

April 21, 2008

Best's Cumulative Average Impairment Rates

U.S. life/health and property/casualty data from 1977 to 2007.

Rating	1-Year	5-Year	10-Year	15-Year
A++/A+	0.06%	0.68%	2.07%	4.18%
A/A-	0.19%	2.20%	5.33%	7.84%
B++/B+	0.75%	5.59%	10.69%	14.86%
B/B-	2.07%	10.03%	18.95%	26.14%
C++/C+	3.39%	13.46%	24.57%	29.66%
C/C-	6.00%	16.74%	31.09%	40.70%
D	7.34%	25.54%	40.84%	49.35%
Secure	0.25%	2.24%	5.00%	7.58%
Vulnerable	3.65%	14.79%	26.04%	33.52%
All	0.71%	3.82%	7.69%	10.98%

Source A.M. Best Co.

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Best's Impairment Rate and Rating Transition Study – 1977 to 2007

This is the fifth study conducted by A.M. Best Co. on the long-term impairment rates of A.M. Best-rated, U.S.-domiciled insurance companies. It updates *Best's Impairment Rate and Rating Transition Study – 1977 to 2006*, published Feb. 26, 2007.

The study covers the 30 one-year periods from Dec. 31, 1977 to Dec. 31, 2007 and only includes companies that had a Best's Financial Strength Rating (FSR) over this period. Of the 5,044 individual U.S. companies that carried a Best's FSR, an average of 22.8 companies per year, or 685 companies, became financially impaired. Impairment, generally defined as any official action by state regulators that restricts the insurance business activity of an operating insurance company, goes beyond the traditional concept of issuer defaults as discussed later.

Since the last impairment study (which included impairments from 1977 through 2006), three companies have been added to the list

Exhibit 1 Impairment Count by Year (1978-2007)

Year	No. of Impairments*	% of Total Impairments
1978	8	(8/685)*100 = 1.2%
1979	6	0.9%
1980	5	0.7%
1981	10	1.5%
1982	7	1.0%
1983	16	2.3%
1984	22	3.2%
1985	31	4.5%
1986	25	3.6%
1987	24	3.5%
1988	25	3.6%
1989	39	5.7%
1990	39	5.7%
1991	54	7.9%
1992	34	5.0%
1993	31	4.5%
1994	24	3.5%
1995	10	1.5%
1996	18	2.6%
1997	30	4.4%
1998	17	2.5%
1999	27	3.9%
2000	37	5.4%
2001	39	5.7%
2002	41	6.0%
2003	32	4.7%
2004	13	1.9%
2005	8	1.2%
2006	10	1.5%
2007	3	0.4%
	685	100%

*Includes companies that were not rated at the time of impairment but had a Best's FSR between Dec. 31, 1977 and the date of impairment. U.S. life/health and property/casualty data.
Source: A.M. Best Co.

of impaired insurers for 2007, as listed in **Exhibit 15**. The three impairments (two life/health companies and one property/casualty company) represent a historical low for the period of the study. This low impairment count continues a recent trend in which annual impairments have gone from 41 in 2002 to three in 2007. In this period, insurance companies generally have been buoyed by a relatively robust equity market; a moderate overall market for premium pricing; and above-average economic growth. The historical low impairment rate parallels the results found in corporate default studies conducted by other credit rating agencies. It's not yet clear whether impairments will increase in 2008 and beyond if there is a prolonged soft market in the property/casualty sector and the credit crunch precipitated by the subprime mortgage crisis continues to affect the capital markets.

The average annual impairment rate for all insurers was 0.71%. Secure companies – with FSRs of “B+” (Good) and above – and Vulnerable companies – with FSRs of “B” (Fair) and below – had average annual impairment rates of 0.25% and 3.65%, respectively.

A.M. Best's rating transition rates remained stable over the period covered by the study. Among companies with Secure ratings, 98.08% maintained their Secure status over a one-year period. The remaining 1.92% were downgraded to Vulnerable or became impaired over a one-year period.

Motivation for This Study

Best's Impairment Rate and Rating Transition Study – 1977 to 2007 (Best's Impairment Rate and Rating Transition Study) responds to the need for insurance industry data for use in insurance-related structured finance transactions, including the securitization of trust-preferred securities and surplus notes, reinsurance recoverables, structured settlements and life settlements, among others. General corporate bond default statistics are inappropriate for assessing insurance credit risks in such transactions because of the unique regulatory and accounting environment in which insurers operate, and because relatively few insurers issue public debt. This study also is useful for assessing capital requirements associated with entities such as sidecars, protected cells and bankruptcy-remote vehicles where the life

of the transaction and the covered risks are well defined and limited.

A.M. Best embarked on this study to estimate rates of impairment for insurance companies that can serve as the basis for estimating the likelihood of defaults on financial obligations made by those companies. As detailed later, “impairment” is a substantially wider category of financial duress than an event of default. In particular, impairment frequently occurs when an insurer still is able to meet its current policyholder obligations, yet regulators have become sufficiently concerned about the degree of current or future solvency to

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intervene in the insurer's business. This leads to substantially higher impairment rates at any given rating level than would be observed purely using default data.

This Study vs. Prior Best's Insolvency/Impairment Studies

Drawn from A.M. Best's general impairment database and historical rating records, this impairment rate and rating transition study is a special-purpose report aimed at estimating default risk of insurers that have had interactive FSRs from A.M. Best. As such, the data used in this study are a subset of the data used in A.M. Best's insurer impairment studies (general impairment studies) begun in 1991 (P/C) and 1992 (L/H) and periodically updated. (The next updates are scheduled for May 2008.) The studies and their updates can be found at www.ambest.com.¹

The major differences between this study and the general impairment studies (formerly called insolvency studies) are:

- This study serves as a basis for estimating the likelihood of default. The purpose of the general impairment studies is to provide insight into the underlying causes of impairment.
- This study calculates one-year to 15-year cumulative average impairment rates by applying the static pool methodology commonly employed by the credit rating indus-

try in issuer default studies. The general impairment studies do not calculate long-term impairment rates.

