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CREDIT RATING AGENCIES: COMPETITION RELATED ISSUES

-- Note by Ms. Patricia LANGOHR--

Competition delegates will find enclosed FOR INFORMATION an extract of the book 'The Rating Agencies and Their Credit Ratings: What They Are, How They Work, and Why They are Relevant' by Herwig Langohr and Patricia Langohr.

This document is available in PDF format only.

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resources to achieve economies of scale. IRG comprises a network of established ratings companies, Global Credit Rating Co. (GCR) in South Africa, Pacific Credit Rating Co. (PCR), which has offices in six Latin American countries with plans to open offices in five more, and JCR-VIS Credit Rating Co. Ltd (JCR-VIS) in Pakistan. The companies operate under the umbrella brand of IRG. The group specializes in emerging markets, which GCR Chairman Dave King pointed out are 'fundamentally different to the developed markets in the US and Western Europe.'[80]

8.2 INDUSTRY SPECIFICS AND HOW THEY AFFECT COMPETITION

In this section we analyze the factors affecting the competitive structure of the industry.

8.2.1 Agencies Compete for the Market rather than in the Market

Credit Ratings are Experience Goods

A credit rating is a benchmark probability of default, at a given point in time, conditional on the information possessed by the rater. So before buying a rating, or even at the time the rating is issued, market participants cannot really assess the quality of the prediction. They can just assess the general reasoning behind the rating action and the methodology used. Unlike sweaters, you cannot test how good a rating fits before paying for it. You can only look in the mirror when the issue has come to maturity. Therefore, by definition it is a good, whose quality is only revealed over time. We can only have a more precise idea of the accuracy ex-post once we have the information of whether it defaulted or not. Even then, this measure of quality is very rough. Statistically, the quality of a rating, say a Moody's Baa1, can only be measured using large enough samples of different issues rated Baa1 by Moody's over time, and by comparing the benchmark probabilities of default associated with Baa1 with the realized frequencies of default over time. One could also compare benchmark probabilities of default with realized frequencies of default across firms. But generally, users of ratings will have to form beliefs concerning the quality of a rating. These beliefs are constantly updated as new ratings are produced and default-like events occur. The formation and update of these beliefs constitute an agency's reputation capital. And vice-versa: the reputation of a firm forms the beliefs that are held by the users of ratings.

As producers of experience goods, reputation is the crucial competitive advantage that an agency needs to build. The value of a rating to the market will depend on the reputation of the agency producing it. How investors perceive the quality (accuracy of estimate) of a rating determines the benefit of that rating to the issuer, in terms of improving its cost of debt, i.e. it needs an unbiased rating that reflects its credit risk efficiently.

Certainly incumbent firms with a strong reputation will have an advantage compared to relatively unknown agencies or entrants. Moreover, the greater volume of ratings and the longer track-record will give incumbents an early-mover advantage.[81] However, reputation

[80] IRG, 2006. 'Regional Rating Agencies Announce Formation of International Ratings Group,' IRG press release, February 22, 2006.

[81] McDaniel, R.W., President of Moody's Investors Service, 2005. Examining the role of credit rating agencies in the capital markets, Testimony before the US Senate Committee on Banking, Housing, and Urban Affairs, February 8, 1–14, page 11.

is a capital that can depreciate. It would be very interesting to study the impact on market shares after a given agency 'fails to predict' default-related events. This would give an idea of how strong the market discipline is on CRAs.

Switching Costs Limit the Number of CRAs in a Market

Investors will form and update their beliefs concerning the reputation of an agency and its ratings in different segments. Also, investors need to translate a rating on an ordinal scale into the type of risks they are willing to take. In some sense, ratings from a given CRA provide investors with a common language or standard to interpret credit risk. Switching from one language to another is costly. As we described in Chapter 3, investors will desire consistency and comparability in credit opinions. So for a given agency's reputation, the more widely its ratings are used and accepted by market participants, the greater the utility of its ratings to investors, and therefore issuers. Bond portfolio managers look for complete coverage of investment opportunities. Portfolio sponsors want to be in good company when setting portfolio constraints. Hence the network externality characteristic associated with ratings. S&P, Moody's, and Fitch have become *de facto* dominant standards in the credit rating markets. However, dominant firm reversals in industries with network effects exist, and there are several mitigating factors in this industry that increase the chances of a given market tipping in favor of a new entrant. We will see in a later section the strategies that can be used to unseat a dominant player.

Issuers will value the ratings of companies that investors value. The agency that is most trusted at removing information asymmetry should normally improve its spread most. However, besides switching costs for investors, there are also direct switching costs for issuers. Issuers build a trust relationship with just one or two CRAs. Fundamental credit analysis involves valuable CEO and executive management time as well as the exchange of sensitive information. There is a sunk cost involved in starting a rating process with a new agency. Moreover, the marginal benefit to an issuer from having an extra rating on a given issue decreases substantially with the number of ratings. Indeed, once information asymmetry is lifted through a rating, the remaining asymmetry is very small; however, CRAs still incur the same marginal cost (and charge the same fee) for producing a rating, even when that issue has already been rated by a competitor.

Because of the switching costs for both investors and issuers, it is unlikely that the market for credit ratings can sustain a large number of agencies in each segment. However, as we have seen, the industry is segmented along several dimensions, giving some room for specialized firms.

Other Barriers to Entry and Early-Mover Advantages

As we have seen above, some intrinsic characteristics result in barriers to entry in the credit rating industry. But there are others, some exogenous, such as the ones created by regulations, and some endogenous. Endogenous barriers to entry are those that incumbents build in order to protect themselves and maintain their dominance.

Regulations Credit ratings are used in several regulations and, since recognition systems exist to determine which CRAs' ratings are eligible in applying regulations, this use of ratings influences competition in the industry. As an example, we discuss below the US

recognition system, as it was in effect until mid-2007. Although the NRSRO status is now granted in a more transparent way, without any tacit market share criteria, the status is still in many regulations and has greatly affected the competitive dynamics and structure of the industry.

Since 1975, the US Securities and Exchange Commission (SEC) relied on ratings from market-recognized, credible rating agencies to distinguish between grades of creditworthiness in various regulations under federal securities laws. The SEC granted or refused 'Nationally Recognized Statistical Rating Organization,' or NRSRO, status, and recognized it through the no-action letter process.[82]

NRSRO status and the exclusive recognition of NRSRO ratings for particular purposes have restricted competition in the industry. Entrance to several lines of rating agency activity are clearly influenced by the SEC's control over NRSRO status, and, under most ratings-dependent regulations in the US the only ratings that matter are those issued by an NRSRO.

Fitch, Moody's, and S&P received the initial NRSRO status in 1975. Since then, several rating agencies have entered the sector and achieved the requisite level of market recognition to be designated NRSRO. However, each of these NRSROs was subsequently acquired by or merged into another NRSRO, with the result that, until February 2003, there were only three NRSROs. In February 2003, Dominion Bond Ratings Service was awarded NRSRO designation, bringing the total number of NRSROs up to four. In March 2005, a fifth rating agency, A.M. Best Company, Inc., was designated under the old NRSRO status.

The principal test which the SEC applies to grant NRSRO status, is that the agency be 'nationally recognized by the predominant users of ratings in the United States as an issuer of credible and reliable ratings.'[83] This means in effect that the capital markets – arguably the toughest and most competitive market anywhere – must 'already place substantial weight on the judgment of the rating agency,' and leads to something akin to a 'chicken and egg' problem for agencies wishing to obtain NRSRO status, which they view as necessary or, at a minimum, very important for becoming a substantial presence in the industry.[84] This clearly favors incumbents and acts as a substantial barrier to entry for new rating agencies.[85] The SEC has acknowledged this, but is grappling with how exactly to open up the market since users of credit ratings and others point out that there must be substantive threshold standards for achieving NRSRO status for that term to have meaning.[86]

Are the extraordinary shareholder results for Moody's until late 2006 due to the NRSRO factor? Some, certainly; but generally, NRSRO status is just a partial explanation for CRA industry concentration. The industry was concentrated before NRSRO was introduced in

[82] US Securities and Exchange Commission, 2003. Report on the role and function of credit rating agencies in the operation of the securities market, January, 1–45, page 5.

[83] US Securities and Exchange Commission, 1994. Nationally Recognized Statistical Rating Organizations, August 31, File No. S7-23-94, 1–12.

[84] Cantor, R. and Packer, F., 1994. The credit rating industry, *Quarterly Review*: Federal Reserve Bank of New York, Summer-Fall, 1–26, page 8.

[85] Basel Committee on Banking Supervision, 1999. A new capital adequacy framework: a consultative paper, Bank for International Settlements, Basel, June, 1–62, proposes as criteria for recognition as an eligible external credit assessment institution: objectivity, independence, transparency, credibility, international access and resources and the possession of a track record, pages 29–35.

[86] Nazareth, A.L., Director, Division of Market Regulation – U.S. Securities and Exchange Commission, 2003. Rating the rating agencies: the state of transparency and competition, Testimony before the House Subcommittee on Capital Markets, Insurance, and Government Sponsored Enterprises, Committee on Financial Services, April 2, 1–8.

1975. Concentration exists today in the EU, where NRSRO does not apply. Concentration is largely due to the reputation and networking first mover's advantages that benefits incumbents. The NRSRO status, as it had been defined until September 2006, has reinforced this tendency; it has not created it, as is sometimes claimed.[87]

Learning Curve Another advantage that incumbents have over entrants is that they have more experience in producing credit ratings and hence have learned how to do so more efficiently. The credit rating's black box becomes a very efficient machine once the process has been viewed, corrected, and reviewed over time. This is the learning curve advantage, whereby firms' average costs decrease as they accumulate experience and knowledge in a given market. According to this, all else being equal, incumbents should have lower average costs. Of course, if the knowledge of the efficient process is embedded in a handful of analysts and directors, these could always be hired away by a new entrant in the industry, so this advantage will only be sustainable as long as incumbent CRAs are able to retain their analysts.

Installed Base and the Case for Unsolicited Ratings DBRS – New rating agencies will have difficulty getting started without doing unsolicited ratings or at least doing benchmark reports. These ratings are not done by new CRAs to put pressure on entities to obtain solicited ratings, but to start up operations or to gain exposure to new markets. Today, DBRS has a general policy to stay out of unsolicited ratings if at all possible, but DBRS started by doing over 100 unsolicited ratings. Despite present opinions with respect to our involvement in unsolicited ratings, DBRS would never have been created, had it not been able to do unsolicited ratings at the start.[88]

Agencies benefit by establishing themselves as a standard and by building a reputation that is continuously evaluated by investors through an up-to-date, dense track record. They should therefore actively seek to increase this track record, as it can positively enhance their reputation, help them to develop expertise in a segment, and preempt other firms by locking in investors and issuers who are unwilling to switch agency. This should encourage agencies to race for an installed base of clients, especially in growing segments. One way of doing this is by providing unsolicited ratings.[89] Unsolicited ratings are a sunk cost. They can be viewed as the industry equivalent of advertising or distributing free software, and are necessary for entrants to be able to credibly challenge incumbents. This is what we mean by agencies competing for the market rather than in the market. They tend to focus on capturing a whole market by going for volume and establishing a strong reputation, rather than competing fiercely for each individual issue and taking the risk of compromising their reputation or providing individual fee discounts.

Exhaustive reliable evidence for unsolicited ratings is difficult to find. We know that they have been used extensively in the aggregate and they have been used by all issuer-pays rating agencies, including the three global ones. Until the 1970s, all ratings were

[87] The standard reference for the regulatory license view of credit ratings is Partnoy, F., 1999. The Siskel and Ebert of financial markets?: Two thumbs down for the credit rating agencies, *Washington University Law Quarterly*, Vol. 77, No. 3, 619–715.

