was available, ratings were assigned in cases where the agency believed that market perceptions were skewed by the outstanding ratings of other agencies.

On December 21, for example, Moody's assigned its Aa3 rating to a $135 million transaction issued by Ryland Acceptance Corporation. The deal had earlier received a triple-A ranking from S&P, the only agency that Ryland had asked to rate the deal. In an article published the next day in the *Wall Street Journal,* Ann Monroe commented that "Moody's Investors Service Inc. has been handing out some unexpected presents. And the recipients are pretty unhappy about it." An investment banker who declined to be quoted by name called Moody's rating an "implied threat," Monroe reported. Some issuers were telling her that Moody's tactic amounted to polite blackmail designed to attract rating fees.

Watson insisted, however, that in an environment of generally declining corporate credit quality, market participants were asking for more information, and Moody's was helping both issuers and investors by providing it. "The securities are getting more complex, and issuers are dipping deeper into the quality bin," said Watson. "Investors see potential problems." "If our opinion differs from others in the market," Watson later told the *American Banker,* "then we think we have a responsibility to do something about it." Michael Keenan, deputy chairman of finance at New York University, agreed. The agencies "have two reasons for doing what they're doing," said Keenan. "Their institutional clients have to know what's going on and they want issuers to go with them too, and pay their fees. It's all part of the competitive process, and there doesn't seem to be anything wrong with it."

The securities are getting more complex, and issuers are dipping deeper into the quality bin. Investors see potential problems."

Moody's unsolicited rating practices would generate further controversy in coming years, but they did not inhibit the market's international expansion. In 1988, MBS and ABS markets were already beginning to flourish outside the United States, notably in the United Kingdom, Canada, France, and Australia. Having built the staffing and analytics to serve those markets, Moody's introduced its *Global Structured Finance* monthly in 1988 and began to issue some unsolicited ratings overseas. That year, the Structured Finance Group accounted for one-third of Moody's revenues in the taxable bond sector and Moody's rating coverage extended to approximately 90 percent of the structured finance market globally.

RATING MILKEN'S JUNK BONDS

Another market targeted for ratings expansion in the 1980s—speculative-grade bonds—was, of course, not new to Moody's. By regulatory mandate, ratings had defined which securities were classed as speculative-grade since in the mid-1930s.

Because those regulations specified that banks and many other institutions could not purchase or hold speculative-grade debt, few low-rated bonds were issued over the next four decades.

As late as 1980, Moody's had virtually no revenue from rating new bond issues below Baa, and companies that could not get investment-grade ratings were forced to borrow directly from commercial banks, typically at very high financing costs. That would soon change.

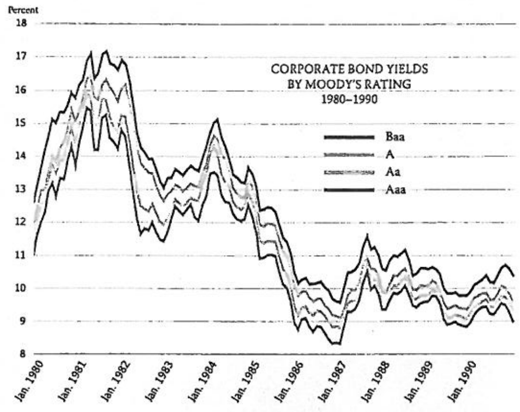
Michael Milken, of investment banking firm Drexel Burnham Lambert, was a major force driving reinvigoration and rapid expansion of the speculative-grade (i.e., "junk bond") market in the mid-1980s.

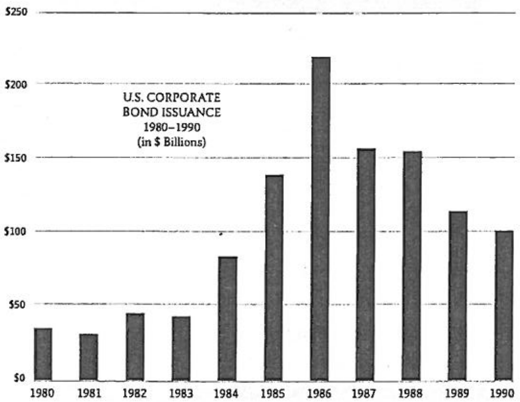
With rising inflation in the late 1970s, bond investors were increasingly disenchanted with low or negative returns on their portfolios. Committed to fixed-income investment, especially at a time of lackluster equity returns, they began to eye the high coupons of below-investment-grade bonds—i.e., "junk bonds." The dogged marketing by Michael Milken, head of high-yield bond underwriting at Drexel Burnham Lambert, fed directly into this search for higher returns.

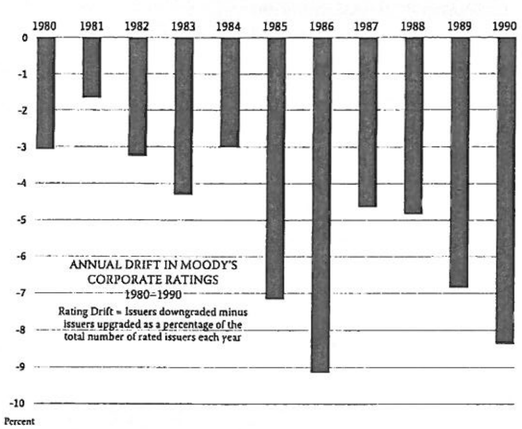
Through a careful reading of W. Braddock Hickman's study of rating performance during the depression years (*Corporate Bond Quality and Investor Experience,* see page 95), Milken noted and then aggressively marketed Hickman's finding that even through the stress of the Great Depression diversified portfolios of lower-quality bonds performed better than investment grade portfolios. Milken's marketing also had strong appeal for lower-quality issuers: what bond investors saw as high returns they viewed as a low-cost alternative to bank financing.

Under Milken, Drexel became the driving force in the rebirth of a high-yield—and largely unrated—bond market. By 1985, high-yield securities accounted for 24 percent of the dollar volume of corporate bonds issued, up from 11 percent three years earlier. Over the ten years beginning in 1976, the outstanding debt in the speculative-grade bond market grew nearly tenfold to some $125 billion in 1986.

In all that time, Drexel was careful not to emphasize Hickman's central finding that bond ratings had shown a high degree of reliability right through the Great Depression. In fact, an integral part of Drexel's strategy was to seek to control the







PERSPECTIVE ON THE 1980s

A DECADE OF HEAVY BORROWING AND DECLINING CREDIT QUALITY

DECLINING INTEREST RATES beginning in 1982 (first chart) opened the door to a decade of heavy borrowing by US corporations and sharp declines in their credit quality.

Over the next four years, as shown in the second chart, issuance of new bonds by US corporations more than quadrupled. By 1986, new issue volumes hit a record $219 billion, as interest rates on Baa-rated bonds plunged to around 10 percent, down from 17 percent in 1982.

Speculative-grade debt accounted for around a quarter of new issues at mid-decade and added significantly to the market's overall default risk. But the biggest declines in overall credit quality resulted from the more than 160 issuers that were downgraded each year on average from 1983 to 1990—often in the wake of debt-financed mergers, acquisitions, leveraged buyouts, and capital restructurings.

As shown in the third chart, downgrades caused ratings in Moody's universe of rated corporate issuers to drift downward by an average of 6 percent each year during the same period. By the same measure, ratings had remained stable on average over the preceding three decades.

Lower ratings warn of higher bond default rates to come; and that is what happened. The speculative-grade bond default rate would rise above 10 percent in 1990, signaling the sudden demise of the new-issue junk bond market, the end of the merger and acquisition boom—and new challenges for the rating agencies.

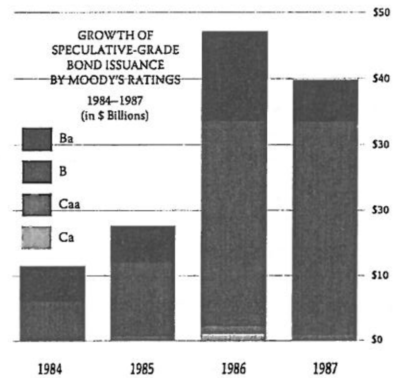
flow of all information that went into bond pricing, including credit risk assessment. As Connie Bruck put it in her book on Milken, *Predator's Ball,* he believed that "there was no corporate democracy in the country and there never would be unless it was forced." Milken did not want rating agencies to provide objective, third-party ratings that could disrupt bond pricing, and he discouraged issuers from coming to the rating agencies to be rated.

