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Special Comment

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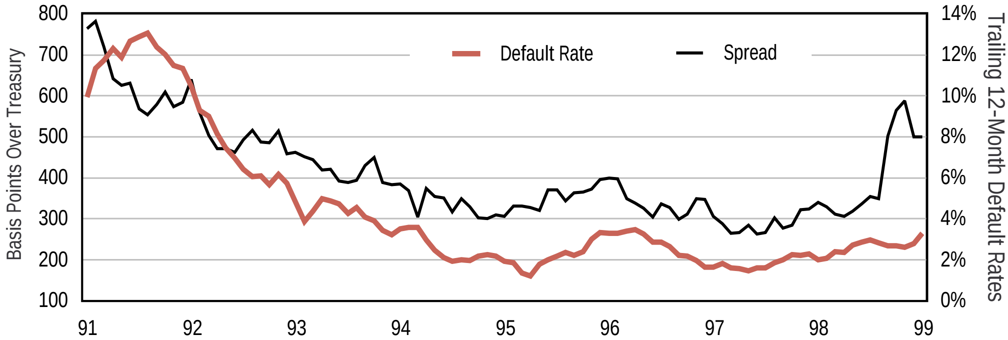
Historical Default Rates of Corporate Bond Issuers, 1920 - 1998

Summary

This report, Moody's 12th annual corporate bond default study, extends our default research to cover the period from 1920 to 1998; to date that research encompasses a total of 15,200 issuers of rated debt and some 2,200 defaulting issuers over the 79-year period. As in past years, our purpose here is (a) to provide rating-specific statistics that are designed to quantify the performance of Moody's ratings and to help investors make better use of our ratings in their credit risk management, and (b) to provide a comprehensive account of bond default experience last year in the corporate and sovereign sectors globally. Highlights from this year's study:

- Worldwide, 126 issuers defaulted on $29.6 billion of long-term, publicly held corporate and sovereign debt in 1998. Even excluding Russia's massive $9.7 billion default, this marks a 80% increase in issuer terms and an 111% increase in dollar amount from 1997, in which 70 issuers defaulted on $9.3 billion.
- Defaults by Pakistan, the Russian Federation and Venezuela represented three of only ten long-term public bond defaults by sovereign governments since WWII.
- The US was the largest single source of defaults contributing 52 defaults on $8.8 billion of publicly held long-term corporate bonds. Southeast Asian issuers as a whole, led by Indonesia, contributed an additional 54 defaults on $8.9 billion, respectively.
- Moody's trailing 12-month default rate for speculative-grade issuers ended 1998 at 3.31% — up from last year's 2.02%, but below its post-1970 average of 3.37%. The 1998 all-corporate trailing 12-month default rate, 1.27% — nearly doubled last year's rate of 0.68%.
- Moody's expects the issuer-based speculative-grade default rate to remain roughly in the range bounded by the post-1970 average of 3.37% and the post-1992 average of 2.30% in 1999.
- Average recovery rates, as measured by defaulted bond prices, fell to 45% of par from 54% last year, but remained above their post-1970 average of 41% of par.

Speculative-Grade Yield Spread vs Speculative-Grade Default Rate



The appendix to this study contains several 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.

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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 comparability of our long-term debt ratings across asset classes. Since then, we have continued to upgrade and expand that research to further examine the performance of our ratings as indicators of credit quality over a wider variety of economic cycles. We also use these data to study patterns and correlations in the incidence of default and rating changes between industries, domiciles, and rating categories.

This report presents a general overview of defaults, default rates, and recovery rates, as well as descriptive statistics describing the industrial and geographic evolution of Moody's-rated universe. Also, while this report explores the default experience of the better part of this century, we continue to pay special attention and provide extra detail on the more recent period extending from 1970 to the present, under the rationale that more recent experience is of greater interest to investors. We first present a summary of 1998's default activity. In subsequent parts, we explore the entire period from 1920 through 1998.

1998 Default & Bond Market Activity

1998 produced an approximate doubling in both the number and magnitude of bond defaults which, tempered by robust growth in issuance, produced percentage increases of 63% and 87% for the all-corporate and speculative-grade default rates, respectively. Moody's trailing 12-month default rate for all corporate issuers jumped from 0.68% at the start of 1998 to 1.27% at the start of 1999 after holding steady at around 1.0% for most of the year. Moody's speculative-grade trailing 12-month default rate ended the year at 3.31% versus 2.02% for 1997. These rates remain below the averages since January 1970 of 1.04% for all corporates and 3.37% for speculative-grade. For US-only speculative-grade issuers, the trailing 12-month default rate climbed to 3.84% as of January 1, 1999, versus 2.14% a year ago.

Globally, 126 corporate and sovereign issuers defaulted on $29.6 billion of long-term publicly held corporate bonds in 1998. Even excluding the Russian Federation's massive $9.7 billion default, this represents increases of 97% in issuer terms and 111% in terms of the dollar amount of defaulted debt, from 1997 when 70 issuers defaulted on $9.3 billion. Exhibit 1 presents a breakdown of 1998's defaults by issuer domicile. While total default activity was fairly steady throughout the year, US-issuer defaults were clustered toward the end of the year with 25, or 47%, occurring in the fourth quarter.

Exhibit 1

1998 Defaulters by Domicile*

United States	52
Indonesia**	32
Thailand	7
Canada	6
Malaysia	6
Argentina	3
Korea	3
British Virgin Islands	2
Cayman Islands	2
Hong Kong	2
Russia	2
Netherlands	1
Belgium	1
China	1
Ireland	1
Japan	1
Pakistan	1
Philippines	1
United Kingdom	1
Venezuela	1

*Includes Moody's-rated and unrated defaulters.
**Includes Netherlands-based Indonesian issuers

1998 saw the default of one issuer who began the year with an investment grade rating. Guangdong International Trust & Investment Corporation (GITIC), headquartered in Guangzhou, China, held a Baa2 rating as of January 1, and was downgraded to Ba1 on August 30. GITIC was established in 1980 by the government of Guangdong province to raise funds in support of the province's investment plans and economic strategy. On October 6, 1998, the People's Bank of China closed down GITIC due to its reported inability to service maturing obligations and announced that the repayment of all GITIC's debt obligations will be suspended until January 6, 1999.

An additional noteworthy default was that of CRIIMI MAE Inc., a Maryland- based real estate investment trust involved in the acquisition of subordinate commercial mortgage-backed securities and the securitization, and servicing of multifamily and commercial mortgages. Because CRIIMI MAE is a trust and not a corporate issuer, it does not fall under the scope of this report. However, its importance in the commercial mortgage-backed market – the company reported total assets of approximately $2.8 billion and total equity of approximately $700 million on June 30, 1998 – made its October default on $100 million of long-term debt a stark reminder that weakness in the market for a given asset class may ultimately translate into defaults on bonds backed by those assets.

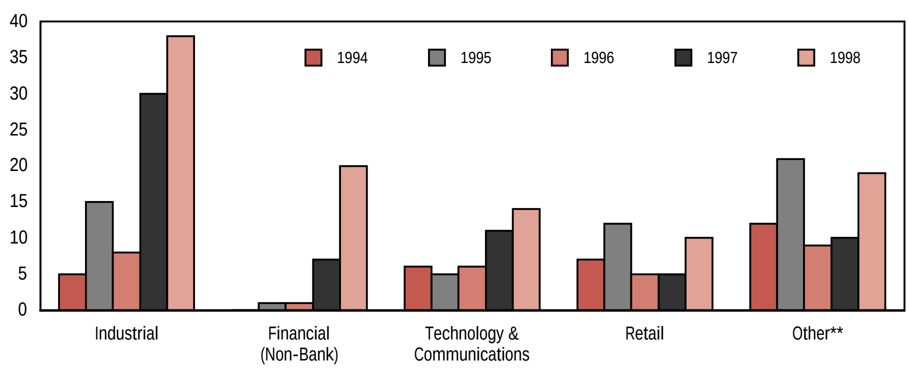
Exhibit 35 in the appendix presents chronological lists for 1998's corporate and sovereign defaulters. Exhibit 36 in the appendix provides additional detail for 1998's defaulters, including descriptions and values of the defaulted instruments, the type of business activities in which the issuers were involved, the circumstances surrounding the default event, and whether or not the issuer's debt held a Moody's rating.

INDUSTRIAL COMPOSITION OF DEFAULTERS

The industrial composition of defaulters shifted again in 1998. Industrial issuers remained the primary source of defaulting issuers, contributing 38 or 30% of the total. Defaults by non-bank financial institutions rose from fourth place to second, with 20 or 16% of the total, as fallout from the Asian financial crisis continued to affect this sector. Technology & communications firms contributed 14 or 11% of the total, taking third place for the second year in a row. Retail sector defaults were also up from last year at 10, or 8% of the total, while the remaining one-quarter of the total were dispersed across sectors, with banking, healthcare, hotels & casinos, sovereigns and transportation issuers all contributing. The recent trend in default counts by sector is presented in Exhibit 2.

Exhibit 2

Number of Defaulters by Industry Group, 1994-1998*



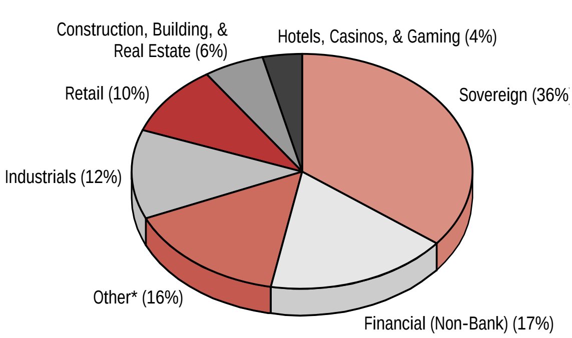
**Includes rated and unrated defaulters. **includes Transportation, Banking, Media, Hotel & Gaming and Utilities.*

In terms of the dollar amount of debt affected, sovereign issuers, led by the Russian Federation, comprised the largest component (35%) with defaults on over $10.3 billion. Non-bank financial issuers came in second (17%) contributing over $5.1 billion in 1998, up from $1.4 billion last year. Following in third place were industrial issuers (12%) which contributed another $3.6 billion, while the fourth place slot was filled by the retail sector which defaulted on $2.9 billion (10%). Exhibit 3 gives more detail of the composition of 1998's defaults by dollar amount.

Exhibit 3

1998's Defaulted Debt by Industry

($29.6 billion=100%)*



**Includes rated and unrated defaulters.*
***Includes Transportation, Real Estate, Healthcare, Banking & Misc.*

SOVEREIGN DEFAULTS

1998's defaults by Venezuela, the Russian Federation and Pakistan represented three of only ten defaults by sovereign governments on long-term publicly held debt documented by Moody's since WWII. Other post-WWII sovereign defaulters include Argentina, Costa Rica, Guatemala, Panama, Poland, Rhodesia (Zimbabwe), and Uruguay. For an overview of the long term history of sovereign defaults on bonds and loans see Truglia (1995).

Of 1998's sovereign bond defaults, both Venezuela's $270 million domestic currency default and Pakistan's $300 million Euronote default involved delayed interest payments – defaults according to the operational definition of this report — which were ultimately disbursed within the specified grace period.

Of far greater magnitude in terms of the amount, severity, and effect on the debt markets was the default by the Russian Federation who announced on August 17 a “de-facto” devaluation of the domestic currency and payment moratorium on an array of obligations. The Russian Federation, which became fully independent in December of 1991 after the break-up of the Soviet Union, has been in a prolonged economic slump since its inception. While economic reform has been a top priority for policy makers, significant institutional and cultural barriers have frustrated the transition from the old centralized planning system to a free market economy. The Russian Federation’s continuing problem has been the fiscal deficit which resulted from weak economic growth and the government’s inability to collect taxes.

The August “de-facto” devaluation also carried with it a forced rescheduling of short-term treasury debt issues (GKOs) and long-term treasury debt issues (OFZs), and a 90-day moratorium on principal repayment of foreign-originated syndicated loans, settlements of foreign currency forward contracts, and margin calls on repurchase transactions. The rescheduling of rouble-denominated government debt constituted an outright default on 33 separate GKOs with face values totaling over $US 33 billion, and 12 separate OFZs with face value totaling $US 9.7 billion. The loan moratorium affected 5 multi-lateral loans originated under the London Club restructuring agreement totaling $US 22 billion, as well as a $100 million facility originated by ING Bank N.V. for the Republic of Tartarstan, a Russian Republic.

In addition to the Russian central government’s default on treasury debt and post-Soviet restructured debt, 49 Russian autonomous republics and other municipalities (oblasts) defaulted on coupon and principal repayment on rouble denominated agrocultural bonds (agrobonds) totaling $US 336.2 million over the period from late May through mid-October. Agrobonds, issued by nearly all Russian regions in mid-1997, were created by the Russian Ministry of Finance as means of solving the severe non-payment problem on agricultural loans extended to the regions by the central government.

1998 BOND MARKET ACTIVITY

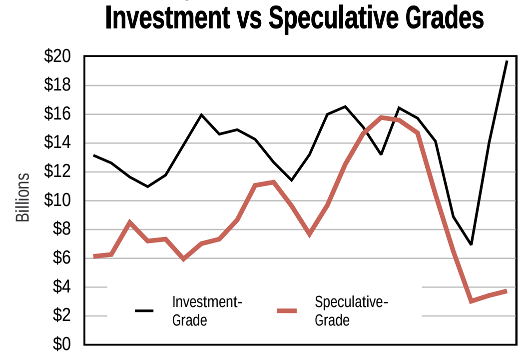
1998’s bond market activity was marked by two distinctive features. The most striking was the difference between market conditions for investment-grade versus speculative-grade issuers. Buoyed by strength in the US Treasury market where, for the seven-year Treasury Note, yields fell steadily from 5.48% to 4.71% over the course of the year, median yields for investment-grade bonds fell from 6.32% in January to 6.07% in December. However, investment-grade rally did not keep pace with Treasuries and consequently spreads widened about 51 basis points (bps) to 136 bps. Still, this segment’s strength was evident in its ability to absorb larger and larger issues; 1998 saw over 100 separate investment-grade corporate issues with face values in excess of $1 billion.

The speculative-grade market began the year with a median yield of 8.76% for seven-year maturities. This produced a spread over Treasuries of 329 bps, which was only 17 bps higher than the average for 1996-97; and seemed to bode well for investor confidence in this segment in the face of continuing credit problems in Southeast Asia and their potential spillover effects. As shown on the cover of this report, speculative-grade spreads began to widen significantly in May and continued to widen, jumping from 349 bps to 502 bps in August alone, reaching a peak of 588 bps in October. This marked the widest spread level since December of 1991, a point at which the speculative-grade default rate stood at 11.34%. As the cover chart shows, default rates had already begun to creep higher, but the relationship between speculative-grade yields and default frequency experienced a fundamental shift in August as liquidity fell and investors demanded a higher credit risk premium than had been the case since 1992.

The pattern of new issuance reflected this third quarter shift in investor posture. Exhibit 4 shows, in dollar terms, US new issuance since January 1997. Investment-grade issuance outpaced speculative-grade issuance for most of last year, and although slowing in August,

Exhibit 4

Monthly New Issuance*, 1997-98, Investment vs Speculative Grades



**Three month moving average.*

September and October, finished the year on a high note, with over $40 billion coming to market in November and December. Speculative-grade issuance began to weaken in May as problems with the Russian Federation began to surface, plunging to its lowest levels of the year by October, and remaining virtually flat throughout the fourth quarter.

The total US new issuance in 1998, including bonds issued under rule 144a, was $297.3 billion, an increase of 17% over 1997's record total, comprised of $176.6 billion and $120.8 billion of investment-grade and speculative grade, respectively. Year-over-year, speculative-grade issuance growth outpaced investment-grade growth, rising by $22.7 billion or 23% from 1997 while investment-grade issuance rose by $21.2 billion, or 14% from the previous year. The total number of Moody's-rated corporate and sovereign issuers grew by a more modest 11% over the year.

Data And Methodology

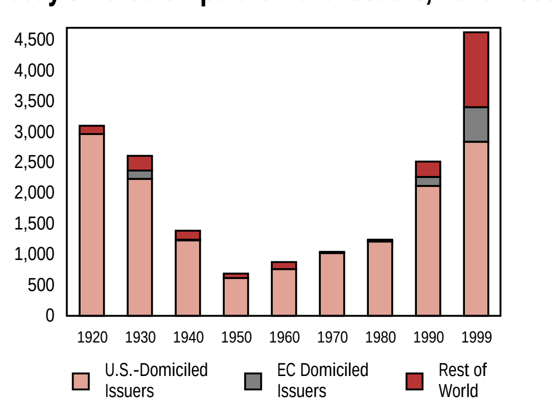
THE MOODY'S-RATED UNIVERSE

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 15,200 issuers that sold long-term debt publicly at some time between 1919 and the start of 1999. As of January 1, 1999, over 4,600 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.

Exhibit 5 details the number of firms included in our ratings database 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 firms 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 5

Moody's-Rated Corporate Bond Issuers, 1920-1999



Non-U.S. issuers comprised nearly as large a percentage of the Moody's-rated universe in January of 1930 (15%) as they did in January of 1990 (18%). The portion of rated issuers domiciled outside of the United States began to fall with the decline in international trade that accompanied the Great Depression and continued until it hit an all-time low in 1970. Since then, this fraction has grown significantly, rebounding to 1930 levels by 1990 and exceeding 38% as of the beginning of 1999.

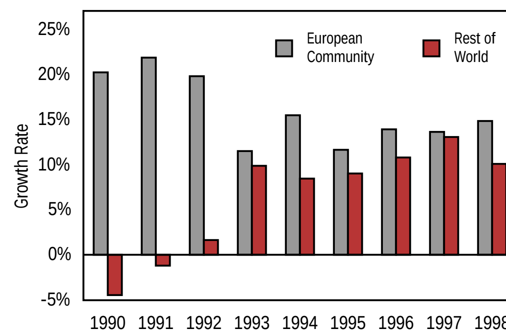
Before 1980, the non-U.S. issuers rated by Moody's rated were predominantly those tapping the U.S. bond market. In recent years, however, Moody's has extended ratings to many more issuers placing debt in non-U.S. markets. Currently, the three non-U.S. countries contributing the largest number of Moody's-rated issuers are the United Kingdom (5.6% of the total), Japan (5.5%), and Canada (3.8%). Two countries which specialize in providing havens for corporate residence — the Netherlands and the Cayman Islands — are the fifth and seventh largest contributors of rated bond issuers at 3.6% 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 while non-bank financial companies risen to the number two spot comprising 17% of the Moody's rated universe, with banking institutions third at 14%, as of the start of 1999.

Geographically, two of the fastest growing components of the Moody's-rated universe are the European Community (EC) and Emerging Market (EM) countries. The growth in the number of EC-domiciled issuers has averaged just under 20% per year since 1990 while the average for all other countries combined was just under 6%. As shown in Exhibit 6, EC growth outpaced the rest of the world in every year since 1990, including a strong performance in 1998. Non-EC issuer growth was negative in 1990 and 1991 and minimal in 1992 largely as a result of the collapse of the US junk-bond market. Optimism surrounding the European Monetary Union helped stimulate new EC debt issuance last year and should provide even greater stimulus going forward.

Exhibit 6

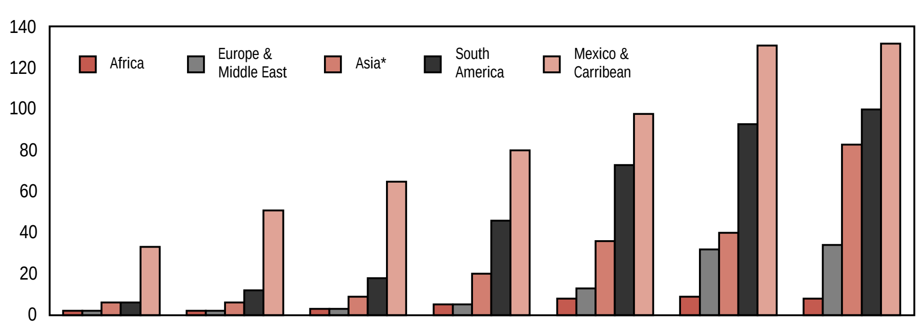
Growth of Moody's-Rated, EC-Domiciled Issuers vs Rest of World



While emerging market-based issuers still make up a relatively small proportion of Moody's-rated universe, this component grew by nearly 45% annually from 1993 through 1997. Poor borrowing conditions for speculative-grade issuers in general and investor apprehension toward EM issuers resulting from the Asian financial crisis, restrained 1998's growth in the EM issuer base to a modest 17%, with most of that growth coming from Asian countries. Since most EM issuers carry speculative-grade ratings, this growth has had a significant impact on the geographic composition of the speculative-grade universe. The proportion of speculative-grade issuers that are EM- based has risen from just 2% in 1993 to over 13% at the beginning of 1999. Exhibit 7 below details the regional composition of EM-domiciled issuers.

Exhibit 7

Moody's-Rated, EM-Domiciled Issuer Count by Region, 1993-98



**Includes Netherlands-based subsidiaries.*

MOODY'S DEFINITION OF DEFAULT

Moody's default database covers over 3,200 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 denominators 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 29 of the appendix.)

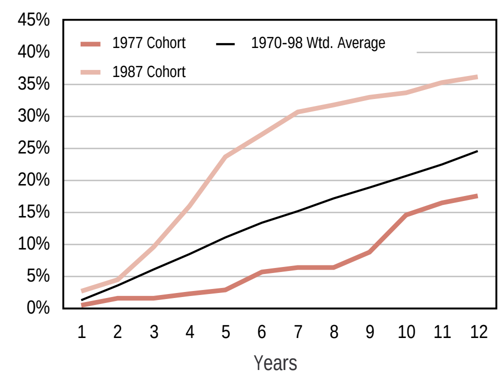
Moody's employs a cohort approach to calculating multi-year default rates. A cohort consists of all issuers holding a given senior implied rating at the start of a given year. These issuers are then followed through time, keeping track of when they default or leave the rated universe for non credit-related 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 1998?" The answer to this question – 6.46% — is found in Exhibit 33 (appendix), in the last row and last column headed "14" 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 8 presents cumulative default rates from one to twelve years for two Ba cohorts, 1977 and 1987, as well as for the weighted average cumulative default rate from 1970-present.

Exhibit 8

Cumulative Default Rates



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 9, 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 a 79-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.

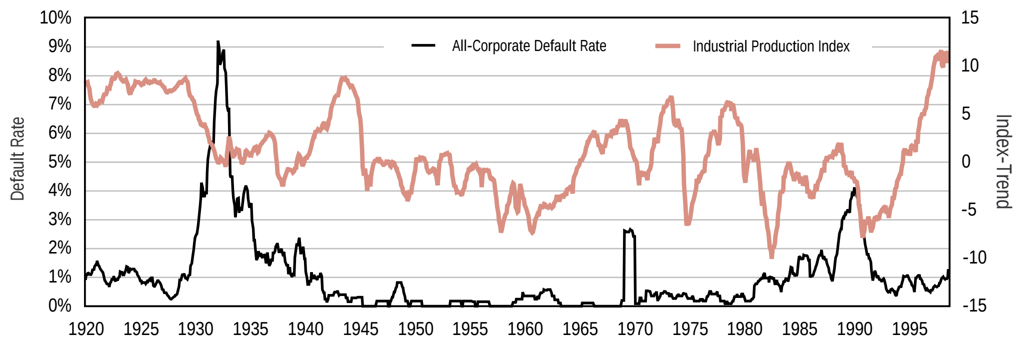
The severity of the depression and its characteristic asset depreciation ensured that such high rates of default did not quickly subside. For the eight-year period beginning in January 1930, the default rate averaged 3.7% — nearly as high as the recent 4.1% peak set in July 1991. The default rate again 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 9 also plots the US Industrial Production Index (IP) in terms of its deviation from trend,[1] whose correlation with the all-corporate default rate 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 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 rising 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. More recently, robust economic growth and low default rates have gone hand in hand. Nevertheless, the shifting of this lead-lag relationship is a typical example the instability of the relationship between corporate bond default rates and macroeconomic variables generally.

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

Exhibit 9

Trailing 12-Month All-Corporate Issuer Default Rate, 1920-1998

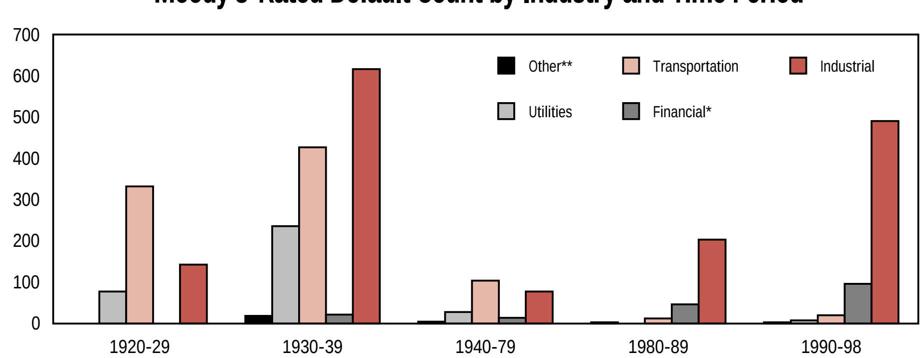


DEFAULTS BY INDUSTRY

The contributions made by different industries to the total number of defaults have varied substantially through time. Exhibit 11 portrays the total number of defaults, sorted by broad industry group, in each of five decades that span the period from 1920 through the present. At 47%, industrials account for the largest percentage of the total number of defaults over the last 79 years. The remaining defaulters are divided between transportation companies (30%), utilities (12%), financial companies (6%), and miscellaneously affiliated firms (5%). In the 1920s, transportation companies made up the majority of defaulters, with industrial firms coming in a distant second place. However, the number of industrials defaulting surged past those for other industries after the depression years of the 1930s to exceeding 600 for the period 1930-39.

Exhibit 10

Moody's-Rated Default Count by Industry and Time Period

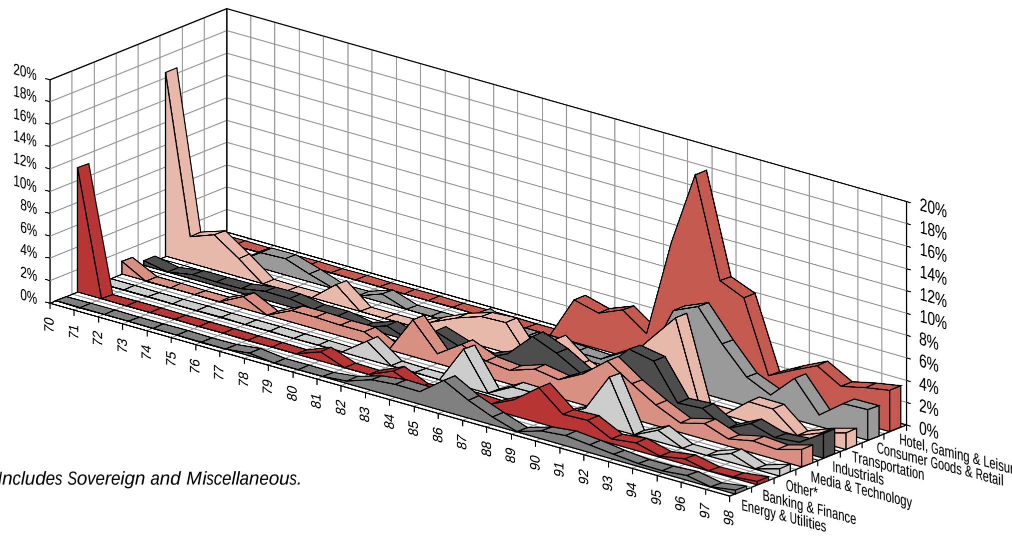


**Includes Insurance. **Includes Sovereign and Miscellaneous.*

Over time, changes in the raw numbers of defaulting issuers by sector have occurred simultaneously with changes in the industrial composition of Moody's rated universe. Default rates for broad industry categories, shown in Exhibit 11, capture both patterns and highlight the differences in the timing of high default activity. As the exhibit shows, high default episodes may primarily affect a few related sectors, as in 1970, or may affect many sectors but with differing timing as was the case during the 1989-91 period.

Exhibit 11

Default Rates by Broad Industry Group, 1970-1998



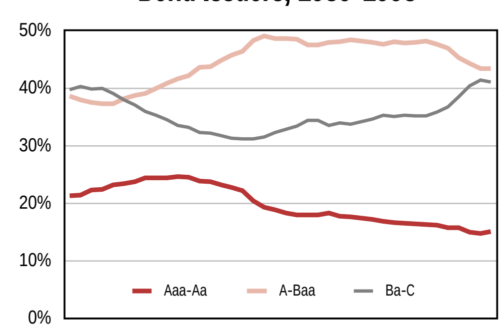
*Includes Sovereign and Miscellaneous.

RECENT CREDIT QUALITY TRENDS

Overall, the rating composition of speculative-grade issuance continued to deteriorate in 1998. As a result, the proportion of Moody's-rated issuers holding speculative-grade ratings climbed to 42%, a level not reached since 1953, while A- and Baa-rated issuers fell from 48% to 44% over the year, and Aaa and Aa rated issuers fell to 15%, a post-WWII low, as shown in Exhibit 12. While part of this reflects the continued outpacing of investment-grade new issuance by speculative-grade new issuance during 1998, part of it reflects negative rating drift for existing issuers.

Exhibit 12

Ratings Composition of Moody's-Rated Bond Issuers, 1989-1998



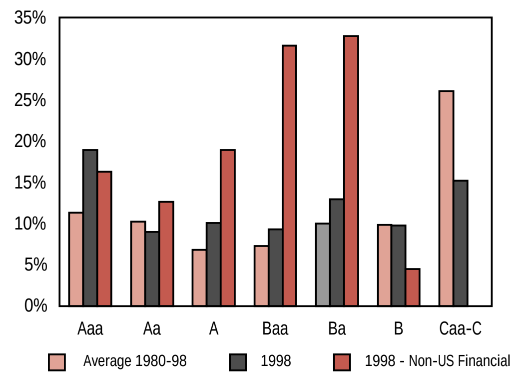
This negative drift is summarized by the overall upgrade/downgrade ratio which was less than one for the last three quarters of 1998. This marked the first instance of three consecutive quarters with downgrades outnumbering upgrades since 1993, and the annual average of 0.90 was the worst since 1992.

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 26 and 27 in the appendix compare rating transition and default rates for 1998 with averages for the nineteen-year period 1980-1998. Interestingly, overall rating volatility in 1998 did not exceed 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 Aaa category which experienced a downgrade rate of almost 19% compared to an average downgrade rate of 11% over the 1980-98 period.

One of the sectors which experienced a more severe downgrade bias was the non-US financial sector. Exposure by Japanese and European financial institutions to the devastated Southeast Asian corporate loan market contributed to the downward pressure on long-term debt ratings for this sector. Exhibit 13 compares one-year negative credit event frequency by rating category, for non-US financial issuers in 1998, with all-issuers 1998 and with the all-issuer average for 1980-1998, where negative credit events are defined as *downgrades or defaults* within one-year of holding a given rating.

Exhibit 13

Negative Credit Event Frequency by Rating



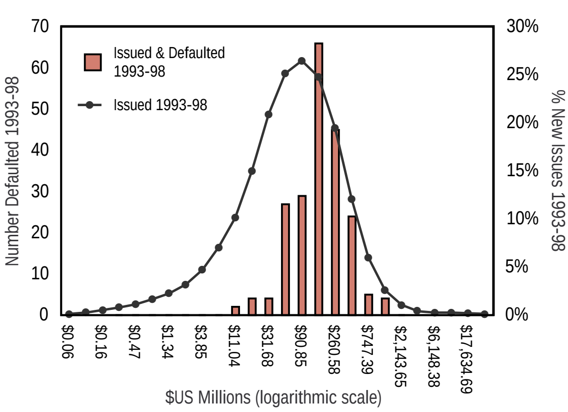
The first two sets of bars in Exhibit 13 are just the sums of the upper triangular rows of Exhibits 26 and 27. The chart shows that, defined this way, credit risk is fairly evenly distributed across rating categories with the exception of the Caa-C categories where downgrades or defaults affect one out four issuers on average. The last set of bars plots the same information for non-US financial institutions. This latter group differs from the total Moody's-rated universe in that its initial credit quality is above average. None of its 722 obligors began the year with a rating lower than B, and only one defaulted during the year. Nevertheless, nearly 20% of these obligors experienced negative credit events, with most of the downgrades affecting the A, Baa and Ba categories. For a more detailed analysis of rating migrations over various time horizons since 1920, see Moody's previous rating migration studies (e.g., Carty, 1997b).

SIZE DISTRIBUTION OF DEFAULTING BOND ISSUES

The average size of defaulting corporate bonds has followed a choppy but steady upward trend since 1970, averaging about $100 million over the past five years. Much of the volatility of the annual average default size derives from a small number of special events including the huge 1987 defaults of Texaco Capital, Inc and Texaco Capital N.V. on $3.7 billion and $2.7 billion respectively, Flagstar's $1.5 billion 1997, and Penn Traffic's $1 billion default in 1998. One component contributing to the gradual increase in the size of defaults is the steadily increasing size of new issues which grew from an average of $144 million in 1987 to $160 million in 1997. Increasing average issue size is not merely a reflection of overall price inflation, however. In fact, the 11% growth in average issue size, has lagged significantly behind the 41% increase in the overall price level for the same period, as measured by the CPI.