[88] Schroeder, W.J., CFA, President – Dominion Bond Rating Service, 2001. DBRS Response to the January 2001 Basel Committee on banking supervision draft, May 28, 1–5.

[89] Unsolicited ratings are also discussed in section 4.2.1. on the rating action. Agencies also refer to unsolicited ratings as public information ratings, because it is often the case. However, it happens that some unsolicited ratings contain private information and some public information ratings are actually solicited.

unsolicited, because all ratings were delivered under the investor-pays model, and this also corresponds to the publisher status protected by the right of free press in the US.

The practice of unsolicited ratings does not seem to have had as much bad press in the US as in Europe. For instance S&P almost systematically rates all US debt without bad publicity. All major agencies have used unsolicited ratings to penetrate the European market, with varying amounts of negative publicity. Fitch has probably issued the most unsolicited ratings, thanks to which investors now consider it as an acceptable alternative to the S&P–Moody's duopoly. Unsolicited ratings have had especially bad press during the reform of CRA regulations and in the light of potential conflicts of interest in the aftermath of the auditors' roles in the major corporate bankruptcies. However, in this industry, unsolicited ratings should really be considered as a necessary tool for entering competitors to have a chance at entering the market at all.

8.2.2 The Business Model and Profit Drivers

As we saw in Chapter 3, direct demand for ratings comes from both investors and issuers, and both are willing to pay for them. CRAs are formally independent from both parties. In the following, we discuss CRAs' business models and the drivers of price, mark-up, volume, and cost.

The Business Model

There are two pricing models prevalent among rating agencies today. One is the subscription-based model, where users such as institutional investors and broker-dealers are charged for ratings. The other, followed by the old NRSROs, is the issuer-pays pricing model. Here, although traditionally the primary commitment of the agencies is to the investment community, they are primarily paid by the issuers whose securities they rate.

Prior to 1970, all agencies provided ratings free of charge to issuers and sold their publications to investors for a fee. The subscribers-pay model however, turned out to be unsustainable. While it guaranteed the agencies independence from the issuer being rated, it did not provide sufficient revenues to support their operations, since the publications could easily be copied. During the US recession of 1970, the dynamics of the industry changed. The railroad company Penn Central defaulted on US$82 million of commercial paper obligations. The commercial paper market had grown quickly in the 1960s, with little regard for credit quality. If a borrower was well known, he could easily tap the short-term commercial paper market. When Penn defaulted, the creditworthiness of many sound companies was questioned and investors stopped rolling over their short-term paper. This prompted a liquidity crisis and more defaults. Issuers became willing to pay for a rating in order to demonstrate to the market that they were a sound credit. With the demand for ratings rising, the rating agencies found themselves able to charge a fee for their services. This practice grew to the point where, by 1987, nearly 80% of S&P's revenues came from issuer fees.[90] The balance came from selling research and ratings information to large institutional investors, corporations, and libraries.

The justification for charging issuers is two-fold. Firstly, issuers receive substantial value through the publication of independent ratings that gives them access to public debt markets

[90] Ederington, L.H., Roberts, B.E., and Yawitz, J.B., 1987, The informational content of bond ratings, *Journal of Financial Research*, Fall, Vol. 10, No. 3, 211–226, page 12.

and improve the cost of capital. Secondly, rating agencies need these revenues to be able to sustain the costs of their activity.

While both issuers and investors rely on ratings, issuers have a higher willingness-to-pay than investors. This is due to two attributes of ratings for investors: non-excludability of rating information and redundance of any specific rating. Firstly, it is impossible to exclude any investor from the knowledge of a credit rating once it has become available to some investors. An investor cannot 'consume' a rating, knowledge is a non-depletable good in the sense that a rating will still exist once an investor has bought the information, but even more than that, the investor will not be able to exclude any other investor from this information, as most of it will be transferred through the pricing of the rated issue in question. A 'bulk' ratings subscription service that covers the universe that the subscriber specifies could be highly valuable for investors. Unfortunately, such a service is impractical because of the expectation that a rating action on any specific instrument will become simultaneously available to all investors through public dissemination. Because ratings are publicly disseminated, investors do not need to purchase ratings, as they are freely available.

Secondly, the same rating that may be 'required' for an issuer is rather 'redundant' for the investor. There is a substantial difference between issuers and investors in their need for a rating on any single debt instrument. The rating of a particular bond promotes its broad marketability and is therefore valuable for the issuer. But investors can select from a wide range of alternative bonds and are, therefore, more interested in the general existence and application of ratings than in any individual rating. If, for example, a rating is not assigned to a particular bond, in most cases an investor's motivation to request and pay for a rating on that bond is low, even if it were the only investor to have this information. There are many other rated bonds or investment opportunities that the investor can choose from. For issuers it is more interesting to pay for the rating themselves and have access to a much broader investor base than not pay for the rating and have only a couple of investors invest in the issue and split the total amount of the corresponding fee schedule; which they would not even be willing to do because of the automatic dissemination of the rating information.

Summing up, a rating is a public good in the economic sense that it is non-depletable once it is produced and made available, and that it is difficult to exclude anyone from its consumption. Combining the public availability of ratings with the relative indifference of investors toward any single rating, it follows that investors can benefit from ratings by consuming them without a compelling need to support the cost-base that produces them. Ratings become a free good. An issuer does not have the same tolerance as an investor for missing a rating on its bond. It does not have the same range of choices in accessing capital that an investor has in deploying capital. In order for an issuer to make its bonds marketable, it will probably choose to have that bond rated.

So where does the subscription-based model apply? Credit rating agencies that use market implied ratings rather than fundamental credit analysis, based mostly on public information, use investor subscriptions as unique source of income. The reason for this is that the cost of producing a market implied rating is much lower than that of a fundamental credit rating. Because the market segment for fundamental credit ratings is the dominating one, we focus on this business model and profit drivers. In Section 6.2.3 we discuss the complementarity between market-implied ratings and traditional credit ratings.

Fee Schedule Drivers

In the issuer-pays pricing model, the fees that are charged by the agencies vary according to the size and type of security being analyzed. A typical up-front fee on a new long-term corporate bond issue ranges between 4 and 5 bps of the principal amount. Thus a typical fee for a US$200 million 10-year bond issue would be somewhere in the range of US$80 000 to $100 000. Frequent issuers (companies issuing rated securities more than five or six times per year) often receive negotiated rates based on the total value of issuance.[91] In addition, more complex securities generally carry higher fees since the rating agency must spend considerably more time and due diligence rating a complex structured finance transaction, as opposed to a plain vanilla bond issue from a regular issuer.

An assessment of the fee schedules of the three main CRAs shows that the fee for a long-term bond rating typically consists of an up-front initial fee, that is generally a fixed percentage of the amount of the debt issue (with stated maximum and minimum fees), and an annual surveillance fee. Commercial paper and medium-term notes have separate fee schedules. Fees are mostly similar across the three major agencies, with Fitch being somewhat lower. Table 8.3 shows Moody's fee schedule for 2000 and 2007, suggesting the following observations.

Firstly, rating fees that depend on the value of the debt issue imply that the total fees paid increase with the volume of debt. It is unlikely that CRAs have costs that increase commensurately with the size of the issue even though more of their reputation capital is at stake and their legal exposure increases. It seems more likely that issuers' willingness to pay for a rating increases with the size of the issue. We identified some of the main benefits from getting a rating in Section 3.1.1, as lowering the cost of debt, increasing the liquidity in the trading of the issue, and getting access to a much broader investor base. These three benefits certainly increase with the size of the issue probably at least in a linear way. Hence, this fee schedule is also consistent with second-degree price discrimination, according to which a firm (here the CRA) will extract more rents from the buyer of its service (here the issuer) as its willingness to pay increases. This is typical of industries with a certain degree of market power.

Table 8.3 Moody's fee schedule for long term debt for corporates in Europe (2000 and 2007).

Moody's (€)	2007	2000
Bond rating	Initial fee 43 500[a] 4.5 bp on initial 500 mn Additional 3 bp for issues over 500 mn Min of 43 500 Max of 372 000 Surveillance 25 300	Initial fee 23 750[a] 3.25 bp on initial 473 mn Additional 2 bp for issues over 500 mn Min of 23 750 Max of 189 000 nil

Sources: Moody's Investors Service, 2000, Moody's Rating Fee Guide – Corporates, January, 1–3; Moody's Investors Service, 2007, Fee Guide for Per Issue Fees, January, 1–2.

[a](The initial fee is for a first issue with Moody's only.)

[91] S&P has a frequent issuer program whereby issuers who come to market more than five or six times per year may pay a flat yearly fee for unlimited ratings advisory service. No further information regarding such programs or tariff levels is available since the rating agencies consider such information to be proprietary.

A second observation is the significant increase in fees over the years 2001–2007, a period during which the practices of CRAs were called into question. A survey conducted in 2004 by the Association of Finance Professionals found that 52% of financial professionals indicated that the cost of credit ratings had increased by at least 11% over the previous three years, including 19% of respondents indicating that costs had increased by at least 25% over that time period.[92,93] These observations point toward the low bargaining power of buyers. The three major CRAs are predominant. Their ratings are almost universally required by issuers for access to institutional investors.

However, these observations have to be mitigated by two other facts. At the end, the credit rating cost is small relative to the total issuing cost, and relative to total company costs they are minuscule. It is, however, a source of irritation for treasurers because CRA invoices are important in their operating budget, and CRAs charge increasingly for every service rendered and are stiff in sticking to their fee schedules. Interviews with the Association of Corporate Treasurers revealed that there is in effect really little scope for bargaining and negotiation. Treasurers dealing with agencies are dependent on the rating, and at the same time feel that the pricing is not necessarily proportional to the agencies' costs. Issuers would, a priori, feel more comfortable with a fee based on the agency's time, more like typical lawyer or consultant services. We further discuss why the current type of fee structure may be efficient in the section on the price–cost margin.

Another important fact to keep in mind is that the agencies have been under a lot of scrutiny and pressure over the last seven years after the major bankruptcies in the US and Europe, as regulatory reform was under way. In addition to the publication of strict codes of conduct, agencies have internally developed major initiatives like transparency initiatives to increase the transparency of the rating process, of methodologies, of revealing potential conflicts; quality initiatives, and especially quality of governance initiatives and forensic accounting initiatives. Even if the initiatives have not been sufficient to guard markets earlier against the subprime crisis agencies' costs have increased over the last five to seven. This is an efficient reason to increase fees as it is directly linked with an expected increase of quality of ratings.

Other Sources of CRA Revenue

Today, CRAs provide a host of services apart from credit ratings. These include risk solutions to help corporations and financial institutions to manage their credit exposures, research and indices on mutual, insurance and pension funds, data services on corporations, securities, indices and funds.

As noted in the overall revenue charts in Section 8.1.3, while ratings continue to form the bulk of rating agency revenues (80% for Moody's and 90% for Fitch), those other products, including research and analytical products, are growing faster than the rating products. This product diversification is thus reducing the dependence of rating agency revenues on debt issuance trends. Overseas operations have similarly reduced dependence

[92] The Association for Financial Professionals (AFP) represents more than 14 000 finance and treasury professionals representing more than 5000 organizations.

[93] Kaitz, J.A., President and Chief Executive Officer – the Association of Finance Professionals, 2005, Testimony before the Committee on Banking, Housing, and Urban Affairs, United State Senate, February 8, 1–24, page 3.

on domestic debt issuance. Morgan Stanley equity research analysts comment on Moody's for Q1 of 2005,

> First quarter results speak to the diversity of Moody's revenue basis and our belief that interest rates and new debt issuance trends are not the sole drivers of growth at Moody's. For example, the Corporate Finance revenue was up 9.5%. despite a 20%+ drop in corporate issuance in the US Revenue from overseas, bank loan ratings, and enhanced analytical products more than offset softness in ratings revenue for US corporates.