During this period, however, junk bonds were becoming junkier. The decade of the 1980s was an era of broad declines in the credit quality of U.S. companies, in large part the result of declining interest rates and a huge increase in bond issuance, notably for mergers, acquisitions, leveraged buyouts, and capital restructuring. Signs of that decline were already evident in the speculative-grade sector in the early 1980s, when increasing numbers of debt-heavy issuers were downgraded below investment grade and increasing numbers of new junk bonds were being issued in the high-risk B and Caa rating categories. Speculative-grade bond default rates had been running well above 3 percent annually since 1983 (more than triple their average at the turn of the decade); they would rise to 5.6 percent in 1986.

Recognizing this, McGuire assigned Moody's industrials analyst Bruce Clark to head a special project in 1985 to conduct in-depth meetings with high-yield investors and to develop a rating and research strategy. Working with Moody's marketing and product strategy staff, Clark built a speculative-grade service that featured overnight delivery of ratings and accompanying rationales for all high-yield bonds before they came to market. This was accompanied by a full-scale unsolicited rating program to extend rating coverage across the sector.

The ratings and Moody's Speculative Grade Research service were announced soon thereafter. As a result, Moody's rating coverage grew from less than 30 percent of high-yield bond new-issue volumes in 1985 to 95 percent two years later.

Somewhat surprisingly, even Milken came to appreciate Moody's role in the



Michael Milken discouraged issuers from coming to the rating agencies; but in 1985 Moody's launched its Speculative Grade Research service, including a market-wide unsolicited rating program. That, coupled with declining interest rates and an overall increase in corporate bond issuance, led to a rapid increase in rating coverage of newly issued junk bonds, notably in the higher-risk B-rating categories.

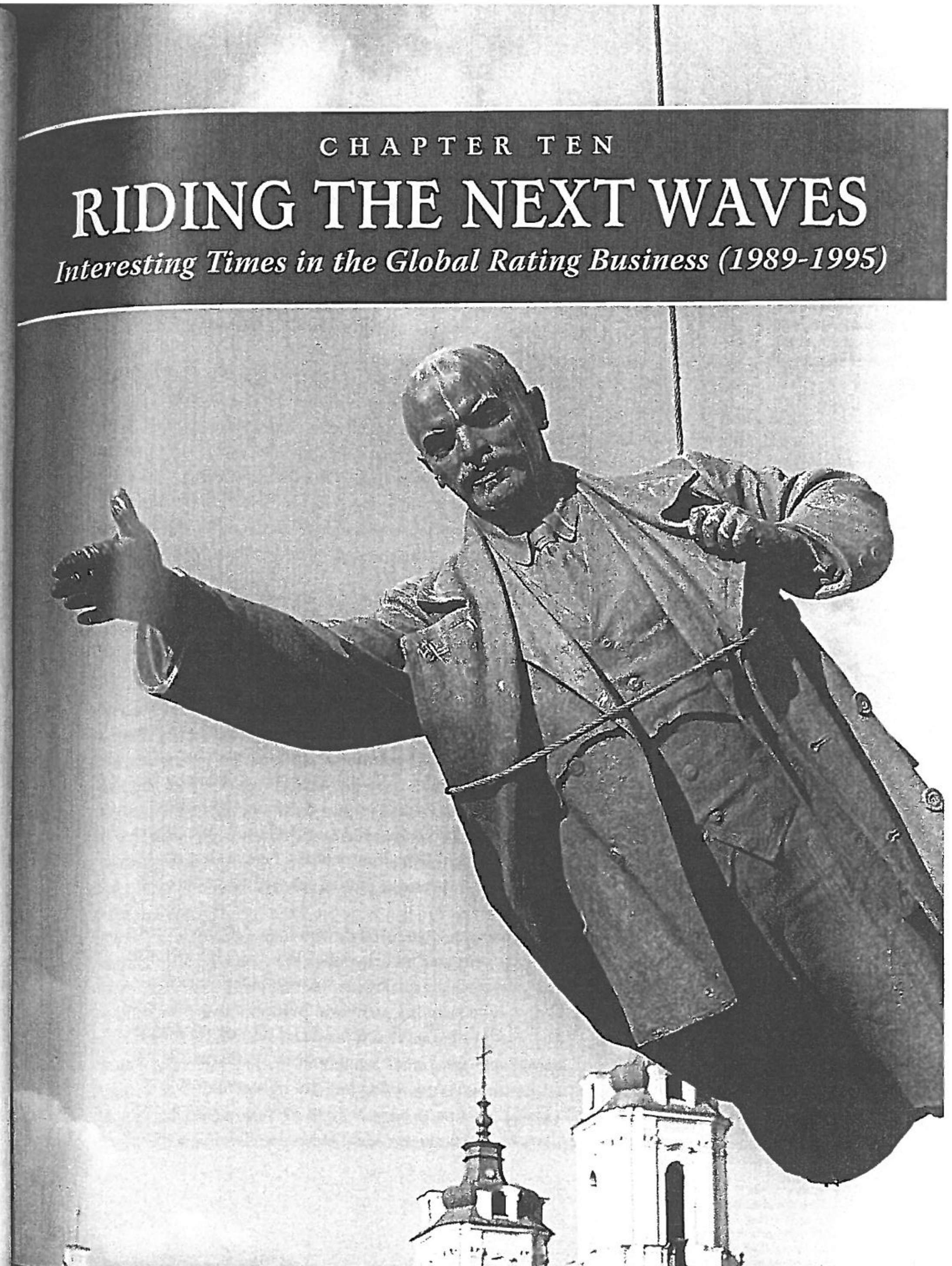
bond markets. In 1986, McGuire, never shy, bearded the lion in his own den in Beverly Hills. This is how he later characterized the substance of his meeting with the "Junk Bond King":

> *Mike Milken of Drexel ended a five-hour monologue critiquing our ratings by complimenting us on our extraordinary growth prospects and saying that he might be interested in buying Moody's.*

CHAPTER TEN

RIDING THE NEXT WAVES

Interesting Times in the Global Rating Business (1989-1995)



Overleaf: The dissolution of the Soviet Union in the early 1990s helped to foster financial market liberalization, growth of international bond markets, and globalization of the rating industry.

BY THE LATE 1980s it had become clear that opportunities for growth across the capital markets were just beginning to unfold.

With revenues of $115 million in 1987, Moody's accounted for a fraction of Dun & Bradstreet's nearly $3.4 billion of revenues that year; and the parent company continued to view Moody's as a convenient source of stable revenue growth—a cash cow. Nevertheless, D&B made several changes that were intended to support both Moody's international expansion and its overall business strategy in the financial services industry.

In March 1988, D&B acquired securities data provider Interactive Data Corporation (IDC) from Chase Manhattan Bank for $140 million. Under president John Rutherfurd Jr., IDC was billed as a significant addition to D&B's position as a financial information provider and a potential source of data for Moody's.

In November, D&B formed Dun & Bradstreet Financial Information Services. The new division was set up to coordinate the activities of all of D&B's financial data units, now including Moody's Financial Information Services, IDC, and Dun's Datastream International. Bill Dwyer was named president, while remaining president of Moody's for the time being.

John A. Bohn, Jr. was named president of Moody's on February 20, 1989, effective March 1.

JOHN BOHN TAKES THE HELM

In February 1989, after several months of searching, D&B announced that John A. Bohn Jr., then head of the Export Import Bank of the United States, would succeed Bill Dwyer as president of Moody's. Effective March 1, 1989, it would be Bohn's turn to head the firm through the next waves of capital market expansion. He brought substantial international experience to the job. Bohn had served as president and chairman of the board of the Export Import Bank since his appointment by President Reagan in early 1986. He had served as U.S. ambassador and executive director at the Asian Development Bank from 1981 to 1984. And in the private sector, he had worked for several years as manager of international operations for Wells Fargo Bank.

