



Research

Default, Transition, and Recovery: 2009 Annual Global Corporate Default Study And Rating Transitions

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Last year set many new records in terms of global corporate default and transition performance. There were 264 defaults globally, the highest annual total since our database began in 1981 (see Table 1). The rated debt amount affected by these defaults reached \$627.7 billion, also a series high. Distressed exchanges featured prominently as a trigger, accounting for 39% of defaults globally and 55% of total debt affected by defaults.

Credit degradation among nondefaulting issuers was widespread and pronounced, especially in the first half of 2009, with the percentage of issuers downgraded during the course of the year reaching 18.34%, the highest rate in 29 years (see Table 6). There were 3.85 downgrades for every upgrade, the worst ratio on record. In addition, the average number of notches recorded among downgrades rose in 2009 to 1.76, a pace unmatched since 2002 (see Chart 12).

Financials featured disproportionately among issuers that experienced downgrades of seven or more notches. Meanwhile, global speculative-grade default rates—expressed as a percentage of the issuer count—rose to levels that, though not unprecedented, had not been seen since 1991, driven by trends in the U.S. (see Chart 1).

At the end of December 2009, speculative-grade default rates rose to 10.93% in the U.S. compared with 7.5% in Europe, 5.90% in the emerging markets, 7.5% in Asia-Pacific, and 9.35% in an assorted grouping of other developed markets. In all regions, default rates in 2009 outpaced the long-term averages (see Table 7). If all rated entities are included, the global default rate rose to 3.99% in 2009 from 1.72% a year earlier. Meanwhile, the investment-grade default rate fell to 0.32% in 2009 from 0.41% in 2008 (see Table 1).

This study includes industrials, utilities, financial institutions (which includes banks, brokerages, asset managers, and other financial entities), and insurance companies around the world with long-term local-currency ratings. All default rates reported are calculated on an issuer-weighted basis. For a detailed explanation of the methodology used in the study, please refer to Appendix 1.

Notwithstanding the record number of defaults, the Gini ratio—a key measure of the relative ability of ratings to differentiate risk—rose to 82.7% in 2009 from an all-time low of 64.9% a year earlier. For the entire 29-year time horizon, the average one-year Gini was 82.07% (see Table 2). (For details on Gini methodology, refer to Appendix 2). The high Gini ratio for 2009 indicates that ratings ably differentiated between defaulters and nondefaulters in a year characterized by very high defaults. By sector, 11 out of 13 sectors recorded default rates that were in excess



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of the long-term weighted averages (see Chart 2). The only two sectors that failed to pierce the mean in 2009 were utilities and insurance. Broken out by rating, we note that nine out of 17 rating categories recorded default rates that were in excess of the long-term average (see Table 9).

Table 1

Global Corporate Default Summary							
Year	Total defaults*	Investment-grade defaults	Speculative-grade defaults	Default rate (%)	Investment-grade default rate (%)	Speculative-grade default rate (%)	Total debt defaulting (Bil. \$)
1981	2	0	2	0.14	0.00	0.62	0.06
1982	18	2	15	1.19	0.18	4.41	0.90
1983	12	1	10	0.76	0.09	2.93	0.37
1984	14	2	12	0.91	0.17	3.26	0.36
1985	19	0	18	1.11	0.00	4.31	0.31
1986	34	2	30	1.72	0.15	5.66	0.46
1987	19	0	19	0.95	0.00	2.79	1.60
1988	32	0	29	1.39	0.00	3.84	3.30
1989	43	2	35	1.74	0.14	4.66	7.28
1990	70	2	56	2.74	0.14	8.09	21.15
1991	93	2	65	3.26	0.14	11.04	23.65
1992	39	0	32	1.49	0.00	6.08	5.40
1993	26	0	14	0.60	0.00	2.50	2.38
1994	21	1	15	0.62	0.05	2.10	2.30
1995	35	1	29	1.04	0.05	3.52	8.97
1996	20	0	16	0.51	0.00	1.80	2.65
1997	23	2	20	0.63	0.08	1.99	4.93
1998	57	4	49	1.29	0.14	3.70	11.27
1999	108	5	91	2.11	0.17	5.46	39.38
2000	136	7	108	2.43	0.24	6.06	43.28
2001	229	8	172	3.73	0.26	9.61	118.79
2002	225	13	158	3.52	0.41	9.22	190.92
2003	120	3	89	1.89	0.10	4.92	62.89
2004	56	1	39	0.78	0.03	2.02	20.66
2005	39	1	30	0.57	0.03	1.42	42.00
2006	29	0	25	0.45	0.00	1.11	7.13
2007	24	0	21	0.36	0.00	0.88	8.15
2008	126	14	88	1.72	0.41	3.48	429.63
2009	264	11	223	3.99	0.32	9.23	627.70

*Includes companies that were no longer rated at the time of default. Sources: Standard & Poor's Global Fixed Income Research and Standard & Poor's Credit Pro®.

Chart 1

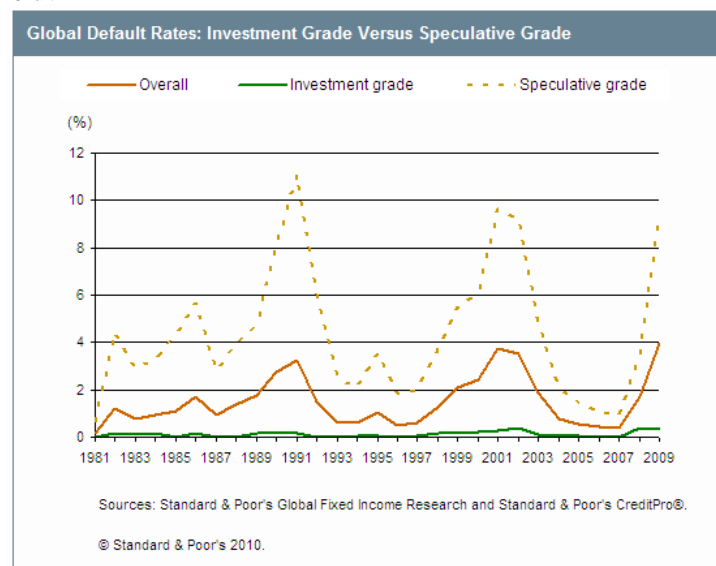


Chart 2

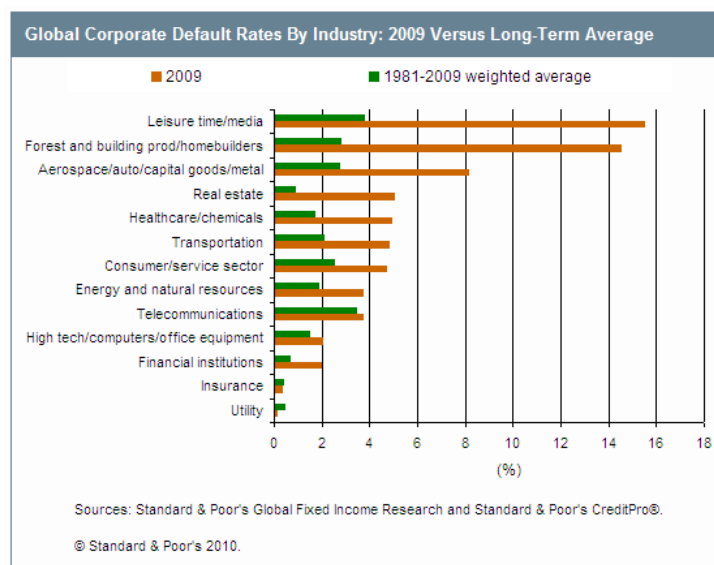
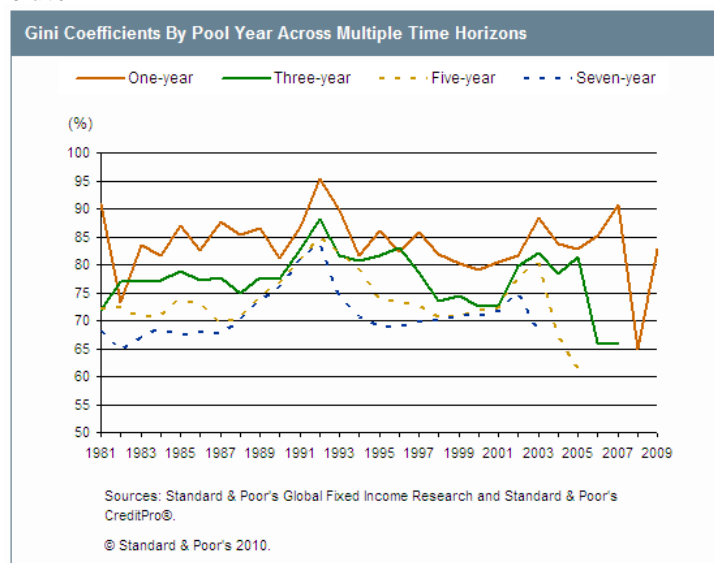


Chart 3 plots a time series of Gini ratios calculated over various time horizons (i.e., one-year through seven years). Note that Gini ratios display a higher degree of cyclical variation in the one-year timeframe than in three, five, or seven years. Cyclical variation in the latter periods is suppressed because the longer time frames allow for more ratings degradation.

Chart 3



All of Standard & Poor's default studies have found a clear correlation between ratings and defaults: The higher the rating, the lower the observed frequency of default, and vice versa. Over each time span, lower ratings correspond to higher default rates (see Chart 4). This also holds true when the data are broken out separately by rating (see Table 24 and Table 26) or by region (see Table 25). Even in high-default years, the ability of corporate ratings to serve as an effective measure of relative risk remains intact. Many default studies, including this one, also look at transition rates, which gauge the degree to which ratings change—either up or down—over a particular time. Transition studies have repeatedly confirmed that higher ratings tend to be more stable and that speculative-grade debt generally experiences more rating volatility.

Table 2

Global Average Gini Coefficients By Broad Sector (1981-2009)

Sector	—Time horizon—			
	One-Year	Three-Year	Five-Year	Seven-Year
Global				
Weighted average	82.07	75.25	72.49	71.20
Average	83.75	77.40	73.67	71.04
Standard deviation	5.63	4.97	5.05	4.46
Financial				
Weighted average	76.86	67.83	62.62	61.30
Average	82.15	71.82	65.20	61.62
Standard deviation	17.67	14.49	14.87	11.56

Nonfinancial				
Weighted average	81.10	73.53	70.82	69.51
Average	82.99	76.09	72.76	70.08
Standard deviation	6.40	4.83	5.55	4.94

Sources: Standard & Poor's Global Fixed Income Research and Standard & Poor's CreditPro®.

Chart 4

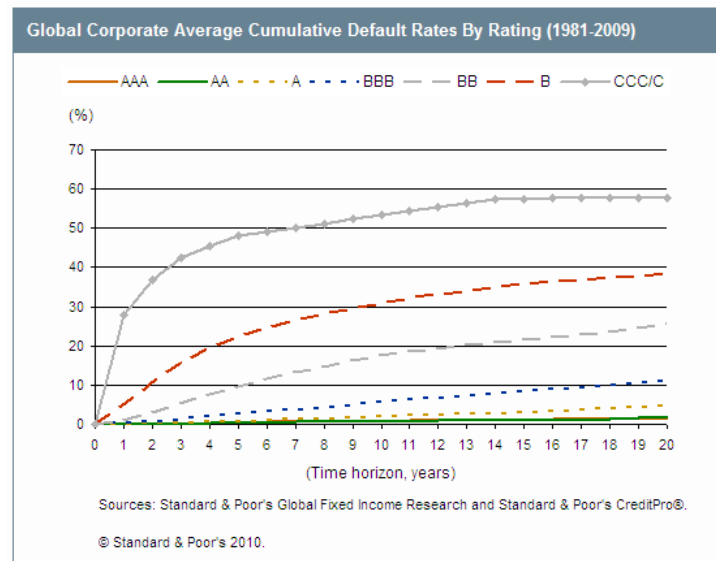
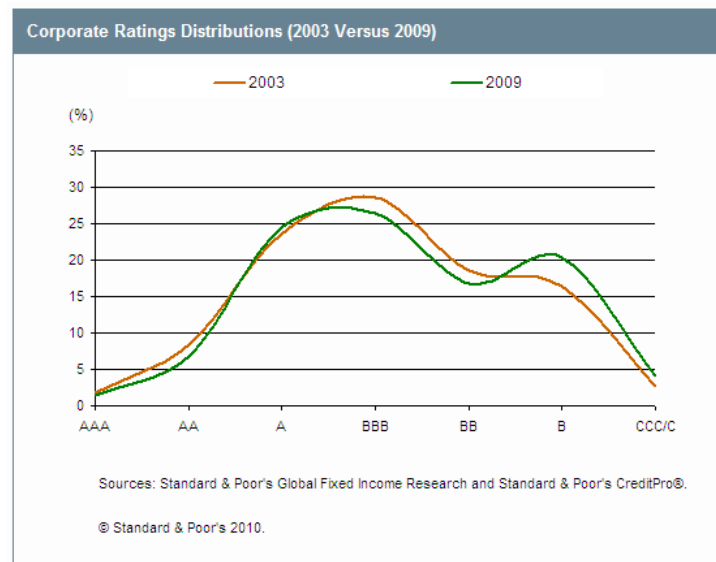


Chart 5



What remains noteworthy is that despite the steep acceleration in corporate casualties, the global ratings distribution has not yet completely corrected for the imbalances that began with the credit boom beginning in 2003 (see Chart 5). As a wave of defaults occur, a better equilibrium should be restored as the rating distribution tips closer toward investment grade, perhaps resembling the distribution observed in 2003. This dynamic typically results when the volume of defaults more than compensates for the new entrants into the speculative-grade universe, either from downgrades or from originations. Some progress has already been made; indeed, only two industries remained dominated by speculative-grade issuers as of the end 2009, in sharp contrast with the eight recorded a year ago (see Chart 19).

The breakout by rating category presented in Table 3 reveals that default exposure was concentrated in the lower rating categories. In 2009, default rates exceeded their long-term weighted average in the 'A', 'BBB', 'B' and 'CCC/C' rated categories (see Table 4). They remained below the weighted long-term average in the 'AA' and 'BB' rating categories. Meanwhile, default rates in the 'AAA' rating category stayed at zero, demonstrating that the default record for corporate ratings within this category remained unblemished and consistent with historical trends.

Table 3
Global Corporate Annual Default Rates By Rating Category

	AAA	AA	A	BBB	BB	B	CCC/C
1981	0.00	0.00	0.00	0.00	0.00	2.27	0.00
1982	0.00	0.00	0.21	0.34	4.22	3.13	21.43

1983	0.00	0.00	0.00	0.32	1.16	4.55	6.67
1984	0.00	0.00	0.00	0.66	1.14	3.39	25.00
1985	0.00	0.00	0.00	0.00	1.48	6.44	15.38
1986	0.00	0.00	0.18	0.33	1.31	8.33	23.08
1987	0.00	0.00	0.00	0.00	0.37	3.08	12.28
1988	0.00	0.00	0.00	0.00	1.04	3.62	20.37
1989	0.00	0.00	0.00	0.60	0.72	3.37	33.33
1990	0.00	0.00	0.00	0.58	3.56	8.54	31.25
1991	0.00	0.00	0.00	0.55	1.68	13.84	33.87
1992	0.00	0.00	0.00	0.00	0.00	6.99	30.19
1993	0.00	0.00	0.00	0.00	0.70	2.62	13.33
1994	0.00	0.00	0.14	0.00	0.27	3.08	16.67
1995	0.00	0.00	0.00	0.17	0.98	4.58	28.00
1996	0.00	0.00	0.00	0.00	0.67	2.89	4.17
1997	0.00	0.00	0.00	0.25	0.19	3.47	12.00
1998	0.00	0.00	0.00	0.41	0.97	4.59	42.86
1999	0.00	0.17	0.18	0.19	0.94	7.27	32.35
2000	0.00	0.00	0.26	0.37	1.24	7.72	34.12
2001	0.00	0.00	0.35	0.33	3.10	11.23	44.55
2002	0.00	0.00	0.00	1.01	2.78	8.10	44.12
2003	0.00	0.00	0.00	0.22	0.56	3.98	33.13
2004	0.00	0.00	0.08	0.00	0.53	1.55	15.33
2005	0.00	0.00	0.00	0.07	0.20	1.72	8.94
2006	0.00	0.00	0.00	0.00	0.29	0.80	12.38
2007	0.00	0.00	0.00	0.00	0.19	0.24	15.09
2008	0.00	0.38	0.38	0.48	0.76	3.91	26.26
2009	0.00	0.00	0.21	0.53	0.70	10.14	48.42

Sources: Standard & Poor's Global Fixed Income Research and Standard & Poor's CreditPro®.

Table 4

Descriptive Statistics On One-Year Global Default Rates

	AAA	AA	A	BBB	BB	B	CCC/C
Minimum	0.00	0.00	0.00	0.00	0.00	0.24	0.00
Maximum	0.00	0.38	0.38	1.01	4.22	13.84	48.42
Weighted long-term average	0.00	0.02	0.08	0.26	0.97	4.93	27.98
Median	0.00	0.00	0.00	0.22	0.76	3.91	23.08
Standard deviation	0.00	0.08	0.12	0.27	1.06	3.27	12.90
2002 default rates	0.00	0.00	0.00	1.01	2.78	8.10	44.12
Latest four quarters (Q1 2009 - Q4 2009)	0.00	0.00	0.21	0.53	0.70	10.14	48.42
Difference between last four quarters and average	0.00	(0.02)	0.13	0.27	(0.27)	5.21	20.45
Number of standard deviations	0.00	(0.32)	1.13	1.01	(0.25)	1.59	1.59

Sources: Standard & Poor's Global Fixed Income Research and Standard & Poor's CreditPro®.

2009 Summary

We note below some key takeaways from the 2009 defaulting cohort:

- Defaults among financials and nonfinancials reached a record high of 264 defaults in the globally rated population. This includes entities that were publicly and confidentially rated as well as entities that were not rated at the time of default (see Chart 6).
- By count, the U.S. (and associated tax havens) accounted for the bulk of defaults with 191 companies, followed by Europe with 20 and other developed nations (Australia, Canada, and Japan) accounting for 17. Within emerging markets, Latin America recorded 16 defaults, Eastern Europe/Middle East/Africa 12, and Emerging Asia 8.
- Expressed as a percent of the rated population, the global speculative-grade default rate was 9.23% at the end of 2009, with breakouts of 10.93% in the U.S., 7.5% in Europe, and 5.9% in the emerging markets (see Table 7). If all rated entities are taken into account, the equivalent default rates were 3.99% globally, 5.62% in the U.S., 1.39% in Europe, and 3.48% in the emerging markets.
- The rated debt volume affected by the 2009 defaults also reached a series peak of \$627 billion, considerably higher than the \$429 billion posted a year ago (see Chart 7).
- The automakers—Ford Motor Co. and General Motors Corp.—were the single biggest defaulters, with rated debt of \$70.9 billion and \$53.0 billion, respectively (see Table 5). Together, these two issuers accounted for 20% of total debt affected in 2009.
- In 2009, the biggest defaults by debt volume came from the nonfinancial sector, which accounted for 83% of the total debt affected. By contrast, the financial segment's share was only 17%, reversing the pattern seen in 2008.
- The vast majority of rated defaults (223) were rated speculative grade ('BB+' or lower) at the beginning of 2009. Only 11 defaulting entities were rated 'BBB-' or higher as of Jan. 1, 2009.
- Of those that defaulted last year with ratings as of Jan. 1, 2009, 52% were rated in the 'B' rating category ('B+', 'B', or 'B-') at the start of the year. An additional 39% were rated 'CCC' or lower.
- A total of 31 issuers were not rated at the time of default.
- Of the global total, 29 defaults were recorded on issuers with confidential ratings.
- Of those defaulting issuers with available outlooks or CreditWatch listings as of Jan 1, 2009, 79% were listed with a negative bias (a negative outlook or ratings on CreditWatch with negative implications) a year prior to default. Of the remainder, 16% were stable, 4% were listed as developing, and 1% had a positive bias. Note that issuers that were not rated at the beginning of 2009 are excluded from these statistics.
- A total of 38 defaults received an initial rating of 'BBB-' or higher; whereas 226 companies—or 86% of all defaults in 2009—received an initial rating of 'BB-' or lower.
- Of those that received an initial rating that was investment grade, the average time to default—the time elapsed between first rating and date of default—was 12.46 years, with an associated standard deviation of 8.7 years.
- By contrast, the average time to default among entities that received an initial rating of 'BB+' or lower was much lower at 5.72 years, with an associated standard deviation of 5.4 years.

- For all issuers defaulting in 2009, the average time to default from first rating was 6.69 years, and the median was 4.44 years.
- At 28.9 years, the issuer with the longest time to default in 2009 was U.S.-based monoline insurer Ambac Assurance Corp, which was rated 'AAA' at the time of the start of the database (Dec. 31, 1980) and received its first rating in January 1974.
- Conversely, the issuer with the shortest time to default—0.11 years—was U.K.-based racetrack operator Donington Holdings PLC, which received its first rating of 'CCC+' with a developing outlook in October 2009.
- The financial segment—banks, nonbanks, and insurance companies—recorded 32 defaults globally, accounting for 12% of total defaults, a slightly higher share than the 10.7% share observed over the long term.
- Within nonfinancials, media and entertainment recorded the highest number of defaults worldwide (66). Much of this activity was centered in the U.S., which accounted for 86% of defaults within this sector.
- Next in line by sector were the forest products and building materials, consumer products, and automotive sectors. Together, these four sectors combined accounted for 51% of total defaults.
- Distressed exchanges were the single most frequent trigger globally, accounting for 103 (39%) of 264 defaults. Standard & Poor's views distressed exchanges as defaults because of the loss in economic value for bondholders. Traditional triggers—such as Chapter 11—affected 60 companies.
- If viewed in terms of the debt amount affected by defaults, distressed exchanges accounted for an even larger share: 55% of the total amount of \$627.7 billion affected in 2009. Europe and the U.S. recorded much higher shares of distressed exchanges than did the emerging markets, with Europe leading the charge at 91% of all debt affected attributable to distressed exchanges. By contrast, the shares in the U.S. and the emerging markets were 56% and 27%, respectively.

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Annual Global Trends

Last year set some records both in terms of rated number of defaulters (see Chart 6) and the amount of affected debt (see Chart 7). The U.S. led the charge in both cases, which was in part attributable to the larger rated population there. The single largest defaulter by debt amount was Ford Motor Co., the ratings on which were lowered to 'SD' upon the completion of a distressed exchange offer on April 6, 2009. With \$71 billion in rated debt affected by the tender offer, Ford Motor Co. set a new record for nonfinancial issuers since the start of our database in 1981 (see Table 5).

Outside of record default counts, 2009 also saw widespread credit deterioration more broadly, notably in the first half of the year. At the end of 2009, credit trends dipped for the worse in no uncertain terms, with downgrades exceeding upgrades globally by 3.85-to-1, the biggest annual margin on record (see Table 6).

Table 5

Largest Global Rated Defaults By Year

Largest corporate defaulters by outstanding debt amount		
Year defaulted	Issuer	Amount (Mil. \$)
1991	Columbia Gas System	2,292
1992	Macy (R.H.) & Co.	1,396
1993	Mesa, Inc.	600
1994	Confederation Life Insurance	2,415
1995	Grand Union Co./Grand Union Capital	2,163
1996	Tiphook Finance	700
1997	Flagstar Corp.	1,021
1998	Service Merchandise Co.	1,326
1999	Integrated Health Services Inc.	3,394
2000	Owens Corning	3,299
2001	Enron Corp.	10,779
2002	WorldCom Inc.	30,000
2003	Parmalat Finanziaria SpA	7,177
2004	RCN Corp.	1,800
2005	Calpine Corp.	9,559
2006	Pliant Corp.	1,644
2007	Movie Gallery Inc.	1,225
2008	Lehman Brothers Holdings Inc.	144,426
2009	Ford Motor Co.	70,989

Sources: Standard & Poor's Global Fixed Income Research and Standard & Poor's CreditPro®.

Chart 6

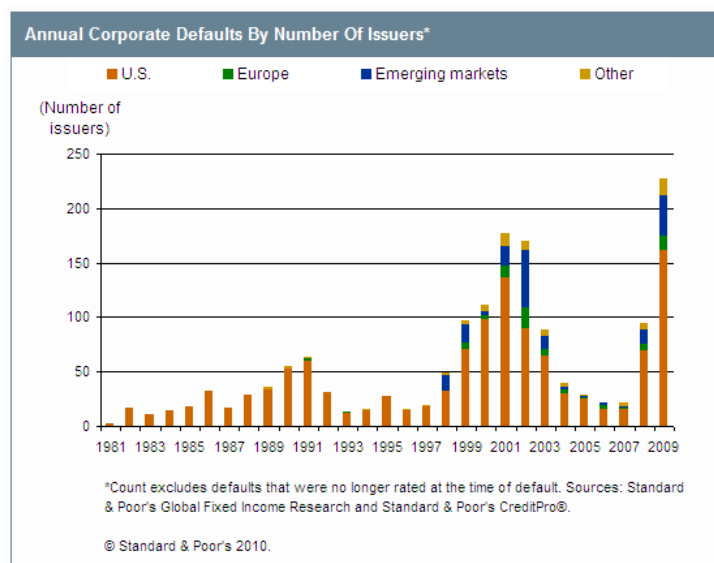


Chart 7



Table 6

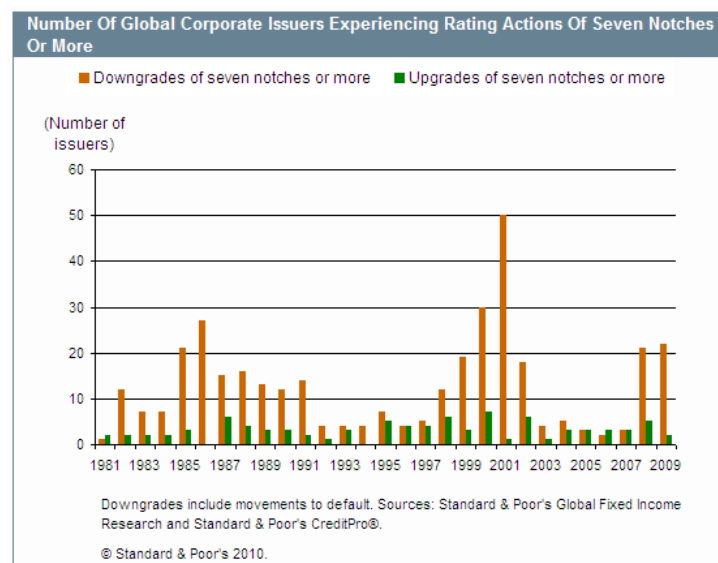
Summary Of Annual Corporate Rating Changes* (%)

Year	Issuers as of Jan. 1	Upgrades	Downgrades [†]	Defaults	Withdrawn ratings	Changed ratings	Unchanged ratings	Downgrade/upgrade ratio
1981	1386	9.75	13.21	0.14	2.02	25.13	74.87	1.36
1982	1434	5.86	12.63	1.19	5.30	24.98	75.02	2.15
1983	1456	7.08	11.75	0.76	5.22	24.81	75.19	1.66
1984	1543	11.15	9.99	0.91	2.85	24.90	75.10	0.90
1985	1630	7.86	13.76	1.11	4.05	26.78	73.22	1.75
1986	1859	7.22	15.83	1.72	6.89	31.66	68.34	2.19
1987	2007	7.13	11.77	0.95	9.28	29.13	70.87	1.65
1988	2095	8.89	11.80	1.39	8.22	30.29	69.71	1.33
1989	2134	9.47	10.88	1.74	8.02	30.11	69.89	1.15
1990	2120	6.14	15.34	2.74	6.61	30.83	69.17	2.50
1991	2057	6.09	14.17	3.26	3.55	27.07	72.93	2.33
1992	2146	9.33	11.20	1.49	4.01	26.04	73.96	1.20
1993	2333	8.45	9.27	0.60	8.41	26.74	73.26	1.10
1994	2570	6.97	9.19	0.62	4.64	21.43	78.57	1.32
1995	2892	8.77	9.32	1.04	4.54	23.67	76.33	1.06
1996	3163	9.42	7.58	0.51	6.98	24.48	75.52	0.80
1997	3531	9.01	7.79	0.63	7.36	24.78	75.22	0.86
1998	4127	7.27	11.42	1.29	8.14	28.12	71.88	1.57
1999	4570	5.57	11.49	2.11	8.73	27.90	72.10	2.06
2000	4752	6.73	11.73	2.43	7.02	27.91	72.09	1.74
2001	4837	5.58	15.84	3.73	7.40	32.55	67.45	2.84
2002	4876	5.22	18.76	3.52	7.01	34.51	65.49	3.59
2003	4898	6.34	14.23	1.89	7.32	29.77	70.23	2.25
2004	5131	8.54	7.36	0.78	7.23	23.91	76.09	0.86
2005	5428	12.48	9.04	0.57	8.41	30.50	69.50	0.72
2006	5602	12.04	8.44	0.45	8.46	29.39	70.61	0.70
2007	5825	13.28	9.07	0.36	10.21	32.92	67.08	0.68
2008	5966	7.66	15.54	1.72	7.46	32.38	67.62	2.03
2009	5860	4.76	18.34	3.99	8.36	35.46	64.54	3.85
Weighted average		8.14	12.03	1.63	7.26	29.06	70.94	1.72
Median		7.66	11.73	1.19	7.23	27.91	72.09	1.57
Standard deviation		2.20	3.12	1.07	2.05	3.54	3.54	0.83
Minimum		4.76	7.36	0.14	2.02	21.43	64.54	0.68
Maximum		13.28	18.76	3.99	10.21	35.46	78.57	3.85

*This table compares the net change in ratings from the first to the last day of each year. All intermediate ratings are disregarded. [†]Excludes downgrades to 'D', shown separately in the default column. Sources: Standard & Poor's Global Fixed Income Research and Standard & Poor's CreditPro®.

Amid the elevated turbulence, the number of entities experiencing downgrades of seven notches or more escalated to a high of 22 issuers in 2009, its highest level since 2001 (see Chart 8). Of note, financials accounted for more than 62% of these big movers, contributing to a two-year period of dominance by financials among large ratings changes (predominantly downgrades).

Chart 8



The overall issuer-weighted default rate—including both investment-grade and speculative-grade entities—was 3.99% in 2009, the highest rate in more than seven years on a trailing 12-month basis. By region, the comparable rates were 5.62% in the U.S., 1.39% in Europe, and 3.48% in the emerging markets.

On a trailing-12-month basis, the global speculative-grade default rate peaked at 9.77% in November 2009. This was driven by the U.S., which recorded a 11.3% default rate in November. This most recent peak was nearly 2.5x the long-term average of 4.49%, yet it failed to pierce the 12.5% record set in July 1991. Note that speculative-grade default rates in other regions also trailed the peaks set in prior cycles.

At the end of December 2009, speculative-grade default rates of 9.2% were recorded globally, with regional breakouts of 10.9% in the U.S., 7.5% in Europe, and 5.9% in the emerging markets. In contrast with 2008, speculative-grade default rates at year-end 2009 handily exceeded their long-term (1981-2009) averages. The biggest gap was for the U.S., as noted above, and the smallest was in the emerging markets. Meanwhile, the global long-term default rate was more than twice its 4.38% long-term average. For Europe and the emerging markets, the corresponding long-term (1996-2009) averages were 4.02% and 3.87%, respectively (see Table 7).