The Price–Cost Margin

We do not have a direct measure of the price–cost margin. Measures of prices can be observed through the fee schedules but true marginal costs are difficult to determine. We do know that most of the marginal costs per rating (additional costs incurred for each additional rating) are driven by analyst labor time. Moody's 2004 accounts show that operating, general, and administrative expenses represented 94.9% of expenses, of which compensation amounted to about 71%. As financial products become more sophisticated and more specific, the labor market for analysts also becomes tighter, and CRAs compete with investment banks for high-quality analysts who are not only more and more specialized and quantitative, but are also required to have a solid background in business and economics. Competencies have become much more specific with the segmentization of the industry, and the profile of an expert in sovereign ratings will be very different from that of an expert in structured finance. Overall, analyst compensation is relatively high even though there is a discount in the base salaries compared to similar competencies in an investment bank; but the major difference lies in the bonuses. Credit analysts are totally disconnected with the commercial aspect of issues. They have no incentives related to the commercial aspect of a rating in stark contrast to investment banks' high-powered incentive schemes. A major credit analyst that changes agency does not bring with him issuers and issues he has been following. Credit analysts' bonuses are driven by individual performance of the ratings and overall firm performance. Certainly, analysts leave CRAs and move to investment banks when they recruit aggressively and the bonuses are high. Generally, credit analysts seem to enjoy working in rating agencies rather than banking because they value the less commercial, more collegial and academic corporate culture. Given that fees do not seem to vary with market conditions (other than the deeper trend of fee increases) and that credit analysts' salaries increase when the issuing volume is high, CRA margins may be slightly countercyclical.

We have previously seen that the bargaining power of issuers is low with respect to CRAs. This is not surprising because issuers have very few close substitutes to getting a rating in many markets. In the most mature markets, where two ratings per issue is the norm, issuers do not seriously consider issuing without a credit rating; this would be a negative signal to the market with respect to the quality of the issue and hence would be too costly. Distant substitutes would be a bank loan, or raising equity or convertible debt, but these options are very limited, generally less flexible, and more expensive. CRAs thus still have some leeway in terms of pricing before issuers move away from them.

Fees do not vary much with characteristics of issuers, issues, and market timing (i.e. volume and utilization rates of rating analysts). They rather vary in a simple, predictable and observable way. For most goods, it is the pricing mechanism that allows supply to

meet demand in an efficient way. Generally prices vary with the essential characteristics of the goods that affect its production costs and the buyer's willingness to pay for these characteristics. Hence one expects prices to vary with these characteristics. Here the pricing mechanism is a simple posted pricing rule, which does not mean that the price–cost margin does not vary across issues, on the contrary. Two issues of the same type of bond, with the same issuing volume, issued with the same rating can have very different costs in terms of analyst time spent on the issue, depending for instance on the issuer's industry. The main advantage of this relatively simple pricing rule is that it decreases transaction costs as it reduces the scope for negotiation and the role of prices as an adjustment variable. Certainly one could see that transaction costs are decreased this way. But another point that came out from several interviews with market participants, other than the agencies themselves, is that it adds distance in the relationship between the issuer and the agency from the commercial aspect. The risk expressed is that allowing for price negotiation would be like opening a 'can of worms' or conflicts of interest. The simple pricing rule can be viewed as a commitment mechanism not to enter into lengthy negotiation and adjusting the rating agency's service as a function of the negotiation. We believe that the lack of a simple public pricing rule in the structured finance market has contributed to the loosening of standards and conduct inside the rating agencies.

Volume

Industry Volume Drivers Since the amount of rating fees generated is linked to the size of a bond issue, debt issuance trends significantly affect the ratings revenues of the CRAs. Revenues are thus affected by the factors that affect issuance volumes. We examine below the three main trends that affect debt issuance, and thus ratings revenues.

A low interest rate scenario favors new issuance, as borrowers make use of the opportunity to borrow at low costs. For instance, rising interest rates in the US in the second half of 2004 led to a decline of 27% in issuance of asset-backed securities, while the same grew in Europe by 10.2% due to the accommodative interest rate policy. For corporate borrowers, the spreads over treasury yields also affect new bond issuance. Higher spreads increase borrowing costs, and provide higher return to investors, with the same amount of investments leading to a dual negative impact on bond issuance. Spreads are affected by a combination of credit quality and economic conditions.

Good economic conditions encourage expansionary business activities and the consequent use of debt to finance it. In addition, economic growth increases investor confidence, which reduces risk premia and thus corporate spreads, encouraging new bond issuance, which in turn increases the demand for ratings. On the other hand, economic downturn and volatility increases investor demand for assurances on credit quality, which in turn results in a need for credit ratings.

Credit quality is typically measured by default rates, downgrade ratios (ratio of downgrades to total rating actions), and outlooks in watchlists. Credit quality deterioration negatively affects investors' appetite for risk and vice versa. Moreover, as noted above, a slowdown in deterioration of credit quality reduces corporate spreads, which in turn raises new bond issuance and therefore the demand for ratings.

Agency Specific Volume Drivers The most important predictor of agency-specific volume drivers, in segments other than structured finance, is a CRA's installed base in that

segment. It results directly from the reputation that the agency has built, and comprises sophisticated and unsophisticated investors' beliefs concerning the quality of the CRA's ratings. Installed base, or the number past issues and issues outstanding rated, depends on a dense performance track record, and this track record can be affected by unsolicited ratings. This may explain how Fitch was able to build up demand for its ratings, as it produces unsolicited ratings that are highly researched, probably thanks to a low number of issuers followed per analyst. Market shares in structured finance seem to depend less on installed base. We believe that there are two main reasons for this. One is the fact that each structured finance transaction is akin an initial rating because each SPV is created specifically for a transaction. There is no large switching cost for an issuer of a structured finance transaction as there could be for a corporation that switches rating agency. The second one is that issuers in structured finance are known for a practice known as ratings shopping. Ratings shopping is prevalent in structured finance because the issuer expects to capture the return from shopping, whereas for corporate debt investors understand the differences in approach of the agencies sufficiently to reflect them in the spreads. It is as if investors understood the methodology so well that, disregarding which rating agency is selected, the issuer ends-up with the same spread. Whereas in structured finance 'If the market does not wholly understand the differences between the two approaches, [], CDO issuers may be able to lower funding costs by strategic selection of which agency to employ for which type of tranche.'[94]

Average Costs and Fixed Costs

Other than the unsolicited ratings and installed base, the fixed costs associated with setting up as a CRA are relatively low, and are essentially composed of establishing offices and creating an initial network of contacts, which requires management time and overhead.

Given the increasing specialization of the industry and products, there are fixed costs associated with entering a segment that requires investing in specific tools and training. Some segments, such as general corporate issues, are likely to be less specialized than structured finance transactions and sovereign ratings.

There are some economies of scope, whereby the average costs of credit analysis in two related products are certainly lower than the sum of the average costs that two separate agencies would incur to analyze credit risk in these products separately. An illustration of this is that Fitch systematically has a credit analyst participate in rating reviews outside their domain of expertise. It is not clear how these economies of scope are likely to vary, given the increasing specialization of the industry. Increasingly, CRAs are organized in separate divisions according to product specificities and analysts are encouraged to develop a domain of expertise.

Economies of scale certainly exist if you consider the average costs of analyzing issues from the same issuer. Once you have rated an issuer and one or two issues, the cost of producing a rating on a third issue will certainly be smaller, which explains why rating agencies are keen on locking their issuers into a long-term relationship.

[94] *The citation refers to the expected loss versus the probability of default approach, but the principle can be extended to other methodological differences and mis-understandings by the market.* Pereytatkin, V., Perraudin, W., 2003, Expected loss and probability of default approaches to rating collateralised debt obligations and the scope for 'ratings shopping', Credit Ratings, methodologies, rationale and default risk, ed. M.K. Ong, Risk Books, 495–506, page 496.

8.2.3 Some Dynamic Aspects of Competition among CRAs: A Small Number of Players can be Consistent with Intense Rivalry

Reputation, installed base, and network effects feed into a greater demand for ratings and reinforce an *incumbent's first-mover advantages.* So clearly, establishing a brand name is one of the critical factors in building a successful CRA. Both S&P and Moody's have been able to leverage their reputation capital, acquired in the US capital markets, to build market share in Europe, Asia, and Latin America in recent years.

There are high barriers to entry in the industry but lower mobility barriers within the industry and across segments. Incumbents can leverage their reputation and expertise advantage into complementary goods and segments. But to some extent so can specialized firms on the fringe. How difficult it is for specialized fringe firms to enter neighboring segments remains to be investigated. The case of DBRS and how it entered the European financial institutions market, provides an interesting example.

> DBRS already has an impressive rating coverage on North American financial institutions – both in the United States and in Canada. Now, in addition to North America, we are focusing our skills on rating European banking entities and keeping investors apprised of pertinent market activities here.
>
> Based on our global expansion, early this summer DBRS started to publish its first ratings and research on various European financial institutions. We rate their deposits and the full panoply of securities: medium-term notes, commercial paper, various categories of subordinated debt and hybrids, as well as, going forward, covered bonds. These are [given in Example 8.1]:[95]

Example 8.1

Germany	Hypo Real Estate Group; WestLB
Ireland	Anglo Irish Bank; International Securities Trading Corporation
Netherlands	ABN AMRO Bank
Norway	DnB NOR
Spain	Banco Popular; Caixa Catalunya; Caja Madrid
Switzerland	Credit Suisse
United Kingdom	Barclays Plc

In an industry where installed base is such a crucial driver of agency-specific demand for ratings, the existence of market segments with high growth rates is of crucial importance for competition. Rapidly developing macroeconomic factors and trends such as globalization and structuring are a real opportunity for the fringe. Investment in unsolicited ratings should show a high return if it increases an agency's installed base beyond a certain tipping point, so the harshest battles for an installed base would be expected in new and strongly growing segments. This is what has been observed in the structured finance area, with the anticompetitive complaints concerning the practice of 'notching' and a loosening of diligence and procedures in a fight amongst the rating agencies to become the dominant agency or standard in all and each of the segments in the rapidly expanding structured finance area.

[95] Dominion Bond Rating Service, 2006, DBRS *New European Banking Weekly*, October 5, Issue 1. DBRS was forced to close its offices in Europe early 2008, as a result of the subprime crisis, but the rating of European financial institutions still remains.

Other successful growth and entry strategies would be mergers and acquisitions to reach critical size and enter new markets. The advantage for users of ratings here is that investor and issuer switching costs are internalized in the new CRA. When two rating agencies merge, they have to merge their rating scales and procedures. In other words, it is the merged agency, and not the investors, that translate both rating scales and methodologies in a common one. And obviously, mergers help entrant firms, in that they reduce the number of competitors. This strategy has made the success of Fitch whether in the US or overseas.

Another strategy is to include products, like Moody's KMV, within the same agency. These are complements not substitutes, and enhance an agency's overall reputation and visibility among investors who use KMV products. Not least, continuously innovating and remaining at the cutting edge of credit analysis research is essential to be able to compete, it can also become an advantage if an agency creates a valuable, unique innovation.

The distorting effect of NRSRO status is expected to be reduced since the Credit Rating Agency Reform Act of 2006 came into force in 2007. It is discussed extensively in Chapter 9.

It is true that S&P and Moody's have historically dominated the credit rating industry. However, there is no doubt that the rating agency business is slowly becoming more competitive. The advent of Fitch as a global rating agency and true alternative to S&P and Moody's is the compelling illustration of this. This can be seen by the fact that CRAs are moving into one another's turf and launching new products in an effort to increase revenues. For example, the agencies have followed each other in introducing rating advisory services, which allow issuers and financial advisers to get 'a more definitive response' to inquiries on the ratings impact of big corporate events or recovery ratings.