- This study covers impairments only of A.M. Best-rated companies with interactive FSRs — those companies cover 98% of U.S. industry premium volume. The general impairment studies focus on impairments of all companies in the insurance industry, regardless of whether the impaired companies were rated by A.M. Best.
- This study includes a conversion of A.M. Best-rated insurance company impairment rates to the implied impairment rates associated with debt issued by insurance holding companies.
- This study tabulates impairment statistics for the combined P/C and L/H sectors. The general impairment studies provide separate reports for each sector.
- This study covers the time period from year-end 1977 to year-end 2007. The last general P/C impairment study covered the period from 1969 to 2006, and the last general L/H impairment study covered the period from 1976 to 2006. Again, updated general studies through 2007 are scheduled for May 2008.

¹ Although the earlier general impairment studies generally included "insolvency" in their titles, the definition of impairment has been consistent in all impairment studies of the P/C and L/H industries, as well as in the impairment rate and rating transition studies.

Financially Impaired Companies Defined

A.M. Best designates an insurer as a Financially Impaired Company (FIC) as of the first official regulatory action taken by an insurance department, whereby the insurer's:

- Ability to conduct normal insurance operations is adversely affected;
- Capital and surplus have been deemed inadequate to meet legal requirements; and/or
- General financial condition has triggered regulatory concern.

State actions include supervision, rehabilitation, liquidation, receivership, conservatorship, cease-and-desist orders, suspension, license revocation and certain administrative orders. A.M. Best emphasizes that the

FICs in this study might not technically have been declared insolvent.

It should be noted that the above definition of an FIC is broader than that of a Best's Rating of "E" (under regulatory supervision), which is assigned only when an insurer is "no longer allowed to conduct normal ongoing insurance operations." Thus, a company may be designated as financially impaired in this study, but not have been assigned an "E" Best's Rating. Further, a Best's Rating of "F" (in liquidation) can reflect a liquidation as part of the impairment process, or it can indicate a voluntary dissolution. Unless under financial duress, voluntary dissolutions are not counted as impairments. Before 1992, a Best's Rating of "NA-10" was used to indicate that a company was under regulatory supervision and/or in liquidation.

- This study covers insurers domiciled in the United States, excluding U.S. territories. The general studies include U.S. territories.
- This study is titled *Best's Impairment Rate and Rating Transition Study — 1977 to 2007* to distinguish it from the general impairment studies and their updates.

Definition of Impairment

A.M. Best designates an insurer as a Financially Impaired Company (FIC) upon the first official regulatory action taken by an insurance department. Such state actions include involuntary liquidation because of insolvency, as well as other regulatory processes and procedures such as supervision, rehabilitation, receivership, conservatorship, a cease-and-desist order, suspension, license revocation, administrative order and any other action that restricts a company's freedom to conduct its insurance business as normal. Companies that enter voluntary dissolution and are not under financial duress at that time are not counted as financially impaired. (See sidebar: "Financially Impaired Companies Defined.")

Impairments vs. Defaults

The definition of financial impairment is different from that of issuer defaults generally used in the credit markets. The credit markets broadly deem an issuer default as having occurred when an issuer misses interest or principal payments on its obligations; restructures its debt in a way that is deleterious to investors; or files for bankruptcy. Financial impairment of insurance companies, by contrast, often occurs even if an insurance company has not formally been declared insolvent. For instance, an FIC's capital and surplus could have been deemed inadequate to meet risk-based capital requirements, or there might have been regulatory concern regarding its general financial condition. Thus, at any given rating level, more insurers would be impaired, according to the A.M. Best definition, than actually would default on policyholder obligations.

Another important reason for focusing on impairment rates, rather than defaults on policyholder obligations, is the difficulty in defining what constitutes the latter. In particular,

Exhibit 2

Best's Cumulative Average Impairment Rates

U.S. life/health and property/casualty data from 1977 to 2007.

Rating	1-Year	2-Year	3-Year	4-Year	5-Year	6-Year	7-Year	8-Year	9-Year	10-Year	11-Year	12-Year	13-Year	14-Year	15-Year
A++/A+	0.06%	0.19%	0.35%	0.52%	0.68%	0.91%	1.16%	1.42%	1.74%	2.07%	2.41%	2.86%	3.34%	3.82%	4.18%
A/A-	0.19%	0.59%	1.10%	1.62%	2.20%	2.83%	3.44%	4.13%	4.73%	5.33%	5.96%	6.50%	7.01%	7.43%	7.84%
B++/B+	0.75%	1.79%	2.87%	4.20%	5.59%	6.80%	8.05%	9.04%	9.83%	10.69%	11.55%	12.44%	13.34%	14.26%	14.86%
B/B-	2.07%	4.24%	6.28%	8.10%	10.03%	12.06%	13.98%	15.64%	17.32%	18.95%	20.59%	22.20%	23.68%	24.96%	26.14%
C++/C+	3.39%	5.69%	8.52%	11.18%	13.46%	15.76%	17.90%	20.68%	22.92%	24.57%	25.90%	26.77%	27.71%	28.84%	29.66%
C/C-	6.00%	9.27%	11.62%	14.13%	16.74%	20.30%	23.34%	26.65%	29.12%	31.09%	33.54%	35.49%	37.10%	38.82%	40.70%
D	7.34%	12.36%	17.18%	21.40%	25.54%	29.66%	33.06%	35.95%	38.48%	40.84%	43.19%	45.07%	46.69%	48.11%	49.35%
Secure	0.25%	0.67%	1.15%	1.68%	2.24%	2.81%	3.39%	3.95%	4.47%	5.00%	5.54%	6.09%	6.65%	7.17%	7.58%
Vulnerable	3.65%	6.99%	9.75%	12.27%	14.79%	17.46%	19.85%	22.14%	24.19%	26.04%	27.88%	29.46%	30.99%	32.32%	33.52%
All	0.71%	1.44%	2.22%	3.00%	3.82%	4.65%	5.46%	6.26%	6.99%	7.69%	8.42%	9.12%	9.80%	10.45%	10.98%

Source A.M. Best Co.

Illustration of Impairment Without Subsequent Default on Policyholder Obligations

To illustrate how financial impairments, as defined by A.M. Best, can occur without a default on an insurance company's financial obligations to its policyholders, it is instructive to observe the financial impairment of General American Life Insurance Co. (GALIC). In August 1999, the Missouri Department of Insurance placed GALIC under administrative supervision to avoid a "run on the bank" by the company's policyholders. In January 2000, Metropolitan Life Insurance Co. purchased GALIC and its affiliates from General American Mutual Holding Co., the operat-

ing company's parent. Administrative supervision of GALIC ended at that time.