THE WALL STREET JOURNAL.

Ex-Im's Chairman Bohn Named Moody's President

21 February 1989

NEW YORK – John A. Bohn Jr., chairman and president of the U.S. Export-Import Bank, was named president of Moody's Investors Service Inc., effective March 1.

At the corporate and public-finance debt-rating unit of Dun & Bradstreet Corp., Mr. Bohn succeeds William O. Dwyer, who was named president of Dun's Financial Information Services group in November. That group was formed to coordinate activities of Dun's Datastream

At Moody's, Bohn brought in a new corporate-level management team designed to meet the firm's rapidly increasing needs for high-quality staffing, for computer systems to support its expanding analytical and publishing operations, and for improvements in Moody's internal and external communications. He hired Paul Rumely from Prudential Bache Securities to serve as managing director of human resources, Ruth Morley to serve as Moody's first managing director of information technology, and George Fasel as managing direc-

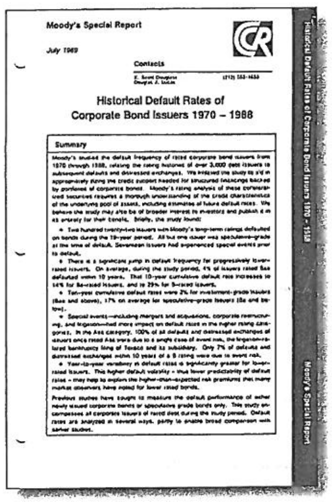
John Bohn's management team in 1990—seated from left: Bohn, George Fasel, Daniel Heimowitz, Tom McGuire, Ruth Morley. Standing from left: Danny Zottoli, Paul Rumely, Ed Roberts, and Kevin O'Brien.

tor of communications, also a new position. Edward Roberts was hired to serve as executive vice president of operations and to explore new business opportunities for the firm. Roberts came to Moody's with broad experience in international finance, having most recently served as chief financial officer of the Inter-American Development Bank in Washington, D.C.

Bohn made no changes, however, to Moody's existing departments, with Kevin O'Brien continuing as chief financial officer and Danny Zottoli as managing director and publisher in the Financial Information Services Department. Tom McGuire remained director of the Corporate Department, and Freda Ackerman continued on for a year as director of the Public Finance Department. (Daniel Heimowitz would succeed Ackerman in April 1990.)

MOODY'S BOND DEFAULT RESEARCH

The late 1980s and early 1990s would be interesting times in the rating business and at Moody's. The agency would extend its network of offices and its global rating standards to newly emerging capital markets in Europe, the Middle East, Africa, and East Asia. Moody's would undertake an aggressive campaign to expand rating coverage in fast-developing sectors, including emerging market sovereigns and banks, structured finance, the insurance industry, mutual funds, derivatives, and syndicated bank loans. Its rating actions would attract high-profile news coverage and the increasing perception, often controversial, of its growing power in the capital markets. And both Moody's and Standard & Poor's would face stiff competition from other rating concerns, notably Fitch.


Moody's Special Report

July 1989

Contacts

Historical Default Rates of Corporate Bond Issuers 1970 – 1988

Summary

Moody's first study of corporate bond default rates, prepared by analyst Douglas Lucas, was published in 1989. It demonstrated the reliability of Moody's ratings and provided market participants with useful statistics for bond pricing.

Among the first significant developments during John Bohn's seven-year tenure was the publication in July 1989 of Moody's first corporate bond default study. The study would have important long-term implications for the agency's marketing, as well as the analytics underlying its ratings. For one thing, like W. Braddock Hickman's study of rating performance during the Great Depression, it showed that rating assessments by an established agency can be highly reliable measures of credit risk—a fact that soon became widely known to capital market participants.

A few days after the Moody's study was released, financial media from the *Wall Street Journal* to the *Financial Times* published tables showing that companies rated in successively lower rating categories by Moody's had experienced progressively higher bond default rates over the 19-year study period (1970 to 1988). And in a March 1991 article on the global ratings business, *The Economist* cited that track record as a distinct competitive advantage:

> Competitors could challenge Moody's and S&P more easily if the two leaders made more mistakes. They do not make many. In 20 years only one company with an investment-grade rating from Moody's had defaulted on long-term debt—Manville, a single-A company that went bankrupt voluntarily to protect itself from asbestosis lawsuits.

Moody's had been working for years to find an accurate measure of its ratings performance. That research was accelerated in the late 1980s, as speculative-grade bond default rates shot upward and many institutions with large high-yield bond holdings were looking for ways to manage their increasing risks. One new way they explored was to package bonds for resale as structured financings (i.e., bond-backed bonds). In 1987, Moody's hired Douglas Lucas to come up with the precise bond default-rate statistics that Moody's needed to rate the new securities.

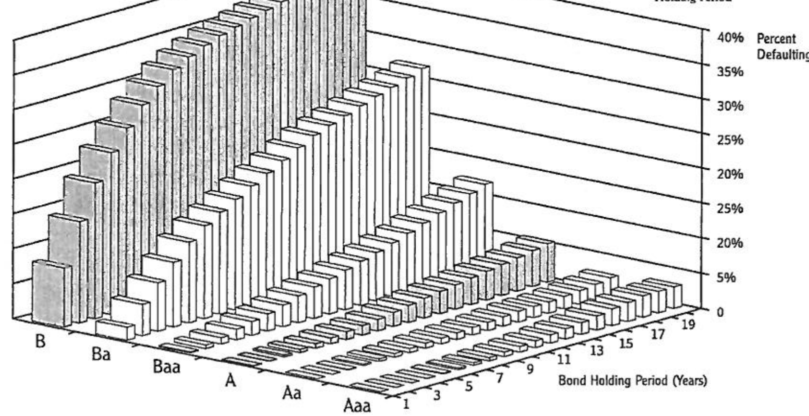
Lucas continued to publish Moody's default research through 1990, when a succession of what came to be known as "Default Doctors" followed in his footsteps, including Jerry Fons, Richard Cantor, Lea Carty, Sean Keenan, David Hamilton, and Kenneth Emery.

Moody's fifth annual bond default study, published January 1993, was headed by Jerry Fons (center), with the assistance of Lea Carty (left) and Denis Girault (right). Over a 22-year study period, 1970 to 1992, the research showed that bonds rated at successively lower rating categories experienced significantly higher default rates on average. Over 10-year bond holding periods, for example, less than one percent of issuers rated Aaa defaulted on their debt; for B-rated issuers the 10-year default rate was 34.7 percent

Over time, the scope of research was expanded considerably. Study periods presented in the annual default reports were extended back to 1920; research was conducted not only on default rates but also the amount of loss after a default occurred; updates on default research were soon published monthly; a forecasting model was developed to project default rates in various economic environments; and default research was extended to short-term as well as long-term securities.

The studies provided clear evidence that Moody's ratings could be used for bond pricing across the global universe of taxable bonds. As important, they helped to define the meaning of each rating category by providing a statistically significant measure of the relative default

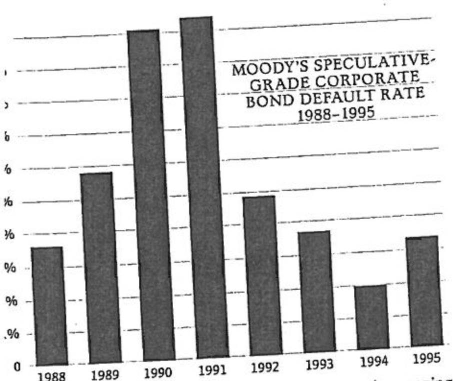
CORPORATE BOND DEFAULT EXPERIENCE
By Moody's Rating and Holding Period



probabilities that investors could expect for bonds rated at each level (see chart page __). In addition, the default rate and expected default loss statistics—along with rating transition studies—would help to provide a statistical framework for measuring and refining the consistency of Moody's ratings across all security types and geographic regions globally. The research would also help to spawn new lines of business, including the design of statistical models for predicting bond default and loss rates for speculative-grade issuers. Similar models would be developed for use by bank lenders to middle-market companies not yet able to enter the bond markets.

