Inc.

Provider of communication services

\$225.0 million 13% Senior Notes due 2/15/2005

\$200.0 million 11.5% Senior Notes due 7/1/2008

On October 28, 1999 OpTel, Inc. filed for Chapter 11, following its second failed attempt in a year to raise equity through an IPO and the write-off by majority owner Videotron of its remaining investment in the company. The company's liquidity position has been eroding at an increasingly rapid pace over the last few quarters due to dismal operating performance--particularly with its video service products--and continued high capital spending levels to reconfigure its business strategy towards a more telephony-oriented focus. OpTel, Inc., headquartered in Dallas, Texas, provides cable television, telephone and high-speed Internet access services in 14 major US cities.

10/28/1999 Chapter 11

(Contact: Russell Solomon, 553-4301)

Orion Electric Company Ltd.

Manufacturer of electronic components

KRW 20,000.0 million 11% Guaranteed Korean Bonds, Ser. 18 due 1/8/2000 [\$16.7 million]

KRW 50,000.0 million 11% Korean Bonds, Ser. 31 due 8/31/2001 [\$41.7 million]

KRW 49,995.2 million 4% Convertible Korean Bonds, Ser. 26 due 3/31/2001 [\$41.7 million]

KRW 50,000.0 million 10% Korean Bonds Ser. 30 due 8/5/2001 [\$41.7 million]

KRW 20,000.0 million 11% Korean Bonds, Ser. 32 due 9/16/2000 [\$16.7 million]

KRW 30,000.0 million 11% Guaranteed Korean Bonds, Ser. 19 due 6/7/2000 [\$25.0 million]

KRW 50,000.0 million 12% Korean Bonds, Ser. 29 due 7/16/2000 [\$41.7 million]

KRW 10,000.0 million 7% Guaranteed Convertible Korean Bonds, Ser. 20 due 8/29/2000 [\$8.3

KRW 30,000.0 million 15% Guaranteed Korean Bonds, Ser. 22 due 12/5/2000 [\$25.0 million]

On October 29, 1999 Korea Exchange Bank, Orion Electric's major creditor bank, announced the approval by the company's domestic creditors of a distressed restructuring whereby principal payments on its debt will be suspended until the end of 2001. In addition, interest payments will be lowered during that period. Korean-based Orion Electric Company Ltd., manufactures electronic components for TVs and computer monitors. Orion is also a unit of Daewoo Corporation and part of its recent debt-restructuring program. Please refer to critique under Daewoo Corporation.

10/29/1999 Creditors agreed to delay all principal debt payments until the end of 2001 and lower interest payments during the debt freeze period

(Contact: Wolfgang Draack, 553-1653)

P.T. Inti Indorayon Utama**Producer of pulp and rayon fiber**

\$110.0 million 9.125% Senior Notes due 10/15/2000

\$60.0 million 7% Convertible Eurobonds due 5/2/2006

P.T. Inti Indorayon Utama (Indorayon), based in Indonesia, is a manufacturer of pulp, dissolving pulp and rayon fiber. Following a restructuring of its shareholdings in February this year, Indorayon was spun off from its previous parent, Asia Pacific Resources International Holdings Ltd. (APRIL) and is now 51% directly held by Indonesia's Sukanto Tanoto family. Social unrest due to environmental pollution from the company's Porsea mill resulted in a four month closure of the Indonesian mill until November 1998. Deliveries of raw materials were halted for nearly four months last year, and have been halted since January of this year, resulting in significant losses in production and revenues. The effects of these interruptions coupled with the likelihood that a majority of the bondholders intend to exercise the put option to redeem the bonds early, prompted Indorayon to announce on March 19, 1999 that the interest and principal payment due on March 29, 1999 on the \$150 million guaranteed eurobonds maturing in 2001 (issued through its wholly-owned Netherlands-based subsidiary Indorayon International Finance B.V.) will not be disbursed. The company has appointed Donaldson, Lufkin & Jenrette as its financial advisor to devise a debt restructuring program.

03/19/1999 Announced that its subsidiary Indorayon International Finance B.V. would miss interest and principal payment due on March 29, 1999 on \$150 million guaranteed eurobonds maturing in 2001

03/29/1999 Missed interest payment

04/15/1999 Missed interest payment on its senior notes maturing in 2000

04/27/1999 Announced that it would miss interest payment on its convertible eurobonds due on 5/2/99 and maturing in 2006

05/21/1999 Missed interest payment on its convertible eurobonds

(Contact: Gary Lau, 553-1653)

Pacific & Atlantic Holdings, Inc.**Shipping company**

\$125.0 million 11.5% First Preferred Ship Mortgage Notes due 5/30/2008

Pacific & Atlantic Holdings, Inc. failed to make the \$7.4 million interest payment due November 30, 1999 on its mortgage notes. The company embarked on a rapid expansion in 1997 to replace its aging fleet. The losses resulting from this strategy had negative repercussions on P&A's financial flexibility, given that the timing of its expansion coincided with a deteriorating freight rate environment in the drybulk and container feeder sectors. Pacific & Atlantic Holdings is a Liberian corporation with commercial and technical fleet management based in Piraeus, Greece, that operates a diversified fleet of handysize bulk carriers, multipurpose and container feeder vessels.

11/30/1999 Missed interest payment

12/30/1999 Made interest payment

(Contact: Heiko Neumann, 553-1653)

Pacific Can Investment Holdings Ltd.**Investment holding firm**

Sing\$ 20.8 million 2.5% Unsecured Loan Stocks w/warrants due 4/30/99 [\$12.3 million]

Based in Singapore, Pacific Can Investment Holdings Ltd. (Pacific Can), is a holding company which conducts business in construction, can-making, commercial properties rental and management services in Singapore, Malaysia and China. Declining concrete prices, persistent downturn in the retailing market and considerable costs from relocating its can-making factory from Singapore to Malaysia negatively impacted Pacific Can's financial results. Recurring losses at the group level led to cash flow problems and the announcement on April 8, 1999 of its inability to make principal payment due on April 30, 1999 on its maturing loan stocks.