Table 7

Annual Corporate Speculative-Grade Default Rate By Geographic Region (%)

Year	U.S. and tax havens*	Europe†	Emerging markets	Other‡
1981	0.63	0.00	N/A	0.00
1982	4.44	0.00	N/A	0.00
1983	2.98	0.00	N/A	0.00
1984	3.32	0.00	0.00	0.00
1985	4.39	0.00	N/A	0.00
1986	5.74	0.00	N/A	0.00
1987	2.83	0.00	N/A	0.00
1988	3.88	0.00	N/A	0.00
1989	4.31	0.00	N/A	50.00
1990	7.91	0.00	N/A	40.00
1991	10.69	66.67	N/A	16.67
1992	6.23	0.00	N/A	0.00
1993	2.39	20.00	0.00	0.00
1994	2.19	0.00	0.00	0.00
1995	3.64	9.09	0.00	0.00
1996	1.84	0.00	0.00	2.78
1997	2.15	0.00	0.00	1.96
1998	3.23	0.00	8.38	1.43
1999	5.22	6.59	6.87	4.35
2000	7.24	2.52	1.82	6.45
2001	10.50	8.59	5.75	12.22
2002	7.10	12.50	15.32	5.94
2003	5.50	3.66	3.48	4.76
2004	2.49	1.60	0.75	2.01
2005	1.99	0.47	0.22	1.32
2006	1.28	1.82	0.39	0.76
2007	0.99	0.99	0.18	2.19
2008	4.04	2.53	2.13	3.79
2009	10.93	7.50	5.90	10.32
Average	4.49	4.98	2.84	5.76
Median	3.88	0.00	0.57	1.43
Standard deviation	2.85	12.78	4.17	11.70
Minimum	0.63	0.00	0.00	0.00
Maximum	10.93	66.67	15.32	50.00

*U.S., Bermuda, and Cayman Islands. †Austria, Belgium, Bulgaria, Channel Islands, Cyprus, Czech Republic, Denmark, Estonia, Finland, France, Germany, Greece, Hungary, Iceland, Ireland, Italy, Latvia, Lithuania, Luxembourg, Malta, Netherlands, Norway, Poland, Portugal, Slovakia, Slovenia, Spain, Sweden, Switzerland, and U.K. ‡Australia, Canada, Isle of Man, Japan, Liechtenstein, Malta, Monaco, and New Zealand. N/A—Not applicable.

Averages for regions other than U.S. calculated from 1996 to 2009. Sources: Standard & Poor's Global Fixed Income Research and Standard & Poor's CreditPro®.

Evidence collected from the database of defaulted corporate issuers globally indicates that defaults among speculative-grade entities tend to be clustered in the third year after the initial rating, particularly in the 'B' rating category (see Chart 9). For example, among defaulters that were rated 'B' at origination, the default rate climbs to a high of 19.7% in the first three years and then decelerates thereafter. Defaulted issuers rated 'BB' at origination show a similar pattern but peak a little later—in the fourth year. Conversely, defaulters with an initial rating of 'CCC' show the reverse, with the highest default rate observed in the first year, which is not surprising given the low rating.

Chart 9



Of the 264 defaulting entities in 2009, 226 were originally rated speculative grade ('BB+' or lower). Conversely, 38 had an initial investment-grade rating. The rating path observed for defaulters in the trailing 12 quarters is broadly representative of the long-term ratings trend, which shows that both the average rating and median rating on all defaulting entities were in the speculative-grade category in the five years preceding default (see Chart 10).

Some issuers default when they no longer rated (NR) by Standard & Poor's. We make our best effort to capture such defaults in the database, and we include them in the annual default rate calculation if the entity was rated as of Jan. 1 in the year of default. If, however, the rating was withdrawn prior to Jan. 1 of the year of default, the issuer would not be included in the default rate calculation in that year. Of the 264 defaults in 2009, 11.7% issuers were from the 'NR' category, a lower share than the long-term average of 19.0% (see Chart 11). Furthermore, although 'NR' defaulters are not always included in the default rate calculation for the year of default, such defaults are captured in the longer-term cumulative default rate statistics, tagged back to the year in which they last had a rating.

Table 8 provides an itemized list of all the nonconfidentially rated defaults recorded in 2009. For additional detail on 2009 defaulters, refer to the article titled "2009 Annual Default Synopses (Premium)," soon to be available on Ratings Direct.

Chart 10

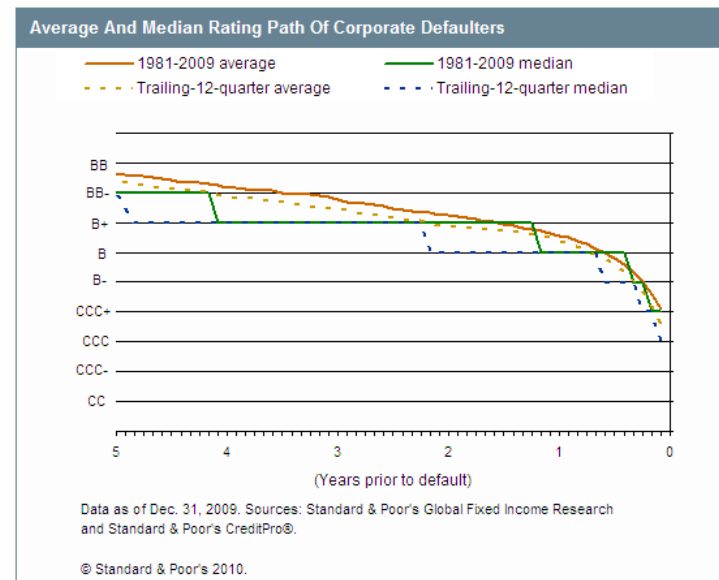


Chart 11A

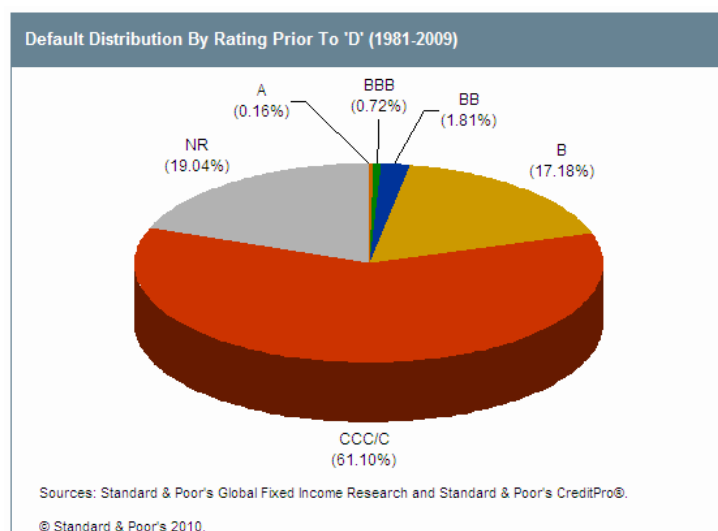


Chart 11B

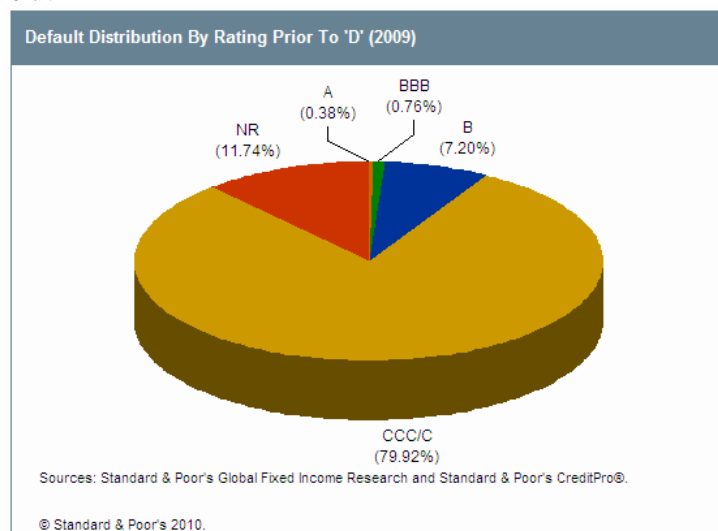


Table 8

2009 Global Corporate Publically Rated Defaults*

Company	Country	Industry	Debt amount (Mil.\$)	Default date	Next to last rating	Date of next to last rating	First rating	Date of first rating
U.S. Shipping Partners L.P.	U.S.	Transportation	372.3	1/6/2009	CCC	8/21/2008	BB	8/6/2002
Penn Treaty Network America Insurance Co.	U.S.	Insurance	0.0	1/7/2009	CC	10/3/2008	A-	12/27/1996
Triple Crown Media LLC	U.S.	Leisure time/media	140.0	1/8/2009	CCC-	10/14/2008	B	10/12/2005
Merisant Worldwide Inc.	U.S.	Consumer/service sector	551.6	1/13/2009	CC	12/17/2008	B+	11/5/2003
Nortel Networks Corp.	Canada	Telecommunications	4,175.0	1/14/2009	B-	7/18/2008	B-	7/18/2008
Spansion Inc.	U.S.	High tech	1,529.1	1/15/2009	CCC	12/17/2008	B	12/6/2005
Black Gaming LLC	U.S.	Leisure time/media	191.0	1/16/2009	CCC	7/1/2008	B	12/7/2004
EuroFresh Inc.	U.S.	Consumer/service sector	214.2	1/20/2009	CC	2/1/2008	B	4/22/2004
Young Broadcasting Inc.	U.S.	Leisure time/media	843.3	1/20/2009	CCC	9/5/2008	BB-	10/12/1994
Simmons Company	U.S.	Consumer/service sector	1,309.0	1/21/2009	CCC	11/14/2008	B+	4/4/2006
Foamex L.P.	U.S.	Health care/chemicals	607.4	1/23/2009	CCC+	8/21/2008	B+	9/25/1992
JSEC Inc.	U.S.	Forest products	700.0	1/26/2009	CC	1/15/2009	B-	7/18/2008
Smurfit-Stone Container Corp.	U.S.	Forest products	3,861.9	1/26/2009	CCC	1/15/2009	B+	11/18/1998
Bonten Media Group Inc.¶	U.S.	Leisure time/media	243.4	1/30/2009	B	5/17/2007	B	5/17/2007
Scottish Annuity & Life Insurance Co. (Cayman) Ltd.¶	Cayman Islands	Insurance	425.0	1/30/2009	CC	1/9/2009	A-	12/18/2001
ASAT Holdings Ltd.	Hong Kong	Aerospace/auto/cap. goods/metals	150.0	2/2/2009	CC	12/16/2008	B+	10/4/1999
Vitro S.A.B. de C.V.	Mexico	Aerospace/auto/cap. goods/metals	1,506.1	2/2/2009	CC	1/22/2009	BB	4/22/1997
Indalex Holding Corp.	U.S.	Energy and natural resources	390.8	2/3/2009	CCC	12/12/2008	B	1/25/2006
Spectrum Brands Inc.	U.S.	Consumer/service sector	3,765.5	2/4/2009	CCC+	2/8/2007	B+	10/15/1996

Station Casinos Inc.	U.S.	Leisure time/media	6,492.9	2/4/2009	CC	11/26/2008	BB-	5/17/1993
Akerys Holdings S.A.	France	Real estate	1,021.9	2/10/2009	CCC	10/23/2008	BB	7/9/2007
Rail Leasing¶	Russia	Financial institutions	27.9	2/10/2009	CCC+	3/31/2006	CCC+	3/31/2006
Aleris International Inc.	U.S.	Aerospace/auto/cap. goods/metals	3,095.4	2/12/2009	CCC-	1/29/2009	B	9/23/2003
Muzak Holdings LLC	U.S.	Leisure time/media	515.0	2/12/2009	CCC-	11/25/2008	B+	3/3/1999
Pliant Corp.	U.S.	Health care/chemicals	1,526.2	2/12/2009	CCC	10/16/2008	BB-	9/11/1997
Castle HoldCo 4	Cayman Islands	Real estate	1,186.6	2/17/2009	CCC	11/4/2008	B	4/23/2007
BearingPoint Inc.	U.S.	High tech	650.0	2/18/2009	NR	2/6/2007	BBB-	8/26/2002
American Achievement Corp.¶	U.S.	Consumer/service sector	658.7	2/27/2009	B	6/5/2006	BB-	2/4/2002
Independencia S.A.	Brazil	Consumer/service sector	625.0	3/2/2009	B	1/8/2007	B	1/8/2007
Nadra Bank	Ukraine	Financial institutions	443.3	3/2/2009	CC	2/13/2009	B-	1/9/2008
Milacron Inc	U.S.	Aerospace/auto/cap. goods/metals	225.0	3/10/2009	CCC+	12/29/2005	BBB+	7/1/1985
Fleetwood Enterprises Inc	U.S.	Forest products	286.2	3/11/2009	CCC-	9/10/2008	BBB+	2/3/1998
Canwest Media Inc.	Canada	Leisure time/media	2,794.1	3/16/2009	CCC	2/10/2009	BB-	10/30/2000
Primus Telecommunications Group Inc.	U.S.	Telecommunications	0.0	3/16/2009	NR	4/23/2007	B-	7/21/1997
Asia Aluminum Holdings Ltd	China	Aerospace/auto/cap. goods/metals	450.0	3/17/2009	CC	2/16/2009	BB	12/7/2004
General Growth Properties, Inc.	U.S.	Real estate	8,690.0	3/17/2009	CC	12/24/2008	BBB-	6/2/1998
Community Distributors Inc.	U.S.	Consumer/service sector	0.0	3/18/2009	NR	4/7/2003	B+	10/6/1997
Fairchild Corp.	U.S.	Leisure time/media	360.0	3/18/2009	NR	3/2/2004	B+	3/24/1999
True Temper Sports Inc.	U.S.	Consumer/service sector	314.2	3/18/2009	CCC	11/20/2007	B+	8/20/1998
Bite Finance International B.V.¶	Lithuania	Telecommunications	276.1	3/19/2009	CC	2/18/2009	B	2/26/2007
Chemtura Corp.	U.S.	Health care/chemicals	1,360.0	3/19/2009	CCC	1/22/2009	BBB	9/2/1999
BI-LO LLC	U.S.	Consumer/service sector	770.0	3/24/2009	CCC	2/25/2009	B	6/15/2005
Industrias Unidas S.A. de C.V.	Mexico	Aerospace/auto/cap. goods/metals	235.0	3/26/2009	CC	3/23/2009	BB-	6/4/1998
Charter Communications Inc.	U.S.	Leisure time/media	22,505.4	3/27/2009	CC	12/12/2008	BB	3/10/1999
Freescale Semiconductor Inc.¶	U.S.	High tech	11,034.2	3/27/2009	CC	2/10/2009	BB+	6/23/2004
Abitibi-Consolidated Inc.	Canada	Forest products	3,705.8	3/31/2009	CC	3/16/2009	BBB-	11/17/1997
Idearc Inc.	U.S.	Leisure time/media	9,248.1	3/31/2009	CCC	2/3/2009	BB	10/16/2006
MediaNews Group Inc.	U.S.	Leisure time/media	1,239.3	3/31/2009	NR	3/19/2009	BB	4/7/1994
Ply Gem Industries Inc.¶	U.S.	Forest products	1,120.0	3/31/2009	B-	12/12/2008	B+	1/29/2004
Riviera Holdings Corp.	U.S.	Leisure time/media	227.5	3/31/2009	CCC+	11/11/2008	B+	8/7/1997
Sensata Technologies B.V.¶	Netherlands	Aerospace/auto/cap. goods/metals	2,163.4	3/31/2009	CC	3/3/2009	B+	4/6/2006
155 East Tropicana LLC	U.S.	Leisure time/media	130.0	4/1/2009	CCC-	6/10/2008	B-	3/14/2005
J.G. Wentworth LLC	U.S.	Financial institutions	650.0	4/1/2009	NR	3/31/2009	B-	3/29/2006
Thornburg Mortgage Inc.	U.S.	Financial institutions	1,570.5	4/1/2009	CC	12/16/2008	BB	4/29/2003
United Subcontractors Inc.	U.S.	Forest products	390.4	4/1/2009	CCC-	2/18/2009	B+	10/1/2004
Nexstar Broadcasting Group Inc.¶	U.S.	Leisure time/media	708.2	4/2/2009	CC	3/10/2009	B+	2/28/2001
NXP B.V.¶	Netherlands	High tech	6,027.7	4/2/2009	CC	3/4/2009	BB	9/18/2006
Panolam Industries International Inc.	U.S.	Forest products	348.6	4/2/2009	CCC+	2/27/2009	B+	1/22/1999
Polymer Holdings LLC¶	U.S.	Health care/chemicals	555.3	4/3/2009	B-	11/12/2008	B+	10/19/2004
Rhodes Companies LLC (The)	U.S.	Real estate	393.0	4/3/2009	CCC	4/15/2008	B	10/24/2005
Ford Motor Co.¶	U.S.	Aerospace/auto/cap. goods/metals	70,989.4	4/6/2009	CC	3/4/2009	A-	5/22/1984
Noranda Aluminum Holding Corp.¶	U.S.	Energy and natural resources	1,453.3	4/6/2009	CCC+	1/29/2009	B+	4/26/2007
BCBG Max Azria Group Inc.¶	U.S.	Consumer/service sector	728.5	4/7/2009	CCC+	2/18/2009	B+	10/18/2005
Cinram International Inc.¶	Canada	Leisure time/media	825.0	4/7/2009	CC	4/2/2009	BB	8/29/2003
Aventine Renewable Energy Holdings Inc.	U.S.	Energy and natural resources	360.0	4/8/2009	CC	3/18/2009	CCC+	12/9/2004
CMP Susquehanna Radio Holdings Corp.¶	U.S.	Leisure time/media	789.6	4/8/2009	CC	3/12/2009	B-	4/19/2006
Newark Group Inc. (The)	U.S.	Forest products	297.3	4/8/2009	CCC	2/27/2009	B+	2/26/2004
Alliance Bank JSC	Kazakhstan	Financial institutions	3,702.6	4/14/2009	CC	3/31/2009	B+	10/10/2007
Energy Partners Ltd	U.S.	Energy and natural resources	754.5	4/15/2009	CCC-	3/16/2009	B+	7/21/2003
French Lick Resorts & Casino LLC¶	U.S.	Leisure time/media	110.4	4/15/2009	CC	11/18/2008	B-	3/17/2006
Harrah's Entertainment Inc.¶	U.S.	Leisure time/media	24,235.3	4/15/2009	CC	3/6/2009	A	12/31/1980
AbitibiBowater Inc.	Canada	Forest products	350.0	4/16/2009	CC	2/10/2009	B-	3/10/2008
Bowater Inc.	U.S.	Forest products	2,520.6	4/16/2009	CC	2/10/2009	BBB	10/11/1995
Broder Brothers Co.	U.S.	Consumer/service sector	389.1	4/16/2009	CC	4/14/2009	B+	9/9/2003
Donnelley (R.H.) Corp.	U.S.	Leisure time/media	4,174.5	4/16/2009	CCC+	2/12/2009	BB	11/12/2002
Human Touch LLC	U.S.	Consumer/service sector	93.1	4/16/2009	CC	2/6/2009	B	3/2/2004
Six Flags Inc.	U.S.	Leisure time/media	1,268.3	4/16/2009	CCC	3/18/2009	B+	3/25/1998
Six flags Theme Park Inc.	U.S.	Leisure time/media	1,108.6	4/16/2009	CCC	3/18/2009	BB+	10/24/1984
Dayton Superior Corp.	U.S.	Forest products	254.8	4/20/2009	CCC-	3/17/2009	B+	4/24/2000
Barrington Broadcasting LLC¶	U.S.	Leisure time/media	403.8	4/21/2009	CCC+	10/6/2008	B	7/21/2006
Emmis Communications Corp¶	U.S.	Leisure time/media	493.6	4/21/2009	CCC+	4/14/2009	B-	12/4/1985
Hexion Specialty Chemical Inc.¶	U.S.	Health care/chemicals	3,718.5	4/21/2009	CCC+	1/28/2009	A	12/31/1980
NTK Holdings Inc¶	U.S.	Forest products	608.0	4/21/2009	B-	4/21/2008	B	2/10/2005
Banco Hipotecario S.A.¶	Argentina	Financial institutions	1,038.9	4/24/2009	CC	3/30/2009	BB	12/24/1998
BTA Bank J.S.C.	Kazakhstan	Financial institutions	12,705.6	4/24/2009	CC	3/31/2009	B	12/18/2000

Metrofinanciera S.A. de C.V. SOFOM. E.N.R.	Mexico	Financial institutions	869.3	4/24/2009	CC	2/25/2009	BB-	3/29/2006
Synagro Technologies Inc.¶	U.S.	Aerospace/auto/cap. goods/metals	839.9	4/27/2009	CC	3/27/2009	BB-	4/2/2002
Airborne Health Inc.	U.S.	Health care/chemicals	180.0	4/28/2009	CCC	6/25/2008	B	11/15/2006
Brand Development Inc.	Belize	Consumer/service sector	0.0	4/28/2009	CCC+	11/28/2008	B-	6/6/2007
Chrysler LLC	U.S.	Aerospace/auto/cap. goods/metals	22,500.0	4/30/2009	CC	12/22/2008	B	7/2/2007
Rexnord LLC¶	U.S.	Aerospace/auto/cap. goods/metals	3,736.8	4/30/2009	CC	3/27/2009	B+	10/3/1989
Mark IV Industries Inc.	U.S.	Aerospace/auto/cap. goods/metals	997.1	5/1/2009	CCC+	1/12/2009	B+	3/11/1985
Source Interlink Cos. Inc.	U.S.	Leisure time/media	1,634.0	5/1/2009	CCC	3/12/2009	B	6/18/2007
Workflow Management Inc.¶	U.S.	Leisure time/media	455.0	5/1/2009	CC	1/13/2009	B+	6/14/2002
Wolverine Tube Inc.¶	U.S.	Aerospace/auto/cap. goods/metals	122.0	5/4/2009	CC	11/1/2006	BB-	8/10/1992
GSCP (NJ) L.P.	U.S.	Financial institutions	250.0	5/5/2009	B	1/25/2006	B	1/25/2006
Thomson S.A.¶	France	Consumer/service sector	2,993.6	5/7/2009	CC	1/29/2009	BBB+	7/24/2002
Sonic Automotive Inc.¶	U.S.	Aerospace/auto/cap. goods/metals	1,700.5	5/8/2009	CCC+	2/13/2009	B+	7/13/1998
Standard Motor Products Inc.¶	U.S.	Aerospace/auto/cap. goods/metals	259.2	5/8/2009	CC	3/25/2009	BB	7/8/1999
November 2005 Land Investors, LLC	U.S.	Real estate	231.7	5/11/2009	CC	2/6/2009	BB-	2/10/2006
G Steel Public Co. Ltd.	Thailand	Energy and natural resources	170.0	5/12/2009	CC	3/11/2009	B+	9/7/2005
Hayes Lemmerz International Inc.	U.S.	Aerospace/auto/cap. goods/metals	670.2	5/12/2009	CC	5/6/2009	BBB+	11/20/1992
Pakistan Mobile Communications Ltd.¶	Pakistan	Telecommunications	416.5	5/12/2009	CC	4/16/2009	B+	8/2/2006
PT Davomas Abadi Tbk.	Indonesia	Consumer/service sector	238.0	5/12/2009	CCC+	4/8/2009	B+	1/13/2006
The International Banking Corp.	Bahrain	Forest products	0.0	5/12/2009	BBB-	5/2/2006	BBB-	5/2/2006
NES Rentals Holdings Inc.¶	U.S.	Aerospace/auto/cap. goods/metals	1,130.0	5/13/2009	CC	3/31/2009	B+	11/12/1997
Dex Media Inc.	U.S.	Leisure time/media	4,734.7	5/15/2009	CC	4/16/2009	BB-	11/3/2003
Donnelley (R.H.) Inc.	U.S.	Leisure time/media	1,615.3	5/15/2009	CC	4/16/2009	BB	5/21/1998
Rapsod Trade Ltd.	British Virgin Islands	Leisure time/media	175.0	5/15/2009	CC	5/14/2009	B-	5/2/2006
Atrium Cos. Inc.	U.S.	Forest products	656.5	5/18/2009	CCC-	4/7/2009	BB-	11/21/1996
Inn of the Mountain Gods Resort and Casino	U.S.	Leisure time/media	200.0	5/18/2009	CCC	12/16/2008	B	10/7/2003
Mandra Forestry Finance Ltd.	British Virgin Islands	Forest products	195.0	5/18/2009	CC	4/30/2009	B	4/12/2005
Barzel Industries Inc.	U.S.	Aerospace/auto/cap. goods/metals	490.0	5/19/2009	CCC+	4/24/2009	B	10/30/2007
Caraustar Industries Inc.	U.S.	Forest products	288.8	5/19/2009	CC	5/4/2009	BBB	10/20/1998
Lazy Days' R.V. Center Inc.	U.S.	Aerospace/auto/cap. goods/metals	137.8	5/19/2009	CC	11/18/2008	B+	4/28/2004
Majestic Holdco LLC	U.S.	Leisure time/media	643.5	5/19/2009	C	10/9/2008	B-	12/6/2005
ION Media Networks Inc.	U.S.	Leisure time/media	1,588.8	5/20/2009	CC	4/21/2009	B+	5/28/1998
Dana Holding Corp.¶	U.S.	Aerospace/auto/cap. goods/metals	1,409.0	5/21/2009	CC	5/11/2009	A	8/2/1983
Georgia Gulf Corp.	U.S.	Health care/chemicals	1,465.4	5/21/2009	CC	4/1/2009	BB-	2/22/1990
Berry Plastics Group Inc.¶	U.S.	Health care/chemicals	3,924.9	5/22/2009	CC	4/15/2009	B	5/30/2007
Metaldyne Corp.	U.S.	Aerospace/auto/cap. goods/metals	841.7	5/28/2009	CCC-	12/22/2008	BBB+	1/27/1987
Visteon Corp.	U.S.	Aerospace/auto/cap. goods/metals	2,628.3	5/28/2009	CCC	1/12/2009	BBB	6/2/2000
General Motors Corp.	U.S.	Aerospace/auto/cap. goods/metals	53,019.5	6/1/2009	CC	12/4/2008	AAA	12/31/1980
Genmar Holdings Inc.	U.S.	Leisure time/media	0.0	6/1/2009	NR	10/31/1997	B+	7/7/1994
Imcopa Importacao, Exportacao E Industria De Oleos S.A.	Brazil	Consumer/service sector	340.0	6/1/2009	CCC-	5/6/2009	B	11/7/2006
Lear Corp.	U.S.	Aerospace/auto/cap. goods/metals	2,500.0	6/2/2009	CCC+	1/30/2009	B+	11/23/1988
Newport Television Holdings LLC¶	U.S.	Leisure time/media	890.0	6/2/2009	B-	12/11/2008	B	4/15/2008
Saad Group	Saudi Arabia	Financial institutions	6,655.0	6/2/2009	BBB+	4/2/2009	BBB+	4/2/2007
Hawker Beechcraft Inc.¶	U.S.	Aerospace/auto/cap. goods/metals	2,683.4	6/5/2009	CC	5/7/2009	B+	3/5/2007
Travelport Holdings Ltd.¶	U.S.	Transportation	1,100.0	6/5/2009	B-	6/2/2009	B	3/26/2007
Fontainebleau Las Vegas Holdings LLC	U.S.	Leisure time/media	2,525.0	6/10/2009	CCC	2/20/2009	B	3/20/2007
Kinetek Holdings Corp.¶	U.S.	Aerospace/auto/cap. goods/metals	365.0	6/10/2009	B-	12/11/2008	B+	10/29/1996
Crescent Resources LLC	U.S.	Real estate	1,525.0	6/11/2009	CCC-	5/26/2009	BB	10/30/2006
Extended Stay America Inc	U.S.	Leisure time/media	8.1	6/15/2009	NR	5/12/2004	B+	2/24/1998
Momentive Performance Materials Inc.¶	U.S.	Health care/chemicals	3,229.0	6/15/2009	CC	5/13/2009	B	11/20/2006
William Lyon Homes¶	U.S.	Forest products	514.8	6/15/2009	CC	4/14/2009	B-	6/22/1994
Building Materials Holding Corp	U.S.	Forest products	425.1	6/16/2009	NR	12/10/2008	BB-	7/28/1999
Cooper-Standard Automotive Inc.	U.S.	Aerospace/auto/cap. goods/metals	1,203.3	6/16/2009	CC	12/29/2008	BB-	12/6/2004
Sabre Holdings Corp.¶	U.S.	Transportation	3,934.0	6/16/2009	B	3/30/2009	A-	2/7/2000
Eddie Bauer Holding Inc	U.S.	Consumer/service sector	294.7	6/17/2009	CCC	2/23/2009	B+	6/6/2005
Finlay Fine Jewelry Corp.	U.S.	Consumer/service sector	548.3	6/17/2009	CCC	2/23/2009	B+	6/6/2005
Hovnanian Enterprises Inc.¶	U.S.	Forest products	1,994.6	6/17/2009	CCC	4/1/2009	BB-	12/11/1984
Kazanorgsintez OJSC	Russia	Health care/chemicals	400.0	6/18/2009	CC	4/2/2009	B-	11/18/2005