8.3 INDUSTRY PERFORMANCE

8.3.1 Performance for CRA Shareholders

The value that CRAs add to their shareholders is a critical component of their business model and profit drivers. In corporate finance, we teach that it is hard to generate sustainable, valuable free cash flows that translate into shareholder' value without competitive products and services that satisfied clients are willing to purchase at a good price. Growth in revenues and in shareholder value could thus be key indicators of CRAs' business model and value-added.

Aggregated credit rating revenues of Fitch, Moody's, and S&P grew at a compounded annual growth rate of 17% during 1998–2005, reaching $4.9 billion.

What about free cash flow generation, profitability, and shareholder value creation? Since September 20, 2000, Moody's has been listed on the NYSE. It is the only pure credit rating company the stock market 'plays.' The results of Fitch's and S&P's credit rating business are confounded with those of other lines of business for parent companies Fimalac and McGraw-Hill, respectively, and thus harder to observe. So we are obliged to focus on Moody's.

For the period 2000–2004, Moody's reported average ROA of over 45% per year and average growth in EPS of around 25% per year. Figure 8.13 shows that, through 2005, the company repurchased stock worth about $1.5 billion and reached a stock market capitalization of around $18 billion, more than quadrupling its $4 billion IPO value. Until late 2007, Moody's was a real free cash-flow generating engine, and financial analysts describe it as one of the best performing stocks in the business services/publishing sector.

It is unclear to what extent Moody's performance is typical of a CRA. Figure 8.14 shows the stock price evolution of Fimalac, McGraw-Hill, and Moody's, and some indices from October 2000 through October 2007.

Is Moody's credit rating business really outperforming Fitch (a business line of Fimalac) and S&P (a business line of McGraw-Hill)? Hearst's acquisition of a 20% minority stake in Fitch Group from Fimalac SA shows that it is performing at a very comparable level. The agreement was signed in March 2006, and the deal value for 20% was based on a Fitch Group enterprise value of US$ 4.4 billion, which was itself derived by applying a Moody's multiple of 17-fold to the Fitch Ratings EBITDA.

Figure 8.13 and Figure 8.14 confirm that CRAs have been able to capture their share of the value created through the tremendous global growth of the credit market and structured finance transactions. CRAs have kept up for a while with the growing markets, increased their fees and probably kept their costs under control, but unfortunately it seems like they have not been able to invest sufficiently in their analysts, in innovating, and maintaining timely and high-quality service to issuers and investors in the structured finance segment. They have been struggling to adapt their rating and management processes to the extremely rapid rate of innovation.

8.3.2 Performance of Ratings as a Public Good

Serving Issuers or Investors?

It is often argued that CRAs have a clear conflict of interest because they serve two masters: the investors and the issuers. Investors want the ratings to be objective and useful for making inferences about default probability and loss in the event of default. Issuers want the ratings

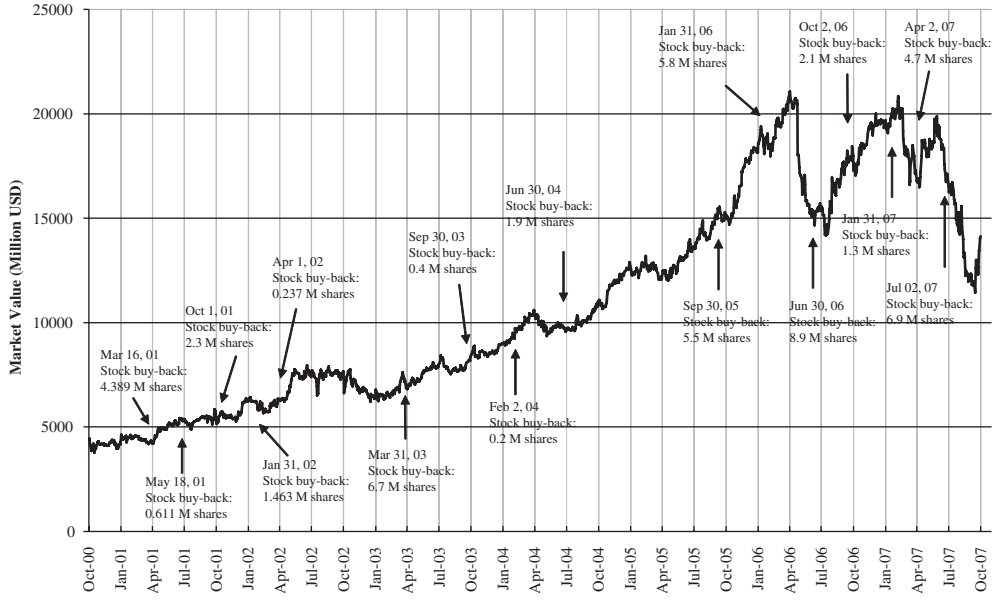

Figure 8.13 Moody's market capitalization and share buy-backs (2000–2007).
Source: Thomson Datastream.

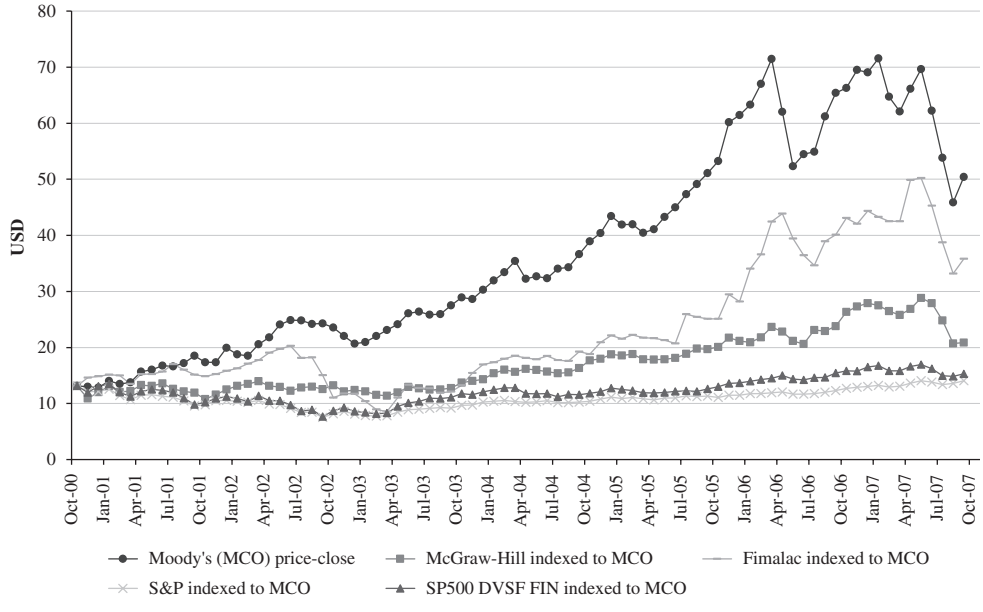

Figure 8.14 Stock price evolution of Fimalac, McGraw-Hill, and Moody's and some indices (2000–2007).
Source: Thomson Datastream.

to be favorable in order to decrease their cost of capital and increase their access to capital markets. Since the issuers supply the rating agencies with most of their revenue in fees, a conflict seems to exist. It is even possible that public listings of ratings businesses (first Moody's and then Fitch) may increase the conflict of interest by shifting the emphasis to commercial gains, rather than the provision of a 'public good.' Despite this apparent conflict, however, the payment arrangements have not eroded the credibility of the agencies in the traditional segments and many argue before the subprime mortgage crisis:

> While the current payment structure may appear to encourage agencies to assign higher ratings to satisfy issuers, the agencies have an overriding incentive to maintain a reputation for high-quality, accurate ratings . . . Over the years, the discipline provided by reputation considerations appears to have been effective, with no major scandals in the ratings industry of which we are aware.[96]

The 2002 SEC hearings agreed:

> In general, hearing participants did not believe that reliance by rating agencies on issuer fees leads to significant conflicts of interest or otherwise calls into question the overall objectivity of credit ratings. While the issuer-fee model naturally creates the potential for conflict of interest and ratings inflation, most were of the view that this conflict is manageable and, for the most part, has been effectively addressed by the credit rating agencies. The rating agencies take the position that their reputation for issuing objective and credible ratings is of paramount

[96] Cantor, R., and Packer, F., 1994, The credit rating industry, *Quarterly Review*: Federal Reserve Bank of New York, Summer-Fall, 1–26, page 4.

> importance, and that they would be loathe to jeopardize that reputation to mollify a particular issuer.[97] Furthermore, the rating agencies have implemented a number of policies and procedures designed to assure the independence and objectivity of the ratings process, such as requiring ratings decisions to be made by a ratings committee, imposing investment restrictions, and adhering to fixed fee schedules. In addition, they assert that rating analyst compensation is merit-based (e.g. based on the demonstrated accuracy of their ratings), and is not dependent on the level of fees paid by issuers the analyst rates. While most hearing participants agreed that, for the most part, the rating agencies had effectively managed this potential conflict, they stressed the importance of credit rating agencies implementing stringent firewalls, independent compensation, and other related procedures.[98]

So, while the agencies are 'paid for their services, they generally behave more like academic research centers than like businesses. Analysts, for example, never discuss the cost of a rating in their discussions with clients. They are engaged in pure analysis, and do not even have to concern themselves with a budget.'[99] Although this may seem surprising in the more recent context of the subprime crisis, this reputation for independence from conflicts of interests is pervasive in the non-structured finance related segments. It has been shown empirically, on a dataset of about 2000 bond credit rating migrations from S&P and Moody's from 1997 to 2002, that rating changes do not appear to be importantly influenced by rating agency conflicts of interest, but, rather, suggest that rating agencies are motivated primarily by reputation-related incentives.'[100] A more recent academic study, mostly executed prior to the subprime crisis, based on interviews and surevys, of key market participants mostly in the U.K. including both issuers and investors finds that all interviewees were confident in the independence of the CRAs they dealt with. The main objective of the study is to identify the characteristics that market participants, such as financial managers, investors and other interested parties, value in a CRA. The study finds relative agreement amongst the participants and the ranking of essential characteristics is as follows: 'reputation, trust, and values, followed by characteristics of transparency, timeliness, expertise, investor orientation; methodology, co-operation; independence; issuer orientation; internal process; and responsiveness.'[101] Interestingly, this study relates to the auditing literature as an approach to a model of rating quality. There is one key difference that we highlight which is the possibility to quantitatively measure the performance of ratings at maturity, as discussed in the previous chapter. Indeed, this is the ultimate measurable feedback of ratings' quality that will enhance the reputation building incentives of agencies. Given these performance statistics, investors and issuers can objectively evaluate the rating agencies, even if it is with a lag.

It seems as though reputation mechanisms have kept moral hazard temptation at bay in the traditional rating segments. We review the specific issues of conflicts of interest in the structured finance segment and the shortcomings of the rating agencies in that area in

[97] Fees from any single issuer typically comprise a very small percentage – less than 1% – of a rating agency's total revenue.

[98] US Securities and Exchange Commission, 2003, Report on the role and function of credit rating agencies in the operation of the securities market, January, 1–45, page 23.

[99] Caouette, J.B., Altman, E.I., and Narayanan, P., 1998, *Managing Credit Risk: The Next Great Financial Challenge*, John Wiley & Sons, Inc., New York, 1–452, page 70.

[100] Covitz, D., Harrison, P., 2003. Testing conflicts of interest at bond rating agencies with market anticipation: evidence that reputation incentives dominate, working paper, Federal Reserve Board, December, 1–37, page 2.