04/08/1999 Announced that it would miss principal and interest payments on its maturing loan stocks due on 4/30/99

04/30/1999 Missed principal and interest payments

(Contact: Sarah Nichols, 553-3836)

1999 Public Corporate Bond Defaults

PanOceanic Bulk Carriers Limited Shipping company

\$100.0 million 12% Guaranteed First Preferred Ship Mortgage Notes, Ser. B due 12/15/2007

PanOceanic Bulk Carriers Limited, a Guernsey-registered company with management based in London, England, is an international shipping company which specializes in panamax size vessels, transporting dry bulk cargoes, including coal, grain iron ore, bauxite and alumina. The company's financial flexibility and cash flows were adversely impacted by severely depressed dry bulk carrier market conditions due to excess capacity and faltering demand (largely ignited by the Asian crisis) since early 1998. High leverage coupled with a lack of liquidity prompted PanOceanic to solicit from its noteholders the consent to withdraw escrowed funds in order to, among other things, make interest payment on notes due on December 15, 1998. As of January 25, 1999 PanOceanic redeemed all of its outstanding 12% first preferred ship mortgage notes maturing in 2007 at a redemption price of 75% of the principal amount, which, by Moody's definition, constituted a default since the issuer offered bondholders new securities that amounted to a diminished financial obligation.

12/24/1998 Distressed exchange offer

01/25/1999 Distressed exchange completed: bondholders agreed to receive \$750 in cash for each \$1,000 par amount of the 12% first preferred ship mortgage notes maturing in 2007

(Contact: Per Regnarsson, 553-1653)

Pegasus Shipping (Hellas) Limited S.A. Shipping company

\$144.0 million 11.875% First Preferred Mortgage Notes due 11/15/2004

Pegasus Shipping (Hellas) Ltd. missed the interest payment due November 15, 1999 on its first preferred mortgage bonds maturing 2004. The company's eroding performance is largely due to soft freight rates in the Panamax tanker market, which have adversely affected the value of its relatively aged fleet. In addition, the recent failure of Pegasus' major customer to honor its charter obligations further stressed the company's ability to support its excessive leverage, taken on in its aggressive debt-funded fleet expansion in 1997. Pegasus Shipping, incorporated in Bermuda, is one of the world's largest independent owners of Panamax tankers. It currently owns and operates 14 Panamax tankers and transports crude oil and heavier petroleum products along North American, South American and Caribbean trade routes.

11/15/1999 Missed interest payment

(Contact: Heiko Neumann, 553-1653)

Petsec Energy, Inc. Oil and gas company

\$100.0 million 9.5% Senior Subordinated Notes, Ser.B due 6/15/2007

Petsec Energy, Inc. missed payments on its bank debt and the coupon payment on its senior subordinated notes on December 15, 1999. Petsec became heavily leveraged after pursuing a debt-funded offshore drilling strategy in the Gulf of Mexico on a small, very short-lived reserve base. This ill-timed strategy was, moreover, initiated one year before the 1998 oil price collapse, resulting in poor cash flow, operating results. The company's cash flows inadequately covered debt service and drilling capex needed to replace short-lived production. Bank debt grew as the company borrowed to supplement cash flow to fund drilling activity, but Petsec's problem was compounded by unsatisfactory debt-funded drilling results. Although Petsec repaid most of its bank debt from proceeds of certain asset sales to its recent joint venture partner, subsequent drilling results, production, and cash flows were insufficient to generate internal funding for the remaining debt and capex needs. Petsec Energy, Inc., headquartered in Lafayette, Louisiana, is a petroleum exploration and production company with operations in the Gulf of Mexico.

10/29/1999 Missed principal payments on its revolving credit facility due 2001

12/15/1999 Missed interest payment on its senior subordinated notes due 2007

(Contact: Andrew Oram, 553-1649)

Planet Hollywood International, Inc.**Operator of theme restaurants**

\$250.0 million 12% Senior Subordinated Notes due 4/1/2005

Headquartered in Orlando, Florida, Planet Hollywood International Inc. operates 39 and franchises 42 theme restaurants under the names Planet Hollywood and Official All Star Café. Planet Hollywood's aggressive growth (from 18 units in 1994 to 81 units), poor execution in its restaurants, and merchandising missteps, led to steep declines in the company's operating performance. During this period Planet Hollywood's competitive position also became increasingly challenged as a large number of new players entered the theme restaurant segment. The company's extremely leveraged position, disappointing operating performance and dissipating liquidity position prompted the company's announcement on March 30, 1999 not to pay interest payment coming due April first on its 12% senior subordinated notes. While the company may have the necessary funds to disburse interest payment within the grace period, the uncertainty surrounding its turnaround strategy and the slow speed of asset sales which would help repay the bank facility and provide additional liquidity may prevent the company from doing so.

03/29/1999 Announced that it would miss interest payment

04/01/1999 Missed interest payment

10/12/1999 Chapter 11

(Contact: Michael Rowan, 553-4465)

Premier Cruises, Ltd.**Cruise operator**

\$160.0 million 11% Guaranteed Senior Notes due 3/15/2008

Premier Cruises, Ltd. (Premier), headquartered in Miami, Florida, is the world's fifth largest cruise operator. Premier has been negatively impacted by intense competition from bigger competitors. Relatively higher operating costs due to the fact that it operates generally older, smaller, and less well appointed ships have also contributed to its already vulnerable financial position. Since spring of 1998, the company has undergone a management change and, more recently, a capital restructuring. Premier's operating results continued to disappoint, and, as a result, interest payment on its \$160 million guaranteed senior notes was not disbursed on the March 15, 1999 due date.

03/15/1999 Missed interest payment

(Contact: Richard Mercier, 553-7885)

PRIMESTAR Satellite, Inc.**Satellite-television provider**

\$275.0 million 12.25% Senior Subordinated Discount Notes due 2/15/2007

\$200.0 million 10.875% Senior Subordinated Notes due 2/15/2007

On April 28, 1999 PRIMESTAR Satellite, Inc. came to an agreement with debtholders to repurchase its debt at a discount pursuant to the sale of its high power direct broadcast satellite assets to Hughes Electronics' DirecTV subsidiary. The company's ineffective business model, which included considerably higher subscriber acquisition costs and churn, coupled with an aggressive marketing effort that unsuccessfully attempted to stem defections and spur more growth in its subscriber base, largely contributed to PRIMESTAR's current capital deficiencies. In addition, the company's liquidity shortfall was evidenced by the eroding competitiveness of its product offering and further compounded by generally unreceptive debt markets. PRIMESTAR Satellite, Inc., headquartered in Englewood, Colorado, was a medium-power direct-to-home satellite broadcast provider with approximately 2.3 million subscribers at the time its debt repurchase agreement was announced.

01/22/1999 Purchase agreement with Hughes Electronics' Direct TV subsidiary to sell its direct-to-home satellite broadcast assets

02/01/1999 Distressed exchange offer

04/28/1999 Asset purchase agreement consummated for approximately \$1.35 billion in cash and stock; After rejecting the initial tender offer, holders of 84% of the senior subordinated notes received 85.6 cent in cash for each accreted dollar plus stock rights

04/29/1999 The company changed its name to Phoenixstar, Inc.