Although the company was under administrative supervision for approximately five months, it was not liquidated, and it continued to satisfy its financial obligation under its insurance policies. Accordingly, no insurance policy default event occurred. As the company and its affiliates were under administrative supervision for a period, however, they were counted as impaired according to A.M. Best's definition of impairment.

the common practice of commutation means that it often is unclear whether default, as normally defined in the credit markets, has taken place or not. This is because, while the policyholder might be agreeing to a commutation to avoid the risk of the insurer becoming insolvent in the future, other factors, such as the liquidity value of receiving payment now or the future uncertainty of the ultimate size of the claim, often influence commutation agreements.

Financial Strength Rating Categories

In 1977, A.M. Best had the following seven FSR categories (excluding the impaired category): “A+,” “A,” “B+,” “B,” “C+,” “C” and “D.” By 1992, the company had expanded its FSR scale to the following 13 categories to recognize finer distinctions in credit quality among insurance companies: “A++,” “A+,” “A,” “A-,” “B++,” “B+,” “B,” “B-,” “C++,” “C+,” “C,” “C-” and “D.” Companies rated “B+” and above are considered Secure, and companies rated “B” and below are considered Vulnerable. These same FSR categories remain in use today.

Please note that in A.M. Best’s FSR scale, the symbol “D”² does not designate financial impairment. The designation for financial impairment in the period covered by the study includes the following ratings: “E,” “F” and “NA-10.” The “E” and “NA-10” ratings are used to indicate companies that are under regulatory supervision. The “F” rating is used for companies in liquidation, which may include voluntary dissolutions that are not impairments. For the purposes of this study, the nomenclature “impaired” or “impairments” will appear on various tables and graphs to designate FICs with “E,” “F” and “NA-10” ratings assigned by A.M. Best and regulatory interventions that did not otherwise trigger an A.M. Best impaired rating.

To facilitate the comparison across time, this study has grouped FSRs (excluding the impaired category) into the following seven categories: “A++/A+,” “A/A-,” “B++/B+,” “B/B-,” “C++/C+,” “C/C-” and “D.”³

The ratings in this study are determined at year end. Multiple rating actions in a given

² The “NA-7” rating category is included in the “D” category.

³ The FSR groupings in this study included the Financial Performance Ratings (FPR) that were introduced in 1990 and discontinued in 2002. See the Preface of a pre-2002 *Best’s Insurance Reports* for groupings of FSRs and FPRs.

year are ignored. There are two exceptions to this rule: 1) when a company becomes financially impaired, the impairment designation is maintained even if the company emerges from regulatory supervision by year end, and 2) when a company’s rating is withdrawn at the company’s request, the last rating issued by A.M. Best just before the withdrawal is maintained in the year of the rating withdrawal.

Companies Covered

The study includes property/casualty and life/health insurance companies domiciled in the United States that traditionally have filed statutory statements. Managed care companies are excluded from the life/health pool.

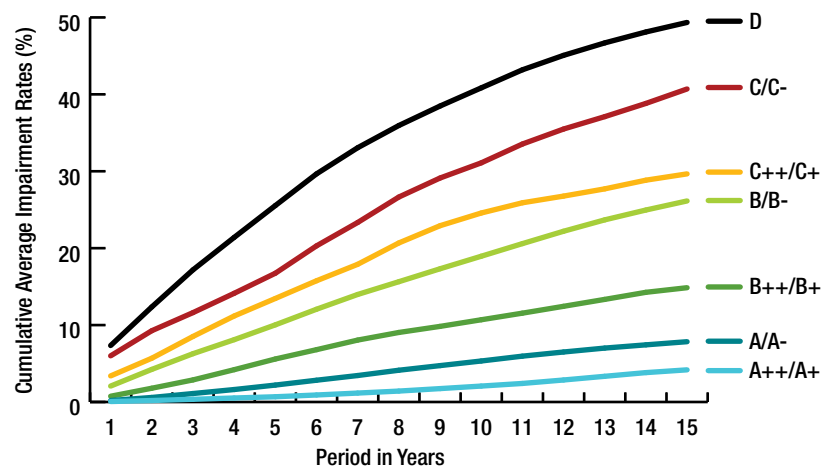
Specifically, the study covers 685 financially impaired companies out of the 5,044 insurance companies that had a Best’s FSR at some point between Dec. 31, 1977 and Dec. 31, 2007.

The data in “Impairment Count by Year – 1978 to 2007” (**Exhibit 1**) represent impaired companies that had received at least one Best’s FSR between Dec. 31, 1977 and Dec. 31, 2007. This impairment list is markedly different from prior lists published by A.M. Best because it counts only companies previously rated by A.M. Best in that period. Some of these companies had no A.M. Best rating assigned to them at the time of impairment, since they became impaired after A.M. Best ceased to rate them. These companies are included in the study, however, as dictated by the static pool methodology described in the section titled “Static Pool-Based Calculation Methodology.”

Exhibit 3

Cumulative Average Impairment Rates – All Best’s Ratings

U.S. life/health and property/casualty data from 1977 to 2007.



Source: A.M. Best Co.

The reader should be aware that impairment counts in this impairment study and prior studies are based on individual companies, not on groups or rating units. As such, the failure of a large group can affect annual impairment counts significantly. For example, nine of the 27 impairments in 1999 are attributed to the impairment of General American Life Insurance Co.

The reader also should be aware that A.M. Best will continue to improve and possibly expand the database upon which this impairment study is based. Updates, therefore, may include corrections to the data, or they may include or exclude new insurance companies previously excluded from or included in prior studies. (See sidebar: “A Note on Revisions.”)

These adjustments to the data or inclusion criteria may make it difficult to compare the results of one study to its predecessors. To maintain as much consistency as possible, however, the study’s updates and revisions will be done from the common starting point of Dec. 31, 1977.

Impairment Rates

“Best’s Cumulative Average Impairment Rates” (Exhibit 2), “Cumulative Average Impairment Rates — All Best’s Ratings” (Exhibit 3) and “Cumulative Average Impairment Rates — Secure vs. Vulnerable Best’s Ratings” (Exhibit 4) show the cumulative average impairment rates calculated using the static pool methodology. The data show an inverse relationship between FSRs and

impairment rates: the lower the FSR, the higher the rate of impairment. Specifically, over a one-year period, the impairment rate for companies in the highest Best’s Rating category, “A++/A+,” was 0.06%. It is important to note that no insurance companies rated “A++” have become impaired since that rating category was introduced in 1992. The one-year impairment rate for companies in the lowest rating category, “D,” was 7.34%. The rate of impairment for the companies in the “A/A-” rating category, where the highest percentage of insurance companies evaluated by A.M. Best are rated, was 0.19%.