[101] Duff, A., Einig, S., 2007. Credit Rating Agencies: Meeting the Needs of the Market?, The Institute of Chartered Accountants of Scotland. On page 55 a consultant is quoted in this study as: 'I've seen clients kicking and screaming, but they [the CRA] stuck to their opinion. I think they're independent.'

section 7.3 on the subprime crisis. However, there have been allegations of anticompetitive practices in the industry.[102] These practices include: agencies that provide an unsolicited rating of a company along with a bill for the service; forcing rated companies to purchase other services, known as tying; and lowering the ratings on asset-backed securities unless a substantial portion of the assets making up those securities are also rated by the agency, known as notching.

Unsolicited Ratings

CRAs have been charged with misusing unsolicited ratings to extract revenue from the rated issuer. By its nature, an unsolicited rating relies on poorer information than a solicited one. Remember from Section 4.1 how important it is for the analyst to know and understand the issuer in depth in order to be able to make a fair assessment of its creditworthiness. For businesses with high information asymmetries due to the complexity, proprietary nature, or sheer confidentiality of their business, it would be impossible to form a fair opinion without at least some access to confidential information. For example, banks would say that it is impossible to conduct a fair unsolicited rating on them because the rater needs to know what is in the loan book, and the loan book is private and confidential. An architect, designer, manufacturer of advanced aircraft or any R&D intensive company would argue similarly. Suppose a CRA published an unsolicited rating on such a company. Wouldn't this put pressure on 'good' companies to go for a solicited and paid rating that in all likelihood would be more favorable because it would be based on more relevant, accurate information? This is what the charge of 'extracting revenue' refers to.

However, CRAs dismiss the charge as unfounded. They argue that unsolicited ratings are issued in response to meaningful interest in the investor community for cases where there is adequate public disclosure. For example, on November 20, 2006, Fitch assigned Pernod Ricard S.A., the second largest spirits company, a BBB minus senior unsecured and Issuer Default Rating (IDR). The press release stated that this rating has 'been initiated by Fitch as a service to Investors. The issuer did not participate in the rating process other than through the medium of its public disclosure.'[103] Presumably, there are few information asymmetries in a Ricard pastis, a Havana Club rum or a Chivas whisky. Moreover, there is public disclosure of unsolicited ratings as such. So this may very well have been a Fitch Initiated Rating to help Fitch enter the French corporate market, and provide valuable competition.

Rating agencies are often reluctant to issue ratings on an unsolicited basis, partly because they would, to some extent, be based on information that did not come from the actual issuer. Since the presumption is that the company being rated knows its business better than anyone else, this would tend to undermine the value of any unsolicited rating. The rating agency foots the bill for unsolicited issues. However given the fact that substantially less due diligence is required (the issuer is not likely to open its doors to the rating agency in the case of an unsolicited rating) the costs to the agency of completing an unsolicited rating tend to be lower.

The CRAs have slightly different policies with regard to assigning ratings not requested by the issuer. Both S&P and Moody's rate all SEC-registered, US corporate securities,

[102] Include citations from Partnoy, F., 1999, The Siskel and Ebert of financial markets?: Two thumbs down for the credit rating agencies, *Washington University Law Quarterly*, Vol. 77, No. 3, 619–715.
[103] Fitch Ratings, 2006, Fitch rates Pernod Ricard IDR 'BBB'; stable outlook, Press release, November 20, 1–2.

regardless of whether the rating was requested and paid for by the issuer.[104] They publicly release all of their ratings.

When Moody's does undertake an unsolicited rating, it informs the issuer and gives company management the opportunity to participate in (and pay for) the ratings process. Moody's often rates non-registered structured securities and foreign bonds on an unsolicited basis as well. Unsolicited ratings are often assigned to large, liquid foreign issues that are expected to be heavily traded. Moody's will indicate in a press release when a newly rated issuer chooses not to participate in the ratings process.

In 1996, S&P ended a long-standing policy of only assigning ratings to registered securities or upon request.[105] It began assigning unsolicited ratings using its standard rating scale with a 'pi' notation (for 'public information') to indicate that the rating was unsolicited. Most observers feel that S&P changed its policy in order to better compete with Moody's.

Similarly, Fitch did not publish unsolicited ratings before 2001. In 2001, the Fitch Initiated Ratings (FIR) program was introduced, which targeted high-profile market participants or issuers with discrepancy in market opinions not traditionally rated by Fitch. Ratings published under this program are identified as such in the original publication concerning the rating. Fitch states that it will only publish an FIR if it concludes that there is sufficient information available to allow an educated opinion, and, in all cases, such ratings are uncompensated and Fitch does not assess or seek fees for the analysis. There is no difference in the analytical process or criteria for FIRs, although the level of management involvement varies. Procedures relative to the publication of the ratings are also the same and Fitch contacts the issuer prior to publishing a new rating or subsequent rating action to the marketplace.

Those in favor of unsolicited ratings argue that they provide a check against ratings shopping. This is the practice of hiring only those agencies that are expected to provide a favorable rating. Furthermore, a company may be willing to take the chance (however small) that a third rating agency will assign a slightly higher rating, particularly if the firm thinks they have been undervalued by S&P and Moody's.[106] The incremental cost of a third credit rating is small compared to the potential savings that an investment grade rating could make for a company rated below investment grade by Moody's or S&P.

An unsolicited rating may end up being lower than what a solicited one would have been: firstly, because unsolicited ratings are likely to be based on incomplete information since contact with the issuer is limited, and secondly, the agency will be more cautious, having had less access to information. In other words, unsolicited ratings may be downward biased. Findings from a pooled time-series cross-sectional data analysis from S&P covering 265 firms in 15 countries during the period of 1998–2000 document this bias, as Table 8.4 shows.[107] The mean rankings in the tables indicate that unsolicited ratings, on average,

[104] 'As a matter of policy, in the U.S., we assign and publish ratings for all public corporate debt issues over $100 million–with or without a request from the issuer. Public transactions are defined as those registered with the SEC, those with future registration rights, and other 144A deals that have broad distribution,' Standard and Poor's, 2005, *Corporate Ratings Criteria*, 1–119, page 15.

[105] Standard & Poor's, 1996. Behind the ratings: substantially broader ratings coverage for banks, *Research*, November 27, 1–2, page 1.

[106] Reinebach, A., 1998b, Study shows third rating shrinks spreads, *The Investment Dealers' Digest*, Vol. 64, page 8.

[107] Poon, W.P.H., 2003, Are unsolicited credit ratings biased downward?, *Journal of Banking and Finance*, April, Vol. 27, Issue 4, 593–614. The null hypothesis that solicited and unsolicited ratings have identical mean rankings is rejected at the 1% level for all three panels in Table 8.4.

Table 8.4 Downward bias of unsolicited ratings (2001).
A study of 595 issuer long-term ratings across 15 countries by S&P between 1998 and 2000.

Sub-sample	No. of observations	Mean rank
Overall sample: Solicited rating	272	349
Unsolicited rating	323	255
Excluding Japanese issuers: Solicited rating	193	163
Unsolicited rating	107	128
Japanese issuers: Solicited rating	79	225
Unsolicited rating	216	120

Mean ranks for 32 pairs of Japanese issuers with similar financial profiles

Sub-sample	No. of observations	Mean rank
Solicited rating	32	41.2
Unsolicited rating	32	23.8

To control difference in sovereign risk, 32 pairs of matching issuers with similar financial profile are selected only from the Japanese sub-sample (representing about half of the overall sample) for this Mann–Whitney U test. A Japanese issuer from the solicited group is paired with another Japanese issuer from the unsolicited group by matching ICOV, ROA, DTC, and SDTD. Each pair of issuers has a similar financial profile. Specifically, the absolute differences in these ratios between the two groups fall within the following ranges: ICOV 1-time, ROA 1%, DTC 0.1, and SDTD ±0.1.

Note: The ratings are coded on a six-point ordinal scale where AA or above = 6, A = 5, BBB = 4, BB = 3, B = 2, and CCC or below = 1.
Source: Poon, W.P.H., 2003, Are unsolicited credit ratings biased downward?, *Journal of Banking and Finance*, April, Vol. 27, Issue 4, 593–614, pages 606–607.

are lower than solicited ratings for the overall sample and all sub-samples. This downward bias could be because those issuers who choose not to obtain rating services from S&P have weaker financial profiles. In order to remove this self-selection bias, the same study is conducted on a sub-sample of Japanese firms paired according to similar financial profiles, with the conclusion that even after controlling for differences in sovereign risk and key financial characteristics, the mean ranking of unsolicited ratings is still lower than that for solicited ratings.

It is thus possible that a CRA takes the opportunity to subtly reward the firms that pay with a higher rating. A possible example where CRAs may have abused the practice of issuing unsolicited ratings is the story of the German insurance company, Hannover Re, published in the *Washington Post*.[108]

> Moody's exerted subtle pressure on the company to pay for the ratings that it was issuing on the company on an unsolicited basis. Since the company was already a client of two other rating companies, it refused to solicit Moody's services. Moody's began evaluating Hannover anyway, giving it weaker marks over successive years and publishing the results while seeking

[108] Klein, A., 2004, Credit raters' power leads to some abuses, some borrowers say, *The Washington Post*, November 24, page A01.

> Hannover's business. Still, the insurer refused to pay. Then in 2003, even as other credit raters continued to give Hannover a clean bill of health, Moody's cut Hannover's debt to junk status. Shareholders worldwide, alarmed by the downgrade, dumped the insurer's stock, lowering its market value by about $175 million within hours.

Sean Egan, MD, Egan-Jones Ratings Co., quoted this article at the Senate Hearings held on credit rating agencies in February 2005. Raymond McDaniel, President of Moody's Investors Service, defended Moody's by emphasizing that the downgrade in fact happened after payment was received from Hannover Re.[109]

However, as Caouette et al. (1998) point out, if investors were to lose confidence in an agency's ratings, issuers would no longer believe they could lower their funding costs by obtaining ratings from that agency. Every time a rating is assigned, the agency's name, integrity, and credibility are on the line and subject to inspection by the whole investment community.[110] This view is supported by the reputation hypothesis mentioned earlier, suggesting that the key success factor in building a successful CRA is the development of a strong reputation in the international financial community. For a CRA to preserve its reputation while also assigning unsolicited ratings, it is of paramount importance to announce clearly if and when a rating is unsolicited, both at initiation and follow-ups.

Notching

In the course of the Congress Hearings on Rating Agencies, allegations were made that the largest rating agencies had abused their dominant position by engaging in a practice known as notching. Notching occurs when a CRA refuses to provide an overall rating for a structured finance instrument, or gives an unfavorable rating, unless a substantial portion of the assets in the underlying pool are also rated by that CRA.[111] This is a complaint that has been publicly stated by Fitch for several years. 'Through their discriminatory practice known as "notching," Moody's and S&P successfully alter competition in the commercial and residential mortgage-backed securities markets (RMBS) by leveraging their monopoly position in other markets.'[112] For example, if a CDO based exclusively on a pool of RMBS is only rated by S&P or Moody's if they also rate at least 80% of the RMBS', any originator of RMBS will initially pick the agency that leads the market in the RMBS segment. Hence, stifling competition. A practice such as notching can certainly affect the market dynamics in favor of the dominant firms, thereby reducing competition in the RMBS rating segment, which seemed to already lack market discipline.

The arguments in favor of notching compare the case of a rating agency X relying on the ratings of agency Y for the pool of assets on which its CDO is based, to a lawyer relying

[109] United States Senate Committee on Banking, Housing, and Urban Affairs, 2005, Examining the role of credit rating agencies in the capital markets: Open session hearing, February 8.