Metromedia International Group Inc.	U.S.	Leisure time/media	0.0	6/18/2009	NR	8/1/1996	BB-	12/31/1980
Affinity Group Holding Inc.¶	U.S.	Leisure time/media	332.2	6/19/2009	CCC	4/7/2009	BB-	3/13/1997
Fraser Papers Inc.	Canada	Forest products	25.0	6/19/2009	NR	8/7/2007	B	3/2/2005
Grant Forest Products Inc.	Canada	Forest products	550.0	6/25/2009	NR	6/24/2009	BB-	9/10/1998
Red Roof Inns, Inc.	U.S.	Leisure time/media	0.0	6/25/2009	NR	4/6/2000	B+	6/2/1994
Allis-Chalmers Energy Inc.¶	U.S.	Energy and natural resources	0.0	6/29/2009	CC	5/22/2009	B-	1/5/2006
McClatchy Co. (The)¶	U.S.	Leisure time/media	2,052.3	6/29/2009	CC	5/22/2009	BBB-	2/8/2000
Bombardier Recreational Products Inc.¶	Canada	Leisure time/media	1,222.6	7/2/2009	CC	4/8/2009	B+	12/2/2003
Express Energy Services Operating, LP	U.S.	Energy and natural resources	357.5	7/2/2009	CCC	4/3/2009	B	6/19/2008
Safilo SpA	Italy	Consumer/service sector	1,105.2	7/3/2009	CC	6/24/2009	BB-	5/7/2003
CCS Medical	U.S.	Health care/chemicals	535.0	7/8/2009	CCC	11/18/2008	B	9/29/2005
NV Television LLC	U.S.	Leisure time/media	332.4	7/13/2009	NR	6/23/2009	B	10/10/2007
NXP B.V.¶	Netherlands	High tech	129.8	7/13/2009	CC	6/8/2009	CCC+	4/3/2009
Euramax International Inc¶	U.S.	Aerospace/auto/cap. goods/metals	801.1	7/14/2009	CC	4/1/2009	BB-	9/4/1996
RathGibson Inc	U.S.	Aerospace/auto/cap. goods/metals	290.0	7/14/2009	CC	6/26/2009	B	1/25/2006
Travelport LLC¶	U.S.	Transportation	3,562.5	7/14/2009	B-	6/2/2007	B+	8/1/2006
CEVA Group PLC¶	Netherlands	Transportation	3,601.4	7/20/2009	CC	6/22/2009	B+	11/14/2006
Kelwood Co¶	U.S.	Consumer/service sector	644.7	7/23/2009	NR	2/27/2008	BB	11/19/1984
PT Gajah Tunggal Tbk.¶	Indonesia	Aerospace/auto/cap. goods/metals	435.1	7/23/2009	CC	6/15/2009	B	6/29/2005
Headwaters Inc.¶	U.S.	Health care/chemicals	510.1	7/28/2009	B	2/5/2009	B+	7/31/2002
Arclin Canada Ltd.	Canada	Health care/chemicals	250.0	7/29/2009	CCC	2/9/2009	B	6/19/2007
Treofan Holdings GmbH¶	Germany	Health care/chemicals	326.7	7/29/2009	CC	5/4/2009	B-	7/18/2006
Pier 1 Imports Inc¶	U.S.	Consumer/service sector	178.3	7/30/2009	NR	10/29/2007	BB-	7/5/1983
FairPoint Communications Inc.¶	U.S.	Telecommunications	861.4	7/31/2009	CC	6/25/2009	B+	4/27/1998
Alfa-Bank Ukraine¶	Ukraine	Financial institutions	250.0	8/3/2009	CC	7/3/2009	B+	7/7/2008
CommerceConnect Media Holdings Inc.	U.S.	Leisure time/media	0.0	8/3/2009	NR	12/24/2008	B	5/27/2004
Unisys Corp.¶	U.S.	High tech	299.6	8/3/2009	CC	4/30/2009	A	12/31/1980
China Glass Holdings Ltd¶	China	Aerospace/auto/cap. goods/metals	60.9	8/4/2009	CC	6/5/2009	B+	6/21/2007
Accuride Corp.	U.S.	Aerospace/auto/cap. goods/metals	995.1	8/6/2009	CCC	5/13/2009	B+	1/9/1998
Commercial Vehicle Group Inc.¶	U.S.	Aerospace/auto/cap. goods/metals	183.5	8/6/2009	CCC+	4/8/2009	BB-	6/22/2005
Haight's Cross Communications Inc.	U.S.	Leisure time/media	413.2	8/6/2009	CC	6/10/2009	B+	11/30/1999
Peach Holdings Inc.¶	U.S.	Financial institutions	335.0	8/6/2009	CC	7/28/2009	B	10/18/2006
American Achievement Corp.¶	U.S.	Consumer/service sector	0.0	8/7/2009	CC	6/5/2009	CCC+	3/5/2009
Duane Reade Inc.¶	U.S.	Consumer/service sector	624.2	8/10/2009	CC	7/9/2009	B	10/17/1992
MXEnergy Holdings Inc.¶	U.S.	Energy and natural resources	190.0	8/12/2009	CC	12/18/2008	B	7/17/2006
ESCADA AG	Germany	Consumer/service sector	288.4	8/14/2009	CC	4/24/2009	BB-	3/11/2005
Head N.V.¶	Netherlands	Leisure time/media	83.1	8/14/2009	CC	4/22/2009	B+	6/16/1999
CIT Group, Inc.¶	U.S.	Financial institutions	42,118.2	8/17/2009	CC	7/16/2009	AA	12/31/1980
Colonial BancGroup Inc.	U.S.	Financial institutions	250.0	8/17/2009	CC	7/30/2009	BBB-	1/17/1997
Colonial Bank	U.S.	Financial institutions	794.2	8/17/2009	CCC-	7/30/2009	BBB	1/21/1997
Reader's Digest Association Inc.	U.S.	Leisure time/media	2,075.5	8/17/2009	CCC	2/19/2009	BBB-	11/16/2001
Beazer Homes USA Inc.¶	U.S.	Forest products	1,431.5	8/18/2009	CCC	6/16/2009	B+	2/22/1994
Little Traverse Bay Band of Odawa Indians	U.S.	Leisure time/media	122.0	8/18/2009	CC	8/12/2009	B	10/25/2005
Affinity Group Holding Inc.	U.S.	Leisure time/media	0.0	8/19/2009	CCC	7/22/2009	CCC	7/22/2009
Tishman Speyer Real Estate D.C. Area Portfolio(Borrower), L.P.	U.S.	Real estate	570.0	8/21/2009	CCC	5/18/2009	BB-	11/22/2006
WRC Media Inc.	U.S.	Leisure time/media	0.0	8/24/2009	NR	9/13/2005	B+	10/29/1999
TLC Vision Corp.	U.S.	Health care/chemicals	110.0	8/25/2009	CC	8/18/2009	B	6/8/2007
ARINC Inc.¶	U.S.	Aerospace/auto/cap. goods/metals	770.0	8/28/2009	B	10/26/2007	BB	1/14/2004
Clear Channel Communications Inc.¶	U.S.	Leisure time/media	22,287.8	8/28/2009	CC	8/4/2009	BBB-	9/26/1997
Freedom Communications Inc.	U.S.	Leisure time/media	1,197.6	9/1/2009	NR	6/10/2009	BB	3/2/2004
Nortek Inc.	U.S.	Forest products	1,735.0	9/4/2009	CCC	4/22/2009	BB-	12/31/1980
Stallion Oilfield Services Ltd.	U.S.	Energy and natural resources	798.5	9/14/2009	CCC	5/5/2009	B	1/10/2007
Aiful Corp.	Japan	Financial institutions	3,509.3	9/24/2009	CC	9/18/2009	BBB	10/6/2003
Golden Nugget Inc.¶	U.S.	Leisure time/media	505.4	9/28/2009	CC	7/24/2009	B	11/7/2003
Realogy Corp.¶	U.S.	Leisure time/media	7,617.7	9/29/2009	CC	11/14/2008	BBB	4/7/2006
Merrill Corporation¶	U.S.	Leisure time/media	568.8	9/30/2009	CCC	7/13/2009	BB-	11/5/1999
NewPage Corporation¶	U.S.	Forest products	4,867.2	9/30/2009	CC	7/20/2009	B	4/14/2005
Appleton Papers Inc.¶	U.S.	Forest products	285.6	10/1/2009	CC	8/18/2009	BB	9/24/2001
FairPoint Communications Inc.	U.S.	Telecommunications	1,569.6	10/1/2009	CC	8/3/2009	CC	8/3/2009
Advanstar Inc.¶	U.S.	Leisure time/media	838.4	10/2/2009	CCC	7/6/2009	B	5/8/2007
QMG Holdings Inc.	U.S.	Leisure time/media	235.0	10/5/2009	NR	7/13/2009	B	8/13/2007
Coinmach Service Corp.¶	U.S.	Consumer/service sector	1,225.0	10/9/2009	CCC+	9/25/2009	B	11/23/2004
Champion Enterprises Inc.	U.S.	Forest products	380.7	10/15/2009	CC	8/21/2009	BBB-	4/22/1999
Quality Distribution Inc.¶	U.S.	Transportation	376.0	10/15/2009	CC	9/1/2009	B+	6/3/1998

NCI Building Systems Inc.¶	U.S.	Forest products	150.2	10/20/2009	CC	8/20/2009	BB-	4/22/1999
NIS Group Co. Ltd.¶	Japan	Financial institutions	169.3	10/21/2009	CCC-	3/25/2009	BB+	10/6/2004
NTK Holdings Inc.	U.S.	Forest products	608.0	10/23/2009	CC	4/22/2009	CC	4/22/2009
Capmark Financial Group Inc.	U.S.	Financial institutions	10,162.3	10/26/2009	CC	9/4/2009	BBB-	3/23/2006
Centaur LLC	U.S.	Leisure time/media	750.0	10/28/2009	CCC	8/15/2008	B	10/4/2007
Magyar Telecom B.V.¶	Hungary	Telecommunications	719.0	11/4/2009	CC	9/30/2009	B+	7/22/2004
Advanta Corp	U.S.	Financial institutions	0.0	11/8/2009	NR	7/17/2009	BB	11/12/1986
Delance Ltd.¶	Cyprus	Aerospace/auto/cap. goods/metals	250.0	11/9/2009	CC	9/25/2009	BB-	6/5/2007
Libbey Inc.¶	U.S.	Consumer/service sector	605.1	11/11/2009	B	6/16/2006	B	6/16/2006
Energy XXI (Bermuda) Limited¶	Bermuda	Energy and natural resources	846.3	11/13/2009	CC	9/4/2009	CCC+	5/17/2007
Energy Future Holdings Corp.¶	U.S.	Utility	43,849.6	11/16/2009	CC	10/5/2009	BBB	10/3/1997
Mashantucket Western Pequot Tribe	U.S.	Energy and natural resources	2,000.4	11/16/2009	CCC	8/26/2009	BBB-	9/15/1999
Hellas Telecommunications I SARL¶	Luxembourg	Telecommunications	4,370.5	11/17/2009	CC	9/4/2009	B+	12/15/2005
White Birch Paper Company	U.S.	Forest products	650.0	11/17/2009	CCC+	5/30/2008	B	3/15/2005
Ambac Assurance Corp.¶	U.S.	Insurance	0.0	11/18/2009	CC	7/28/2009	AAA	12/31/1980
Integra Telecom Inc.¶	U.S.	Telecommunications	1,238.1	11/20/2009	CC	5/8/2009	B-	7/13/2007
Donington Holdings PLC	UK	Financial institutions	223.7	11/24/2009	CCC-	10/29/2009	CCC+	10/15/2009
Temirbank JSC¶	Kazakhstan	Financial institutions	1,254.2	11/24/2009	CC	3/31/2009	B+	11/13/2006
Corporacion Interamericana de Entretenimiento, S. A. B. de C. V.¶	Mexico	Leisure time/media	210.6	11/25/2009	CC	11/5/2009	B+	5/31/2005
AmTrust Financial Corp.	U.S.	Financial institutions	150.0	12/1/2009	NR	6/25/2008	BBB-	2/28/2006
Dune Energy Inc.	U.S.	Energy and natural resources	502.3	12/2/2009	CCC	9/16/2009	B-	4/30/2007
Japan Airlines Corporation	Japan	Transportation	2,214.5	12/2/2009	CC	11/13/2009	AA-	4/5/1991
Quality Home Brands Holdings LLC	U.S.	Consumer/service sector	420.0	12/8/2009	CC	9/23/2009	B	6/22/2006
Mercer International Inc.¶	U.S.	Forest products	421.1	12/11/2009	CC	7/14/2009	B	1/25/2005
Axia Inc.	U.S.	Forest products	120.0	12/14/2009	NR	6/20/2008	B+	7/7/1998
Takefuji Corp.	Japan	Financial institutions	3,468.8	12/15/2009	CC	11/17/2009	A-	2/10/1999
Citadel Broadcasting Corp. (Unsolicited Ratings)	U.S.	Leisure time/media	2,246.5	12/21/2009	CCC-	9/18/2009	B+	5/11/2007
NextMedia Operating Inc.	U.S.	Leisure time/media	415.0	12/21/2009	CCC	3/27/2009	B+	6/26/2001
Total			588,994					

*This total does not match Table 4 because it excludes confidentially rated defaults. ¶Indicates rating movements to 'D' or 'SD' owing to distressed exchange. Sources: Standard & Poor's Global Fixed Income Research and Standard & Poor's CreditPro®.

Since 2003, the average notch movements among both upgrades and downgrades globally has been running well below long-term averages, and we expect some cyclical reversal in this pattern over the next couple of years, approaching convergence to the long-term mean (see Chart 12). Indeed, 2009 has borne out these expectations, with the average upgrade inching up to 1.3 notches, whereas the average downgrade increased to 1.6 notches, a pace unmatched since 2002.

Chart 12

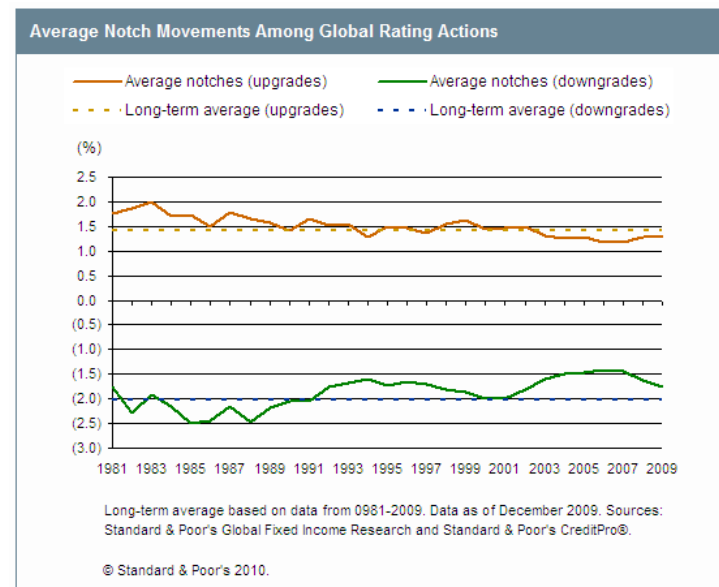


Table 9 shows a breakout of historical default rates by rating modifier.

Table 9

	AAA	AA+	AA	AA-	A+	A	A-	BBB+	BBB	BBB-	BB+	BB	BB-	B+	B	B-	CCC/C
1981	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	3.28	0.00	0.00
1982	0.00	0.00	0.00	0.00	0.00	0.33	0.00	0.00	0.68	0.00	0.00	2.86	7.04	2.22	2.33	7.41	21.43
1983	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	1.33	2.17	0.00	1.59	1.22	9.80	4.76	6.67

1984	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	1.40	0.00	0.00	1.64	1.49	2.13	3.51	7.69	25.00
1985	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	1.64	1.49	1.33	2.59	13.11	8.00	15.38
1986	0.00	0.00	0.00	0.00	0.00	0.00	0.78	0.00	0.78	0.00	1.82	1.18	1.12	4.65	12.16	16.67	23.08	
1987	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.83	1.31	5.95	6.82	12.28	
1988	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	2.34	1.98	4.50	9.80	20.37	
1989	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.91	0.78	0.00	0.00	0.00	2.00	0.43	7.80	4.88	33.33	
1990	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.77	0.00	1.10	2.78	3.06	4.50	4.87	12.26	22.58	31.25	
1991	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.83	0.74	0.00	3.70	1.12	1.05	8.72	16.25	32.43	33.87	
1992	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.72	14.93	20.83	30.19		
1993	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	1.92	0.00	1.30	5.88	4.17	13.33		
1994	0.00	0.00	0.00	0.00	0.45	0.00	0.00	0.00	0.00	0.00	0.00	0.86	0.00	1.83	6.58	3.23	16.67	
1995	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.63	0.00	1.55	1.11	2.76	8.00	7.69	28.00	
1996	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.86	0.65	0.55	2.33	3.74	3.92	4.17	
1997	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.36	0.34	0.00	0.00	0.00	0.41	0.72	5.19	14.58	12.00	
1998	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.27	1.05	1.30	1.06	0.72	2.57	7.47	9.46	42.86	
1999	0.00	0.00	0.00	0.36	0.00	0.24	0.27	0.00	0.28	0.31	0.54	1.33	0.90	4.19	10.55	15.45	32.35	
2000	0.00	0.00	0.00	0.00	0.00	0.24	0.56	0.00	0.26	0.88	0.00	0.80	2.30	5.59	10.66	11.50	34.12	
2001	0.00	0.00	0.00	0.00	0.57	0.49	0.00	0.24	0.48	0.27	0.49	1.19	6.00	5.94	15.74	23.31	44.55	
2002	0.00	0.00	0.00	0.00	0.00	0.00	0.00	1.12	0.65	1.32	1.50	1.74	4.62	3.69	9.63	19.53	44.12	
2003	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.19	0.53	0.48	0.94	0.28	1.69	5.21	9.23	33.13	
2004	0.00	0.00	0.00	0.00	0.00	0.24	0.00	0.00	0.00	0.00	0.00	0.65	0.77	0.46	2.68	2.82	15.33	
2005	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.17	0.00	0.36	0.00	0.25	0.78	2.60	2.98	8.94	
2006	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.36	0.00	0.48	0.54	0.79	1.57	12.38	
2007	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.30	0.23	0.19	0.00	0.88	15.09	
2008	0.00	0.00	0.44	0.41	0.31	0.21	0.58	0.19	0.59	0.71	1.14	0.63	0.64	2.97	3.31	7.41	26.26	
2009	0.00	0.00	0.00	0.00	0.29	0.39	0.00	0.40	0.18	1.09	0.00	1.02	0.91	5.48	9.96	17.16	48.42	
Average	0.00	0.00	0.02	0.03	0.06	0.07	0.08	0.17	0.27	0.32	0.66	0.90	1.50	2.55	7.37	10.23	23.61	
Median	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.17	0.00	0.00	0.86	0.90	2.13	6.58	7.69	23.08	
Standard deviation	0.00	0.00	0.08	0.10	0.15	0.14	0.20	0.32	0.35	0.47	0.97	0.84	1.81	2.10	4.54	7.92	12.90	
Minimum	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	
Maximum	0.00	0.00	0.44	0.41	0.57	0.49	0.78	1.12	1.40	1.33	3.70	3.06	7.04	8.72	16.25	32.43	48.42	

Sources: Standard & Poor's Global Fixed Income Research and Standard & Poor's CreditPro®.

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2009 Timeline

Last year got off to a gloomy start, though the tone in the economy and financial markets improved measurably in subsequent quarters in response to the unprecedented interventions put in place by governments worldwide.

In the first quarter, a raft of interventions and financial guarantees were implemented, aimed at propping up liquidity in the beleaguered financial sector. In the U.S., the Federal Reserve Bank of New York began its purchase of agency-issued mortgage-backed securities (Jan 5). The U.S. Treasury purchased \$4.8 billion in preferred stock from 43 U.S. banks under the Capital Purchase Program (Jan. 9). Additional rescue schemes were unveiled for financial behemoths such as Bank of America (Jan 16) and Citigroup (Feb 23). The Fed announced it would expand the TALF program to accept a wider range of collateral (Feb 10). The Treasury unveiled the Capital Assistance Program (CAP), designed to provide large banks with backup capital in the event they are unable to raise sufficient funds from private investors (Feb 25).

Elsewhere, the U.K. announced a plan to support small and medium-sized enterprises by offering up to £20 billion in loans (Jan. 14). The Bank of England set up a £50 billion asset-purchase program to buy private-sector assets (Jan. 19). Recapitalization programs swept through Europe, including France (Jan. 21), Sweden (Jan. 22), Ireland (Feb. 11), Germany (Feb. 24), and Italy (Feb. 25). Several high-profile nationalizations were announced, such as the Anglo Irish Bank by the government of Ireland (Jan. 15) and the Royal Bank of Scotland (Feb 26) and Lloyds by the U.K. government (March 7). Multilateral agencies such as the European Investment Bank (EIB) and the World Bank announced plans to provide financial assistance to countries in Eastern Europe, such as Hungary and Latvia (Feb. 27). In Japan, the central bank announced its intention to spend trillions of yen purchasing commercial paper, asset-backed commercial paper (Jan. 22), and bank equities (Feb. 19).

Later in the quarter, stress spread to the insurance sector, with AIG reporting its largest ever quarterly loss, which culminated with an announcement that the Fed and Treasury would inject \$30 billion in capital as part of a restructuring program (March 2).

U.S. regulators announced they would conduct stress tests on banks with assets exceeding \$100 billion to estimate their ability to withstand a range of possible future losses (Feb. 25).

Data released in the first quarter suggested a precipitous shock to the global economy, even in regions that had small direct exposure to the financial shock. The sudden collapse in trade and private capital flows during the fourth quarter of 2008 caused the biggest contractions in the most open, trade-oriented markets of Asia and Latin America. China's exports recorded their biggest decline in 10 years (Jan. 13). Home prices fell at their fastest pace in 10 years in Singapore (Jan. 2). Japan's exports nearly shrank by half (Feb. 25), and India's posted their steepest drop in a decade (March 2). In the worst affected economies, news was depressing. Real GDP turned negative in the U.K. with the release of fourth-quarter 2008 data and declined by an annual 6.2% rate in the U.S., its biggest drop since the 1982 recession. In the U.S., the unemployment rate steadily rose since its low in the first quarter of 2007; by October 2009, it reached 10.1%, the highest rate since its last peak in 1982. Housing starts sank to their lowest level in 50 years (Feb. 19).

Interest rate cuts continued apace. The U.S. Federal Reserve lowered rates three times during the first quarter by a cumulative 200 basis points (bps) (Jan. 22, Jan. 30, and March 18). The European Central Bank (ECB) cut interest rates to 2% (Jan. 15). The Bank of England further reduced the benchmark interest rate to 1.5%, its lowest level in more than three centuries (Feb. 5).

Monetary accommodation was matched by fiscal firepower. Newly elected President Barack Obama signed into law a \$787 billion stimulus package called the "American Recovery and Reinvestment Act of 2009" (Feb. 17). Additional programs were announced to support financially distressed homeowners (Feb. 18). Fiscal plans were also announced in swathes of Asia, including Hong Kong, South Korea, and China. For example, China announced it would continue to pour funds into its state-sponsored infrastructure investment plan, in line with the growth objectives unveiled in November 2008 (March 5). In Latin America, Brazil led the way in terms of providing

government support. In Europe, Denmark's parliament announced a financial package worth Kr100 billion (Jan 18). The summit of G20 countries held in London at the end of the first quarter brought forth pledges to provide up to \$1.1 trillion via multilateral agencies to promote jobs, growth, and financial support (April 2).

Beginning in the second quarter, the flow of bad news from the financial sector began to decelerate from toxic highs. A couple of banks—Goldman Sachs and Wells Fargo—reported better-than-expected results and declared their intention to repay TARP funding (April 13). Central banks remained accommodative, maintaining interest rates at ultra-low levels in the U.S. and in Europe. The results of the U.S. bank stress tests were better than anticipated (May 7), lifting market sentiment and paving the way for banks to access new capital (May 11). Only 10 banks were deemed in need of funds to bolster their capital levels by a cumulative \$75 billion. Nevertheless, unconventional policy measures remained in place and were occasionally reinforced. The Fed declared it would include legacy commercial mortgage backed securities in its TALF program (May 19). The U.S. Treasury continued to periodically make purchases of preferred stock from banks under the Capital Purchase Program in April, May, and June. The expiration date for a number of the Fed's liquidity programs was extended to the end of the year or beyond (June 24). In addition, the U.S. Treasury also announced sweeping plans to revamp regulation of the financial sector, including greater oversight powers for the Federal Reserve (June 17).

Worrisome news surfaced from various segments of the U.S. economy: Mall operator General Growth Properties sought bankruptcy protection to reorganize its mammoth \$27 billion debt load (April 16). Reports emerged of millions of additional losses and bailout need at agencies such as Fannie Mae (May 9) and Freddie Mac (May 12). Automakers remained under severe financial pressure, with Chrysler filing for bankruptcy protection on May 1, followed by General Motors on June 1. By the end of May, the FDIC reported 36 bank failures among institutions under its purview, a sum that would balloon to a record high of 140 by year end.

The quarter was interspersed with news of high-profile consolidations in the financial and nonfinancial sectors: Pulte Homes' acquisition of Centex (April 9), Oracle's deal to purchase Sun (April 21); Toys R Us's purchase of FAO Schwarz (May 28); and BlackRock's purchase of Barclays Global Investors for \$13.5 billion (June 12).

Economic news from Asia surprised on the upside, and suggested the region may have turned the corner. South Korea recorded positive growth in the first quarter (April 24). In China, manufacturing recorded gains for the first time in nine months (May 4). Factory output in Japan rose at its fastest pace in decades (May 29).

The tone of financial-market developments visibly improved in the third quarter. Within the auto industry, Congressional approval for the cash-for-clunkers program led to its official initiation in July and spurred auto sales in that month to their highest pace in 11 months. Fed Chairman Ben Bernanke's testimony to Congress noted that "extreme risk aversion has eased somewhat, and investors are returning to private credit markets" (July 21). Key interest rates remained unchanged during the quarter. The volume of credit offered at Term Auction Facility (TAF) auctions in July and August progressively declined in line with the pickup in market conditions. Financial markets reacted with relative equanimity to the expiration of some policy programs that had been initiated to provide extraordinary support during the financial crisis, such as The Treasury Guarantee Program for Money Markets and The Temporary Liquidity Guarantee Program.

A welcome surprise was noted when General Motors speedily emerged from reorganization after spending only 40 days in bankruptcy (July 10). Nevertheless, news that the U.S.-based CIT Group—a specialist lender in commercial financing and leasing—needed emergency restructuring to ward off default was a stark reminder of the risk remaining in the pipeline (July 20). At the same time, the FDIC reported concern about the financial health of 111 banks under its watch (Aug. 28). Outside the U.S., trouble seemed less pervasive in the financial sector; the Swiss government became the first to sell its stake in UBS at a handsome price of \$1.13 billion (Aug. 21). By the end of the quarter, many banks in Germany, France, and Italy had announced plans to tap the equity markets for capital financing; proceeds from these fund raisings were to be allotted toward paying down debt held by governments.

In the fourth quarter, the Dow crossed the 10,000 barrier for the first time since the fall of 2008 (Oct. 14). The Reserve Bank of Australia became the first central bank of a developed country to reverse its monetary cycle and raise interest rates (Oct 6). Negative news emerged sporadically, such as the U.S. announcement of a government deficit of \$1.4 trillion, the largest as a share of GDP since World War II (Oct. 17) and the CIT bankruptcy (Nov. 1), but the tone remained largely encouraging overall. Of the 10 bank holding companies flagged by the Fed during the May stress tests, all but one (GMAC) are reported to have bolstered capital sufficiently to meet their required capital targets (Nov. 9). The growing confidence in the funding climate enabled banks that received TARP funds—such as Bank of America, Citibank, and Wells Fargo—to declare their intention to repay their debts in full from the proceeds of securities offerings (Dec. 2). Late in the year, Dubai World's appeal for a six-month debt standstill from its investors sent shockwaves through emerging markets, which had been relative safe havens throughout the crisis (Nov. 26).

Note: The timeline in this section was compiled using data from the Federal Reserve Bank of New York (http://www.newyorkfed.org/research/global_economy/Crisis_Timeline.pdf and http://www.newyorkfed.org/research/global_economy/IRCTimelinePublic.pdf), the Federal Reserve Bank of St. Louis (<http://timeline.stlouisfed.org/pdf/CrisisTimeline.pdf>), the National Library Board, Singapore (<http://rpe.nl.sg/Business/E443CD56-ED91-4AA4-803D-300B339C907D.aspx>), and Dow Jones & Co. Inc. (<http://online.wsj.com/public/page/quarterly-markets-review-010410.html>).

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Quarterly Trends

Broken out by quarter, the incidence of defaults peaked in the second quarter of 2009, which had 99 defaults, dropping to 33 defaults by the end of the fourth quarter (see Chart 13). Similarly, the volume of debt affected by the defaults rose to US\$296 billion in the second quarter, which—on a quarterly level—is the highest amount on record (see Chart 14). Expressed as a default rate on a trailing-three-month basis, the default rate rose to a record in the U.S. but failed to do so for other regions such as Europe or the emerging markets (see Chart 15).

Chart 13

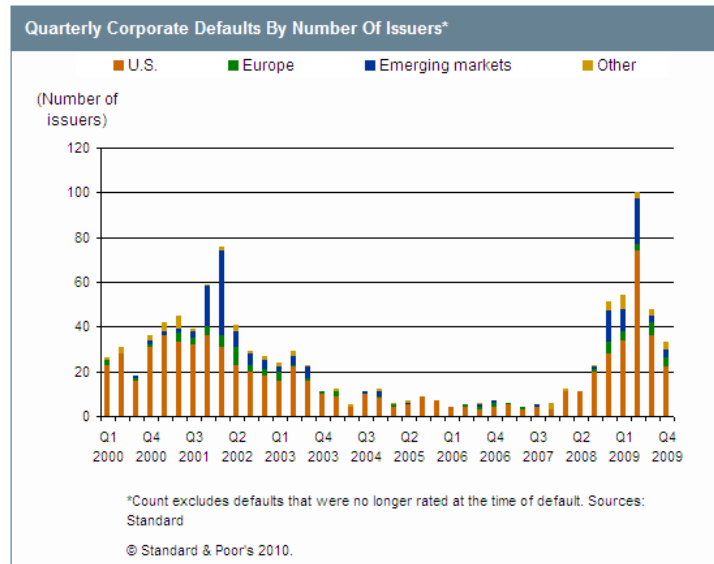


Chart 14

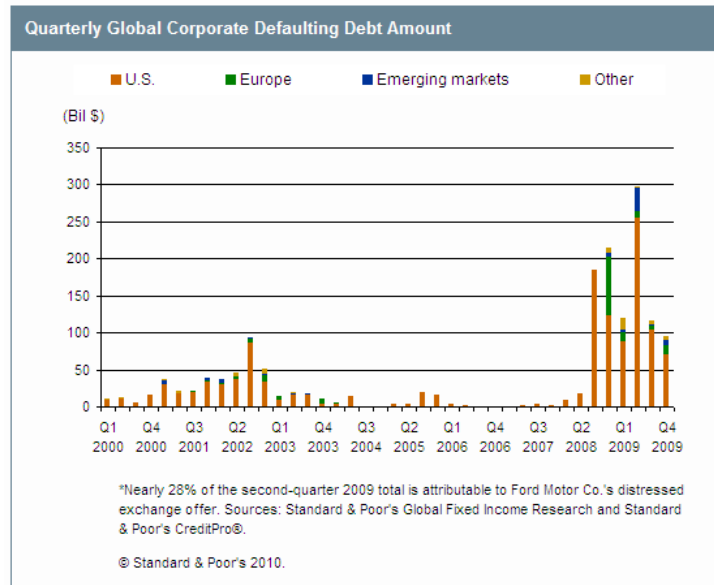
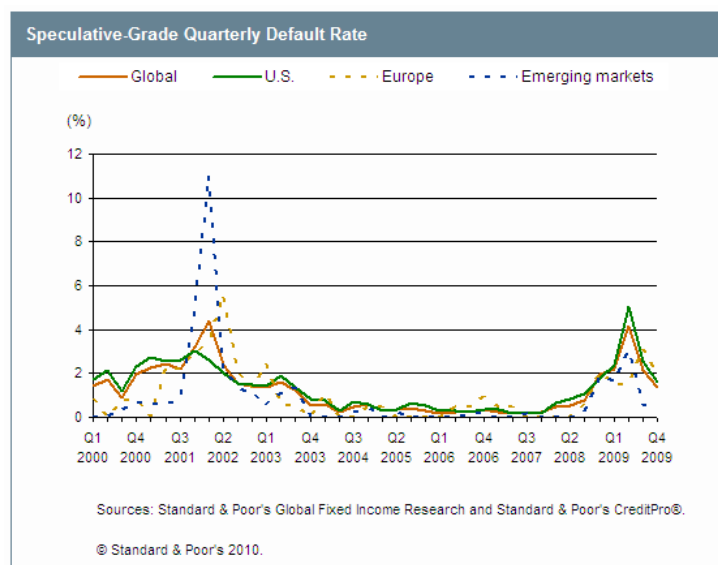


Chart 15



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Lower Ratings Consistent With Higher Default Vulnerability

Within the speculative-grade category, the general trend is that the lower the original rating on an issuer, the shorter the time to default over the long term. For example, for the entire pool of defaulters (1981-2009), the average times to default for issuers that were originally rated in the 'BB' and 'B' categories were 6.3 years and 4.7 years, respectively, from initial rating (or from Dec. 31, 1980, the start date of the study), whereas issuers in the 'CCC' rating category or lower had an average time to default of 2.7 years. Table 10 displays the median, average, and standard deviations for the time to default from both the original rating. Table 11 presents the average and median times to default from each rating category and includes both rating originations as well as transitions to the category. Note that in both cases, the standard deviation of the times to default shrinks progressively as the rating gets lower.

Table 10

Time To Default From Original Rating For Global Corporate Defaulters (1981-2009)

Original rating	Defaults	Average number of years from original rating*	Median number of years from original rating	Standard deviation of years from original rating
AAA	7	16.4	9.0	11.3
AA	25	15.1	14.4	7.7
A	84	12.4	10.4	7.8
BBB	176	7.9	6.7	5.5
BB	486	6.3	4.9	5.0
B	1048	4.7	3.5	4.0
CCC/C	107	2.7	1.5	3.2
Total	1933	5.8	4.0	5.2

*Or Dec. 31, 1980, whichever is later. Sources: Standard & Poor's Global Fixed Income Research and Standard & Poor's CreditPro®.

Table 11

Time To Default From All Ratings For Global Corporate Defaulters (1981-2009)

Rating path to default	Average number of years from rating category	Median number of years from rating category	Standard deviation of years from rating category
AAA	16.3	12.3	10.5
AA	13.9	13.0	8.2
A	10.9	9.6	7.3
BBB	7.5	6.0	6.1
BB	5.5	4.0	5.0
B	3.3	2.2	3.8
CCC/C	0.9	0.3	1.7
NR	4.6	2.7	4.8
Total	3.8	2.0	4.9

Sources: Standard & Poor's Global Fixed Income Research and Standard & Poor's CreditPro®.

Table 12

Fastest Cumulative Defaulters Among Global Corporates From Original Rating (1981-2008)

	AAA	AA	A	BBB	BB	B	CCC/C	Total
Number of issuers defaulting within:								
One year				3	10	53	39	105
Three years			6	28	122	429	75	660
Five years		2	13	64	250	724	93	1,146
Seven years	2	4	27	93	330	861	100	1,417
Total	7	25	84	176	486	1,048	107	1,933
% of total defaults per time frame								
One year	0.0	0.0	0.0	2.9	9.5	50.5	37.1	
Three years	0.0	0.0	0.9	4.2	18.5	65.0	11.4	
Five years	0.0	0.2	1.1	5.6	21.8	63.2	8.1	

Seven years	0.1	0.3	1.9	6.6	23.3	60.8	7.1
Total	0.4	1.3	4.3	9.1	25.1	54.2	5.5

*Or Dec. 31, 1980, whichever is later. Sources: Standard & Poor's Global Fixed Income Research and Standard & Poor's CreditPro®.