05/07/1999 Distressed exchange offer to purchase the outstanding notes upon the sale by the company of substantially all of its assets

06/04/1999 Sale of the company's assets effective

06/15/1999 Distressed exchange completed: holders of the senior subordinated discount notes agreed to receive \$735.87 in cash for each \$1,000 principal amount of such notes

(Contact: Russell Solomon, 553-4301)

1999 Public Corporate Bond Defaults

Purina Mills, Inc. **Manufacturer of animal nutrition products**

\$350.0 million 9% Senior Subordinated Notes due 3/15/2010

Purina Mills, Inc. did not make the coupon payment due September 15, 1999 on its subordinated notes maturing 2010. The company also deferred a principal payment due September 30, 1999, to its bank group, but has continued to make scheduled interest payments on its bank debt. Purina is continuing the financial restructuring discussions that were initiated in early September with its banks and noteholders. Extremely depressed hog prices have negatively impacted the company, which has significant swine market exposure, greatly weakening cash flow generation and financial flexibility. Purina Mills, Inc., headquartered in St. Louis, Missouri, is a wholly owned subsidiary of Koch Agriculture, a unit of Koch Industries, Inc., and is a leading manufacturer and provider of animal nutrition products.

- 09/14/1999 Announced that it would miss interest payment due 9/15/99
- 09/15/1999 Missed interest payment
- 09/30/1999 Missed principal payments on its bank debt
- 10/28/1999 Chapter 11

(Contact: Calvelli Helen, 553-7295)

RainTree Healthcare Corporation **Healthcare provider**

\$26.0 million 11% Senior Secured Notes due 1/1/2003

Six months after emerging from Chapter 11, RainTree defaulted again by missing the interest payment on its senior secured notes due July 1, 1999. Persistently unprofitable, the company has experienced higher than expected administrative and leasing costs. Declines in occupancy rates and the shift to the prospective payment system for Medicare (since the beginning of this year) aggravated its poor operating results. RainTree Healthcare Corporation (RainTree), headquartered in Scottsdale, Arizona, is a provider of long-term and specialty healthcare services through 41 facilities in the U.S.

- 07/01/1999 Missed interest payment

(Contact: Michael Murray, 553-7215)

Reliant Building Products, Inc. **Manufacturer of aluminum and vinyl-framed windows**

\$70.0 million 10.875% Senior Subordinated Notes, Ser. B due 5/1/2004

On November 1, 1999 Reliant Building Products, Inc. missed the interest payments on its subordinated notes due 2004. Because of its debt-financed acquisition strategy (it acquired the Care-Free Window Group in 1998), the company has accumulated substantial leverage relative to its cash generation levels. Despite efforts to reduce costs, Reliant has been unable to effectively realize synergies from its acquisition and bolster liquidity. Reliant Building Products, based in Dallas, Texas, is one of the largest manufacturers of residential aluminum and vinyl-framed windows in the United States.

- 11/01/1999 Missed interest payment

(Contact: Teresa McCarthy, 553-3878)

Sabratek Corporation **Provider of medical systems**

\$85.0 million 6% Convertible Subordinated Notes due 4/15/2005

On October 15, 1999 Sabratek Corporations missed the interest payment on its convertible notes due 2005. Operational difficulties, such as the recent distribution disruption of its pre-filled flush syringe products, have weakened the company’s revenues and, compounded with its aggressive acquisition strategy commenced in 1998, depleted its cash reserves. Sabratek Corporation, headquartered in Skokie, Illinois, is a provider of therapeutic and diagnostic medical systems for the alternate-site health care market.

- 10/15/1999 Missed interest payment
- 12/17/1999 Chapter 11

(Contact: Michael Murray, 553-7215)

SBS-Agro Finance B.V.**Non-U.S. Bank**

\$250.0 million 10.25% Guaranteed Eurobonds due 7/21/2000

On July 21, 1999 SBS-AGRO missed the interest payment on its eurobonds maturing in 2000 (issued through SBS-Agro Finance B.V.). The bank's heavy use of short-term foreign bank borrowings in the form of repurchase transactions backed by its large holdings of MinFin debt securities left it vulnerable in the depressed Russian securities market of 1998. The financial market crisis prompted last year by the government's effective default added to the bank's problems and sparked a run on the bank's relatively large retail deposit base. Despite these difficulties SBS-AGRO has managed to retain its license. SBS-AGRO Bank (SBS-AGRO) is one of the largest private banks in Russia.

07/21/1999 Missed interest payment

(Contact: Pavel Simacek, 553-1653)

Semi-Tech Corporation**Provider of consumer products**

\$334.6 million 11.5% Guaranteed Senior Secured Discount Notes due 8/15/2003

Deterioration of the holding company's portfolio of companies, which include Singer, Pfaff, and Semi-Tech Global (Akai and Sansui), has largely contributed to Semi-Tech Corporation's Chapter 11 bankruptcy filing in the Southern District Court of New York on September 6, 1999. Poor cash flow flexibility, due to operational and market weaknesses, resulted in unsupportable leverage. Moreover, certain of its acquisitions (mostly through Singer), including the Pfaff acquisition in 1998, further hurt the company's financial health. Semi-Tech Corporation, headquartered in Markham, Ontario, Canada, is a holding company engaged in the retailing and distribution of sewing products, consumer durables, and consumer electronics.

09/07/1999 Chapter 11

(Contact: Christina Padgett, 553-4164)

Sharp Do Brazil S.A.- Equipamentos Eletronicos**Provider of consumer electronics products**

\$120.0 million 9.625% Eurobonds due 10/30/2005

On October 30, 1999 Sharp Do Brazil S.A.- Equipamentos Eletronicos missed the coupon payment on its eurobonds. An unfavorable retail market and the devaluation of the Brazilian real in mid-January negatively impacted the company's operating performance and indebtedness. Sharp S.A., headquartered in Sao Paulo, Brazil, manufactures consumer electronics, banking and retail automation and telecommunications systems.

10/30/1999 Missed interest payment

(Contact: Tatsuya Mizuno, 553-1653)

Shin Yen Textile Company, Ltd.**Textile company**

Taiwan Dollar 21.0 million 1% Convertible Notes due 12/18/2004 [\$0.6 million]

Shin Yen Textile Company, Ltd., located in Taiwan, has recently diversified its businesses. Initially an acrylic yarns manufacturer, it has expanded into real estate development. Nineteen-ninety-eight's regional economic slowdown, and the coincident real estate market down-turn, negatively impacted Shin Yen's real estate operations. As a consequence of its cash flow problems, Shin Yen Textile filed for receivership at the Taipei District Court on May 21, 1999.