MONITORING HIGH-YIELD CREDITS

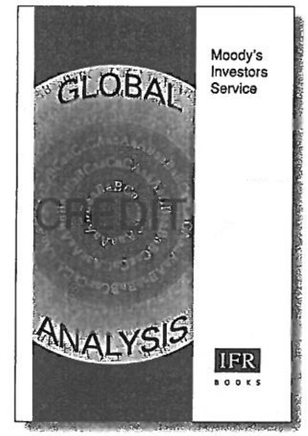
Beginning in 1990, the most newsworthy aspect of Moody's default research was its confirmation of an alarming rise in bond defaults. That year, and again in 1991, the speculative-grade default rate for corporate bonds rose above 10 percent, its highest level since 1933. Meanwhile, Drexel Burnham Lambert had run into financial difficulties after the convictions of financier Ivan Boesky and Drexel employee Denis Levine for insider trading and securities fraud, followed by a highly publicized trial of Michael Milken on similar charges. The firm filed for bankruptcy in 1990. That year, issuance of high-yield bonds plummeted to $4 billion, down from $25 billion in 1989.



Default rates on corporate bonds rose sharply at the opening of the 1990s. Moody's speculative-grade corporate bond default rate topped 10 percent in both 1990 and 1991—its highest level since the Great Depression.

Despite the slowdown, Moody's aimed to remain relevant in the high-yield sector. Structured finance analyst Andrew Kimball was assigned to establish Moody's Speculative Grade Group. Since few high-yield bonds were being issued, it was not expected that the unit would be a revenue generator, but the group served an important purpose by helping investors to identify speculative-grade credits that were under stress or on the verge of default.

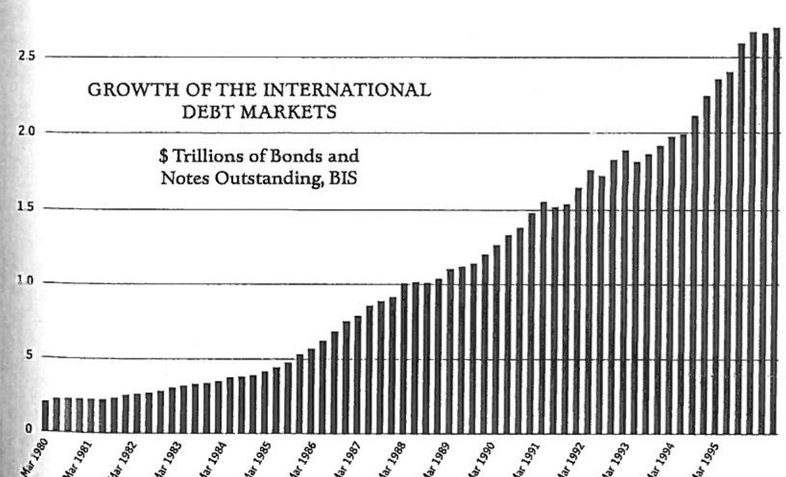
Kimball hired associate analysts to keep constant tabs on high-yield credits. Working with Roger Stein, an expert in artificial intelligence systems, and building on Moody's ongoing default risk research, Kimball's team also developed credit risk modeling tools designed to leverage analysts' time as they monitored lower-quality companies. These efforts proved well placed, and a strong foundation to build from, when it became clear around the middle of 1992 that issuance of new high-yield bonds was again on the rise and a strong secondary market was developing.



Moody's efforts to provide a comprehensive overview of the rating process began in 1991 with the publication of *Global Credit Analysis.* The 650-page book, edited by Moody's David Stimpson and published by IFR Publishing Ltd., London, presented guidelines on the agency's rating methodology for each major sector of the global markets, from sovereigns to structured finance.

A FLOWERING OF LOCAL RATING AGENCIES

The collapse of the high-yield bond market had done little to deter the growth of capital markets overseas. Advances in technology and the quickening pace of financial deregulation continued to open new opportunities for the global rating business—particularly after the fall of the Berlin Wall in 1990 signaled the dissolution of the Soviet Union and the end of the Cold War. Total outstandings in the international bond and note markets had grown steadily during the 1980s. During John Bohn's presidency, they would more than double, from around $1 trillion at the beginning of 1989 to over $2.7 trillion in at year-end 1995.



The sharp decline in the issuance of new high-yield bonds beginning in the late 1980s did not deter the long-term growth of the global bond markets. The volume of bonds and notes outstanding in the US and international markets had grown steadily in the 1980s. Worldwide outstandings more than doubled during John Bohn's presidency, from around $1 trillion in 1980 to well over $2.7 trillion at the end of 1995.

The first waves of financial market liberalization had occurred mainly in the U.S., Britain, Canada, and to a lesser extent in Japan and Australia. Soon thereafter, regulators, borrowers, and banking interests in traditionally highly regulated financial systems—notably in continental Europe and East Asia—were choosing the economic advantages of open capital markets. Invariably, they viewed rating agencies as necessary precursors to development of those markets.

By the late 1980s, scores of new rating agencies had sprung up in countries from Germany to China, mainly through the support of governments and local financial institutions.

By the late 1980s, scores of new rating agencies had sprung up in countries from Germany to China, mainly through the support of governments and local financial institutions. Their enthusiasm was reinforced by a belief that only local agencies could understand the accounting systems, management practices, industry cultures, regulatory regimes, and all the rest of the local realities that must be incorporated into reliable credit risk assessments.

A key publication serving the Euromarkets, *Euroweek*, put succinctly the European sentiments at the time: "We need a European rating agency that understands the peculiarities of European companies and European markets." An article in the German publication *Wirtschaftswoche* was more emphatic: "We are simply better than the Americans. They sometimes ask senseless questions, because they are not sufficiently familiar with German circumstances." The article added, for example, that "hidden reserves . . . would not be appreciated sufficiently by Americans."

As in Japan, however, a key question remained as to whether such a European rating agency could also build the global scale and credibility needed to compete head-to-head with Moody's and Standard & Poor's. Over a ten-year period beginning in the mid-1980s there were several bold attempts to do so.

EURORATINGS AND A RATING WORKING PARTY

The first attempt at establishing a European alternative to the big two came in 1986, with the opening of EuroRatings Ltd. in London. Ironically, the firm was founded by an American agency, Fitch Investors Service, but it was staffed with European analysts and meant specifically to fill a ratings gap in the Eurocommercial paper market. "Many banks," said the *Financial Times,* "believed that the best way to attract investors to the market was via ratings." Nevertheless, the agency closed its doors in January 1989, having failed to build investor confidence in its research. In a later wrap-up article, *Euromoney* magazine noted that EuroRatings "tried to be profitable too quickly in a business where relationships take time to build; it was not supported by issuers; and it depended on fee income from the start rather than

building a reputation among investors for solid analysis."

A more purely European effort to compete with the Americans was proposed by a German consortium—the "Rating Working Party"—formed at the end of 1988. By May 1991, according to a report in *Frankfurter Allgemeine Zeitung,* a leading German financial newspaper, the group had persuaded ten credit institutions and nine German banks (led by Deutsche Bank) to take shares in a new agency: Projectgesellshaft Rating GmbH. The agency was founded in part to support the recent introduction of the deutschemark commercial paper market, but it hoped to cooperate with other rating agencies in Europe to develop a common rating standard for the region.

Then, on October 20, 1991, London-based IBCA merged with Euronotation, a French rating agency, to form IBCA-Notation Group. Some 70 percent of the new group was sold to French conglomerate Centenaire Blanzy, which in turn hoped to sell a portion of its shares to other European investors, notably Bertelsmann AG, the German publishing giant. With Bertelsmann's participation, it was further hoped that Projectgesellschaft Rating would join the alliance.

A year later, the German agency's managing director, Oliver Everling, pointed out that some forty separate rating agencies were already operating in Europe. He was confident that the formation of IBCA-Notation Group was the first step toward bringing many of them into a pan-European body.

As it turned out, Projectgesellschaft collapsed in April 1993, soon after Bertelsmann decided not to invest in IBCA-Notation. Bertelsmann was unable to get a 50 percent controlling interest in the Centenaire Blanzy portion of the agency and its board of directors believed that without such control a "cooperative" of rating agencies could not be successful.