[110] Caouette, J.B., Altman E.I., and Narayanan, P., 1998, *Managing Credit Risk: The Next Great Financial Challenge*, John Wiley & Sons, Inc., New York, 1–452, page 70.

[111] US Securities and Exchange Commission, 2003, Report on the role and function of credit rating agencies in the operation of the securities market, January, 1–45, page 24.

[112] Stroker, N., Group Managing Director–Fitch Ratings, 2005, Legislative Solutions for the Credit Rating Agency Duopoly Relief Act of 2005, Statement to the House Subcommittee on Capital Markets, Insurance and Government Sponsered Enterprises, June 29, 1–24, page 4. For instance, according to comments submitted Fitch, Moody's refuses to rate a given structured finance transaction if the less than 80% of the underlying pool of assets is rated by Moody's also.

on someone else's opinion in order to form its own opinion. The question of independence and diversity of rating opinions is clearly at stake. But still, the above argument does not seem as convincing in defense of notching as it has become clearer recently that the rating agencies did not mind relying on third parties' due diligence when these are not competitors. The question of notching is complicated and merits further investigation in order to find the most efficient arrangement.

8.3.3 Performance for Issuers

The important CRA performance metrics from the issuer's perspective would be the fee, the decrease in terms of cost of credit compared to best available alternatives, accuracy and stability of the ratings, and quality of the service.

We have mentioned that issuers only have distant substitutes for ratings, which directly implies that the CRAs probably provide issuers with a competitive cost of credit. The immense growth volume of rated issues in the last 15 years talks for itself. Another implication of the lack of substitutes is the low bargaining power of issuers with respect to the fees.

The fact that the industry is so concentrated and that CRAs compete for the market rather than in the market, implies that issuers may suffer from a lack of choice among agencies and that agencies may not be as competitive in terms of service. Issuers get locked into a relationship with an agency once the agency has produced its initial rating. Agencies do not have a strong incentive to maintain a high quality of service in terms of availability of analysts, response time, and flexibility, which is consistent with our discussions with issuers and treasury associations.

Finally, issuers have a strong preference for credit ratings that are not only accurate but also stable: 'They want ratings to reflect enduring changes in credit risk because rating changes have real consequences – due primarily to ratings-based portfolio governance rules and rating triggers – that are costly to reverse.'[113] Here, credit-focused CRAs differentiate themselves clearly from CRAs that provide market-implied ratings and carefully gauge the trade-off between increasing accuracy of short-term ratings while reducing rating stability. In this sense, rating outlooks and watches are useful in providing more information on credit quality without affecting stability too much.

8.3.4 Performance for Investors

The main performance criteria for investors are accuracy and timeliness. Accuracy is discussed in Chapter 7. Timeliness is certainly an important dimension that, in the aggregate, could affect investors' portfolio performance substantially. Timeliness may especially be an issue when the financial markets are bullish and when CRAs are understaffed, especially if the issuing volume at the time is high.

Often investors subscribe to ratings information services provided by CRAs, and hence expect a certain level of service such as a large range of information and in-depth reports, seminars and opportunities for discussion or explanations on given ratings.

[113] Cantor, R., and Mann, C., 2006, Analyzing the tradeoff between ratings accuracy and stability, *Special Comment*: Moody's Investors Service, September, Report 99100, 1–8.

8.4 CONCLUSION

Changes in regulatory recognition systems and a growing consensus that competition can improve the functioning of the rating industry could increase competition from new and existing firms. The high industry growth rates (see Figure 8.14) also encourage new entrants.

The growth of a number of competing agencies has provided a much greater level of competition to Moody's and Standard & Poor's in recent years.[114] Many argue that Moody's and Standard & Poor's together represent one of the most powerful groups in the international financial markets and share concern over the power and influence of these two agencies. It is seen that a greater level of competition to the two agencies would be a healthy development in the marketplace.

There is no doubt that Moody's and S&P have built strong brand names and are seen as the pace-setters in the industry. However, it also seems that, due to fast-growing capital markets in the US, Europe, and the emerging countries, there is room for growth among all of the industry players. Indeed, the vast majority of corporations are still unrated.

Competitors of Moody's and S&P point to evidence that competition in the ratings business is good for clients. A 1998 study shows that a third corporate debt rating can affect bond spreads.[115] The study examined the behavior of more than 235 bonds rated by Fitch, Moody's, and S&P between 1991 and 1995. It found that for corporate bonds similarly rated by Moody's and S&P, the presence of a higher Fitch rating resulted in a lower spread. For bonds rated Baa2/BBB for example, a Fitch rating saved the issuer 23 basis points.[116] The lower the rating, the more a third rating generally helped. For B2/B rated securities, issuers saved 86 basis points. The yield differential was significant as well when Moody's and S&P gave a split rating and Fitch was being utilized to serve as a tie-breaker. Where S&P offered an A rating and Moody's a Baa2 or vice versa, an A rating from Fitch resulted in a 98 basis point advantage for the issuer.[117] The findings thus provide quantitative support to an argument that S&P and Moody's competitors have been making for years: third ratings are noticed by the capital markets and can often help issuers to achieve a lower total cost of capital.

[114] Reinebach, A., 1998b, Study shows third rating shrinks spreads, *The Investment Dealers' Digest*, Vol. 64, page 8.
[115] Reinebach, A., 1998b, Study shows third rating shrinks spreads, *The Investment Dealers' Digest*, Vol. 64, page 8.
[116] How significant might that be to a CFO? Consider a corporation issuing a US$250 million bond. A 23 basis point savings would amount to approximately US$600 000 per year. Perhaps almost enough to pay the CFO's annual pre-bonus salary.
[117] This would save our CFO approximately US$2,500,000 per year, significantly more than he would have to pay Fitch and his investment bankers to obtain the rating.

9
Regulatory Oversight of the Credit Rating Industry

It is clear that today's CRA industry presents plenty of public interest externalities. The quality, volume, cost and price of its output have repercussions for the efficiency of resource allocation in the economy. This is due to the success of CRAs in becoming a pillar of the informational infrastructure of world capital markets, and the extent to which regulators use credit ratings. Few industries driven by shareholder value have no public interest externalities, and in the financial sector, all sub-sectors (insurance companies, stock exchanges, equity analysis, auditors, etc.) are implicated. The solution adopted for these sectors has been to impose regulatory constraints on behavior aimed at maximizing private value in order to reconcile this with the public interest. And so it is with the CRA industry.

This chapter reviews the regulatory uses of credit ratings and the regulation of the credit rating agencies that produce them. While related, the former is not necessary for the latter and the latter doesn't fully follow from the former. Even if ratings were not used for regulatory purposes, the sheer commercial market success of the credit rating agencies' product has created its own public interest externalities. This alone would have eventually resulted in a call for some sort of regulatory oversight – however relevant, useful, or wasteful this may be. But that same commercial success made regulators decide to use ratings for their own prudential regulatory purposes. Paradoxically, this adoption was later used to justify regulatory oversight of CRAs to ensure that they did a good job.

Economic crises and government attempts to deal with these led to the use of ratings in regulation. It started with the change in the US Comptroller of the Currency's (OCC) valuation of bonds in national bank portfolios after the onset of the second banking crisis in March 1931.[1]

> Banks had to dump their assets on the market, which inevitably forced a decline in the market value of those assets and hence of the remaining assets they held. The impairment in the market value of assets held by banks, particularly in their bond portfolios, was the most important source of impairment of capital leading to bank suspensions, rather than the default of specific loans or of specific bond issues.[2]

For bonds in which there was an active market and continuous price quotations, bank examiners impaired the capital of banks to the full extent of the drop in market value

[1] Friedman, M., and Schwartz, A.J., 1963. *A Monetary History of the United States 1867–1960*, Princeton University Press, Princeton, New Jersey, 1–860, give an extremely lucid account of the process on page 312: 'In their search for liquidity [during the onset of the first banking crisis, October 1930], banks and others were inclined first to dispose of their lower-grade bonds . . . hence . . . their prices fell. The decline in bond prices itself contributed . . . to the subsequent banking crises. It made banks more fearful of holding bonds and so fostered declines in prices. By reducing the market value of the bond portfolios of banks, declines in bond prices in turn reduced the margin of capital as evaluated by bank examiners, and in this way contributed to subsequent bank failures.'

[2] Friedman, M., and Schwartz, A.J., 1963. *A Monetary History of the United States 1867–1960*, Princeton University Press, Princeton, New Jersey, 1–860, page 355.

below face value, regardless of credit quality. To alleviate the pressure on banks capital as measured by banking examiners, the Comptroller changed the valuation regulations and 'ruled that national banks would be required to charge off no depreciation [to market value] on bonds of the four highest ratings.'[3] Thus, publicly traded bonds rated BBB or higher by at least one credit rating agency could now be carried at book value. Otherwise, the bonds would have to be written down and 25% of the resulting book losses would be charged against capital. This was the first regulatory use of credit ratings.

The more recent spate of ratings reverses in the Asian financial crisis, the corporate scandals in the US and Europe and the latest subprime crisis repeatedly prompted calls to regulate the industry, or strengthen the existing regulation. In Europe, the scandals led the EU executive to begin analyzing the issue of credit rating agencies in April 2002.[4] In the US, it led to the July 2002 'Sarbanes–Oxley Act,' which ordered a study of the credit ratings industry.[5] Regulation in the aftermath of these studies occurred first in Europe, with the adoption of EU regulatory policy as defined in the December 2005 'Communication from the Commission on Credit Rating Agencies.'[6] Nine months later, the US adopted the 'Credit Ratings Reform Act of 2006' and in June 2007 the SEC adopted the final rule that provides it with the authority to implement oversight rules with respect to registered rating agencies.[7] The scandals had highlighted that credit rating agencies had to be competent, diligent, transparent, independent, and trustworthy for the stability and proper functioning of capital markets. They brought to the foreground issues such as inadequate due diligence, apparent conflicts between the commercial and deontological interests of CRAs, inadequate explanation of ratings, and unfair commercial practices.[8] Each one of these could prevent CRAs from producing reliable, timely, and fair ratings. The subprime crisis, starting very shortly after in the summer of 2007, raised again these issues applied more specifically to the structured finance market and has started a new round of regulatory proposals.[9]

9.1 THE REGULATORY USES OF RATINGS

Credit ratings are used in decisions about purchasing, selling, holding or disposing of particular securities. In 1936, the Office of the Comptroller and the US Federal Reserve went further than the Comptroller's 1931 ruling on valuation, now 'prohibiting banks from holding bonds not rated BBB or above by at least two agencies. The new rules had far-reaching

[3] Friedman, M., and Schwartz, A.J., 1963. *A Monetary History of the United States 1867–1960*, Princeton University Press, Princeton, New Jersey, 1–860, page 319, n. 22.
[4] At the Oviedo Informal ECOFIN Council.
[5] United States Congress, 2002. Sarbanes–Oxley Act of 2002, January 23, 1–66, Title VII, Section 702.
[6] Commission of the European Communities, 2005. Communication from the Commission on Credit Rating Agencies, December 23, 2005/11990, 1–9.
[7] US Securities and Exchange Commission, 2007. Oversight of Credit Rating Agencies Registered as Nationally Recognized Statistical Rating Organizations, Securities Exchange Act of 1934, Release No. 55857, June, 72 FR 33564, 1–284.
[8] US Securities and Exchange Commission, 2003. Concept release: rating agencies and the use of credit ratings under the federal security laws, June, page 2, and Technical Committee of International Organization of Securities Commissions, 2003. Report on the activities of credit rating agencies, September, OICV-IOSCO PD 153, 1–20, page 15.
[9] US Securities and Exchange Commission, 2008. Proposed rules for Nationally Recognized Statistical Rating Organizations, June 11, 1–168 and the Technical Committee of International Organisation of Securities Commissions, 2008, Code of Conduct Fundamentals for Credit Rating Agencies, revised May, OICV-IOSCO PD 271, 1–14.

consequences, because 891 of the 1975 bonds listed on the New York Stock Exchange were rated below BBB in 1936.'[10] These regulations remain in force today.