Impairment rates also vary across time. The data in Exhibit 2 show that the insurance companies with FSRs of “A++/A+” had the lowest impairment rates, ranging from 0.06% over a one-year period to 4.18% over a 15-year period. By contrast, the insurance companies with an FSR of “D” had the highest impairment rates, ranging from 7.34% over a one-year period to 49.35% over a 15-year period. The one-year to 15-year impairment rates for the insurance companies with “A/A-” ratings ranged from 0.19% to 7.84%.

The data further show that the rate of increase in impairment rates is most significant in the early years. For example, the cumulative average impairment rate of “A++/A+”-rated companies moves from 0.06%

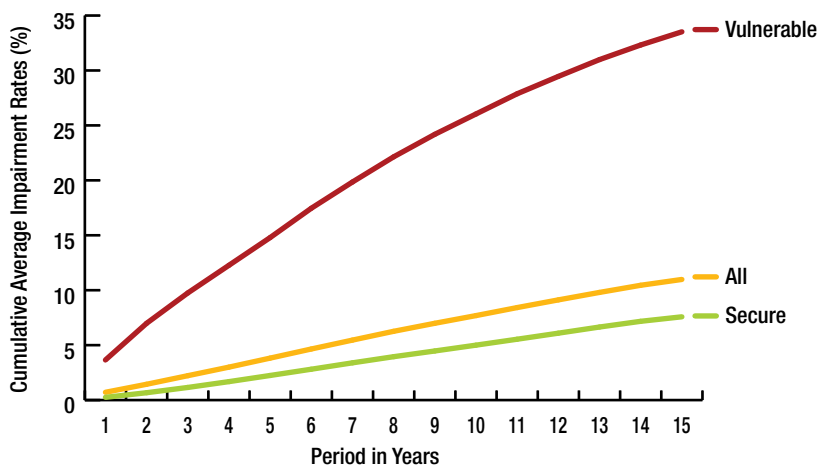
A Note on Revisions

As a result of ongoing research efforts, A.M. Best’s Impairment Database is updated continually to reflect the incorporation of new data or adjustments to existing data.

Ongoing historical research occasionally leads to the restatement of certain data, primarily a company’s initial year of impairment. If any change places a company outside of this study’s parameters, that company is eliminated.

The current study includes the most accurate information currently available from what is believed to be the most comprehensive insurance company impairment database in existence. After incorporating all updates and revisions, the results of the current study remain broadly consistent with those published for the prior study.

Exhibit 4
Cumulative Average Impairment Rates –
Secure vs. Vulnerable Best's Ratings
 U.S. life/health and property/casualty data from 1977 to 2007.



Source: A.M. Best Co.

Converting Insurance Company Impairment Rates to Debt Impairment Rates

The tabulation of impairment rates in this document is based on Financial Strength Ratings (FSRs) of insurance operating companies. A Best's FSR is an opinion of an insurer's financial strength and ability to meet ongoing obligations to policyholders. Thus, the impairment rates based on FSRs are not directly comparable to impairment rates on debt securities, which by definition are subordinate to policyholder obligations.

A.M. Best's debt securities rating methodology is set forth in *A.M. Best's Ratings & the Treatment of Debt*, published Oct. 11, 2004. The methodology outlines how an FSR translates into an Issuer Credit Rating (ICR), which is an opinion as to an issuer's ability to meet its senior obligations.

In the U.S. insurance industry, corporate debt generally is issued at the holding company level as opposed to the operating company level. A.M. Best uses notching criteria to convert the operating company's ICR to that of the holding company where debt securities would be issued. This notching is shown in **Exhibit 5**.

An example will help illustrate the process of assigning ratings to debt securities issued by an insurance holding company.

Assume that the FSR of an insurance operating entity is "A-," and that the holding company associated with that insurance company wants to issue senior unsecured debt to fund its operating subsidiary. The

equivalent operating company ICR on the credit market scale would be "a-". The ICR of the holding company, which is equivalent to the rating of the senior obligations of the holding company – normally senior unsecured debt – generally would be three notches from the operating company's "a-" ICR, or a rating level of "bbb-".

Using an algorithm that applies the notching process to convert all the FSRs to implied debt ratings at the holding company level, A.M. Best calculates the one-year to 15-year implied cumulative average impairment rates for insurance company debt as shown in **Exhibit 6**.

Exhibit 5 Notching From Operating Company ICR To Holding Company ICR

FSR (Operating Insurance Co.)	Equivalent ICR on the Credit Market Scale (Operating Insurance Co.)	Number of Notches from Operating ICR to Holding Company ICR (i.e., to Holding Company Senior Unsecured Debt)
A++	aaa	0 to 2
	aa+	2 to 3
A+	aa	3
	aa-	3
A	a+	3
	a	3
A-	a-	3
B++	bbb+	3
	bbb	3
B+	bbb-	3 to 4
B	bb+	4
	bb	4
B-	bb-	4 to 5

Source: A.M. Best Co.

Exhibit 6 Best's Implied Impairment Rates of Holding Company Senior Unsecured Debt Grouped by ICR.