Table 13

Fastest Cumulative Defaulters Among Global Corporates From Rating, 1981-2009

	AAA	AA	A	BBB	BB	B	CCC/C	NR	Total
Number of issuers defaulting within:									
One year			10	65	171	857	1,562	105	2,770
Three years		7	40	158	498	1,846	1,856	248	4,653
Five years		11	63	242	766	2,388	1,930	318	5,718
Seven years	2	18	89	323	939	2,641	1,956	365	6,333
Total	8	65	256	566	1,304	2,994	1,986	468	7,647
% of total defaults per time frame									
One year	0.0	0.0	0.4	2.3	6.2	30.9	56.4	3.8	
Three years	0.0	0.2	0.9	3.4	10.7	39.7	39.9	5.3	
Five years	0.0	0.2	1.1	4.2	13.4	41.8	33.8	5.6	
Seven years	0.0	0.3	1.4	5.1	14.8	41.7	30.9	5.8	
Total	0.1	0.9	3.3	7.4	17.1	39.2	26.0	6.1	

Sources: Standard & Poor's Global Fixed Income Research and Standard & Poor's CreditPro®.

Lower ratings at origination are consistent with higher default vulnerability. Table 12 presents the distribution by timeline of default count based on the original rating on a firm. The first row presents the rating distribution of defaults occurring within 12 months of the original rating. The second row is the distribution of the cumulative count of defaults occurring within three years of the original rating. As expected, the vast majority of companies that defaulted within one year of the original rating are from the lowest rungs of the speculative-grade universe. For example, of the 105 companies that defaulted within 12 months of having been rated, 92 (88%) were originally rated in the 'B' category ('B+', 'B', and 'B-') or lower. Only when looking at longer time frames do companies with higher original ratings surface among the defaults. For example, of all the companies that defaulted during 1981-2009, no entity rated 'AAA' at inception registered a default prior to seven years from origination. Throughout the 29-year time span, only seven companies that received a first rating of 'AAA' rating category have ever defaulted.

Table 13 records the fastest cumulative defaults from all ratings and includes ratings that were reached not only by originations, as in Table 12, but also by transitions. As each issuer is liable to be captured multiple times in line with its migration from one rating to another, the total count in Table 13 is different from that reported in Table 12. From the first row of this table, we see that 10 companies rated 'A' at any point in their lifetime defaulted within one year of this rating.

Table 14 also documents that defaults are disproportionately sourced from lower rating categories, even in high-default years. Moreover, this tendency persists even when looking at longer horizons. For example, a total of 255 defaults were recorded in the five-year pool that began in January 2005, of which 85% were speculative-grade. See Table 15 for a list of the 37 publicly rated investment-grade defaults during this time period; two defaults that were confidentially rated are not listed. Among nonfinancials, the lower the rating, the higher the number of defaults, and the lower the survivor rate. Note that among financials, ratings are concentrated in investment-grade, with the speculative-grade category only accounting for less than one-fifth of all ratings in the displayed pools. For these sectors, defaults have been clustered in the lower rungs of the investment-grade category.

Table 14

Defaults And Survivor Rates In Latest One-, Three-, And Five-Year Pools

Rating	—Latest one-year—			—Latest three-year—			—Latest five-year—		
	Number of ratings as of Jan. 1, 2009	Number of defaults through December 2009	Nondefault rate (%)	Number of ratings as of Jan. 1, 2007	Number of defaults through December 2009	Nondefault rate (%)	Number of ratings as of Jan. 1, 2005	Number of defaults through December 2009	Nondefault rate (%)
Global									
AAA	81	0	100.0	87	1	98.9	89	1	98.9
AA	470	0	100.0	492	2	99.6	417	1	99.8
A	1,396	3	99.8	1,334	7	99.5	1,274	9	99.3
BBB	1,498	8	99.5	1,480	21	98.6	1,510	28	98.1
BB	1,002	7	99.3	1,048	58	94.5	997	59	94.1
B	1,223	124	89.9	1,243	167	86.6	990	123	87.6
CCC/C	190	92	51.6	106	41	61.3	123	34	72.4
Nonfinancials									
AAA	15	0	100.0	16	0	100.0	21	0	100.0
AA	132	0	100.0	133	0	100.0	135	0	100.0
A	589	0	100.0	632	0	100.0	674	1	99.9
BBB	981	0	100.0	1,035	6	99.4	1,067	18	98.3
BB	800	6	99.3	867	48	94.5	827	52	93.7
B	1,084	113	89.6	1,112	158	85.8	880	121	86.3
CCC/C	167	86	48.5	87	39	55.2	97	32	67.0
Financials									
AAA	66	0	100.0	71	1	98.6	68	1	98.5
AA	338	0	100.0	359	2	99.4	282	1	99.6
A	807	3	99.6	702	7	99.0	600	8	98.7
BBB	517	8	98.5	445	15	96.6	443	10	97.7
BB	202	1	99.5	181	10	94.5	170	7	95.9
B	139	11	92.1	131	9	93.1	110	2	98.2
CCC/C	23	6	73.9	19	2	89.5	26	2	92.3

The totals included might differ from the counts in Table 1 because defaults that are not rated at the beginning of the pool year are excluded. Sources: Standard & Poor's Global Fixed Income Research and Standard & Poor's CreditPro®.

Table 15

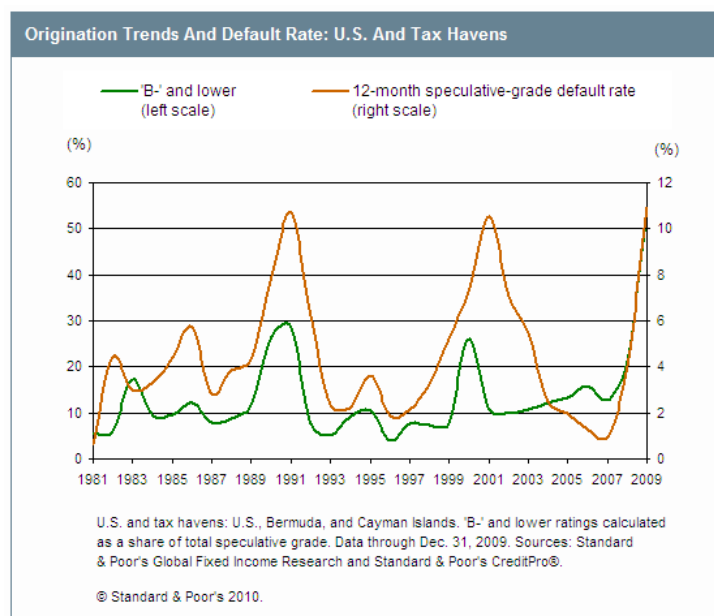
Investment-Grade Defaults In The Five-Year 2005 Static Pool

Company	Country	Industry	Default Date	Next to last rating	Date of next to last rating	First rating	Date of first rating	Year of Default
Aiful Corp. (A)	Japan	Financial institutions	9/24/2009	CC	9/18/2009	BBB	10/6/2003	2009
Ambac Assurance Corp. (A)	U.S.	Insurance	11/18/2009	CC	7/28/2009	AAA	12/31/1980	2009
BluePoint Re Limited	Bermuda	Insurance	8/14/2008	A	6/9/2008	AA	10/25/2004	2008
CIT Group Inc.	U.S.	Financial institutions	8/17/2009	CC	7/16/2009	AA	12/31/1980	2009
Clear Channel Communications Inc. (A)	U.S.	Leisure time/media	12/23/2008	CC	12/5/2008	BBB-	9/26/1997	2008
Colonial BancGroup Inc.	U.S.	Financial institutions	8/17/2009	CC	7/30/2009	BBB-	1/17/1997	2009
Colonial Bank	U.S.	Financial institutions	8/17/2009	CCC-	7/30/2009	BBB	1/21/1997	2009
Commonwealth Land Title Insurance Co. (A)	U.S.	Insurance	12/4/2008	BB-	11/24/2008	A-	6/25/1997	2008
Controladora Comercial Mexicana S. A. B. de C. V.	Mexico	Consumer/service sector	10/9/2008	BBB-	10/3/2000	BB+	3/31/1998	2008
Dana Holding Corp. (A)	U.S.	Aerospace/automotive/capital goods/metal	3/3/2006	CCC-	3/2/2006	AA	12/31/1980	2006
Downey Financial Corp.	U.S.	Financial institutions	11/24/2008	CCC-	11/21/2008	BBB-	6/7/1999	2008
Downey Savings and loans Assn	U.S.	Financial institutions	11/24/2008	CCC	11/21/2008	A+	12/31/1980	2008
Energy Future Holdings Corp. (A)	U.S.	Energy and natural resources	11/16/2009	CC	10/5/2009	BBB	10/3/1997	2009
Entergy New Orleans Inc.	U.S.	Utility	9/23/2005	CCC+	9/20/2005	BBB+	12/31/1980	2005
Ford Motor Co. (A)	U.S.	Aerospace/automotive/capital goods/metal	4/6/2009	CC	3/4/2009	A	12/31/1980	2009
Freescale Semiconductor Inc. (A)	U.S.	High technology/computers/office equipment	3/27/2009	CC	2/10/2009	BB+	6/23/2004	2009
General Growth Properties Inc.	U.S.	Real estate	3/17/2009	CC	12/24/2008	BBB-	6/2/1998	2009
GMAC Inc. (A)	U.S.	Financial institutions	12/31/2008	CC	11/20/2008	AAA	12/31/1980	2008
Harrah's Entertainment Inc. (A)	U.S.	Leisure time/media	12/24/2008	CC	11/18/2008	A	12/31/1980	2008
Hexion Specialty Chemicals Inc. (A)	U.S.	Health care/chemicals	4/21/2009	CCC+	1/28/2009	A	12/31/1980	2009
Indymac Bancorp	U.S.	Financial institutions	7/14/2008	CCC	7/9/2008	BB+	10/23/2001	2008
IndyMac Bank FSB	U.S.	Financial institutions	7/14/2008	B-	7/9/2008	BBB-	9/4/1998	2008
Kellwood Co.	U.S.	Consumer/service sector	7/23/2009	BB-	10/17/2007	BB	11/19/1984	2009
LandAmerica Financial Group Inc.	U.S.	Insurance	11/26/2008	B-	11/24/2008	BBB-	11/19/2004	2008
Lear Corp. (A)	U.S.	Aerospace/automotive/capital goods/metal	6/2/2009	CCC+	1/30/2009	B+	11/23/1988	2009
Lehman Brothers Holdings Inc.	U.S.	Financial institutions	9/16/2008	A	6/2/2008	AA-	1/1/1985	2008
LyondellBasell Industries AF S.C.A.	Netherlands	Health care/chemicals	12/30/2008	B-	11/14/2008	BBB-	8/1/2001	2008
Mashantucket Western Pequot Tribe	U.S.	Leisure time/media	11/16/2009	CCC	8/26/2009	BBB-	9/16/1999	2009
McClatchy Co. (The) (A)	U.S.	Leisure time/media	6/29/2009	CC	5/22/2009	BBB-	2/8/2000	2009
Motors Liquidation Co. (fka General Motors Corp.)	U.S.	Aerospace/automotive/capital goods/metal	6/1/2009	CC	12/4/2008	AAA	12/31/1980	2009
Pier 1 Imports Inc.	U.S.	Consumer/service sector	7/30/2009	B-	9/18/2006	BB-	7/5/1983	2009
Sabre Holdings Corp. (A)	U.S.	Transportation	6/16/2009	B	3/30/2009	A-	2/7/2000	2009
Takefuji Corp. (A)	Japan	Financial institutions	12/15/2009	CC	11/17/2009	A-	2/10/1999	2009
Thomson S.A.	France	Consumer/service sector	5/7/2009	CC	1/29/2009	BBB+	7/24/2002	2009
Tribune Co.	U.S.	Leisure time/media	12/9/2008	CCC	11/11/2008	AA	3/1/1983	2008
Washington Mutual Bank	U.S.	Financial institutions	9/26/2008	BBB-	9/15/2008	B+	1/24/1989	2008
World Color Press Inc. (A)	Canada	Leisure time/media	1/16/2008	CCC	12/18/2007	BBB+	1/13/1997	2008

Excludes confidentially rated defaults. Sources: Standard & Poor's Global Fixed Income Research and Standard & Poor's CreditPro®.

Tables 10 and 12 demonstrate the prevalence of defaults emanating from the 'B' rating category ('B+', 'B', and 'B-'). Since 1981, this rating category has accounted for 1,048 defaulters (54.2% of the total), more than double the number of the 'BB' rating category. Tracking the movement in new rating patterns could prove useful in anticipating future default activity, based on the notion that years characterized by high numbers of new ratings of 'B-' or lower will likely be followed by increased default risk. Chart 16 plots the ratio of all speculative-grade new ratings of 'B-' or lower in the U.S. to total speculative-grade ratings against the year-end U.S. speculative-grade default rate. As coincident indicators, broad movements in the two series generally mirror each other throughout most of their shared history.

Chart 16



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Industry Variations

In 2009, financial defaults accounted for 12.1% of total defaults globally, which is slightly more elevated than the average 10.7% share observed in the long term. To some extent, distress in the financial sector was suppressed by the unprecedented financial support of governments beginning in late 2008. In terms of volume of debt affected by defaults, the financial sector ceded its number one position from a year prior, accounting for only 17% of total debt, whereas the lion's share was attributable to nonfinancials. Despite the low absolute default rates in this sector, news attention in this segment remains high in light of the higher-than-average default rates and pronounced ratings degradation.

Table 16

Cumulative Global Corporate Default Rates By Sector

(%)	2009	2008	Average (1981-2009)	Median	Standard deviation	Minimum	Maximum
Financial institutions							
One-year	1.39	2.08	0.66	0.26	0.77	0.00	2.42
Three-year	1.49	3.42	1.86	1.08	1.77	0.00	6.34
10-year	4.02	4.07	5.06	4.10	2.73	1.58	10.00
Insurance							
One-year	0.50	0.36	0.67	0.34	1.11	0.00	5.13
Three-year	0.86	0.91	2.04	1.52	1.95	0.16	7.69
10-year	5.09	4.77	6.58	5.47	3.43	3.36	16.13
All financials							
One-year	1.26	0.85	0.61	0.44	0.58	0.00	1.87
Three-year	1.25	1.98	1.84	1.83	1.32	0.10	4.98
10-year	4.49	4.36	5.53	5.40	2.29	2.38	9.07
All nonfinancials							
One-year	1.74	3.26	1.79	1.34	1.27	0.16	5.00
Three-year	2.90	5.37	5.03	3.99	3.02	2.05	12.04
10-year	18.63	19.23	11.47	10.79	3.26	6.94	19.23

Sources: Standard & Poor's Global Fixed Income Research and Standard & Poor's CreditPro®.

The time to default from the original rating shows some variation by sector. Note that over the long term, cyclicity has been more pronounced within nonfinancials than among financials, which is to be expected in light of the differences in rating profile between the two broad sectors (see Chart 17). For instance, the average one-year default rate among all financials historically was 0.61% compared with 1.79% for all nonfinancials (see Table 16). The same gap persists even over longer-term horizons such as three years or 10 years (see Chart 18).

Chart 17

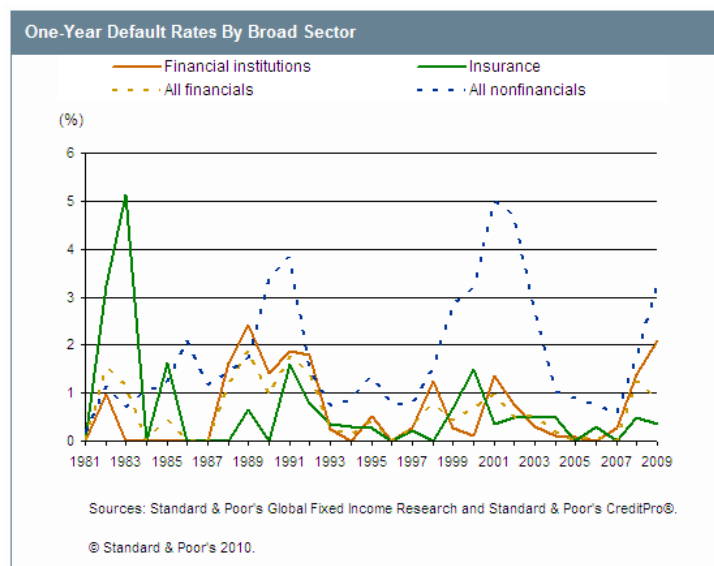
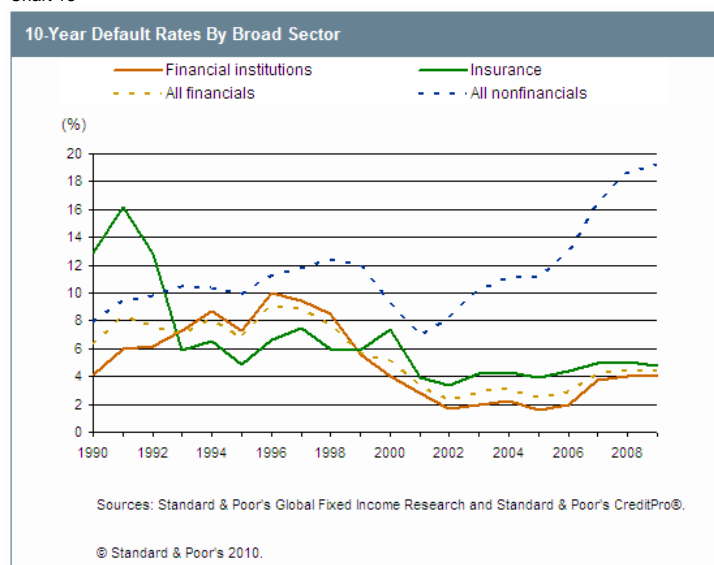


Chart 18



Of the 1,933 defaults recorded globally over the long term, six sectors displayed an average time to default that is lower than the overall average of 5.8 years. These sectors are energy and natural resources, financial institutions, high technology, leisure time/media, real estate, and telecommunications (see Table 17). If the median time to default is considered, then transportation gets added into the mix. Table 18 displays the time to default from all ratings by industry.

Table 17

Time To Default From Original Rating Grouped By Industry (%)

	Median original rating	Defaults	Average years from original rating*	Median years from original rating	Standard deviation of years from original rating
Aerospace / automotive / capital goods / metal	BB-	321	6.3	4.5	5.6
Consumer / service sector	BB-	376	6.3	4.6	5.3
Energy and natural resources	BB-	113	4.1	3.0	3.7
Financial Institutions	BBB+	145	5.4	3.7	5.9
Forest and building products / homebuilders	BB-	120	6.9	4.8	5.6
Health care / chemicals	BB-	118	5.9	4.1	5.0
High technology / computers / office equipment	B+	67	5.1	3.7	4.7
Insurance	A	61	7.3	6.6	5.3
Leisure time / media	B+	265	5.6	4.0	4.8
Real estate	BBB-	32	4.1	3.2	3.0
Telecommunications	B+	151	3.9	3.1	3.0
Transportation	BB+	105	6.2	3.7	6.2
Utility	A-	59	6.0	4.3	6.0
Total	BB+	1,933	5.8	4.0	5.2

*Or Dec. 31, 1980, whichever is later. Sources: Standard & Poor's Global Fixed Income Research and Standard & Poor's CreditPro®.

Table 18

Time To Default From All Ratings Grouped By Industry (1981-2009)

(%)	Defaults	Average years to default	Median years to default	Standard deviation of years to default
Aerospace / automotive / capital goods / metal	321	4.4	2.4	5.3
Consumer / service sector	376	4.1	2.4	4.8
Energy and natural resources	113	2.7	1.5	3.6
Financial Institutions	145	3.5	1.3	5.3
Forest and building products / homebuilders	120	4.0	2.2	4.8
Health care / chemicals	118	3.7	2.1	4.5
High technology / computers / office equipment	67	4.5	2.6	5.4
Insurance	61	3.9	2.3	4.4
Leisure time / media	265	3.7	2.0	4.7
Real estate	32	2.1	1.2	2.5
Telecommunications	151	2.3	1.3	3.1
Transportation	105	5.1	2.5	6.1
Utility	59	3.3	0.9	5.2
Total	1,933	3.8	2.0	4.9

Sources: Standard & Poor's Global Fixed Income Research and Standard & Poor's CreditPro®.

By industry, the highest default rates in 2009 were in the leisure time/media sector, followed by the forest products and homebuilding sector, similar to the lineup in 2008. Table 19 shows a historical breakout of global default rates by industry. The variation by industry stems partly from sample size differences as well as differentiation in the rating mix across sectors. For example, the leisure/media sector has a much higher representation of speculative-grade ratings than the financial institutions or insurance sectors (see Chart 19). Although the absolute default rate is still low among financials, risk nevertheless remains elevated in this sector owing to higher-than-average historical default rates, and pronounced ratings degradation, as evidenced by the higher incidence of large-notch rating downgrades.

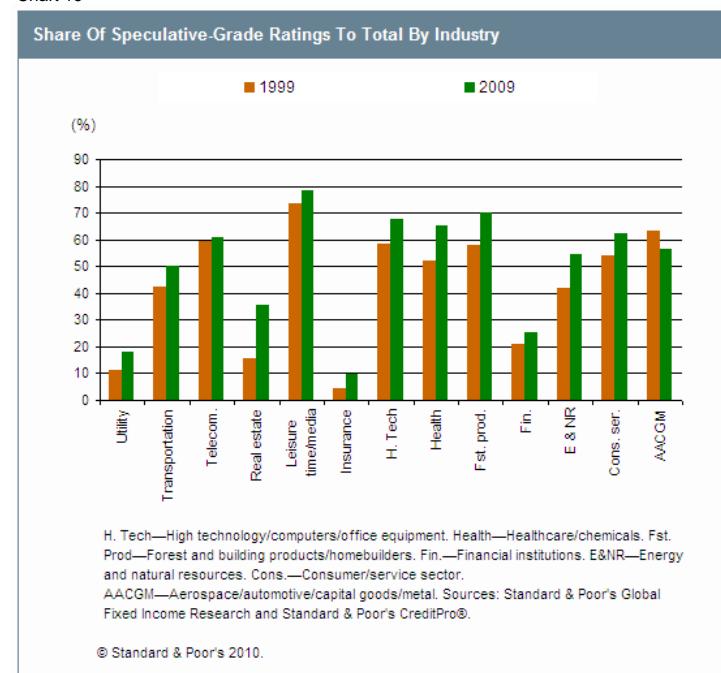
Table 19

Global Default Rates By Industry

(%)	2009	2008	Weighted average (1981-2009)	Median	Standard deviation	Minimum	Maximum
Aerospace / automotive / capital goods / metal	8.20	1.25	2.78	1.51	2.36	0.00	10.02
Consumer / service sector	4.74	2.86	2.58	2.06	1.80	0.00	6.33
Energy and natural resources	3.78	1.48	1.91	1.33	2.52	0.00	11.11
Financial Institutions	2.03	1.32	0.68	0.25	0.79	0.00	2.51
Forest and building products / homebuilders	14.59	3.59	2.83	1.35	3.29	0.00	14.59
Health care / chemicals	4.96	2.50	1.73	0.90	1.49	0.00	4.96
High technology / computers / office equipment	2.05	0.52	1.52	1.22	1.62	0.00	5.23
Insurance	0.39	0.53	0.44	0.35	1.11	0.00	5.13
Leisure time / media	15.56	5.97	3.83	2.15	3.60	0.00	15.56
Real estate	5.06	2.20	0.93	0.00	3.30	0.00	12.00
Telecommunications	3.76	1.99	3.51	0.54	4.59	0.00	19.51
Transportation	4.84	1.47	2.15	1.72	1.84	0.00	5.63
Utility	0.18	0.00	0.49	0.00	0.86	0.00	4.36

Includes investment-grade and speculative-grade rated entities. Sources: Standard & Poor's Global Fixed Income Research and Standard & Poor's CreditPro®.

Chart 19



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Hefty Growth In Speculative-Grade Ratings

History suggests that growth in speculative-grade ratings is usually a good precursor to a wave of subsequent defaults. The recent surge in speculative-grade originations beginning in 2002 in the U.S.—where the high-yield market has the most depth—provides evidence to support this notion (see Chart 22). By contrast, high-yield rating originations in Europe appear more subdued but of note, much of the leveraged activity migrated to the private credit estimate market (see Chart 23). Regions where speculative-grade originations activity were the most heated have backtracked on a trailing 12-month basis but still remain high on a relative basis.

The turning point for defaults globally was in December 2007, more than five years after the acceleration in speculative-grade ratings (see Chart 21). On a trailing-12-month basis, the global speculative-grade default rate peaked at 9.77% in November 2009 (see Chart 20). Typically, after default peaks, the total count of new corporate issuers declines substantially. Nevertheless, the share of new ratings that are rated 'BB+' or lower actually increased to 66%, reversing the decline recorded a year earlier and slightly higher than the 65% average recorded in 2003-2007. That new speculative-grade ratings did not fall further is a testament to the marked acceleration in risk appetite in the latter half of 2009.

Chart 20

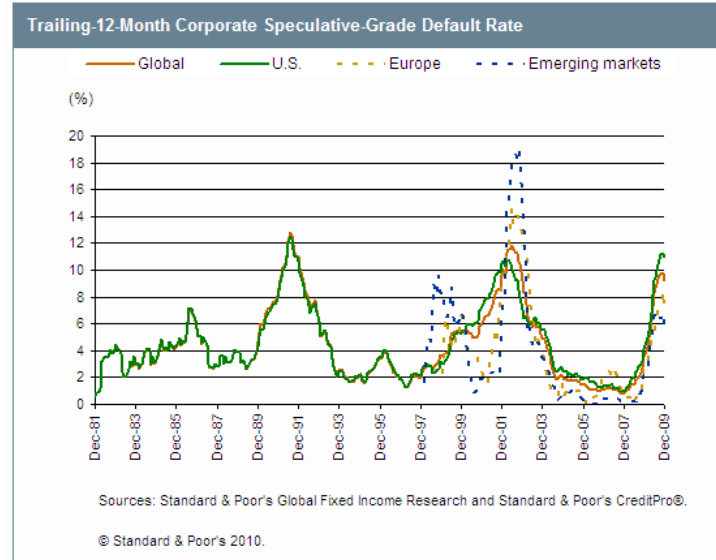


Chart 21

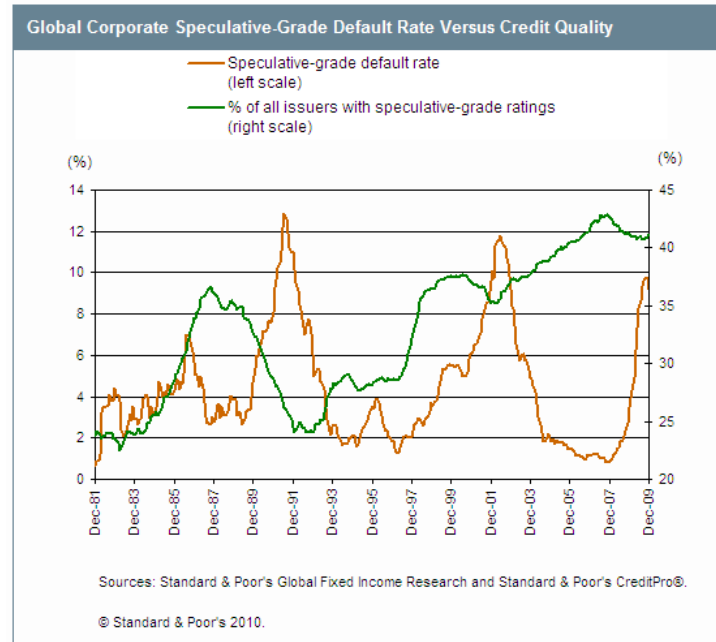


Chart 22

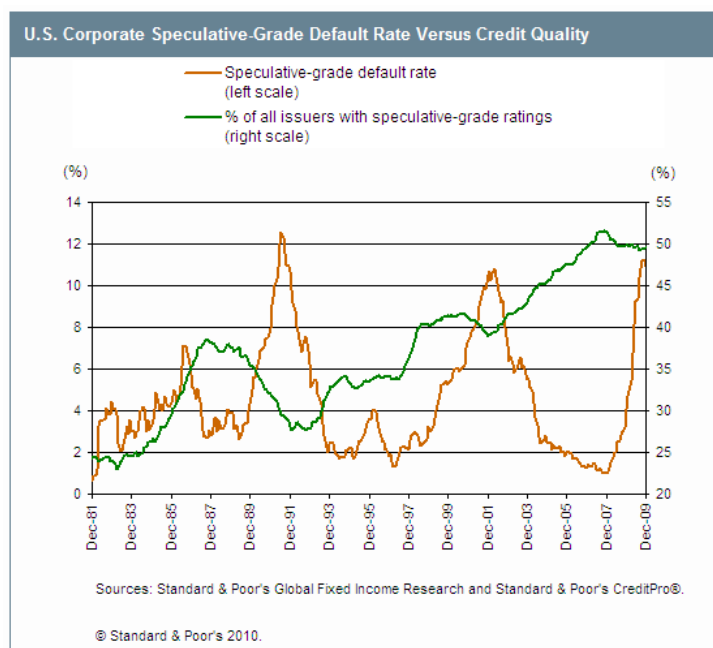
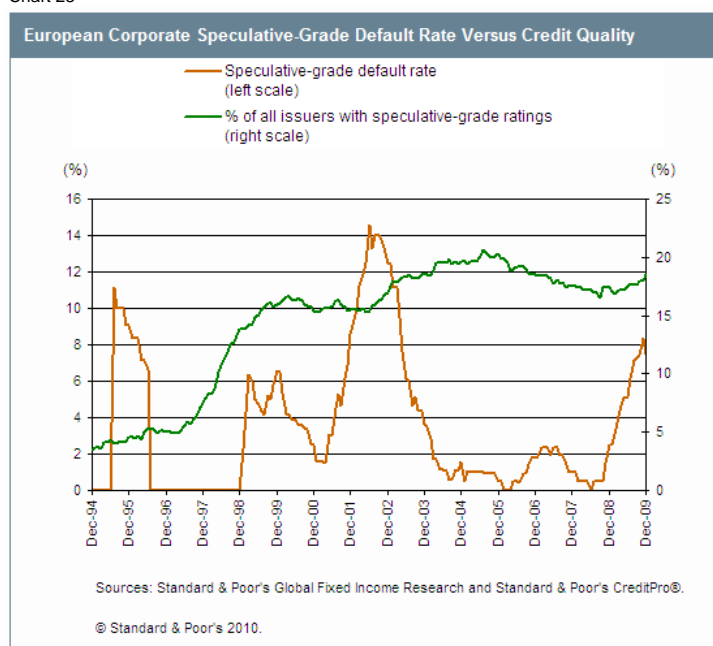


Chart 23



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Transition Tables And Cumulative Default Rates

Analysis of transition rates over the four quarters ended December 2009 suggests that ratings behavior continues to exhibit consistency with long-term trends, showing a clear negative correspondence between ratings and observed frequency of default. Table 20 demonstrates that investment-grade-rated issuers—globally as well as in the U.S. and Europe—tend to exhibit greater credit stability (as measured by the frequency of rating transition) than their speculative-grade counterparts. For instance, 84.67% of issuers rated 'A' at the beginning as of Jan. 1, 2009, were still rated 'A' by Dec. 31, 2009, whereas the comparable share for an issuer rated 'B' was only 69.34%. The same relationship holds even when the transition rates are analyzed separately for the U.S., Europe, or the emerging markets.