Exhibit 14

Size Distribution of All Issues vs Defaulting Issues, 1993-98



Skewness in the distribution of default size, resulting from the small number of very large defaults and larger number of much smaller defaults, is a characteristic of the debt market as a whole. To gauge the relationship between the size distribution of bond defaults and the size distribution of bonds outstanding, we compared the size distributions for bonds issued over the past five years, with the distribution of the defaulted subset of those bonds (226 separate issues), shown in Exhibit 14. The chart shows issue size on a logarithmic scale to reduce the skewness, and shows that the distribution of defaulted issues lies slightly to the right of the overall market distribution for this period. These data suggest that for this particular sample, the smallest issues have been somewhat less likely to default than the larger issues. However, even for sub-samples in which default rates by size differ from the overall population, we find little evidence of a comparable relationship between loss rates and issue size. Over the period 1970-1998, the correlation between the face value of defaulting issues and the post-default prices of those issues is very low, just 0.02%.

Ratings As Indicators Of Default Probability

Over 2,200 of the more than 15,200 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 15. 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.[2] Thus, 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 15

Median and Average Ratings Before Default, 1920-1998

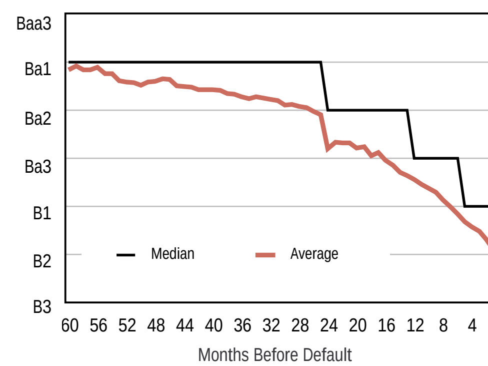


Exhibit 15 shows that, five years prior to default, the median rating of defaulting companies is speculative-grade. The downward slope of the average shows that, as a group, these future defaulters are already seeing downward rating pressure five years in advance of default. At 24 months before default, the median rating has fallen to Ba2 and falls further to Ba3 twelve months prior to default. The average rating falls faster and farther than the median rating, reaching Ba3 sixteen months prior to default. Moreover, the fact that the average lies everywhere below the median rating indicates that the rating distribution for issuers that ultimately default is skewed toward the lower end of the rating scale. The level of rating has become lower and the rate of rating decline has increased over recent years as precipitous rating drops prior to default have been rare. For example, for issuers defaulting in 1998, the median rating both one and two years prior to default was B2, well below the historical average.

OUTLIERS: MOODY'S HIGHEST-RATED DEFAULTERS

Of the more than 900 defaults on Moody's-rated debt since 1937, only three issuers have defaulted while holding investment-grade ratings. Since 1970, twenty-five issuers have defaulted within one year of holding an investment grade rating. These issuers, along with their rating histories prior to default, are listed in Exhibit 34 in the appendix.

The highest rating ever to be held by a Moody's-rated defaulter at the time of default was A3, held in 1982 by Johns Manville, which sought protection under Chapter 11 after being found liable for massive asbestos-related damages. This marked the first ever strategic bankruptcy filing by an issuer that was solvent, thereby raising defensive Chapter 11 filings as a new category of credit risk associated with certain types of issuers. One year prior to its default (before the introduction of numerical rating-modifiers), Manville's rating was A.

The second highest rated issuer to default was Columbia Gas System which defaulted in June of 1991 while holding a Baa1 rating at the senior unsecured level.[3] The company's financial position deteriorated during the 1980's as regulatory revisions left it locked into high-priced purchase contracts with producers, while facing competitive and falling end market prices. The record warmth of the 1990 and 1991 heating seasons further depressed gas prices, and the company, unable to service its debts, filed for bankruptcy after failing to re-negotiate its bank credit facilities. Although the firm did not emerge from bankruptcy until November of 1995, secondary market pricing would have allowed investors to recover 85% of par, one month after the bankruptcy petition was filed. Ultimately, investors received principle, interest, and interest on interest generating a recovery rate of 100%. The third investment-grade rated defaulter was Green Bay & Western Railroad who defaulted in February 1938 while holding a Baa rating.

2 A linear mapping is used here for simplicity only.
3 Technically, Columbia Gas System was downgraded to below investment grade one day prior to the bankruptcy filing.

In October 1989, two New Zealand based firms, DFC Financial Overseas and DFC Overseas Investments, defaulted while holding Ba1 ratings. These defaulters had begun the year with Aa3 ratings and so, as members of the Aa3 cohort for that year, contributed to the one-year default rates for the Aa3 category. These investment-grade ratings reflected, in part, Moody's expectation of support from the government of New Zealand. However, the Government of New Zealand's failure to support the notes resulted in their default in October 1989. This example illustrates the value of implicit, as opposed to explicit, sovereign guarantees on the credit ratings of sovereign-related issuers.

DEFAULT RATES BY RATING CATEGORY

Weighted average default rates shown in Exhibit 16 clearly show an increased risk of default associated with lower rating categories. Since 1970, an average of 3.27% of speculative-grade issuers have defaulted per year, compared with just 0.17% of investment-grade issuers. For all but 28 of the past 79 years, the one-year default rate for the investment-grade sector was zero.

Exhibit 29 (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. As these data indicate, the default rate for all speculative-grade issuers has averaged 3.32% higher than that for investment grade issuers since 1970, and 4.00% higher since 1980.

Exhibit 16

Average One-Year Default Rates by Alpha-Numerical Ratings, 1983-1998

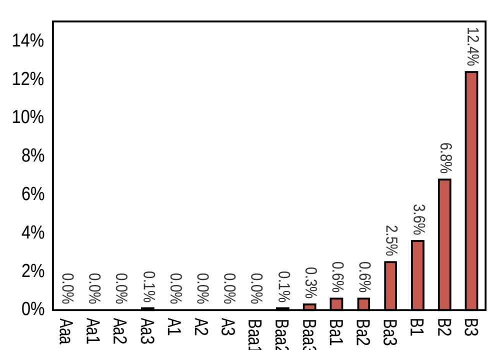
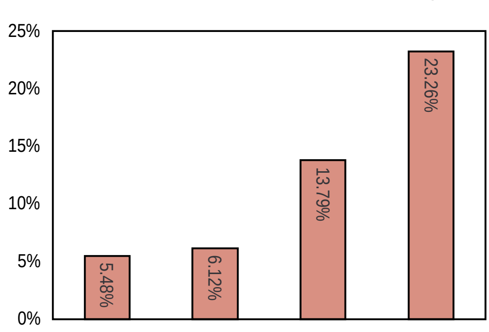


Exhibit 17

1998 One-Year Default Rates For B3 and Numerically Modified Caa Ratings



The results presented in Exhibit 16 suggest that the relationship between ratings and default likelihood holds for numerically modified rating categories as well as for the non-modified categories. Exhibit 29 and Exhibit 30 (in the appendix) present one-year and weighted average one-year default rates for each of these rating categories. The latter rates are drawn from 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 12.4% for B3. The default rate for US domiciled speculative-grade issuers has remained slightly above the total speculative-grade rate since 1992.

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 17 shows default rates for the numerically modified Caa ratings for 1998, the first and only cohort year for these sub categories, as well as the B3 category for the same period. The default rates increase smoothly over the entire range, from B3 through Caa3.

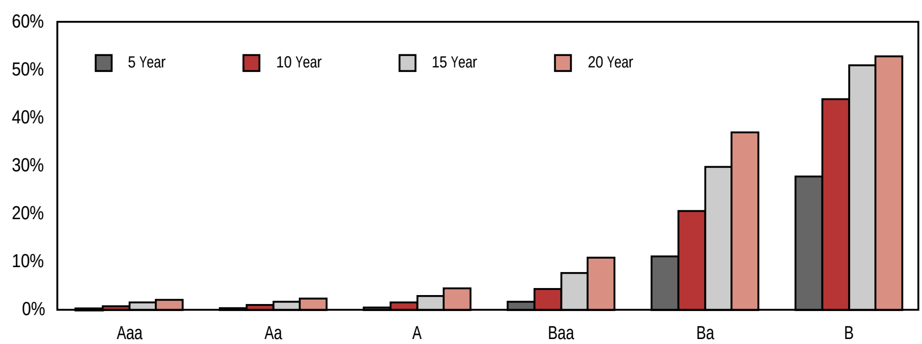
MULTI-YEAR DEFAULT RATES

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 18 presents average cumulative default rates for 5-, 10-, 15-, and 20-year time horizons based on all data available since 1970, and 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 0.1% for the Aaa rating category to 27.7% for the B rating category. Exhibit 18 also shows that the pattern recurs for average default rates for 10-year and 15-year holding periods. Exhibit 31 in the appendix presents these data in detail for the period from 1970 to the present, and Exhibit 32 presents average cumulative default rates by numerically modified ratings for up to eight years.

Exhibit 18

5-, 10-, 15- and 20-Year Average Cumulative Default Rates, 1970-1998



HAZARD RATES OF DEFAULT

Defaults are complex events which involve issuers at different stages of their evolution as firms. Moody's default rates characterize the relationship between the credit rating of issuers at a point in time and the probability of default over different time horizons, with lower ratings generally linked to higher defaults rates. However, default rate statistics calculated using our cohort methodology do not identify the relationship between default frequency and the life-cycle of corporate bond issuers. More precisely, all the issuers that enter a cohort at a particular point in time belonged to the healthy population previously, but may have arrived at that point via credit histories of differing length and credit quality.

In this section we attempt to identify regularities in default dynamics by describing the time spent by an issuer in the healthy group before default occurs. Thus we are considering the hazard rate of issuer default, as opposed to default rates. The issuer-based hazard rate of default is the default frequency as a function of the length of issuer's credit rating history[4] which emphasizes the decision making characteristic of issuers, opposed to the issue-based hazard rate which is the bond-level default frequency as a function of the life of the individual bond.[5] Our approach allows us to gauge the relative risk of default for issuers with many years of credit experience versus those in the early stages of their evolution as corporations.

We consider the hazard rate of default of all Moody's-rated issuers over the period 1988-1998, comparing this to the average length of credit history over the same period. We also consider separate hazard rates for investment-grade and speculative-grade issuers. Because the credit rating of an issuer can significantly change over the years, generally deteriorating in advance of default, it is not possible to assign a single average rating to an issuer's rating history. We resolve this problem by assigning issuers into categories defined by the period of time the issuer's credit quality remains of investment or speculative grade before default, described further below.

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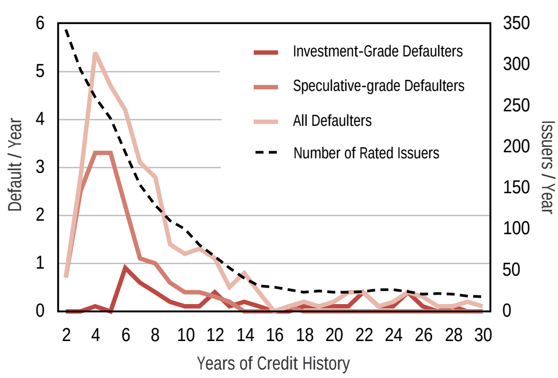
4 Carty (1997a).
5 Altman (1988).

Exhibit 19 shows the hazard rate for issuers at different stages of their credit history, plotted against the length of credit history, for the period 1988-1998. Similar results were found for other periods. The interpretation is as follows; if the curve for all- defaulters were perfectly flat, the risk of default would be constant over the issuer's life. The default rate is quite low for issuers in their first two years as rated borrowers, reflecting the fact that their initial rating is usually accompanied by a successful debt issue, bolstering their financial position in the short run. Default risk increases sharply in the third year, reaching a peak in the fourth year and tapering off thereafter. For guidance purposes, the dashed line represents the average annual number of issuers for a given length of credit history.

Exhibit 19 also breaks out the hazard rates by broad credit quality. While it is impossible to assign a single unambiguous credit quality measure to a changing rating history, we use a simple rule to group issuers' rating histories by average credit quality. The subgroups are defined as investment-grade — issuers whose credit rating remained of investment quality at least 80% of the time before default, and speculative-grade — issuers whose credit rating remained of speculative quality at least 80% of the time before default. Because these identification schemes exclude some borrowers they do not sum to the total. Nevertheless, they do show important differences in the hazard profile of issuers of varying credit quality. Specifically, the speculative-grade subset exhibits a significantly higher default risk in the 3-5 year range of its credit history and is thus a major contributor to the shape of the all-issuer hazard profile. The investment-grade profile is much flatter, indicating a more constant level of default risk over the credit history of the issuer. The modest peak that is evident is also further out and broader than that of the speculative-grade group.

Exhibit 19

Distribution of Default Frequency by Length of Rated Credit History



DEFAULT RATE VOLATILITY BY RATING

An examination of the cohorts presented in Exhibit 33 (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 23.4% in 1970. The sources of this variation are many, but macroeconomic trends are certainly among the most influential factors. To quantify this variability, Moody's calculated the standard deviations of the one-year default rates for each letter rating category. Exhibit 20 presents these statistics defined over the periods from 1920 and from 1970 to the present.

Exhibit 20

One-Year Default Rate Volatilities

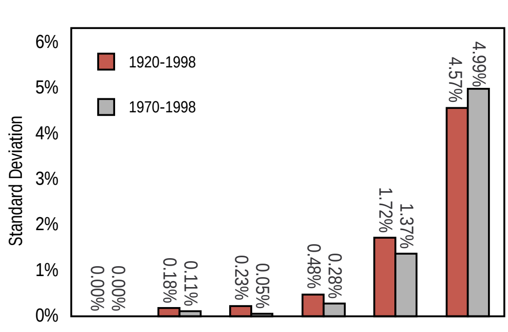
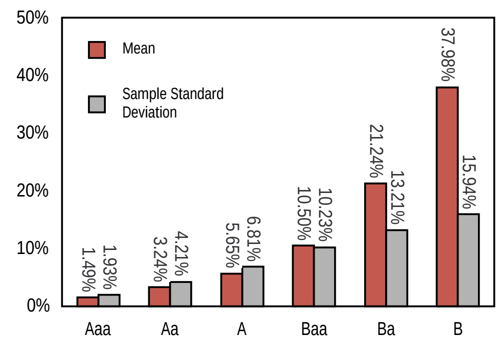


Exhibit 20 highlights a pattern of higher default rate volatility for lower credit ratings for both time periods examined. That is, while the average risk of default is higher for lower rating categories, the chances of the default rate differing significantly from the average in any given year is also higher. The greater investment-grade default rate volatility — except the Aaa rating — for the period including the Great Depression, reflects the uncertainty over default rates provoked by the extreme economic circumstances of that time.

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.

Exhibit 21

Ten-Year Cumulative Default Rates & Volatilities, 1920-1998*



** Excludes the exceptionally low default period from 1950-1965.*

Volatility increases for cumulative default rates at horizons greater than one-year, with standard deviations for 10-year cumulative default rates being roughly three times higher than the one-year volatilities shown in Exhibit 20. However, while volatility tends to increase linearly with the default rate itself for investment-grade categories, for speculative-grade categories default rate standard deviations are significantly lower than the average cumulative default rates. Exhibit 21 plots 10-year cumulative default rates along with their standard deviations, for a representative period which covers 1920-1998 but excludes the post-WWII low default rate period where default rates of near zero exert a downward bias on volatility calculations.

Default Severity And Recovery Rates

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

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 even a physical asset in place of cash. As there is frequently no market for such payments, there is no definite measure of their value.

For these reasons, we use the trading price of the defaulted instrument as a proxy for the present value of the ultimate recovery. To do so, we collected prices from several sources for many of the bonds that defaulted between January 1, 1920, and December 31, 1998. For each defaulted issue, we considered the seniority, date of default, and the price approximately one month after default. 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.

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.

The resulting data reveal correlations of recovery rates with macroeconomic variables and the risk of default. The lows in defaulted bond prices of $21 and $30 hit in 1932 and 1990, respectively, correspond to peaks in the corporate default rate, suggesting a negative correlation of defaulted bond prices with the incidence of default. Additionally, the low values during the late 1970s and early 1980s suggest a negative correlation with interest rates. Last year's average of $45.02 is slightly above the long term average since 1970 of $41.02. Defaulted bond price volatility has remained low since 1992, as shown in Exhibit 22, partly as a result of the development of deeper and more efficient markets for distressed debt instruments.

Exhibit 22

Yearly Average Defaulted Bond Prices, 1970-1998

(Per $100 Par Amount)

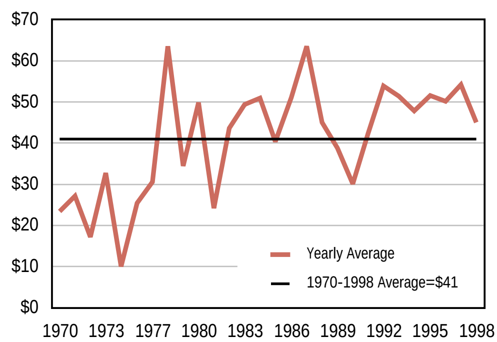
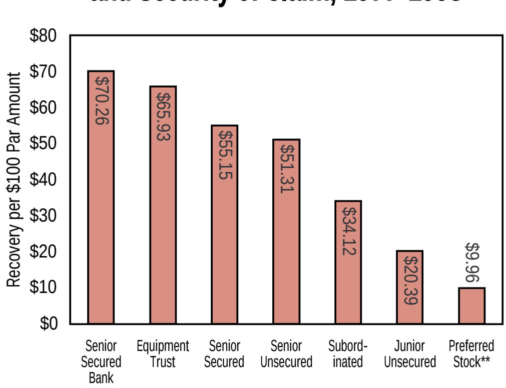


Exhibit 23 breaks out the average recovery estimates since 1970 by seniority of claim and includes Moody's estimate of the recovery investors can expect to receive on senior secured bank loans and preferred stock.[6] Recoveries, on average, decline as priority of claim declines, lending support to Moody's practice of assigning lower ratings to an issuer's subordinated debt. The average senior secured bank loan recovery estimate is $70 per $100 defaulted par amount. Considering prices for 118 senior secured bonds, our recovery estimate is $55; prices for 338 senior unsecured bonds generate a recovery estimate of $51. The 252 subordinated bonds sold for $39 on average, while 19 junior subordinated bonds sold for $20 on average. Preferred stock holders can only expect to retrieve about $10 per $100 par or liquidation value of defaulted preferred stock.

Exhibit 23

Defaulted Debt Recovery Estimates by Seniority and Security of Claim, 1977-1998



** estimate based on data from 1989 to 1998,*
*** estimate based on data from 1980 to 1998.*

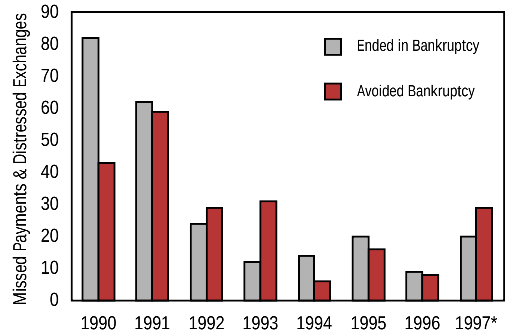
Over the past decade, about half of long-term public bond defaults resulted from bankruptcy filings, with missed payments accounting for about 43%, and distressed exchanges accounting for about 7%. However distressed exchange incidence has trended lower over recent years while missed payment incidence has trended higher, rising sharply during the past year. In 1998, payments were missed or delayed on 111 separate Moody's-rated issues or 62% of all defaulting rated issues, versus 24 for 46% in 1997. Because missed payments do not have the immediate and dramatic effect on prices that bankruptcy filings do, the sharp increase in the proportion of less severe default events in 1998 has helped to support average recovery estimates based on market prices for defaulted bonds. But, while default events that avoid immediate bankruptcy may bode well for post-default prices, ultimate recovery depends on whether or not the issuer can right his financial ship and either continue to make timely interest and principal payments on notes outstanding or re-negotiate a less burdensome debt package.

[6] See December 1994 Moody's Special Comment, "Preferred Stock Dividend and Credit Risk" and the November 1996 Moody's Special Comment, "Defaulted Bank Loan Recoveries."

To gauge the likelihood of success for these issuers, we counted the number of missed payment and distressed exchange defaults by year, and grouped them by whether or not they filed for chapter 11 within two years of the initial default event. Exhibit 24 plots these resolutions and shows that, with the exceptions of 1990 where bankruptcy incidence was high and 1993 where bankruptcy incidence was low, roughly half of those issuers who miss or delay payments, or who negotiate distressed exchanges file for bankruptcy within two years of the initial default event.

Exhibit 24

Resolution Within Two Years of Missed-Payment and Distressed Exchange Defaults, 1990-1997



**As of January 1, 1998. 1998 not shown since insufficient time has elapsed to make comparable.*

DEFAULTED BOND PRICE VOLATILITY

An additional important consideration in assessing recovery rates is the variability of defaulted bond prices. As shown in Exhibit 22, the average defaulted bond price for the 79-year period from 1920-1998 is $41, although recovery values over various shorter time horizons vary significantly. The problem then with choosing averages as an indicator is that they approximate the most likely bond price to arise from a particular default, but they do not convey the range of possible outcomes. For example, while the estimated recovery for all subordinated bonds is $34 per $100 par amount, one of the underlying issues had a price of just $1 while several had prices above par.

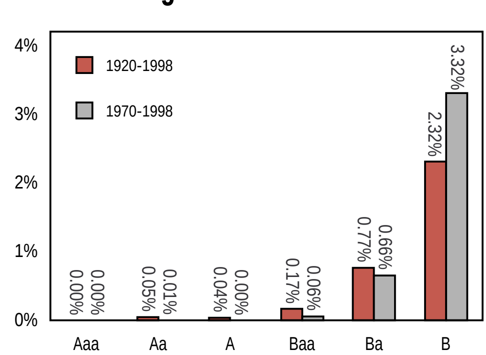
Exhibit 26 in the appendix provides additional statistics describing the distribution of defaulted debt prices. Equipment trust obligations have median post-default prices significantly higher than other debt classes. This reflects, in part, bankruptcy statutes that accelerate the transfer of assets pledged as security when those assets consist of transportation equipment, the main type of asset used to support equipment trust issues. 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.

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 25

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 25 presents these estimates using both the 1920-1998 and 1970-1997 average default rates and the 1989-1997 average recovery rate estimate for senior unsecured debt. (The 51% recovery rate implies a 49% loss rate.)

Exhibit 25 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

Our estimation of 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 the post-1970 period, default rates and average default losses increase with lower rating categories, reaching averages of 6.47% default rate and 3.32% loss rate for the B category. Average default rates increase smoothly even when measured over numerically modified ratings from 1983-1998. 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.

Default rate volatility also 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 varied 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 produced significantly higher default rates than have been experienced over the past several years. Part of this reflects the Asian crisis. Another part of it reflects the fact that over the last several years, under the umbrella effects of stable real growth and relative monetary stability, worldwide capital markets have been willing and able to extend credit to larger and more diverse set of speculative-grade borrowers. The marked increase in sovereign defaults is also, in part, a reflection of the easy credit environment of the mid-1990s. While the ability to extend credit to risky borrowers is itself an indication of capital market strength, the effect of this trend will be to increase the absolute number of bond defaults over time. Currently, however, growth in the speculative-grade issuer base is likely to keep pace with the growth in default counts keeping a lid on average default rates over the next six to nine months.

Moody's believes that 1999 is likely to see continued expansion of the capital markets worldwide, increasing the size and geographic diversity of our rated-issuer base. Thus, even if default activity remains at its current brisk level, default rates should hold steady or moderate from their current levels. We believe that, barring any major economic or political disturbance, a likely range of fluctuation for the speculative-grade default rate in 1999 is described by the post-1970 average of 3.37% and the post-1992 average of 2.30%.

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Appendix

Statistical Tables of Default Rates and Recovery Estimates

Exhibit 26 – Descriptive Statistics for Defaulted Bond Prices, 1977-1998

Seniority and Security	Number	Average	Standard Deviation
Senior Secured Bank Loans*	98	$70.26	$21.33
Equipment Trust	27	$65.93	$28.55
Senior Secured Public Debt	118	$55.15	$24.31
Senior Unsecured Public Debt	338	$51.31	$26.30
Senior Subordinated Public Debt	252	$39.05	$24.39
Subordinated Public Debt	405	$31.66	$20.58
Junior Subordinated Public Debt	19	$20.39	$15.36
All Subordinated Public Debt	675	$34.12	$22.35
All Public Debt	1113	$45.02	$26.77

**Data covers 1989-1996.*

Exhibit 27 – All-Corporate Average One-Year Rating Transition Matrix, 1980-1998 (Percent)

	Rating to:	Aaa	Aa	A	Baa	Ba	B	Caa-C	Default	WR
Rating from:	Aaa	**85.44**	9.92	0.98	0.00	0.03	0.00	0.00	0.00	3.63
	Aa	1.04	**85.52**	9.21	0.33	0.14	0.14	0.00	0.03	3.59
	A	0.06	2.76	**86.57**	5.68	0.71	0.17	0.01	0.01	4.03
	Baa	0.05	0.32	6.68	**80.55**	5.72	0.95	0.08	0.15	5.49
	Ba	0.03	0.07	0.51	5.20	**76.51**	7.40	0.49	1.34	8.46
	B	0.01	0.04	0.16	0.60	6.07	**76.12**	2.54	6.50	7.96
	Caa-C	0.00	0.00	0.66	1.05	3.05	6.11	**62.97**	26.16	0.00

Exhibit 28 – All-Corporate One-Year Rating Transition Matrix, 1998 (Percent)

	Rating to:	Aaa	Aa	A	Baa	Ba	B	Caa-C	Default	WR
Rating from:	Aaa	**79.67**	18.70	0.00	0.00	0.00	0.00	0.00	0.00	1.63
	Aa	0.94	**88.20**	8.80	0.00	0.00	0.00	0.00	0.00	2.06
	A	0.09	2.78	**84.42**	9.37	0.46	0.00	0.00	0.00	2.88
	Baa	0.00	0.24	3.21	**84.20**	8.08	0.83	0.00	0.12	3.33
	Ba	0.00	0.29	0.58	5.25	**74.93**	7.58	3.94	0.58	6.85
	B	0.00	0.00	0.13	0.40	6.21	**76.38**	4.99	4.05	7.83
	Caa-C	0.00	0.00	0.00	0.00	0.95	6.67	**77.14**	15.24	0.00

Exhibit 29 – One-Year Default Rates by Year and Letter Rating, 1970-1998 (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	0.27	0.00	0.00	0.00	0.00	0.30	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	2.73	0.91	0.83
B	23.38	4.00	7.41	3.92	10.34	6.15	0.00	3.39	5.56	0.00	5.06	4.60	2.41	6.36	6.78
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	9.12	1.11	1.88	1.24	1.31	1.74	0.88	1.35	1.79	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	1.02	0.95	0.91

Rating	1985	1986	1987	1988	1989	1990	1991	1992	1993	1994	1995	1996	1997	1998
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
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
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
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
Ba	1.75	2.05	2.72	1.24	2.98	3.32	5.25	0.30	0.55	0.23	0.67	0.00	0.19	0.61
B	8.28	11.80	5.86	6.02	9.17	16.11	14.66	9.00	5.76	3.81	4.84	1.45	2.10	4.08
Investment-Grade	0.00	0.32	0.00	0.00	0.28	0.00	0.07	0.00	0.00	0.00	0.00	0.00	0.00	0.04
Speculative-Grade	3.90	5.67	4.10	3.47	6.02	9.80	10.45	4.83	3.50	1.93	3.30	1.66	2.02	3.31
US OnlySpeculative-grade	4.24	5.82	4.04	3.77	5.75	9.85	10.53	5.13	3.84	2.07	3.65	1.92	2.14	3.84
All Corporates	1.06	1.89	1.44	1.31	2.42	3.51	3.29	1.33	0.96	0.57	1.07	0.54	0.68	1.24

Exhibit 30 – One-Year Default Rates by Year and Alpha-Numeric Rating, 1983-1998 (Percent)

	1983	1984	1985	1986	1987	1988	1989	1990	1991	1992	1993	1994	1995	1996	1997	1998
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
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
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
Aa3	0.00	0.00	0.00	0.00	0.00	0.00	1.40	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
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
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
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
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
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
Ba1	0.00	1.16	0.00	0.88	3.73	0.00	0.80	2.69	1.07	0.00	0.81	0.00	0.00	0.00	0.00	0.00
Ba2	0.00	1.61	1.63	1.21	0.96	0.00	1.82	2.74	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.58
Ba3	2.61	0.00	3.77	3.44	2.95	2.58	4.69	3.90	9.73	0.73	0.75	0.59	1.71	0.00	0.47	1.09
B1	0.00	5.84	4.38	7.61	4.93	4.34	6.24	8.59	6.04	1.03	3.32	1.93	4.43	1.19	0.00	2.09
B2	11.11	20.00	7.69	16.67	4.30	6.90	8.16	21.82	12.58	1.54	4.96	3.61	6.31	0.00	1.48	7.16
B3	17.91	2.90	13.86	16.07	8.89	9.59	19.40	28.93	28.42	24.24	11.29	7.84	4.10	3.38	7.49	5.48
Investment-Grade	0.00	0.09	0.00	0.32	0.00	0.00	0.28	0.00	0.07	0.00	0.00	0.00	0.00	0.00	0.00	0.04
Speculative-Grade	3.82	3.32	3.90	5.67	4.10	3.47	6.02	9.80	10.45	4.83	3.50	1.93	3.30	1.66	2.02	3.31
All Corp.	0.95	0.91	1.06	1.89	1.44	1.31	2.42	3.51	3.29	1.33	0.96	0.57	1.07	0.54	0.68	1.24

Exhibit 31 – Average Cumulative Default Rates by Letter Rating From 1 to 20 Years (Percent) – 1970-1998

Years:	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20
Aaa	0.00	0.00	0.00	0.04	0.14	0.24	0.35	0.47	0.61	0.77	0.94	1.13	1.35	1.47	1.59	1.73	1.88	2.05	2.05	2.05
Aa	0.03	0.04	0.09	0.23	0.36	0.50	0.64	0.80	0.91	0.99	1.08	1.18	1.30	1.56	1.63	1.72	1.92	2.04	2.17	2.32
A	0.01	0.06	0.20	0.35	0.50	0.68	0.85	1.05	1.29	1.55	1.81	2.09	2.35	2.56	2.86	3.19	3.52	3.86	4.24	4.45
Baa	0.12	0.38	0.74	1.24	1.67	2.14	2.67	3.20	3.80	4.39	5.04	5.71	6.35	7.02	7.72	8.46	9.19	9.88	10.44	10.89
Ba	1.29	3.60	6.03	8.51	11.10	13.37	15.20	17.14	18.91	20.63	22.50	24.54	26.55	28.21	29.86	31.70	33.28	34.66	35.88	36.99
B	6.47	12.77	18.54	23.32	27.74	31.59	35.04	37.97	40.70	43.91	45.98	47.25	48.53	49.69	51.07	52.20	52.90	52.90	52.90	52.90
Investment-Grade	0.05	0.15	0.33	0.58	0.81	1.06	1.34	1.63	1.94	2.27	2.62	2.99	3.35	3.72	4.10	4.52	4.95	5.36	5.73	5.99
Speculative-Grade	3.82	7.69	11.27	14.44	17.49	20.14	22.33	24.46	26.38	28.32	30.16	31.96	33.74	35.23	36.74	38.36	39.73	40.87	41.87	42.80
All Corp.	1.15	2.30	3.37	4.33	5.21	5.99	6.66	7.31	7.93	8.55	9.17	9.77	10.37	10.91	11.47	12.07	12.65	13.16	13.62	13.98

Exhibit 32 – Average Cumulative Default Rates from 1 to 8 Years (Percent) – 1983-1998

Years:	1	2	3	4	5	6	7	8
Aaa	0.00	0.00	0.00	0.07	0.22	0.30	0.40	0.53
Aa1	0.00	0.00	0.00	0.25	0.25	0.42	0.42	0.42
Aa2	0.00	0.00	0.07	0.23	0.50	0.61	0.74	0.89
Aa3	0.07	0.11	0.21	0.32	0.45	0.61	0.61	0.61
A1	0.00	0.03	0.37	0.59	0.75	0.93	1.01	1.10
A2	0.00	0.03	0.16	0.43	0.66	0.88	1.01	1.38
A3	0.00	0.15	0.28	0.38	0.45	0.60	0.88	0.99
Baa1	0.04	0.29	0.59	1.02	1.45	1.66	2.05	2.36
Baa2	0.08	0.28	0.41	0.85	1.29	1.84	2.24	2.40
Baa3	0.31	0.75	1.28	2.21	2.79	3.65	4.53	5.39
Ba1	0.64	2.14	3.77	6.11	8.45	10.93	12.63	14.30
Ba2	0.59	2.84	5.46	7.75	9.66	11.22	12.76	13.77
Ba3	2.55	6.95	11.76	16.38	20.76	24.66	28.40	32.39
B1	3.56	9.17	15.03	20.36	25.56	30.85	35.90	39.70
B2	6.85	13.83	19.85	24.78	28.52	31.34	32.93	34.34
B3	12.41	20.97	27.79	32.56	37.49	40.55	43.75	48.34
Caa1-C	18.31	25.94	31.38	35.76	38.30	42.79	42.79	47.37
Investment-Grade	0.04	0.15	0.32	0.59	0.82	1.06	1.27	1.47
Speculative-Grade	3.67	8.19	12.60	16.58	20.26	23.54	26.44	29.17
All Corp.	1.18	2.59	3.95	5.19	6.25	7.17	7.94	8.64