Rating	1-Year	2-Year	3-Year	4-Year	5-Year	6-Year	7-Year	8-Year	9-Year	10-Year	11-Year	12-Year	13-Year	14-Year	15-Year
aaa	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%
aa	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%
a	0.07%	0.22%	0.39%	0.59%	0.77%	1.02%	1.29%	1.58%	1.92%	2.27%	2.64%	3.10%	3.60%	4.09%	4.46%
bbb	0.19%	0.59%	1.10%	1.62%	2.20%	2.83%	3.44%	4.13%	4.73%	5.33%	5.96%	6.50%	7.01%	7.43%	7.84%
bb	0.75%	1.79%	2.87%	4.20%	5.59%	6.80%	8.05%	9.04%	9.83%	10.69%	11.55%	12.44%	13.34%	14.26%	14.86%
b	1.58%	3.52%	5.74%	7.68%	9.56%	11.55%	13.50%	15.26%	17.16%	18.90%	20.66%	22.42%	24.07%	25.50%	26.79%
c	5.00%	8.44%	11.57%	14.48%	17.44%	20.57%	23.26%	25.90%	28.06%	29.97%	31.86%	33.33%	34.63%	35.90%	37.04%
Investment															
Grade	0.14%	0.41%	0.76%	1.12%	1.51%	1.95%	2.38%	2.86%	3.33%	3.79%	4.27%	4.76%	5.25%	5.71%	6.09%
Non-															
Investment															
Grade	2.07%	3.92%	5.75%	7.62%	9.53%	11.41%	13.20%	14.81%	16.22%	17.57%	18.92%	20.18%	21.36%	22.51%	23.43%
All	0.71%	1.44%	2.22%	3.00%	3.82%	4.65%	5.46%	6.26%	6.99%	7.69%	8.42%	9.12%	9.80%	10.45%	10.98%

Source A.M. Best Co.

in the first year to 0.19% in the second year – about a threefold increase. By comparison, the increase in impairment rates from year two to year three (i.e. from 0.19% to 0.35%) is only about a twofold increase. This is the same trend found in issuer default studies, although with higher rates because of the substantially wider concept of impairment compared with default as described earlier.

The one-year impairment rate for all A.M. Best-rated companies was approximately 0.71%. Separating the ratings into Secure and Vulnerable rating categories, however, reveals that Secure companies have a one-year impairment rate of 0.25%, while Vulnerable companies have an impairment rate of 3.65%. Thus, the one-year impairment rate of Vulnerable companies is approximately 15 times the one-year impairment rate of Secure companies.

Exhibit 7 Best’s One-Year Rating Transition Matrix

U.S. life/health and property/casualty data from 1977 to 2007.

Ratings	Rating One Year Later							
	A++/A+	A/A-	B++/B+	B/B-	C++/C+	C/C-	D	Impaired
A++/A+	92.81%	6.72%	0.38%	0.03%	0.00%	0.00%	0.00%	0.06%
A/A-	4.18%	91.30%	3.49%	0.58%	0.10%	0.06%	0.11%	0.19%
B++/B+	0.37%	10.80%	81.27%	5.43%	0.61%	0.30%	0.47%	0.75%
B/B-	0.27%	1.07%	14.99%	75.55%	3.91%	0.96%	1.18%	2.07%
C++/C+	0.23%	0.59%	1.87%	18.31%	67.06%	5.32%	3.22%	3.39%
C/C-	0.00%	0.63%	0.25%	4.38%	14.88%	66.00%	7.88%	6.00%
D/NA-7	0.10%	0.65%	1.05%	2.95%	2.95%	3.50%	81.47%	7.34%

	Rating One Year Later	
	Secure	Vulnerable
Secure	98.08%	1.92%
Vulnerable	9.93%	90.07%

Source A.M. Best Co.

Exhibit 8 Impaired Companies in Each Rating Category By Years Before Impairment

U.S. life/health and property/casualty data from 1977 to 2007.

Ratings	No. of Years Before Impairment					In Year of Impairment
	5 Years	4 Years	3 Years	2 Years	1 Year	
A++/A+	32	35	34	29	14	1
A/A-	132	126	132	110	58	10
B++/B+	124	128	112	117	92	25
B/B-	77	79	96	111	116	93
C++/C+	29	36	41	36	58	55
C/C-	16	16	16	24	48	62
D/NA-7	67	70	83	92	147	208
Not Formally Followed*	208	195	171	166	152	231
All	685	685	685	685	685	685

*The “Not Formally Followed” category represents companies that did not have a Best’s FSR at the time period in question but had a Best’s FSR at some time after Dec. 31, 1977.
Source: A.M. Best Co.

Exhibit 4 shows the difference in impairment rates for Secure, Vulnerable and all companies.

While impairment rates associated with insurance company FSRs are not equivalent to issuer defaults, as previously discussed, insurance company impairment rates can be translated to the impairment rates of debt securities of insurance companies, had those companies issued debt securities. The sidebar “Converting Insurance Company Impairment Rates to Debt Impairment Rates,” on page 7, describes the translation from FSR impairment rates to implied impairment rates of senior unsecured debt issued by insurance entities.

Rating Transition

Rating transition tables can reveal to what extent ratings are stable across different periods. **Exhibit 7**, “Best’s One-Year Rating Transition Matrix,” shows the percentage of ratings that moved from one rating category to another in a one-year period. For example, 91.30% of the companies rated “A/A-” remained in the “A/A-” category one year later. The percentage of the “A/A-” companies that were upgraded one year later to “A++/A+” is 4.18%, while the percentage of the “A/A-” companies that were downgraded to “B++/B+” is 3.49%. The percentage of the “A/A-” companies that were downgraded to any rating below “A/A-,” including the impaired category, is 4.53%.⁴

Generally, as ratings decline, the percentage of companies maintaining the same rating over a one-year period also declines. For example, 91.30% of the companies with an “A/A-” rating remained in that same rating category one year later, but only 81.27% of companies with a “B++/B+” rating stayed in that category one year later.

Overall, the likelihood of a Secure company keeping its rating in the Secure range over a one-year period is 98.08%, while the likelihood of a Vulnerable company keeping its rating in the Vulnerable range over the same period is 90.07%, as shown at the bottom of **Exhibit 7**.

Ratings also migrate from the Secure rating categories to the Vulnerable rating categories as impairment approaches. **Exhibit 8**, “Impaired Companies in Each Rating Category by

⁴ 4.53% = 3.49% + 0.58% + 0.10% + 0.06% + .0.11% + 0.19%

Years Before Impairment,” displays the number of companies in each rating category at various times before impairment. To illustrate rating movements as impairments approach, observe the number of FICs in the “A++/A+” and the “D” rating categories before impairment. There are 32 FICs in the “A++/A+” rating category five years before impairment, but there are only 14 one year before impairment. By contrast, there are 67 FICs rated “D” five years before impairment, but that number increases to 147 one year before impairment. In general, the decline in the number of FICs in the higher rated categories is offset by the increase in the number of companies in the lower rated or “Not Formally Followed” categories.

Exhibit 9

Average Years to Impairment For the 685 Impaired Companies

U.S. life/health and property/casualty data from 1977 to 2007.