Table 20

2009 Corporate Transition Rates By Region (%)

From/to	AAA	AA	A	BBB	BB	B	CCC/C	D	NR
Global									
AAA	87.65	8.64	0.00	0.00	0.00	0.00	0.00	0.00	3.70
AA	0.00	76.17	15.96	0.64	0.21	0.00	0.00	0.00	7.02
A	0.00	0.36	84.67	7.74	0.43	0.29	0.00	0.21	6.30
BBB	0.00	0.00	2.00	83.71	5.94	0.80	0.20	0.53	6.81
BB	0.00	0.00	0.00	3.09	72.95	11.48	0.60	0.70	11.18

B	0.00	0.00	0.16	0.00	2.29	69.34	8.42	10.14	9.65
CCC/C	0.00	0.00	0.00	0.00	0.00	6.32	27.37	48.42	17.89
U.S.									
AAA	91.67	8.33	0.00	0.00	0.00	0.00	0.00	0.00	0.00
AA	0.00	68.68	19.78	1.65	0.55	0.00	0.00	0.00	9.34
A	0.00	0.18	82.13	10.65	0.54	0.54	0.00	0.18	5.78
BBB	0.00	0.00	1.82	86.69	5.46	1.12	0.28	0.56	4.06
BB	0.00	0.00	0.00	2.50	77.29	12.50	0.63	0.83	6.25
B	0.00	0.00	0.23	0.00	1.96	70.90	8.89	10.16	7.85
CCC/C	0.00	0.00	0.00	0.00	0.00	6.90	29.66	48.97	14.48
Europe									
AAA	90.91	0.00	0.00	0.00	0.00	0.00	0.00	0.00	9.09
AA	0.00	76.63	18.48	0.00	0.00	0.00	0.00	0.00	4.89
A	0.00	0.43	88.50	5.42	0.00	0.00	0.00	0.22	5.42
BBB	0.00	0.00	3.55	80.14	8.51	0.35	0.35	0.00	7.09
BB	0.00	0.00	0.00	3.60	63.06	15.32	0.00	0.90	17.12
B	0.00	0.00	0.00	0.00	3.95	63.16	10.53	9.21	13.16
CCC/C	0.00	0.00	0.00	0.00	0.00	0.00	7.69	53.85	38.46
Emerging markets									
AAA	66.67	0.00	0.00	0.00	0.00	0.00	0.00	0.00	33.33
AA	0.00	100.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
A	0.00	0.54	82.80	9.14	1.61	0.54	0.00	0.54	4.84
BBB	0.00	0.00	0.98	84.59	6.23	0.66	0.00	0.66	6.89
BB	0.00	0.00	0.00	3.37	73.60	10.11	0.56	0.84	11.52
B	0.00	0.00	0.00	0.00	1.75	67.11	6.14	9.65	15.35
CCC/C	0.00	0.00	0.00	0.00	0.00	7.69	19.23	42.31	30.77

Sources: Standard & Poor's Global Fixed Income Research and Standard & Poor's CreditPro®.

This pattern is similar to the long-term (1981-2009) average of ratings behavior among all global rated issuers. This study—in line with previous default studies—confirms that higher ratings are more stable than lower ratings. 'AAA' rated issuers were still rated 'AAA' one year later 88.21% of the time, and 'CCC/C' ratings remained 'CCC/C' 44.98% of the time. These long-term relationships do not change even when default rates are calculated over longer time horizons (see Table 21) or broken out by region (see Table 22). In contrast, the relationship is slightly more discontinuous when we examine the rating transitions across modifiers (i.e., a plus or minus after a rating), but these variations are likely a fallout of sample size variations, and we do not consider them statistically significant (see Table 23). For example, 'AA+' rated issuers were still rated 'AA+' one year later 76.28% of the time, and 'AA' rated issuers were still rated 'AA' one year later 80.71% of the time.

Table 21

Global Corporate Average Transition Rates, 1981-2009 (%)

From/to	AAA	AA	A	BBB	BB	B	CCC/C	D	NR
One year									
AAA	88.21	7.73	0.52	0.06	0.08	0.03	0.06	0.00	3.31
	(5.09)	(4.84)	(0.87)	(0.18)	(0.26)	(0.20)	(0.40)	(0.00)	(2.41)
AA	0.56	86.60	8.10	0.55	0.06	0.09	0.02	0.02	4.00
	(0.54)	(4.87)	(3.99)	(0.75)	(0.26)	(0.25)	(0.07)	(0.08)	(1.92)
A	0.04	1.95	87.05	5.47	0.40	0.16	0.02	0.08	4.83
	(0.14)	(1.16)	(3.47)	(2.13)	(0.50)	(0.36)	(0.07)	(0.12)	(1.96)
BBB	0.01	0.14	3.76	84.16	4.13	0.70	0.16	0.26	6.68
	(0.07)	(0.24)	(2.34)	(4.44)	(1.80)	(1.05)	(0.25)	(0.27)	(1.86)
BB	0.02	0.05	0.18	5.17	75.52	7.48	0.79	0.97	9.82
	(0.06)	(0.16)	(0.40)	(2.44)	(4.94)	(4.78)	(0.93)	(1.06)	(2.92)
B	0.00	0.04	0.15	0.24	5.43	72.73	4.65	4.93	11.83
	(0.00)	(0.13)	(0.38)	(0.34)	(2.59)	(5.25)	(2.64)	(3.27)	(3.07)
CCC/C	0.00	0.00	0.21	0.31	0.88	11.28	44.98	27.98	14.37
	(0.00)	(0.00)	(0.74)	(1.05)	(1.34)	(7.86)	(12.81)	(12.90)	(7.57)
Three year									
AAA	68.58	18.57	2.49	0.32	0.15	0.06	0.12	0.12	9.60
	(7.78)	(7.50)	(1.61)	(0.85)	(0.40)	(0.30)	(0.52)	(0.35)	(5.04)
AA	1.35	66.52	17.99	2.27	0.38	0.25	0.04	0.12	11.10
	(0.79)	(7.34)	(5.08)	(1.45)	(0.68)	(0.53)	(0.08)	(0.15)	(4.22)
A	0.08	4.70	67.20	11.84	1.43	0.57	0.11	0.32	13.74
	(0.12)	(2.32)	(6.14)	(2.95)	(1.17)	(0.85)	(0.17)	(0.27)	(3.79)
BBB	0.03	0.44	9.13	60.88	7.52	2.16	0.38	1.18	18.29
	(0.10)	(0.54)	(4.03)	(7.62)	(2.71)	(1.80)	(0.51)	(0.87)	(3.53)
BB	0.01	0.07	0.71	11.40	43.82	11.89	1.41	5.21	25.48
	(0.09)	(0.23)	(1.11)	(4.35)	(5.76)	(3.98)	(1.12)	(3.46)	(4.08)
B	0.01	0.05	0.37	1.16	11.37	38.34	4.69	14.87	29.14
	(0.13)	(0.17)	(0.81)	(0.96)	(3.65)	(6.14)	(2.49)	(7.03)	(6.12)
CCC/C	0.00	0.00	0.30	0.97	2.12	16.28	12.71	39.89	27.72
	(0.00)	(0.00)	(0.89)	(2.41)	(3.50)	(7.75)	(11.53)	(13.62)	(11.99)
Five year									
AAA	53.83	23.38	5.16	0.92	0.15	0.09	0.09	0.31	16.08
	(6.78)	(6.95)	(2.30)	(1.85)	(0.40)	(0.37)	(0.33)	(0.58)	(6.50)
AA	1.68	51.59	23.70	4.05	0.60	0.37	0.05	0.30	17.67
	(0.91)	(6.52)	(4.55)	(1.80)	(0.73)	(0.74)	(0.12)	(0.35)	(4.90)
A	0.12	5.86	53.56	15.15	2.34	0.91	0.17	0.68	21.21
	(0.11)	(2.54)	(6.99)	(2.45)	(1.30)	(1.18)	(0.23)	(0.45)	(4.21)
BBB	0.04	0.75	10.91	47.04	8.11	2.89	0.47	2.51	27.29

	(0.11)	(0.67)	(4.38)	(7.80)	(2.49)	(1.88)	(0.59)	(1.31)	(4.56)
BB	0.02	0.11	1.45	12.38	28.14	11.06	1.53	9.61	35.72
	(0.09)	(0.29)	(1.26)	(4.16)	(5.38)	(3.33)	(1.51)	(4.68)	(4.43)
B	0.03	0.05	0.48	2.10	10.95	21.44	2.93	22.26	39.76
	(0.28)	(0.15)	(1.21)	(1.57)	(3.03)	(5.50)	(1.48)	(8.17)	(6.43)
CCC/C	0.00	0.00	0.28	1.11	3.47	11.59	3.40	46.29	33.87
	(0.00)	(0.00)	(0.87)	(4.26)	(3.33)	(5.34)	(8.18)	(14.30)	(12.56)
Seven year									
AAA	42.80	26.07	7.36	1.78	0.23	0.06	0.13	0.45	21.12
	(4.72)	(5.24)	(2.49)	(2.16)	(0.51)	(0.29)	(0.36)	(0.75)	(7.19)
AA	1.75	40.43	26.87	5.34	0.82	0.33	0.03	0.51	23.91
	(1.03)	(4.70)	(3.78)	(1.62)	(0.73)	(0.60)	(0.09)	(0.56)	(4.83)
A	0.12	5.93	44.03	16.84	2.99	1.08	0.17	1.18	27.66
	(0.13)	(2.12)	(6.37)	(1.87)	(1.36)	(1.29)	(0.24)	(0.55)	(3.72)
BBB	0.06	0.99	10.72	38.20	8.00	2.97	0.43	3.96	34.67
	(0.18)	(0.54)	(3.99)	(6.26)	(0.84)	(1.35)	(0.54)	(1.57)	(3.71)
BB	0.00	0.11	1.83	12.02	19.37	9.52	1.16	14.13	41.86
	(0.00)	(0.31)	(1.41)	(4.47)	(4.61)	(2.83)	(1.04)	(4.67)	(4.15)
B	0.01	0.04	0.69	2.28	8.64	12.77	1.83	28.38	45.36
	(0.24)	(0.15)	(1.03)	(2.09)	(2.35)	(3.10)	(0.96)	(7.01)	(6.21)
CCC/C	0.00	0.00	0.34	1.35	3.81	7.11	1.69	52.58	33.11
	(0.00)	(0.00)	(0.96)	(4.87)	(2.59)	(3.65)	(4.60)	(12.33)	(10.85)

Numbers in parentheses are standard deviations. Sources: Standard & Poor's Global Fixed Income Research and Standard & Poor's CreditPro®.

Table 22

Average One-Year Corporate Transition Rates, 1981-2009 (%)

From/to	AAA	AA	A	BBB	BB	B	CCC/C	D	NR
U.S.									
AAA	88.75	7.07	0.59	0.04	0.13	0.04	0.04	0.00	3.34
	(5.69)	(5.32)	(1.24)	(0.20)	(0.36)	(0.32)	(0.32)	(0.00)	(2.59)
AA	0.60	86.36	7.90	0.66	0.09	0.13	0.04	0.04	4.18
	(0.53)	(6.67)	(4.83)	(0.91)	(0.23)	(0.30)	(0.12)	(0.18)	(2.45)
A	0.05	1.86	86.94	5.74	0.50	0.20	0.04	0.09	4.59
	(0.15)	(1.26)	(3.55)	(2.41)	(0.54)	(0.37)	(0.11)	(0.17)	(1.83)
BBB	0.01	0.15	3.67	84.29	4.48	0.79	0.14	0.28	6.18
	(0.07)	(0.23)	(2.48)	(4.53)	(1.60)	(1.10)	(0.19)	(0.32)	(1.87)
BB	0.03	0.06	0.23	5.22	75.41	8.28	0.72	1.04	9.01
	(0.09)	(0.17)	(0.38)	(2.64)	(5.06)	(4.90)	(0.85)	(0.99)	(2.92)
B	0.00	0.05	0.17	0.25	4.90	73.94	4.86	4.96	10.87
	(0.00)	(0.13)	(0.38)	(0.35)	(2.56)	(5.25)	(2.79)	(3.26)	(3.11)
CCC/C	0.00	0.00	0.27	0.41	0.95	9.82	45.70	28.92	13.92
	(0.00)	(0.00)	(0.78)	(1.12)	(1.46)	(7.74)	(12.60)	(13.25)	(7.02)
Europe									
AAA	88.52	7.94	0.49	0.00	0.00	0.00	0.12	0.00	2.93
	(5.56)	(5.34)	(1.75)	(0.00)	(0.00)	(0.00)	(1.16)	(0.00)	(3.43)
AA	0.27	86.07	9.80	0.51	0.00	0.00	0.00	0.00	3.36
	(0.45)	(6.34)	(5.91)	(0.80)	(0.00)	(0.00)	(0.00)	(0.00)	(2.07)
A	0.00	2.51	87.16	5.05	0.18	0.06	0.00	0.06	4.97
	(0.00)	(1.35)	(3.55)	(2.49)	(0.29)	(0.08)	(0.00)	(0.11)	(2.09)
BBB	0.00	0.17	4.79	82.69	3.57	0.45	0.17	0.14	8.02
	(0.00)	(0.24)	(2.33)	(3.65)	(2.90)	(0.53)	(0.37)	(0.30)	(4.01)
BB	0.00	0.00	0.18	4.68	70.73	8.35	0.46	0.73	14.86
	(0.00)	(0.00)	(2.43)	(2.68)	(6.74)	(4.06)	(0.72)	(1.23)	(6.17)
B	0.00	0.00	0.12	0.36	6.63	64.34	4.82	4.58	19.16
	(0.00)	(0.00)	(0.46)	(0.61)	(4.96)	(6.64)	(3.66)	(5.39)	(7.14)
CCC/C	0.00	0.00	0.00	0.00	0.00	5.41	31.08	43.24	20.27
	(0.00)	(0.00)	(0.00)	(0.00)	(0.00)	(8.42)	(19.05)	(26.30)	(29.35)
Emerging markets									
AAA	88.68	3.77	0.00	0.00	0.00	0.00	0.00	0.00	7.55
	(23.08)	(12.10)	(0.00)	(0.00)	(0.00)	(0.00)	(0.00)	(0.00)	(18.03)
AA	0.00	87.14	8.57	0.71	0.00	0.71	0.00	0.00	2.86
	(0.00)	(14.59)	(12.54)	(3.34)	(0.00)	(5.35)	(0.00)	(0.00)	(3.20)
A	0.00	1.27	89.48	5.16	0.49	0.39	0.00	0.10	3.12
	(0.00)	(1.72)	(8.75)	(6.97)	(1.30)	(2.50)	(0.00)	(0.14)	(1.83)
BBB	0.00	0.05	3.65	85.06	4.23	0.90	0.45	0.27	5.40
	(0.00)	(0.12)	(3.55)	(7.40)	(5.92)	(1.93)	(1.79)	(0.67)	(2.82)
BB	0.00	0.00	0.07	4.68	78.56	4.61	1.26	1.08	9.74
	(0.00)	(0.00)	(0.16)	(2.97)	(7.32)	(3.08)	(3.43)	(1.82)	(4.36)
B	0.00	0.00	0.05	0.21	8.51	69.04	3.11	4.20	14.89
	(0.00)	(0.00)	(0.33)	(0.46)	(4.90)	(6.20)	(3.77)	(5.27)	(4.55)
CCC/C	0.00	0.00	0.00	0.00	0.59	19.29	46.59	19.29	14.24
	(0.00)	(0.00)	(0.00)	(0.00)	(0.86)	(13.19)	(25.02)	(16.96)	(26.13)

Numbers in parentheses are standard deviations. For Europe and emerging markets, calculations are for 1996-2009. Sources: Standard & Poor's Global Fixed Income Research and Standard & Poor's CreditPro®.

Table 23

Average One-Year Transition Rates For Global Corporates By Rating Modifier (1981-2009)

From/to	—Rating—																	
	AAA	AA+	AA	AA-	A+	A	A-	BBB+	BBB	BBB-	BB+	BB	BB-	B+	B	B-	CCC	D

AAA	88.21	4.31	2.73	0.69	0.17	0.25	0.11	0.03	0.03	0.00	0.03	0.06	0.00	0.00	0.03	0.00	0.06	0.00	3.31
	(5.26)	(2.33)	(2.34)	(1.36)	(0.35)	(0.76)	(0.31)	(0.00)	(0.00)	(0.00)	(0.00)	(0.00)	(0.00)	(0.00)	(0.35)	(0.00)	(0.71)	(0.00)	(2.60)
AA+	2.34	76.28	11.77	3.90	0.90	0.66	0.30	0.12	0.12	0.06	0.00	0.00	0.00	0.06	0.00	0.00	0.00	0.00	3.48
	(4.70)	(15.18)	(13.47)	(5.38)	(4.60)	(0.81)	(1.03)	(0.69)	(0.00)	(0.00)	(0.00)	(0.00)	(0.00)	(0.00)	(0.00)	(0.00)	(0.00)	(0.00)	(4.11)
AA	0.50	1.33	80.71	7.99	2.90	1.37	0.44	0.43	0.15	0.09	0.06	0.04	0.02	0.00	0.00	0.02	0.06	0.02	3.88
	(0.41)	(2.48)	(10.72)	(5.33)	(3.98)	(1.34)	(1.01)	(0.50)	(0.15)	(0.37)	(0.18)	(0.00)	(0.00)	(0.00)	(0.00)	(0.15)	(0.15)	(2.56)	(2.01)
AA-	0.06	0.15	4.44	76.87	9.86	2.92	0.69	0.28	0.15	0.07	0.04	0.00	0.00	0.04	0.11	0.02	0.00	0.04	4.27
	(0.29)	(0.00)	(6.38)	(9.02)	(6.42)	(5.53)	(1.07)	(0.47)	(0.37)	(0.35)	(0.12)	(0.00)	(0.00)	(0.12)	(0.00)	(0.12)	(0.00)	(0.14)	(2.01)
A+	0.00	0.11	0.61	4.50	77.09	8.89	2.62	0.73	0.42	0.10	0.10	0.13	0.01	0.08	0.04	0.01	0.00	0.07	4.47
	(0.00)	(0.31)	(1.15)	(3.79)	(5.23)	(4.06)	(1.03)	(0.80)	(0.51)	(0.13)	(0.22)	(0.42)	(0.00)	(0.10)	(0.00)	(0.10)	(0.00)	(0.13)	(2.35)
A	0.05	0.06	0.30	0.57	5.03	77.47	6.87	2.75	1.14	0.30	0.16	0.16	0.11	0.12	0.03	0.01	0.02	0.09	4.76
	(0.08)	(0.00)	(0.77)	(0.36)	(2.48)	(4.49)	(3.95)	(1.69)	(0.67)	(0.38)	(0.16)	(0.17)	(0.07)	(0.10)	(0.00)	(0.08)	(0.07)	(0.15)	(2.02)
A-	0.05	0.01	0.11	0.21	0.65	6.98	75.08	7.70	2.43	0.70	0.18	0.16	0.18	0.15	0.03	0.01	0.05	0.09	5.23
	(0.00)	(0.00)	(0.14)	(0.57)	(0.52)	(4.07)	(6.07)	(3.95)	(1.47)	(0.62)	(0.11)	(0.11)	(0.23)	(0.24)	(0.00)	(0.00)	(0.08)	(0.19)	(2.03)
BBB+	0.00	0.01	0.08	0.09	0.31	1.06	6.90	72.90	8.88	2.08	0.47	0.42	0.18	0.27	0.14	0.03	0.10	0.17	5.90
	(0.00)	(0.00)	(0.14)	(0.13)	(0.66)	(1.91)	(3.48)	(5.02)	(4.01)	(1.80)	(0.46)	(0.71)	(0.16)	(0.65)	(0.22)	(0.09)	(0.16)	(0.38)	(1.56)
BBB	0.01	0.01	0.07	0.05	0.18	0.51	1.29	6.91	74.28	6.04	1.71	0.85	0.38	0.32	0.18	0.05	0.09	0.24	6.82
	(0.00)	(0.00)	(0.07)	(0.06)	(0.15)	(0.74)	(0.54)	(4.13)	(4.08)	(2.08)	(1.02)	(0.76)	(0.23)	(0.29)	(0.16)	(0.15)	(0.10)	(0.25)	(1.90)
BBB-	0.02	0.02	0.02	0.08	0.08	0.25	0.41	1.46	8.66	70.22	5.71	2.68	1.05	0.60	0.36	0.24	0.33	0.41	7.41
	(0.00)	(0.09)	(0.08)	(0.00)	(0.07)	(0.56)	(0.37)	(0.95)	(4.04)	(3.92)	(2.44)	(0.89)	(1.52)	(0.50)	(0.31)	(0.16)	(0.26)	(0.53)	(1.73)
BB+	0.08	0.00	0.00	0.05	0.03	0.15	0.13	0.66	2.24	11.46	62.89	6.45	3.30	1.32	0.81	0.20	0.56	0.53	9.14
	(0.17)	(0.00)	(0.00)	(0.12)	(0.00)	(1.50)	(0.17)	(1.41)	(0.98)	(3.62)	(5.49)	(3.36)	(2.06)	(0.62)	(4.40)	(0.38)	(0.63)	(0.55)	(4.49)
BB	0.00	0.00	0.06	0.02	0.00	0.10	0.08	0.22	0.78	2.55	8.33	64.02	7.83	2.85	1.43	0.48	0.76	0.82	9.68
	(0.00)	(0.00)	(0.00)	(0.11)	(0.00)	(0.00)	(0.15)	(0.72)	(0.72)	(0.99)	(4.56)	(7.12)	(3.63)	(1.51)	(1.61)	(0.67)	(0.83)	(0.59)	(3.45)
BB-	0.00	0.00	0.00	0.02	0.02	0.02	0.08	0.14	0.30	0.47	1.98	7.81	63.90	8.48	3.17	0.99	0.96	1.34	10.33
	(0.00)	(0.00)	(0.00)	(0.00)	(0.22)	(0.00)	(0.00)	(0.22)	(0.25)	(0.87)	(0.96)	(2.82)	(9.58)	(7.89)	(1.90)	(1.13)	(0.61)	(1.42)	(3.27)
B+	0.00	0.01	0.00	0.05	0.00	0.06	0.09	0.06	0.07	0.10	0.34	1.59	6.68	64.88	7.67	2.73	2.04	2.70	10.94
	(0.00)	(0.00)	(0.00)	(0.00)	(0.00)	(0.09)	(0.00)	(0.08)	(0.10)	(0.06)	(0.32)	(1.10)	(3.97)	(13.51)	(4.15)	(1.90)	(1.25)	(1.90)	(4.48)
B	0.00	0.00	0.02	0.02	0.00	0.10	0.08	0.04	0.11	0.04	0.23	0.40	1.64	8.13	57.18	7.98	5.64	6.26	12.15
	(0.00)	(0.00)	(0.00)	(0.00)	(0.00)	(0.07)	(0.13)	(0.21)	(0.11)	(0.07)	(0.55)	(0.53)	(1.13)	(5.32)	(5.18)	(3.79)	(4.02)	(3.53)	(2.63)
B-	0.00	0.00	0.00	0.00	0.04	0.08	0.00	0.16	0.08	0.16	0.20	0.24	0.55	2.87	8.61	51.36	11.59	9.86	14.22
	(0.00)	(0.00)	(0.00)	(0.00)	(1.59)	(0.20)	(0.00)	(0.21)	(0.23)	(0.60)	(1.59)	(0.41)	(1.21)	(2.79)	(4.43)	(9.71)	(6.22)	(7.20)	(3.28)
CCC/C	0.00	0.00	0.00	0.00	0.05	0.00	0.15	0.10	0.10	0.10	0.05	0.21	0.62	1.24	2.42	7.62	44.98	27.98	14.37
	(0.00)	(0.00)	(0.00)	(0.00)	(0.00)	(0.29)	(0.00)	(0.00)	(0.27)	(0.00)	(0.20)	(0.37)	(3.03)	(1.46)	(5.45)	(15.90)	(16.45)	(4.51)	

Numbers in parentheses are standard deviations. Sources: Standard & Poor's Global Fixed Income Research and Standard & Poor's CreditPro®.

All of Standard & Poor's default studies have found a clear correlation between ratings and defaults: the higher the rating, the lower the observed frequency of default, and vice versa. Over each time span, lower ratings correspond to higher default rates (see Table 24 and Chart 24). This also holds true in every region worldwide (see Table 25).

Chart 24

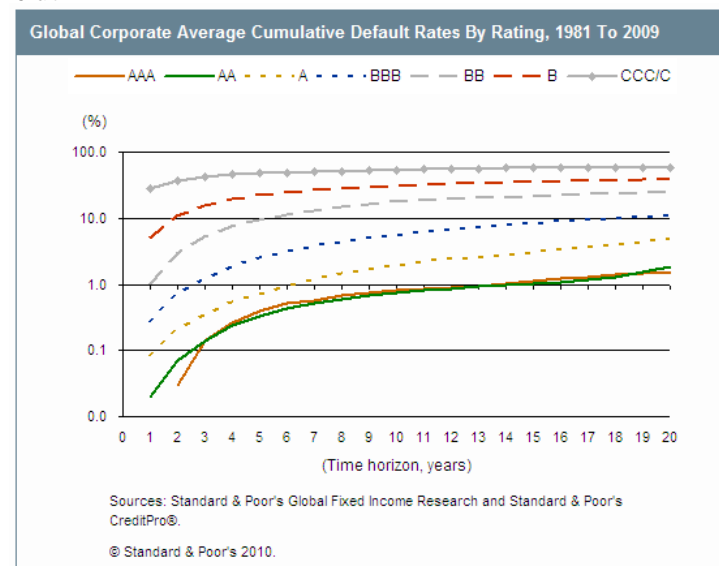


Table 24

Global Corporate Average Cumulative Default Rates (1981-2009)

(%)	—Time horizon (years)—														
Rating	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15
AAA	0.00	0.03	0.14	0.26	0.39	0.51	0.58	0.68	0.74	0.82	0.86	0.90	0.94	1.04	1.14
	(0.00)	(0.20)	(0.35)	(0.44)	(0.58)	(0.69)	(0.75)	(0.83)	(0.84)	(0.85)	(0.86)	(0.86)	(0.87)	(0.94)	(1.02)
AA	0.02	0.07	0.14	0.24	0.33	0.43	0.52	0.60	0.67	0.74	0.81	0.87	0.93	0.98	1.02
	(0.08)	(0.12)	(0.15)	(0.25)	(0.35)	(0.48)	(0.56)	(0.64)	(0.69)	(0.73)	(0.73)	(0.75)	(0.72)	(0.72)	(0.72)
A	0.08	0.21	0.35	0.53	0.72	0.95	1.22	1.46	1.70	1.97	2.20	2.39	2.58	2.75	2.99
	(0.12)	(0.21)	(0.27)	(0.36)	(0.45)	(0.49)	(0.55)	(0.59)	(0.67)	(0.78)	(0.88)	(0.94)	(0.91)	(0.89)	(0.84)
BBB	0.26	0.72	1.23	1.86	2.53	3.20	3.80	4.40	5.00	5.60	6.21	6.72	7.24	7.80	8.36
	(0.27)	(0.60)	(0.87)	(1.09)	(1.31)	(1.47)	(1.57)	(1.59)	(1.59)	(1.59)	(1.43)	(1.34)	(1.17)	(1.07)	(1.03)
BB	0.97	2.94	5.27	7.49	9.51	11.48	13.19	14.75	16.21	17.45	18.49	19.39	20.18	20.84	21.57

	(5.27)	(8.43)	(11.48)	(12.63)	(13.16)
CCC/C	19.29	22.11	23.79	24.53	25.76
	(17.45)	(16.76)	(18.04)	(31.97)	(32.55)
Investment grade	0.20	0.82	1.54	2.45	3.36
	(0.46)	(2.33)	(3.32)	(4.23)	(4.92)
Speculative grade	3.53	6.33	8.64	10.66	12.07
	(4.42)	(6.53)	(8.01)	(9.52)	(10.69)
All rated	2.17	4.09	5.77	7.35	8.56
	(2.86)	(4.63)	(5.77)	(7.20)	(8.18)

Numbers in parentheses are standard deviations. Standard deviations for Europe and the emerging markets are calculated for 1996-2009. Sources: Standard & Poor's Global Fixed Income Research and Standard & Poor's CreditPro®.

Table 26
Global Corporate Average Cumulative Default Rates By Rating Modifier, 1981-2009 (%)

Rating	—Time horizon (years)—														
	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15
AAA	0.00	0.03	0.14	0.26	0.39	0.51	0.58	0.68	0.74	0.82	0.86	0.90	0.94	1.04	1.14
	(0.00)	(0.20)	(0.35)	(0.44)	(0.58)	(0.69)	(0.75)	(0.83)	(0.84)	(0.85)	(0.86)	(0.86)	(0.87)	(0.94)	(1.02)
AA+	0.00	0.06	0.06	0.13	0.19	0.26	0.33	0.33	0.33	0.33	0.33	0.33	0.33	0.33	0.33
	(0.00)	(0.32)	(0.33)	(0.67)	(0.98)	(1.37)	(1.82)	(1.85)	(1.89)	(1.93)	(1.96)	(2.00)	(2.05)	(2.09)	(2.14)
AA	0.02	0.04	0.06	0.16	0.25	0.31	0.41	0.50	0.58	0.66	0.71	0.74	0.84	0.87	0.91
	(0.08)	(0.13)	(0.16)	(0.23)	(0.25)	(0.30)	(0.38)	(0.42)	(0.42)	(0.56)	(0.59)	(0.58)	(0.52)	(0.52)	(0.52)
AA-	0.04	0.12	0.24	0.35	0.46	0.61	0.71	0.79	0.88	0.98	1.08	1.20	1.24	1.34	1.39
	(0.10)	(0.16)	(0.35)	(0.73)	(0.86)	(1.08)	(1.33)	(1.55)	(1.62)	(1.60)	(1.56)	(1.83)	(1.83)	(1.92)	(2.06)
A+	0.07	0.13	0.29	0.48	0.64	0.78	0.96	1.13	1.33	1.55	1.76	1.97	2.23	2.56	2.84
	(0.15)	(0.27)	(0.35)	(0.46)	(0.55)	(0.56)	(0.53)	(0.48)	(0.51)	(0.62)	(0.82)	(0.86)	(1.00)	(1.29)	(1.35)
A	0.09	0.22	0.36	0.51	0.68	0.91	1.14	1.38	1.65	1.98	2.25	2.42	2.56	2.66	2.95
	(0.14)	(0.26)	(0.34)	(0.40)	(0.46)	(0.51)	(0.62)	(0.74)	(0.85)	(0.95)	(1.05)	(1.11)	(1.05)	(0.97)	(0.82)
A-	0.09	0.25	0.41	0.60	0.87	1.17	1.59	1.90	2.15	2.37	2.55	2.75	2.94	3.07	3.16
	(0.20)	(0.34)	(0.48)	(0.65)	(0.90)	(1.10)	(1.52)	(1.71)	(2.03)	(2.30)	(2.29)	(2.30)	(2.28)	(2.29)	(2.34)
BBB+	0.17	0.48	0.84	1.20	1.63	2.13	2.50	2.89	3.35	3.75	4.13	4.37	4.72	5.28	5.92
	(0.32)	(0.65)	(0.96)	(1.04)	(1.30)	(1.57)	(1.90)	(1.91)	(1.75)	(1.78)	(1.50)	(1.45)	(1.56)	(1.97)	(2.21)
BBB	0.24	0.59	0.91	1.42	1.98	2.52	3.04	3.58	4.18	4.76	5.41	5.98	6.51	6.70	7.06
	(0.35)	(0.54)	(0.73)	(0.93)	(1.09)	(1.21)	(1.41)	(1.69)	(1.76)	(1.85)	(1.79)	(1.85)	(1.80)	(1.80)	(1.46)
BBB-	0.41	1.21	2.14	3.26	4.38	5.43	6.38	7.33	8.10	8.96	9.79	10.54	11.25	12.39	13.18
	(0.47)	(1.19)	(1.77)	(2.21)	(2.75)	(3.49)	(3.74)	(3.54)	(3.58)	(3.22)	(3.23)	(3.31)	(3.41)	(3.24)	(3.50)
BB+	0.53	1.49	2.81	4.21	5.51	6.88	8.09	8.86	9.97	11.10	11.90	12.74	13.43	13.91	14.79
	(0.97)	(1.98)	(3.12)	(4.06)	(4.84)	(5.12)	(5.64)	(6.05)	(6.57)	(6.96)	(7.12)	(6.97)	(6.84)	(6.94)	(7.03)
BB	0.82	2.55	4.91	7.09	9.22	11.11	12.71	14.15	15.40	16.43	17.48	18.44	19.00	19.34	19.73
	(0.84)	(1.77)	(2.89)	(3.59)	(4.19)	(4.35)	(4.06)	(3.84)	(3.38)	(3.20)	(2.78)	(3.13)	(3.21)	(3.43)	(3.70)
BB-	1.34	4.12	7.02	9.76	12.14	14.51	16.60	18.72	20.55	22.03	23.19	24.07	25.11	26.12	27.05
	(1.81)	(3.65)	(5.26)	(5.98)	(6.15)	(6.32)	(6.59)	(6.66)	(6.72)	(6.81)	(7.18)	(7.37)	(7.74)	(7.95)	(8.05)
B+	2.70	7.22	11.54	15.35	18.29	20.55	22.66	24.53	26.22	27.93	29.36	30.50	31.62	32.63	33.59
	(2.10)	(4.60)	(6.20)	(7.46)	(8.03)	(8.05)	(7.78)	(7.79)	(8.02)	(5.97)	(5.79)	(5.11)	(4.84)	(5.06)	(5.29)
B	6.26	13.32	18.75	22.51	25.09	27.61	29.12	30.32	31.26	32.26	33.26	34.12	34.98	35.77	36.64
	(4.54)	(7.39)	(8.35)	(9.01)	(9.46)	(8.84)	(8.28)	(7.74)	(7.56)	(7.21)	(6.62)	(6.09)	(5.21)	(4.88)	(4.97)
B-	9.86	17.94	23.95	28.04	31.05	32.96	34.84	35.93	36.83	37.45	38.15	38.78	39.12	39.49	40.09
	(7.92)	(12.34)	(14.08)	(14.63)	(14.61)	(14.96)	(14.30)	(13.86)	(14.18)	(14.26)	(14.20)	(14.19)	(13.74)	(13.88)	(14.14)
CCC/C	27.98	36.95	42.40	45.57	48.05	49.19	50.26	51.09	52.44	53.41	54.32	55.33	56.38	57.28	57.28
	(12.90)	(13.28)	(13.62)	(14.37)	(14.30)	(12.73)	(12.33)	(12.38)	(11.74)	(10.47)	(10.85)	(11.73)	(11.61)	(9.61)	(9.75)
Investment grade	0.13	0.35	0.60	0.91	1.24	1.58	1.90	2.20	2.50	2.80	3.08	3.31	3.55	3.78	4.04
	(0.12)	(0.28)	(0.40)	(0.51)	(0.61)	(0.66)	(0.70)	(0.73)	(0.80)	(0.84)	(0.86)	(0.85)	(0.76)	(0.70)	(0.67)
Speculative grade	4.44	8.68	12.42	15.46	17.90	19.96	21.72	23.25	24.67	25.96	27.08	28.02	28.91	29.68	30.45
	(2.82)	(4.58)	(5.70)	(6.29)	(6.45)	(5.99)	(5.29)	(4.75)	(4.42)	(4.07)	(3.81)	(3.55)	(3.47)	(3.62)	(3.65)
All rated	1.63	3.23	4.67	5.89	6.90	7.79	8.55	9.23	9.86	10.45	10.97	11.40	11.82	12.20	12.60
	(1.07)	(1.83)	(2.40)	(2.77)	(2.93)	(2.85)	(2.67)	(2.55)	(2.48)	(2.30)	(2.06)	(1.77)	(1.74)	(1.96)	(2.14)

Numbers in parentheses are standard deviations. Sources: Standard & Poor's Global Fixed Income Research and Standard & Poor's CreditPro®.