FT FINANCIAL TIMES
World business newspaper

Contest to set up European rating agency intensifies

By RICHARD WATERS.
6 August 1992

THE battle to create a ne rating agency has intensifi competing for the backin the German media giant as one of the main potenti a venture.

IBCA, the London-based built a strong reputation ratings for financial instit recent talks with Bertelsn company has also held tal based group set up with t man banks to look into t Europe-wide rating agenc

Both groups are trying to ratings agency with the res tion to compete with the tw

AFP

French group takes control of British IBCA credit agency

20 October 1992

PARIS, Oct 20 (AFP) - A French investment management group took control of the British IBCA credit-rating agency and of the French Euronotation-France SA agency, Euronotation said here on Tuesday.

The operation, by Centenaire Blanzy, was carried out through a French holding company IBCA-Notation Group. Blanzy controls about 70 percent of the capital of 127.5 million French francs (about 25 million dollars) of the holding, the rest

As Moody's and S&P continued to expand operations around the world, there were several attempts to form a pan-European rating agency headquartered in Europe. A German agency, Projectgesellshaft Rating, was formed in 1991. Euronotation, a French agency, and London-based IBCA were merged the same year. The resulting firm, IBCA-Notation Group, hoped to gain the financial backing of Bertelsman, the German publishing giant; but in April 1993, Bertelsman decided not to invest in the new group. Projectgesellshaft collapsed the same month. On May 14, 1991, in an ad in German financial media, Moody's announced "the first German rating agency"—Moody's Deutschland GmbH, in Frankfurt.

MOODY'S DEUTSCHLAND GmbH

From Moody's point of view, Bertelsmann was right. As Tom McGuire had predicted years earlier, any agency that aims to "calibrate" its ratings with those of other agencies—or with a presumed "global standard" for the rating industry—will inevitably run into problems. Credit ratings are inherently opinions and inevitably contain a subjective element. For that reason, said McGuire, "There are no eight ratios that allow you to generate a rating conclusion with complete reliability that applies all over the system. The only guaranty of consistency is that the ratings are produced by the same organization with an identity of values, culture, and history." It is likely that this problem became obvious to Bertelsmann directors—and to others involved in creating a pan-European rating agency—when Moody's made its next move into Europe.

Moody's vice president Michael Buneman, headed the agency's office in Frankfurt after Moody's Deutschland was founded in 1991. Buneman had opened Moody's Paris office in 1998, and would open offices in Madrid and Milan. As Moody's developing markets coordinator, he would later serve as the agency's "ambassador" to the emerging markets of Eastern Europe, South Asia, and the Mediterranean region.

On May 14, 1991, the same month that Projectgesellschaft was founded, Moody's announced the formation of Moody's Deutschland GmbH and the opening of an office in Frankfurt, headed by Moody's Michael Buneman. Along with several other Moody's executives, McGuire flew to Germany to meet with key decision makers. The announcement was made public in advertisements in major German financial media and in a German-language press release distributed to financial journalists. The release was also sent to key market participants, along with a carefully worded cover letter signed by McGuire.

The letter explained how Moody's intended to serve the best interests of the German market as a global rating agency with a thoroughly German perspective:

> Moody's purpose is to respond to the rapid changes taking place in the German capital market and to play a positive, constructive role in increasing both the transparency of that market and the confidence with which investors, both German and non-German, can operate within it. To that purpose we bring a century long record of accuracy in our rating judgments, as well as the advantage of the comparability of a global system.

> We have been training Germans in every area of our operation in order to make sure that we would have the necessary skills when the German market started to expand. Most of those people will remain in London and in New York and will work only partially on German issuers. They are intended to change the texture and culture of our organization, to give it the linguistic, social and cultural skills needed to understand the German context, rather than solely to work on German business. Moody's remains strongly committed to the belief that we can use Germans to understand French issuers or Australian issuers, and Japanese or American analysts to follow German companies. We are simply seasoning the organization with enough people so that national perspectives will be included in a global framework. That integration is not perfect yet, and will take many years to fully accomplish, but it is the only effective way to build a system which truly creates global comparability...
>
> While I know that you are supporting other efforts within the European community, I hope that that support will not be exclusive and that Moody's will be able to look to you . . . for help in fulfilling its mission in Germany.

Moody's remains strongly committed to the belief that we can use Germans to understand French issuers or Australian issuers, and Japanese or American analysts to follow German companies.

EUROPE'S GLOBAL RATING AGENCIES

Market research done in 1992 among major market participants in Europe found that there was no perceived need for a "European" rating agency. A subsequent study found that European investors preferred a global rating agency to a European one. Moody's and S&P had become Europe's global rating agencies.

In 1989, Moody's had announced that it would assign ratings to all Eurobonds of international companies at the request of either issuers or major institutional investors. Rating and research coverage of Eurobonds, Eurocommercial paper, deutschemark commercial paper, and domestic European markets had expanded rapidly thereafter. New products were then introduced specifically for Europe, including Moody's European Money Market Guide and Moody's French Ratings Guide. Research relationships were deepened with major institutional investors across Europe. And the agency opened a subsidiary in Madrid in 1993.

LA VANGUARDIA

MOODY'S FORMALLY OPENS OFFICE IN MADRID

20 November 1993

The president of the US credit rating agency Moody's Investors Service, John A. Bohn has formally opened its office in Madrid. He said that its first rating for a Spanish borrower was for the Kingdom of Spain in August 1985. Moody's has no plans to change the Aa2 rating of the Kingdom of Spain's issues in foreign currencies. Bohn commented that this was a high quality investment. He considered that Spain was a stable democracy with a relatively low level of foreign debt.

Elsewhere, globalization of Moody's research capabilities proceeded apace, with research into market needs, increased staffing, expansion of rating coverage, investor

oody's Asia
acific, Ltd was
unded in Hong
ong during 1994,
nd the subsidiary
pened an office
Singapore the
llowing year.

outreach, and new product development. In Tokyo, a Japanese-language research service was launched in 1994, including reports on Japanese issuers and structured financings issued in Japan. The same year, Moody's Canada Inc. opened in Toronto and Moody's Asia Pacific, Ltd. was founded in Hong Kong. The wholly owned Moody's company opened a Singapore office in 1995.

By the mid-1990s, one-third of Moody's analytic staff consisted of non-U.S. nationals from the major regions in which the company maintained rating coverage. And virtually all major sources of capital around the world were clients of Moody's consultative research service, which now had a new name: Moody's Global Credit Research Service.

NEW RATING INITIATIVES

The rapid expansion of Moody's offices and international staffing was accompanied by even faster growth of rating coverage at home and abroad. Although the many new initiatives required substantial investment, they helped to push the agency's overall revenues to nearly $300 million in 1995—double their 1989 level. Among the key efforts driving that growth were the following:

Banks in the Emerging markets. Moody's most ambitious initiative during the period was the extension of its bank ratings franchise to all banks active in the global interbank markets, which had grown from around $1.4 trillion of deposits and other foreign-currency positions in 1980 to over $6 trillion in 1990. The market would exceed $8 trillion in 1995.

By the early 1990s, Moody's had succeeded in rating all of the major banks in the developed nations. In 1994, under Ken Pinkes, Ray McDaniel, and Christopher Mahoney, the agency launched a program to rate banks throughout the emerging markets. As part of the project, they introduced Moody's Bank Financial Strength Ratings (BFSRs), which use a separate A-through-E scale to rank each bank's inherent financial strength. The BFSRs were needed to help investors distinguish the intrinsic risks of banks, particularly in emerging markets, where deposit ratings

were held down by low sovereign ratings.

Moody's hired senior bank analysts with relevant cultural backgrounds and expertise in emerging market banking systems. In 1995, Moody's Interbank Credit Service Ltd. was established in Limassol, Cyprus, to cover banks in Eastern Europe, the Middle East, Africa, and South Asia. Arrangements were also made to cover East Asian banks out of Moody's Hong Kong subsidiary, while Latin American banks were covered out of New York. In addition, a broad unsolicited rating program was undertaken to extend Moody's overall rating coverage from 600 banks in late 1994 to more than 1,000 institutions over several years.