Exhibit 33 – 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	1.41	1.41	2.53	2.53
Baa	0.27	0.27	0.27	1.14	1.43	1.43	1.74	2.39	3.06	3.06	3.42	3.42	4.59	5.00	5.42	6.29	7.67	8.68	9.77	10.36
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	23.38	26.02	28.66	28.66	28.66	28.66	28.66	28.66	28.66	28.66	28.66	28.66	35.98	35.98	35.98	35.98	35.98	35.98	35.98	35.98
Investment-Grade	0.14	0.14	0.14	0.56	0.71	0.86	1.01	1.31	1.63	1.63	1.96	1.96	2.48	2.84	3.02	3.40	4.36	4.97	5.83	6.06
Speculative-Grade	9.12	10.16	11.96	12.70	13.47	14.28	14.70	15.59	16.53	16.53	16.53	17.69	20.79	21.45	21.45	23.69	26.92	27.83	27.83	28.95
All Corp.	2.72	3.02	3.52	4.03	4.35	4.67	4.89	5.35	5.81	5.81	6.07	6.33	7.41	7.83	7.97	8.71	10.09	10.74	11.43	11.80
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	1.21	1.63	1.63	1.63	2.08	2.08	3.04	3.04	3.04
Baa	0.00	0.00	0.80	1.07	1.07	1.36	1.96	2.58	2.58	2.92	2.92	4.03	4.41	4.81	5.63	6.94	7.88	8.90	9.44	10.59
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	4.00	8.00	8.00	8.00	8.00	8.00	8.00	8.00	8.00	8.00	8.00	20.27	20.27	20.27	20.27	20.27	20.27	20.27	20.27	20.27
Investment-Grade	0.00	0.00	0.39	0.53	0.66	0.80	1.09	1.38	1.38	1.69	1.69	2.34	2.68	2.85	3.19	3.91	4.48	5.28	5.49	6.14
Speculative-Grade	1.11	3.02	3.82	4.64	5.93	6.38	7.34	8.35	8.35	8.35	9.59	12.92	13.63	13.63	16.03	20.33	21.30	21.30	22.50	22.50
All Corp.	0.28	0.77	1.26	1.56	1.98	2.19	2.63	3.08	3.08	3.32	3.58	4.75	5.16	5.29	6.01	7.33	7.96	8.63	8.98	9.53
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	2.56	3.07
Baa	0.00	0.73	0.98	1.23	1.50	2.05	2.63	2.63	3.25	3.25	3.94	4.30	4.67	5.43	6.63	7.51	8.46	9.47	11.09	13.33
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	7.41	7.41	7.41	7.41	7.41	7.41	7.41	7.41	7.41	7.41	18.30	18.30	18.30	18.30	18.30	18.30	18.30	18.30	18.30	18.30
Investment-Grade	0.00	0.37	0.49	0.62	0.74	1.01	1.28	1.28	1.57	1.57	2.02	2.33	2.49	2.82	3.48	4.01	4.76	5.15	6.17	7.21
Speculative-Grade	1.88	2.66	3.47	4.73	5.17	6.10	7.08	7.08	7.08	8.26	12.04	12.71	13.43	16.47	20.54	21.45	21.45	22.55	23.72	29.88
All Corp.	0.45	0.92	1.20	1.59	1.79	2.20	2.62	2.62	2.85	3.09	4.19	4.57	4.82	5.62	6.86	7.45	8.07	8.56	9.60	11.37

Exhibit 33 – 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, 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	0.68	1.16	1.40	1.91	2.45	2.45	3.03	3.03	3.67	4.33	5.01	6.07	7.19	7.99	8.87	9.81	11.82	13.92	13.92
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	3.92	3.92	3.92	3.92	3.92	3.92	3.92	3.92	3.92	15.22	15.22	15.22	15.22	15.22	15.22	15.22	15.22	15.22	15.22	15.22
Investment-Grade	0.23	0.35	0.59	0.71	0.96	1.21	1.21	1.49	1.49	1.92	2.36	2.66	3.13	3.76	4.27	4.98	5.35	6.52	7.52	7.73
Speculative-Grade	1.24	2.10	3.00	3.47	4.46	5.49	5.49	5.49	6.73	11.31	12.00	12.00	14.34	18.54	20.42	20.42	21.55	22.76	30.29	31.63
All Corp.	0.45	0.73	1.10	1.30	1.70	2.11	2.11	2.33	2.56	3.74	4.23	4.47	5.25	6.45	7.15	7.76	8.23	9.40	11.28	11.65
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	0.71	1.21	1.74	1.74	2.31	2.31	2.94	3.60	4.27	5.32	5.69	6.49	7.37	8.30	9.80	11.89	11.89	11.89
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	10.34	10.34	10.34	10.34	10.34	10.34	10.34	14.72	23.94	23.94	23.94	23.94	23.94	23.94	23.94	23.94	23.94	23.94	23.94	23.94
Investment-Grade	0.00	0.23	0.35	0.60	0.85	0.85	1.12	1.12	1.69	2.12	2.42	2.87	3.18	3.68	4.38	4.74	5.69	6.67	6.88	6.88
Speculative-Grade	1.31	2.23	2.71	3.73	4.79	4.79	4.79	6.06	10.74	11.46	11.46	13.85	19.85	21.77	21.77	22.93	25.41	33.20	34.59	36.15
All Corp.	0.27	0.65	0.84	1.23	1.64	1.64	1.86	2.09	3.37	3.86	4.10	4.86	6.05	6.75	7.35	7.82	8.96	10.82	11.18	11.37
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	0.00	0.37	0.37	0.37	0.76	0.76	1.60	1.60	2.05	2.99	3.50	4.05	4.05
Baa	0.00	0.00	0.25	0.78	0.78	1.35	1.35	2.30	2.95	3.61	4.66	5.02	5.81	6.24	7.16	9.11	11.15	11.15	11.15	11.15
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	6.15	6.15	6.15	9.45	9.45	9.45	13.30	21.37	21.37	21.37	21.37	21.37	21.37	21.37	21.37	31.19	42.66	42.66	42.66	42.66
Investment-Grade	0.00	0.00	0.12	0.36	0.36	0.62	0.62	1.16	1.57	1.85	2.28	2.58	3.05	3.71	4.05	5.13	6.23	6.43	6.64	6.64
Speculative-Grade	1.74	2.65	4.08	5.08	5.08	5.08	6.27	10.71	11.38	11.38	13.64	19.32	21.13	22.12	23.20	25.49	32.64	33.91	35.30	35.30
All Corp.	0.36	0.54	0.92	1.31	1.31	1.52	1.73	2.96	3.41	3.65	4.37	5.50	6.16	6.86	7.31	8.53	10.43	10.77	11.14	11.14

Exhibit 33 – 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, 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	0.97	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	1.32	1.32	2.44	2.44	2.84	4.10	4.10	4.59	4.59	5.65
Baa	0.00	0.27	0.55	0.55	0.86	0.86	2.19	2.88	3.59	4.69	5.08	5.91	5.91	6.88	8.95	10.56	11.12	11.12	11.12	11.12
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	3.77	3.77	3.77	8.47	18.36	18.36	18.36	18.36	18.36	18.36	18.36	18.36	33.21	49.90	49.90	49.90	49.90	49.90
Investment-Grade	0.00	0.11	0.23	0.23	0.35	0.35	0.98	1.50	1.76	2.17	2.59	3.03	3.65	3.98	4.99	6.03	6.22	6.42	6.42	6.86
Speculative-Grade	0.88	2.26	3.70	3.70	4.24	5.39	9.07	9.72	9.72	11.91	17.39	19.15	20.13	21.17	23.38	31.44	32.68	34.02	34.02	34.02
All Corp.	0.17	0.53	0.90	0.90	1.10	1.30	2.45	2.99	3.21	3.90	5.09	5.72	6.38	6.80	7.97	9.92	10.24	10.59	10.59	10.97
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	1.25	1.25	3.02	3.02	3.78	4.98	4.98	5.45	5.45	6.47	6.47
Baa	0.27	0.56	0.56	0.56	0.56	1.90	2.60	3.32	4.44	4.83	5.67	5.67	6.65	8.20	9.82	10.38	10.38	10.38	10.38	10.38
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	3.39	6.97	6.97	11.40	16.19	27.00	27.00	27.00	27.00	27.00	27.00	27.00	27.00	43.22	62.15	62.15	62.15	62.15	62.15	62.15
Investment-Grade	0.11	0.22	0.22	0.22	0.22	0.83	1.34	1.59	1.99	2.40	2.83	3.74	4.06	5.04	6.05	6.23	6.43	6.43	6.86	6.86
Speculative-Grade	1.35	2.76	2.76	3.81	4.95	8.57	9.21	9.21	11.36	16.71	18.41	19.35	20.35	22.48	30.29	31.49	32.81	32.81	32.81	32.81
All Corp.	0.35	0.71	0.71	0.90	1.10	2.22	2.74	2.96	3.63	4.79	5.40	6.31	6.71	7.84	9.74	10.05	10.39	10.39	10.76	10.76
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	2.74	2.74	3.93	4.77	4.77	5.26	5.26	6.31	6.31	6.31
Baa	0.00	0.00	0.00	0.00	1.31	1.65	2.35	3.44	3.82	4.63	5.07	6.02	7.51	9.58	10.13	10.13	10.13	10.13	10.13	10.13
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	5.56	5.56	12.07	15.52	23.03	23.03	27.69	27.69	33.72	40.35	40.35	40.35	50.29	64.49	64.49	64.49	64.49	64.49	64.49	64.49
Investment-Grade	0.00	0.00	0.00	0.00	0.60	0.96	1.21	1.60	2.00	2.42	3.30	3.61	4.72	5.71	5.88	6.07	6.07	6.49	6.49	6.49
Speculative-Grade	1.79	1.79	2.80	3.88	7.32	8.54	9.18	11.87	18.32	20.71	21.59	22.53	25.53	32.97	34.13	36.66	36.66	36.66	36.66	36.66
All Corp.	0.35	0.35	0.53	0.73	1.81	2.32	2.64	3.39	4.74	5.45	6.32	6.72	8.08	9.92	10.22	10.71	10.71	11.07	11.07	11.07

Exhibit 33 – 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, 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	0.80	0.80	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
A	0.00	0.00	0.00	0.00	0.60	0.60	0.60	1.25	1.25	2.69	2.69	3.47	4.29	4.29	4.77	4.77	5.80	5.80	5.80	5.80
Baa	0.00	0.30	0.30	1.59	1.93	2.27	3.35	3.35	4.15	4.59	5.53	8.03	10.12	10.66	10.66	10.66	10.66	10.66	10.66	10.66
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	6.67	10.19	17.83	17.83	22.53	27.69	40.27	47.73	47.73	47.73	60.80	60.80	60.80	-	-	-	-	-	-
Investment-Grade	0.00	0.11	0.11	0.70	1.05	1.18	1.55	1.81	2.22	3.09	3.39	4.64	5.61	5.78	5.97	5.97	6.37	6.37	6.37	6.37
Speculative-Grade	0.42	1.31	2.26	5.26	7.37	10.75	13.69	21.22	23.30	24.05	24.86	28.34	34.90	35.91	38.12	38.12	38.12	38.12	38.12	38.12
All Corp.	0.09	0.35	0.54	1.58	2.26	2.96	3.79	5.30	5.98	6.82	7.20	8.78	10.56	10.85	11.33	11.33	11.67	11.67	11.67	11.67
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	
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	
A	0.00	0.00	0.28	0.86	0.86	0.86	1.79	2.11	3.16	3.16	3.91	4.69	4.69	5.15	5.15	6.14	6.14	6.14	6.14	
Baa	0.00	0.00	0.94	1.27	1.61	3.01	3.01	3.40	4.24	5.57	7.95	9.93	10.96	10.96	10.96	10.96	10.96	10.96	10.96	
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	
B	5.06	7.74	16.25	22.34	28.95	32.60	45.64	50.58	50.58	50.58	62.94	71.17	71.17	71.17	71.17	71.17	71.17	71.17	71.17	
Investment-Grade	0.00	0.00	0.45	0.80	0.91	1.40	1.77	2.30	3.13	3.56	4.76	5.68	6.01	6.19	6.19	6.59	6.59	6.59	6.59	
Speculative-Grade	1.61	2.47	6.52	8.41	12.42	15.58	22.89	25.36	26.04	28.27	32.24	40.05	41.99	44.08	44.08	44.08	44.08	45.28	45.28	
All Corp.	0.34	0.51	1.68	2.33	3.19	4.17	5.81	6.67	7.47	8.19	9.82	11.76	12.32	12.77	12.77	13.10	13.10	13.27	13.27	
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		
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		
A	0.00	0.27	0.27	0.27	0.27	1.19	1.51	2.21	2.21	2.95	3.74	3.74	4.20	4.20	5.20	5.20	5.20	5.20		
Baa	0.00	0.60	1.86	2.51	3.53	3.53	3.91	4.71	6.00	8.28	9.70	10.67	10.67	10.67	10.67	10.67	10.67	10.67		
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		
B	4.60	11.84	16.95	25.12	28.06	41.44	41.44	41.44	41.44	52.09	58.48	58.48	58.48	58.48	58.48	58.48	58.48	58.48		
Investment-Grade	0.00	0.32	0.77	0.99	1.35	1.71	2.22	3.03	3.45	4.62	5.37	5.69	5.86	5.86	6.24	6.24	6.24	6.24		
Speculative-Grade	0.70	4.77	6.71	10.42	14.31	22.20	24.25	24.82	27.30	32.04	39.63	41.35	43.23	43.23	43.23	43.23	44.33	45.47		
All Corp.	0.16	1.33	2.10	3.09	4.19	6.11	6.93	7.69	8.49	10.27	12.12	12.65	13.09	13.09	13.40	13.40	13.57	13.75		

Exhibit 33 – 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
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
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
A	0.26	0.26	0.26	0.26	1.15	1.15	1.82	1.82	2.92	3.68	3.68	4.13	4.13	4.13	4.13	4.13	4.13
Baa	0.30	0.30	1.30	2.34	2.70	3.48	4.30	5.62	7.95	9.39	10.39	10.39	10.39	11.00	11.00	11.00	11.00
Ba	2.73	5.22	7.86	11.99	18.83	20.45	21.05	23.71	28.07	32.97	34.83	36.84	36.84	36.84	36.84	38.13	39.50
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
Investment-Grade	0.21	0.21	0.54	0.88	1.36	1.86	2.65	3.06	4.35	5.10	5.41	5.58	5.58	5.96	5.96	5.96	5.96
Speculative-Grade	3.54	7.63	10.52	14.29	21.95	23.72	24.22	26.43	30.70	37.60	39.17	40.87	40.87	40.87	40.87	41.95	43.08
All Corp.	1.02	2.00	2.93	4.07	6.18	6.95	7.68	8.45	10.29	12.09	12.61	13.03	13.03	13.34	13.34	13.50	13.67
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	
Aa	0.00	0.00	0.00	0.00	0.48	1.98	1.98	1.98	1.98	1.98	1.98	1.98	2.68	2.68	2.68	2.68	
A	0.00	0.00	0.00	0.26	0.26	0.83	0.83	1.76	2.74	3.42	3.79	3.79	3.79	3.79	3.79	3.79	
Baa	0.00	1.16	1.56	3.27	3.74	4.26	5.36	6.52	7.73	7.73	7.73	7.73	7.73	7.73	7.73	7.73	
Ba	0.91	2.39	5.58	13.22	13.91	17.05	20.68	25.83	31.49	31.49	32.93	32.93	34.53	34.53	36.37	38.27	
B	6.36	11.12	18.03	25.39	28.70	29.90	32.68	40.79	50.82	55.74	58.51	58.51	58.51	58.51	58.51	58.51	
Investment-Grade	0.00	0.30	0.40	0.93	1.39	2.11	2.35	3.13	3.81	4.10	4.26	4.26	4.43	4.43	4.43	4.43	
Speculative-Grade	3.82	6.97	11.32	18.64	20.68	23.00	26.21	32.33	39.31	40.92	42.73	42.73	43.73	43.73	44.92	46.18	
All Corp.	0.95	1.93	3.02	5.08	5.88	6.92	7.72	9.42	11.08	11.56	11.96	11.96	12.25	12.25	12.40	12.56	
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		
Aa	0.00	0.00	0.00	0.88	1.80	1.80	1.80	1.80	1.80	1.80	1.80	2.44	2.44	2.44	2.44		
A	0.00	0.22	0.46	0.71	1.48	1.75	2.59	3.47	4.09	4.09	4.09	4.09	4.09	4.09	4.09		
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		
Ba	0.83	4.38	13.05	14.14	17.87	22.12	26.89	33.81	34.78	35.87	35.87	37.10	37.10	38.60	38.60		
B	6.78	12.88	20.29	24.20	27.39	32.39	42.79	50.06	52.28	57.30	57.30	57.30	57.30	57.30	61.37		
Investment-Grade	0.09	0.19	0.39	0.93	1.61	1.96	2.71	3.48	3.76	3.91	3.91	4.07	4.07	4.07	4.07		
Speculative-Grade	3.32	7.69	15.87	17.96	21.47	25.98	32.69	39.65	40.99	43.23	43.23	44.07	44.07	45.10	46.24		
All Corp.	0.91	2.07	4.20	5.10	6.42	7.63	9.50	11.37	11.82	12.31	12.31	12.59	12.59	12.74	12.89		

Exhibit 33 – Cumulative Default Rates for Cohorts Formed Since 1970 (Percent)

Years:	1	2	3	4	5	6	7	8	9	10	11	12	13	14
Cohort formed January 1, 1985														
Aaa	0.00	0.00	0.00	0.00	0.00	1.36	1.36	1.36	1.36	1.36	1.36	1.36	1.36	1.36
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
A	0.00	0.21	1.33	2.28	2.53	3.57	4.39	4.68	4.68	4.68	4.68	4.68	4.68	4.68
Baa	0.00	1.20	1.20	1.70	2.77	3.34	5.12	5.75	6.46	6.46	6.46	6.46	6.46	6.46
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	35.98	35.98
B	8.28	17.78	23.23	26.68	31.00	43.17	50.06	52.33	57.63	57.63	57.63	57.63	57.63	61.86
Investment-Grade	0.00	0.36	0.85	1.58	1.92	2.61	3.33	3.59	3.74	3.74	3.90	3.90	3.90	3.90
Speculative-Grade	3.90	10.55	14.13	17.57	23.01	30.14	36.84	38.49	40.33	40.33	42.46	42.46	43.29	44.21
All Corp.	1.06	3.10	4.39	5.81	7.32	9.39	11.29	11.81	12.26	12.26	12.78	12.78	12.92	13.06
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	
Aa	0.00	0.00	0.79	0.79	1.24	1.24	1.24	1.24	1.24	1.84	1.84	1.84	1.84	
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	
Baa	1.33	1.33	3.00	3.87	5.25	6.70	7.75	8.34	8.34	8.34	8.34	8.34	8.34	
Ba	2.05	6.29	8.53	14.02	20.21	28.24	30.08	32.85	33.60	34.40	34.40	36.32	36.32	
B	11.80	16.60	20.62	24.69	34.60	44.29	48.80	52.33	52.33	54.78	54.78	54.78	57.90	
Investment-Grade	0.32	0.40	1.22	1.60	2.29	2.81	3.04	3.16	3.16	3.30	3.30	3.30	3.30	
Speculative-Grade	5.67	10.04	13.11	18.04	25.31	33.67	36.22	39.13	39.66	41.41	41.41	42.79	43.56	
All Corp.	1.89	3.22	4.66	6.20	8.46	10.69	11.39	12.06	12.17	12.60	12.60	12.84	12.97	
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		
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		
A	0.00	0.00	0.40	1.25	1.68	1.68	1.68	1.68	1.68	1.68	1.68	1.68		
Baa	0.00	1.04	1.78	3.34	4.97	6.27	7.23	7.23	7.23	7.23	7.87	7.87		
Ba	2.72	4.48	9.56	15.98	23.72	27.14	30.64	31.76	32.99	33.68	35.26	36.14		
B	5.86	12.72	19.62	31.27	42.61	46.09	48.16	48.16	49.54	49.54	49.54	51.48		
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		
Speculative-Grade	4.10	7.86	13.52	21.67	30.49	33.87	36.83	37.58	39.24	39.70	40.75	41.94		
All Corp.	1.44	2.89	4.96	8.00	10.85	11.93	12.81	12.99	13.45	13.55	13.85	14.07		

Exhibit 33 – Cumulative Default Rates for Cohorts Formed Since 1970 (Percent)

Years:	1	2	3	4	5	6	7	8	9	10	11
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
Aa	0.00	0.33	0.67	0.67	0.67	0.67	0.67	1.14	1.14	1.14	1.14
A	0.00	0.38	0.99	1.40	1.40	1.40	1.40	1.40	1.40	1.40	1.40
Baa	0.00	0.33	1.03	2.49	3.65	4.50	4.50	4.50	4.50	5.06	5.06
Ba	1.24	6.98	12.83	20.58	23.61	26.79	27.70	28.70	29.81	31.07	31.77
B	6.02	13.07	25.73	37.00	41.18	46.30	47.16	50.21	50.21	51.49	57.28
Investment-Grade	0.00	0.31	0.80	1.32	1.59	1.79	1.79	1.90	1.90	2.02	2.02
Speculative-Grade	3.47	9.64	18.01	26.95	30.34	34.14	35.02	36.98	37.72	38.95	41.24
All Corp.	1.31	3.75	6.96	10.17	11.36	12.55	12.78	13.35	13.52	13.88	14.36
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	
Aa	0.61	0.61	0.61	0.61	0.61	0.61	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	
Baa	0.60	1.23	1.88	2.93	2.93	2.93	2.93	2.93	3.40	3.40	
Ba	2.98	10.00	18.13	20.82	23.99	24.40	25.31	26.84	28.58	30.54	
B	9.17	22.97	33.39	38.44	44.07	46.10	50.06	50.06	52.17	57.07	
Investment-Grade	0.28	0.51	0.82	1.06	1.06	1.06	1.17	1.17	1.28	1.28	
Speculative-Grade	6.02	15.85	24.93	28.50	32.54	33.54	35.53	36.49	38.30	41.19	
All Corp.	2.42	6.05	9.28	10.56	11.75	12.02	12.60	12.84	13.32	13.92	

Exhibit 33 – Cumulative Default Rates for Cohorts Formed Since 1970 (Percent)

Years:	1	2	3	4	5	6	7	8	9
Cohort formed January 1, 1990									
Aaa	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	0.36	0.36	0.36	0.36
A	0.00	0.00	0.00	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
Ba	3.32	11.71	14.22	17.16	17.91	19.17	20.07	22.06	23.73
B	16.11	27.79	34.73	39.84	41.52	44.19	44.99	46.90	51.47
Investment-Grade	0.00	0.14	0.14	0.14	0.14	0.23	0.23	0.23	0.23
Speculative-Grade	9.80	19.57	23.86	27.61	28.71	30.71	31.55	33.43	35.93
All Corp.	3.51	6.91	8.28	9.40	9.71	10.31	10.52	10.97	11.51
Cohort formed January 1, 1991									
Aaa	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	0.31	0.31	0.31	0.31	
A	0.00	0.00	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	
Ba	5.25	6.50	8.29	8.70	10.09	11.09	12.73	14.58	
B	14.66	23.84	30.75	32.96	36.23	37.00	39.74	44.05	
Investment-Grade	0.07	0.07	0.07	0.07	0.15	0.15	0.15	0.15	
Speculative-Grade	10.45	15.11	19.02	20.16	22.51	23.38	25.33	27.94	
All Corp.	3.29	4.66	5.75	6.05	6.69	6.89	7.32	7.84	
Cohort formed January 1, 1992									
Aaa	0.00	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		
A	0.00	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		
Ba	0.30	1.00	1.00	2.34	2.83	3.90	5.70		
B	9.00	17.46	20.80	24.77	27.07	29.70	33.78		
Investment-Grade	0.00	0.00	0.00	0.08	0.08	0.08	0.08		
Speculative-Grade	4.83	8.90	10.26	12.83	13.98	15.90	18.43		
All Corp.	1.33	2.39	2.72	3.37	3.62	4.01	4.50		

Years:	1	2	3	4	5
Cohort formed January 1, 1994					
Aaa	0.00	0.00	0.00	0.00	0.00
Aa	0.00	0.00	0.00	0.00	0.00
A	0.00	0.00	0.00	0.00	0.00
Baa	0.00	0.21	0.21	0.43	0.66
Ba	0.23	1.76	2.04	2.95	4.67
B	3.81	9.13	12.28	14.09	17.85
Investment-Grade	0.00	0.06	0.06	0.12	0.18
Speculative-Grade	1.93	5.31	7.17	8.39	10.79
All Corp.	0.57	1.58	2.09	2.46	3.08
Cohort formed January 1, 1995					
Aaa	0.00	0.00	0.00	0.00	
Aa	0.00	0.00	0.00	0.00	
A	0.00	0.00	0.00	0.00	
Baa	0.00	0.00	0.00	0.43	
Ba	0.67	0.92	1.98	3.77	
B	4.84	7.37	10.24	13.50	
Investment-Grade	0.00	0.00	0.00	0.11	
Speculative-Grade	3.30	5.05	6.88	9.67	
All Corp.	1.07	1.61	2.16	3.02	
Cohort formed January 1, 1996					
Aaa	0.00	0.00	0.00		
Aa	0.00	0.00	0.00		
A	0.00	0.00	0.00		
Baa	0.00	0.00	0.18		
Ba	0.00	0.70	2.26		
B	1.45	4.45	8.86		
Investment-Grade	0.00	0.00	0.05		
Speculative-Grade	1.66	3.81	7.20		
All Corp.	0.54	1.21	2.24		

Exhibit 33 – Cumulative Default Rates for Cohorts Formed Since 1970 (Percent)

Cohort formed January 1, 1993

Years:	1	2	3	4	5	6
Aaa	0.00	0.00	0.00	0.00	0.00	0.00
Aa	0.00	0.00	0.00	0.00	0.00	0.00
A	0.00	0.00	0.00	0.00	0.00	0.00
Baa	0.00	0.00	0.26	0.26	0.26	0.55
Ba	0.55	0.55	2.94	3.68	4.93	6.34
B	5.76	9.98	14.83	16.67	19.48	22.70
Investment-Grade	0.00	0.00	0.07	0.07	0.07	0.14
Speculative-Grade	3.50	5.13	8.78	10.12	11.89	13.91
All Corp.	0.96	1.38	2.33	2.65	3.05	3.52

Cohort formed January 1, 1998

Years:	1
Aaa	0.00
Aa	0.00
A	0.00
Baa	0.12
Ba	0.61
B	4.08
Investment-Grade	0.04
Speculative-Grade	3.31
All Corp.	1.24

Cohort formed January 1, 1997

Years:	1	2
Aaa	0.00	0.00
Aa	0.00	0.00
A	0.00	0.00
Baa	0.00	0.15
Ba	0.19	1.42
B	2.10	7.31
Investment-Grade	0.00	0.04
Speculative-Grade	2.02	5.84
All Corp.	0.68	1.93

Exhibit 34 – Defaulters Holding Investment- Grade Ratings Within One Year of Default Date, 1970-1998

Issuer Name	Default Date	Rating at Default	Rating 1 Year Prior	Rating 2 Years Prior	Rating 3 Years Prior
Ames Department Stores, Inc.	4/25/90	B3	Baa3	Baa3	Baa3
Arlan's Department Stores Inc.	5/13/73	Ba	Baa	Baa	Baa
C-U Funding Corporation	3/30/90	Caa	A2	A2	A2
Columbia Gas System, Inc.	6/20/91	B1	Baa1	Baa2	Baa2
Daylin Inc.	2/28/75	Caa	Baa	Baa	Baa
DFC Financial (Overseas) Ltd.	10/3/89	Caa	Aa3	Aa3	—
DFC Overseas Investment Ltd.	10/3/89	Caa	A1	A1	—
Documation Inc.	10/31/84	Caa	Baa3	Baa3	Baa
Dow Corning Corporation	5/15/95	Caa	Baa1	Baa1	A3
Equitable Lomas Leasing Corporation	9/1/89	Caa	Baa2	A2	A2
First RepublicBank Corporation	3/15/88	B3	Baa1	Aa3	Aa3
Guangdong International Trust & Investment Corporation	10/6/98	Ba1	Baa2	Baa2	Baa2
Interstate Stores	2/1/74	B	Baa	Baa	Baa
Itel Corporation	6/1/80	Caa	Baa	—	—
Itel Financial International N.V.	6/1/80	Caa	Baa	—	—
Johns Manville Corp.	8/26/82	Ca	A	A	A
Moran Bros., Inc.	11/1/86	Ba3	Baa3	Baa3	Ba3
Moran Energy International N.V.	11/1/86	Ba3	Baa3	Baa3	—
Moran Energy, Inc.	11/1/86	Ba3	Baa3	Baa3	Ba3
One Bancorp, The	1/31/90	Caa	Baa2	Baa3	Baa3
Parkview-Gem Inc.	11/1/73	Ba	Baa	Baa	Baa
Philadelphia, Baltimore & Washington Railroad Co.	6/21/70	Baa	Baa	Baa	Baa
Revere Copper & Brass Co.	10/27/82	Caa	Baa	Baa	Baa
Smith International, Inc.	3/7/86	Caa	A3	A1	A1
Storage Technology Corporation	10/31/84	Caa	Baa2	Baa3	Baa

Exhibit 35 – Chronological List of 1998 Public Corporate Bond Defaulters

Defaulted Company	Amount	Default Description
January		
A.P.S., Inc.	$100.0	Chapter 11
All Star Gas Corporation	$127.2	Grace period default
Anvil Range Mining Corporation	$21.0	Bankruptcy
Bakrie Finance Corporation Tbk.	$15.1	Missed interest payment
Bakrie Indonesia B.V.	$185.0	Missed interest payment
Bakrie International Finance Company B.V.	$469.2	Missed interest payment
BIN Finance Company B.V.	$100.0	Missed interest payment
Ciputra Development International Finance B.V.	$100.0	Missed interest payment
GB Property Funding Corp.	$182.5	Chapter 11
Kalfarm Finance Limited	$100.0	Missed interest payment
Pegasus Gold Inc.	$115.0	Chapter 11
Peregrine Investments Holdings Ltd.	$272.1	Receivership
PIV Investment Finance (Cayman) Limited	$192.9	Receivership
PT Bakrie Investindo	$54.0	Missed interest payment
PT Ciputra Development	$13.7	Missed interest payment
Venture Stores Inc.	$60.9	Chapter 11
Defaulted Debt (US millions):	*$2,108.5*	
Number of Defaulting Companies:	*16*	
February		
American Rice, Inc.	$99.0	Missed interest payment
Banco Medefin UNB S.A.	$129.5	Missed interest payment
Bruno’s, Inc.	$400.0	Chapter 11
Franki S.A.	$19.9	Bankruptcy
Grand Union Company	$595.5	Missed interest payment
Reliance Acceptance Group, Inc.	$25.0	Chapter 11
United States Leather, Inc.	$130.0	Missed interest payment
Defaulted Debt (US millions):	*$1,398.9*	
Number of Defaulting Companies:	*7*	
March		
Alpargatas S.A.I.C.	$220.0	Missed principal payment
Duta Anggada International B.V.	$100.0	Missed interest payment
Hybridon, Inc.	$50.0	Missed interest payment
Imagyn Medical Technologies, Inc.	$50.0	Missed interest payment
PT Ciputra Surya Tbk.	$35.1	Missed interest payment
PT Duta Anggada Realty Tbk.	$14.1	Missed interest payment
PT Pakuwon Jati Tbk.	$34.0	Missed interest payment
PT Semen Cibinong Tbk.	$170.0	Payment moratorium
Salant Corp.	$104.9	Missed interest payment
Thai Modern Plastic Industry PCL	$14.6	Missed interest payment
Defaulted Debt (US millions):	*$792.7*	
Number of Defaulting Companies:	*10*	
April		
Aokam Perdana Berhad	$123.8	Bankruptcy
Cibinong International Finance Company B.V.	$150.0	Payment moratorium
CP Pokphand (Finance) Co. Ltd.	$135.0	Missed principal payment
CP Pokphand Co. Ltd.	$242.8	Missed principal payment
Dharmala Intiutama International B.V.	$316.0	Missed interest payment
DSS Overseas International B.V.	$100.0	Missed interest payment
Eagle Finance Corp.	$17.0	Missed interest payment
FSW International Finance Company B.V.	$135.0	Payment moratorium
Heartland Wireless Communications, Inc.	$225.0	Missed interest payment
JTS Corporation	$43.4	Missed interest payment
PRT Funding Corp.	$85.0	Missed interest payment
PT Dharmala Sakti Sejahtera	$5.8	Missed interest payment
Defaulted Debt (US millions):	*$1,578.7*	
Number of Defaulting Companies:	*12*	