05/21/1999 Filed for receivership

(Contact: Catherine Guinee, 553-4385)

1999 Public Corporate Bond Defaults

Singer Company N.V. **Manufacturer of consumer sewing machines**

\$150.0 million 7% Senior Notes due 4/1/2003

Parent of Semi-Tech Corporation. See accompanying critique under Semi-Tech Corporation.

09/07/1999 Semi-Tech Corporation, the parent company, filed for Chapter 11

09/13/1999 Chapter 11

(Contact: Christina Padgett, 553-4164)

SmarTalk TeleServices, Inc. **Provider of prepaid telecommunications**

\$150.0 million 5.750% Convertible Subordinated Notes due 9/15/2004

SmarTalk TeleServices, Inc., headquartered in Dublin, Ohio, is a provider of prepaid telecommunications and wireless products and services primarily through the SmarTalk calling card. The company's aggressive expansion through acquisitions and investments in marketing of its products (both activities primarily financed by debt and proceeds from issuance of stock) resulted in ballooning leverage and operating losses. In addition, SmarTalk's questionable accounting practices and methods relating to revenue recognition and accounting for acquisitions led to the restatement of earnings and a slue of lawsuits. The company recorded a net loss of \$67.1million for the nine-month period ended September 30, 1998 compared to a net loss of \$4.2 million for the same period in 1997. After engaging two investment bankers to help it evaluate available alternatives, on January 19, 1999 SmarTalk announced the agreement to sell its assets to AT&T for \$192.5 million in cash and the filing of Chapter 11 petition in the U.S. Bankruptcy Court.

01/19/1999 Chapter 11

(Contact: Marcus Jones, 553-7721)

Sociedad Comercial del Plata S.A. **Oil and public utility holding company**

\$25.0 million 0% Euro Medium Term Notes due 4/13/99

\$40.0 million 10.75% Euro Medium Term Notes due 3/12/2000

\$125.0 million 11.5% Eurobonds due 5/9/2000

SwFr 60.0 million 9% Swiss Bonds due 12/21/2000 [\$40.3 million]

Sociedad Comercial del Plata S.A. (SCP), headquartered in Buenos Aires, Argentina, is an oil and public utility holding company. Disappointing results at its entertainment subsidiaries due to cost overruns, and weak operating performance at its oil and gas subsidiary due to depressed international oil prices during 1998 led to a current cash flow deficit. Despite its recent efforts to reduce its heavy debt by selling off some of its assets, the company has been unable to solve its cash flow problems. Subsequently, on April 13, 1999 SCP failed to repay a total of \$25 million in principal at maturity on its euronotes.

04/13/1999 Missed principal payment on its \$25 million maturing zero coupon euro medium term notes

05/03/1999 Missed interest payment on its \$125 million eurobonds maturing in 2000

05/06/1999 Announced that it would suspend all debt payments

(Contact: Andy Jacobyansky, 553-7819)

Southern Mineral Corporation **Oil and gas company**

\$41.4 million 6.875% Convertible Subordinated Debentures due 10/1/2007

Southern Mineral Corporation was unable to make the interest payment due October 1, 1999 on its convertible subordinated debentures maturing in 2007. Crippled by debt, the company failed to finalize a financial restructuring that involved equity infusion, the sale of certain assets and a distressed exchange of its convertible bonds. The ill-timed cash and equity acquisitions of Neutrino Resources, Inc. and Amerac Energy Corporation in 1998, coupled with lower oil and gas prices, aggravated Southern Mineral's poor cash flow condition. Southern Mineral Corporation, headquartered in Houston, Texas, is an oil and gas company that operates in the Texas Gulf Coast, Canada and Ecuador.

07/21/1999 Distressed exchange offer

10/01/1999 Missed interest payment

10/29/1999 Chapter 11

(Contact: Andrew Oram, 553-1649)

Specialty Foods Acquisition Corporation**Producer of baked goods**

\$319.3 million 13% Senior Secured Discount Debentures, Ser. B due 8/15/2005

Specialty Foods Acquisition Corporation (Specialty Foods), headquartered in Deerfield, Illinois, produces, markets and distributes through its subsidiaries bakery products throughout the U.S.. The company's numerous acquisitions over the past year have left the company highly leveraged and aggravated its already weak financial condition, consequently depleting its cash reserves. On June 11, 1999 holders of the 11.25% senior subordinated notes due 2003 (issued through Specialty Foods Corporation) agreed to receive a consent fee of \$35 for each \$1,000 par amount. Holders of the 11.125% and 10.25% senior notes due 2002 and 2001 (also issued through Specialty Foods Corporation) received \$10 for each \$1,000 par amount, respectively. Holders of the 13% senior secured discount debentures due 2005 (issued through Specialty Foods Acquisition Corporation) agreed to extend the initial coupon payment from February 2000 to December 2004, and extend the maturity date from August 2005 to June 2009.

05/12/1999 Distressed exchange offer

06/11/1999 Distressed exchange of the 13% senior secured discount debentures maturing in 2005 was approved by the majority of bondholders and initial coupon payment date was postponed from February 2000 to December 2004

(Contact: Philip Li, 553-4578)

Specialty Foods Corporation**Producer of baked goods**

\$200.0 million 11.25% Senior Subordinated Notes, Ser. B due 8/15/2003

\$225.0 million 10.25% Senior Notes, Ser. B due 8/15/2001

\$150.0 million 11.125% Senior Notes, Ser. B due 10/1/2002

A unit of Specialty Foods Acquisition Corporation. See accompanying critique under Specialty Foods Acquisition Corporation.

05/12/1999 Distressed exchange offer

06/11/1999 Distressed exchange approved by bondholders of Specialty Foods Acquisition Corporation (the parent) and Specialty Foods Corporation (the subsidiary); lenders approved the extension of the revolving credit and term loan from January 2000 to January 2001

(Contact: Philip Li, 553-4578)

Sri Thai Superware Public Company Limited**Plastic and melamine products manufacturer**

\$60.0 million 3.25% Convertible Eurobonds due 6/13/2006

Sri Thai Superware Public Company Limited (Srithai), headquartered in Bangkok, Thailand, is a major producer of plastic and melamine household products. Following the domestic and regional economic crisis that began in 1997, the company saw its revenues plummet and its financial situation gradually deteriorate. In addition, Srithai's attempts to boost exports to offset the shortfall in domestic demand for its products have not been successful. Continued negative operating performance finally culminated in the company's decision to seek a court-led restructuring of its mostly dollar-denominated debts. On April 27, 1999 Srithai filed a petition for reorganization under Section 90 with the recently created Thai Bankruptcy court.