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Gini Ratios And Lorenz Curves

A quantitative analysis of the performance of Standard & Poor's ratings shows that corporate ratings continue to correlate with the level of default risk across several time horizons. To measure ratings performance, the cumulative share of issuers by rating is plotted against the cumulative share of defaulters in a Lorenz curve to visually render the accuracy of its rank ordering (for definition and methodology, refer to Appendix II). The results are in Charts 23-26. Over the long term, the global average one-year transition to default has a one-year Gini coefficient of 82%; three-year, 75%; five-year, 72%; and seven-year, 71%.

Table 27
Corporate Gini Coefficients By Region (1981-2009)

Region	—Time horizon (years)—			
	1	3	5	7
Global				
Weighted average	82.07	75.25	72.49	71.20
Average	83.75	77.40	73.67	71.04
Standard deviation	5.63	4.97	5.05	4.46
U.S.				
Weighted average	80.68	73.86	71.39	69.83
Average	82.40	75.28	72.07	69.53
Standard deviation	7.01	6.21	6.11	4.94

Europe				
Weighted average	90.87	85.48	80.65	77.81
Average	91.47	87.74	78.98	71.52
Standard deviation	5.76	6.86	7.14	7.15

Standard deviation for Europe calculated for 1996-2009. Sources: Standard & Poor's Global Fixed Income research and Standard & Poor's CreditPro®.

Table 27 displays the variation in Gini coefficients by region, and Table 28 shows them by broad sector. As expected, the Gini coefficients decline over time because longer time horizons allow greater opportunity for credit degradation among higher-rated entities. In the one-year global Lorenz curve, for example, 94.7% of defaults occurred in the speculative-grade category ('BB+' or lower), while ratings of 'BB+' or lower constituted only 34.7% of all corporate ratings (see Chart 25). Charts 25-28 provide the Gini ratios for multiple time horizons. Looking at the seven-year Lorenz curve, speculative-grade issuers constituted 85.3% of defaulters and only 31.7% of the entire sample (see Chart 28). If the rank ordering of ratings had little predictive value, the cumulative share of defaulting corporate entities and the cumulative share of all entities would be nearly the same.

Table 28
Gini Coefficients For Global Corporates By Broad Sector (1981-2009)

Sector	—Time horizon (years)—			
	1	3	5	7
Financial				
Weighted average	76.86	67.83	62.62	61.30
Average	82.15	71.82	65.20	61.62
Standard deviation	17.67	14.49	14.87	11.56
Nonfinancial				
Weighted average	81.10	73.53	70.82	69.51
Average	82.99	76.09	72.76	70.08
Standard deviation	6.40	4.83	5.55	4.94

Sources: Standard & Poor's Global Fixed Income Research and Standard & Poor's CreditPro®.

Chart 25

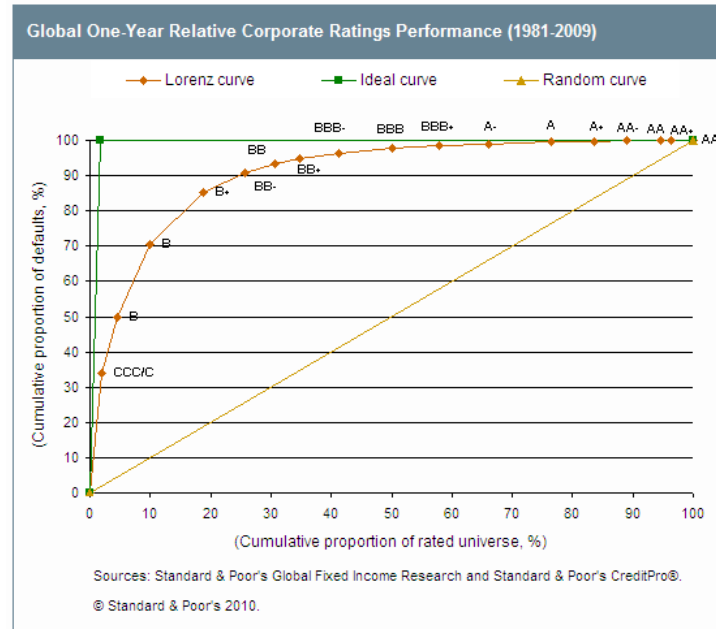


Chart 26



Chart 27

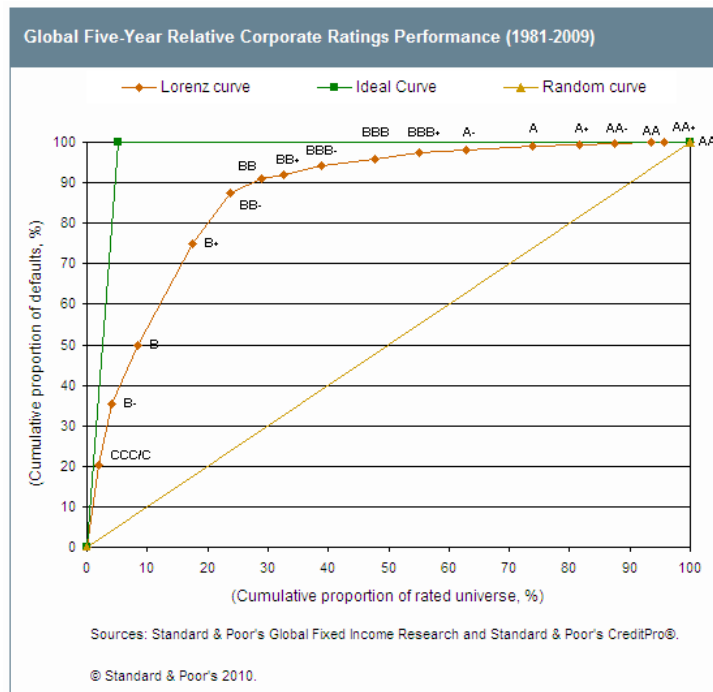


Chart 28

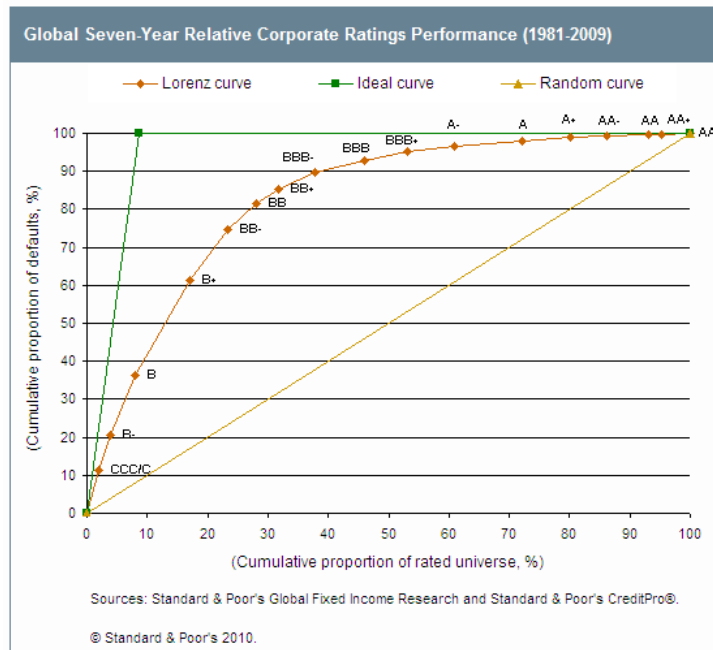
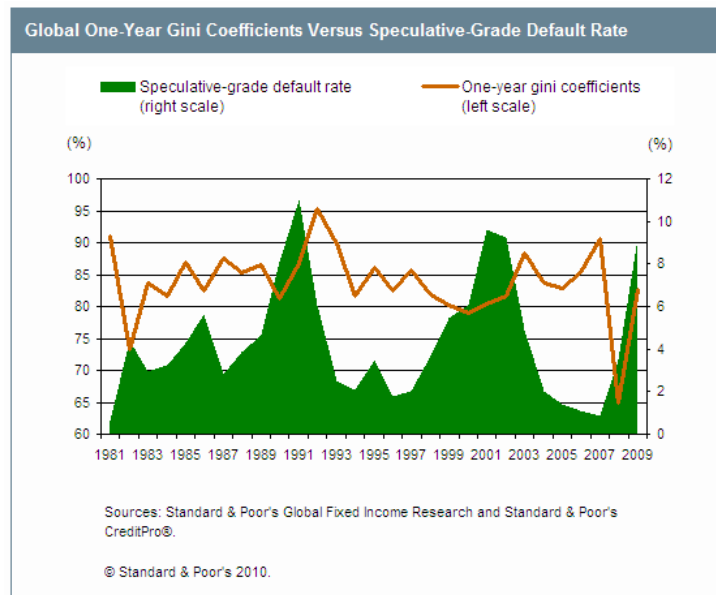


Chart 29



The pattern of one-year Gini coefficients appears to be broadly cyclical (see Chart 29). Trends in the one-year Gini ratio emerge during periods of both extremes in default pressure, which is a reflection of the natural relationship between the two concepts. In periods of high defaults, there tends to be greater variation with respect to how the defaults are distributed across the ratings spectrum, which reduces the Gini. That is, when default pressure is high, the economic conditions are such that there is an increased likelihood of companies from across the rating spectrum suffering a more rapid deterioration of credit quality. At 82.7% in 2009, the one-year Gini is fairly high in a year characterized by record defaults, certifying the effectiveness of ratings as an indicator of relative risk. Much of this decline was attributable to extraordinary turbulence among global financials, which led the average Gini in that segment to decline to 77%. Meanwhile, an average Gini ratio of 81% was recorded among global nonfinancials.

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Relationship With Recovery Rates

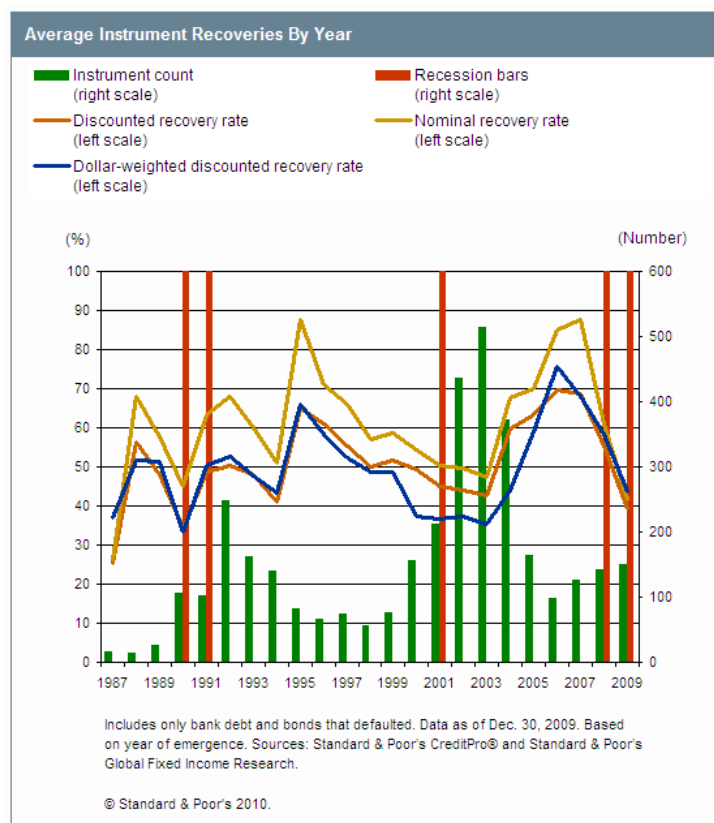
Standard & Poor's issuer credit ratings are forward-looking opinions of an obligor's overall financial capacity to pay its financial obligations (its creditworthiness). This opinion focuses on the obligor's capacity and willingness to meet its financial commitments as they become due. It does not apply to any specific financial obligation, as it does not take into account the nature and provisions of the obligation, its standing in bankruptcy or liquidation, statutory preferences, or the legality and enforceability of the obligation. Even though Standard & Poor's issuer credit ratings do not explicitly comment on recovery prospects, an investigation of the relationship between the two concepts offers some valuable insight.

Recovery in this case is defined as ultimate recovery rates following emergence from three types of default: bankruptcy filings, distressed exchanges, and defaults cured outside the grace period (30 days in the U.S.). This measure is believed to be a more accurate measure of value than the post-default trading price, which is subject to greater liquidity-related price impairment and less certainty about recovery prospects. In addition, the relationship between default rates and recovery rates broadly corresponds with expectations and has been ably documented in academic literature. One interpretation of the inverse relationship between default rates and recovery rates is offered by Altman, Resti, and Sironi (2003), who suggest that economic conditions that cause defaults to rise might also cause recovery rates to decline. Data for the U.S. indicate that speculative-grade default rates and recovery rates are inversely correlated (see Chart 30). In other words, recovery rates tend to be low in years characterized by high defaults, and vice versa. As default rates rose to a peak in 2009, recovery rates dropped to near record lows. Default and recovery rates have experienced considerable variation in 2007-2009.

Chart 30



Chart 31



A steep recoil in liquidity and a sharp fall in asset values drove ultimate recovery rates to new lows in 2009 (see Chart 31). Average recovery rates on a discounted basis across all instruments fell to 39.6% in 2009, its lowest level in 19 years, from 55% in 2008. For loans and revolvers, recovery rates declined to 63% in 2009 from 73% in 2008, whereas the equivalent rates for bonds were 34% and 51%, respectively.

Although in the aggregate, recovery rates show a fairly reliable relationship with default rates, instrument-level recovery rates can vary widely. In fact, recovery rates appear to follow a bi-modal (U-shaped) distribution, with 20% of instruments experiencing recovery rates of 0%-10%, while 14% of instruments have recoveries of par or higher (see Chart 32). Still, the implications of the securities' relative position in the capital structure are important because recovery experience varies greatly by level of seniority (see Table 29).

Chart 32

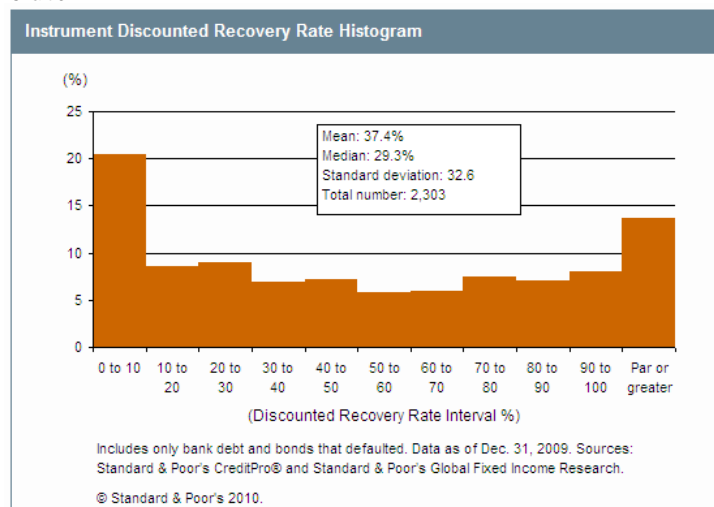


Table 29

Discounted Recovery Rates By Instrument Type (1987-2009)						
Instrument type	Mean (%)	Median (%)	Dollar-weighted rate (%)	Standard deviation	Coefficient of variation (%)	Count
Term loans	69.4	80.4	67.5	32.9	47.4	616
Revolving credit	78.0	95.4	68.0	29.5	37.9	617

All loans/facilities	73.8	87.5	67.7	31.3	42.4	1,233
Senior secured bonds	57.2	58.2	55.8	30.9	54.1	299
Senior unsecured bonds	43.0	39.2	40.4	32.8	76.4	1,084
Senior subordinated bonds	28.3	16.6	28.3	32.5	114.7	495
All other subordinated bonds	19.4	8.3	21.0	29.9	154.0	425
All bonds	37.4	29.3	38.4	32.6	87.3	2,303
Total defaulted instruments	50.1	47.9	46.6	36.5	73.0	3,536

Includes only bank debt and bonds that defaulted. Data as of Dec. 31, 2009. Based on year of emergence. Sources: Standard & Poor's CreditPro® and Standard & Poor's Global Fixed Income Research.

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Appendix I: Default Methodology And Definitions

This long-term corporate default and rating transition study uses the CreditPro® database of long-term local currency issuer credit ratings. An issuer credit rating reflects Standard & Poor's forward-looking opinion of a company's overall capacity to pay its obligations (that is, its fundamental creditworthiness). This opinion focuses on the obligor's ability and willingness to meet its financial commitments on a timely basis, and it generally indicates the likelihood of default regarding all financial obligations of the firm. It is not necessary for a company to have rated debt to be assigned an issuer credit rating.

Although the rating on a company's very senior forms of secured debt, particularly ones with strong covenants, could occasionally be rated higher than the issuer credit rating on the company, specific issues are typically rated as high as or lower than these ratings, depending on their relative priority within the company's debt structure. If they are speculative grade, issuer credit ratings are generally two notches higher than subordinated debt ratings. Otherwise, they are generally one notch higher. Therefore, although a 'BB+' issuer credit rating is generally paired with a 'BB-' subordinated debt rating, a 'AA' issuer credit rating usually corresponds to a 'AA-' subordinated rating.

Standard & Poor's ongoing enhancement of the CreditPro® database used to generate this study could lead to outcomes that differ to some degree from those reported in previous studies. However, this poses no continuity problem because each study reports statistics back to Dec. 31, 1980. Therefore, each annual default study is self-contained and effectively supersedes all previous versions.

Issuers included in this study

The study analyzes the rating histories of 13,952 companies that were rated by Standard & Poor's as of Dec. 31, 1980, or that were first rated between that date and Dec. 31, 2009. These companies include industrials, utilities, financial institutions, and insurance companies around the world with long-term local currency ratings. The analysis excludes public information ("pi") ratings and ratings based on the guarantee of another company. Structured finance vehicles, public-sector issuers, and sovereign issuers are the subject of separate default and transition studies and are also excluded from this study.

Subsidiaries with debt that is fully guaranteed by a parent or with default risk that is considered identical to that of their parents were excluded. The latter are companies with obligations that are not legally guaranteed by a parent but that have operating or financing activities that are so inextricably entwined with those of the parent that it would be impossible to imagine the default of one and not the other. At times, however, some of these subsidiaries might not yet have been covered by a parent's guarantee, or the relationship that combines the default risk of parent and subsidiary might have come to an end or might not have begun. Such subsidiaries were included for the period during which they carried a distinct and separate risk of default.

Definition of default

A default is recorded on the first occurrence of a payment default on any financial obligation, rated or unrated, other than a financial obligation subject to a bona fide commercial dispute; an exception occurs when an interest payment missed on the due date is made within the grace period. Preferred stock is not considered a financial obligation; thus, a missed preferred stock dividend is not normally equated with default. Distressed exchanges, on the other hand, are considered defaults whenever the debt holders are coerced into accepting substitute instruments with lower coupons, longer maturities, or any other diminished financial terms.

Issue ratings are usually revised to 'D' following a company's default on the corresponding obligation. In addition, 'SD' is used whenever Standard & Poor's believes that an obligor that has selectively defaulted on a specific issue or class of obligations will continue to meet its payment obligations on other issues or classes of obligations in a timely matter. 'R' indicates that an obligor is under regulatory supervision owing to its financial condition. This does not necessarily indicate a default event, but the regulator might have the power to favor one class of obligations over others or pay some obligations and not others. 'D', 'SD', and 'R' issuer ratings are deemed defaults for purposes of this study. A default is assumed to take place on the earliest of: the date Standard & Poor's revised the ratings to 'D', 'SD', or 'R'; the date a debt payment was missed; the date a distressed exchange offer was announced; or the date the debtor filed or was forced into bankruptcy.

Calculations

Static pool methodology. Standard & Poor's conducts its default studies on the basis of groupings called static pools. Static pools are formed by grouping issuers by rating category at the beginning of each year covered by the study. Each static pool is followed from that point forward. All companies included in the study are assigned to one or more static pools. When an issuer defaults, that default is assigned back to all of the static pools to which the issuer belonged.

Standard & Poor's uses the static pool methodology to avoid certain pitfalls in estimating default rates. This is to ensure that default rates account for rating migration and to allow for default rates to be calculated across multi-period time horizons. Some methods for calculating default and rating transition rates might charge defaults against only the initial rating on the issuer, ignoring more recent rating changes that supply more current information. Other methods may calculate default rates using only the most recent year's default and rating data; this method may yield comparatively low default rates during periods of high rating activity, as they ignore prior years' default activity.

The pools are static in the sense that their membership remains constant over time. Each static pool can be interpreted as a buy-and-hold portfolio. Because errors, if any, are corrected by every new update and because the criteria for inclusion or exclusion of companies in the default study are subject to minor revisions as time goes by, it is not possible to compare static pools across different studies. Therefore, every new update revises results back to the same starting date of Dec. 31, 1980, so as to avoid continuity problems.

Entities that have had ratings withdrawn—that is, revised to N.R.—are surveilled with the aim of capturing a potential default. These companies, as well as those that have defaulted, are excluded from subsequent static pools.

For instance, the 1981 static pool consists of all companies rated as of 12:01 a.m. Jan. 1, 1981. Adding those companies first rated in 1981 to the surviving members of the 1981 static pool forms the 1982 static pool. All rating changes that took place are reflected in the newly formed 1982 static pool. This same method was used to form static pools for 1983 through 2008. From Jan. 1, 1981, to Dec. 31, 2009, a total of 12,567 first-time rated organizations were added to form new static pools, while 1,933 defaulting companies and 6,430 companies with a last rating that was classified as N.R. were excluded from them.

Consider the following example: An issuer is originally rated 'BB' in mid-1986 and is downgraded to 'B' in 1988. This is followed by a rating withdrawal (N.R.) in 1990 and a default ('D') in 1993. This hypothetical company would be included in the 1987 and 1988 pools with the 'BB' rating, which it was rated at the beginning of those years; likewise, it would be included in the 1989 and 1990 pools with the 'B' rating. It would not be part of the 1986 pool because it was not rated as of the first day of that year, and it would not be included in any pool after the last day of 1990 because the rating had been withdrawn by then. Yet each of the four pools in which this company was included (1987-1990) would record its 1993 default at the appropriate time horizon.

Ratings are withdrawn when an entity's entire debt is paid off or when the program or programs rated are terminated and the relevant debt extinguished. They may also occur as a result of mergers and acquisitions. Others are withdrawn because of a lack of cooperation, particularly when a company is experiencing financial difficulties and refuses to provide all the information needed to continue surveillance on the ratings, or at the entity's request.

Default rate calculation. Annual default rates were calculated for each static pool: first in units and later as percentages with respect to the number of issuers in each rating category. Finally, these percentages were combined to obtain cumulative default rates for the 29 years covered by the study (see Tables 24-26 and 31-33).

Issuer-weighted default rates. Averages that appear in this study are calculated based on the number of issuers rather than the dollar amounts affected by defaults or rating changes. Although dollar amounts provide information about the portion of the market that is affected by defaults or rating changes, issuer-weighted averages are a more useful measure of the performance of ratings.

Many practitioners utilize statistics from this default study and CreditPro® to estimate "probability of default" and "probability of rating transition." It is important to note that Standard & Poor's ratings do not imply a specific probability of default.

Average cumulative default rate calculation. Cumulative default rates that average the experience of all static pools were derived by calculating marginal default rates, conditional on survival (survivors being nondefaulters) for each possible time horizon and for each static pool, weight averaging the conditional marginal default rates, and accumulating the average conditional marginal default rates (see Tables 24-26 and 31-33). Conditional default rates are calculated by dividing the number of issuers in a static pool that default at a specific time horizon by the number of issuers that survived (did not default) to that point in time. Weights are based on the number of issuers in each static pool. Cumulative default rates are one minus the product of the proportion of survivors (nondefaulters).

For instance, the weighted average first-year default rate for all speculative-grade rated companies for all 29 pools was 4.44%, meaning that an average of 95.56% survived one year. Similarly, the second- and third-year conditional marginal averages were 4.44% for the first 28 pools (95.56% of those companies that did not default in the first year survived the second year) and 4.10% for the first 27 pools (95.90% of those companies that did not default by the second year survived the third year), respectively. Multiplying 95.56% by 95.56% results in a 91.31% survival rate to the end of the second year, which is a two-year average cumulative default rate of 8.68%. Multiplying 95.56% by 95.90% results in a 91.65% survival rate to the end of the third year, which is a three-year average cumulative default rate of 8.36%.

Time sample

This update limits the reporting of default rates to the 15-year time horizon. However, the data was gathered for 29 years and all calculations are based on the rating experience of that period. The maturities of most obligations are much shorter than 15 years. In addition, average default statistics become less reliable at longer time horizons as the sample size becomes smaller and the cyclical nature of default rates increases its effect on averages.

Default patterns share broad similarities across all static pools, suggesting that Standard & Poor's rating standards have been consistent over time. Adverse business conditions tend to coincide with default upswings for all pools. Speculative-grade issuers have been hit the hardest by these upswings, but investment-grade default rates also increase in stressful periods.

Transition analysis

Transition rates compare issuer ratings at the beginning of a time period with ratings at the end of the period. To compute one-year rating transition rates by rating category, the rating on each entity at the end of a particular year was compared with the rating at the beginning of the same year. An issuer that remained rated for more than one year was counted as many times as the number of years it was rated. For instance, an issuer continually rated from the middle of 1984 to the middle of 1991 would appear in the six consecutive one-year transition matrices from 1985 to 1990. All 1981 static pool members still rated on Dec. 31, 2009, had 29 one-year transitions, while companies first rated between Jan. 1, 2009, and Dec. 31, 2009, had only one. Table 30 displays the summary of one-year transitions within the investment-grade and speculative-grade rating categories.

Each one-year transition matrix displays all rating movements between letter categories from the beginning of the year through year-end. For each rating listed in the matrix's left-most column, there are nine ratios listed in the rows, corresponding to the ratings from 'AAA' to 'D', plus an entry for N.R. (see Table 22).

Table 30

Summary Of One-Year Global Corporate Rating Transitions

—Investment-grade rating distribution at year-end—

	Jan. 1 investment grade (number)	Investment grade (%)	Speculative grade* (%)	Defaulted† (%)	Rating withdrawn (%)
1981	1,064	97.37	1.41	0.00	1.22
1982	1,093	93.60	3.02	0.18	3.20
1983	1,114	94.16	2.07	0.09	3.68
1984	1,174	95.32	2.30	0.17	2.21
1985	1,210	93.06	3.55	0.00	3.39
1986	1,327	89.98	3.84	0.15	6.03
1987	1,324	90.18	3.02	0.00	6.80

1988	1,337	91.77	2.77	0.00	5.46
1989	1,381	93.12	2.68	0.14	4.06
1990	1,426	94.60	2.10	0.14	3.16
1991	1,465	96.25	1.84	0.14	1.77
1992	1,617	96.42	1.18	0.00	2.41
1993	1,769	92.48	1.53	0.00	5.99
1994	1,853	95.84	0.76	0.05	3.35
1995	2,061	95.58	1.12	0.05	3.25
1996	2,263	94.48	0.62	0.00	4.90
1997	2,512	93.47	1.19	0.08	5.25
1998	2,791	90.21	2.22	0.14	7.42
1999	2,893	90.91	1.63	0.17	7.29
2000	2,958	91.72	1.72	0.24	6.32
2001	3,035	90.83	2.60	0.26	6.29
2002	3,149	89.55	4.04	0.41	6.00
2003	3,068	92.47	2.48	0.10	4.95
2004	3,181	94.09	1.00	0.03	4.87
2005	3,290	92.86	1.61	0.03	5.50
2006	3,312	93.90	2.13	0.00	4.65
2007	3,393	90.39	1.74	0.00	7.87
2008	3,398	92.14	2.03	0.41	5.41
2009	3,445	89.78	3.34	0.32	6.56
Weighted average	63,903	92.58	2.08	0.13	5.24
Median		93.06	2.07	0.09	4.95
Standard deviation		2.22	0.90	0.12	1.77
Minimum		89.55	0.62	0.00	1.22
Maximum		97.37	4.04	0.41	7.87

—Speculative-grade rating distribution at year-end—

	Jan. 1 speculative grade (number)	Investment grade (%)	Speculative grade* (%)	Defaulted† (%)	Rating withdrawn (%)
1981	321	4.67	90.03	0.62	4.67
1982	340	2.65	80.88	4.41	12.06
1983	341	3.23	83.58	2.93	10.26
1984	368	4.89	86.95	3.26	4.89
1985	418	3.83	85.89	4.31	5.98
1986	530	3.02	82.26	5.66	9.06
1987	681	3.52	79.59	2.79	14.10
1988	756	3.57	79.50	3.84	13.10
1989	751	5.19	74.84	4.66	15.31
1990	692	3.18	75.00	8.09	13.73
1991	589	2.89	78.10	11.04	7.98
1992	526	6.28	78.71	6.08	8.94
1993	561	4.82	76.65	2.50	16.04
1994	714	4.06	85.85	2.10	7.98
1995	825	3.75	84.97	3.52	7.76
1996	890	4.60	81.35	1.80	12.25
1997	1,007	4.27	81.13	1.99	12.61
1998	1,324	3.02	83.61	3.70	9.67
1999	1,666	1.38	81.94	5.46	11.22
2000	1,783	2.18	83.57	6.06	8.19
2001	1,789	1.51	79.60	9.61	9.28
2002	1,713	1.93	79.98	9.22	8.87
2003	1,809	1.55	82.20	4.92	11.33
2004	1,926	2.24	84.63	2.02	11.11
2005	2,110	3.04	82.61	1.42	12.94
2006	2,255	1.45	82.71	1.11	14.06
2007	2,397	3.05	82.56	0.88	13.52
2008	2,528	2.13	84.18	3.48	10.21
2009	2,415	1.36	78.47	9.23	10.93
Weighted average	34,025	2.67	81.79	4.44	11.06
Median		3.05	82.20	3.70	10.93
Standard deviation		1.29	3.48	2.82	2.95
Minimum		1.36	74.84	0.62	4.67
Maximum		6.28	90.03	11.04	16.04

*Fallen angels that survived to Jan. 1 of the year after they were downgraded. †Investment-grade defaulters. ‡Rising stars. Source: Standard & Poor's Global Fixed Income Research and Standard & Poor's CreditPro®.