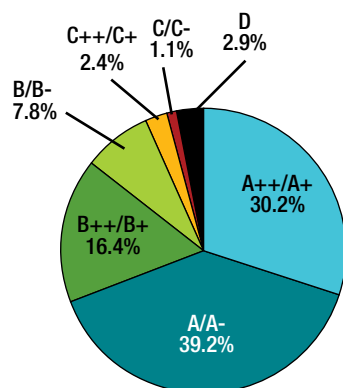
Initial Rating Category	No. of Impairments	Average Years to Impairment from Initial Rating Date*
A++/A+	94	14.9
A/A-	146	12.4
B++/B+	131	10.3
B/B-	110	9.2
C++/C+	53	7.7
C/C-	31	9.6
D/NA-7	120	9.3
Secure	371	12.3
Vulnerable	314	9.0
All	685	10.8

* Initial rating date is the later of Dec. 31, 1977, or the date of the original rating.
Source: A.M. Best Co.

Exhibit 10

Historical Rating Distribution

U.S. life/health and property/casualty data from 1977 to 2007.



Source: A.M. Best Co.

Time to Impairment

There is a strong relationship between the initial ratings of FICs and the time to impairment. As shown in **Exhibit 9**, “Average Years to Impairment For the 685 Impaired Companies,” the higher the initial rating of FICs, the longer it takes for those companies to become financially impaired. For example, it took an average of 14.9 years for FICs that initially were rated “A++/A+” to become financially impaired, but only an average of 9.2 years for FICs rated “B/B-” to become financially impaired. Data for the “C/C-” rating category and the “C++/C+” rating category probably are less reliable, since they are based on smaller impairment counts compared with the impairment counts of the other rating groupings. In addition, the “C/C-” and the “C++/C+” rating categories make up only 1.1% and 2.4%, respectively, of the historical distribution of ratings between year-end 1977 and year-end 2007 as shown in **Exhibit 10**, “Historical Rating Distribution.”

It is important to emphasize that **Exhibit 9** displays the initial ratings of the 685 insurance companies that became impaired from year-end 1977 to year-end 2007. For example, one of the 94 companies in the “A++/A+” category had an initial rating of “A+” in 1977. That company’s rating steadily declined to “B-” five years before its impairment, and then to “C-” one year before its impairment in 2002. Therefore, that company was counted in the “A++/A+” initial rating category, even though its rating in the years before impairment was far below its initial rating of “A+.”

Overall, the average years to impairment for FICs that had initial ratings in the Secure and Vulnerable categories were 12.3 and 9.0, respectively. The average number of years to impairment for all FICs with at least one Best’s FSR from year-end 1977 to year-end 2007 was 10.8.

Relationship Between the Economy And Rating Movements

There are relationships among the A.M. Best impairment count, the general economy and the A.M. Best downgrade/upgrade ratio, although these relationships may occur with time lags. It is important to note that the financial health of the insurance industry is affected not only by general economic factors, but also by catastrophes and underwriting issues that are not necessarily correlated

directly with economic activity. These relationships are explored fully in the general impairment studies and their updates.

Exhibit 11, “Impairments vs. Rating Movements and the Economy,” shows the economy as represented by the average annual growth in real (inflation-adjusted) U.S. gross domestic product (GDP); the impairment count as previously presented; and the ratio of A.M. Best-rated companies that were downgraded — excluding companies that became impaired — to the number of A.M. Best-rated companies that were upgraded. The most notable periods of low economic activity as measured by real GDP growth are the double-dip recession that occurred from 1980 to 1982 and the 1991 and 2001 recessions.

Economic activity generally is related inversely to impairments – the lower the economic activity, the higher the number of impairments, and vice versa. **Exhibit 11** shows the double-dip recession that occurred through 1980 and 1982, when annual real GDP decreased by 0.2% and 1.9%, respectively. Since low economic activity generally leads financial impairments in the insurance industry, the effect of this recessionary period was manifested in the increase in the impairment count from 16 in 1983 to 31 in 1985. This was additionally evident following the 2001 recession with the local peak of 41 impairments in 2002 — the same year corporate bond defaults peaked as reported by other credit rating agencies.

Exhibit 12, “Impairment Count vs. Real GDP Growth,” also shows clearly the inverse relationship between the impairment count and real growth in GDP. Note that in 1982, when the economy was in its second recession since 1980, the impairment count was relatively low. The impairment count, however, subsequently increased in 1983, 1984 and 1985, when it hit its peak for that general time period. Likewise, when real growth in GDP was at its peak in 1984, compared with the overall period of this study, the impairment count did not hit its low point after that steep economic growth until 1987. The lag between economic activity and impairment is clearly evident with the recession and the economic boom examined between 1980 and 1984.

The recent modest growth in GDP of 3.6%, 3.1% and 2.9% in 2004, 2005 and 2006, respec-

Exhibit 11 Impairments vs. Rating Movements and the Economy

Year	No. of Impairments*	Real GDP Growth**	Downgrade/Upgrade Ratio***
1978	8	5.6%	0.45
1979	6	3.2%	0.41
1980	5	-0.2%	0.43
1981	10	2.5%	0.42
1982	7	-1.9%	0.67
1983	16	4.5%	1.22
1984	22	7.2%	1.74
1985	31	4.1%	4.90
1986	25	3.5%	1.13
1987	24	3.4%	0.41
1988	25	4.1%	0.55
1989	39	3.5%	0.82
1990	39	1.9%	1.00
1991	54	-0.2%	1.05
1992	34	3.3%	1.79
1993	31	2.7%	1.32
1994	24	4.0%	0.88
1995	10	2.5%	1.62
1996	18	3.7%	1.09
1997	30	4.5%	0.78
1998	17	4.2%	0.42
1999	27	4.4%	0.40
2000	37	3.7%	0.74
2001	39	0.8%	2.05
2002	41	1.6%	3.87
2003	32	2.5%	3.29
2004	13	3.6%	0.88
2005	8	3.1%	0.55
2006	10	2.9%	0.65
2007	3	2.2%	0.32

* U.S. life/health and property/casualty data.

** Annual growth as reported by the Bureau of Economic Analysis, Department of Commerce.

*** Impaired companies are excluded from downgrade figures. Rating movements are based on the seven rating categories. Source: A.M. Best Co.

tively, contributed significantly to the historical general decline in impairments, which hit its lowest level in 2007. The low growth in GDP of 2.2% in 2007 may portend a rise in future impairments for the coming years, barring intervening factors such as a hard insurance market or strong equity-market performance.