10/28/1997 Suspended debt repayments

04/27/1999 Filed for Section 90 of the Thai Bankruptcy Act

(Contact: Emi Ueji, 553-1653)

Stuart Entertainment, Inc.**Manufacturer of bingo-related products**

\$100.0 million 12.5% Senior Subordinated Notes due 11/15/2004

Stuart Entertainment, Inc. (Stuart), headquartered in Council Bluffs, Iowa, is a leading manufacturer of bingo paper, pulltab tickets and related gaming equipment and supplies, with locations in the U.S., Canada and Mexico. The company's main line of business is at odds with the growing demand for electronic bingo products and its recent diversification efforts through acquisitions failed to boost earnings. Being highly leveraged and persistently unprofitable, Stuart was unable to make the interest payment on its 12.5% senior subordinated notes due on May 15, 1999.

05/15/1999 Missed interest payment

08/13/1999 Chapter 11

12/15/1999 Reorganization plan confirmed

(Contact: Todd Gray, 553-4688)

1999 Public Corporate Bond Defaults

Sun Healthcare Group, Inc. Healthcare provider

- \$83.3 million 6% Convertible Subordinated Debentures due 3/1/2004
- \$345.0 million 7% Convertible Junior Subordinated Debentures due 5/1/2028
- \$150.0 million 9.375% Senior Subordinated Notes due 5/1/2008
- \$25.0 million 6.5% Convertible Subordinated Debentures due 8/1/2003
- \$250.0 million 9.5% Senior Subordinated Notes due 7/1/2007

Sun Healthcare Group, Inc. (Sun Healthcare), headquartered in Albuquerque, New Mexico, is a diversified international long-term care provider operating long-term and post acute care facilities in the U.S., UK, Spain, Germany and Australia. The dramatic deterioration in the company’s operating results and financial condition primarily stems from the transition to the prospective payment system for Medicare and the ensuing restructuring charges. After its announcement on April 13, 1999, Sun Healthcare missed a dividend payment on its convertible trust preferred securities due 2028 (issued through its subsidiary, Sun Financing I). Moreover, the company also failed to make interest payment due on April 29, 1999 on its \$150 million subordinated notes maturing in 2008. Concurrently, the company indicated that it would make every effort to disburse interest payment within the grace period.

- 04/13/1999 Announced that it would miss dividend payment on its 7% guaranteed trust preferred capital securities due on 5/1/99 and maturing in 2028 (through its subsidiary Sun Financing I)
- 04/29/1999 Missed interest payment on its 9.375% senior subordinated notes maturing in 2008
- 05/01/1999 Missed dividend payment (issued through Sun Financing I) and interest payment on its \$150 million subordinated notes maturing in 2008
- 10/14/1999 Chapter 11

(Contact: Michael Murray, 553-7215)

Supercanal Holding S.A. Cable television operator

- \$300.0 million 11.5% Senior Notes due 5/15/2005

Supercanal Holding S.A. (Supercanal), headquartered in Mendoza, Argentina, is the third largest cable television operator in the country with approximately 425, 000 subscribers. Recent subscriber erosion due to non-payment/disconnection and churn following rate increases resulted in reduced cash flows. Rapid acquisition growth and ensuing integration problems have further deteriorated Supercanal’s operating performance. High indebtedness combined with poor liquidity led to the recent breach of certain covenants under its bank credit facility and the company’s inability on May 15, 1999 to make the interest payment on its senior notes.

- 05/15/1999 Missed interest payment
- (Contact: Russell Solomon, 553-4301)

TBS Shipping International Limited Shipping company

- \$110.0 million 10% Guaranteed First Preferred Ship Mortgage Notes due 5/1/2005

Registered in Bermuda, TBS Shipping International Limited (TBS) is an ocean transportation services company that operates a fleet of 20 owned and chartered vessels in scheduled liner service transporting high value, time-sensitive cargoes primarily to and from ports in South America. The current economic turmoil in Asia, the low level of fish meal production due to the impact of El Nino and the entry of other carriers in the Latin American markets, have adversely affected the company’s revenues. The resulting imbalance of trade with Asian exports surging and imports languishing, as well as a decline in freight rates on TBS’ s principal liner routes has caused a cash shortfall that became eminent when on April 30, 1999 the company announced that it would not be able to pay interest payment on its first preferred ship mortgage due 2005.

- 04/30/1999 Announced that it would miss interest payment due on 5/1/99
 - 05/01/1999 Missed interest payment
- (Contact: Richard Bittenbender, 553-0396)

Technology Resources Industries Bhd.**Cellular-telecommunications company**

\$175.0 million 2.75% Convertible Eurobonds due 11/28/2004

Technology Resources Industries Bhd. (TRI), failed to make the principal and coupon payment on its \$175 million convertible eurobonds due November 28, 1999 and maturing 2004, the second debt issue it has defaulted on in a month. TRI did not honor a put option requiring the company to buy back its bonds at a 48.67% premium. A drop in subscriber numbers due to the build up in GSM prepaid services, together with intense competition in the cellular market, has adversely affected the company's operating position. Moreover, the collapse of the Ringgit in Mid-1997 rendered debt payments in US dollars more difficult. Technology Resources Industries, is Malaysia's largest cellular phone company.

10/29/1999 Missed principal and interest payments on its \$200 million zero coupon convertible bonds

11/28/1999 Missed principal and interest payments on its \$175 million convertible eurobonds

(Contact: Charles MacGregor, 553-1653)

Telegroup, Inc.**Provider of telecommunications services**

\$97.0 million 0% Senior Discount Notes due 11/1/2004

Telegroup, Inc., headquartered in Fairfield, Iowa, is a provider of long distance telecommunications services to residential and small and medium-sized business customers worldwide. Significant start-up investments into building and expanding its telecommunications network have had a negative impact on the company's financial position as it mostly used outside financing to implement its business plans. After a series of consecutive operating losses and inability to borrow more in late 1998 due to unfavorable market conditions, Telegroup faced a severe liquidity crunch and announced a major restructuring plan ranging from reduction of the workforce to a possible sale of some of the assets. Subsequently, on February 11, 1999 Telegroup sought protection under Chapter 11 and appointed Alvarez & Marsal, a corporate turnaround specialist, as its financial advisor.