Exhibit 35 – Chronological List of 1998 Public Corporate Bond Defaulters

Defaulted Company	Amount	Default Description
May		
American Telecasting, Inc.	$232.6	Distressed exchange
Cityscape Financial Corporation	$429.6	Missed interest payment
Korea Tungsten Co., Ltd.	$135.7	Receivership
Ometraco Nederland B.V.	$80.0	Missed interest payment
PT Bahana Pembinaan Usaha	$325.0	Missed interest payment
Royal Oak Mines Inc.	$175.0	Distressed exchange
William Resources Inc.	$67.9	Missed interest payment
WorldCorp, Inc	$65.0	Missed interest payment
Defaulted Debt (US millions):	*$1,510.7*	
Number of Defaulting Companies:	*8*	
June		
Citra Marga Finance B.V.	$300.0	Missed interest payment
FPA Medical Management, Inc.	$80.7	Missed interest payment
Geotek Communications, Inc.	$282.0	Chapter 11
Malaysian General Investment Corporation	$17.5	Bankruptcy
Mego Mortgage Corporation	$80.0	Distressed exchange
Philippine Airlines Inc.	$200.0	Suspension of payments
Polysindo International Finance Company B.V.	$682.5	Missed interest payment
Polytama International Finance B.V.	$200.0	Missed interest payment
PT Polysindo Eka Perkasa	$27.5	Missed interest payment
Robinson Department Store Plc	$236.4	Missed interest payment
Tri Polyta Finance B.V.	$185.0	Grace period default
Defaulted Debt (US millions):	*$2,291.5*	
Number of Defaulting Companies:	*11*	
July		
Arab Malaysian Corporation Berhad	$98.8	Bankruptcy
CAI Wireless Systems, Inc.	$275.0	Prepackaged Chapter 11
Kwang Myung Electric Engineering Co., Ltd.	$8.0	Receivership
Mulia Industrindo Finance B.V.	$225.0	Missed interest payment
Sahaviriya Steel Industries Plc	$110.0	Missed interest payment
Shinwon Industries Co., Ltd.	$10.0	Receivership
Taiping Consolidated Berhad	$33.5	Bankruptcy
Texfi Industries Inc.	$36.8	Missed interest payment
TIME Engineering Berhad	$250.0	Bankruptcy
Defaulted Debt (US millions):	*$1,047.1*	
Number of Defaulting Companies:	*9*	
August		
Renaissance Cosmetics, Inc.	$200.0	Missed interest payment
Defaulted Debt (US millions):	*$200.0*	
Number of Defaulting Companies:	*1*	
September		
Acme Metals Incorporated	$238.2	Chapter 11
Golden Books Publishing Company, Inc.	$150.0	Missed interest payment
Hemaraj Land and Development Public	$54.4	Missed interest payment
International Wireless Communications	$196.7	Chapter 11
Moscow City Telephone Network	$150.0	Grace period default
PT Bank Papan Sejahtera	$22.6	Grace period default
Rossiyskiy Kredit Securities B.V.	$200.0	Grace period default
Defaulted Debt (US millions):	*$1,011.9*	
Number of Defaulting Companies:	*7*	

Exhibit 35 – Chronological List of 1998 Public Corporate Bond Defaulters

Defaulted Company	Amount	Default Description
October		
Astra Overseas Finance B.V.	$200.0	Suspension of payments
Banco Mayo Cooperativo Limitado	$100.0	Seized by regulators
Bangkok Bank of Commerce Pcl	$61.6	Missed interest payment
Boston Chicken, Inc.	$623.0	Chapter 11
CRIIMIE MAE, Inc.	$100.0	Chapter 11
Guangdong International Trust & Investment Corp.	$399.0	Suspension of payments
Ionica Plc	$225.0	Receivership
Mulialand Finance B.V.	$200.0	Missed interest payment
PT Astra International Tbk.	$347.2	Suspension of payments
PT Bank Modern Tbk.	$13.0	Missed interest payment
PT Muliaglass	$10.9	Missed interest payment
PT Muliakeramik Indahraya Tbk.	$10.9	Missed interest payment
PT Mulialand Tbk.	$34.7	Missed interest payment
Renong Berhad	$513.8	Suspension of payments
Scott Cable Communications, Inc.	$110.5	Prepackaged Chapter 11
Southern Pacific Funding Corporation	$175.0	Chapter 11
Tatneft Finance plc	$300.0	Grace period default
Defaulted Debt (US millions):	*$3,324.6*	
Number of Defaulting Companies:	*16*	
November		
AmeriTruck Distribution Corp.	$100.0	Chapter 11
Dhana Siam Finance Public Company Limited	$64.9	Suspension of payments
HealthCor Holdings, Inc.	$80.0	Missed interest payment
Livent Inc.	$125.0	Chapter 11
Mancon (BVI) Investment Holding Company	$100.0	Missed interest payment
National Energy Group, Inc.	$164.7	Missed interest payment
Philip Services Corp.	$25.6	Suspension of payments
PHP Healthcare Corp.	$69.0	Chapter 11
Pioneer Finance Corp.	$60.0	Suspension of payments
Thai Oil Company Limited	$200.0	Missed interest payment
Wilshire Financial Services Group Inc.	$184.2	Distressed exchange
Defaulted Debt (US millions):	*$1,173.5*	
Number of Defaulting Companies:	*11*	
December		
Biscayne Apparel, Inc.	$6.4	Missed interest payment
CML Group, Inc.	$41.6	Chapter 11
Florida Coast Paper Company, L.L.C.	$165.0	Missed interest payment
Forman Petroleum Corporation	$70.0	Missed interest payment
Four M Corporation	$170.0	Grace period default
Geneva Steel Company	$325.0	Missed interest payment
JumboSports, Inc.	$74.8	Chapter 11
P & C Food Markets, Inc.	$107.2	Missed interest payment
Penn Traffic Company	$1,025.0	Missed interest payment
PhoneTel Technologies, Inc.	$125.0	Missed interest payment
Physicians Resource Group, Inc.	$125.0	Missed interest payment
Service Merchandise Company, Inc.	$313.0	Missed interest payment
SGL Carbon Corporation	$90.7	Chapter 11
VDH Holland B.V.	$100.0	Missed interest payment
Willcox & Gibbs, Inc.	$85.0	Missed interest payment
Defaulted Debt (US millions):	*$2,823.7*	
Number of Defaulting Companies:	*15*	

Exhibit 35 – Chronological List of 1998 Public Sovereign Bond Defaulters

Defaulted Company	Amount	Default Description
July		
Venezuela, Republic of	$270.3	Grace period default
August		
Russian Federation	$9,744.2	Distressed exchange
November		
Pakistan, Islamic Republic of	$300.0	Grace period default

Year-to-date through December 31	1999	1998	1997	1996
Defaulted Debt ($US millions):	$29,576.3	$9,289.3	$6,002.7	$9,425.4
Number of Defaulting Companies:	126	70	32	58
Moody's Trailing Twelve-Month, Issuer-Based Default Rate (Spec. Grade)	3.31%	2.02%	1.65%	3.30%
Moody's Trailing Twelve-Month, Dollar-Based Default Rate (Spec. Grade)	3.75%	2.95%	1.61%	3.63%

Exhibit 36 - Detail of 1998's Corporate Public Bond Defaults

A.P.S., Inc. — Distributor of automotive parts

$100.0 million 11.875% Guaranteed Senior Subordinated Notes due 1/15/2006

A.P.S., Inc., a wholly-owned subsidiary of APS Holding Corporation, is based in Houston, Texas. It distributes automotive replacement parts through a network of approximately 1,800 stores owned by associated jobbers and 300 company-owned stores as of January 25, 1997. Over the last four fiscal years, APS pursued aggressive expansion programs through external financing, adding considerably to its debt load and becoming highly leveraged.

Lower profit margins, high costs associated with integrating its acquisition, Parts, Inc., as well as significant inventory write-offs at its Installers' Service Warehouse business, resulted in losses of $10.8 million for FY1996 ended January 25, 1997. Additionally, as a result of an initiative to reduce costs and streamline its distribution channels by closing unprofitable stores and installing a new Centralized Management System, APS took a restructuring charge of $8.7 million in their second quarter ended July 25, 1997 and recorded a net loss of $18.5 million for the nine months ended October 25, 1997. Failing to comply with financial covenants on its revolving bank credit facility and not being able to obtain new financing as of January 13th, the company announced on January 13th that it would not be able to make interest payments due January 15, 1998 on its 11.875% senior subordinated notes.

01/13/1998 Announced it would not make interest payment due January 15, 1998
01/15/1998 Missed interest payment
02/02/1998 Chapter 11

(Contact: Marie Menendez, 553-4126)

Acme Metals Incorporated — Integrated steel producer

$0.7 million 13.5% Senior Secured Discount Notes due 8/1/2004
$200.0 million 10.875% Senior Notes due 12/15/2007
$17.6 million 12.5% Senior Secured Notes due 8/1/2002
$11.3 million 7.95% Environmental Improvement Bonds, Ser. 1996 (Riverdale, Il) due 4/1/2025
$8.6 million 7.9% Environmental Improvement Bonds, Ser. 1996-A (Riverdale, Il) due 4/1/2024

Acme Metals Incorporated, headquartered in Riverdale, Illinois, is a fully integrated producer of hot rolled steel and finished steel products, including steel tubes and steel straps for packaging. The September 29, 1998 Chapter 11 filing follows nearly two years of difficulties Acme Metals has experienced bringing its new continuous thin slab caster/hot strip mill complex into operation. In addition, recent unfavorable pricing conditions in the flat rolled steel market compounded the situation. Acme's cash flow from continuing operations has been less than interest expense for the last six quarters. The cash flow has been depressed primarily because of the slower-than-expected ramp-up in capacity of the new mill, which has hurt product yields, increased costs, and reduced shipments of value-added commodity products. Acme Metals posted a net loss of $10.3 million for the six months ended June 28, 1998 compared to a net loss of $28.6 million for the same period a year earlier.

09/29/1998 Chapter 11

(Contact: Steven Oman, 553-1673)

All Star Gas Corporation — Propane distributor

$127.2 million 12.875% Senior Secured Reset Notes due 7/15/2004

All Star Gas Corporation, located in Lebanon, Missouri, is engaged in the retail marketing of propane and propane-related appliances to residential, agricultural, and commercial customers in 21 states. The company became highly leveraged after a management-led leveraged buyout in 1994. The rationale for the buyout included the modernization and rationalization of the business, requiring significant capex, part of which was to be funded by divestiture of non-core assets. Some of those divestitures have been delayed. The poor operating performance over the last few years resulted in high dependency on external sources to finance its debt service obligations and working capital needs. Since the bulk of the propane sold by the company is used for heating, the unusually warm weather during the current fiscal year further negatively affected revenues, margins, and cash flows. Moreover, the recent cash acquisition of Red Top Gas and delayed asset sales further depleted its liquidity, causing a shortfall in cash flow relative to scheduled debt service. As a result, on January 13, 1997 All Star announced that it would use the 30-day grace period to pay full interest payment on its 12.875% senior secured notes due 2004. The Caa1 rating on the senior secured notes is therefore under review for probable downgrade.

01/13/1998 Announced that it would make a partial interest payment on its 12.875% senior secured notes due 2004 and that it expects to use its 30 day grace period to make payment in full
01/15/1998 Made partial interest payment: approximately $2 million paid out of required $4.2 million
02/13/1998 Made interest payment
07/15/1998 Missed interest payment
08/15/1998 Made interest payment

(Contact: Andrew Oram, 553-1649)

Alpargatas S.A.I.C. — Footwear and textiles manufacturer

$70.0 million 9% Convertible Bonds due 3/15/98 *Not Rated by Moody's*

$30.0 million FLT% Convertible Subordinated Bonds due 12/31/2001

$80.0 million FLT% Convertible Subordinated Bonds due 7/30/2003

$40.0 million 11.75% Eurobonds, Ser. 10 due 8/18/98

Alpargatas S.A.I.C., based in Buenos Aires, Argentina, manufactures, markets and exports casual and athletic footwear, denim apparel, work apparel and household textiles. Having seen its sales drop mainly due to cheap imports from Southeast Asia during early 1990s, the company could not reclaim its market share even after the Argentine government's decision in October of 1995 to quadruple duties on foreign footwear and textiles. Despite poor performance, Alpargatas was able to finance itself through issuance and refinancing of debt, amassing a totalof $333 million in banking and financial debts at the end of 1997. The company's efforts to repackage its debt and return to profitability through the selling of $175 million bonds in late 1997 did not materialize as crisis in Asia increased debt costs and precluded the sale. Delays in securing new financing left Alpargatas without the cash to repay maturing bonds on March 16, 1998.

03/16/1998 Missed principal payment
10/01/1998 The company's Brazilian subsidiary, Footline Industriae Comercio Ltd., files for bankruptcy (Contact: Marie Menendez, 553-4126)

American Rice, Inc. — Processor and marketer of rice and olives

$99.0 million 13% Mortgage Notes due 7/31/2002

American Rice, Inc., based in Houston, Texas, is a processor and marketer of a variety of rice and olive products in the U.S. and internationally. The company markets approximately 20% of the total U.S. rice crop annually. Sales revenues decreased by 18.5% to $303.6 million in the nine months ended December 31, 1997 compared to the same period a year ago mainly due to a $86.6 million decline in export rice sales. A failed business agreement with Aqaba Packaging Company of Saudi Arabia resulted in the restatement of its financials for the second quarterended September 30, 1997, reducing sales by $19.9 million and increasing net losses by $2.2 million. Total net losses for the nine months ended December 31, 1997 were $10.9 million versus a net income of $1.5 million a yearearlier. Lower export sales increased inventory levels and operating costs overseas, depleting available sources offinancing and impairing ARI's liquidity. Continued deterioration in operating performance and significant liquidity constraints precluded the announcement on February 23, 1998 of non-payment of interest due February 28, 1998 on its mortgage notes maturing in 2002.

02/23/1998 Announced that it would miss interest payment due 2/28/98
02/28/1998 Missed interest payment
08/12/1998 Chapter 11 (Contact: Philip Li, 553-4578)

American Telecasting, Inc. — Wireless cable television provider

$95.3 million 14.5% Senior Discount Notes due 6/15/2004

$137.3 million 14.5% Senior Discount Notes, Ser. B due 8/15/2005

American Telecasting, Inc., headquartered in Colorado Springs, Colorado, provides wireless cable television services to approximately 133,700 subscribers (as of March 31, 1998) in mid-sized markets throughout the United States. American Telecasting experienced negative cash flow from operations in each year since its inception in 1988 as it acquired a large number of wireless cable systems and incurred substantial start-up marketing and capital expenditures. Relying mostly on external financing and not generating any profits, the company's ability to develop new services (such as internet access, multi-media, and digital video) and to expand existing services has been limited. On March 18, 1997, American Telecasting augmented its low liquidity position by selling its Southeastern assets to BellSouth Wireless. Having realized about $54 million in the first closing of the transactionin August of 1997 and $2.9 million in additional proceeds in March of 1998, the company extended a tender offer to purchase a portion of its outstanding senior discount notes on April 9, 1998 in order to avoid a mandatory prepayment and/or reinvestment in assets from the asset sales proceeds (as stipulated in the notes' indentures). The maximum aggregate amount of cash available for the purchase of the notes pursuant to the offer was $17.5 million. Upon the expiration of the offer on May 7, 1998, holders of approximately $95.3 million of notes due 2004 and $137.3 million of notes due 2005 have agreed to receive $255 and $225 per $1,000 principal amount at maturity, respectively.04/09/1998 Tender offer for a portion of its outstanding notes

Exhibit 36 - Detail of 1998's Public Corporate Bond Defaults

04/28/1998 Received consents from the holders of a majority of its outstanding
05/13/1998 Partial distressed exchange completed: the company tendered $30.2 million of notes maturing 2004 and $43.5 million of notes maturing 2005 for a cash price of $255 and $225, respectively, per each $1,000 principal amount09/11/1998 Second tender offer for a portion of its outstanding notes
10/15/1998 Partial distressed exchange completed: the company tendered $21.5 million of notes maturing 2004 and $22.6 million of notes maturing 2005 for a cash price of $280.5 and $247.5, respectively, per each $1,000 principal amount (Contact: Russell Solomon, 553-4301)

AmeriTruck Distribution Corp. — Trucking company

$100.0 million 12.25% Guaranteed Senior Subordinated Notes due 11/15/2005

AmeriTruck Distribution Corp., headquartered in Fort Worth, Texas, was formed in 1995 to combine six non-unionregional trucking companies. Since its formation, the company grew through additional acquisitions which were primarily financed with debt, increasing its already high leverage. AmeriTruck's financial results have been severelystrained by both the cost of the integration and an inability to achieve timely operating inefficiencies. The negativeoperating performance and the resultant tight liquidity were augmented by additional borrowings under its bank revolving facility. The company partially repaid over-advances against its credit lines through sales of some of its assets in early 1998. Following its inability to repay the remaining over-advances under senior secured revolver on September 15, 1998 (for which it had obtained a temporary waiver of default from the lender), on November 9, 1998 AmeriTruck filed for Chapter 11 protection and indicated that it would seek to liquidate some of its assets to reduce its debt load.

11/09/1998 Chapter 11 (Contact: Richard Bittenbender, 553-0396)

Anvil Range Mining Corporation — Zinc and lead mining company

Can$ 30.2 million 8.5% Convertible Debentures due 1/17/2002 [$21.0 million] *Not Rated by Moody's*

Anvil Range Mining Corporation, located in Toronto, Canada, produces zinc and lead from mines located at the Faro Property in the Yukon Territory. The company temporarily suspended mining operations effective December20, 1996 due to falling prices for zinc and lead in world markets, lower-than-expected recovery rate of metal from ore, and production problems in its mining and milling operations. As a result, Anvil wrote down Can$31 million (US$ 23.1 million) of the carrying value of its resource properties in the three months ended October 31, 1996 andrecorded a net loss of Can$35.3 million (US$ 25.8 million) for fourteen months ended December 31, 1996. The mine stayed closed for much of 1997 and was reopened on November 20, 1997 after the company secured the necessary financing. Because of persistently low zinc and lead prices, though, Anvil could not sustain continuing losses and announced that it would miss interest payment on its convertible debentures on January 16, 1998. Simultaneously, it filed for protection from creditors and shut down its operations at the Faro mine for the second time in last 14 months.

01/16/1998 Filed for bankruptcy under Canadian Companies' Creditors Arrangement Act; announced that it would not make interest payment due 1/17/98
01/17/1998 Missed interest payment
04/21/1998 The Court appoints Deloitte & Touche as Interim Receiver (Contact: Todd Baker, 553-4999)

Aokam Perdana Berhad — Timber company

$123.8 million 3.5% Convertible Debentures due 6/13/2004 *Not Rated by Moody's*

Aokam Perdana Berhad, located in Kuala Lumpur, Malaysia, is an investment holding company which, through its subsidiaries, is involved in manufacturing and marketing of timber and timber-related products. The economic slowdown in South East Asia has decreased construction activity, resulting in sharp drop in demand and prices for timber. Being highly leveraged, Aokam was hit hard as rising interest rates and depreciation of the domestic currency increased debt servicing costs. The accumulated losses over the last few years rendered Aokam Perdana insolvent and unable to service its debts. This prompted a reshuffling of management and appointment of Aseambankers Malaysia Berhad, a financial advisor, to conduct a comprehensive assessment of the present financial situation and to propose a restructuring plan. Concurrently, on April 18, 1998 Aokam secured a High Court Order preventing its creditors from taking any legal action while it reorganizes. On June 13, 1998 the company failed to make interest payment due on its publicly traded 3.5% convertible eurodebentures.04/18/1998 The court granted a Restraining and Stay order from creditors while the company undergoes restructuring to restore the financial position.

06/13/1998 Missed interest payment
11/23/1998 The reorganization plan approved by the bankruptcy court and the creditors: distressed exchange completed: 3.5% convertible debentures due 2004 exchanged into equity (Contact: Edward Young, 553-1655)

Arab Malaysian Corporation Berhad — Diversified industrial and financial company

M Ringgit 411.6 million 5% Convertible Debentures (Unsecured Loan Stock) due 5/2/2002 — *Not Rated by Moody's*

Arab Malaysian Corporation Berhad controls Malaysia's seventh largest banking group and has vast interests in real estate and infrastructure development. As the Malaysian economy sank into recession in 1997, the country experienced currency devaluation, a stock market crash, and rising interest rates. The company was among the hardest hit as a result of these developments, given its significant exposure to banking and property sectors. Thenet income of 320.7 million Ringgit (US$128.3 million) in FY1996 declined to a net loss of 99.2 million Ringgit (US$26.8 million) in FY1997. To settle its debts and meet all obligations to lenders on a timely basis, Amcorp decided to sell off a substantial stake in AMMB Holdings Bhd.(a holding company for its banking sector companies), thus effectively exiting the battered banking sector. To proceed with the sale in an orderly fashion and to buy time to prepare a comprehensive financial restructuring plan to its creditors, the company sought and received a 3-month bankruptcy protection order on July 17, 1998.

07/17/1998 Granted a restraining order against creditors. (Contact: Edward Young, 553-1653)

Astra Overseas Finance B.V. — Finance subsidiary

$200.0 million 8.75% Guaranteed Eurobonds due 8/7/2003 — *Not Rated by Moody's*

Please see accompanying critique on PT Astra International Tbk..

10/22/1998 The parent company, PT Astra International Tbk., announced the suspension of interest payments on its debt
(Contact: David Andrews, 553-7776)

Bakrie Finance Corporation Tbk. — Financial services firm

Ind Rupiah 200,000.0 million 16.375% Secured Bonds due 7/23/2002 [$15.1 million] — *Not Rated by Moody's*

A unit of Bakrie group. Please see accompanying critique under Bakrie International Finance Company B.V..

01/23/1998 Missed interest payment due on 16.375% domestic bonds maturing
01/28/1998 Made interest payment
02/12/1998 Bakrie International Finance Company B.V., a unit of Bakrie group, missed interest payment on floating rate euro medium term notes, tranche 1, maturing 2000
03/23/1998 Bakrie International Finance Company B.V., a unit of Bakrie group, missed interest payment on floating rate euronotes maturing 1999
06/17/1998 Bakrie Indonesia B.V., a unit of Bakrie group, missed interest payment on 9.625% eurobonds maturing 1999
07/30/1998 BIN Finance Company B.V., a unit of Bakrie group, missed interest payment on floating rate euronotes maturing in 1999
(Contact: Todd Baker, 553-4999)

Bakrie Indonesia B.V. — Finance conduit

$50.0 million 9.625% Guaranteed Eurobonds due 12/17/99 — *Not Rated by Moody's*

$135.0 million FLT% Guaranteed Euronotes due 7/18/2001

A unit of Bakrie group. Please see accompanying critique under Bakrie International Finance Company B.V..

01/23/1998 Bakrie Finance Corporation Tbk., a unit of Bakrie group, missed interest payment due on 16.375% domestic bonds maturing 2002
01/28/1998 Bakrie Finance Corporation Tbk., a unit of Bakrie group, made interest payment
02/12/1998 Bakrie International Finance Company B.V., a unit of Bakrie group, missed interest payment on floating rate euro medium term notes, tranche 1, maturing 2000
03/23/1998 Bakrie International Finance Company B.V., a unit of Bakrie group, missed interest payment on floating rate euronotes maturing 1999
06/17/1998 Missed interest payment on 9.625% eurobonds maturing 199907/30/1998 BIN Finance Company B.V., a unit of Bakrie group, missed interest payment on floating rate euronotes maturing in 1999 (Contact: Todd Baker, 553-4999)

Exhibit 36 - Detail of 1998's Public Corporate Bond Defaults

Bakrie International Finance Company B.V. — Finance conduit

JpnYen 14,000.0 million FLT% Guaranteed Euro Medium Term Notes, Tr. 1 due 2/12/2000 *Not Rated by Moody's*

$175.0 million FLT% Guaranteed Euronotes, Ser. 1, Tr. 1 due 11/5/99

$100.0 million FLT% Guaranteed Euronotes due 3/22/99

JpnYen 10,000.0 million FLT% Guaranteed Euronotes due 9/24/99 [$80.9 million]

PT Bakrie & Brothers Tbk., PT Bakrie Investindo, PT Bakrie Finance Tbk., Bakrie Indonesia B.V., and BIN Finance Company B.V. are members of Indonesia's Bakrie Group, which has interests ranging from engineering, telecommunications, and agriculture to banking and finance. Although most of the group's foreign-currency borrowings were hedged, it still has not been able to cope with rising costs which stemmed from the domestic currency meltdown since the summer of 1997. The cash flows shrunk across all of its various businesses as economic crisis dried up the demand for many products, prompting the group to halt its expansion projects estimated at approximately $2 billion in December of 1997, consolidate and simplify its business structure, and to divest of some of its non-core businesses in order to conserve resources and repay maturing obligations. On January 19, 1998 the group appointed a special financial advisor to assist it in improving its financial performance and capital structure. Bakrie group stopped servicing its debts on February 12, 1998 when it missed interest payment due on floating rate euronotes maturing in 2000 (issued by Bakrie International Finance Company B.V., the Netherlands-based finance subsidiary).

01/23/1998 Bakrie Finance Corporation Tbk., a unit of Bakrie group, missed interestpayment due on 16.375% domestic bonds maturing 2002
01/28/1998 Bakrie Finance Corporation Tbk., a unit of Bakrie group, made interest payment02/12/1998 Missed interest payment on floating rate euro medium term notes, tranche 1, maturing 2000
03/23/1998 Missed interest payment on floating rate euronotes maturing 1999
06/17/1998 Bakrie Indonesia B.V., a unit of Bakrie group, missed interest payment on 9.625% eurobonds maturing 1999
07/30/1998 BIN Finance Company B.V., a unit of Bakrie group, missed interest payment on floating rate euronotes maturing in 1999

(Contact: Todd Baker, 553-4999)

Banco Mayo Cooperativo Limitado — Cooperative bank

$50.0 million 9.125% Euro Medium Term Notes, Ser. 1 due 6/30/99 *Not Rated by Moody's*

$50.0 million 10% Euro Medium Term Notes, Ser. 2 due 5/11/2001

Banco Mayo Cooperativo Limitado, headquartered in Buenos Aires, Argentina, was the country's 29th largest bank (ranked by size of assets) operating a network of 108 branches. Banco Mayo's recent (May 1998) acquisition of a failed bank Banco Patricios as well as high percentage of non-performing loans led to its own demise. Having injected about US$326 million into Banco Mayo to help it stay afloat, on October 12, 1998 the Argentinean Central Bank cut off any additional funding to the bank and suspended the bank's operations due to significant liquidity problems after a series of deposit withdrawals. Banco Mayo had outstanding loans of 730 million pesos (US$730 million) and deposits of 728 million pesos (US$728 million) at the time of the suspension.

10/12/1998 Argentina's Central Bank suspends Banco Mayo's operations.
10/29/1998 Argentina's Central Bank approves the takeover of the bank by the localunit of Citigroup's Citibank. (Contact: Daniel Sarp, 553-4903)

Banco Medefin UNB S.A. — Non-U.S. bank

$29.5 million FLT% Medium Term Euronotes due 8/5/2001 *Not Rated by Moody's*

$50.0 million FLT% Eurodebentures due 2/23/2001

$50.0 million FLT% Euronotes due 12/15/2000

Banco Medefin UNB S.A., headquartered in Buenos Aires, Argentina, is a small commercial bank holding approximately $105.4 million in deposits. The bank was purchased in 1996 by the Geneva-based financial servicesfirm Socimer Finance Holding S.A. Socimer is owned by Transafrica S.A., a Madrid-based holding that's in turn 49-percent owned by Andre & Cie, a Swiss commodities firm. Plagued with bad loans (48% of loans are non-performing as of September 30, 1997) and low deposit levels, Banco Medefin has lost money in the last couple of years, depleting its capital base and requiring additional external financing to stay afloat. Having amassed approximately $124 million in bond obligations and $59 million in bank debt, the bank wound up with substantial debt service requirements and defaulted on February 2, 1998, missing the interest payment on floating rate medium term euronotes due 2001. Subsequently, after failing to meet the necessary capital requirements, Banco Medefin was suspended by the Argentine Central Bank on February 26, 1998 and ordered to submit a recapitalization plan or face permanent closure. Moreover, the situation at Banco Medefin was exacerbated after Transafrica S.A., its ultimate parent, filed for protection from creditors in Spain on February 27, 1998 after revelations that Socimer, Transafrica's operating company, is being investigated by Spanish regulators over allegedsecurities violations.

02/05/1998 Missed interest payment on medium term euronotes due 8/5/200
102/23/1998 Missed interest payment on eurodebentures due 2/23/200
102/25/1998 Suspended by the Argentine central bank for failing to meet capital requirements (Contact: Daniel Sarp, 553-4903)

Bangkok Bank of Commerce Pcl — Commercial bank

DM 100.0 million 4.375% Subordinated Eurobonds w/warrants due 10/19/99 [$61.6 million] *Not Rated by Moody's*

Bangkok Bank of Commerce, based in Bangkok, Thailand, is one of the ten largest commercial banks in Thailand. Due to the bank's failure to meet capital-increase guidelines, on May 7, 1997 the management of the bank was transferred over to The Industrial Finance Corporation of Thailand, a specialized financial institution 31% owned by the Thai government. The current financial crisis in Thailand and an escalating amount of bad loans eroded the bank's capital base and erased earnings, rendering it insolvent. Following continued losses and a failure to recapitalize, the bank was ordered to suspend most of its activities effective August 17, 1998, including time deposit funding, increasing loan lines, foreign currency trading, issuing new letter of credit and guarantees. On October 19, 1998 BBC failed to disburse interest payment due on its subordinated notes maturing in 1999.

10/19/1998 Missed interest payment (Contact: Nicholas Krasno, 553-1404)

BIN Finance Company B.V. — Finance conduit

$100.0 million FLT% Guaranteed Euronotes due 7/30/99 *Not Rated by Moody's*

A unit of Bakrie group. Please see accompanying critique under Bakrie International Finance Company B.V..

01/23/1998 Bakrie Finance Corporation Tbk., a unit of Bakrie group, missed interest payment due on 16.375% domestic bonds maturing 2002
01/28/1998 Bakrie Finance Corporation Tbk., a unit of Bakrie group, made interest payment
02/12/1998 Bakrie International Finance Company B.V., a unit of Bakrie group, missed interest payment on floating rate euro medium term notes, tranche 1, maturing 2000
03/23/1998 Bakrie International Finance Company B.V., a unit of Bakrie group, missed interest payment on floating rate euronotes maturing 1999
06/17/1998 Bakrie Indonesia B.V., its wholly-owned finance subsidiary, missed interest payment on 9.625% eurobonds maturing 1999
07/30/1998 Missed interest payment on floating rate euronotes maturing in 1999 (Contact: Todd Baker, 553-4999)

Biscayne Apparel, Inc. — Designer of apparel products

$6.4 million 13% Subordinated Notes due 12/15/99 *Not Rated by Moody's*

Biscayne Apparel, Inc., headquartered in Clifton, New Jersey, designs, manufactures and imports diversified apparel. Due to increased production costs and a weaker demand for its products, net sales decreased by 10% for the nine months ended September 30, 1998 compared to the same period last year. Biscayne posted a net loss of $15.5 million for the nine-months period ended September 30,1998 compared to a net loss of $0.06 million for the same period the previous year. The company has been in violation on certain of its loan agreements, and subsequently failed to disburse the interest payment on its 13% subordinated notes due December 15, 1998.

12/14/1998 Announced that it would miss interest payment due December 15
12/15/1998 Missed interest payment

Boston Chicken, Inc. — Operator of restaurants

$206.0 million 0% Convertible Subordinated LYONs due 6/1/2015

$129.5 million 4.5% Convertible Subordinated Debentures due 2/1/2004

$287.5 million 7.75% Convertible Subordinated Debentures due 5/1/2004

Boston Chicken, Inc., based in Golden, Colorado, operated 965 Boston Market stores across 36 states and the District of Columbia (as of October 5, 1998). The company had grown rapidly over the last several years by establishing a group of franchisees (area developers) that were given exclusive geographic territories to operate and develop restaurants. The company coordinated the development of the brand and financed the growth of the restaurant system by providing loans to the area developers (these loans were convertible into a controlling equity interest in the area developers). While Boston Chicken recorded increasing profits from franchise, royalty and interest income, the area developers incurred substantial operating losses and cash flow deficits. In late 1997, thecompany decided to convert the loans to the area developers to equity, moving to a company-controlled restaurant system, and realized significant charge-offs for provision for losses on the loans to the area developers ($128 million in the 4th quarter of 1997, $202 million in the 1st quarter of 1998, and $212 million in the 2nd quarter of 1998). Over the last several quarters the Boston Market restaurant system realized significant declines in sales, and the system-wide cash flow deficits increased. Boston Chicken's liquidity deteriorated and it failed to meet financial covenants of its bank credit facility. Lenders provided a liquidity facility, and extended the maturity of its loans to October 17, 1998. But attempts to negotiate the debt restructuring with its creditors were unsuccessful, and the company decided to file for bankruptcy protection under Chapter 11 on October 5, 1998.