The use of ratings in regulations is most widespread in, but not limited to, the US. In June 2005, US Congress hearings reported that at least 8 Federal statutes, 47 Federal rules, and 100 State laws made reference to them.[11] These regulations affect not only banks, but also broker-dealers, insurers, pension funds, and mutual funds. They restrict or prohibit the purchase of securities with 'low' ratings (usually below BBB), impose variable equity capital requirements depending on the rating of the holdings, and ease the issuance conditions or disclosure requirements for securities carrying a 'satisfactory' rating.[12] One can summarize the key purposes of these uses under three broad categories: prudence, from which follows, for instance the setting of minimum capital adequacy requirements for banks and broker dealers; investor protection, for instance, minimum rating requirements for investments by pension funds; and the integrity of security markets, for instance the regulation of market access as a function of the rating of the security. Exhibit 9.1 tabulates the various uses of these ratings in the US, which we will discuss in some detail later in this section.

As of July 1st 2008, the SEC has proposed a rule in three sections that would substantially reduce the regulatory reliance on credit ratings of NRSROs. This is an unprecedented move towards decreasing the use of NRSRO ratings and an open door to omitting any reference to them at all and hence eliminating any undue reliance on NRSRO ratings specifically by market participants.[13]

The regulatory use of ratings is less widespread and codified in Europe. This is particularly true at the level of the European Union. Several European States use credit ratings standards for similar purposes to the US and with comparable techniques. Supervisors of insurance companies use ratings to calculate technical reserves, to determine eligible counterparties or in the context of the stress testing that insurance companies are obliged to apply.[14] However, ratings-based regulation is much less common overall in Europe than in the US.[15] As an example, Exhibit 9.2 shows the main uses of ratings in regulation in France, demonstrating that, while ratings are indeed used in some regulations, the number of uses does not come anywhere close to what it is in the US.

At the EU level, the one regulation using credit ratings extensively is the 2006 Capital Requirements Directive (CRD), discussed in detail below. Upon the advice of the Committee

[10] Cantor, R., and Packer, F., 1994. The credit rating industry, *Quarterly Review*: Federal Reserve Bank of New York, Summer–Fall, 1–26, page 6.

[11] 'The NRSRO concept, after all, has become embedded in many areas of the law. The term is used in about 8 federal statutes, 47 federal rules, and more than 100 state laws.' Kanjorski, P.E., Ranking democratic member, 2005, Opening statement at the hearing entitled 'Legislative solutions for the credit rating industry' before the House Subcommittee on Capital Markets, Insurance and Government Sponsored Enterprises, June 29, 1–6.

[12] Gonzalez, F., Hass, F., Johannes, R., Persson, M., Toledo, L., Violi, R., Wieland, M., and Zins, C., 2004. Market dynamics associated with credit ratings, Occasional Paper No. 16: European Central Bank, June, 1–40, page 9.

[13] US Securities and Exchange Commission, 2008. Proposed rule – References to ratings of Nationally Recognized Statistical Rating Organizations, July 1st, release 34-58070, 1–75. US Securities and Exchange Commission, 2008, Proposed rule – Security ratings, July 1st, release 33-8940, 1–77. US Securities and Exchange Commission, 2008, Proposed rule – References to ratings of Nationally Recognized Statistical Rating Organizations, July 1st, release IC-28327, 1–70.

[14] The Committee of European Securities Regulators (CESR), 2004. CESR's technical advice to the European Commission on possible measures concerning credit rating agencies, Consultation Paper, November, Reference CESR/04-612b, 1–86, page 15.

[15] Gonzalez, F., Hass, F., Johannes, R., Persson, M., Toledo, L., Violi, R., Wieland, M., and Zins, C., 2004. Market dynamics associated with credit ratings, Occasional Paper No. 16: European Central Bank, June, 1–40, page 9.

Exhibit 9.1 Selected uses of ratings in regulation in the US (1931–2000)

Year adopted	Ratings dependent regulation	Minimum rating	How many ratings?	Regulator/Regulation	Use
1931	Required banks to mark-to-market lower rated bonds	BBB	2	OCC and Federal Reserve Examination Rules	Prudence
1936	Prohibited Banks from purchasing 'speculative securities'	BBB	Unspecified	OCC, FDIC and Federal Reserve joint statements	Prudence
1951	Imposed higher capital requirement on insurers' lower rated bonds	Various	NA	NAIC mandatory reserve requirement	Capital Adequacy Require-ment
1975	Imposed higher capital haircuts on broker dealers' below investment grade bonds	BBB	2	SEC amendment to rule 15c3-1, the uniform net capital rule	Capital Adequacy Require-ment
1982	Eased disclosure requirements for investment grade bonds	BBB	1	SEC adoption of integrated disclosure system	Easier Market Access
1984	Eased issuance of non agency mortgage-backed securities	AA	1	Congressional promulgation of the secondary Mortgage Market Enhancement Act of 1984	Easier Market Access
1987	Permitted margin lending against MBS and (later) foreign bonds	AA	1	Federal Reserve regulation T	Prudence
1989	Allowed pension funds to invest in high rated ABS	A	1	Department of Labor relaxation of ERISA restriction	Investor Protection
1989	Prohibited S&Ls from investing in below investment grade bonds	BBB	1	Congressional promulgation of the Financial Institutions Recovery and Reform Act of 1989	Investor Protection
1991	Required money market mutual funds to limit holdings of low rated paper	A1*	1	SEC amendment to rule 2a-7 under the Investment Company Act of 1940	Investor Protection
1992	Exempted issues of certain ABS from registration as a mutual fund	BBB	1	SEC adoption of Rule 3a-7 under the Investment Company Act of 1940	Easier Market Access
1994	Imposes varying capital charges on banks and S&Ls of different tranches of ABS	AAA and BBB	1	Federal Reserve, OCC, FDIC, OTS Proposed Rule on Recourse and Direct Substitutes	Capital Adequacy Require-ment

Exhibit 9.1 *(continued)*

Year adopted	Ratings dependent regulation	Minimum rating	How many ratings?	Regulator/Regulation	Use
1998[a]	Department of Transportation can only extend credit assistance to projects with an investment grade rating	BBB	1	Transport Infrastructure Finance and Innovation Act 1998	Prudence
1999[a]	Restricts the ability of national banks to establish financial subsidiaries	A	1	Gramm-Leach-Biley Act of 1999	Prudence
2000[b]	Loan by non profit corporation eligible for guarantee under the Act provided that such corporation has one or more issues of outstanding long-term debt that is rated within the highest 3 rating categories of an NRSRO (District of Columbia – Appropriations Legislation)	A	1	Public Law 106-553	Prudence

[a]Estrella, A., 2000, Credit ratings and complementary sources of credit quality information, Basel Committee on Banking Supervision, Working Papers No. 3: Bank for International Settlements, Basel, August, 1–186, page 54.
[b]United States Congress, 2000, Public law 106-553: Federal funding, fiscal year 2001, December 21, 1–151, page 130; US Securities and Exchange Commission, 2005, Proposed rule – definition of Nationally Recognized Statistical Rating Organizations, April 19, 1–74, pages 6–9.
Source: (1931–1994): Cantor, R. and Packer, F., 1994, The credit rating industry, *Quarterly Review*, Federal Reserve Bank of New York, Summer–Fall, 1–26, page 6.

of European Securities Regulators (CESR), the European Commission (the EU executive) has been reluctant to extend the regulatory use of ratings to other applications.[16] It holds that

> the use of ratings in European legislation should not simply be encouraged in a general way without a case-by-case analysis of the different proposals. In any event, it would be necessary to identify all the alternatives capable of achieving the regulatory objectives sought by the use of ratings in the legislation. A detailed study of the strengths and weaknesses of each alternative, including the use of ratings, should be prepared prior to any conclusion.[17]

[16] European Commission, 2004. Call to CESR for technical advice on possible measures concerning credit rating agencies, July 27, 1–10, Item 3.5.
[17] The Committee of European Securities Regulators (CESR), 2005. The use of ratings in private contracts, Technical advice to the European Commission on possible measures concerning credit rating agencies, March, CESR/05-139b, 1–93, page 40.

Exhibit 9.2 Selected uses of ratings in regulation in France

Year adopted	Ratings dependent regulation	Minimum rating	How many ratings?	Regulator/regulation	Use
1988	Any Securitized debt fund making a public offering requires a rating	NA	NA	Article L 214-44 of the Monetary and Financial Code	Prudence
1991	Allowed money market funds to hold up to 25% of their assets in the form of securities issued by a single credit institution if the institution was rated			Decree	Prudence
1988	Issuers of money market securities must disclose the rating assigned to their issuance program before each issue			Decree 2004-865 of 24 Aug. 2004, amending decree 92-137 of Feb. 1992	Prudence
1988	Required a rating for admission to trading on a regulated market or for the issue of financial instruments including a component of debt securities. In November 2003, this requirement was extended to issuers whose shares were already listed if they wanted to make a public offering of debt securities (except for debt securities that are or could be convertible).			Reg. 88-04, Reg. 98-04 and the Commission decision of 9 Nov. 1990	Investor protection

Source: Autorité des Marchés Financiers, 2005, *2004 AMF Report on Rating Agencies*, January, 1–76, pages 37, 38.

The use of credit ratings in regulations is nevertheless prevalent around the world. For example, in Canadian securities regulation, at least 10 National Instruments or National Policies as well as various provincial securities rules and regulatory instruments use the concept of approved credit ratings. In addition, references to ratings obtained from rating agencies (although not necessarily references to specific rating agencies) appear in at least 8 Federal statutes or regulations promulgated under Federal legislation, and at least 37 Canadian provincial statutes (or regulations) in addition to securities laws.[18] With examples drawn from a number of countries where ratings-based regulations are in existence, we now turn to the three broad categories of uses of credit ratings: prudence, market access, and investor protection.

[18] Nicholls, C.C., 2005. *Public and Private Uses of Credit Ratings*, Policy Series: Capital Markets Institute (Canada), August, 1–47, page 15.

9.1.1 Prudence

Prudential regulations aim at ensuring the stability of financial institutions in order to maintain market confidence. The early US regulations of 1931 and 1936 are prudential. The norms usually relate to capital and other risk management standards and are intended to mitigate the possibility that firms will be unable to meet their liabilities and commitments to consumers and counterparties.[19] Examples of prudential guidelines relating to better risk management include bank exposure limits for different borrowers according to industry, sector, individual or group (i.e. common management control),[20] frameworks for lending to risky sectors such as venture capital (which may contain stipulations with respect to the maximum tenor, documentation, classification of the asset in the bank's books, etc.), barring end uses for which certain types of loans may be granted, rules on valuations of investment portfolios of financial institutions (which further translates into capital adequacy), etc. Exhibit 9.1 shows the uses of credit ratings in the US in prudential regulations.