02/10/1999 Chapter 11

05/28/1999 Assets sold

(Contact: Douglas Bontemps, 553-3779)

Teletrac, Inc.**Provider of wireless fleet management services**

\$105.0 million 14% Senior Notes, Ser. B due 8/1/2007

Teletrac, Inc., headquartered in Carlsbad, California, provides wireless fleet management services in twelve metropolitan markets throughout the U.S.. Limited customer growth and considerable costs for network build-outs led to recurring losses since the company's inception in 1996. Its rapid debt-financed expansion program resulted in excessive leverage and liquidity problems. Consequently, on June 9, 1999 the company filed for Chapter 11 in Wilmington, Delaware.

06/09/1999 Chapter 11

(Contact: Marcus Jones, 553-7721)

Tevecap S.A.**Pay television operator**

\$250.0 million 12.625% Senior Notes, Ser. A due 11/26/2004

Tevecap S.A., headquartered in Sao Paulo, Brazil, is a pay television provider through cable, wireless cable, C-band and Ku-band satellite, and UHF technologies. Significant start-up costs have contributed to the company's recurring losses and its present negative working capital. Brazil's deteriorating economic condition and high interest rate environment has impaired Tevecap's ability to meet its debt obligations. Weakening of the Brazilian real has further worsened Tevecap's operating performance, since its revenues are denominated in real while its costs are denominated in U.S. dollars. On June 3, 1999 the majority of bondholders approved Tevecap's distressed exchange offer, receiving \$500 in cash for each \$1,000 par amount of the 12-5/8% senior notes due 2004. Cash for the distressed exchange offer will be raised from the proceeds of the sale of its interest in the DIRECTV and satellite-TV services to Galaxy Latin America.

05/19/1999 Distressed exchange offer

06/03/1999 Distressed consent solicitation approved: bondholders agreed to receive \$500 in cash for each \$1,000 par amount of the 12.625% senior notes maturing in 2004

07/28/1999 Distressed exchange completed

(Contact: Russell Solomon, 553-4301)

1999 Public Corporate Bond Defaults

Thorn Apple Valley, Inc.

Producer of meat products

\$17.3 million 9% Convertible Subordinated Debentures due 4/1/2007

Thorn Apple Valley, Inc. (Thorn Apple), headquartered in Southfield, Michigan, is a producer of processed meat and poultry products. Persistent declining sales since 1996 due to increased domestic competition prompted the company to shift product mix strategy from lower-margin to higher-margin premium processed and proprietary branded products. As a result of the strategic shift, the company decided in July 1998 to shut down its fresh pork business, taking a charge of \$39.3 million during the fourth quarter of 1998. Furthermore, the recent collapse of the Russian ruble in August 1998 reduced significantly the value of its export business. The company's already weak financial position was further exacerbated when in January 1999 it recalled six months' worth of processed meat products because of potentially tainted meats. The actual costs and uncertainties due to the recall triggered Thorn Apple's decision to seek protection under Chapter 11 on March 5, 1999.

03/05/1999 Chapter 11

07/23/1999 IBP, Inc.'s bid to buy the pork plants from Thorn Apple Valley, Inc. was approved by U.S. Bankruptcy

(Contact: Philip Li, 553-4578)

Traffic Stream (BVI) Infrastructure Company, Ltd.

Toll road operator

\$119.0 million 14.25% Senior Secured Notes due 5/1/2006

Traffic Stream (BVI) Infrastructure Company, Ltd., based in Hong Kong, owns and operates six toll roads in Guangdong Province and Shangdong Province, the People's Republic of China (PRC). The widely-debated minimum return guarantee issue in the PRC has resulted in payment delays from the company's investments particularly in the Shangdong Province. This has impaired its cash flow flexibility. On May 3, 1999 the company failed to make the 14.25% interest payment on its senior secured notes.

05/03/1999 Missed interest payment

(Contact: Takahiro Morita, 553-1653)

TransAmerican Energy Corporation

Oil and gas company

\$1,021.0 million 0% Senior Secured Discount Notes, Ser. B due 6/15/2002

\$475.0 million 11.5% Senior Secured Notes, Ser. B due 6/15/2002

TransTexas Gas Corporation (TTG), headquartered in Houston, Texas, is a small independent oil and natural gas exploration and production company. In 1997, TTG sold its core Lobo property for just under \$1 billion. At the same time, its parent, TransAmerican Energy Corp. (TEC) issued \$1.5 billion in high yield bonds. Together, these transactions recapitalized the TEC group and attempted to raise sufficient funding of TEC's effort to complete a large refinery construction and upgrade project. TTG was saddled with far more intercompany and external debt than it could service while simultaneously aggressively reinvesting to re-grow its exploration and production business. The deep gas drilling and production program under-performed relative to debt service requirements due to high drilling, development, and completion capex and short-lived production that could not accelerate cash flows fast enough to get ahead of debt service. Very high leverage and high mandatory capex needed to maintain production impaired TTG's ability to meet debt service and stay current with the trade. On April 19, 1999 TTG filed in the State of Delaware for relief under Chapter 11 with the U.S. Bankruptcy code.

04/20/1999 Chapter 11

(Contact: Andrew Oram, 553-1649)

TransAmerican Refining Corporation

Oil and gas company

\$200.0 million 16% Senior Subordinated Notes, Ser. B due 6/30/2003

See accompanying critique on TransAmerican Energy Corporation.

04/20/1999 Chapter 11

(Contact: Andrew Oram, 553-1649)

TransTexas Gas Corporation**Oil and gas company**

\$115.8 million 13.75% Senior Subordinated Notes, Ser. D due 12/31/2001

See accompanying critique on TransAmerican Energy Corporation.

04/19/1999 Chapter 11

(Contact: Andrew Oram, 553-1649)

TRISM, Inc.**Trucking company**

\$86.2 million 10.75% Senior Subordinated Notes due 12/15/2003

TRISM, Inc., headquartered in Kennesaw, Georgia, is the largest trucking company in the U.S., specializing in hauling heavy machinery and equipment, explosives and radioactive materials. Deteriorating operating performance in all its business segments since 1996, caused by difficulties in the integration of acquisitions and competitive pressures, led to faltering cash flows and an inability to continue necessary fleet renewal expenditures. Driver turnover and maintenance costs increased substantially placing further pressure on operating efficiency and cash flow. Disappointing results for the first quarter of 1999 led to TRISM's decision on June 10, 1999 to suspend the interest payment due June 15, 1999 on its senior subordinated notes.