BANK FINANCIAL STRENGTH RATINGS (1994)

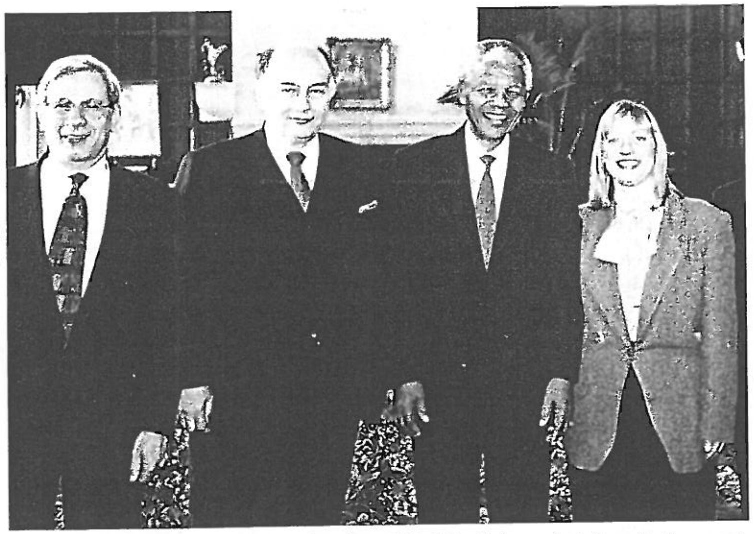
BFSR	Intrinsic Safety and Soundness
A	Superior
B	Strong
C	Adequate
D	Weak
E	Very Weak

Moody's Bank Financial Strength Ratings (BFSRs) were introduced in 1994 to answer investor requests for an opinion on each bank's intrinsic safety and soundness, excluding external credit risks or credit supports. BFSRs are useful in comparing the stand-alone risk of banks in emerging market nations, where the banks' debt and deposit ratings are often capped by the nation's sovereign rating.

Moody's Interbank Credit Service was established in Limmasol, Cyprus in 1995 to provide rating coverage of banks in Eastern Europe, the Middle East, Africa, and South Asia. The Moody's managers most involved in its founding were Mara Hilderman, managing director for European banking; Chris Mahoney, managing director, Banks & Sovereigns; Liz Jackson-Moore, managing director of the new interbank service; and Ray McDaniel, managing director, Europe.

Sovereign Risk. Simultaneously, Moody's increased staffing substantially in its Sovereign Risk Unit to rate emerging market nations. By 1998 sovereign coverage would be extended to 100 nations active in the capital markets. That effort involved extensive international travel and many meetings with top officials of emerging market countries. In 1994, for example, Moody's analysts met with Nelson Mandela, president of South Africa. Around the same time, David Levey and Tom McGuire met with Chinese Premier Zhu Rongji in Beijing in the course of rating The People's Republic of China.

Structured Finance. Moody's structured finance ratings franchise continued to grow rapidly in the early 1990s, first under Scott Douglas, then under Donald Noe. By year-end 1995, there were 85 analysts in Moody's Structured Finance Group, many of them located in offices outside the U.S., and the group's revenues had



the course of
ting South Africa,
oody's analysts
et with President
elson Mandela in
hannesburg in
994. From left:
avid Levey, head of
oody's Sovereign
sk Unit; Tom
cGuire, director,
oody's Corporate
epartment; Mr.
andela; Kristin
ndow, lead analyst
r South Africa.

risen to $65 million, double their level in 1990. Moody's market share in the mortgage-backed securities sector had declined, mainly because of stiff competition on credit enhancement standards. But the agency's rating coverage in the asset-backed securities sector, including asset-backed commercial paper programs, was near 100 percent.

Derivatives. Early in the decade, Moody's had assigned the first-ever rating on a derivatives products company. Merrill Lynch Derivatives Products, Inc. was rated Aaa in November 1991, and soon thereafter all such companies carried Moody's ratings. Under Daniel Curry, the Structured Derivatives Products group was also busy refining Moody's rating analytics for structured notes. These are debt securities with payment streams linked to the credit quality of the issuer and other factors, such as the rating on another bond or an "embedded derivative" linked to changes in an interest rate index or the price of gold. To make matters still more complicated, many structured notes were being issued as draw-downs from medium-term note (MTN) programs. In 1995, there were some 8,000 such draw-downs in the U.S. market alone, each requiring a separate risk assessment, typically only an hour or two after the drawdown was announced. To meet the need for quick rating response, Curry's team launched Moody's MTN Rating Desk in early 1996.

Insurance companies. Moody's had begun to rate the debt and financial strength of insurance companies in the mid-1980s. In the early 1990s, under Chester Murray, the agency's staffing, ratings, and research services covering the insurance industry were extended substantially. By mid-decade, Moody's Insurance Group rated all of the leading group annuity writers in the U.S., which accounted for some 87 percent of the premium volume in the industry in the mid 1990s.

Mutual Funds. Murray also led a program to formulate a new class of ratings, Moody's Mutual Fund Ratings, which were assigned to some 200 funds internationally by year-end 1995. That year, Murray and his team introduced Moody's Market Risk Ratings, which measure the potential for loss on money market and bond funds stemming from interest rate, currency, liquidity, and prepayment risks, as well as from the use of derivatives.

Bank Loans. Moody's began gearing up to rate bank loans and other bank facilities in the early 1990s. With the collapse of the high-yield bond market at the beginning of the decade, lower-quality companies had turned to commercial banks for funding. Saddled with their own credit problems, however, the banks began selling their loans in the syndicated loan market—which, in turn, began attracting high-yield bond buyers. As a result, the loan market began to look like another bond market and a demand for reliable ratings emerged. Moody's Bank Loan Rating Unit was formed in 1995, under Douglas Watson, and a new bank loan research service was marketed to major lenders. By mid-year 1996, the unit had rated 70 percent of the trading volume across the global syndicated loan market, including some 550 credit facilities of 290 borrowers in the U.S. and abroad.

As capital markets continued to grow larger and more complex, Moody's also began new unsolicited rating initiatives covering private placement transactions, project financings, real estate investment trusts, and the counterparty risk of derivatives transactions.

THE POWER OF A TRIPLE-A

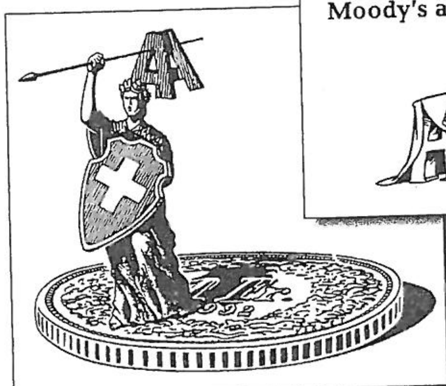
With exponential growth of rating coverage came widespread press coverage about what had been an old story in the U.S. municipals markets since the 1960s: the power of ratings. Three decades on, the most sensational news stemmed from the continuing credit pressures—and resulting rating downgrades—in the global banking and sovereign sectors.

Les banques japonaises déclassées par Moody's

When Moody's lowered its ratings on several Japanese banks in the fall of 1990, a cartoonist in France depicted the banks' reaction in the cartoon above, with the caption: "Japanese banks downgraded by Moody's." The cartoon was taken as a clear sign of the globalization of the banking system. (At the time, Mr. Cook was a chairman of the Basel committee set up to establish international bank capital requirements. Although these were perceived by some as exposing the weakness of the Japanese banking system, Moody's rating actions had resulted from other factors, notably the bursting of Japan's financial bubble.)

In 1992, when Moody's lowered ratings of several Swiss banks, cartoonists in Switzerland found novel ways to illustrate the loss of the third "a" in their long-standing triple-A ratings.

Moody's abaisse le rating du Crédit Suisse



During the second half of 1990, for example, Moody's caused an international stir when it reviewed then lowered ratings of several prominent Japanese banks. Reports and commentary appeared in financial media from Tokyo to Paris.