10/05/1998 Chapter 11 (Contact: Michael Rowan, 553-4465)

Bruno's, Inc. — Grocery chain operator

$400.0 million 10.5% Guaranteed Notes due 8/1/2005

Bruno's Inc., headquartered in Birmingham, Alabama, operates a chain of 196 supermarkets in the Southeastern United States. The company, 87% owned by Kohlberg Kravis Roberts & Co. (KKR), amassed a significant level of debt after a KKR-led leveraged buyout in May of 1995. Since the KKR led LBO, competition in Bruno's trade areas has been intense, as competitors opened 38 new stores in its trade areas in 1997, following the 60 new stores openings in 1996. New Wal-Mart supercenters accounted for a significant portion of these openings. To meet these competitive challenges, Bruno's sought to reposition its Food World and Food Max stores from every-day-low-price operators to high-low promotional operators, raising its shelf prices and introducing a frequent shopper card. Poor execution of this repositioning coupled with disruptions in its distribution operations (as it consolidated it two warehouses into a single facility), led to significant sales declines. Although the company had completed the sale of its 10 Memphis Tennessee stores to Albertson's Inc. for $88 million, it chose not to make the interest payment due on its senior subordinated notes on February 2, 1998 and filed for Chapter 11 protection the same day.

02/02/1998 Filed for Chapter 11 protection; missed interest payment on 10.5% sr. sub. notes due 2005 (Contact: Michael Rowan, 553-4465)

CAI Wireless Systems, Inc. — Operator of wireless cable TV systems

$275.0 million 12.25% Senior Notes due 9/15/2002

CAI Wireless Systems, Inc., based in Albany, New York, is an operator and owner of wireless cable television systems concentrated in major metropolitan areas in the northeast and mid-Atlantic regions of the U.S. Significant costs in launching its business, coupled with technological deficiencies which limited the competitivenessof programming services offered, resulted in a sequence of operating losses and required large external borrowings. CAI's efforts to develop alternative uses of its spectrum after the break-up of its joint venture with Bell Atlantic and Nynex in December of (the company's biggest customer) were limited by the absence of internal funds and decreased support from the financial community. In addition, the company has faced tough competitionoperating in the densely populated northeast and mid-Atlantic metropolitan areas as opposed to rural areas where there is less competition. CAI has accumulated losses of $377 million since its inception in 1991 and had outstanding consolidated debt of $357 million as of March 31, 1998. Within the month of June, CAI received threematurity extensions for its privately placed $45 million of 13% senior secured notes. Lack of liquidity due to recurring losses and the inability to secure additional financing has left the company with no choice but to solicit consents for the prepackaged reorganization plan on June 30, 1998. The necessary number of consents was received on July 30, 1998 and was followed with the concurrent Chapter 11 filing in the Federal Bankruptcy Court in Wilmington, Delaware.

06/01/1998 Received an extension to June 15, 1998 of the maturity date of its 13% senior secured notes06/15/1998 Received an extension to June 24, 1998 of the maturity date of its 13% senior secured notes
06/25/1998 Received an extension to June 30, 1998 of the maturity date of its 13% senior secured notes
06/30/1998 Began solicitations for its prepackaged reorganization plan
07/30/1998 Prepackaged Chapter 11
09/30/1998 Reorganization plan confirmed
10/14/1998 Reorganization plan effective(Contact: Russell Solomon, 553-4301)

Cibinong International Finance Company B.V. — Finance conduit

$150.0 million FLT% Guaranteed Eurobonds due 6/5/2003 — *Not Rated by Moody's*

A wholly-owned subsidiary of PT Semen Cibinong Tbk. See accompanying critique on PT Semen Cibinong Tbk.04/14/1998 The parent company, PT Semen Cibinong Tbk., suspended all principal and interest payments on its debt

(Contact: James Alward, 553-7108)

Ciputra Development International Finance B.V. — Finance conduit

$100.0 million FLT% Guaranteed Euronotes due 7/27/2000 — *Not Rated by Moody's*

See accompanying critique on PT Ciputra Development.

01/29/1998 Missed interest payment (Contact: E. Young, 553-1653)

Citra Marga Finance B.V. — Finance conduit

$175.0 million FLT% Guaranteed Euronotes due 12/17/98 — *Not Rated by Moody's*

$125.0 million 7.25% Guaranteed Euronotes due 2/20/2002

PT Citra Marga Nusaphala Persada, based in Jakarta, Indonesia, is a developer and operator of toll roads. The company is controlled by former president Suharto's eldest daughter – the fact which, after Suharto's resignation, brought speculations about the future of Citra Marga as it became uncertain if the present government will give any concessions to the company by means of helping it secure new contracts and arrange financings. Because ofthe sharp depreciation of the rupiah, the resultant high interest rates and continued contraction of the Indonesian economy, several of Citra Marga's projects have been cancelled and/or suspended, e.g. the planned US$2.3 billion three-tier transport project in Jakarta was scrapped on June 5, 1998. Citing inability to get banks to exchange rupiah for dollars, on June 15, 1998 Citra Marga did not make interest payment due on its dollar-denominated floating rate guaranteed notes maturing December 17, 1998 (issued through the Netherlands-based subsidiary Citra Marga Finance B.V.).

06/15/1998 Missed interest payment on floating rate guaranteed euronotes due December 17, 1998
08/20/1998 Paid back past due interest on floating rate guaranteed euronotes maturing in December 1998; made partial payment of interest due on 7.25% guaranteed euronotes maturing 2002 ($0.9 million paid out of required $4.5 million)
12/17/1998 Paid only 10% of the principal payment on floating rate notes which matured on December 17, 1998; asked noteholders to extend payment of the remaining 90% for three months (Contact: Tomomichi Nagaoka, 553-1655)

Cityscape Financial Corporation — Sub-prime mortgage lender

$129.6 million 6% Convertible Subordinated Debentures due 5/1/2006

$300.0 million 12.75% Guaranteed Senior Notes, Ser. A due 6/1/2004

Cityscape Financial Corp., based in Elmsford, New York, is a consumer finance company engaged in the businessof originating, selling and servicing mortgage loans secured primarily by one- to four-family residences to individuals who often have an impaired or unsubstantiated credit history and cannot obtain mortgage financing fromconventional sources. The company recorded a net loss of $418.9 million for the year ended December 31, 1997 compared to a net profit of $50.7 million a year earlier. The negative financial performance during fiscal 1997 is primarily attributable to writedowns of interest-only securities Cityscape created through securitizations. These writedowns were necessitated by changes in the company's valuation assumptions, which include the collectibility of ancillary fees, prepayment rates, and the level of loan charge-offs. Cityscape's losses have strained liquidity and hindered its ability to secure additional financing. In efforts to reorganize its capital structure, Cityscape announced that it would be deferring a convertible debt interest payment due May 1, 1998.05/01/1998 Missed interest payment on 6% convertible subordinated debentures due200606/01/1998 Missed interest payment on 12.75% senior notes due 2004

10/05/1998 Prepackaged Chapter 11(Contact: Thomas Foley, 553-7225)

Exhibit 36 - Detail of 1998's Public Corporate Bond Defaults

CML Group, Inc. — Specialty marketing company

$41.6 million 5.5% Convertible Junior Subordinated Eurobonds due 1/15/2003 — *Not Rated by Moody's*

CML Group, Inc., headquartered in Acton, Massachusetts, markets fitness equipment and garden supplies through its two subsidiaries NordicTrack, Inc. and Smith & Hawken, Ltd. Net sales decreased by 19.6% to $274.4 million for the year ended July 31, 1998, compared to $341.3 million for the same period a year ago, due tocontinuing operating losses incurred by NordicTrack, its largest subsidiary. Operating inefficiencies coupled with unsuccessful marketing strategies contributed to considerable losses and led to NordicTrack's bankruptcy filing on November 5, 1998. CML initiated a full-scale restructuring of its operations while considering a complete liquidationof NordicTrack' s assets. Subsequently, the company's management decided on December 17, 1998 to file for Chapter 11 protection in order to facilitate an orderly plan of liquidation.

12/17/1998 Chapter 11 (Contact: Marie Menendez, 553-4126)

CP Pokphand (Finance) Co. Ltd. — Finance conduit

$135.0 million FLT% Guaranteed Notes due 7/23/2001 — *Not Rated by Moody's*

A wholly-owned finance subsidiary of CP Pokphand Co., Ltd.. Please see the critique on CP Pokphand Co. Ltd..04/23/1998 The parent company, CP Pokphand Co. Ltd., failed to repay principal payment on floating rate notes on which the put option was exercised bythe noteholders

05/29/1998 Noteholders agreed to a temporary standstill on the immediate repayment of the notes (Contact: John Dahl, 553-7237)

CP Pokphand Co. Ltd. — Integrated agricultural company

$92.8 million FLT% Notes due 4/21/2000 — *Not Rated by Moody's*

$150.0 million FLT% Notes due 3/25/99

CP Pokphand Co. Ltd., based in Hong Kong, is an agricultural company doing much of its business in China. The company is a subsidiary of Thailand's Charoen Pokphand Group, a diversified investment holding company and oneof the Asia's largest integrated poultry and agribusiness groups. The company took on considerable amounts of debt to expand its core business of agriculture as well as unrelated industries such as motorcycle manufacturing. For the year ended December 31, 1997, CP Pokphand lost US$107.3 million on sales of US$1.8 billion compared to a net income of $7.1 million on sales of $1.3 billion the year before. Although the company's Chinese agribusiness posted a net profit in 1997, the negative performance was primarily the result of considerable losses from Indonesian and Thai operations which were the most severely affected by the regional financial crisis. The debt burden of over $1 billion in debt, most of which is dollar-denominated, coupled with current regional currency weakness and high interest rates, led to CP Pokphand's decision to start debt restructuring discussions with bank creditors in early April of 1998. Shortly thereafter on April 23, 1998, the company asked the bondholders to renounce their demands for early repayment of $92.8 million of principal (the bondholders exercised the put option on the bonds), thus admitting that it could not repay the owed amounts. While failing to pay off the principal amount, CP Pokphand disbursed the required interest payments on time. At the May 29th, 1998 meeting with thecompany, the bondholders agreed to delay taking any legal action against the company while it reorganizes.

04/23/1998 Failed to repay principal payment on floating rate notes on which the putoption was exercised by the noteholders
05/29/1998 Noteholders agreed to a temporary standstill on the immediate repayment of the notes (Contact: John Dahl, 553-7237)

CRIIMIE MAE, Inc. — Self-managed real estate investment trust

$100.0 million 9.125% Senior Notes due 12/1/2002

CRIIMI MAE Inc. (CMM), headquartered in Rockville, Maryland, is a self-managed real estate investment trust involved in the acquisition of subordinate commercial mortgage-backed securities and the origination, securitization,acquisition and servicing of multifamily and commercial mortgages. The majority of the company's assets are subordinate tranches of commercial mortgage-backed securities (CMBS) that have been pledged as collateral under repurchase agreements. As a result, in addition to having limited financial flexibility due to its high level of secured financing, the company faced an increasing level of margin calls following recent severe declines in the market value of CMBS, particularly subordinate classes of CMBS. These pressures and the turbulent conditions in the secondary CMBS market led to the Chapter 11 filing on October 5, 1998. CMM reported total assets of approximately $2.8 billion, and total equity of approximately $700 million, at June 30, 1998.

10/05/1998 Chapter 11 (Contact: Jay Siegel, 553-4927)

Dhana Siam Finance Public Company Limited — Financial company

Thai Baht 2,400.0 million 3.875% Subordinated Bonds due 10/28/2000 [$64.9 million] *Not Rated by Moody's*

Dhana Siam Finance & Securities Public Company Limited, headquartered in Bangkok, Thailand, is a financial company that provides consumer and commercial services. Years of reckless lending led to the company's insolvency once the domestic economy entered recession in the summer of 1997. Asset quality problems forced Dhana Siam to dramatically increase its provisions for doubtful accounts to 5.3 billion Thai Baht (US$112.0 million) in fiscal year ended December 1997 from 0.3 billion Thai Baht (US$12.8 million) in 1996. As a result, on August 14, 1998 the Bank of Thailand seized the company, along with 5 other financial firms, and ordered it to write off allof its bad loans. The Thai government 's blanket guarantee on all debts of the seized companies did not apply in the case of Dhana Siam's debt because of the ongoing merger talks between the company and Krung Thai Thanakit, also a financial services firm. Pending the conclusion of merger talks, on November 16, 1998 the company missed the payment on its 3.875% subordinated debentures maturing in 2000.

11/16/1998 Announced the suspension of debt payments (Contact: Nicholas Krasno, 553-1404)

Dharmala Intiutama International B.V. — Finance conduit

$200.0 million FLT% Guaranteed Eurobonds due 10/15/99 *Not Rated by Moody's*

JpnYen 15,000.0 million 5.45% Guaranteed Samurai Bonds due 7/9/2002 [$116.0 million]

PT Dharmala Intiutama, headquartered in Jakarta, Indonesia, is a diversified holding company for Dharmala Group, one of the country's ten largest conglomerates. The Group is engaged in business activities through subsidiaries and associated companies whose main interests are concentrated in financial services, real estate, agriculture, and electronics. Even though the Dharmala Group is well diversified, therefore less vulnerable to a downturn in a single industry, it fell victim to the current economic crisis in Indonesia brought about by the rupiah depreciation in August of 1997. In addition, since the Group borrowed mostly abroad and sold its products and services domestically, it was highly susceptible to the domestic currency devaluation as its foreign currency-denominated obligations ballooned in rupiah terms and liquidity tightened. As a result, several of the Group's subsidiaries defaulted on their publicly traded long term bonds. First, PT Dharmala Sakti Sejahtera, a financial services holding company, missed interest payment due April 1, 1998 on its domestic bonds maturing in 1998. Subsequently, Dharmala Intiutama International B.V., the group's finance conduit, failed to make scheduledinterest payment on April 15, 1998 on its eurobonds maturing in 1999.

04/15/1998 Missed interest payment on floating rate guaranteed eurobonds due 1998
07/09/1998 Missed interest payment on 5.45% guaranteed samurai bonds due 7/9/2002 (Contact: Bruce Clark, 553-4814)

DSS Overseas International B.V. — Finance conduit

$100.0 million FLT% Guaranteed Euronotes due 5/15/2000

Subsidiary of PT Dharmala Sakti Sejahtera, which, in turn, is a subsidiary of PT Dharmala Intiutama. See accompanying critique on PT Dharmala Intiutama International B.V.

04/01/1998 The parent company, PT Dharmala Sakti Sejahtera, missed interest payment on variable rate domestic bonds due 1998
(Contact: Deborah Schuler, 553-1653)

Duta Anggada International B.V. — Finance conduit

$100.0 million FLT% Guaranteed Eurobonds due 5/13/2000 *Not Rated by Moody's*

See accompanying critique on PT Duta Anggada Realty Tbk.

03/01/1998 The parent, PT Duta Anggada Tbk., missed interest payment on 18% secured bonds maturing in 2001
05/12/1998 Missed interest payment on floating rate eurobonds due 2000 (Contact: Teresa McCarthy, 553-3878)

Exhibit 36 - Detail of 1998's Public Corporate Bond Defaults

Eagle Finance Corp. — Sub-prime consumer finance company

$17.0 million 10.75% Rising Interest Subordinated Notes due 6/1/2005 *Not Rated by Moody's*

Eagle Finance Corp., headquartered in Gurnee, Illinois, is a specialized financial services company, whose business consists primarily of acquiring and servicing automobile retail installment contracts for purchases of late model used cars by "non-prime" consumers, who typically have limited access to traditional credit sources. Eagle Finance has suffered significant losses over the past two fiscal years, recording net losses of $12.3 million and $5.3 million for years ended December 31, 1997 and December 31, 1996, respectively. These losses are attributed to higher level of delinquencies in the company's loan portfolio and the resultant charge-offs. Although Eagle Finance has been trying to clean up its loan portfolio both by reducing its purchases of new contracts and developing a new credit scoring system, high loan default levels have persisted. As a result of significant losses and its inability to obtain additional funding, the company ceased approving and purchasing new finance receivables in October 1997. Subsequently, on April 28, 1998 Eagle Finance announced that it intends to suspend payments on its outstanding rising interest subordinated notes due 2005.

04/28/1998 Announced the suspension of payments on its outstanding subordinated notes (Contact: Thomas Keller, 553-1653)

Florida Coast Paper Company, L.L.C. — Linerboard mill operator

$165.0 million 12.75% First Mortgage Notes due 6/1/2003

See accompanying critique on Four M Corporation.

12/01/1998 Missed interest payment (Contact: Mark Gray, 553-7783)

Forman Petroleum Corporation — Oil company

$70.0 million 13.5% Senior Secured Notes due 6/1/2004 *Not Rated by Moody's*

Forman Petroleum Corporation, headquartered in New Orleans, Louisiana, is a gas and oil producer. The company has been adversely affected by the extended decline in energy prices and inclement weather, which led to losses and a decision to defer some of its exploration and development projects. Forman recorded a net loss of $19.33 million for the nine months ended September 30, 1998, compared to a net loss of $5 million in 1997 for the same period. The company missed interest payments due December 1st on its on 13.5% senior secured notes maturing in 2004. Although the company received a payment advance (to be collected at the end of December 1998) from its primary gas purchaser, it has not decided if the money will be applied towards interest payment due December 31, 1998.

12/01/1998 Missed interest payment (Contact: Hugh Scott, 553-1328)

Four M Corporation — Converter of packaging materials

$170.0 million 12% Senior Secured Notes due 6/1/2006

Four M Corporation, headquartered in Valhalla, NY, is the largest independent converter of corrugated packaging materials in North America. Florida Coast Paper Company, L.L.C. (FCPC), equally owned by Four M Corporationand Stone Container Corporation, operates a linerboard mill in Port St. Joe, Florida. Four M and FCPC have been experiencing financial difficulty due primarily to a decline in the price of containerboard. In addition, Four M'scontractual requirement to support FCPC, which is one of the highest cost linerboard mills in the U.S., has aggravated its already strained liquidity. Four M reported a net loss of $7.5 million for the six month period ending June 30, 1998 compared to a net income of $1.3 million for the same period in 1997. Four M is in violationof financial covenants in its bank agreements and has not been able to obtain an acceptable waiver from its banks. Consequently, tight liquidity and insufficient cash resources led to Four M's failure to make an interest payment due December 1, 1998 on $170 million of 12% senior secured notes maturing in 2006. In addition, the interest payment due on FCPC's first mortgage notes maturing in 2003 was not disbursed because of the failure of Four-M and Stone Container (the mills Co-owner) to honor the terms of output purchase agreements under which each was required to purchase half of the FCPC mill's output at a price high enough to cover FCPC's fixed costs, including debt service.

12/01/1998 Missed interest payment
12/31/1998 Made interest payment (Contact: Mark Gray, 553-7783)

FPA Medical Management, Inc. — Physician practice management company

$80.7 million 6.5% Convertible Subordinated Debentures due 12/15/2001

FPA Medical Management, Inc., located in San Diego, California, is a physician practice management company affiliated with approximately 7,900 primary care and emergency department physicians who provide services to about 1.4 million patients in 29 states (as of March 31, 1998). During the past three years the company expandedrapidly primarily through numerous acquisitions, boosting operating revenues by 352% to $1.2 billion for 1997 compared to $340.8 million for 1995 and growing about tenfold since 1995. The rapid acquisition pace led to a significant increase in the company's leverage. Goodwill write-offs, which indicated that FPA has overpaid for some of its acquisitions, and merger- and restructuring-related costs amounted to $55.0 million in 1997 and $52.6 million in 1996, translating into a net loss of $11.8 million and $86.8 million, respectively. Dismal operating performance during 1997 brought about the new management team, which, after assessing of the company's operations, announced that in the second quarter of 1998 FPA will record a pre-tax charge of up to approximately $200 million consisting of $125 million goodwill impairment, $40 million write-down of receivables, $35 million severance payments, and other restructuring charges. As a result of the company's failure to comply with severalcovenants under it credit agreements, on May 14, 1998 the company solicited and received amendments and waivers of default until June 11, 1998 and subsequently extended until July 8, 1998. Negative cash flows, no additional borrowing capacity under current credit facilities, and inability to obtain additional financing prevented the company from paying the June 15th, 1998 interest payment on 6.5% convertible subordinated debentures due 2001.

06/15/1998 Missed interest payment
07/19/1998 Chapter 11 (Contact: Margaret Sunier, 553-4946)

Franki S.A. — Construction company

BelFr 747.3 million 6.25% Subordinated Bonds w/warrants due 7/15/2000 [$19.9 million] *Not Rated by Moody's*

Franki S.A. is a Belgian construction company involved in civil engineering, oil/geothermics drilling, foundation laying and mining projects. The company has lost money in three consecutive years mainly due to the general downturnin the construction industry in Europe, where approximately 80% of its sales come from. After posting a loss of 110 million of Belgian francs (US$3.5 million) for 1996 and being unable to reorganize the company using its internalresources, the management announced the search for a strategic business partner. While searching for a partner, Franki continued to show negative results, recording a loss of 111.7 million Belgian francs (US$3.1 million)on sales of 5.5 billion Belgian francs (US$153.6 million) for the six months ended June 30, 1997. Moreover, the financial situation was exacerbated by Franki's decision to file on January 13, 1998 for liquidation of its unprofitable French unit and take a one-time loss of 450 million Belgian francs (US$12 million). This substantial loss seemed to have delivered the final blow, forcing the company to apply for bankruptcy protection from creditors under Belgian law on February 3, 1998. The court ruled in favor of the application on February 11, 1998, granting Frankiprotection from creditors until June of 1998.

02/03/1998 Filed for bankruptcy protection
06/30/1998 Granted a 2-year extension of protection from creditors (Contact: Teresa McCarthy, 553-3878)

FSW International Finance Company B.V. — Finance conduit

$135.0 million 12.5% Guaranteed Secured Notes due 11/1/2006

Headquartered in Jakarta, Indonesia, PT Fajar Surya Wisesa (Fajar) is the country's second largest producer of industrial paper such as container board, box board and coated paper, used in the packaging of consumer and industrial goods. The devaluation of the rupiah has adversely affected Fajar since two-thirds of the company's products are sold domestically for rupiah and more than half of raw materials are bought overseas for US dollars. In rupiah terms, foreign currency borrowings and the associated interest payments have approximately tripled since the currency devaluation in late summer of 1997. In addition, slumping demand in domestic market due to current economic crisis in Indonesia has led to increased competition among paper producers in export markets and concurrent drop in paper prices, escalating the problems further. As a result, on April 23, 1998 the company announced the payment moratorium on its debt, including an interest payment due May 1, 1998 on 12.5% guaranteed senior notes maturing in 2006 (issued by the Netherlands-based FSW International Finance Company B.V., Fajar's wholly-owned finance subsidiary). At the same time, Fajar Surya Wisesa appointed J.P. Morgan Securities Asia Ltd. as its financial advisor to assist in developing a restructuring plan with its bank creditors and bondholders.

04/23/1998 Suspended all debt payments, including an interest payment due May 1, 1998 on its 12.5% guaranteed secured notes maturing in 2006
(Contact: Nelson Noel, 553-1611)

Exhibit 36 - Detail of 1998's Public Corporate Bond Defaults

GB Property Funding Corp. — Finance conduit

$182.5 million 10.875% Guaranteed First Mortgage Notes due 1/15/2004

Both GB Property Funding Corporation and PRT Funding Corp. are finance subsidiaries of Pratt Casino Corporation, which through a multi-layered corporate structure owns and operates the Sands Hotel & Casino in Atlantic City, New Jersey. Pratt also owns a limited partnership interest in the company that manages the Hollywood Casino in Aurora, Illinois, provides consulting services to the Hollywood Casino in Tunica, Mississippi, and receives a management fee from the Sands in Atlantic City. Neither GB Property Funding nor PRT Funding Corp. have operations on their own and are dependent on dividends and management fees of several casinos, respectively, for servicing their debt obligations. Constant competitive pressure from existing and newly opened casinos both in the form of new gaming space and aggressive marketing promotions contributed to lower revenuesand margins at Sands Casino. As a result, GB Holdings, Inc., Sands Casino & Hotel's holding company, recorded consecutive losses over the last couple of years, posting its latest loss of $37.7 million for the twelve months ended December 31, 1997 compared to a loss of $31.4 million for the same period in the prior year. The company's net worth stood at negative $58.6 million as of December 31, 1997. Generating losses and being unable to obtain additional borrowings from affiliates or other sources, GB Holdings and its subsidiaries, GB Property Funding Corporation and Greate Bay Hotel and Casino, Inc., filed a Chapter 11 petition on January 5, 1998. Although PRT Funding was not a part of bankruptcy filing, the principal amount of its 11.625% senior notes was accelerated and became due and payable as a result of cross-default provisions. Consequently, while negotiating with noteholders about the possible restructuring, PRT Funding did not make its April 15, 1998 interest payment.

01/05/1998 Chapter 11
01/15/1998 Missed interest payment

(Contact: Todd Gray, 553-4688)

Geneva Steel Company — Integrated steel mill

$190.0 million 9.5% Senior Notes due 1/15/2004

$135.0 million 11.125% Senior Notes due 3/15/2001

Geneva Steel Company, based in Vineyard, Utah, owns and operates an integrated steel mill. It manufactures steel plate, hot-rolled coil, pipe and slabs for sale primarily in the western and central United States. The company's worsening financial health mainly reflects the impact of the rapid deterioration of steel markets since late summer of 1998. More specifically, economic weakness in Asia and other regions around the world has led torecord imports of steel into North America, which resulted in increased inventories and sharp declines in steel prices. Geneva Steel's efforts to curb costs by laying off employees and idling one of its blast furnaces have not sufficiently offset the effect of lower prices and shipments. In order to preserve its already low liquidity, on December 29 the company announced that it would not make the interest payment due January 15, 1999 on its 9.5% senior notes. At the same time, the company has retained financial and legal advisors to help it review available financial alternatives, including a possible debt restructuring.12/29/1998Announced that the January 15th interest payment due on 9.5% senior notes would not be made

(Contact: Steve Oman, 553-1673)

Geotek Communications, Inc. — Provider of wireless communications services

$207.0 million 0% Senior Secured Discount Notes, Ser. B due 7/15/2005

$75.0 million 12% Convertible Senior Subordinated Notes due 2/15/2001

Geotek Communications, Inc., headquartered in Montvale, New Jersey, is a wireless communications services company providing integrated digital voice and data services to mobile business users. Substantial operating costsincurred developing and establishing its wireless communications network both domestically and internationally far exceeded new units in service and revenues. The cash shortfall was primarily funded with additional debt. As the company's leverage and debt service burden increased, its liquidity and financial flexibility became strained. Technical problems experienced in late 1996 and early 1997 also had an adverse effect. The company posted significant consolidated negative operating cash flow and net losses in every year of its operation. The need for anoverall capital restructuring was addressed through a strategic initiative to focus its efforts on marketing its products solely in the U.S. in December of 1997 (its European operations were sold in the first quarter of 1998) and through the appointment of Rothschild Inc. as the company's financial advisor in April of 1998. The lack of capital to fund current operations as well as strategic uncertainties led to the Chapter 11 filing on June 29, 1998.

06/29/1998 Chapter 11

(Contact: Cyrille Conseil, 553-4176)

Golden Books Publishing Company, Inc. — Publisher of children's books

$150.0 million 7.65% Senior Notes due 9/15/2002

Golden Books Publishing Company, Inc. is a wholly-owned principal operating subsidiary of Golden Books Family Entertainment, Inc., the largest publisher of children's books in the North American retail market. The deterioration of financial condition since mid-1996 (when a new investor group provided fresh funds, changed management, and implemented a turnaround strategy) has manifested itself in negative operating results and persistent losses. While the company's internal redirection efforts have strained liquidity, sustained industry-wide sales weakness in its key markets (especially the mass merchant channel) have been applying extra pressure on the financial position. The company recorded a net loss of $30.6 million for the second quarter of 1998 compared to a net loss of $11.3 million in the same period a year before. Golden Books has engaged Allen & Company as financial advisers to assist in exploring strategic alternatives on August 4, 1998. On September 14, 1998 the company announced that it would defer the September 15th interest payment on its 7.65% senior notes due 2002 and initiate discussions with noteholders about the possible restructuring of the notes.

09/15/1998 Missed interest payment (Contact: Joel Lustig, 553-4760)

Grand Union Company — Supermarket operator

$595.5 million 12% Senior Notes due 9/1/2004

Grand Union Company, headquartered in Wayne, New Jersey, operates 222 supermarkets in six Northeastern states. Although the company restructured its debt through a Chapter 11 reorganization in June of 1995, it remained highly leveraged. High debt service requirements put a significant strain on company's cash flows and limited much needed investment in remodeling its stores. Intensified competition from newer and bigger stores opened by Grand Union's rivals decreased sales. Moreover, Grand Union's relatively high cost structure limited the company's ability to react to competitive challenges as its sales declined. The company's EBITDA declined to $49.3 million for the 3 quarters ended January 3, 1998 compared to $97.3 million in the same period a year earlier, while its interest expense increased to $85.9 million from $81.3 million, respectively. Grand Union, despite recording significant losses over the last couple of years, was able to fund its liquidity needs mainly through the capital injection from a group of investors and by receiving waivers of defaults, as well as securing additional bank loans. The company announced on January 27, 1998 that it had retained Salomon Smith Barney Inc. as an adviser to evaluate various financial alternatives in order to improve the capital structure. In connection therewith, Grand Union decided not to make the March 2nd interest payment on its 12% senior notes on February 17, 1998. The failure to make this payment constituted a default under the company's bank facility, but the banks have waived this default until April 30, 1998, and the company is currently discussing a restructuring with its bondholdersand bankers.

02/17/1998 Announced that it would miss interest payment due March 2, 1998 on its 12% senior notes maturing in 2004
03/02/1998 Missed interest payment
03/30/1998 The company entered into an agreement in principle on terms of a capital restructuring plan with an unofficial committee of holders
06/24/1998 Plan of reorganization approved by 72% of senior notes holders and all preferred stockholders; the company files a prepackaged Chapter 11 petition
08/05/1998 Reorganization plan confirmed
08/17/1998 Emerged from Chapter 11 (Contact: Michael Rowan, 553-4465)

Guangdong International Trust & Investment Corporation — Sovereign related finance company

$150.0 million 6.75% Bonds due 11/15/2003

$200.0 million 8.75% Bonds due 10/24/2016

$49.0 million FLT% Euronotes due 1/29/2000

Guangdong International Trust & Investment Corporation (GITIC), headquartered in Guangzhou, China, was established in 1980 by the government of Guangdong province to raise funds in support of the province's investment plans and economic strategy. GITIC's main activities include financial services, equity investments, real estate development, brokerage, and import/export trading. The company's financial situation deteriorated quickly since the Asian crisis began in the summer of 1997. GITIC's deeply-impaired asset quality, significant amount of foreign debt and sizable contingent liabilities at a time of worsening operating environment led to poor profitability and tight liquidity. On October 6, 1998, the People's Bank of China closed down GITIC due to its reported inability to service maturing obligations and announced that the repayment of all GITIC's debt obligations will be suspended until January 6, 1999. In addition, the Bank of China has been appointed as trustee to administer the registration and orderly repayment of GITIC's debts. GITIC reported total assets of RMB 23 billion (approximately US$2.8 billion) as of June 30, 1998.

10/06/1998 The People's Bank of China closes the company and announces the suspension of repayments on all of the company's debt obligations for 3 months
10/26/1998 Missed interest payment (Contact: Charles Tan, 553-7724)

HealthCor Holdings, Inc. — Home health care service provider

$80.0 million 11% Guaranteed Senior Notes due 12/1/2004

HealthCor Holdings, Inc., headquartered in Dallas, Texas, provides fully integrated home healthcare services including nursing, respiratory therapy/medical equipment and infusion therapy in the southwestern and central United States. Although the company changed its strategy in the second quarter of 1998 by diversifying away from Medicare revenue and switching to higher margin respiratory therapy business, it was not able to reduce costs sufficiently to offset the impact of changes and reductions made in reimbursement for Medicare services. In addition, Healthcor's financial flexibility has been hindered by continued difficulties in collecting from managementcare organizations, which led to substantial increase in the provision for doubtful accounts during 1998. A net lossof $34.1 million for the nine months ended September 30, 1998 was primarily due to a goodwill write-off of about $4.8 million relating to the Medicare nursing program, additional provision for doubtful accounts of $11 million, a loss from nursing operations of approximately $20 million and a $6.7 million revenue adjustment as the result of 1998 Medicare per-visit cost and per-beneficiary limitations. On November 30, 1998 the company announced that it would not make the semi-annual interest payment due December 1, 1998 on 11% senior notes and that it would present a recapitalization plan to bondholders within the interest payment thirty-day grace period.