06/10/1999 Announced that it would miss interest payment due June 15, 1999

06/15/1999 Missed interest payment

09/10/1999 Distressed exchange completed: a portion of the notes will be converted into new 12% notes worth \$30 million due 2004; the remainder of the notes will be converted into 95% of the new common equity to be issued after recapitalization

09/16/1999 Prepackaged Chapter 11

12/09/1999 Reorganization plan confirmed

(Contact: Richard Bittenbender, 553-0396)

Tultex Corporation**Manufacturer of active-wear products**

\$75.0 million 9.625% Guaranteed Senior Notes due 4/15/2007

\$110.0 million 10.625% Guaranteed Senior Notes due 3/15/2005

Tultex Corporation, headquartered in Martinsville, Virginia, is a manufacturer and marketer of active-wear and private label products. The company's earnings were hurt by continued weak demand for fleece and worldwide overcapacity in T-shirts which pressured pricing and margins for these products and led to aggressive selling practices by the company to lower its swelled inventory levels, currently at 9 months. Tultex's reliance on cost reductions rather than sales growth to reduce leverage, has borne negative operating results. As part of the debt reduction plan, on May 10, 1999 bondholders agreed to receive \$600 in cash for each \$1,000 par amount of the senior notes maturing in 2005 and 2007. At the same time, lenders of the \$53.8 million credit facility received \$0.72 per dollar of outstandings, and agreed to forgive \$15 million of borrowing.

04/13/1999 Distressed exchange offer

05/10/1999 Distressed exchange completed: bondholders received \$600 in cash for each \$1,000 par amount of the 10.625% and 9.625% senior notes maturing in 2005 and 2007, respectively; lenders received \$0.72 per dollar of the \$53.8 million outstanding credit facility

12/03/1999 Chapter 11

(Contact: Catherine Guinee, 553-4385)

TV Filme, Inc.**Wireless cable operator**

\$120.0 million 12.875% Senior Notes due 12/15/2004

TV Filme, Inc., headquartered in Brasilia, Brazil, has established wireless cable operating systems in the cities of Brasilia, Goiania and Belem, and has approximately 75,000 subscribers. The recent devaluation of the real has hurt the company's operating performance, since its costs are largely U.S. dollar denominated. Declining subscription figures coupled with heightened competition from cable companies and satellite services have also hurt TV Filme's existing operations. Furthermore, substantial capital needs for subscriber-based equipment and installation costs have eroded its cash reserves. With the last of its interest escrow paid out in December 1998, and two failed attempts at tendering for the notes at deep discounts of 15%-25% of face value, TV Filme opted not to make the 12-7/8% coupon payment on its senior notes due June 15, 1999.

06/15/1999 Missed interest payment

08/13/1999 Prepackaged bankruptcy agreement

(Contact: Russell Solomon, 553-4301)

1999 Public Corporate Bond Defaults

UNEXIM International Finance B.V.

Finance subsidiary

\$50.0 million FLT% Guaranteed Euronotes due 1/24/2000

\$250.0 million 9.875% Guaranteed Eurobonds due 9/14/2000

United Export Import Bank JSC (Unexim Bank), headquartered in Moscow, Russia, was one of the largest banks in Russia at mid-year 1998. Up until now, it has been a member of the Interros Financial-Industrial Group, providing banking services to group members consisting of large companies in key industries. Unexim has been severely hurt by the Russian market crisis. It had been very active in the forwards market and has had a significant government securities portfolio. These activities have resulted in large losses because of the government's debt restructuring and de facto rouble devaluation. The combination of losses on government securities, forward contracts, and loans has threatened the bank's solvency. The bank also has big loan and deposit concentrations, and its deposit base has contracted as a result of the crisis. Unexim Bank, currently under a restructuring plan approved by the Central Bank, on January 27, 1999 failed to make interest payment on a \$50 million three-year floating-rate global note maturing in 2000 (issued through its wholly-owned Netherlands-based subsidiary UNEXIM International Finance B.V.). Unexim has appointed a Russian subsidiary of Robert Fleming & Co., Ltd. to advise it on its negotiations with creditors.

01/27/1999 Missed interest payment on its \$50 million floating rate euronotes maturing in 2000

02/01/1999 Missed interest payment on 9.875% eurobonds due 2000

11/16/1999 Distressed exchange offer approved by creditors

(Contact: Larry Pellecchio, 553-1653)

United Companies Financial Corporation

Consumer finance company

\$150.0 million 8.375% Subordinated Notes due 7/1/2005

\$100.0 million 7.7% Senior Notes due 1/15/2004

\$125.0 million 9.35% Senior Notes due 11/1/99

United Companies Financial Corporation (UC), headquartered in Baton Rouge, Louisiana, is a consumer finance company which specializes in originating, securitizing, and servicing non-prime home equity and manufactured housing loans. With its high debt burden and negative cash flow from operations, UC's funding flexibility has been persistently under pressure. Over the past few years, an increased level of delinquencies in its home equity portfolio and tightened competitive business environment have hurt UC's operating performance. Moreover, higher than expected loan prepayments and increased expenses related to the expansion of the company's retail franchise also contributed to the erosion of cash flow. The restructuring plan launched in October 1998 aimed at improving the company's profitability and cash flow has not been effective and failed to provide sufficient liquidity to improve loan production. Consequently, on March 2, 1999 UC filed for Chapter 11 protection in order to reorganize its capital structure.

01/01/1999 Missed dividend payment on preferred stock

03/01/1999 Chapter 11

(Contact: Steve Nelson, 553-3781)

Universal Standard Healthcare, Inc.

Healthcare provider

\$11.6 million 8.25% Convertible Subordinated Debentures due 2/1/2006

Universal Standard Healthcare, Inc., headquartered in Southfield, Michigan, is a managed care health services provider operating in 50 states. The company currently provides clinical laboratory and home medical services to employers on a fee-for-service basis. Intense competition in the industry and increasing laboratory operating difficulties have choked revenues since 1995. Universal attempted to restructure its business by divesting certain clinical laboratory assets, which included customer lists, through a reengineering process scheme. The company suffered from charges related to these divestitures, and as a result faced liquidity problems. Net losses were \$7 million and \$0.8 million for the nine-month period ending September 1997 and 1998, respectively. Moreover, the company has defaulted on certain of its bank loan covenants since 1998, which aggravated Universal's access to additional borrowing and contributed to its inability on February 1, 1999 to make an 8.25% interest payment on its convertible notes maturing 2006.

02/01/1999 Missed interest payment

(Contact: Margaret Sunier, 553-4946)

USN Communications, Inc.**Provider of local telephone services**

\$152.7 million 0% Senior Discount Notes w/warrants due 8/15/2004

USN Communications, Inc. (USN), headquartered in Chicago, Illinois, provides a range of telecommunications products and services, focused on the resale of local and long distance service. The company's operating results have consistently fallen below expectations. Its high operating costs as well as large capital requirements to develop its business resulted in sizable losses and depleted its cash reserves. The company recorded a net loss of \$147 million for the nine month period ended September 30, 1998 compared to a net loss of \$73.6 million for the same period in 1997. Furthermore, the fact that USN has been operating in the low-margined reseller segment of the telephone market made it even more difficult for the company to generate cash flow, given its high cost structure. The company has also been negatively affected by inadequacies of its back office operations, including billing and customer support problems. Disappointing current operating performance and uncertain future prospects limited the management's options. On February 18, 1999 USN filed for Chapter 11 protection in Wilmington, Delaware.