The relationship between the economy and the downgrade/upgrade ratio is similar to the relationship between the economy and impairments — the lower the economic activity, the higher the downgrade/upgrade ratio, and vice versa. **Exhibit 13**, “Downgrade/Upgrade Ratio vs. Real GDP Growth,” shows that the 1980 to 1982 double-dip recession increased the downgrade/upgrade ratio from 1.22 in 1983 to 4.90 in 1985 – the highest downgrade/upgrade ratio in the

period covered by the study. Likewise, when real growth in GDP hit its peak in 1984, the downgrade/upgrade ratio did not hit its low point for that general time period until 1987. Additionally, when real growth in GDP hit a recent low of 0.8% in 2001, the downgrade/upgrade ratio spiked in 2002 and 2003 to its highest levels since 1985. The downgrade/upgrade ratio has been relatively low from 2004 to 2007. As is the case with impairment counts, the downgrade/upgrade ratio lags economic activity as represented by real growth in GDP.

There is a correlation between impairments and the downgrade/upgrade ratio as shown in **Exhibit 14**, "Impairments vs. Rating Movements and the Economy." As is to be expected, the two indicators generally move in tandem – the higher the impairment count, the higher the downgrade/upgrade ratio, and vice versa.

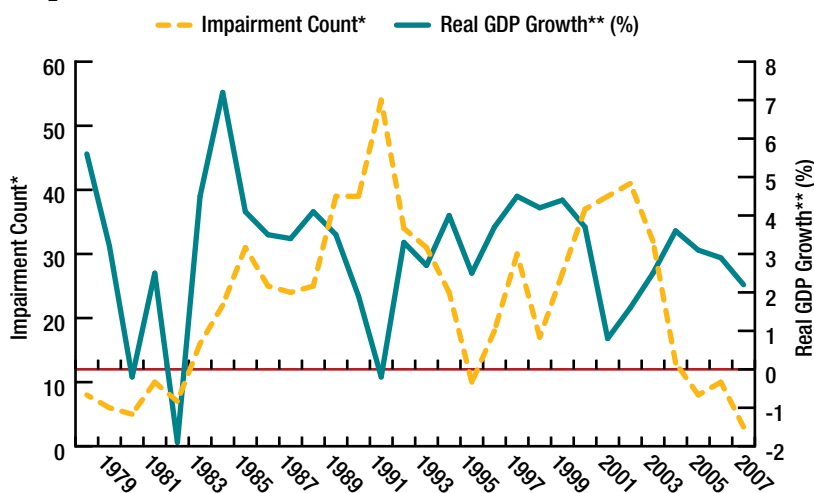
The economy began slowing in late 1989, leading into the 1990-1991 recession. A resulting crisis in the commercial mortgage market led to a rapid upturn in the impairment count. Combined with a weather catastrophe in 1992, these factors boosted the downgrade/upgrade ratio as well.

The recession of 2001, which was preceded by a slowing of the economy in 2000, coupled with fallout from the Sept. 11, 2001 terrorist attacks, helped boost the 2001 and 2002 impairment counts and the downgrade/upgrade ratios in those years. The relatively low impairment count from 2004 through 2006 was helped by improved economic activity in 2002 through 2004, despite the catastrophic losses of hurricanes Jeanne, Frances, Ivan, Charley, Wilma, Rita and Katrina. The decline in impairment count in 2004 to 2007 mirrors the decline in corporate defaults as recorded by other credit rating agencies.

It is important to point out that the longest soft market in the history of the P/C underwriting cycle – about a decade long – preceded the 2001 recession. Generally in soft markets, insurers price coverage aggressively. While the property/casualty sector was experiencing a soft market, however, the economy was experiencing a prolonged expansion that was reflected in the robust equity market of the 1990s. This factor tended to mask the effect of the soft market, as equity returns buoyed the performance of the insurance

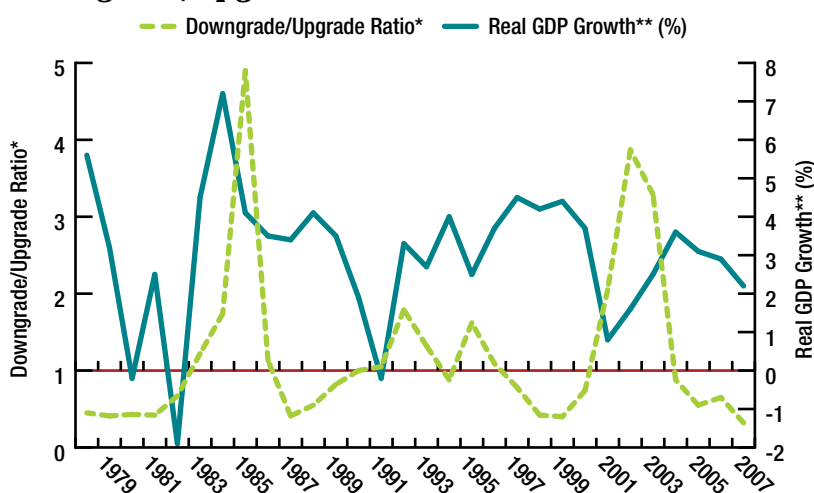
sector – both P/C and L/H – even in the midst of falling premiums for P/C insurers. Certain segments of the P/C market hardened in 2006 as a result of the hurricanes of 2005. In 2007, underwriting P/C results benefited from still-favorable underwriting conditions, improved loss-frequency trends, a high level of reserve releases and lower-than-expected catastrophe losses. In 2008, however, A.M. Best believes that a soft market, as evidenced by falling premiums, will challenge the ability of U.S. insurers to maintain underwriting discipline in light of a slowing economy and

Exhibit 12
Impairment Count vs. Real GDP Growth



* U.S. life/health and property/casualty data.
** Annual growth as reported by the Bureau of Economic Analysis, Department of Commerce.
Source: A.M. Best Co.

Exhibit 13
Downgrade/Upgrade Ratio vs. Real GDP Growth



* U.S. life/health and property/casualty data. Impaired companies are excluded from downgrade figure and from the downgrade/upgrade ratio. Rating movements are based on the seven rating categories.
** Annual growth as reported by the Bureau of Economic Analysis, Department of Commerce.
Source: A.M. Best Co.

rising surplus. Lower underwriting discipline inevitably leads to higher loss ratios; leads to a depletion of surplus; and can threaten the solvency of P/C insurance companies.