11/30/1998 Announced that it would miss interest payment due December 1, 1998
12/01/1998 Missed interest payment (Contact: Margaret Sunier, 553-4946)

Heartland Wireless Communications, Inc. — Wireless cable television provider

$100.0 million 13% Senior Notes due 4/15/2003

$125.0 million 14% Senior Notes due 10/15/2004

Heartland Wireless Communications, Inc., based in Plano, Texas, develops, owns and operates wireless cable television systems and channel rights in small to mid-size markets in the central United States. Although the company has experienced strong revenue growth since its inception, posting $78.8 million in revenues for 1997 compared to $2.2 million in its first full operating year (1994), substantial start-up capital costs and an aggressive expansion strategy pursued by management resulted in consecutive operating losses and built up significant amounts of debt. Heartland Wireless incurred a net loss of $134.6 million for 1997, compared to a net loss of $61.1 million a year earlier. The technological limitations of Heartland's major product (MMDS – multichannel multipoint distribution service – has a limited number of channels it can disseminate), an inability to achieve sufficient subscriber levels, and intense competition from traditional hard-wire cable television firms have applied additional pressure to the company's financial position. Mounting debt service costs and the need for additional capital induced the company to hire Wasserstein Perella & Co., an investment banking firm, to analyze all available options to finance the company's business plan and service its existing debt. In consultation with its financial advisor, Heartland Wireless announced that it would not be making interest payment due April 15, 1998 onits 13% senior notes due 4/15/2003.

04/15/1998 Missed interest payment on 13% senior notes due 4/15/2003
10/06/1998 Reached an agreement on a prepackaged reorganization plan with the majority of senior bondholders
12/04/1998 Prepackaged Chapter 11 (Contact: Russell Solomon, 553-4301)

Hemaraj Land and Development Public Company Limited — Industrial real estate developer

$54.4 million 3.5% Convertible Eurobonds due 9/9/2003 *Not Rated by Moody's*

Based in Bangkok, Thailand, Hemaraj Land and Development Public Company Limited is the country's largest industrial real estate developer. The company is also engaged in power generation and infrastructure projects. The economic slowdown in Asia in general and in Thailand in particular has resulted in a decreased demand for realestate and created an oversupply in the property sector. Net sales for 1997 decreased by 53% to 1.3 billion Thai Baht ($US 27.6 million) from 2.8 billion Thai Baht ($US109.2 million) in 1996. After experiencing a significant drop in revenues and recording losses, Hemaraj increased borrowing to service its existing debt and operations at a time of soaring interest rates and devalued domestic currency. The total long-term debt outstanding almost doubled (based on domestic currency) and stood at 1.1 billion Thai Baht ($US 23.4 million) as of December 31, 1997 compared to 584.7 million Thai Baht ($US 22.8 million) one year prior. The situation did not improve in 1998 with the company posting a net loss of 237.9 million Thai Baht ($US 5.6 million) for the first six months. Facing the put option and the interest payment on the bonds on September 9, 1998, the company engaged in discussions with the bondholders in order to delay the repayment. The September 7, 1998 meeting with bondholders was cancelled due to insufficient attendance. Subsequently, Hemaraj missed the interest payment on September 9, 1998 and rescheduled the meeting with bondholders for October 9, 1998.

09/09/1998 Missed interest payment (Contact: Edward Young, 553-1653)

Hybridon, Inc. — Developer of genetic drugs

$50.0 million 9% Convertible Subordinated Notes due 4/1/2004 *Not Rated by Moody's*

Hybridon, Inc., based in Cambridge, Massachusetts, is engaged in the discovery and development of genetic medicines based on antisense technology. Since commencing its operations in February of 1990, the company has not received any revenue from the sale of biopharmaceutical products and accumulated nearly $219 million in net losses. Most recently, after having devoted significant funding and research efforts to the anti-AIDS drug GEM 91, its major and the most advanced product candidate, the company was forced to shelve the project in July 1997 as a result of inconsistent clinical tests. Since then, the company has significantly scaled back the leveland scope of its operations, cutting its workforce from 213 employees at June 30, 1997 to 78 employees at March 30, 1998 and suspending certain programs. With its first finished products several years away, limited cash resources, and high dependency on the outside financing to continue as an ongoing concern, Hybridon solicited and received the noteholders' consent to exchange 9% senior notes for preferred stock and warrants on May 6, 1998.

02/06/1998 Commenced a distressed exchange offer: noteholders are asked to exchange their notes for preferred stock and warrants
03/30/1998 Holders of approximately $42 million of the outstanding $50 million of 9% notes have agreed to defer interest payment due April 1, 1998 until October 1, 1998
04/01/1998 Missed interest payment
05/06/1998 Distressed exchange completed: approximately $48.6 million principal amount of 9% notes have been exchanged for shares of Series A convertible preferred stock and warrants (Contact: Margaret Sunier, 553-4946)

Imagyn Medical Technologies, Inc. — Manufacturer and distributor of medical products

$50.0 million 8.75% Convertible Subordinated Debentures due 5/30/2006

Imagyn Medical Technologies, Inc., based in Newport Beach, California, is a manufacturer and distributor of minimally invasive and general surgery, urology and gynecology products. Having adopted a strategy of growth mainly through acquisition of companies and new technologies, Imagyn has incurred sizable initial acquisition and subsequent integration costs. Historically, the company has had negative cash flows from operations and depended on external sources for its operating and financing needs. For the year ended March 31, 1998, the company recorded a net loss $88.5 million compared to a net loss of $91.5 million for the same period one year prior, and showed a working capital deficit of $55.7 million. Contributing to the most recent losses was the $20.3 million drop in revenues at its urology division due to much lower demand for its products after the introduction of the anti-impotence drug Viagra. Because of continuing negative operating performance and limitations on additionalborrowing imposed by current indebtedness, Imagyn has been experiencing liquidity pressures, at first missing interest payments due on its 8.75% convertible subordinated debentures on March 31, 1998 (although payments were made within the grace period) and than again on June 30, 1998 for the second time.

03/31/1998 Missed interest payment on 8.75% convertible subordinated debentures due 2006
04/30/1998 Made past due interest payment on 8.75% convertible subordinated debentures maturing 200606/30/1998 Missed interest payment on 8.75% convertible subordinated debentures due 2006 (Contact: Margaret Sunier, 553-4946)

Exhibit 36 - Detail of 1998's Public Corporate Bond Defaults

International Wireless Communications Holdings Inc. — Developer of wireless communications networks

$196.7 million 0% Senior Discount Notes due 8/15/2001 — *Not Rated by Moody's*

International Wireless Communications Holdings, Inc., headquartered in San Mateo, California, is a holding company of International Wireless Communications, Inc, an operator, owner and developer of wireless communications networks in emerging markets in Asia and Latin America. The company reported net losses for each fiscal year since the date of its organization and had a negative stockholders' equity of $151 million as of March 31, 1998. Historically, International Wireless has relied on external financing since most of the company's wireless networks are in their early stages of development and generate little or no revenue. Continued losses, thesubstantial need for future capital expenditures and unfavorable current operating environment in Asia made it extremely difficult for the company to raise adequate additional financing. The efforts to sell some of its non-core assets did not materialize and the company, due to lack of resources to continue operating in the normal course ofbusiness, filed for Chapter 11 protection on September 3, 1998 and engaged in negotiations with its creditors on a plan of reorganization.

09/03/1998 Chapter 11 (Contact: Cyrille Conseil, 553-4176)

Ionica Plc — Provider of wireless telecommunications services

$150.0 million 13.5% Senior Notes due 8/15/2006

$75.0 million 15% Senior Discount Notes due 5/1/2007

Ionica Plc, headquartered in Cambridge, United Kingdom, is a provider of alternative fixed telephony services, utilizing a fixed radio access network system, to residential and small business markets. The initial and current capital expenditures establishing and developing its network have been mostly funded with the proceeds from bond issuance and the flotation of common stock. The company's operating performance has been negatively affected by capacity constraints at almost half of its base systems (which ultimately translated into lower-than-expected market penetration rates), operational difficulties in implementing its network roll-out as well as high customer churn rates. Ionica posted a net loss of 173.2 million pounds (US$290 million) on revenues of 11.6 million pounds (US$19.4 million) for the year ended March 31, 1998 compared to a net loss of 43.9 million pounds (US$72.1 million) on revenues of 2.6 million pounds (US$4.3 million) one year prior. Failure to successfully re-negotiate with its bankers or to find a strategic investor as well as dwindling cash reserves led to the company's announcement of the appointment of administrators over its assets on October 29, 1998.

10/29/1998 PriceWaterhouseCoopers and Ernst & Young are appointed as joint administrators over the company's assets
12/11/1998 Files for bankruptcy protection under Chapter 11 in the United States (Contact: Carlos Winzer, 553-1356)

JDC Corporation — General contractor

Yen 7,155.0 million 3.15% Japan Bonds, Series 4 due 9/26/2002 [$58.2 million]

Yen 10,000.0 million 2.75% Japan Bonds, Series 3 due 9/14/2000 [$81.4 million]

Yen 10,000.0 million 2.95% Japan Bonds, Series 2 due 7/26/2002 [$81.4 million]

Yen 7,082.0 million 1.9% Japan Bonds, Series 5 due 9/28/2001 [$57.6 million]

Yen 20,000.0 million 4.5% Japan Bonds, Series 1 due 9/29/99 [$162.7 million]

JDC Corporation, headquartered in Tokyo, Japan, is a medium-sized general contractor. The company suffered from heavy borrowing during the 1980s and early 1990s, combined with fewer new construction projects and dwindling real estate prices due to general unfavorable economic environment in Japan. In particular, the companymade large and unprofitable investments into the development of golf courses projects. Mounting debts and banks' unwillingness to extend additional loans or renegotiate the debt repayment led to JDC management's decision to seek legal protection from creditors on December 1, 1998.

12/01/1998 Filed for bankruptcy under Corporation Reorganization Law in Japan (Contact: Tomomichi Nagaoka, 553-1653)

JTS Corporation — Computer hard disk drive manufacturer

$43.4 million 5.25% Convertible Subordinated Debentures due 4/29/2002

JTS Corporation, based in San Jose, California, designs and manufactures hard disk drives for personal computers, and markets them to leading system manufacturers and selected resellers. JTS has been unable to attain profitability largely due to the intense competition in the hard disk drive industry. In addition, one of the company's products, the 3-inch "Nordic" disk drive, an alternative to the 2.5-inch drive used in notebook computers, did not generate sufficient demand. Despite some support from leading disk drive and personal computer manufacturers, JTS decided to suspend the production of the Nordic drive and take a one time charge of $38 million in the third quarter of FY1997. The company experienced its latest operating loss of $123.7 million for the fiscal year ended February 1, 1998 compared to an operating loss of $149.9 million for the same period oneyear prior. As of the end of FY1997, JTS Corp.'s net worth was negative $104.6 million. The company announced on April 29, 1998 that it would not be able to make the next interest payment on its 5.25% convertible subordinated debentures and that it retained an investment banker to provide advice with respect to available financial alternatives.

04/29/1998 Missed interest payment (Contact: Howard Sitzer, 553-4312)

JumboSports, Inc. — Operator of sporting goods stores

$74.8 million 4.25% Convertible Subordinated Notes due 11/1/2000

JumboSports, Inc., headquartered in Tampa, Florida, operates 59 sporting goods superstores in 23 states. The company's sales and profitability have been weakening for several years. It posted net losses of $111.3 million, $30.5 million and $32.2 million in fiscal 1997, fiscal 1996 and three quarters of fiscal 1998, respectively. Most recently, during the first 3 quarters of fiscal 1998, the company closed 20 under-performing stores, taking sizable charges relating to inventory liquidations, inventory markdowns and store closings. Increased competitive pressures, combined with poor inventory management and overall softness of the retail market for sporting goods,contributed to JumboSport's continued negative performance and eventual filing of Chapter 11 petition on December 28, 1998.

12/28/1998 Chapter 11 (Contact: Marie Menendez, 553-4126)

Kalfarm Finance Limited — Finance conduit-pharmaceuticals

$100.0 million FLT% Guaranteed Dragon Bonds due 7/28/99 *Not Rated by Moody's*

Kalfarm Finance Limited, located in the British Virgin Islands, is a wholly-owned finance subsidiary of PT. Kalbe Farma, Indonesia's largest pharmaceuticals company. Through its other subsidiaries, PT. Kalbe Farma is also involved in packaging, food and confectionery industries. Although posting a net profit of 73.1 billion rupiah (US$30.9 million) for 1996 and 44.2 billion rupiah (US$13.5 million) for the nine months ended September 30, 1997,the company has experienced cashflow constraints due to a drastic rupiah devaluation in the summer of 1997. With approximately 8% of its sales coming from abroad, its only source of foreign currency, and a significant amount of foreign currency denominated obligations, Kalbe Farma's susceptibility to currency risk was high. It suffered a foreign exchange loss of 35.5 billion rupiah(US$10.9 million) in the three quarters of 1997. The company could not pay the interest payment due January 29, 1998 on its US$100 million of floating rate dragon notes maturing in 1999.

01/29/1998 Missed interest payment (Contact: James Lee, 553-1678)

Korea Tungsten Co., Ltd. — Producer of tungsten and tungsten related products

KWon 20,000.0 million 0% Convertible Bonds, Ser. 9 due 12/31/99 [$13.9 million] *Not Rated by Moody's*

KWon 5,000.0 million 11% Bonds, Ser. 16 due 7/18/2000 [$3.5 million]

KWon 100,000.0 million 17% Bonds, Ser. 18 due 3/30/2001 [$69.6 million]

KWon 70,000.0 million 25% Bonds, Ser. 19 due 1/5/2001 [$48.7 million]

Korea Tungsten Co., Ltd., based in Taegu, Korea, produces tungsten and tungsten related products. The company is a unit of Keo Pyung Group, Korea's 28-th largest conglomerate with diversified interests ranging from construction to fashion clothing. The group's debt burden increased rapidly over the past few years due to severalacquisitions, and its debt-to-equity ratio stood at 438.1% as of December 31, 1997. A slumping economy and rising interest rates put the company into the position of not being able to service its obligations and continue operating without restructuring. As a result, Keo Pyung Group sought loan extensions from creditors and offered to sell or liquidate some of its affiliates in order to extinguish maturing debt On May 12, 1998 the Group placed three of its units into receivership after they failed to pay a total of 673 million Won (US$ 0.47 million) in debt and on May 14, 1998 announced the finalization of the sale of Korea Tungsten's tool division to Iscar, Ltd. of Israel forUS$150 million. The proceeds from the sale, though, will not be sufficient to retire both the Korea Tungsten's own maturing debt obligations and guarantees it has extended to now bankrupt sister companies. Consequently, on May 15, 1998 Korea Tungsten filed for court receivership in order to be able to work out a rehabilitation plan while debt payments are frozen by the court.

05/15/1998 Applied for court receivership
05/19/1998 Missed payments on maturing loans worth 15 billion Won (US$10.4 million) to Korea Exchange Bank and 2.8 billion Won (US$1.9 million) to (Contact: Steve Oman, 553-1673)

Kwang Myung Electric Engineering Co., Ltd. — Manufacturer of electric circuits

$8.0 million 0.25% Convertible Swiss Notes due 2/26/2001 — *Not Rated by Moody's*

A unit of Shinwon Group. Please see accompanying critique under Shinwon Industries Co., Ltd.

07/18/1998 Receivership (Contact: Howard Sitzer, 553-4312)

Livent Inc. — Theater entertainment company

$125.0 million 9.375% Guaranteed Senior Notes due 10/15/2004

Livent Inc., headquartered in Toronto, Ontario, Canada, is a producer of live theatrical entertainment and an operator of theaters in North America. The company has experienced a fundamental deterioration in its business performance as evidenced by gradual weakening of debt coverage ratios and increasing financial leverage over the last few quarters. At the crux of the matter lies aggressive accounting employed by Livent (for ex., capitalizing pre-production expenses instead of immediate write-off, improper revenue recognition), which concealed its true financial performance. Improper accounting led to a multitude of lawsuits after the ownership of the company changed in April of 1998, and subsequently, to restatement of financial results for more than 2 years on November18, 1998. Citing these accounting irregularities as well as inability to obtain additional financing from its creditor banks, Livent's management filed for bankruptcy protection under Chapter 11 in the United States on November 18, 1998 and under Canada's Creditors Arrangement Act on November 19, 1998.

11/18/1998 Filed for Chapter 11 protection in the United States
11/19/1998 Filed for bankruptcy protection under Canada's Creditors Arrangement Act (Contact: Russell Solomon, 553-4301)

Malaysian General Investment Corporation Bhd. — Diversified financial services provider

M Ringgit 70.0 million 0% Bonds due 2/29/2000 [$17.5 million] — *Not Rated by Moody's*

Malaysian General Investment Corporation Bhd., (MGIC) located in Kuala Lumpur, Malaysia, is a diversified financial services company. Its business consists of investment holding and dealing, brokerage, and real estate development. The company recorded a consolidated loss of 235.76 million Ringgit (US$60.6 million) for the year ended December 31, 1997 compared with a profit of 31.18 million Ringgit (US$12.3 million) the year before. The economic slowdown and the ensuing bearish stock market coupled with high interest rates took their toll and put the company in the red as it had to revalue its investments and make provisions for losses. On May 15, 1998, the Kuala Lumpur Stock Exchange suspended MGI Securities, the company's brokerage unit, for failing to meet the minimum requirement for liquid funds. Not long thereafter, on June 15, 1998, MGIC requested and won court protection to stave off creditors while it works out a restructuring of its debt and operations. The "restraining order" to protect the company from creditors was given by the High Court of Malaya.

06/15/1998 Requested and won court protection to hold off creditors (Contact: Edward Young, 553-1653)

Mancon (BVI) Investment Holding Company Ltd. — Finance conduit

$100.0 million FLT% Guaranteed Euronotes due 5/30/2002 *Not Rated by Moody's*

Mancon (BVI) Investment Holding Company Ltd. is a finance conduit of the Malaysia-based Mancon Berhad (Mancon), incorporated in British Virgin Islands for the sole purpose of issuing guaranteed floating rate notes. Mancon is a civil engineering and construction firm mainly involved in earthworks, highway construction, drainage, and other infrastructural projects. The company's cash flow has been constricted following domestic economic slowdown since the middle of 1997, rising interest rates, and tight liquidity in the banking sector. With property development and construction sectors being among the hardest hit, Mancon's ability to timely service its debt obligations was severely hindered. As a result, the company solicited the noteholders' approval to defer interest payment due November 30, 1998 for one year.

11/30/1998 Missed interest payment (Contact: Teresa McCarthy, 553-3878)

Mego Mortgage Corporation — Specialized consumer finance company

$40.0 million 12.5% Guaranteed Senior Subordinated Notes due 12/1/2001

$40.0 million 12.5% Guaranteed Senior Subordinated Notes due 12/1/2001

Headquartered in Atlanta, Georgia, Mego Mortgage Corporation is a specialized consumer finance company that originates, purchases, sells, securitizes, and services home improvement and debt consolidation loans. Since 1994, the company has had negative cash flows due to its rapid expansion and the net cash outflow which is common for companies which securitize their loan production. Mego's loan production grew dramatically, and its total servicing loan portfolio stood at $778.5 million as of February 28, 1998, an increase of 111.3% compared to $368.4 million a year ago. As a result of an increase in delinquencies and voluntary prepayments during the three months ended November 30, 1997, Mego Mortgage adjusted the assumptions used to calculate the carrying value of its mortgage related securities, posting an extraordinary pre-tax writedown of $16 million. In the next quarter, the company adjusted its underlying assumptions with respect to the deferred tax asset created from the pre-tax losses during the six months ended February 28, 1998 and restated the net loss by $12.3 million, bringing the net loss for the six months to $32.5 million. Due to losses and shortage of additional funds, the company curtailed its loan originations and retained an investment bank with the goal of obtaining a strategic investor. On May 13, 1998Mego Mortgage proposed a recapitalization plan and offered to exchange $80 million of its outstanding notes for new subordinated notes and preferred stock, which, when accepted, would constitute an impairment of bondholders economic interest. While soliciting the bondholders' consent for this exchange, Mego Mortgage skipped the June 1st interest payment on both the privately placed and public bonds.

05/13/1998 The company proposes to exchange existing senior subordinated notes for new subordinated notes and convertible stock
06/01/1998 Missed interest payment
06/30/1998 Made interest payment
07/06/1998 Distressed exchange offer completed: approximately $79 million of existing senior subordinated notes exchanged for $41.5 million of new senior subordinated notes due 2001 and $37.5 million of preferred stock (Contact: Steve Nelson, 553-3781)

Moscow City Telephone Network — Provider of telephony services

$150.0 million 12.5% Loan Participation Notes due 3/19/2001

Moscow City Telephone Network (MGTS), based in Moscow, Russia, is the monopoly telecommunications provider of public switched telephony in Moscow, servicing about 3.8 million access lines. It is majority-owned by the Russian government and The City of Moscow through AO Svyazinvest (47%), Russia's Federal telecommunications holding company, and AO Moscow Science and Technology Committee & Co. (33%). MGTSis considered strategically important to the City of Moscow's economic and social welfare and to Russia's telecommunication policy as it offers essential telecommunication services. The economic deterioration in Russia and the resultant sharp devaluation of the ruble (in which the company's revenues are denominated), together with the stress in the Russian banking system, impacted access to liquidity in general and foreign currency in particular.The company's inability to obtain necessary US dollar-denominated funds on time resulted in a 4-day delay payingthe interest on 12.5% loan participation certificates maturing in 2001, which, by Moody's definition, constituted a grace period default.

09/19/1998 Missed interest payment
09/22/1998 Made interest payment within a grace period (Contact: Helen Francis, 553-1653)

Exhibit 36 - Detail of 1998's Public Corporate Bond Defaults

Mulia Industrindo Finance B.V. — Finance conduit

$125.0 million FLT% Guaranteed Euronotes due 2/26/99 — *Not Rated by Moody's*

$100.0 million FLT% Guaranteed Euronotes due 7/10/2002

Please see accompanying critique on PT Muliaglass.

07/08/1998 Missed interest payment on guaranteed floating rate euronotes maturing in 2002
08/27/1998 Missed interest payment on guaranteed floating rate euronotes maturing in 1999 (Contact: Philip Li, 553-4578)

Mulialand Finance B.V. — Finance subsidiary

$100.0 million FLT% Guaranteed Euronotes due 10/22/99 — *Not Rated by Moody's*

$100.0 million 9.125% Guaranteed Euronotes due 10/22/2001

Please see accompanying critique on PT Mulialand Tbk.

10/13/1998 The parent company, PT Mulialand Tbk,, failed to meet the put option on its 18.875% secured domestic bonds due 10/13/2000
10/22/1998 Missed interest payments on floating rate and fixed rate euronotes (Contact: Takahiro Morita, 553-1653)

National Energy Group, Inc. — Oil and gas exploration and production company

$164.7 million 10.75% Guaranteed Senior Notes due 11/1/2006

National Energy Group, Inc., headquartered in Dallas, Texas, is an independent oil and gas exploration and production company operating primarily in Louisiana, Texas, and Oklahoma. Commodity price declines and an unsuccessful drilling program over the last several quarters resulted in decreasing cash flows, rising leverage, strained liquidity, and an incapacity to meet coupon payments and future capex requirements necessary to replaceproduction. Moreover, substantial non-cash write-downs of the company's oil and gas properties in 1997($37.5 million) and in the first six months of 1998 ($51.3 million) wiped out its net worth, increasing the company's book leverage and blocking the company's access to additional funds under its revolving credit facility. With balance sheet liquidity being consumed to cover unproductive capex, credit lines were blocked pending negotiations with creditors. NEGC announced the non-payment of bond interest on November 2, 1998 and, after a 30 day grace period, recently announced it would not make its coupon payment. Carl Icahn, a key shareholder, recently announced an offer to provide DIP financing, senior to the senior notes.

11/02/1998 Missed interest payment
12/04/1998 Involuntary Chapter 11 (Contact: Hugh Scott, 553-1328)

Ometraco Nederland B.V. — Finance subsidiary

$80.0 million FLT% Guaranteed Euronotes due 11/17/2000 — *Not Rated by Moody's*

Indonesia-based PT Ometraco Corporation is a holding company with interests in agriculture, pharmaceuticals, electrical equipment, and financial services. Because of the domestic monetary crisis and the negative impact it had on all of its businesses, the company posted losses and, as a result, initiated negotiations with its creditors in February 1998. While working on a restructuring plan, Ometraco did not make the interest payment due on floating rate euronotes on May 17, 1998 (issued through its wholly-owned finance subsidiary Ometraco Finance B.V.).

05/17/1998 Missed interest payment
09/13/1998 Creditors file a bankruptcy petition against the parent, PT Ometraco, seeking to have it declared bankrupt
09/30/1998 The bankruptcy case against the parent company dismissed by the Jakarta Commercial Court (Contact: Emi Ueji, 553-1653)

P & C Food Markets, Inc. — Operator of supermarkets

$107.2 million 11.5% Senior Notes due 10/15/2001

A unit of Penn Traffic Company. Please see accompanying critique on Penn Traffic Company.

12/15/1998 Penn Traffic Company missed interest payment on 8.625% senior notes maturing in 2003 (Contact: Michael Rowan, 553-4465)

Pegasus Gold Inc. — Gold mining company

$115.0 million 6.25% Convertible Subordinated Notes due 4/30/2002 — *Not Rated by Moody's*

Pegasus Gold Inc. is an international gold mining company, based in Spokane, Washington. With the price of gold falling to an 18 _-year low at below $280 dollars in recent months and the average price of producing one ounce ofgold at $404 dollars as of September 30, 1997, Pegasus has been losing money and could not fund its debt obligations without additional financing. Higher than expected production and operating costs at its Mt. Todd Mine,an Australian mine which represents almost half the company's proven and probable reserves and a third of expected 1997 production, forced the firm to suspend its operations in Australia and place the mine on care and maintenance status. Pegasus took a charge of $421.3 million in the third quarter ended September 30, 1997 and put its Australian subsidiary, Pegasus Gold Australia Pty. Ltd. in receivership on December 11, 1997. As a result of this significant loss, the company was in default under the minimum net worth, interest and funded debt to interest coverage loan covenants. The decision of the firm's creditor banks to accelerate loan repayments proved deadly, and Pegasus filed for protection under Chapter 11 on January 16, 1998.

01/16/1998 Chapter 11
12/22/1998 Reorganization plan confirmed

(Contact: Todd Baker, 553-4999)

Penn Traffic Company — Operator of supermarkets

$200.0 million 8.625% Senior Notes due 12/15/2003
$400.0 million 9.625% Senior Subordinated Notes due 4/15/2005
$125.0 million 10.25% Senior Notes due 2/15/2002
$100.0 million 10.375% Senior Notes due 10/1/2004
$100.0 million 10.65% Senior Notes due 11/1/2004
$100.0 million 11.5% Senior Notes due 4/15/2006

The Penn Traffic Company, headquartered in Syracuse, New York, operates 246 supermarkets in Pennsylvania, upstate New York, Ohio, and West Virginia. The general deterioration of the company's creditworthiness is reflected in five rating downgrades from Ba3 to Ca for the senior unsecured debt since July of 1996. Steep declines in the company's operating performance led to the decision to engage a financial advisor on June 4, 1998 and to not pay coupon due on its subordinated debentures on December 15, 1998. The company's high financial leverage and inability to cover interest from its operations in the past three quarters prompted the company to commence restructuring discussions with bondholders about the conversion of most of its debt to equity. As of October 31, 1998, the company had approximately $1.13 billion of senior and subordinated notes outstanding.

12/15/1998 Missed interest payment on 8.625% senior notes maturing in 2003

(Contact: Michael Rowan, 553-4465)

Peregrine Investments Holdings Ltd. — Investment bank

$120.0 million FLT% Eurobonds due 9/13/99 — *Not Rated by Moody's*
JpnYen 10,000.0 million FLT% Samurai Bonds due 6/20/2000 [$76.0 million]
JpnYen 10,000.0 million FLT% Samurai Bonds due 6/30/2000 [$76.0 million]

Headquartered in Hong Kong, Peregrine Investments Holdings Limited is an investment holding company. Its five core businesses include the origination, underwriting, distribution, structuring, trading and researching of equity and fixed income products, direct investments, asset management and property investment and development. Peregrine's strategy to devote all of its resources to Asia made it very vulnerable to a downturn in that region of the world. As the firm's loan and fixed income portfolio grew, its credit risk profile deteriorated and capital base shrunk. Although Peregrine showed profits over the last couple of years, its profit margins deteriorated due to worsening market conditions in Asia. As Asian currencies drastically depreciated and the firm's debtors could not repay their loans, Peregrine faced a liquidity crunch. The situation became unbearable after Zurich Centre Investments Ltd. investment pulled out of the deal to invest $200 million and the agreement with creditor banks was not secured, forcing Peregrine to capitulate and file for liquidation on January 12, 1998. The firm had total assets of HK$24.2 billion (US$ 3.1 billion) as of December 31, 1996, and total liabilities of HK$17.5 billion (US$ 2.3 billion).

01/12/1998 Filed for liquidation
01/13/1998 Accounting firm Price Waterhouse named as Peregrine's provisional liquidator

(Contact: Les Muranyi, 553-0592)

Exhibit 36 - Detail of 1998's Public Corporate Bond Defaults

Philip Services Corp. — Waste management company

$25.6 million 7.25% Convertible Subordinated Debentures due 6/1/2014

Philip Services Corp., headquartered in Hamilton, Ontario, Canada, is an integrated metals recovery and industrial services company with operations throughout the United States, Canada, and Europe. The company, currently the largest metal-recycling business in North America, incurred a significant amount of debt due to an aggressive acquisition strategy from which the company has yet to achieve the projected revenue growth and cost reductions.Declining commodities prices, large charge-offs related to copper-trading losses, and weakness in its industrial services group led negative operating cash flows. After recording $547.8 million in special charges related to disposition of some of its assets, asset impairments and goodwill write-off for the nine months ended September 30, 1998, Philip's earnings swung to negative $718.9 million for the first nine months of 1998 compared to earningsof $33.3 million in the same period a year earlier. Negative financial performance resulted in covenant violations under its bank credit facility, reshuffling of the management team, and the decision to dispose of certain assets toreduce debt. A dramatic reduction in commodity prices has impaired Philip's ability to sell these assets at a sufficient price to reduce debt by 50%. Faced with continuing losses and an unfavorable business environment, Philip Services suspended payments under its bank credit facility effective November 13, 1998, and entered into restructuring negotiations with its lenders.

11/13/1998 Suspension of payments
11/20/1998 The company has entered into a Standstill Agreement with its controlling shareholders and debtholders
12/01/1998 Missed interest payment (Contact: Catherine Guinee, 553-4385)

Philippine Airlines Inc. — Airline operator

$200.0 million FLT% Euronotes due 1/19/2000 *Not Rated by Moody's*

Philippine Airlines Inc. (PAL) is the oldest and the biggest airline operator both in Philippines, its home country, and in Asia. The company has been brought down by a combination of two key factors. First, PAL undertook a major expansion program right before the beginning of Asian crisis in the summer of 1997, loading up its balance sheet with a significant amount of bank loans and equipment leases. The cost of servicing its debt portfolio went up considerably amidst the economic slowdown as interest rates shot up and additional credit became scarce. PAL recorded its biggest ever loss of 8.08 billion pesos ($US 213 million) in the fiscal 1997 ended March 31, 1997. Second, the company's fragile relationship with its employees has culminated in the June 5, 1998 pilots strike thatwas triggered by a provision in the collective agreement that calls for mandatory retirement of pilots with a prespecified number of years of service and hours of flight time. The strike resulted in a shutdown of about 80% of PAL's operations and cost approximately 150 million peso ($US 3.8 million) a day, adding to the company's plight. Crippled by the pilots strike, on June 19, 1998 the company asked the Philippine Securities and Exchange Commission for a suspension of debt payments to creditors and an appointment of an interim receiver to oversee a rehabilitation plan. Drastic reduction of its fleet and employees did not help alleviate the situation as strikes, and losses, continued. Having failed to reach an agreement with the labor union before the deadline established by the Philippine SEC, on September 23, 1998 PAL filed for liquidation and ceased its operations.

06/19/1998 Filed with Philippine Securities and Exchange Commission to get a reprieve from creditors while it works on a rehabilitation plan; Interim receiver appointed
07/16/1998 Missed interest payment
09/23/1998 Filed for voluntary liquidation (Contact: Martine Nowicki, 553-0831)

PhoneTel Technologies, Inc. — Operator of public phones

$125.0 million 12% Guaranteed Senior Notes due 12/15/2006

PhoneTel Technologies, Inc., headquartered in Cleveland, Ohio, is an independent public pay telephone company. The company's rapid growth (operating 43,156 public pay telephones as of March 13, 1998 compared to 2,350 at December 31, 1993) has been achieved primarily through debt-financed acquisitions. Moreover, PhoneTel recorded operating losses in each of the last 5 years, compensating its cash shortfall by additional borrowing and thus increasing its already high financial leverage. PhoneTel's liquidity was further strained by disputed, uncollected dial-around compensation issues from interexchange carriers. Limited ability to generate sufficient cash flows from operations and constraints to incur additional indebtedness under existing credit agreement (PhoneTel is not in compliance with certain financial covenants since September 30, 1998) led to non-payment of interest on December 15, 1998 on its 12% senior notes maturing in 2006.