Rating actions again attracted worldwide attention in 1992, when Moody's lowered its Aaa ratings on several Swiss banks, including Credit Suisse and Swiss Bank Corporation, to the double-A range. Cartoonists working for several European newspapers found novel ways to illustrate the loss of the third "a" in the banks' triple-A ratings (see page 208). And soon thereafter, the *Financial Times* ran a provocative article titled "The Awesome Power of a Triple-A." In it, *FT* writer Richard Waters sought to give a personalized view of the people behind the ratings by telling this story:

> FT FINANCIAL TIMES
> World business newspaper
>
> **The Awesome Power of a Triple-A**
>
> **Richard Waters on the impact of the credit rating agencies on the financial markets**
>
> By RICHARD WATERS
> 14 May 1992
>
> On Church Street in Manhattan, in a building sandwiched between City Hall and the twin towers of the World Trade Centre, a small group of people met recently to decide on a matter of vital importance to a bank on the other side of the Atlantic. The question: should Swiss Bank Corporation, one of the three mighty and secretive Swiss banks, remain one of the world's tiny band of top-rated financial institutions?

> On Church Street in Manhattan, in a building sandwiched between City Hall and the twin towers of the World Trade Center, a small group of people met recently to decide on a matter of vital importance to a bank on the other side of the Atlantic. The question: should Swiss Bank Corporation, one of the three mighty and secretive Swiss banks, remain one of the world's tiny band of top-rated financial institutions?
>
> The meeting took place at the offices of Moody's Investors Service, which, alongside Standard & Poor's, is one of only two credit rating agencies with worldwide recognition.
>
> Among those present were Mr. Ken Pinkes, responsible for 42 analysts in Moody's financial institutions group, and Mr. Don Noe, head of the agency's international side. With them was Mr. Tom McGuire, head of all corporate ratings.
>
> Together, they represent one of the most powerful groups in the international financial markets. Their judgments on the standing of banks and other entities around the world determine how much it costs companies and governments to borrow money.
>
> In the event, the meeting decided to back the judgment of its young analyst, Mr. John Kriz, a banking specialist who has been with Moody's for seven years. His view: that SBC should lose its cherished triple-A rating. The men on Church Street had reached a similar decision weeks before about Credit Suisse.

Rating agency opinions tended to attract the greatest media attention when they pertained to sovereign borrowers, particularly when the rating actions were interpreted as statements about the quality of governments. More often than not, the announcements touched political nerves and raised emotional issues of national pride.

This had occurred, for example, in 1986, when Moody's lowered its Aaa rating on Australia's foreign-currency debt to Aa1, then again in 1989, when the rating was reviewed for further downgrade, owing mainly to the nation's rising foreign debt. Reactions, of course, were mixed. Government officials were quick to question the agency's competence and suggested that its review was politically motivated. "I think it's a question of being Moody by name, and moody by nature," said Australia's acting treasurer John Dawkins. "They either don't know what's happening in Australia or don't care." In an editorial the next day, however, Australia's *Sunday Morning Herald* had a different view: "Rather than trying to diminish Moody's reputation, the government ought to be using the opportunity to encourage public support for harsher economic measures."

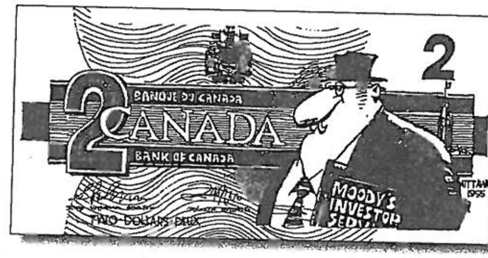
When Italy's Aaa rating was reviewed for downgrade in April of 1991, the government reaction was the opposite of that in Australia. Recognizing the seriousness of the nation's growing debt burden and the political difficulties involved in solving the problem, Italy's budget minister Paolo Cirino Pomicino said that "The government basically agrees" with Moody's decision. But the Italian press greeted the news more pessimistically, with banner headlines about Italy being relegated to the B-series (*Serie B:* a reference to the Italian football league's second division). Reflecting that emotional response, *International Financing Review* published a cartoon showing a Moody's analyst waking in the morning to find a bloody horse's head at the foot of his bed.

TOUCHING A NERVE IN CANADA

By far the liveliest flurry of ratings-related media coverage in the 1990s began in February 16, 1995, when Moody's placed Canada's Aaa foreign-currency debt rating under review, a move that sparked heavy selling of the Canadian dollar and Canadian government bonds. Although the main reasons for the review (problems stemming from Canada's fiscal deficit) were well known, Finance Minister Paul Martin said that he was surprised. "Surprised?" commented the *Globe and Mail,* a Toronto newspaper, "How can it be a surprise when an event occurs more or less as predicted by everyone but the government?"

Amid much talk and speculation, both pro and contra, the Moody's rating action quickly became a cause celebre across Canada. The emotional reaction was evident, for example, in headlines reading "Moody's Holds Gun to Canada" and

Canada's got the... MOODY BLUES'



The public reaction in Canada was widespread and emotionally charged after Moody's placed the nation's Aaa debt rating on review for possible downgrade in February 1995.

"Canada's Got the Moody's Blues." One cartoonist even sought to illustrate the situation by giving a new face to the Canadian two-dollar bill, replacing Queen Elizabeth with a Moody's analyst.

Meanwhile, Vincent Truglia, a vice president in Moody's Sovereign Risk Unit and lead analyst for Canada, had become an overnight (if reluctant) national celebrity. In an effort to personalize the event, several journalists tried to arrange in-person interviews with him. In this highly charged case, though, Moody's sought to limit interviews to discussions by telephone. Unable to get a personal meeting, *Toronto Star* reporter Susan Kastner wrote a widely read story of her unsuccessful trip to New York, where she attempted to "glimpse the face of the shaker of our national mountain." Speaking over the phone from her hotel room, Kastner had asked "the reclusive Vincent" if he would at least tell her the color of his eyes. Truglia declined, noting that the rating review was an objective decision by Moody's rating committee and had nothing to do with his personal life or appearance. "The key issue," he said, "is the analysis."

Nevertheless, albeit half tongue-in-cheek, the color of Truglia's eyes became a matter of great significance for many Canadian journalists. The mystery was solved several months later, when Ken MacQueen, a reporter from the *Hamilton Spectator,* met him at an economic conference in Canada. In his story on the meeting, MacQueen revealed in passing that Truglia's eyes are hazel-brown (which is true). Having spoken with him, however, MacQueen, concluded that the analyst's eye color was, indeed, irrelevant. A rating isn't a judgment about whether a country is bad or good, he explained. Nor is it a measure of the merits of a single budget. Truglia had emphasized that many of Canada's economic indicators then looked "rather rosy" in the short run. Moody's concern, the analyst told MacQueen, "is not what is going to happen next year. Our job is to try to protect investors five and 10 years out."

Earlier, the goings on in Canada had taken on wider significance when they

he New York Times
oreign Affairs: Don't
less With Moody's
THOMAS L. FRIEDMAN
olished: February 22, 1995

the 1960's the most important visitor a
veloping country could have was from
e head of AID, the U.S. agency that doled
it foreign aid. In the 1970's and 80's the
ost important visitor a developing coun-
y could have was from the I.M.F., to help
structure its economy.

attracted the attention of *New York Times* op-ed columnist Thomas L. Friedman. On February 22, 1995, shortly after Moody's rating review was announced, Friedman published his thoughts in an article titled "Foreign Affairs; Don't Mess With Moody's."

"President Clinton visits Ottawa tomorrow," he wrote, "but all the Canadian papers are talking about is the visit they just had from the other superpower—the man from Moody's." Friedman explained:

> Because we now live in an age when governments are basically broke, the only way for most countries to raise cash for development is either to enforce savings at home or attract investors from the world's major bond markets. Moody's is the credit rating agency that signals the electronic herd of global investors where to plunk down their money, by telling them which countries' bonds are blue-chip and which are junk.
>
> That makes Moody's one powerful agency. In fact, you could almost say that we live again in a two-superpower world. There is the U.S. and there is Moody's.

Though Friedman stretched the truth to make a point, this kind of publicity was sobering to Moody's analysts. It did show that there was a huge worldwide demand for rating agency opinions. It also added more fuel the fires of competition in the rating industry.

FITCH IS REINVIGORATED

In the early 1990s, both Moody's and Standard & Poor's faced a sudden competitive onslaught from Fitch Investors Service. Aside from Moody's, Fitch was the only rating concern to survive intact through the Great Depression and World War II. The agency did not have a major presence in the industry, however, until the firm was reinvigorated under the leadership of H. Russell Fraser.