Multi-year transitions

Multi-year transitions were also calculated for periods of two up to 20 years. In this case, the rating at the beginning of the multi-year period was compared with the rating at the end. For example, three-year transition matrices were the result of comparing ratings at the beginning of the years 1981-2007 with the ratings at the end of the years 1983-2009. Otherwise, the methodology was identical to that used for single-year transitions.

Average transition matrices were calculated on the basis of the multi-year matrices just described. These average matrices are a true summary, the ratios of which represent the historical incidence of the ratings listed on the first column, changing to the ones listed on the top row over the course of the multi-year period (see Tables 34-41).

Comparing transition rates with default rates

Rating transition rates may be compared with the marginal and cumulative default rates described in the previous section. For example, note that the one-year default rate column of Table 24 is equivalent to column 'D' of the average one-year transition matrix found in Table 21 and Table 34. However, the two-year default rate column of Table 24 is not the same as column 'D' of the average two-year transition matrix found in Table 35. This difference results from the different static pools used to calculate transition to default and average cumulative default rates.

Average cumulative default rates are the summary of all static pools from 1981-2009, while the number of pools used in the average transition rate is limited by the transition's time horizon.

Initial-to-last transitions and default rates

These transition rates compare issuer ratings from the time of first rating to the last rating, regardless of the time elapsed in the interim. They provide a roadmap to all of the historically observed rating 'states' inhabited by corporate ratings during their rated lifetime. Tables 46-49 display the initial-to-last transitions separately for three broad sectors, including nonfinancials, financial institutions, and insurance. Initial-to-last default rates are calculated based on the initial rating of each defaulter, and encompass varying time horizons. For example, in Table 48, a default rate of 0.75% refers to the total share of defaulting issuers from the 133 financial institutions that received a first rating of 'AAA' in the previous 29 years.

Table 31

Static Pool Cumulative Global Corporate Default Rates Among All Ratings, 1981-2009

Rating: All rated																
Year	Number of issuers	—Time horizon (years)—														
		1	2	3	4	5	6	7	8	9	10	11	12	13	14	15
1981	1,385	0.14	1.37	2.09	2.89	3.54	4.91	5.34	6.14	6.71	7.80	9.46	9.96	10.47	10.54	10.76
1982	1,433	1.19	1.88	2.72	3.42	4.82	5.16	5.93	6.42	7.54	9.35	9.84	10.40	10.47	10.68	10.68
1983	1,455	0.76	1.58	2.41	3.99	4.40	5.43	5.91	7.01	9.00	9.55	10.10	10.17	10.38	10.38	10.45
1984	1,542	0.91	1.95	3.76	4.22	5.25	5.97	7.13	8.82	9.40	9.99	10.05	10.25	10.25	10.38	10.38
1985	1,628	1.11	3.01	3.56	4.91	5.77	7.06	8.91	9.46	9.95	10.01	10.32	10.32	10.44	10.44	10.75
1986	1,857	1.72	2.32	3.61	4.47	5.87	7.75	8.40	8.94	9.10	9.37	9.48	9.69	9.80	10.07	10.50
1987	2,005	0.95	2.39	3.84	5.69	8.23	9.33	10.07	10.32	10.67	10.82	11.02	11.12	11.42	11.92	12.97
1988	2,093	1.39	3.01	5.16	8.22	9.32	10.08	10.32	10.80	10.94	11.23	11.42	11.75	12.47	13.43	14.38
1989	2,132	1.74	4.32	7.83	9.01	9.80	10.13	10.55	10.69	10.98	11.35	11.68	12.34	13.32	14.21	14.68
1990	2,118	2.74	6.14	7.55	8.36	8.69	9.16	9.25	9.63	10.10	10.48	11.28	12.28	13.27	13.79	13.93
1991	2,054	3.26	4.77	5.31	5.65	6.18	6.28	6.62	7.06	7.45	8.13	9.15	10.22	10.71	10.91	11.05
1992	2,143	1.49	2.01	2.33	2.94	3.08	3.41	3.83	4.15	4.85	5.83	6.91	7.33	7.51	7.65	7.79
1993	2,330	0.60	1.07	1.97	2.19	2.58	3.00	3.43	4.21	5.28	6.39	6.82	7.00	7.17	7.38	7.51
1994	2,567	0.62	1.75	2.14	2.61	3.08	3.93	4.95	6.23	7.40	7.91	8.14	8.30	8.57	8.69	9.27
1995	2,886	1.04	1.52	2.01	2.60	3.53	4.50	6.31	7.66	8.25	8.49	8.70	8.94	9.04	9.56	10.43
1996	3,153	0.51	1.08	1.84	2.95	3.93	5.65	7.14	7.80	8.09	8.31	8.53	8.66	9.20	10.05	
1997	3,519	0.63	1.62	2.90	4.26	6.17	7.90	8.81	9.09	9.32	9.61	9.75	10.34	11.20		
1998	4,115	1.29	3.21	5.15	7.78	9.96	11.18	11.66	11.98	12.30	12.44	13.07	14.02			
1999	4,559	2.11	4.58	7.90	10.75	12.22	12.77	13.12	13.47	13.62	14.41	15.57				
2000	4,741	2.43	5.97	9.07	10.74	11.43	11.88	12.23	12.44	13.31	14.70					
2001	4,824	3.73	7.23	9.16	9.87	10.39	10.74	10.95	11.80	13.27						
2002	4,862	3.52	5.51	6.29	6.75	7.10	7.30	8.23	9.81							
2003	4,877	1.89	2.69	3.16	3.55	3.75	4.72	6.50								
2004	5,107	0.78	1.29	1.68	1.92	2.94	4.88									
2005	5,400	0.57	0.96	1.30	2.50	4.72										
2006	5,567	0.45	0.84	2.28	4.89											
2007	5,790	0.36	1.97	5.13												
2008	5,926	1.72	5.38													
2009	5,860	3.99														
Summary statistics																
Marginal average		1.63	1.63	1.48	1.28	1.08	0.95	0.83	0.74	0.69	0.66	0.58	0.49	0.47	0.43	0.45
Cumulative average		1.63	3.23	4.67	5.89	6.90	7.79	8.55	9.23	9.86	10.45	10.97	11.40	11.82	12.20	12.60
Standard deviation		1.07	1.83	2.40	2.77	2.93	2.85	2.67	2.55	2.48	2.30	2.06	1.77	1.74	1.96	2.14
Median		1.19	2.17	3.56	4.37	5.77	6.67	8.23	9.02	9.32	9.58	9.84	10.24	10.44	10.41	10.68
Minimum		0.14	0.84	1.30	1.92	2.58	3.00	3.43	4.15	4.85	5.83	6.82	7.00	7.17	7.38	7.51
Maximum		3.99	7.23	9.16	10.75	12.22	12.77	13.12	13.47	13.62	14.70	15.57	14.02	13.32	14.21	14.68

Table 32

Static Pool Cumulative Global Corporate Default Rates Among All Investment-Grade Ratings, 1981-2009

Rating: Investment grade																
Year	Number of issuers	—Time horizon (years)—														
		1	2	3	4	5	6	7	8	9	10	11	12	13	14	15
1981	1,064	0.00	0.38	0.38	0.47	0.66	1.03	1.32	2.07	2.26	3.01	4.04	4.32	4.51	4.51	4.70
1982	1,093	0.18	0.27	0.37	0.55	1.01	1.28	2.01	2.20	3.02	4.12	4.39	4.67	4.67	4.85	4.85
1983	1,114	0.09	0.36	0.45	0.90	1.08	1.62	1.71	2.51	3.59	3.95	4.22	4.22	4.40	4.40	4.40
1984	1,174	0.17	0.26	0.60	0.77	1.19	1.36	2.04	2.98	3.32	3.58	3.58	3.75	3.75	3.83	3.83
1985	1,210	0.00	0.17	0.25	0.83	0.99	1.74	2.73	3.06	3.31	3.31	3.55	3.55	3.72	3.72	3.88
1986	1,327	0.15	0.15	0.53	0.68	1.21	2.11	2.49	2.64	2.64	2.86	2.86	3.01	3.09	3.24	3.54
1987	1,324	0.00	0.15	0.38	0.83	1.74	2.27	2.42	2.49	2.64	2.64	2.79	2.87	3.02	3.17	4.00
1988	1,337	0.00	0.22	0.37	0.97	1.50	1.65	1.72	1.87	1.87	2.02	2.02	2.17	2.32	2.99	3.74
1989	1,381	0.14	0.29	0.58	1.16	1.30	1.38	1.52	1.52	1.52	1.74	1.88	2.68	3.33	3.69	
1990	1,426	0.14	0.35	0.77	0.98	1.05	1.19	1.19	1.19	1.26	1.54	1.89	2.59	3.16	3.51	3.58
1991	1,465	0.14	0.27	0.41	0.48	0.61	0.61	0.61	0.68	1.02	1.37	2.05	2.59	2.87	2.94	3.00
1992	1,617	0.00	0.06	0.12	0.25	0.25	0.25	0.31	0.56	0.80	1.30	1.79	2.04	2.10	2.23	2.41
1993	1,769	0.00	0.06	0.17	0.17	0.23	0.40	0.73	1.07	1.64	2.26	2.49	2.49	2.60	2.71	2.77
1994	1,853	0.05	0.16	0.16	0.27	0.38	0.81	1.08	1.62	2.21	2.48	2.54	2.59	2.75	2.81	3.18
1995	2,061	0.05	0.05	0.10	0.19	0.68	0.92	1.60	2.18	2.43	2.47	2.52	2.67	2.72	3.11	3.49
1996	2,263	0.00	0.04	0.09	0.49	0.80	1.50	2.03	2.25	2.34	2.39	2.52	2.52	2.92	3.40	
1997	2,512	0.08	0.16	0.48	0.80	1.35	2.07	2.43	2.51	2.55	2.67	2.67	3.07	3.50		
1998	2,791	0.14	0.43	0.79	1.36	2.33	2.76	2.94	3.05	3.12	3.12	3.58	4.16			
1999	2,893	0.17	0.48	0.93	1.87	2.32	2.45	2.56	2.70	2.70	3.21	3.87				
2000	2,958	0.24	0.61	1.52	1.99	2.10	2.23	2.37	2.37	2.94	3.62					

2001	3,035	0.26	1.22	1.65	1.81	1.98	2.11	2.11	2.64	3.36
2002	3,149	0.41	0.76	0.89	1.02	1.08	1.08	1.62	2.29	
2003	3,068	0.10	0.20	0.29	0.33	0.33	0.85	1.56		
2004	3,181	0.03	0.09	0.13	0.13	0.63	1.26			
2005	3,290	0.03	0.06	0.06	0.61	1.19				
2006	3,312	0.00	0.00	0.48	0.91					
2007	3,393	0.00	0.47	0.91						
2008	3,398	0.41	0.79							
2009	3,445	0.32								

Summary statistics															
Marginal average	0.13	0.22	0.25	0.31	0.33	0.34	0.32	0.31	0.30	0.31	0.29	0.24	0.24	0.24	0.27
Cumulative average	0.13	0.35	0.60	0.92	1.25	1.58	1.90	2.20	2.50	2.80	3.08	3.31	3.55	3.78	4.04
Standard deviation	0.12	0.28	0.40	0.51	0.61	0.66	0.70	0.73	0.80	0.84	0.86	0.85	0.76	0.70	0.67
Median	0.09	0.24	0.41	0.79	1.08	1.37	1.72	2.27	2.55	2.66	2.67	2.77	3.02	3.29	3.69
Minimum	0.00	0.00	0.06	0.13	0.23	0.25	0.31	0.56	0.80	1.30	1.74	1.88	2.10	2.23	2.41
Maximum	0.41	1.22	1.65	1.99	2.33	2.76	2.94	3.06	3.59	4.12	4.39	4.67	4.67	4.85	4.85

Table 33
Static Pool Cumulative Global Corporate Default Rates Among All Speculative-Grade Ratings, 1981-2009

Rating: Speculative grade																
(%)																
—Time horizon (years)—																
Year	Number of issuers	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15
1981	321	0.62	4.67	7.79	10.90	13.08	17.76	18.69	19.63	21.50	23.68	27.41	28.66	30.22	30.53	30.84
1982	340	4.41	7.06	10.29	12.65	17.06	17.65	18.53	20.00	22.06	26.18	27.35	28.82	29.12	29.41	29.41
1983	341	2.93	5.57	8.80	14.08	15.25	17.89	19.65	21.70	26.69	27.86	29.33	29.62	29.91	29.91	30.21
1984	368	3.26	7.34	13.86	15.22	18.21	20.65	23.37	27.45	28.80	30.43	30.71	30.98	30.98	31.25	31.25
1985	418	4.31	11.24	13.16	16.75	19.62	22.49	26.79	27.99	29.19	29.43	29.90	29.90	29.90	29.90	30.62
1986	530	5.66	7.74	11.32	13.96	17.55	21.89	23.21	24.72	25.28	25.66	26.04	26.42	26.60	27.17	27.92
1987	681	2.79	6.75	10.57	15.12	20.85	23.05	24.96	25.55	26.28	26.73	27.02	27.17	27.75	28.93	30.40
1988	756	3.84	7.94	13.62	21.03	23.15	25.00	25.53	26.59	26.98	27.51	28.04	28.70	30.42	31.88	33.20
1989	751	4.66	11.72	21.17	23.44	25.43	26.23	27.16	27.56	28.36	29.43	29.96	31.56	32.89	34.22	34.89
1990	692	8.09	18.06	21.53	23.55	24.42	25.58	25.87	27.02	28.32	28.90	30.64	32.23	34.10	34.97	35.26
1991	589	11.04	15.96	17.49	18.51	20.03	20.37	21.56	22.92	23.43	24.96	26.83	29.20	30.22	30.73	31.07
1992	526	6.08	7.98	9.13	11.22	11.79	13.12	14.64	15.21	17.30	19.77	22.62	23.57	24.14	24.33	24.33
1993	561	2.50	4.28	7.66	8.56	9.98	11.23	11.94	14.08	16.76	19.43	20.50	21.21	21.57	22.10	22.46
1994	714	2.10	5.88	7.28	8.68	10.08	12.04	14.99	18.21	20.87	21.99	22.69	23.11	23.67	23.95	25.07
1995	825	3.52	5.21	6.79	8.61	10.67	13.45	18.06	21.33	22.79	23.52	24.12	24.61	24.85	25.70	27.76
1996	890	1.80	3.71	6.29	9.21	11.91	16.18	20.11	21.91	22.70	23.37	23.82	24.27	25.17	26.97	
1997	1,007	1.99	5.26	8.94	12.91	18.17	22.44	24.73	25.52	26.22	26.91	27.41	28.50	30.39		
1998	1,324	3.70	9.06	14.35	21.30	26.06	28.93	30.06	30.82	31.65	32.10	33.08	34.82			
1999	1,666	5.46	11.70	19.99	26.17	29.41	30.67	31.45	32.17	32.59	33.85	35.89				
2000	1,783	6.06	14.86	21.59	25.24	26.92	27.87	28.60	29.16	30.51	33.09					
2001	1,789	9.61	17.44	21.91	23.53	24.65	25.38	25.94	27.33	30.07						
2002	1,713	9.22	14.24	16.23	17.28	18.16	18.74	20.37	23.64							
2003	1,809	4.92	6.91	8.02	9.01	9.56	11.28	14.87								
2004	1,926	2.02	3.27	4.26	4.88	6.75	10.85									
2005	2,110	1.42	2.37	3.22	5.45	10.24										
2006	2,255	1.11	2.08	4.92	10.73											
2007	2,397	0.88	4.09	11.10												
2008	2,528	3.48	11.55													
2009	2,415	9.23														

Summary statistics															
Marginal average	4.44	4.44	4.10	3.47	2.89	2.51	2.20	1.95	1.84	1.72	1.51	1.30	1.23	1.09	1.09
Cumulative average	4.44	8.68	12.42	15.46	17.90	19.96	21.72	23.25	24.66	25.96	27.08	28.02	28.91	29.68	30.45
Standard deviation	2.82	4.58	5.70	6.29	6.45	5.99	5.29	4.75	4.42	4.07	3.81	3.55	3.47	3.62	3.65
Median	3.70	7.20	10.57	14.02	18.16	20.51	23.21	25.12	26.28	26.82	27.41	28.68	29.90	29.66	30.40
Minimum	0.62	2.08	3.22	4.88	6.75	10.85	11.94	14.08	16.76	19.43	20.50	21.21	21.57	22.10	22.46
Maximum	11.04	18.06	21.91	26.17	29.41	30.67	31.45	32.17	32.59	33.85	35.89	34.82	34.10	34.97	35.26

Table 34
Average One-Year Global Corporate Transition Matrix, 1981-2009

(%)									
—One-year transition rates—									
From/to	AAA	AA	A	BBB	BB	B	CCC/C	D	NR
AAA	88.21 (5.09)	7.73 (4.84)	0.52 (0.87)	0.06 (0.18)	0.08 (0.26)	0.03 (0.20)	0.06 (0.40)	0.00 (0.00)	3.31 (2.41)
AA	0.56 (0.54)	86.60 (4.87)	8.10 (3.99)	0.55 (0.75)	0.06 (0.26)	0.09 (0.25)	0.02 (0.07)	0.02 (0.08)	4.00 (1.92)
A	0.04 (0.14)	1.95 (1.16)	87.05 (3.47)	5.47 (2.13)	0.40 (0.50)	0.16 (0.36)	0.02 (0.07)	0.08 (0.12)	4.83 (1.96)
BBB	0.01 (0.07)	0.14 (0.24)	3.76 (2.34)	84.16 (4.44)	4.13 (1.80)	0.70 (1.05)	0.16 (0.25)	0.26 (0.27)	6.68 (1.86)
BB	0.02 (0.06)	0.05 (0.16)	0.18 (0.40)	5.17 (2.44)	75.52 (4.94)	7.48 (4.78)	0.79 (0.93)	0.97 (1.06)	9.82 (2.92)
B	0.00 (0.00)	0.04 (0.13)	0.15 (0.38)	0.24 (0.34)	5.43 (2.59)	72.73 (5.25)	4.65 (2.64)	4.93 (3.27)	11.83 (3.07)
CCC/C	0.00	0.00	0.21	0.31	0.88	11.28	44.98	27.98	14.37

(0.00)	(0.00)	(0.74)	(1.05)	(1.34)	(7.86)	(12.81)	(12.90)	(7.57)
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Numbers in parentheses are standard deviations. Sources: Standard & Poor's Global Fixed Income Research and Standard & Poor's CreditPro®.

Table 35

Average Two-Year Global Corporate Transition Matrix, 1981-2009

(%)	—Two-year transition rates—								
From/to	AAA	AA	A	BBB	BB	B	CCC/C	D	NR
AAA	77.86	13.58	1.47	0.11	0.17	0.06	0.11	0.03	6.61
	(7.07)	(6.57)	(1.46)	(0.28)	(0.37)	(0.27)	(0.48)	(0.20)	(4.22)
AA	0.98	75.58	13.93	1.43	0.21	0.18	0.03	0.08	7.58
	(0.67)	(6.91)	(5.35)	(1.18)	(0.46)	(0.35)	(0.07)	(0.12)	(3.04)
A	0.05	3.56	76.09	9.34	0.91	0.35	0.06	0.20	9.43
	(0.10)	(1.86)	(5.22)	(2.93)	(0.95)	(0.61)	(0.11)	(0.21)	(3.04)
BBB	0.03	0.28	6.93	71.13	6.41	1.48	0.27	0.70	12.76
	(0.15)	(0.33)	(3.51)	(6.76)	(2.47)	(1.56)	(0.36)	(0.60)	(2.86)
BB	0.01	0.06	0.42	9.09	57.12	10.81	1.28	2.96	18.24
	(0.07)	(0.18)	(0.82)	(3.73)	(5.70)	(3.76)	(1.06)	(2.33)	(3.80)
B	0.00	0.06	0.27	0.61	9.33	52.74	5.24	10.37	21.38
	(0.00)	(0.17)	(0.55)	(0.60)	(3.51)	(6.53)	(2.74)	(5.76)	(4.96)
CCC/C	0.00	0.00	0.34	0.86	1.31	15.71	24.16	35.01	22.62
	(0.00)	(0.00)	(0.80)	(2.22)	(1.99)	(7.52)	(12.10)	(13.28)	(10.52)

Numbers in parentheses are standard deviations. Sources: Standard & Poor's Global Fixed Income Research and Standard & Poor's CreditPro®.

Table 36

Average Three-Year Global Corporate Transition Matrix, 1981-2009

(%)	—Three-year transition rates—								
From/to	AAA	AA	A	BBB	BB	B	CCC/C	D	NR
AAA	68.58	18.57	2.49	0.32	0.15	0.06	0.12	0.12	9.60
	(7.78)	(7.50)	(1.61)	(0.85)	(0.40)	(0.30)	(0.52)	(0.35)	(5.04)
AA	1.35	66.52	17.99	2.27	0.38	0.25	0.04	0.12	11.10
	(0.79)	(7.34)	(5.08)	(1.45)	(0.68)	(0.53)	(0.08)	(0.15)	(4.22)
A	0.08	4.70	67.20	11.84	1.43	0.57	0.11	0.32	13.74
	(0.12)	(2.32)	(6.14)	(2.95)	(1.17)	(0.85)	(0.17)	(0.27)	(3.79)
BBB	0.03	0.44	9.13	60.88	7.52	2.16	0.38	1.18	18.29
	(0.10)	(0.54)	(4.03)	(7.62)	(2.71)	(1.80)	(0.51)	(0.87)	(3.53)
BB	0.01	0.07	0.71	11.40	43.82	11.89	1.41	5.21	25.48
	(0.09)	(0.23)	(1.11)	(4.35)	(5.76)	(3.98)	(1.12)	(3.46)	(4.08)
B	0.01	0.05	0.37	1.16	11.37	38.34	4.69	14.87	29.14
	(0.13)	(0.17)	(0.81)	(0.96)	(3.65)	(6.14)	(2.49)	(7.03)	(6.12)
CCC/C	0.00	0.00	0.30	0.97	2.12	16.28	12.71	39.89	27.72
	(0.00)	(0.00)	(0.89)	(2.41)	(3.50)	(7.75)	(11.53)	(13.62)	(11.99)

Numbers in parentheses are standard deviations. Sources: Standard & Poor's Global Fixed Income Research and Standard & Poor's CreditPro®.

Table 37

Average Five-Year Global Corporate Transition Matrix, 1981-2009

(%)	—Five-year transition rates—								
From/to	AAA	AA	A	BBB	BB	B	CCC/C	D	NR
AAA	53.83	23.38	5.16	0.92	0.15	0.09	0.09	0.31	16.08
	(6.78)	(6.95)	(2.30)	(1.85)	(0.40)	(0.37)	(0.33)	(0.58)	(6.50)
AA	1.68	51.59	23.70	4.05	0.60	0.37	0.05	0.30	17.67
	(0.91)	(6.52)	(4.55)	(1.80)	(0.73)	(0.74)	(0.12)	(0.35)	(4.90)
A	0.12	5.86	53.56	15.15	2.34	0.91	0.17	0.68	21.21
	(0.11)	(2.54)	(6.99)	(2.45)	(1.30)	(1.18)	(0.23)	(0.45)	(4.21)
BBB	0.04	0.75	10.91	47.04	8.11	2.89	0.47	2.51	27.29
	(0.11)	(0.67)	(4.38)	(7.80)	(2.49)	(1.88)	(0.59)	(1.31)	(4.56)
BB	0.02	0.11	1.45	12.38	28.14	11.06	1.53	9.61	35.72
	(0.09)	(0.29)	(1.26)	(4.16)	(5.38)	(3.33)	(1.51)	(4.68)	(4.43)
B	0.03	0.05	0.48	2.10	10.95	21.44	2.93	22.26	39.76
	(0.28)	(0.15)	(1.21)	(1.57)	(3.03)	(5.50)	(1.48)	(8.17)	(6.43)
CCC/C	0.00	0.00	0.28	1.11	3.47	11.59	3.40	46.29	33.87
	(0.00)	(0.00)	(0.87)	(4.26)	(3.33)	(5.34)	(8.18)	(14.30)	(12.56)

Numbers in parentheses are standard deviations. Sources: Standard & Poor's Global Fixed Income Research and Standard & Poor's CreditPro®.

Table 38

Average Seven-Year Global Corporate Transition Matrix, 1981-2009

(%)	—Seven-year transition rates—								
From/to	AAA	AA	A	BBB	BB	B	CCC/C	D	NR
AAA	42.80	26.07	7.36	1.78	0.23	0.06	0.13	0.45	21.12
	(4.72)	(5.24)	(2.49)	(2.16)	(0.51)	(0.29)	(0.36)	(0.75)	(7.19)
AA	1.75	40.43	26.87	5.34	0.82	0.33	0.03	0.51	23.91
	(1.03)	(4.70)	(3.78)	(1.62)	(0.73)	(0.60)	(0.09)	(0.56)	(4.83)
A	0.12	5.93	44.03	16.84	2.99	1.08	0.17	1.18	27.66
	(0.13)	(2.12)	(6.37)	(1.87)	(1.36)	(1.29)	(0.24)	(0.55)	(3.72)
BBB	0.06	0.99	10.72	38.20	8.00	2.97	0.43	3.96	34.67
	(0.18)	(0.54)	(3.99)	(6.26)	(0.84)	(1.35)	(0.54)	(1.57)	(3.71)
BB	0.00	0.11	1.83	12.02	19.37	9.52	1.16	14.13	41.86
	(0.00)	(0.31)	(1.41)	(4.47)	(4.61)	(2.83)	(1.04)	(4.67)	(4.15)
B	0.01	0.04	0.69	2.28	8.64	12.77	1.83	28.38	45.36
	(0.24)	(0.15)	(1.03)	(2.09)	(2.35)	(3.10)	(0.96)	(7.01)	(6.21)

CCC/C	0.00	0.00	0.34	1.35	3.81	7.11	1.69	52.58	33.11
	(0.00)	(0.00)	(0.96)	(4.87)	(2.59)	(3.65)	(4.60)	(12.33)	(10.85)

Numbers in parentheses are standard deviations. Sources: Standard & Poor's Global Fixed Income Research and Standard & Poor's CreditPro®.

Table 39

Average 10-Year Global Corporate Transition Matrix, 1981-2009

(%)	—10-year transition rates—								
From/to	AAA	AA	A	BBB	BB	B	CCC/C	D	NR
AAA	29.88	26.74	10.28	3.51	0.15	0.00	0.04	0.66	28.75
	(3.64)	(4.45)	(2.28)	(2.36)	(0.29)	(0.00)	(0.15)	(0.85)	(7.40)
AA	1.55	29.04	27.83	7.44	1.14	0.37	0.02	0.81	31.80
	(0.81)	(3.97)	(2.28)	(1.33)	(0.90)	(0.37)	(0.11)	(0.73)	(4.27)
A	0.17	5.81	33.98	16.91	3.30	1.10	0.11	1.98	36.65
	(0.19)	(1.73)	(3.98)	(1.51)	(0.57)	(0.97)	(0.17)	(0.78)	(3.80)
BBB	0.04	1.30	10.67	28.55	7.24	2.75	0.27	5.76	43.42
	(0.15)	(0.72)	(3.74)	(3.84)	(1.19)	(1.08)	(0.25)	(1.59)	(3.09)
BB	0.03	0.10	2.17	11.32	12.31	6.79	0.66	19.16	47.47
	(0.11)	(0.23)	(1.38)	(3.65)	(3.35)	(2.51)	(0.56)	(4.34)	(4.22)
B	0.00	0.03	0.76	2.80	6.20	6.81	0.96	33.57	48.86
	(0.00)	(0.08)	(0.97)	(2.04)	(1.42)	(2.35)	(0.83)	(5.98)	(5.50)
CCC/C	0.00	0.00	0.27	0.68	4.07	2.30	0.41	54.07	38.21
	(0.00)	(0.00)	(0.97)	(1.92)	(4.39)	(3.26)	(0.65)	(10.47)	(11.38)

Numbers in parentheses are standard deviations. Sources: Standard & Poor's Global Fixed Income Research and Standard & Poor's CreditPro®.

Table 40

Average 15-Year Global Corporate Transition Matrix, 1981-2009

(%)	—15-year transition rates—								
From/to	AAA	AA	A	BBB	BB	B	CCC/C	D	NR
AAA	17.46	24.81	16.13	2.96	0.51	0.26	0.00	1.02	36.86
	(1.95)	(4.27)	(2.76)	(0.80)	(0.52)	(0.58)	(0.00)	(1.02)	(4.26)
AA	1.33	18.18	24.97	9.70	1.50	0.66	0.02	1.22	42.43
	(0.82)	(2.18)	(2.15)	(2.51)	(0.93)	(0.42)	(0.05)	(0.72)	(3.63)
A	0.19	4.85	25.13	16.54	3.55	1.26	0.07	2.88	45.53
	(0.27)	(1.41)	(2.47)	(1.05)	(0.97)	(0.66)	(0.11)	(0.84)	(3.03)
BBB	0.00	1.30	9.44	21.23	5.35	2.53	0.19	7.95	52.02
	(0.00)	(0.38)	(2.51)	(1.73)	(1.01)	(1.39)	(0.24)	(1.03)	(2.59)
BB	0.00	0.18	2.75	9.47	6.31	3.87	0.39	21.59	55.44
	(0.00)	(0.30)	(1.26)	(2.59)	(1.31)	(1.96)	(0.47)	(4.79)	(2.11)
B	0.00	0.00	0.76	3.77	3.87	3.01	0.76	34.14	53.69
	(0.00)	(0.00)	(0.65)	(1.31)	(1.26)	(1.05)	(0.38)	(4.03)	(5.07)
CCC/C	0.00	0.00	0.98	1.57	2.36	1.18	0.39	55.71	37.80
	(0.00)	(0.00)	(3.07)	(1.54)	(4.81)	(1.20)	(0.97)	(9.75)	(10.95)

Numbers in parentheses are standard deviations. Sources: Standard & Poor's Global Fixed Income Research and Standard & Poor's CreditPro®.

Table 41

Average 20-Year Global Corporate Transition Matrix, 1981-2009

(%)	—20-year transition rates—								
From/to	AAA	AA	A	BBB	BB	B	CCC/C	D	NR
AAA	8.98	19.79	18.92	3.40	0.70	0.78	0.00	1.66	45.77
	(1.67)	(3.97)	(5.05)	(2.12)	(0.64)	(0.64)	(0.00)	(1.27)	(7.32)
AA	1.26	9.93	20.02	12.64	1.68	0.74	0.10	2.45	51.19
	(0.66)	(1.98)	(3.06)	(1.96)	(0.27)	(0.48)	(0.20)	(0.97)	(2.76)
A	0.23	2.84	17.83	15.00	3.58	2.11	0.14	5.05	53.21
	(0.25)	(1.20)	(2.44)	(1.31)	(0.73)	(0.70)	(0.17)	(0.98)	(1.86)
BBB	0.00	1.03	7.34	17.52	4.24	1.75	0.23	11.06	56.84
	(0.00)	(0.52)	(1.32)	(1.65)	(1.18)	(1.01)	(0.32)	(1.40)	(2.36)
BB	0.00	0.13	2.15	6.71	3.81	3.07	0.26	27.09	56.77
	(0.00)	(0.24)	(0.97)	(2.08)	(1.45)	(0.86)	(0.37)	(4.05)	(1.46)
B	0.00	0.00	0.46	3.25	2.64	2.02	0.38	38.08	53.17
	(0.00)	(0.00)	(0.28)	(0.93)	(0.60)	(0.88)	(0.38)	(4.40)	(5.25)
CCC/C	0.00	0.00	0.33	1.00	3.01	0.67	0.00	58.53	36.45
	(0.00)	(0.00)	(0.59)	(0.92)	(5.67)	(0.81)	(0.00)	(10.40)	(12.94)

Numbers in parentheses are standard deviations. Sources: Standard & Poor's Global Fixed Income Research and Standard & Poor's CreditPro®.