12/15/1998 Missed interest payment (Contact: Douglas Bontemps, 553-3779)

PHP Healthcare Corp. — Medical management company

$69.0 million 6.5% Convertible Subordinated Debentures due 12/15/2002

Based in Reston, Virginia, PHP Healthcare Corporation is a medical management company designing, developing, and managing integrated healthcare systems for public agencies, corporations, and healthcare providers. The company generates its revenues primarily by arranging contracts with managed care companies under which it agrees to provide certain health care services in exchange for a fixed fee per member per month. Operating difficulties largely associated with last year's capitated contract with HIP of New Jersey eventually led to significantlosses of $47.6 million and $24.2 million for fiscal 1998 and the first quarter of fiscal 1999, respectively. Having drawn on substantially all of available bank credit facility to fund stock repurchases right before incurring big operating losses in its New Jersey operations, the company faced a severe liquidity crunch. The efforts to find alternate sources of liquidity and avert financial crisis were unsuccessful. PHP filed for Chapter 11 protection in the United States Bankruptcy Court in Delaware on November 19, 1998.

11/19/1998 Chapter 11 (Contact: Diana Lee, 553-4747)

Physicians Resource Group, Inc. — Provider of medical management services

$125.0 million 6% Convertible Subordinated Debentures due 12/1/2001

Physicians Resource Group, Inc., headquartered in Dallas, Texas, provides physician management services to eye care practices and operates ambulatory surgery centers. Due to the company's difficulties to integrate certainpractices as part of its aggressive acquisition strategy, PRG incurred a net loss of $41.32 million at December 31, 1998 as opposed to a net income of $7.17 million the previous year. The company has also had problems associated with its internal controls and financial reporting systems as well as management departures. Persistentweak financial performance led to repeated violations of its bank credit facility covenants, and the inability on December 1, 1998 to make the interest payment on its 6% $125 million convertible subordinated debentures due 2001.

12/01/1998 Missed interest payment (Contact: Margaret Sunier, 553-4946)

Pioneer Finance Corp. — Finance conduit

$60.0 million 13.5% Guaranteed First Mortgage Notes due 12/1/98

Pioneer Finance Corp., headquartered in Las Vegas, Nevada, owns and operates the Pioneer Hotel & Gambling Hall (PHI) in Laughlin, Nevada. The company is a wholly-owned subsidiary of Santa Fe Gaming Corporation (SFGC), which also owns a casino in Las Vegas through its wholly owned subsidiary, Santa Fe Hotel Inc. SFGC's revenues from its Laughlin operations have continued to decline partly because of competition from Indiangaming in Arizona and Southern California, leading to depressed market conditions. PHI recorded an impairment to the carrying value of the Pioneer assets for the quarter ended September 30,1998, while Pioneer's operating income decreased by 94.8%, or $1.6 million in fiscal 1997, to $100,000 from $1.7 million in fiscal 1996, resulting in negative cash flows and low liquidity. SFGC, the parent company, reported net losses of $12.4 million for the ninemonths ended June 30,1998 compared to $7.4 million in the same period a year earlier. As of June 30,1998, Santa Fe Gaming Corporation had a net working capital deficiency of $52.4 million. On October 23, 1998, PioneerFinance commenced an exchange offer to extend the maturity of its 13.5% first mortgage notes, due December 1, 1998, (issued by Pioneer Finance Corp. and guaranteed by Santa Fe Gaming Corp.) to 2006. Nearing the expiration of the offer, on November 18, 1998 the company announced that the payment on the 13.5% first mortgage notes will not be made.

10/23/1998 Distressed exchange offer
11/02/1998 Distressed exchange offer not consummated; the company receives requisite bondholder consents to forbear until December 2000 any actions against exercising rights and remedies as a result of non-payment of principal and principal on December 1, 1998
11/18/1998 Announced that it would not pay interest and principal due December 1, 1998 (Contact: Todd Gray, 553-4688)

Exhibit 36 - Detail of 1998's Public Corporate Bond Defaults

PIV Investment Finance (Cayman) Limited — Finance conduit

$192.9 million 4.5% Guaranteed Convertible Eurobonds due 12/1/2000 — *Not Rated by Moody's*

Please see accompanying critique on Peregrine Investments Holdings Limited.

01/12/1998 Filed for liquidation
01/13/1998 Accounting firm Price Waterhouse named as Peregrine's provisional liquidator (Contact: Leslie Muranyi, 553-0592)

Polysindo International Finance Company B.V. — Finance conduit

$260.0 million 11.375% Guaranteed Secured Euronotes due 6/15/2006

$122.5 million 13% Guaranteed Secured Euronotes due 6/15/2001

$250.0 million 9.375% Guaranteed Secured Global Notes due 7/30/2007

$50.0 million FLT% Guaranteed Euronotes due 2/12/99

Please see accompanying critique on PT Polysindo Eka Perkasa.

06/15/1998 Missed interest payment (Contact: Joseph Princiotta, 553-4886)

Polytama International Finance B.V. — Finance conduit

$200.0 million 11.25% Guaranteed Secured Notes due 6/15/2007

PT Polytama Propindo (PP), based in Jakarta, Indonesia, is the country's second largest producer of polypropylene used in manufacturing of a wide range of consumer and industrial products, including plastic film for packaging, yarn for woven bags, and fiber for carpet. Lower polypropylene prices, falling domestic demand, and severe depreciation of the Indonesian Rupiah against the US dollar adversely affected the company's financial performance and contributed to operating losses. The most recent propylene supply interruption, which occurred in April of 1998 due to technical problems at Pertamina refinery, caused the temporary closing of the company's plant and aggravated the already difficult financial position. Limited financial flexibility due both to negative financial results and the tight liquidity of the Indonesian banking sector prevented PP from disbursing interest payment due on secured notes issued by its Netherlands-based subsidiary Polytama International Finance B.V. on June 15, 1998. Simultaneously, the company asked for noteholders' agreement to be able to tap into restricted funds allocated to expansion project in order to meet its current and future financial obligations as well as repay up to US$13 million of its outstanding secured notes.

06/15/1998 Missed interest payment; announced that it intends to seek consent from noteholders for an amendment to the terms of its outstanding notes which would allow it to use restricted funds to pay the interest payments and buy back up to $13 million of notes
09/03/1998 Announced successful consent solicitation results: past due interest on 11.25% guaranteed secured notes made
(Contact: Joseph Princiotta, 553-4886)

PRT Funding Corp. — Finance conduit

$85.0 million 11.625% Guaranteed Senior Notes due 4/15/2004

Please see accompanying critique on GB Property Funding Corp.

01/05/1998 GB Holdings Inc. and its subsidiaries, Greate Bay Hotel & Casino, Inc. and GB Property Funding Corp., filed for Chapter 11; PRT Funding Corp. was not included in the filing
04/15/1998 Deferred interest payment on 11.625% guaranteed senior notes due 2004 (Contact: Todd Gray, 553-4688)

PT Astra International Tbk. — Car manufacturer

Ind Rupiah 250,000.0 million VAR% Bonds, Ser. I due 2/28/99 [$34.7 million] — *Not Rated by Moody's*

Ind Rupiah 400,000.0 million 15.5% Bonds, Ser. II due 2/3/2002 [$55.6 million]

Ind Rupiah 50,000.0 million 11% Convertible Bonds due 3/11/2001 [$6.9 million]

$125.0 million 6.75% Convertible Eurobonds due 5/30/2006

$125.0 million 9.75% Euronotes due 4/29/2001

PT Astra International Tbk., headquartered in Jakarta, Indonesia, is a diversified industrial holding company operating in the automotive, financial services, heavy machinery, agricultural, and infrastructure industries. The company is the largest car manufacturer in Indonesia and the sole distributor of such brands as Toyota, Honda, Isuzu, and others. The sharp depreciation of domestic currency coupled with soaring interest rates significantly decreased demand for Astra's products and left it with large inventories. As the company saw its financing costs and costs of imported parts surge, its financial health worsened and ability to service its substantial debt load decreased. The company's first ever net loss of 278.7 billion Rupiah (US$50 million) in 1997 (since being listed in 1990) was followed by a net loss of 7.4 trillion billion (US$500 million) in the first six months of 1998. Coping with current crisis and trying to reduce costs, Astra suspended production at some of its plants and laid off 20% of its workforce during the last few months. With its core car and motorcycle businesses remaining weak and strained operating cash flows, on October 22, 1998 Astra has announced a suspension of payments under the current terms of most of its debt obligations(including both the dollar- and rupiah-denominated bonds) until the formal restructuring plan is worked out and approved by the creditors.

10/22/1998 The company announced the suspension of interest payments on its debt (Contact: David Andrews, 553-7776)

PT Bahana Pembinaan Usaha — Government-owned financial holding company

$250.0 million FLT% Euro Medium Term Notes due 11/12/99 *Not Rated by Moody's*

$75.0 million FLT% Euro Medium Term Notes due 12/22/2000

PT Bahana Pembinaan Usaha, based in Jakarta, Indonesia, is the holding company of Bahana Securities, one of the only two securities firms fully owned by the Ministry of Finance. The company has experienced severe difficulties paying its debts, despite the fact that it is state-owned, following the start of the domestic recession in the summer of 1997. Bahana defaulted on some promissory notes in February of 1998 and subsequently in May and June of 1998 missed interest payments on both issues of public euro medium term notes.05/12/1998
Missed interest payment on floating rate euro medium term notes
maturing in 1999

06/22/1998 Missed interest payment on floating rate euro medium term notes maturing in 2000 (Contact: Edward Young, 553-1653)

PT Bakrie Investindo — Diversified financial company

$54.0 million 3.75% Convertible Exchangeable Eurobonds due 11/2/2000 *Not Rated by Moody's*

A unit of Bakrie group. Please see accompanying critique under Bakrie International Finance Company B.V..

01/23/1998 Bakrie Finance Corporation Tbk., a unit of Bakrie group, missed interest payment due on 16.375% domestic bonds maturing 2002
01/28/1998 Bakrie Finance Corporation Tbk., a unit of Bakrie group, made interest payment
02/12/1998 Bakrie International Finance Company B.V., a unit of Bakrie group, missed interest payment on floating rate euro medium term notes, tranche 1, maturing 2000
03/23/1998 Bakrie International Finance Company B.V., a unit of Bakrie group, missed interest payment on floating rate euronotes maturing 1999
06/17/1998 Bakrie Indonesia B.V., its wholly-owned finance subsidiary, missed interest payment on 9.625% eurobonds maturing 1999
07/30/1998 BIN Finance Company B.V., a unit of Bakrie group, missed interest payment on floating rate euronotes maturing in 1999 (Contact: Todd Baker, 553-4999)

PT Bank Modern Tbk. — Commercial bank

Ind Rupiah 89,199.7 million VAR% Secured Bonds, Ser. A due 10/25/2000 [$11.6 million] *Not Rated by Moody's*

Ind Rupiah 10,800.3 million VAR% Secured Bonds, Ser. B due 10/25/2000 [$1.4 million]

PT Bank Modern Tbk., based in Jakarta, Indonesia, is a general commercial bank. The bank extended the majority of its loans to intergroup projects and companies controlled by its shareholders. Chronic asset-quality problems became acute after the domestic economy entered the recession in the summer of 1997. After being placed under management of the Indonesian Banking Restructuring Agency in April of 1998, Bank Modern was finally shut for good on August 21, 1998 due to its precarious financial situation. Subsequently, on October 25, 1998 the interest payments due on two series of domestic bonds were not disbursed.

08/21/1998 The bank's operations frozen by the Indonesian government
10/25/1998 Missed interest payment (Contact: Deborah Schuler, 553-1653)

Exhibit 36 - Detail of 1998's Public Corporate Bond Defaults

PT Bank Papan Sejahtera — Commercial bank

Ind Rupiah 250,000.0 million FLT% Secured Notes due 12/23/2001 [$22.6 million] *Not Rated by Moody's*

PT Bank Papan Sejahtera, based in Jakarta, Indonesia, provides general commercial banking, family banking and home financing services through a network of 11 branches in major Indonesian cities. After booking a net profit ofRupiah 8.76 billion (US$ 3.7 million) in 1996, the bank recorded a net loss of Rupiah 40.41 billion (US$ 7.3 million) in 1997. The bank's negative performance during 1997 and dwindling capital base were supported, in part, by lower-cost liquidity credits from Bank Indonesia, which amounted to Rupiah 990.36 billion (US$177.8 million), or nearly 45% percent of the bank's total assets at December 31, 1997. As a result of poor financial performance, Bank Papan, along with 31 other troubled banks, was placed under supervision of the Indonesian Bank Restructuring Agency on April 23, 1998. While still operating under the governmental supervision, the bank delayed coupon payment originally due on September 23, 1998 until October 15, 1998.04/22/1998 The bank is placed under supervision of the Indonesian Bank Restructuring Agency.

09/23/1998 Missed interest payment
10/15/1998 Made interest payment within a grace period (Contact: Deborah Schuler, 553-1653)

PT Ciputra Development — Real estate developer

Ind Rupiah 150,000.0 million 18.75% Bonds, Ser. I due 7/18/2001 [$13.7 million] *Not Rated by Moody's*

PT Ciputra Development, based in Jakarta, Indonesia, is a holding company for Ciputra Group's property and real estate business. It specializes in large scale integrated projects combining housing with commercial and recreational centers, and mixed-use developments including office, shopping and sport facilities. An aggressive expansion strategy during 1990s was financed mostly by debt, 70% of which was denominated in foreign currencies. Following the August of 1997 devaluation of the rupiah, the company's ability to service its foreign currency debt of approximately US$250 million was severely weakened. Most of this debt was unhedged, which resulted in foreign exchange losses of 32.5 billion Rupiah (US$10 million) for the nine months ended September 30,1997 compared to a forex loss of 3.35 billion Rupiah (US$1.1 million) in the same period a year earlier. As a result, PT Ciputra missed a $4 million interest payment on a $100 million euronote issued by Ciputra Development International Finance B.V., its European finance arm, and suspended payments on about $150 million of foreign-currency bank debt owed to Indonesian banks on January 29, 1998. Although the company clearly stated that it would continue to service the rupiah-denominated obligations, the interest payment on 18.75% domestic bonds due April 18, 1998 was not made.

01/29/1998 Missed interest payment on guaranteed floating euronotes due 7/27/2000 (issued by Ciputra Development International Finance B.V., its wholly-owned subsidiary)
04/18/1998 Missed interest payment on 18.75% domestic bonds due 7/18/2001
11/26/1998 The bondholders agreed to exchange their bonds into common shares of PT Ciputra Surya Tbk. (Contact: Edward Young, 553-1653)

PT Ciputra Surya Tbk. — Real estate developer

Ind Rupiah 300,000.0 million 15.5% Secured Bonds, Ser. I due 6/25/2003 [$35.1 million] *Not Rated by Moody's*

Subsidiary of PT Ciputra Group. Please see accompanying critique on PT Ciputra Development

03/25/1998 Missed interest payment
11/26/1998 The bondholders agreed to exchange their bonds into common shares of PT Ciputra Surya Tbk. (Contact: Teresa McCarthy, 553-3878)

PT Dharmala Sakti Sejahtera — Financial services holding company

Ind Rupiah 50,000.0 million VAR% Secured Bonds, Ser. II due 11/19/98 [$5.8 million] *Not Rated by Moody's*

Subsidiary of PT Dharmala Intiutama. See accompanying critique on PT Dharmala Intiutama International B.V.

04/01/1998 Missed interest payment on variable rate domestic bonds due 11/19/98
07/01/1998 Missed interest payment on variable rate domestic bonds due 11/19/98
08/26/1998 Paid interest payment (Contact: Deborah Schuler, 553-1653)

PT Duta Anggada Realty Tbk. — Property developer

Ind Rupiah 100,000.0 million 18% Secured Bonds, Ser. II due 3/1/2001 [$11.3 million] *Not Rated by Moody's*

Ind Rupiah 25,000.0 million 14.5% Secured Bonds, Ser. I due 6/8/99 [$2.8 million]

PT Duta Anggada Realty Tbk., headquartered in Jakarta, Indonesia, develops properties for sale, rental and investment purposes. The monetary crisis driven by the sharp depreciation of Indonesian currency has put a strain on both the property developers like PT Duta Anggada, escalating their massive foreign debts almost three times in rupiah terms, as well as on tenants who could no longer afford to pay their rents in dollars. Moreover, slumping economy resulted in lower consumption and demand for rental space, depressing revenues even further. PT Duta Anggada faced a liquidity crunch and could not make interest payment due March 1, 1998 on its rupiah denominated 18% secured domestic bonds due 2001. In addition, the company has 268 million of debt denominated in US dollars (as of the end of 1997), which constituted 70% of its total debt load.

03/01/1998 Missed interest payment on 18% secured bonds due 2001
05/12/1998 Missed interest payment on floating rate guaranteed eurobonds due 2000 (issued through its wholly-owned subsidiary Duta Anggada International B.V.) (Contact: Teresa McCarthy, 553-3878)

PT Muliaglass — Glass manufacturer

Ind Rupiah 100,000.0 million 15.25% Domestic bonds, Ser. I due 7/11/2004 [$10.9 million] *Not Rated by Moody's*

PT Muliaglass, a manufacturer of glass and glass containers, and PT Muliakeramik Indahraya Tbk, a producer of ceramic floor and wall tiles, are Indonesia-domiciled subsidiaries of PT Mulia Industrindo Tbk, an industrial holding company. As a direct result of higher financing charges due to the sharp depreciation of the rupiah and soaring domestic interest rates, the company's net income fell almost 90% (in terms of domestic currency) to 13.05 billionrupiah (US$ 2.3 million) in 1997 from 113.1 billion rupiah (US$ 47.9 million) in 1996. Over the course of 1997, Mulia Industrindo's debt-to-equity ratio has nearly tripled and stood at 285% as of December 31, 1997, compared to 104% one year prior. The parent company did not make interest payments due on floating euronotes maturing in 2002 on July 8, 1998 and on floating rate euronotes maturing in 1999 on August 28, 1998 (both instruments were issued through Mulia Industrindo Finance B.V., the Netherlands-based wholly-owned finance subsidiary). Subsequently, as part of a standstill agreement reached with their bank creditors, both subsidiaries, Muliaglass andMuliakeramik, failed to make interest payments due on their respective bonds on October 10, 1998.

10/10/1998 Missed interest payment (Contact: Philip Li, 553-4578)

PT Muliakeramik Indahraya Tbk. — Ceramic tiles manufacturer

Ind Rupiah 100,000.0 million 15.25% Domestic bonds, Ser. I due 7/11/2004 [$10.9 million] *Not Rated by Moody's*

The company is a wholly-owned subsidiary of PT Mulia Industrindo Tbk. Please see accompanying critique on PTMuliaglass.

10/10/1998 Missed interest payment (Contact: Teresa McCarthy, 553-3878)

PT Mulialand Tbk. — Property developer

Ind Rupiah 100,000.0 million 18.875% Secured Bonds, Ser. I due 10/13/2000 [$13.9 million] *Not Rated by Moody's*

Ind Rupiah 150,000.0 million 18.125% Secured Bonds, Ser. II due 12/16/2001 [$20.8

PT Mulialand Tbk., headquartered in Jakarta, Indonesia, is a property developer, and operator of office and, to a lesser extent, residential buildings. The company has been affected by general economic downturn that began in summer of 1997. Along with worsening operating environment, higher financing costs due to drastic depreciation of the domestic currency have led to net losses both in the first and second quarters of 1998. After recording a net income of 70.3 billion Rupiah (US$12.6 million) in 1997, Mulialand posted a net loss of 172.9 billion Rupiah (US$11.7 million) for the first two quarters of 1998. Within the same time span, the company's debt-to-equity ratio went from 2.13 at December 31, 1997 to 7.06 as of June 30, 1998. The company was not able to meet the exercised put option on a 18.875% secured domestic bond due 2000 on October 13, 1998. Subsequently, on October 22, 1998 it also suspended interest payments on its floating rate and fixed rate euronotes (issued throughits wholly-owned Netherlands-based finance subsidiary Mulialand Finance B.V.).

10/13/1998 Failed to meet the put option on its 18.875% secured domestic bonds due 10/13/2000
10/22/1998 Missed interest payments on floating rate and fixed rate euronotes (Contact: Takahiro Morita, 553-1653)

Exhibit 36 - Detail of 1998's Public Corporate Bond Defaults

PT Pakuwon Jati Tbk. — Property developer

Ind Rupiah 200,000.0 million 18.5% Secured Bonds, Ser. II due 12/17/2001 [$19.4 million] *Not Rated by Moody's*

Ind Rupiah 150,000.0 million 19.125% Secured Bonds, Ser. I due 6/28/2001 [$14.6 million]

PT Pakuwon Jati Tbk., based in Surabaya, Indonesia, owns, develops and manages various kinds of properties, specializing in high-end retail projects and hotels. Low occupancy rates at its hotels and decreasing demand for housing due to economic downturn caused by the plunge in the rupiah have led to weakened income streams and losses. High interest rates, coupled with lenders' increased unwillingness to extend additional loans, forced Pakuwon Jati to suspend funding of projects under construction and servicing of its debts. The company failed to make an interest payment on its 18.5% secured bonds due 2001 on March 17, 1998.

03/17/1998 Missed interest payment on 18.5% secured bonds maturing 2001 (Contact: Teresa McCarthy, 553-3878)

PT Polysindo Eka Perkasa — Chemical and textile manufacturer

$2.5 million 13% Senior Euronotes due 6/15/2001

$25.0 million 9% Euro Medium Term Notes due 2/8/99

PT Polysindo Eka Perkasa, headquartered in Jakarta, Indonesia, is a vertically integrated polyester chemical and textile manufacturer. It derives most of its revenues from sales of filament yarn and fabrics, representing 16.7% and 72.1%, respectively, of the company's net sales during the first half of 1997. The devaluation of the rupiah hurt the company's financial results in 1997 and the first quarter of 1998, and increased the debt servicing costs. In addition, due to the crisis in the local and regional banking and the resultant limited ability of these markets to refinance the debts, Polysindo experienced a liquidity crunch and failed to repay $17 million in commercial paper maturing February 27, 1998. The firm indicated that it would seek an agreement with creditors to extend the maturity of its short-term obligations and that its planned expansion program would be postponed. Subsequently, on June 15, 1998 Polysindo missed $22.8 million in interest payments on its publicly traded long term bonds.

06/15/1998 Missed interest payment (Contact: Joseph Princiotta, 553-4886)

PT Semen Cibinong Tbk. — Cement maker

$170.0 million 9% Euronotes due 12/15/98 *Not Rated by Moody's*

PT Semen Cibinong, based in Jakarta, Indonesia, is one of Indonesia's big three cement makers. The company has experienced more difficult business and financial conditions as a result of the sharp depreciation of the rupiah and the ensuing higher interest rates. As the Indonesian economy slumped into recession, the domestic demand for cement dried up, leading to the shutdown of 3 out its 5 cement lines. Moreover, the present situation was exacerbated by overcapacity in the cement business worldwide. Substantial foreign exchange losses and an increase in debt service payments on its dollar-denominated debt due to currency depreciation have resulted in negative earnings for 1997 and the first quarter of 1998. Having approximately US$910 million in total borrowings, Semen Cibinong announced on April 14, 1998 that it would halt all payments on its debt and negotiate with creditors to reschedule the repayment of the debt.

03/27/1998 Suspended all principal and interest payments on its debt
11/03/1998 Announced that effective November 1, 1998 it will be making partial interest payments at 25% of the original contractual rate
(Contact: James Alward, 553-7108)

Reliance Acceptance Group, Inc. — Consumer finance company

$25.0 million 9% Subordinated Notes due 6/15/2001 *Not Rated by Moody's*

Reliance Acceptance Group, Inc., located in San Antonio, Texas, is a specialized consumer finance company engaged in the purchasing and servicing of sales finance contracts for used automobiles, primarily to persons with bad credit history who are unable to obtain financing through traditional sources. The company's loan portfolio has steadily deteriorated since the last quarter of 1996. Higher-than-expected default rates among company's customers and inadequate lending practices at a time of an overall softness in the sub-prime auto finance sector resulted in considerable losses. To cover its credit losses, Reliance set aside $60.9 million and $10 million in provision for credit losses in the second and third quarters of 1997, respectively. Having broken several covenantsunder its bank credit facility, Reliance got a waiver of all defaults by agreeing to higher interest rate and lower borrowing base, which further decreased financial flexibility. As a result, the company's ability to originate new loans was hindered, forcing it to close 29 offices and decrease the number of its employees to 284 as of November 10, 1997 from 578 as of April 30, 1997. New loan origination trickled to $2.3 million in the third quarter of 1997, compared to $42.9 million in the second quarter of 1997. Failure to secure external funding forced Reliance to seek Chapter 11 bankruptcy protection on February 9, 1998. Simultaneously, the company announcedthat Ugly Duckling Corp., one of company's competitors, has agreed to take over Reliance's auto loan portfolio upon the bankruptcy court's approval.

02/09/1998 Chapter 11
06/30/1998 Reorganization plan confirmed (Contact: Thomas Keller, 553-1653)

Renaissance Cosmetics, Inc. — Manufacturer and marketer of cosmetics products

$200.0 million 11.75% Senior Notes due 2/15/2004

Headquartered in New York City, Renaissance Cosmetics, Inc. (RCI) is a leading manufacturer and marketer of mass-market cosmetics products that are sold by more than 1,000 retailers in the US and internationally. RCI commenced operations in April of 1994. Its initial business plan was to acquire and reinvigorate underperforming old-line fragrance brands while opportunistically exploiting the name recognition of such fragrances by introducing new cosmetics products with related names. A 7% decline in total fragrance industry sales, and disappointing operating performance over the past few years forced the company to reconsider its business strategy, product mix, and financing alternatives. The company's gross margin fell from 60.1% in fiscal 1996 to 35.6% in fiscal 1997mainly as a result of increased sales of lower margin fragrance and cosmetics products. As a result of flat core sales growth, diminished operating margins, certain sizable charge-offs and adjustments in the 4th quarter, and costs due to implementation of a new business plan, RCI recorded a net loss of $197.4 million for the fiscal year ended March 31, 1998 compared to a net loss of $41.8 million for the same period one year prior. Reflecting the weak operating performance and limited cash flow, the company's debt service measures have remained extremely low and led to difficulties paying the February 15th interest payment (the company had to tap in into funds in escrow account in order to make the payment). As part of a financial restructuring, RCI has engaged in negotiations with senior noteholders, getting two-thirds of them to agree in principle to exchange their bonds for equity on August 27, 1998. In light of the negotiations culminating in this agreement in principle, the company did not make the scheduled interest payment which was due on August 17, 1998.

08/17/1998 Missed interest payment
08/28/1998 Reached an agreement in principle on the terms of a financial restructuring with the holders of almost two-thirds of the Company's 11 3/4% senior notes due 2004 (Contact: Kevin Kusnierek, 553-3835)

Renong Berhad — Diversified industrial conglomerate

$175.0 million 2% Convertible Eurobonds due 7/15/2005 *Not Rated by Moody's*

$225.0 million 2.5% Convertible Eurobonds due 1/15/2005

M Ringgit 432.3 million 4% Convertible Bonds due 5/22/2001 [$113.8 million]

Renong Berhad, one of Malaysia's largest diversified conglomerates, is involved in construction, engineering, financial services, telecommunications, oil, and, to a lesser extent, other industries. Benefiting from close ties to the country's leading political party, the conglomerate amassed significant amounts of debt aggressively expanding its businesses and financing various projects. Since the domestic economy entered a period of recession in the summer of 1997, the financial burden has magnified as the currency devaluation, surging interest rates, and general lack of liquidity in the banking sector strained the conglomerate's ability to service its debts. Renong posted a net loss of 794 million Ringgit (US$ 191 million) for the fiscal year ended June 30, 1998 in contrast to a net income of 536 million Ringgit (US$ 212 million) for the same period a year earlier. While attempts to either selladditional equity or divest some of its assets could not be undertaken due to unfavorable market conditions, the conglomerate proposed a government-sponsored debt restructuring plan on October 9, 1998. The restructuring plan, although currently being reviewed by the government, included the issuance of the government-backed bondsin exchange for Renong's debts. After missing interest payments on two loans on October 15, 1998, the conglomerate announced that, pending the conclusion of the restructuring, it would not service its debts.

10/15/1998 Missed payments on two of its loans and announced the suspension of payments on all of its debt until the restructuring plan is finalized

Exhibit 36 - Detail of 1998's Public Corporate Bond Defaults

Robinson Department Store Plc — Operator of department stores

JpnYen 6,800.0 million FLT% Euronotes due 6/12/2000 [$48.1 million] — *Not Rated by Moody's*

$100.0 million FLT% Euro Medium Term Notes due 2/15/2001

$50.0 million 3.25% Convertible Eurobonds due 7/27/2000

$38.3 million 4.25% Convertible Eurobonds due 4/7/2004

Robinson Department Store Public Company Limited, based in Bangkok, Thailand, owns and operates the "Robinson" department store chain. The company is the second largest department store retailer in Thailand. Economic recession in Thailand has affected consumer spending and negatively impacted the retail sector as a whole. In addition, Robinson was dealt a severe blow during the second half of 1997 as a result of the July's devaluation of the Thai Baht. Although the company had an operating profit for 1997, substantial foreign exchangelosses translated into a net loss of 7.61 billion Thai Baht (US$ 161.6 million) compared to a net profit of 371.7 million Thai Baht (US$ 14.5 million) in 1996. Since most of its debt is denominated in foreign currency, Robinson's cost of capital soared and interest payments more than doubled in domestic currency terms. Cost-cutting measures Robinson started implementing last year and this year resulted in some operating efficiencies, but did not resolve the substantial debt load, prompting the company's decision to hire Bankers Trust,an investment banking firm, to develop a restructuring plan. Subsequently, on June 10, 1998 Robinson missed interest due on floating rate yen-denominated notes due 2000 and announced the suspension of payments on all ofits debt.

06/10/1996 Missed interest payment on floating rate euronotes due 2000 (Contact: Marie Menendez, 553-4126)

Rossiyskiy Kredit Securities B.V. — Finance subsidiary

$200.0 million 10.25% Guaranteed Euro Medium Term Notes, Ser. 1 due 9/29/2000 — *Not Rated by Moody's*

Rossiyskiy Kredit Bank (RKB), headquartered in Moscow, Russia, is one of the ten largest banks in Russia. RKB engages in wholesale, private/retail, and treasury business. One of its primary activities is providing investment type loans to companies indirectly controlled by its major shareholders. Founded as a limited partnership in 1990 and recently transformed into a joint stock company, the bank has grown rapidly since its inception. In 1997, it increased both its assets and shareholders' funds by 85% year-on-year, whereas gross customer loans grew by over 125%. The rapid balance sheet growth reduced the bank's liquidity and increased the risk profile of its loan portfolio at the same time when economic and political turmoil were about to produce contraction and crisis in the banking sector as a whole. The payment moratorium announced by Russian government on August 17, 1998 prevented the bank from paying the principal on its $125 million bank loan on September 2, 1998. On September 29, 1998 the bank has disbursed only $3.4 million of required $10.25 million in interest payment on 10.25% eurobonds due 2000(issued through the Netherlands-based subsidiary Rossiyskiy Kredit Securities B.V.). Within the 5-day grace period though, RKB paid all past due interest in full.09/29/1998
Made partial interest payment

10/05/1998 Made interest payment in full within a 5-day grace period (Contact: Larry Pellecchio, 553-1653)

Royal Oak Mines Inc. — Gold mining company

$175.0 million 11% Guaranteed Senior Subordinated Notes due 8/15/2006

Royal Oak Mines Inc. is a Canadian gold mining company whose current producing mines are in the Northwest Territories and Ontario. Persistently low gold prices in 1997 negatively affected the company and forced the closures of several high cost mines, resulting in significant asset write-offs and closure costs. Royal Oak posted a net loss of Can$135.2 million (US$ 94.0 million) for the FY1997 compared to a net loss of Can$6.0 million (US$ 4.4 million) one year prior. Royal Oak's financial problems were compounded by construction-related problems andcost overruns at the Kemess Mine, the company's late-stage gold and copper development project in British Columbia. As a result of a severe cash crisis, Royal Oak defaulted on payments to contractors and eventually exceeded the amount of trade payables over 90 days stipulated in the indenture of its US$44 million senior securednotes, which constituted a technical default. Facing a working capital deficit of Can$104.8 million (US$ 73.7 million) as of the first quarter ended March 31, 1998 and requiring funds to finish its capital project at Kemess Mine and repay its existing senior secured debt, Royal Oak solicited consents from holders of its 11% senior subordinated bonds due 2006 in order to be able to borrow more. Because the start up of the Kemess Mine is crucial to Royal Oak's future, and because the company was in technical default on its senior debt which would have resulted in bankruptcy, the transaction had the apparent purpose of helping the company avoid default. On May 15, 1998, the bondholders agreed to the company's terms, accepting a consent fee of US$11.2 million in common stock and an increase in coupon rate from 11% to 12.75% in return for granting Trilon Financial Corp., a provider of a US$120 million loan, a first claim on Royal Oak's assets.