02/18/1999 Chapter 11

(Contact: Douglas Bontemps, 553-3779)

Vencor Operating, Inc.**Healthcare provider**

\$300.0 million 9.875% Guaranteed Senior Subordinated Notes due 5/1/2005

Vencor, Inc. (Vencor), headquartered in Louisville, Kentucky, is one of the nation's largest long-term care providers operating hospitals, nursing centers and contract ancillary services in 46 states. The company's operating performance has been adversely impacted by the long term care industry's transition to the prospective payment system for Medicare. In addition, operating difficulties related to its rapid expansion and regulatory problems have significantly deteriorated the company's results across its major divisions. Further, the company is burdened with high leverage, onerous lease obligations and tight liquidity. Substantial recent losses led to covenant violations under its bank facility and its subsequent inability on May 3, 1999 to make the interest payment on its guaranteed senior subordinated notes maturing in 2005 (issued through its subsidiary Vencor Operating, Inc.).

05/03/1999 Missed interest payment

09/13/1999 Chapter 11

(Contact: Michael Murray, 553-7215)

Vista Eyecare, Inc.**Operator of optical vision centers**

\$125.0 million 12.75% Guaranteed Senior Notes due 10/15/2005

Vista Eyecare, Inc. did not make its interest payment due October 15, 1999 on its senior notes maturing in 2005. Declining operating results in 1999 precipitated covenant violations under its bank credit agreement and Vista Eyecare's payment default. The company has been suffering under excessive leverage after two fully-valued acquisitions in 1998 that hurt its operating performance. Moreover, Vista Eyecare has been experiencing increased financial pressure due to the growth of managed care, aggressive price competition, and consolidation by the largest competitors. Vista Eyecare, Inc., headquartered in Lawrenceville, Georgia, is one of the nation's largest optical companies with approximately 920 vision centers operating in host stores and as stand-alone locations.

10/15/1999 Missed interest payment

(Contact: Marie Menendez, 553-4126)

Vitkovice A.S.**Steel company**

CZK 1,000.0 million 13.5% Czech Bonds due 6/22/2000 [\$28.2 million]

Vitkovice A.S. is a Czech-based metallurgy and engineering firm which is 67% owned by the state through the National Property Fund. The company suffered from low investment activity at home and abroad as a result of a global slow-down in the metallurgy products market, stiff competition and unfavorable exchange rates for the Czech crown. Vitkovice's decision in November of 1998 to shut down its main steel mill until February 1999 for modernization purposes further eroded its operating results and contributed to its inability to make the interest payment due June 22, 1999 on its bonds maturing in 2000.

06/22/1999 Missed interest payment

(Contact: Simon Atkinson, 553-1653)

1999 Public Corporate Bond Defaults

Wireless One, Inc.

Provider of cable television systems

\$150.0 million 13% Senior Notes w/warrants due 10/15/2003

\$239.3 million 0% Senior Discount Notes w/warrants due 8/1/2006

Wireless One, Inc.(Wireless), headquartered in Jackson, Missouri, operates wireless cable systems primarily in small to mid-size markets in the southern and southeastern United States. Aggressive growth achieved mainly through debt-financed acquisitions and mergers resulted in high indebtedness. The company reported net losses of \$66 million and \$62 million for the nine month period ended September 30, 1998 and 1997, respectively, principally because of continued considerable capital investments into the development of its systems and overall unprofitable operations. Operating losses and bleak future outlook precluded the company from securing additional financing. Given its present capital needs, lack of liquidity and inability to borrow more, the company was able to reach an agreement with bondholders on a distressed restructuring. On February 11, 1999 Wireless filed a prepackaged Chapter 11 plan to facilitate the agreed upon restructuring.

02/11/1999 Prepackaged Chapter 11

10/25/1999 Reorganization plan confirmed and emergence from Chapter 11; Acquired by MCI Worldcom through equity

(Contact: Russell Solomon, 553-4301)

XCL Ltd.

Oil and gas company

\$64.0 million 13.5% Guaranteed Senior Secured Notes, Ser. A due 5/1/2004

XCL Ltd., headquartered in Lafayette, Louisiana, is an oil and gas exploration and production company that shifted its U.S. operations to the People's Republic of China in 1995. The company's investments in China have failed to generate any revenues as production at its Chinese properties has not commenced. Increased leverage resulting from necessary capital expenditures coupled with recurring net losses since 1994 have depleted the company's cash reserves. On May 1, 1999 XCL was unable to make the interest payment on its senior secured notes.

05/01/1999 Missed interest payment

06/29/1999 Apache Corporation's Apache China unit filed a petition to place XCL Ltd.'s XCL China unit into involuntary bankruptcy

11/01/1999 Missed interest payment

(Contact: Hugh Scott, 553-1328)

Zenith Electronics Corporation

Consumer electronics manufacturer

\$103.5 million 6.25% Convertible Subordinated Debentures due 4/1/2011

\$55.0 million 8.5% Convertible Senior Subordinated Debentures due 11/19/2000

Zenith Electronics Corporation (Zenith), headquartered in Glenview, Illinois, is a manufacturer of consumer electronics and network systems products. Reduced demand for its lower margin color TVs and its network systems division, as well as the adverse effect of competitive pressures particularly from Japanese TV makers, led to considerable operating losses. Recurring negative results coupled with substantial leverage contributed to the company's announcement on May 21, 1998 of a restructuring plan, including a prepackaged Chapter 11 which has yet to be approved by the noteholders. The reorganization plan has caused Zenith to incur \$202.3 million of restructuring charges in 1998, intensifying its financial dependence on its major shareholder, LG Electronics, Inc. (a unit of LG Group). After suspending certain payments on bank loans and pending bankruptcy filing of its restructuring plan, on April 1, 1999 Zenith decided not to make a 6.25% interest and principal payment on its \$103.5 million convertible subordinated debentures maturing in 2011.

04/01/1999 Missed interest and principal payment on its \$103.5 million subordinated debentures maturing in 2011

08/23/1999 Prepackaged Chapter 11

11/08/1999 Reorganization plan confirmed

(Contact: Howard Sitzler, 553-4312)

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