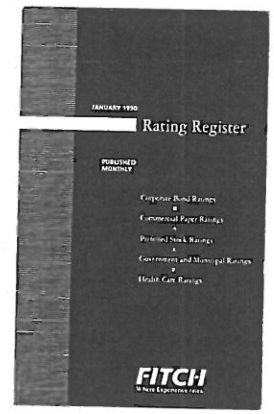
Fraser was among the most colorful figures in the rating business during the last half of the twentieth century. Widely known as an outspoken maverick, he generally came to work in Western attire, and his office near Wall Street was decorated in a manner suggestive of his dude ranch in Wyoming. A former S&P analyst, Fraser had gone on to head AMBAC Indemnity Corporation, the municipal bond insurer, in the mid-1980s. In April 1989, he joined with Robert D. Van Kampen, founder of bond house Van Kampen Merritt Inc., to acquire the family-owned Fitch. Fitch's annual revenues were below $1 million before the ownership change (a fraction of Moody's revenues of nearly $140 million in 1989), but Fraser expected revenues would grow ten-fold in 1990. He argued that the two agencies had grown indifferent over the years and were ripe for competition.

"We had been customers, and we just didn't think the two rating agencies were actively serving the market," he said, referring to his AMBAC days in a 1990 interview with *City & State* magazine. S&P's service was slow, and Moody's was superficial, he later told *Financial World*. "In the process of being rated by Moody's, they sent us kids who didn't know any more about municipal bonds than my daughter. And for that they charged us $5 million. It was an insult."

Fraser's strategy was to build "instant credibility" by hiring top analysts from Fitch's competitors and elsewhere, luring them with the chance to acquire equity in the firm (at the outset employees owned 35 percent of the company). His outsized growth forecasts did not materialize right away, however. The bond market was in the midst of a severe cyclical downturn—new bond issuance in the U.S. corporate market fell from over $200 billion in 1986 to $100 billion in 1990. But when interest rates declined beginning in 1991, an unprecedented surge in new issue volumes sapped the domestic capacity of both Moody's and S&P.

Seizing the opportunity, Fitch tapped the increased revenue stream to build its business. The agency improved its customer service function and provided the same sort of relationship-based research service that had been so successful for Moody's over the preceding decade. It produced research tailored to individual investor needs, developed an electronically-disseminated ratings database, doubled its marketing staff, and greatly increased staffing in

H. Russell Fraser, president of Fitch Investors Service, was among the most colorful figures in the rating business in recent times. He acquired Fitch in April 1989 with the support of financial services entrepreneur Robert D. Van Kampen and soon launched a strong competitive challenge against Moody's and S&P. Fraser often came to work in Western attire and decorated his office near Wall Street in a manner suggestive of his dude ranch in Wyoming.



Fitch Investor Service's *Rating Register*, the agency's first complete listing after its acquisition by bond house Van Kampen Merritt, appeared in January 1990.

its database and computer support group.

Unlike Moody's at the time, Fitch positioned itself as an issuer-friendly agency. In order to respond to the growth in securitized debt, the firm tripled its analytic staff in structured finance and aggressively courted issuers. Before a deal closed, the agency's analysts issued a report and were on the road explaining its details to investors. Fitch focused on issuers who were unhappy with Moody's service, particularly those that had recently been downgraded. And the company invested in market niches where its ratings could help issuers to meet ratings-based regulations.

RENEWED FOCUS ON INVESTOR MARKETING

Following these strategies, Fitch built sufficient ratings coverage to be recognized as a player in the industry. Meanwhile, Duff & Phelps also increased staffing in structured finance, hiring several analysts away from Moody's and S&P. It therefore came as no surprise when market research conducted among investors in 1992 showed that the reputations of both Fitch and Duff had improved dramatically over the preceding five years. S&P's had remained steady. Although Moody's retained the lead, its overall reputation had declined.

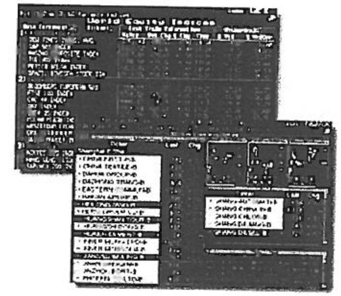
Moody's responded with an aggressive investor-oriented marketing campaign, headed by Don Noe, then director of the Structured Finance group, and Lionel Kaliff, director of the Investors Services group. Analysts received formal training in customer-focused marketing. The number of investor seminars, briefings, and teleconferences was increased, and analysts intensified their direct contact with investors. Structured finance research was also reconfigured in line with Moody's Global Credit Research service in the fundamental rating areas, including stand-alone reports on individual deals and special comments on developing issues in the industry.

At the same time, summary rating opinions in all of Moody's research products were made more prospective, hard-hitting, and explicit. Very importantly, beginning in 1990 the agency's corporate ratings, rating opinions, and research were made available electronically on Bloomberg terminals globally. The following year, the Corporate Department began distributing all press releases electronically to research clients as well as the financial media.

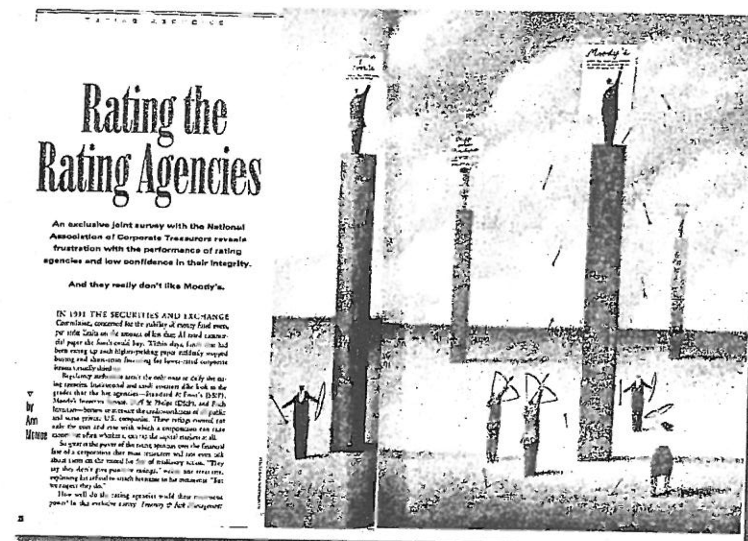
As a result, investor polling conducted in 1994 by Opinion Research Corporation showed a marked improvement for Moody's. When investors were asked which agency had improved most over the last year, Moody's came out on top. S&P and Duff were tied for last place. Further evidence of improvement came the following

year from a survey of investment firms and the investment arms of banks and insurance companies—conducted by Fixed Income Forum, an independent conference firm—in which Moody's was voted "the most effective rating agency for both asset-backed and mortgage-backed securities."

The agency's renewed focus on investor marketing apparently had the opposite effect on rated issuers, however. During the first half of 1994, *Treasury & Risk Management* magazine conducted a joint survey with the National Association of Corporate Treasurers to assess rating agency performance from the issuers' point of view. In its August article, "Rating the Rating Agencies," the publication reported that "Moody's . . . is the agency corporate treasurers love to hate." On each of three measures of satisfaction—fairness of ratings, willingness to accept a company's arguments, and industry understanding—treasurers ranked the agency well below its competitors. When asked from which of the four agencies it was most important to attain a rating, treasurers overwhelmingly chose the two established firms: S&P and Moody's. But overall, survey respondents gave their highest ratings to Fitch and Duff & Phelps. "Both agencies



Beginning in 1990, Moody's corporate ratings and research were made available on Bloomberg terminals world wide.



Rating the Rating Agencies

An exclusive joint survey with the National Association of Corporate Treasurers reveals frustration with the performance of rating agencies and low confidence in their integrity.

And they really don't like Moody's.

In 1994, *Treasury & Risk Management* magazine published the results of a survey of rating agency performance from the point of view of issuers. Overall, issuers gave their highest ratings to Fitch and Duff & Phelps. Moody's, the publication concluded, "is the agency corporate treasurers love to hate."