05/15/1998 The senior subordinated bondholders consented to indenture modifications which decreased economic value of their bonds
12/23/1998 Announced that interest and principal payments will be deferred until February 15, 1999 on all of its debt
(Contact: Steve Oman, 553-1673)

Sahaviriya Steel Industries Plc — Steel manufacturer

$110.0 million 3.5% Convertible Eurobonds due 7/26/2005 — *Not Rated by Moody's*

Sahaviriya Steel Industries Pcl, based in Bangkok, Thailand, is one of the country's biggest producers of steel products, namely hot- and cold-rolled steel coils. The economic crisis that followed the July 1997 flotation of the Thai Baht caused construction activity to decrease significantly, cutting demand for the company's products. Decreased construction and ailing property sector meant an oversupply of steel products, a drop in price, and a subsequent capacity reduction at Sahaviriya's plants. In addition to such negative operating environment, the company's foreign currency denominated debts have increased sharply due to the Baht devaluation. The companyposted a loss of 10.6 billion Baht (US$212 million) in 1997 following a loss of 1.3 billion Baht (US$52 million) in 1996. Sahaviriya's efforts to augment its cash position by selling shares at a time of bearish stock market have been marginal. While negotiating various rescheduling options with its creditors, on July 27, 1998 Sahaviriya did not make interest payment due on its publicly traded 3.5% convertible bonds maturing in 2005.

07/27/1998 Missed interest payment (Contact: Edward Young, 553-1653)

Salant Corp. — Apparel manufacturer

$104.9 million 10.5% Senior Secured Notes due 12/31/98

Salant Corporation, headquartered in New York City, designs, manufactures, imports and markets brand name and private label apparel products to retailers throughout the United States. Although Salant's debt levels were reduced as part of its bankruptcy reorganization in 1993, its balance sheet remained highly leveraged. As part of major restructuring of its menswear division initiated in the first half of 1996, Salant decided to focus on a limited number of key brand names that could deliver higher profit margins and recorded charges of $11.7 million in 1996 and $17 million in 1997 ($9.5 in 9 months ended September 30, 1997 plus $7.5 million of expected charge in the fourth quarter of 1997) related to discontinuation and divestitures of unprofitable product lines and facilities. Thesesignificant charges, coupled with lower sales due to the ongoing restructuring of the firm's business lines and intensified competition from off-price retailers, resulted in a $12.4 million net loss in the first nine months of 1997, compared to a net loss of $15.4 million for the same period a year earlier. Facing increased current and future interest expenses, Salant solicited and reached an agreement in principle with its major note and equity holders to restructure its 10.5% senior secured notes into 92.5% of the company's equity on March 2, 1998. At the same time, because of the treatment of accrued interest on the notes under the proposed restructuring agreement, the company announced that it will not pay $5.2 million of interest due March 2, 1998.

03/02/1998 Announced that it had reached an agreement in principle to exchange senior secured notes for equity and that interest payment due March 2nd would not be made
12/29/1998 Prepackaged Chapter 11 (Contact: Catherine Guinee, 553-4385)

Scott Cable Communications, Inc. — Cable television systems operator

$61.5 million 15% Senior Subordinated PIK Notes due 3/18/2002 — *Not Rated by Moody's*

$49.0 million 16% Junior Subordinated PIK Notes due 7/18/2002

Scott Cable Communications, Inc., based in Stamford, Connecticut, owns and operates cable television systems in suburban and rural markets in the United States. As a result of a January 1988 merger with Simmons Communications Merger Corp., the company became highly leveraged. Its effective leverage continued to increase overtime due to negative operating results and the resultant increased reliance on issuance of long-term debt to finance its capital needs. Scott Cable's high operating expenses and reduced revenues led to a default on its debt in October of 1995 and Chapter 11 filing in February of 1996. After reorganizing and emerging from Chapter 11 in December of 1996, the company's performance did not improve. The net loss of $4.8 million in 1997, the first full year of operations since the emergence, was followed by a net loss of $4.3 million in the first sixmonths of 1998. On July 10, 1998, the company reached an agreement to sell substantially all of its assets to Denver-based InterLink Communications Partners LLP for $165 million. As part of the sale agreement, Scott Cable filed a prepackaged Chapter 11 reorganization plan on October 1, 1998 to consummate the transaction.07/10/1998 The company entered into a definitive asset sale agreement with InterLink Communications Partners, LLLP to sell substantially all of its assets for a purchase price of $165 million

10/01/1998 Prepackaged Chapter 11 (Contact: Russell Solomon, 553-4301)

Service Merchandise Company, Inc. — Jewelry and household appliance retailer

$300.0 million 9% Senior Subordinated Debentures due 12/15/2004

$13.0 million 8.375% Senior Notes due 1/15/2001

Service Merchandise Company, Inc., headquartered in Brentwood, Tennessee, is a retailer of fine jewelry and home products. Declining operating results due to increasing costs and competitive pressures prompted the company to undertake a radical restructuring plan in March 1997 by closing 60 underperforming stores and one distribution center as well as adopting a new store format. Sales dropped 15.1% to $1.87 billion in the first nine months of 1998 from $1.99 billion during the same period in 1997 because of fewer stores and same store sales declines disruptions during the re-positioning. Service Merchandise also incurred sizable charges related to strategic repositioning. Customers did not respond well to the new store presentation, which debuted on Labor Day 1998, and the company reported double digit same-store sales declines through the early holiday buying period. On December 15, 1998 the interest payment due on 9% senior subordinated notes maturing in 2004 was not disbursed.

12/15/1998 Missed interest payment (Contact: Marie Menendez, 553-4126)

SGL Carbon Corporation — Producer of carbon and graphite materials

DM 150.0 million 1.75% Convertible Guaranteed German Bonds due 9/30/2003 [$90.7 *Not Rated by Moody's*

SGL Carbon Corporation, headquartered in Charlotte, North Carolina, is a wholly-owned subsidiary of German-based SGL Carbon AG that is engaged in manufacturing, marketing and distributing of carbon and graphite products. The company, currently under a rationalization program due to its high leveraged condition and the slowdown in the global steel markets, is embroiled in a court litigation petitioned by some of its steel industry customers against price fixing on carbon electrode products. Price disputes led SGL Carbon to seek protection under Chapter 11 on December 16, 1998.

12/16/1998 Chapter 11

Shinwon Industries Co., Ltd. — Manufacturer of satellite video receivers

$10.0 million 0.25% Convertible Bonds due 12/31/2010 *Not Rated by Moody's*

Shinwon Industries Co., Ltd, a manufacturer of satellite video receivers, and Kwang Myung Electrical Engineering Co., Ltd., a manufacturer of electric circuits and transformers, are two units of Korea's Shinwon Group which hasinterests ranging from garment manufacturing to cable television. The group's rapid expansion into different and unrelated industries during the robust economic growth led to financial difficulties after the Korean economy slowed down and entered recession in 1997. Shinwon Group's debts rose to approximately 1 trillion Won (US$590 million) at the end of 1997 as drop in demand for its products decreased sales and resulted in losses, prompting more borrowing at a time of rising interest rates. In February of 1998 the group received 200 billion Won (US$125million) in emergency loans after it agreed to cut the number of its units to four from 17 and sell some real estateholdings. In addition, Shinwon's chairman provided his personal assets as collateral in order to induce the creditor banks' approval of the loans. The plan to merge four of the group's units failed on June 8, 1998 after the stockholders opposed the merger, and subsequently on July 18, 1998 two of the four merger candidates and the group's most troubled units, Shinwon Industries and Kwang Myung Electrical Engineering, applied for court receivership.

07/18/1998 Receivership (Contact: Howard Sitzer, 553-4312)

Southern Pacific Funding Corporation — Sub-prime mortgage lender

$75.0 million 6.75% Convertible Subordinated Notes due 10/15/2006

$100.0 million 11.5% Senior Notes due 11/1/2004

Southern Pacific Funding Corporation (SPFC), based in Lake Oswego, Oregon, is a specialty finance company engaged in the business of originating, purchasing, and selling sub-prime mortgage loans secured by one-to-four family residences. The company focuses on lending to individuals who have impaired or unsubstantiated credit histories and/or unverifiable income. At June 30, 1998, the company had a servicing portfolio of $3.5 billion. SPFC has operated on a negative cash flow basis in the last few years and depended largely on its ability to securitize loans in the secondary market to generate cash proceeds as well as on available credit lines. Current volatility of capital markets made it more difficult for the company to securitize new loans and/or attain additional financing. SPFC's high effective leverage has limited its financial flexibility and decreased its capacity to service its loan portfolio and debt obligations. Consequently, the company retained an investment bank at the end of July 1998 to explore strategic alternatives, including an acquisition or a strategic alliance with a third party. After being unable to negotiate with its lenders to waive recent default notices under current facilities, on October 1, 1998 SPFC filed for Chapter 11 protection.

10/01/1998 Chapter 11 (Contact: Steve Nelson, 553-3781)

Taiping Consolidated Berhad — Real estate developer

M Ringgit 138.0 million 7% Domestic Mortgage Bonds due 9/15/98 [$33.5 million] *Not Rated by Moody's*

Taiping Consolidated Berhad (TCB), is a real estate developer domiciled in Kuala Lumpur, Malaysia. The company posted a loss of 36.2 billion Ringgit (US$9.7 million) for the year ended April 30, 1998 compared to a net income of 21.7 Ringgit (US$8.6 million) a year earlier mainly due to the devaluation of domestic currency and resulting higher costs of borrowing. Current oversupply in the property sector has made it difficult to sell off real estate holdings in order to service debts incurred developing its projects. Experiencing tight liquidity and anticipating that itwill not be able to repay the principal amount of the mortgage bonds in full on September 15, 1998, TCB has obtained a Restraining Order from the High Court on July 30, 1998 to help facilitate orderly debt restructuring negotiations.

07/30/1998 Obtained a Restraining Order from creditors
09/15/1998 Missed principal payment (Contact: Teresa McCarthy, 553-3878)

Tatneft Finance plc — Finance conduit

$300.0 million 9% Guaranteed Global Notes due 10/29/2002

AO Tatneft, headquartered in Almetyevsk, Tatarstan, is principally engaged in the exploration, development, and production of crude oil. In view of recent low oil prices and deteriorating economic conditions in the Republic of Tatarstan, the company's hard currency proceeds from oil exports have proven insufficient both to provide fundingfor its operations and to service its debt obligations. In addition, the present financial turmoil in Russia has resulted in poor liquidity and availability of additional capital in the banking system, limiting the company's refinancing options and access to funding. As a result, on October 29, 1998 Tatneft failed to disburse the interestpayment due on its eurobonds (issued through its wholly-owned Ireland-based finance subsidiary Tatneft Finance plc).

10/29/1998 Missed interest payment
11/19/1998 Made interest payment (Contact: Jeremy Hawes, 553-1653)

Texfi Industries Inc. — Fabrics manufacturer

$34.4 million 8.75% Senior Subordinated Debentures due 8/1/99

$2.4 million 13% Subordinated Extendible Debentures, Ser. C due 4/1/2000

Texfi Industries, Inc., based in Raleigh N.C., is a vertically integrated manufacturer of blended woven fabrics (91%) and narrow elastic fabrics (9%). The company's historical performance has been negatively impacted by under-performing acquisitions which had been intended to grow and diversify earnings. A restructuring program initiated in 1995 focused on the divestiture of non-core businesses, a realignment of the core blends business, international sourcing initiatives and capital improvements. However, weak operating results continued through 1997, due to disruptions and inefficiencies related to the implementation of new equipment. This, combined with charges associated with the asset write-downs and divestitures, has created considerable losses which amounted to $54.5 million on an accumulated basis for the last five full fiscal years ended October 31, 1997. For the twenty-six weeks ended May 1, 1998, the company showed a 26% decline in sales revenues (or 18% as adjusted for the sales of the knitted narrow fabrics division) compared to the same period a year ago. The decrease is attributable primarily to higher competition from foreign imports of competing fabrics and finished apparel from Asia, especially in the missy and junior markets. The lower unit volumes combined with a high percentage of fixedcosts lead to a negative EBIT for the first half. These events triggered certain covenant violations under the terms of the revolving credit facility and on June 5, 1998, the company entered into a forbearance agreement with its lender until July 24, 1998 (which has since been extended until August 24th). On July 20, 1998, Texfi announced that the August 1st, 1998 interest payment on 8.75% senior subordinated debentures due 1999 would not be made pending the expected closing of a new or restructured credit facility with its lenders.

07/20/1998 Announced that it would not make interest payment due August 1, 1998 on 8.75% senior subordinated debentures maturing 1999
08/01/1998 Missed interest payment
09/01/1998 Made interest payment (Contact: Catherine Guinee, 553-4385)

Thai Modern Plastic Industry PCL — Plastics manufacturer

Thai Baht 560.0 million 6.375% Debentures w/warrants due 9/30/99 [$14.6 million] *Not Rated by Moody's*

Thai Modern Plastic Industry Public Company Limited, based in Thailand, is a manufacturer of plastic products used in packaging and consumer products industries. The company's financial profile was dealt a severe blow after the sharp depreciation of domestic currency in August 1997 magnified its mostly US dollar-denominated debt load and domestic economic slowdown decreased the demand for its products. In addition to not being able to make interest payment due on its domestic senior debentures on March 30, 1998, Thai Modern's situation has been exacerbated further by the investigation into alleged understatement of total loans in 1997's annual report by 2.2 billion Baht (US$57.2 million). On August 27, 1998 the civil court, after being petitioned by the company's creditor banks, transferred full management control of the company to South Sathorn Planner Limited.

03/30/1998 Missed interest payment
09/30/1998 Missed interest payment (Contact: Philip Li, 553-4578)

Thai Oil Company Limited — Oil company

$200.0 million FLT% Eurobonds due 11/16/2001 *Not Rated by Moody's*

Thai Oil Company Limited, based in Thailand, is the owner and operator of the country's largest petrochemical refinery with a capacity of 220,000 barrels per day. The state-owned Petroleum Authority of Thailand owns a controlling 49% stake in the company. Weakened economic conditions in Asia in general and in Thailand in particular adversely affected Thai Oil's cash flow generation and liquidity. Lower oil consumption, followed by tumbling oil prices, led to a decline in gross refining margin for the fiscal year ended September 30, 1998 to about $1.8 per barrel from $3.5 per barrel in the corresponding period one year earlier. On November 16, 1998 the company announced a debt-freeze on approximately $1.9 billion of debt for six months. Simultaneously, the interest payment on floating rate eurobonds maturing in 2001 due on the same date was not made.

11/16/1998 Missed interest payment on floating rate eurobonds due 2001; halted payments on all of its debt for 6 months
(Contact: Thomas Coleman, 553-0365)

TIME Engineering Berhad — Diversified Investment holding company

$250.0 million 0% Secured Bonds due 8/4/2001 *Not Rated by Moody's*

Time Engineering Berhad is a Malaysian diversified holding company with interests in telecommunications, information technology, engineering, construction and power industries. The company is 47 percent owned by Renong Berhad, one of the country's largest business conglomerates, and, in turn, owns 21 percent of Renong Berhad. The present problems primarily stem from the accumulation of massive debts developing its own telecommunications network and acquiring existing infrastructures by the company's telecommunications unit, Time Telecommunications Holdings Bhd. As of December 31, 1997, the total bank debt stood at 2.5 billion

Ringgit($US 650 million), 68 percent of which is short-term, in addition to $US 250 million of zero coupon secured domestic bonds due in 2001. All of the company's businesses experienced reduced demand for their products andservices as Malaysian economy sank into recession. The economic downturn and currency turmoil caused the deferral of listing of Time Telecommunications' shares on Kuala Lumpur Stock exchange, precluding stock sales as a way of raising much needed cash. Time Engineering recorded net losses of 145.5 million Ringgit ($US 37.8 million) and 43.9 million Ringgit ($US 11.9 million)) for the 1997 and the first quarter of 1998, respectively. To improve future prospects and continue as a going concern, the company solicited and was granted an order of bankruptcy protection from creditors on July 14, 1998. The order is valid for nine months and gives the company a chance to stave off creditors while it reorganizes.

07/14/1998 Applied for and was granted creditor protection (Contact: Doug Bontemps, 553-3779)

Tri Polyta Finance B.V. — Finance conduit

$185.0 million 11% Guaranteed Secured Notes due 12/1/2003

Headquartered in Jakarta, Indonesia, PT Tri Polyta Indonesia Tbk. is a chemical company whose polypropylene-based polymers are primarily sold domestically and used mainly in manufacturing of food wrap, packaging, yarn, sacks, and ropes. The significant margin squeeze that resulted from recent high feedstock costs and low product prices was compounded by the sharp depreciation of the Rupiah against the dollar since latesummer of 1997. Since most of its production is consumed domestically and sold for Rupiah, PTI saw its dollar-denominated debt servicing costs soar. An attempt to increase export sales in the pursuit of hard currency denominated revenues did not provide sufficient relief as other chemical producers also stepped up their exports, intensifying competition while the overall industry fundamentals remained weak. As a result of the shortage of cash flow from operations and tight liquidity, PTI failed to make interest payment on US$185 million 11.375% guaranteed secured notes (issued by Polyta International Finance B.V., a wholly-owned finance subsidiary domiciled in Netherlands) on June 1, 1998. On June 22, 1998, PTI commenced the consent solicitation to obtain the noteholders' approval to amend the indenture of the notes allowing the company to use the restricted funds setaside for investments in petrochemical projects to pay the past due interest payment.

06/01/1998 Missed interest payment
06/22/1998 The company began a consent solicitation to amend the terms of its outstanding notes which would unrestrict the funds initially set aside for investments only in certain petrochemical projects and provide the fundsto pay the past due interest
06/30/1998 The company receives the requisite approval from the noteholders; interest payment made (Contact: Joseph Princiotta, 553-4886)

United States Leather, Inc. — Leather manufacturer

$130.0 million 10.25% Senior Notes due 7/31/2003

United States Leather, Inc., located in Milwaukee, Wisconsin, is a diversified producer and marketer of finished leather serving the furniture, footwear, personal leather goods and automotive markets. The company experienced a series of losses during the last two years, reporting its latest net loss of $24 million for the nine months period ended September 30, 1997 compared to a loss of $10.3 million in the same period the prior year. US Leather's performance was primarily affected by negative price competition, higher cattlehide prices, and certain manufacturing quality problems which impacted sales and eventually led to inventory write-offs. A weaker retail demand in the leather furniture group and footwear & specialty leather group also contributed to lower than expected sales volumes. Because of the negative financial performance, US Leather was not in compliance with certain covenants contained in the credit facility indenture and received waivers of all prior defaults four times during 1997. As a part of the management's turnaround initiatives, the company decided to sell two of its unprofitable operations and began negotiations with its creditors to restructure and deleverage its balance sheet during the third quarter of 1997. On January 20, 1998, US Leather announced that it has entered into a new revolving credit facility and that the next interest payment on its 10.25% senior notes was not likely to be made. Consequently, the company did not make the interest payment due February 2, 1998.

02/02/1998 Missed interest payment
03/25/1998 Reached an agreement in principle with noteholders to exchange its 10.25% senior notes due 2003 into 97% of the equity
05/15/1998 Prepackaged Chapter 11 (Contact: Catherine Guinee, 553-4385)

Exhibit 36 - Detail of 1998's Public Corporate Bond Defaults

VDH Holland B.V. — Finance conduit

$100.0 million FLT% Guaranteed Euro Medium Term Notes due 6/12/2000 — *Not Rated by Moody's*

Van Der Horst Limited, based in Singapore, is a diversified industrial company involved in engineering, construction, and equipment manufacturing for the oil industry. Up until late 1998, the company was majority-owned by an Indonesian businessman with reportedly close ties to former president Suharto. A concentration of business investments in crisis-stricken Indonesia caused Van Der Horst's sales to fall by more than two thirds to Sing$ 40.2million (US$ 24 million) for the year ended September 1998 compared to Sing$ 123.4 million (US$80.7 million) in the preceding year. Following the announcement of a net loss of Sing$ 222 million (US$132.5 million) for the year ended September 1998 (an amount which is larger than its equity), the company stopped servicing its bank debt, appointed BNP Prime Peregrine (Singapore) Ltd. as its financial advisor, and initiated debt restructuring talks with creditors. Consequently, on December 14, 1998 Van Der Horst did not disburse interest payment due on its floating rate euro medium term notes (issued through its wholly-owned Netherlands-based finance subsidiary VDH Holland B.V.).

12/14/1998 Missed interest payment (Contact: Edward Young, 553-1653)

Venture Stores Inc. — Operator of discount stores

$4.9 million 6.75% Industrial Revenue Bonds (Griffith, Indiana) due 3/1/2009

$6.0 million 8.77% Medium Term Notes due 10/26/2004

$5.0 million 9.02% Medium Term Notes due 11/8/2004

$10.0 million 9% Medium Term Notes due 11/10/2002

$5.0 million 9.25% Medium Term Notes due 11/10/2004

$5.0 million 8.85% Medium Term Notes due 12/6/99

$10.0 million 8.91% Medium Term Notes due 12/6/99

$5.0 million 9.19% Medium Term Notes due 12/5/2002

$5.0 million 9.32% Medium Term Notes due 12/6/2004

$5.0 million 8.89% Medium Term Notes due 12/14/98

Venture Stores, Inc., headquartered in O'Fallon, Missouri, operates 93 family value stores focusing on quality home, family and leisure merchandise in nine Midwestern and Southwestern states. In response to intensified competition in the general discount merchandise sector, Venture decided to adjust its image from a discount store towards a value-oriented family store in 1996. Repositioning the stores and adjusting the merchandise mix resultedin lower sales volumes and losses. Pre-tax charges of $50 million for FY1996 and $63.9 in the second quarter of FY1997 were directly related to costs of the repositioning initiative, liquidating the excess inventory, and closing and selling of some of its stores. The change in strategy and merchandise mix was not successful in attracting higher traffic to the stores. Venture's poor financial results made vendors reluctant to ship goods on a timely basis, further exacerbating the drop in sales. As a result, the company continued to have difficulty in generating enough revenue to fund its operations. Despite generating cash through sales of stores and a sale-leaseback transaction in mid-1997, the company decided to file for Chapter 11 protection on January 20, 1998, citing inability to continue strategic repositioning of the company in normal course of business.

01/20/1998 Chapter 11
11/23/1998 Reorganization plan confirmed (Contact: Marie Menendez, 553-4126)

Willcox & Gibbs, Inc. — Distributor of replacement parts

$85.0 million 12.25% Guaranteed Senior Notes due 12/15/2003

Willcox & Gibbs (W&G), Inc., headquartered in Carteret, New Jersey, is the largest distributor of replacement parts, supplies and specialized equipment to the apparel and sewn products industry in North America. Low sales volume, high fixed overhead, and rising costs associated with the company's expansion in Latin America, have all contributed towards a continuing decline in the company's profitability and cash flow. W&G's weak liquidity also stems from its poor operating performance due, in part, to general downturn of apparel industry in the U.S.. Sales at its Macpherson subsidiary have been hurt by delays in deliveries of a new line of embroidery equipment, while sales at its Clinton subsidiary have declined due to the weak screen printing market. While working on a restructuring plan, on December 9 W&G announced that it would be unable to make the interest payment on its 12.25% senior notes due 2003 scheduled for December 15, 1998.

12/09/1998 Announced that it would miss interest payment due December 15
12/15/1998 Missed interest payment (Contact: Kevin Kusnierek, 553-3835)

William Resources Inc. — Gold mining company

Can$ 97.7 million 8% Convertible Subordinated Debentures due 1/23/2002 [$67.9 million] *Not Rated by Moody's*

William Resources Inc., headquartered in Toronto, Canada, is a gold mining company with operations in Sweden, Finland, Brazil and Australia. Through BLM Service Group, the company also provides contracting, engineering and geological services. William Resources commenced its operations in July 1994 and grew through the acquisition of gold mines and the take-over of two publicly traded gold mining companies. William Resources suspended its Australian operations and sold the gold mine in Mexico, taking a charge of $45 million due to the adjustment of the carrying values of these investments in the third quarter ended September 30,1997.(for FY1997, the company recorded a loss of $77.5 million on revenues of $94 million.) In addition to the continued weakness in the gold price, William Resources incurred higher production costs due to below average ore grade and higher waste stripping cost at both Bjorkal (Sweden) and Pahtavaara (Finland) mines. The company gold production fell to 34,360 ounces at a cash cost of $336 per ounce in the first quarter of 1998 ended March 31, 1998 from 47,391 ounces at a cash cost of $292 per ounce in the same period a year earlier. On May 7, 1998 William Resources has announced that it would not make the May 20th interest payment on its 8% convertible subordinated debentures due 2002 and proposed a restructuring plan to the debentureholders.

05/07/1998 Announced that it would not make interest payment due May 20, 1998 on its 8% subordinated debentures maturing in 2002
05/20/1998 Missed interest payment
08/17/1998 Debentureholders agreed to waive interest payments due May 20, 1998 and November 20, 1998; the next interest payment will be due March 20, 1999 (Contact: Todd Baker, 553-4999)

Wilshire Financial Services Group Inc. — Diversified financial services firm

$84.2 million 13% Notes due 1/1/2004 *Not Rated by Moody's*

$100.0 million 13% Notes, Ser. B due 8/15/2004

Wilshire Financial Services Group Inc., headquartered in Portland, Oregon, is a diversified financial company specializing in loan portfolio acquisition and securitization, mortgage banking, and servicing. Recent weakness in the market for mortgage-backed securities in general and subordinated tranches in particular led to significant liquidity problems as the company was forced to sell-off some of its assets at depressed prices to meet collateral calls. Wilshire's ability to securitize and service loans has also been hindered by its high leverage and the fact thatit relied heavily on secured borrowings during its rapid and aggressive growth. After receiving consents from holders of outstanding notes to eliminate certain liquidity requirements specified in the notes' indentures on August 12, 1998, on November 13, 1998 the company in its 3rd quarter 10-Q filing reported about having reached an agreement with the majority of its noteholders to convert their respective notes into common stock. Wilshire expects this restructuring to be completed at the end of the first quarter of 1999.

11/13/1998 Reached an agreement with the majority of noteholders to exchange their respective notes into equity
(Contact: Thomas Foley, 553-7225)

WorldCorp, Inc — Diversified holding company

$65.0 million 7% Convertible Subordinated Debentures due 5/15/2004

WorldCorp, Inc., based in Washington, is a holding company with 51.2% ownership of World Airways, Inc., a provider of worldwide passenger and cargo air transportation, and 29.4% ownership of InteliData Technologies Corporation, a developer and marketer of services to telecommunications and financial services industries. In addition, on April 20, 1998, the company acquired Paper Acquisition Corp., a specialty paper manufacturer (WorldCorp owns 80% of WorldCorp Acquisition Corp., which, in turn, owns 100% of Paper Acquisition Corp.) All of WorlCorp's funds are generated through its equity positions in World Airways and InteliData, which have not paid dividends on common stock since 1992. Due to sizable losses by InteliData related to strategic repositioning and restrictions under borrowing arrangements of World Airway's ability to pay dividends, the company recorded net losses of $19.1 million and $11.8 million for years 1997 and 1996, respectively. WorldCorp has been financing itself mainly through sale of its common stock holdings and borrowings from subsidiaries. Its highly leveraged position and limited liquidity were further exacerbated by the recent acquisition of Paper Acquisition Corp. Consequently, on May 15, 1998 WorldCorp did not make the interest payment of $2.275 million due on 7% convertible subordinated debentures.

05/15/1998 Missed interest payment (Contact: Richard Bittenbender, 553-0396)

Exhibit 36 - Detail of 1998's Sovereign Public Bond Defaults

Pakistan, Islamic Republic of — Sovereign borrower

$300.0 million FLT% Euronotes due 5/30/2000

Pakistan's historically weak external asset position has been recently imperiled by the government's decision to conduct nuclear tests in May of 1998. Subsequent imposition of trade and financial sanctions by the international community led to the government's declaration of a state of emergency as well as to its decision to freeze foreign currency bank deposits. Although the foreign currency deposits have been frozen, foreign currency reserves havecontinued to dwindle. Having limited access to external financial support and inadequate reserves, the country has failed to meet payments under its bilateral/multilateral loans. While negotiating with IMF and international community on its bail-out package, Pakistan delayed interest payment on its floating rate eurobonds maturing in 2000 for 3 days, missing the payment on November 30th and making it up on December 3rd.

11/30/1998 Missed interest payment
12/03/1998 Made interest payment

(Contact: Kristin Lindow, 553-3896)

Russian Federation — Sovereign borrower

Ru. Ruble 500.1 million OFZs, Ser. 24009 due 10/21/98 [$75.8 million]

Ru. Ruble 5,846.5 million OFZs, Ser. 24011 due 3/31/99 [$885.9 million]

Ru. Ruble 6,824.7 million OFZs, Ser. 24012 due 4/28/99 [$1,034.1 million]

Ru. Ruble 8,000.0 million OFZs, Ser. 24013 due 5/26/99 [$1,212.1 million]

Ru. Ruble 7,704.0 million OFZs, Ser. 24014 due 6/16/99 [$1,167.3 million]

Ru. Ruble 6,920.8 million OFZs, Ser. 24015 due 7/14/99 [$1,048.6 million]

Ru. Ruble 3,835.5 million OFZs, Ser. 24016 due 7/21/99 [$581.2 million]

Ru. Ruble 3,084.4 million OFZs, Ser. 24017 due 8/4/99 [$467.3 million]

Ru. Ruble 5,603.7 million OFZs, Ser. 25001 due 6/6/99 [$849.1 million]

Ru. Ruble 2,900.0 million OFZs, Ser. 25015 due 6/10/99 [$439.4 million]

Ru. Ruble 6,468.1 million OFZs, Ser. 25017 due 9/1/99 [$980.0 million]

Ru. Ruble 6,622.3 million OFZs, Ser. 25019 due 10/13/99 [$1,003.4 million]

The Russian Federation became fully independent in December of 1991 after the break-up of the Soviet Union. Its economy has been in a prolonged, severe slump since 1991 primarily due to the dissolution of the centralized planning system under the rule of the Communist Party and significant barriers that had to be overcome in order to become a "free market" economy. Russia's continuing problem has been the fiscal deficit which is mainly a result of the government's inability to meet targets for revenue generation. Since the latter part of 1997, Russia has experienced a series of negative shocks to its currency and financial markets. Rapidly growing domestic debt primarily in the treasury bill (GKO) market and increased international debt issuance have complicated the debt servicing position of the federal government and placed increasing pressure on an already difficult fiscal position. A sharp fall on the stock market, a significant rise in the Central Bank's refinance and Lombard rates, combined with a rise in yields on the GKO market, and the resultant decrease in investor confidence have been the most evident indicators of the overall rapid deterioration of the economy. The current fragile financial position has been magnified by basic structural issues of the Russian economy including fiscal imbalances, slow pace of enterprise restructuring in general and in the export sector in particular, political instability, inhospitable environment for foreign investment, and low commodity prices on world markets. Russia's diminished ability to service its debt and immediate need to augment its fiscal position was culminated by the announcement on August 17, 1998 of the "de-facto" devaluation of the domestic currency, forced rescheduling of GKO and OFZ obligations, and a 90-day moratorium on principal repayment of foreign-originated syndicated loans, settlements of foreign currency forward contracts, and margin calls on repurchase transactions. Forced rescheduling of ruble-denominated government short-term (GKOs) and long-term (OFZs) obligations constituted a default as investors were given between 15-20% of the value of their original holdings.

08/17/1998 Announced a wider exchange rate band for the ruble, a rescheduling of the ruble-denominated treasury bills(GKOs) and federal loan obligations (OFZs), and a 90-day moratorium on certain debt payments due to foreign creditors.

08/25/1998 Announced the proposed terms of debt rescheduling: GKOs and OFZs issued before 8/17/98 and due before 12/31/99 are to be swapped into 3-, 4-, and 5-year ruble-denominated bonds, or the dollar-denominated 8-year bonds, or a combination of those bonds

11/25/1998 Announced that it would not pay cash interest payment due on PRINs (restructured post-Soviet debt) on December 2, 1998; received an agreement from creditors to pay interest by issuance of IANs (interest arrear notes)

(Contact: Jonathan Schiffer, 553-7968)

Venezuela, Republic of

Sovereign borrower

Ven. Bol. 50,000.0 million 21.89% DPNs (Deuda Publica Nacional), Ser. 1391B due 7/1/98 [$90.1 million]

Ven. Bol. 100,000.0 million 22.37% DPNs (Deuda Publica Nacional), Ser. 1391C due 7/1/99 [$180.2 million]

Since the mid-1980s, Venezuela's public sector balance has been shifting back and forth between deficit and surplus reflecting the volatility of oil prices, as about two-thirds of the government revenues come from oil. The public sector has posted surplus only in years of high oil prices. External indebtedness, Central Bank credit, negative inflation rates, and inflation taxes have been the main sources of financing of the public sector. The quality of the public sector management has deteriorated following years of slow economic decline. Government procedures have not been fully modernized, and in some cases the government has not requested in the initial budget proposal to Congress a large enough appropriation to fully cover the public debt service. The most recent adverse oil price shock in 1998 further strained public finances. A combination of an apparent cash squeeze, archaic budgetary and treasury procedures and an unexpected change of Finance Minister combined in early July 1998 to cause delayed repayment of a total amount of about $130 million in principal and interest payments on two of its public treasury bonds (Deuda Publica Nacional) for a week, missing a payment on July 2 and making it up on July 9, 1998.

07/02/1998 Missed interest and principal payment
07/09/1998 Repaid past due interest and principal payment

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

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