The L/H industry’s results are highly correlated with capital-market performance. Given the exposure on the asset side (from fees related to assets under management) and the liability side (through guarantees in most new variable products), life insurers are particularly vulnerable to the current volatility in the equity markets. Therefore, 2008 generally may produce more challenges from a solvency perspective for weakly capitalized L/H insurance companies.

Static Pool-Based Calculation Methodology

This study applies the static pool approach commonly used in credit market default studies to calculate the cumulative average impairment rates shown in **Exhibit 2**, “Best’s Cumulative Average Impairment Rates.” In general, yearly average impairment rates are accumulated to calculate cumulative average impairment. An example will illustrate how this approach is applied in practice to determine the one-year and two-year cumulative average impairment rates.

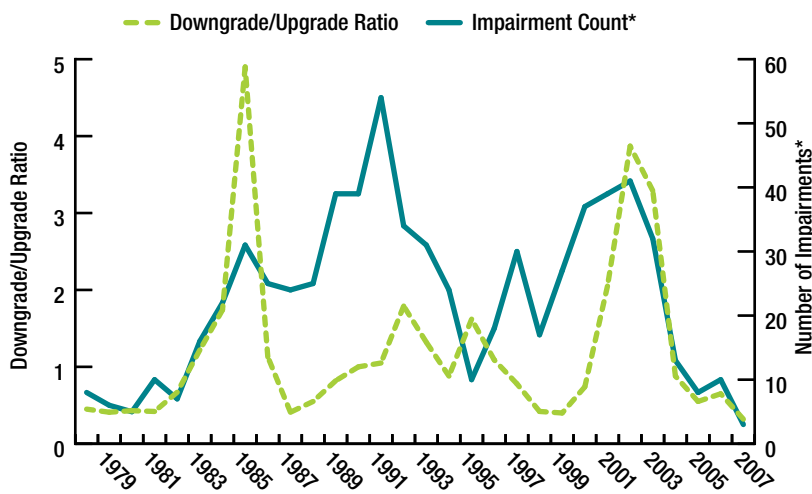
The 1977 static pool consists of insurance companies that had a Best’s FSR as of Dec. 31, 1977, and were not financially impaired. Those same insurance companies are

observed again at the end of 1978 to see how many had become financially impaired during 1978. A new static pool is determined at the end of 1978 and followed to the end of 1979, once again to observe the number of financial impairments. This pattern is repeated until the last static pool formed at the end of 2006 is followed to the end of 2007. The total number of impairments in the 30 static pools – formed from year-end 1977 to year-end 2006 – are added and then divided by the total number of companies in the 29 static pools. This calculation is used to produce the one-year average impairment rates for each of the seven rating categories described earlier.

To calculate the two-year average impairment rate, a methodology similar to the one used for the one-year average impairment rate is applied, except that the impairment count used in this case is the number of impairments in the second year after the formation of each static pool. Specifically, the 1977 static pool is observed two years later to see how many companies had become financially impaired by year-end 1979. The 1978 static pool is observed two years later to see how many insurance companies had become financially impaired by year-end 1980, and so on. Note that the static pools used for the two-year average impairment rate calculation are the static pools formed from year-end 1977 to year-end 2005, since the last data in the study are from year-end 2007. The total number of impairments in the second year for each static pool is added and then divided by the total companies in the 29 static pools to produce the two-year average impairment rate. To calculate the two-year cumulative average impairment rate, the one-year average impairment rate is added to the two-year average impairment rate. This process is continued until the 15-year cumulative average impairment rate is calculated.

To illustrate the process further, observe how the one-year, two-year and three-year cumulative average impairment rates – 0.06%, 0.19% and 0.35%, respectively – in **Exhibit 2** are calculated for the “A++/A+” rating category. The one-year, two-year and three-year average impairment rates calculated using the methodology described in the previous paragraphs are 0.0603%, 0.1301% and 0.159%. The one-year cumulative average impairment rate is simply the one-year average impairment rate of 0.0603% (rounded to 0.06%). The two-year

Exhibit 14
Impairments vs. Rating Movements and the Economy



*U.S. life/health and property/casualty data. Impaired companies are excluded from downgrade/upgrade figure and from the downgrade/upgrade ratio. Rating movements are based on the seven rating categories.
Source: A.M. Best Co.

cumulative average impairment rate, 0.1904% (rounded to 0.19%), is the sum of the one-year and the two-year average impairment rates (0.0603% + 0.1301% = approximately 0.19%). The three-year cumulative average impairment rate, 0.3494% (rounded to 0.35%), is the sum of the one-year, two-year and three-year average impairment rates (0.0603% + 0.1301% + 0.159% = approximately 0.35%).

Note that although this study presents only the one-year to 15-year cumulative average impairment rates, the data underpinning these calculations cover the 30 one-year periods from year-end 1977 to year-end 2007. Thus, the one-year cumulative average impairment rate uses 30 data points for the calculation, the two-year cumulative average impairment rate uses 29 data points, the three-year cumulative average impairment rate uses 28 data points, and so on.

These calculations are adjusted for withdrawal of ratings. Ratings can be with-

drawn for several reasons, including: voluntary liquidations; mergers and acquisitions; company request; lack of proper financial information for the evaluation of companies; and substantial changes in companies that make A.M. Best's rating process inapplicable. In the event that a company requests that its rating be withdrawn, the study captures the last rating just before the withdrawal.

The adjustment for withdrawals is made by reducing the static-pool count — the denominator in the impairment rate calculation — by the number of withdrawals in the calculation period, while maintaining the same impairment count — the numerator in the impairment rate calculation. The effect is to increase the impairment rate over what it would have been without the adjustment.

Guides to Best's Financial Strength and Debt Ratings are available at www.ambest.com/ratings/methodology.

Exhibit 15

Impairment List for 2007*

U.S. life/health and property/casualty data for 2007.

Company Name	State of Domicile	Year of Impairment	Type
Municipal Insurance Co of America	IL	2007	LH
Benicorp Insurance Company	IN	2007	LH
Colonial Indemnity Insurance Company	NY	2007	PC

* Companies with a Best's FSR Dec. 31, 1977 or after, which became impaired in 2007
Source A.M. Best Co.



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