Table 42

Average Multi-Year Global Corporate Transition Matrices, 1981-2009—All Financials

From/to	AAA	AA	A	BBB	BB	B	CCC/C	D	NR
One year									
AAA	89.02	7.45	0.35	0.09	0.09	0.04	0.09	0.00	2.87
	(5.67)	(5.26)	(1.32)	(0.31)	(0.48)	(0.24)	(0.48)	(0.00)	(2.47)
AA	0.56	86.47	8.56	0.42	0.03	0.03	0.05	0.05	3.84
	(0.87)	(5.35)	(4.99)	(1.06)	(0.07)	(0.07)	(0.30)	(0.11)	(2.11)
A	0.02	2.91	87.17	4.02	0.29	0.10	0.02	0.16	5.32
	(0.37)	(1.80)	(4.10)	(3.28)	(0.90)	(0.18)	(0.04)	(0.19)	(2.56)
BBB	0.00	0.35	5.32	82.04	3.27	0.67	0.21	0.44	7.70
	(0.00)	(1.02)	(3.30)	(6.32)	(4.65)	(1.89)	(0.45)	(1.04)	(2.92)
BB	0.00	0.17	0.30	7.30	73.85	4.98	1.16	1.03	11.21
	(0.00)	(0.34)	(1.37)	(6.69)	(9.86)	(4.61)	(2.81)	(1.84)	(6.72)
B	0.00	0.07	0.21	0.55	9.42	70.41	3.33	3.81	12.20

	(0.00)	(0.25)	(1.40)	(3.01)	(6.35)	(13.88)	(7.06)	(6.58)	(7.82)
CCC/C	0.00	0.00	0.00	0.00	2.28	14.45	46.77	17.49	19.01
	(0.00)	(0.00)	(0.00)	(0.00)	(5.97)	(13.45)	(32.40)	(25.33)	(16.85)
Three year									
AAA	70.12	18.73	1.81	0.33	0.14	0.05	0.19	0.19	8.46
	(11.57)	(9.37)	(3.19)	(2.05)	(0.55)	(0.30)	(0.67)	(0.51)	(5.06)
AA	1.45	66.98	18.23	1.98	0.15	0.14	0.05	0.20	10.81
	(1.47)	(7.32)	(7.08)	(2.32)	(0.40)	(0.53)	(0.10)	(0.28)	(4.32)
A	0.06	7.17	68.03	7.57	1.01	0.31	0.12	0.61	15.12
	(0.47)	(3.10)	(7.60)	(3.23)	(2.10)	(1.16)	(0.39)	(0.64)	(5.71)
BBB	0.00	1.04	13.80	56.53	4.51	1.21	0.45	1.53	20.93
	(0.00)	(2.37)	(6.02)	(7.25)	(3.97)	(2.83)	(1.51)	(1.86)	(5.83)
BB	0.00	0.21	1.35	16.78	40.03	6.37	1.50	4.61	29.16
	(0.00)	(0.58)	(2.62)	(8.05)	(15.51)	(5.18)	(2.54)	(6.33)	(12.84)
B	0.00	0.00	0.60	3.00	19.74	36.74	2.83	9.10	27.98
	(0.00)	(0.00)	(2.05)	(5.09)	(8.16)	(18.90)	(4.62)	(13.23)	(14.35)
CCC/C	0.00	0.00	0.45	0.89	3.13	20.09	13.84	21.88	39.73
	(0.00)	(0.00)	(9.62)	(3.21)	(5.94)	(13.23)	(18.30)	(31.07)	(29.69)
10 year									
AAA	29.62	27.77	10.76	2.78	0.06	0.00	0.06	0.93	28.01
	(4.96)	(9.22)	(5.62)	(4.60)	(0.21)	(0.00)	(0.22)	(1.46)	(10.09)
AA	1.68	33.70	27.30	5.13	0.31	0.17	0.03	1.26	30.42
	(1.31)	(7.87)	(7.60)	(2.44)	(0.33)	(0.28)	(0.06)	(2.57)	(5.66)
A	0.20	9.23	35.46	7.54	1.78	0.18	0.13	2.40	43.07
	(0.89)	(3.67)	(4.00)	(3.16)	(0.61)	(0.82)	(0.14)	(1.64)	(5.44)
BBB	0.00	4.25	11.64	21.99	2.70	0.85	0.30	6.55	51.72
	(0.00)	(5.62)	(3.55)	(7.03)	(1.98)	(1.22)	(0.92)	(2.21)	(5.32)
BB	0.00	0.36	5.22	12.76	5.47	3.65	0.12	17.74	54.68
	(0.00)	(0.81)	(4.60)	(4.64)	(2.69)	(3.35)	(0.19)	(10.68)	(11.69)
B	0.00	0.00	3.76	9.65	11.06	3.53	0.47	24.47	47.06
	(0.00)	(0.00)	(4.08)	(9.16)	(8.54)	(6.24)	(5.65)	(16.30)	(15.38)
CCC/C	0.00	0.00	1.23	0.00	4.94	1.23	0.00	45.68	46.91
	(0.00)	(0.00)	(11.18)	(0.00)	(7.25)	(2.48)	(0.00)	(34.40)	(36.76)

Numbers in parentheses are standard deviations. Sources: Standard & Poor's Global Fixed Income Research and Standard & Poor's CreditPro®.

Table 43

Average Multi-Year Global Corporate Transition Matrices, 1981-2009—Insurance (%)

From/to	AAA	AA	A	BBB	BB	B	CCC/C	D	NR
One year									
AAA	89.53	8.39	0.30	0.00	0.07	0.07	0.15	0.00	1.48
	(7.61)	(5.82)	(1.52)	(0.00)	(0.30)	(0.50)	(1.00)	(0.00)	(2.03)
AA	0.75	86.83	7.95	0.50	0.06	0.06	0.09	0.06	3.70
	(3.92)	(7.20)	(5.67)	(1.09)	(0.14)	(0.13)	(1.86)	(0.14)	(2.38)
A	0.03	3.31	87.47	3.92	0.35	0.13	0.03	0.25	4.50
	(0.07)	(9.15)	(10.93)	(5.46)	(2.32)	(0.26)	(0.06)	(0.36)	(3.71)
BBB	0.00	0.23	6.35	81.02	3.40	0.58	0.52	0.35	7.56
	(0.00)	(2.36)	(5.61)	(5.91)	(5.19)	(2.25)	(1.64)	(2.08)	(5.53)
BB	0.00	0.21	0.82	10.10	70.52	3.92	2.06	1.24	11.13
	(0.00)	(1.55)	(3.29)	(12.79)	(16.66)	(7.01)	(4.33)	(3.97)	(9.41)
B	0.00	0.39	0.78	0.78	11.76	68.24	3.92	3.14	10.98
	(0.00)	(1.43)	(6.30)	(4.84)	(12.89)	(20.55)	(6.61)	(8.73)	(10.84)
CCC/C	0.00	0.00	0.00	0.00	3.64	10.91	41.82	27.27	16.36
	(0.00)	(0.00)	(0.00)	(0.00)	(7.10)	(21.85)	(39.66)	(32.94)	(18.98)
Three year									
AAA	70.67	21.76	1.95	0.00	0.16	0.08	0.31	0.31	4.76
	(11.95)	(9.33)	(2.61)	(0.00)	(0.62)	(0.55)	(1.23)	(0.82)	(4.82)
AA	1.87	67.34	16.85	2.32	0.28	0.17	0.10	0.31	10.76
	(7.69)	(12.88)	(8.13)	(2.46)	(0.91)	(0.38)	(0.20)	(0.38)	(5.24)
A	0.12	8.30	68.13	6.91	1.27	0.22	0.15	1.05	13.85
	(0.19)	(14.11)	(16.13)	(5.82)	(5.18)	(3.58)	(0.16)	(3.15)	(7.28)
BBB	0.00	0.88	16.56	55.19	4.78	1.10	0.88	1.84	18.76
	(0.00)	(4.52)	(6.78)	(10.93)	(5.37)	(2.30)	(3.00)	(4.37)	(7.92)
BB	0.00	0.26	3.34	20.31	38.05	5.40	2.57	5.14	24.94
	(0.00)	(1.60)	(6.53)	(16.34)	(26.07)	(7.60)	(6.75)	(8.59)	(15.58)
B	0.00	0.00	3.61	6.70	18.56	38.14	2.58	10.82	19.59
	(0.00)	(0.00)	(10.44)	(13.78)	(16.76)	(25.98)	(2.72)	(13.86)	(11.63)
CCC/C	0.00	0.00	2.33	2.33	9.30	11.63	18.60	39.53	16.28
	(0.00)	(0.00)	(19.25)	(6.41)	(11.02)	(9.85)	(24.09)	(37.58)	(33.18)
10 year									
AAA	31.49	34.76	11.66	2.45	0.10	0.00	0.10	1.53	17.89
	(17.46)	(12.29)	(9.26)	(4.12)	(0.34)	(0.00)	(0.34)	(2.12)	(11.51)
AA	2.71	33.58	25.98	5.65	0.63	0.29	0.06	1.67	29.44
	(4.95)	(9.42)	(5.58)	(3.88)	(1.15)	(0.37)	(0.10)	(2.28)	(6.67)
A	0.65	9.89	33.82	8.22	3.05	0.22	0.44	4.51	39.20
	(6.13)	(11.08)	(9.01)	(6.76)	(2.59)	(0.38)	(0.33)	(4.47)	(11.91)
BBB	0.00	6.35	9.72	28.57	3.17	0.60	0.79	9.92	40.87
	(0.00)	(9.56)	(7.07)	(13.13)	(5.90)	(0.56)	(1.17)	(6.05)	(6.50)
BB	0.00	1.60	10.16	13.37	6.42	4.81	0.00	31.55	32.09
	(0.00)	(2.74)	(11.87)	(10.99)	(8.31)	(5.38)	(0.00)	(11.24)	(12.05)

B	0.00	0.00	9.89	24.18	10.99	3.30	2.20	19.78	29.67
	(0.00)	(0.00)	(14.24)	(22.64)	(16.89)	(11.30)	(9.08)	(18.74)	(13.89)
CCC/C	0.00	0.00	5.26	0.00	0.00	0.00	0.00	68.42	26.32
	(0.00)	(0.00)	(22.36)	(0.00)	(0.00)	(0.00)	(0.00)	(43.75)	(33.54)

Numbers in parentheses are standard deviations. Sources: Standard & Poor's Global Fixed Income Research and Standard & Poor's CreditPro®.

Table 44

Average Multi-Year Global Corporate Transition Matrices, 1981-2009—Financial Institutions (%)

From/to	AAA	AA	A	BBB	BB	B	CCC/C	D	NR
One year									
AAA	88.30	6.11	0.42	0.21	0.11	0.00	0.00	0.00	4.85
	(8.50)	(8.18)	(1.56)	(0.91)	(0.98)	(0.00)	(0.00)	(0.00)	(4.17)
AA	0.39	86.12	9.14	0.36	0.00	0.00	0.00	0.03	3.98
	(0.96)	(5.94)	(5.93)	(1.20)	(0.00)	(0.00)	(0.00)	(0.08)	(2.53)
A	0.02	2.64	86.98	4.09	0.24	0.08	0.02	0.10	5.84
	(0.45)	(2.07)	(5.09)	(3.72)	(1.06)	(0.19)	(0.06)	(0.20)	(3.47)
BBB	0.00	0.40	4.87	82.50	3.21	0.71	0.08	0.48	7.75
	(0.00)	(1.26)	(3.96)	(8.40)	(5.54)	(2.28)	(0.43)	(1.00)	(3.24)
BB	0.00	0.16	0.16	6.56	74.73	5.26	0.92	0.98	11.23
	(0.00)	(0.36)	(1.82)	(6.04)	(9.70)	(6.36)	(2.88)	(1.42)	(7.64)
B	0.00	0.00	0.08	0.51	8.92	70.88	3.20	3.96	12.46
	(0.00)	(0.00)	(1.24)	(4.87)	(6.50)	(15.69)	(8.82)	(11.22)	(8.17)
CCC/C	0.00	0.00	0.00	0.00	1.92	15.38	48.08	14.90	19.71
	(0.00)	(0.00)	(0.00)	(0.00)	(6.88)	(11.57)	(33.53)	(18.43)	(16.05)
Three year									
AAA	69.31	14.25	1.61	0.80	0.11	0.00	0.00	0.00	13.91
	(15.26)	(12.97)	(3.93)	(2.66)	(0.74)	(0.00)	(0.00)	(0.00)	(7.72)
AA	1.04	66.63	19.58	1.65	0.03	0.10	0.00	0.10	10.85
	(1.17)	(7.66)	(8.59)	(2.62)	(0.36)	(0.62)	(0.00)	(0.29)	(5.01)
A	0.02	6.48	67.96	7.98	0.86	0.37	0.09	0.34	15.90
	(0.57)	(4.02)	(8.69)	(3.89)	(2.12)	(0.94)	(0.43)	(0.58)	(6.58)
BBB	0.00	1.11	12.68	57.07	4.40	1.26	0.27	1.41	21.81
	(0.00)	(2.09)	(7.63)	(9.98)	(5.40)	(3.75)	(1.61)	(2.24)	(6.14)
BB	0.00	0.19	0.84	15.89	40.53	6.61	1.23	4.47	30.22
	(0.00)	(0.81)	(2.61)	(6.88)	(13.24)	(6.04)	(2.92)	(7.10)	(13.94)
B	0.00	0.00	0.00	2.27	19.98	36.46	2.88	8.75	29.66
	(0.00)	(0.00)	(0.00)	(5.97)	(13.27)	(20.40)	(6.87)	(18.81)	(17.41)
CCC/C	0.00	0.00	0.00	0.55	1.66	22.10	12.71	17.68	45.30
	(0.00)	(0.00)	(0.00)	(2.14)	(6.90)	(14.69)	(24.23)	(20.91)	(28.08)
10 year									
AAA	26.76	17.06	9.39	3.29	0.00	0.00	0.00	0.00	43.51
	(9.86)	(5.09)	(7.58)	(5.99)	(0.00)	(0.00)	(0.00)	(0.00)	(11.65)
AA	0.71	33.81	28.56	4.65	0.00	0.05	0.00	0.88	31.35
	(1.19)	(10.69)	(10.50)	(3.63)	(0.00)	(0.27)	(0.00)	(3.32)	(6.48)
A	0.00	8.94	36.19	7.24	1.22	0.16	0.00	1.47	44.78
	(0.00)	(4.19)	(4.66)	(4.11)	(1.02)	(1.02)	(0.00)	(2.03)	(6.39)
BBB	0.00	3.54	12.29	19.77	2.54	0.94	0.13	5.41	55.38
	(0.00)	(4.91)	(4.06)	(7.14)	(2.22)	(1.74)	(1.32)	(3.09)	(6.78)
BB	0.00	0.00	3.77	12.58	5.19	3.30	0.16	13.68	61.32
	(0.00)	(0.00)	(3.22)	(5.24)	(3.04)	(4.41)	(0.21)	(12.58)	(15.09)
B	0.00	0.00	2.10	5.69	11.08	3.59	0.00	25.75	51.80
	(0.00)	(0.00)	(2.88)	(12.20)	(9.63)	(22.18)	(0.00)	(27.22)	(24.75)
CCC/C	0.00	0.00	0.00	0.00	6.45	1.61	0.00	38.71	53.23
	(0.00)	(0.00)	(0.00)	(0.00)	(9.81)	(3.73)	(0.00)	(23.98)	(38.97)

Numbers in parentheses are standard deviations. Sources: Standard & Poor's Global Fixed Income Research and Standard & Poor's CreditPro®.

Table 45

Average Multi-Year Global Corporate Transition Matrices, 1981-2009—Nonfinancial (%)

From/to	AAA	AA	A	BBB	BB	B	CCC/C	D	NR
One year									
AAA	86.80	8.22	0.83	0.00	0.08	0.00	0.00	0.00	4.07
	(7.48)	(6.63)	(1.54)	(0.00)	(0.31)	(0.00)	(0.00)	(0.00)	(4.19)
AA	0.55	86.74	7.59	0.69	0.10	0.15	0.00	0.00	4.17
	(0.63)	(5.74)	(3.86)	(1.05)	(0.33)	(0.33)	(0.00)	(0.00)	(2.54)
A	0.05	1.31	86.96	6.44	0.48	0.21	0.03	0.03	4.50
	(0.13)	(1.37)	(3.99)	(2.41)	(0.54)	(0.46)	(0.09)	(0.08)	(2.30)
BBB	0.01	0.07	3.23	84.87	4.42	0.71	0.15	0.21	6.34
	(0.07)	(0.20)	(2.55)	(4.85)	(1.71)	(1.07)	(0.26)	(0.30)	(2.04)
BB	0.02	0.02	0.16	4.80	75.82	7.92	0.73	0.96	9.57
	(0.07)	(0.18)	(0.42)	(2.43)	(5.21)	(5.02)	(0.71)	(1.12)	(3.01)
B	0.00	0.04	0.15	0.21	5.05	72.95	4.78	5.04	11.79
	(0.00)	(0.14)	(0.40)	(0.29)	(2.63)	(5.19)	(2.83)	(3.39)	(3.11)
CCC/C	0.00	0.00	0.24	0.36	0.66	10.79	44.70	29.62	13.65
	(0.00)	(0.00)	(0.83)	(1.15)	(1.33)	(7.88)	(12.97)	(13.44)	(8.04)
Three year									
AAA	66.02	18.30	3.63	0.31	0.15	0.08	0.00	0.00	11.51
	(10.39)	(9.30)	(3.15)	(1.18)	(0.45)	(0.28)	(0.00)	(0.00)	(7.00)

AA	134	0.00	1.49	11.94	11.94	5.97	4.48	2.99	4.48	0.75	1.49	0.00	0.00	0.00	0.00	0.00	0.00	0.00	2.99	51.49
AA-	179	0.00	0.56	7.82	14.53	13.41	12.29	0.56	1.68	2.79	0.00	1.12	0.00	0.00	0.00	0.00	0.00	0.56	2.23	42.46
A+	197	0.00	0.00	4.57	6.09	22.84	7.61	2.54	2.54	2.54	1.02	0.51	0.00	0.00	0.00	0.00	0.00	1.02	48.73	
A	268	0.37	0.00	0.75	2.61	8.21	16.42	8.58	2.24	3.73	2.61	0.37	0.00	0.37	0.00	0.00	0.37	0.00	0.75	52.61
A-	212	0.00	0.00	0.47	1.89	5.66	16.04	21.70	4.25	3.77	1.42	2.36	0.00	0.00	0.47	0.00	0.00	0.00	1.42	40.57
BBB+	186	0.00	0.00	0.00	1.08	3.23	6.45	6.45	17.74	6.99	5.91	2.69	0.54	0.54	0.00	0.00	0.54	0.54	3.23	44.09
BBB	219	0.00	0.00	0.46	1.83	2.28	0.91	5.94	7.76	21.46	2.28	1.83	0.46	0.91	0.46	0.00	0.91	0.00	4.11	48.40
BBB-	218	0.00	0.00	0.00	0.00	0.92	2.75	0.92	6.88	11.01	19.27	3.67	0.46	0.92	0.92	0.46	0.00	0.826	42.66	
BB+	104	0.00	0.00	0.00	0.00	0.00	0.00	0.96	3.85	9.62	9.62	19.23	4.81	1.92	0.00	0.00	0.96	0.00	10.58	38.46
BB	121	0.00	0.00	0.00	0.00	0.00	0.00	0.83	0.83	3.31	6.61	4.96	17.36	1.65	0.00	0.83	0.00	0.83	9.92	52.89
BB-	148	0.00	0.00	0.00	0.00	0.00	0.00	0.00	2.70	0.68	0.68	1.35	3.38	20.27	3.38	2.03	0.00	0.68	12.84	52.03
B+	127	0.00	0.00	0.00	0.00	0.00	0.00	0.79	0.79	0.79	1.57	0.79	2.36	14.96	15.75	3.15	2.36	1.57	12.60	42.52
B	129	0.00	0.00	0.00	0.00	0.00	0.00	0.00	1.55	0.00	0.00	0.00	3.10	3.88	12.40	6.20	3.88	17.05	51.94	
B-	64	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	1.56	1.56	0.00	4.69	7.81	6.25	28.13	0.00	7.81	42.19	
CCC/C	72	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	1.39	1.39	6.94	2.78	12.50	16.67	15.28	43.06

Initial-to-last transition rates are calculated based on the original rating vis-à-vis the last rating for rated entities across all time horizons. Sources: Standard & Poor's Global Fixed Income Research and Standard & Poor's CreditPro®.

Table 49

Initial-To-Last Default Rates By Rating Category For Broad Sectors (%)

Rating	—Nonfinancials—		—Insurance—		—Financial institutions—	
	Issuer count	Default rate (%)	Issuer count	Default rate (%)	Issuer count	Default rate (%)
AAA	143	1.40	139	2.88	133	0.75
AA+	68	1.47	46	0.00	51	0.00
AA	278	2.52	137	3.65	134	2.99
AA-	202	1.49	108	0.93	179	2.23
A+	295	3.39	150	1.33	197	1.02
A	673	5.05	172	5.23	268	0.75
A-	432	3.24	176	4.55	212	1.42
BBB+	451	4.43	95	3.16	186	3.23
BBB	706	7.08	111	7.21	219	4.11
BBB-	603	9.78	74	4.05	218	8.26
BB+	387	10.85	28	10.71	104	10.58
BB	660	17.27	36	8.33	121	9.92
BB-	1,195	23.43	16	12.50	148	12.84
B+	1,889	28.53	22	9.09	127	12.60
B	1,253	24.66	30	16.67	129	17.05
B-	520	28.46	12	16.67	64	7.81
CCC/C	279	34.05	4	25.00	72	15.28

Initial-to-last default rates are calculated based on the original rating vis-à-vis the last rating for rated entities across all time horizons. Sources: Standard & Poor's Global Fixed Income Research and Standard & Poor's CreditPro®.

Table 50

Default Rates By Rating Category By Broad Sectors (%)

Rating	—Nonfinancials—			—Insurance—			—Financial institutions—		
	One year (2009 pool)	Three year (2007 pool)	10 year (2000 pool)	One year (2009 pool)	Three year (2007 pool)	10 year (2000 pool)	One year (2009 pool)	Three year (2007 pool)	10 year (2000 pool)
AAA	0.00	0.00	0.00	0.00	2.78	1.52	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
AA	0.00	0.00	0.00	0.00	1.45	1.09	0.00	0.00	0.00
AA-	0.00	0.00	0.00	0.00	0.00	1.28	0.00	0.79	0.00
A+	0.00	0.00	2.55	0.00	0.00	2.04	0.71	0.95	1.85
A	0.00	0.00	1.20	0.77	0.00	6.58	0.61	1.45	2.15
A-	0.00	0.00	2.79	0.00	0.92	6.78	0.00	2.29	3.70
BBB+	0.00	0.00	3.61	0.00	0.00	7.69	1.71	2.54	3.33
BBB	0.00	0.48	5.78	0.00	0.00	7.41	0.88	6.59	3.08
BBB-	0.00	1.41	12.06	0.00	2.63	8.33	5.26	7.81	8.57
BB+	0.00	1.87	17.18	0.00	0.00	16.67	0.00	4.44	2.63
BB	0.83	6.59	21.43	0.00	6.67	0.00	2.94	7.50	11.43
BB-	1.13	6.84	29.39	0.00	0.00	50.00	0.00	7.84	9.09
B+	5.14	10.55	37.38	0.00	11.11	50.00	10.00	6.00	3.57
B	9.86	15.51	48.37	0.00	5.56	33.33	15.15	9.09	17.39
B-	19.31	19.90	59.41	0.00	0.00	0.00	5.56	5.56	9.09
CCC/C	51.50	44.83	60.53	25.00	0.00	100.00	26.67	11.11	50.00

Sources: Standard & Poor's Global Fixed Income Research and Standard & Poor's CreditPro®.

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Appendix II: Additional Tables

Table 51

Corporate Transition Matrix—One Year Ending Dec. 31, 2009: Nonfinancials (%)

Rating	Number of issuers	Number of issuers																		
		AAA	AA+	AA	AA-	A+	A	A-	BBB+	BBB	BBB-	BB+	BB	BB-	B+	B	B-	CCC/C	D	NR
AAA	15	80.00	6.67	13.33	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
AA+	13	0.00	46.15	46.15	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	7.69
AA	57	0.00	0.00	64.91	8.77	1.75	5.26	1.75	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	17.54
AA-	62	0.00	0.00	4.84	72.58	14.52	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	8.06
A+	91	0.00	1.10	0.00	0.00	74.73	12.09	1.10	0.00	0.00	0.00	2.20	0.00	0.00	1.10	0.00	0.00	0.00	0.00	7.69
A	215	0.00	0.00	0.00	0.00	1.86	78.14	12.09	0.93	1.40	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	5.58
A-	283	0.00	0.00	0.00	0.00	0.00	2.83	78.45	10.60	1.77	0.00	0.35	0.00	0.00	0.00	0.00	0.00	0.00	0.00	6.01
BBB+	301	0.00	0.00	0.00	0.00	0.00	0.00	4.32	71.76	15.28	1.66	1.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	5.98
BBB	370	0.00	0.00	0.00	0.00	0.00	0.81	2.97	80.81	8.92	2.43	0.54	0.00	0.00	0.00	0.00	0.00	0.00	0.00	3.51

BBB+	26	0.00	0.00	0.00	3.85	0.00	3.85	3.85	7.69	23.08	11.54	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	7.69	38.46
BBB	27	0.00	0.00	3.70	3.70	0.00	3.70	11.11	7.41	7.41	7.41	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	7.41	48.15
BBB-	12	0.00	0.00	0.00	0.00	0.00	0.00	0.00	8.33	0.00	33.33	0.00	8.33	0.00	0.00	0.00	0.00	0.00	8.33	8.33	33.33
BB+	6	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	16.67	0.00	33.33	0.00	0.00	0.00	0.00	16.67	0.00	33.33
BB	4	0.00	0.00	0.00	25.00	25.00	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	50.00
BB-	2	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	50.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	50.00	0.00
B+	6	0.00	0.00	0.00	0.00	0.00	16.67	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	50.00	33.33
B	6	0.00	0.00	0.00	0.00	0.00	0.00	0.00	33.33	0.00	0.00	0.00	16.67	0.00	0.00	0.00	0.00	0.00	0.00	33.33	16.67
B-	1	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	100.00
CCC/C	3	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	100.00	0.00

Sources: Standard & Poor's Global Fixed Income Research and Standard & Poor's CreditPro®.

Table 59

Corporate Transition Matrix—10 Years Ending Dec. 31, 2009: Financial Institutions (%)

Rating	Number of issuers	AAA	AA+	AA	AA-	A+	A	A-	BBB+	BBB	BBB-	BB+	BB	BB-	B+	B	B-	CCC/C	D	NR	
AAA	40	42.50	10.00	2.50	0.00	0.00	0.00	2.50	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	42.50	
AA+	15	6.67	6.67	6.67	0.00	6.67	20.00	0.00	6.67	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	46.67	
AA	48	0.00	0.00	8.33	14.58	18.75	6.25	2.08	0.00	0.00	4.17	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	45.83	
AA-	82	0.00	0.00	13.41	14.63	21.95	13.41	2.44	3.66	2.44	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	28.05	
A+	108	0.00	0.00	6.48	9.26	17.59	13.89	0.93	3.70	4.63	2.78	1.85	0.00	0.00	0.00	0.00	0.00	0.00	0.00	1.85	37.04
A	93	0.00	0.00	2.15	5.38	9.68	18.28	13.98	0.00	2.15	3.23	0.00	0.00	1.08	0.00	0.00	0.00	0.00	2.15	41.94	
A-	81	0.00	0.00	0.00	0.00	7.41	17.28	8.64	6.17	2.47	1.23	8.64	0.00	0.00	1.23	0.00	0.00	0.00	3.70	43.21	
BBB+	60	0.00	0.00	0.00	5.00	5.00	3.33	10.00	10.00	5.00	8.33	1.67	0.00	1.67	0.00	0.00	1.67	0.00	3.33	45.00	
BBB	65	0.00	0.00	0.00	4.62	3.08	0.00	7.69	12.31	12.31	3.08	0.00	0.00	1.54	0.00	0.00	0.00	0.00	3.08	52.31	
BBB-	70	0.00	0.00	0.00	0.00	2.86	1.43	5.71	8.57	8.57	5.71	4.29	0.00	0.00	1.43	2.86	0.00	0.00	8.57	50.00	
BB+	38	0.00	0.00	0.00	0.00	0.00	5.26	5.26	2.63	18.42	2.63	2.63	0.00	0.00	0.00	0.00	0.00	0.00	2.63	60.53	
BB	35	0.00	0.00	0.00	0.00	0.00	8.57	0.00	8.57	8.57	5.71	0.00	5.71	0.00	0.00	0.00	0.00	0.00	11.43	51.43	
BB-	33	0.00	0.00	0.00	0.00	0.00	0.00	0.00	3.03	0.00	3.03	3.03	0.00	0.00	9.09	0.00	3.03	9.09	69.70		
B+	28	0.00	0.00	0.00	0.00	0.00	0.00	3.57	0.00	3.57	7.14	0.00	3.57	3.57	3.57	7.14	0.00	3.57	60.71		
B	23	0.00	0.00	0.00	0.00	0.00	4.35	0.00	0.00	0.00	0.00	0.00	0.00	8.70	4.35	0.00	0.00	0.00	17.39	65.22	
B-	11	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	9.09	0.00	0.00	9.09	81.82		
CCC/C	6	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	16.67	0.00	0.00	16.67	0.00	50.00	16.67	

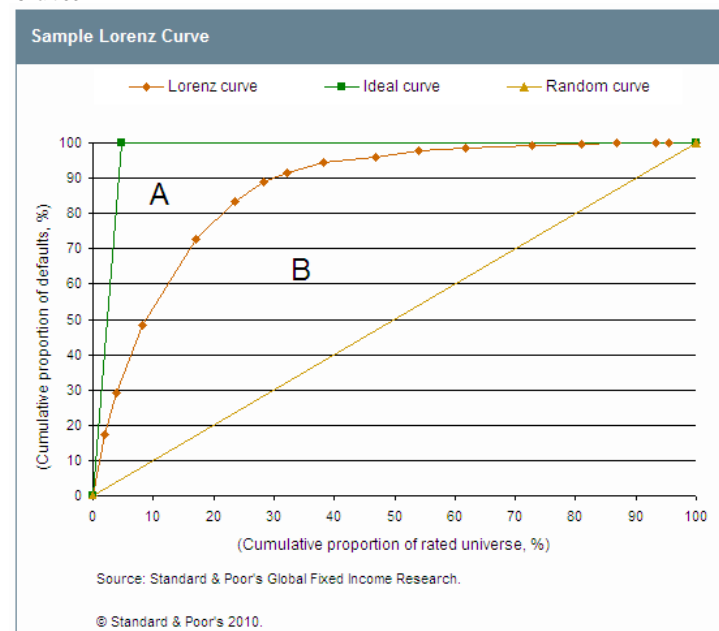
Sources: Standard & Poor's Global Fixed Income Research and Standard & Poor's CreditPro®.

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Appendix III: Gini Methodology

To measure ratings performance or ratings accuracy, the cumulative share of issuers by rating is plotted against the cumulative share of defaulters in a Lorenz curve to visually render the accuracy of their rank ordering. The Lorenz curve was developed by Max O. Lorenz as a graphical representation of the proportionality of a distribution. To build the Lorenz curve, the observations are ordered from the low end of the ratings scale ('CCC/C') to the high end ('AAA'). If Standard & Poor's corporate ratings only randomly approximated default risk, the Lorenz curve would fall along the diagonal. Its Gini coefficient—which is a summary statistic of the Lorenz curve—would thus be zero. If corporate ratings were perfectly rank-ordered so that all defaults occurred only among the lowest-rated entities, the curve would capture all of the area above the diagonal on the graph and its Gini coefficient would be one (see Chart 33). The procedure for calculating the Gini coefficients is illustrated below and is accomplished by dividing area B by the total area A + B. In other words, the Gini coefficient captures the extent to which actual ratings accuracy diverges from the random scenario and aspires to the ideal scenario.

Chart 33



We would like to thank our CRISIL colleagues Preeti Iyer, Kartikey Kaushik, Nivritti Mishra, and Sumitra Sharma for their assistance with this report.

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