The most incisive prudential regulation consists of minimum regulatory capital requirements imposed on financial firms. In these, regulators use credit ratings to induce financial intermediaries to finance their credit portfolios with a proportion of equity that corresponds to the credit risks of the portfolio.[21] In 1975, the US SEC used ratings in such regulation for the first time, in its net capital rule for broker-dealers. The net capital rule requires broker-dealers, when computing net capital, to deduct certain percentages of the market value of their proprietary securities positions from their net worth, depending on the ratings of these securities.[22] In Europe, ratings are used in the financial regulation of banks, primarily to determine the capital requirement to back earning assets. The Financial Services Authority (FSA) in the UK, for example, allows debt securities of any issuer to qualify for reduced risk weightings if they are rated investment grade by at least one among Fitch, Moody's, or S&P.[23]

In the global arena, this works through the Basel Committee on Banking Supervision (the Committee). For credit risk, the 1988 Basel Capital Accord (Basel I) had used regulatory fiat to decide the credit risk class of an asset.[24] But this mechanism biased the amount of capital to be held against risk classes at the extreme end of the risk spectrum: too much capital for low credit risk; insufficient for high risk. Overall, banks hold larger fractions of low-risk than high-risk assets. As a result, Basel I increased the capital intensity of bank lending and made high-quality borrowing from banks uncompetitive relative to issuing securities to investors not subject to these capital requirements.

In 1993, the Committee started distinguishing between bank assets held for 'lending' purposes, and those for 'trading' purposes. It then proposed market risk charges to debt

[19] The gist of this definition has been taken from The Financial Services Authority, 2001. *Interim Prudential Sourcebook for Investment Businesses*, June, Chapter 1, page 1.

[20] For example, Indian Term Lending institutions are subject to 'individual and group borrower exposure limits' by the Indian Central Bank, the Reserve Bank of India (Reserve Bank of India, 2005, Master circular – exposure norms for financial institutions, August 13, 1–23, page 1), as well as limits on some industry sectors such as stock markets, venture capital, etc.

[21] See Caouette, J.B., Altman, E.I., and Narayanan, P., 1998. *Managing Credit Risk: the Next Great Financial Challenge*, John Wiley & Sons, Inc., New York, 1–452, Table 6.1, page 66 for the uses of ratings by US regulators.

[22] US Securities and Exchange Commission, 2003. Report on the role and function of credit rating agencies in the operation of the securities market, January, 1–45, page 6.

[23] The Financial Services Authority, 2001. *Interim Prudential Sourcebook: Banks*, June, page 173–175.

[24] In January 2001, this was superseded by the Second Consultative Paper titled 'The New Basel Capital Accord', which was in turn superseded by the Third Consultative Paper (published in April 2003).

securities held in trading books to replace credit risk weights. These charges were going to use for the first time credit ratings among other criteria to determine the level of the charge.[25]

In the aftermath of the 1997–1998 turbulences in the world financial system, and with the objectives of ensuring that credit risk in lending was priced properly and improving the use of capital in the banking sector, this Committee extended more economic based credit risk weightings to the banks' 'lending' book. It issued a 'New Capital Adequacy Framework' proposal in June 1999. This proposal interprets the credit risk of an asset as its probability of default combined with the expected loss in the event of default. To determine the asset basis on which required capital is computed, the asset weights used for different assets are made a function of these assets' credit risk. And the credit risk, also called credit quality, of the asset itself can be gauged by two approaches. Under the standardized approach, credit quality may be determined by reference to the external credit assessments (ECAs, i.e. credit ratings) of the External Credit Assessment Institutions (ECAIs, i.e. CRAs). Under the alternative, internal ratings-based (IRB) approach, the prudential authority can permit a bank to use its own credit ratings if properly based on verified EDF and LGD estimates by the bank. This proposal led to the 2004 New Basel Capital Accord (Basel II).[26] Exhibit 9.3 shows the asset weights, transposing the six credit quality steps used in the accord to the rating scales in Exhibit 2.4. Basel II tightens up the relationship between ordinal ratings and cardinal default probabilities. It links ratings more closely to the amount of equity that banks need in order to fund an asset and therefore to the cost of credit.[27] For the members of the EU, this is encapsulated in the CRD.[28,29] This Directive provides for the use of 'external credit assessments' (ECAs) in the determination of credit risk weights (and consequential capital requirements) applied to a bank or investment firm's exposures, in application of Basel II.[30]

9.1.2 Market Access

Regulators also use credit ratings as an eligibility criterion for issuers tapping the capital markets. They often use the rating to differentiate the compliance/due diligence/information requirements that the issuer must fulfill in order to be granted access to the market. The use of credit ratings to control market access is widespread globally, as the following examples illustrate.

The US SEC adopted several such regulations under the Securities Act of 1933. Offerings of certain non-convertible debts, preferred securities, and asset-backed securities that

[25] Basel Committee on Banking Supervision, 1993. The supervisory treatment of market risks: consultative proposal, Bank for International Settlements, Basel, April, 1–61, pages 15–19.

[26] The new accord calls this 'the standardized approach to credit risk,' see Basel Committee on Banking Supervision, 2006. *International Convergence of Capital Measurement and Capital Standards: A Revised Framework*, Bank for International Settlements, Basel, June, 1–347, page 19.

[27] See Basel Committee on Banking Supervision, 1999. A new capital adequacy framework: a consultative paper, Bank for International Settlements, Basel, June, 1–62, and Fleming, S., 1999, *Disarming Bank Credit Risk*, Institutional Investor – International Edition, August, Vol. 24, Issue 8, 28–35, pages 29–34.

[28] European Parliament and Council, 2006. Directive 2006/48/EC of June 14, 2006 relating to the taking up and pursuit of the business of credit institutions (recast), *Official Journal of the European Union*, June 30, 1–200, page L177, Title V, Chapter 2: Technical instruments of prudential supervision.

[29] Basel Committee on Banking Supervision, 2006. *International Convergence of Capital Measurement and Capital Standards: A Revised Framework*, Bank for International Settlements, Basel, June, 1–347.

[30] Commission of the European Communities, 2005. Communication from the commission on credit rating agencies, December 23, 2005/11990, 1–9, page 4 (as produced in the *Official Journal of the European Union*, 2006/C59/02, March 11, 2006, 1–5).

Exhibit 9.3 The New Basel Capital Accord – Standardized Approach for risk weighting banking book exposures (June 2004)

Rating ranks		Corporates	Sovereigns	Banks			Securitization exposure
				Option 1	Option 2		
Alphanumeric	Numeric				Long term	Short term	Long term
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)
AAA	1	20%	0%	20%	20%	20%	20%
AA+	2	20%	0%	20%	20%	20%	20%
AA	3	20%	0%	20%	20%	20%	20%
AA−	4	20%	0%	20%	20%	20%	20%
A+	5	50%	20%	50%	50%	20%	50%
A	6	50%	20%	50%	50%	20%	50%
A−	7	50%	20%	50%	50%	20%	50%
BBB+	8	100%	50%	100%	50%	20%	100%
BBB	9	100%	50%	100%	50%	20%	100%
BBB−	10	100%	50%	100%	50%	20%	100%
BB+	11	100%	100%	100%	100%	50%	350%
BB	12	100%	100%	100%	100%	50%	350%
BB−	13	100%	100%	100%	100%	50%	350%
B+	14	150%	100%	100%	100%	50%	Deduction
B	15	150%	100%	100%	100%	50%	Deduction
B−	16	150%	100%	100%	100%	50%	Deduction
CCC+	17	150%	150%	150%	150%	150%	Deduction
CCC	18	150%	150%	150%	150%	150%	Deduction
CCC−	19	150%	150%	150%	150%	150%	Deduction
CC	20	150%	150%	150%	150%	150%	Deduction
C	21	150%	150%	150%	150%	150%	Deduction
Unrated		100%	100%	100%	50%	20%	Deduction

Rating ranks	Securitization exposure
	Short term
	(9)
A-1/P-1	20%
A-2/P-2	50%
A-3/P-3	100%
All other ratings or unrated	Deduction

Notations follow the methodology used by one institution, S&P. The use of S&P's credit ratings is an example only.

Source: Basel Committee on Banking Supervision, 2004, *International Convergence of Capital Measurement and Capital Standards: a Revised Framework*, Bank for International Settlements, Basel, June, 1–251, pages 15–19, 120.

are rated investment grade by at least one NRSRO, can be registered on Form S-3 – the Commission's 'short-form' registration statement – without the issuer satisfying a minimum public float test.[31] Similarly, the SEC's adoption of Rule 3a-7 under the Investment Company Act of 1940 (in 1992), exempted issues of certain ABS from registration as a mutual

[31] US Securities and Exchange Commission, 2005. Proposed rule – definition of Nationally Recognized Statistical Rating Organizations, April 19, 1–74, page 7.

fund. One of the criteria for such an exemption was that the security be '... rated, at the time of initial sale, in one of the four highest categories assigned long-term debt or in an equivalent short-term category (within either of which there may be sub-categories or gradations indicating relative standing) by at least one nationally recognized statistical rating organization ... '[32]

Another example from the US defined the term 'mortgage related security.'[33] This required, among other things, that such securities be rated in one of the two highest rating categories by at least one NRSRO.[34]

Similarly, the French Autorité des Marché Financiers (AMF) requires that any securitized debt fund making a public offering be rated. Issuers of money market securities must disclose the rating assigned to their issuance program before each issue.[35] The stock market regulator requires issuers to disclose a rating from a specialized agency for issues of securities, other than money market securities, that are aimed at the general public. Back in 1988, the Commission des Opérations de Bourse (which was then the stock market regulator) could require a rating for an issue's admission to trading on a regulated market or for the issue of financial instruments, including a component of debt securities. In November 2003, this requirement was extended to issuers whose shares were already listed if they wanted to make a public offering of debt securities (except for debt securities that are or could be convertible).[36]

Canada, under national Securities Laws, also refers to credit ratings when granting market access. For example, dealers in guaranteed or short-term debt do not need to be registered if the debt has an approved credit rating.[37]

In India, a company must obtain a credit rating from any one of the CRAs recognized by the Reserve Bank of India (RBI) to be eligible to issue Commercial Paper.[38] The minimum credit rating needs to be P-2 from CRISIL or an equivalent rating from other agencies.[39] The Central Bank of India, for instance, in its guidelines on 'Securitization of Standard Assets,'[40] stipulates that

> the securities issued by the SPV (Special Purpose Vehicle) shall compulsorily be rated by a rating agency registered with SEBI[41] and such rating at any time shall not be more than 6 months old. The credit rating should be publicly available. For the purpose of rating and subsequent updating, the SPV should supply the necessary information to the rating agency in a timely manner. Commonality and conflict of interest, if any, between the SPV and the rating agency should also be disclosed.

[32] United States Congress, Investment Company Act of 1940. Rule 3a-7 – Issuers of Asset-Backed Securities.
[33] See Section 3(a)(41) of the Securities Exchange Act of 1934 introduced as part of the Secondary Mortgage Market Enhancement Act of 1984 revised through September 30, 2004, 1–259.
[34] US Securities and Exchange Commission, 2005. Proposed rule – definition of Nationally Recognized Statistical Rating Organizations, April 19, 1–74, page 8.
[35] Autorité des Marchés Financiers (AMF), 2005. *2004 AMF Report on Rating Agencies*, January, 1–76, page 37.
[36] Autorité des Marchés Financiers (AMF), 2005. *2004 AMF Report on Rating Agencies*, January, 1–76, page 38.
[37] Nicholls, C.C., 2005. *Public and Private Uses of Credit Ratings*, Policy series: Capital Markets Institute (Canada), August, 1–47, page 38.
[38] The RBI currently recognizes four CRAs for this purpose, and in general as well – Credit Rating Information Services of India Ltd (CRISIL) which has an affiliation with S&P, the Investment Information and Credit Rating Agency of India Ltd (ICRA) which has an affiliation with Moody's, the Credit Analysis and Research Ltd (CARE) and FITCH Ratings India Pvt. Ltd (*Source*: Reserve Bank of India). Interestingly, credit rating agencies in India are regulated under The Securities and Exchange Board of India Act, 1992. Under this Act, CRAs need to register with SEBI, and the Act confers powers on SEBI to regulate CRAs.
[39] The second highest grade in CRISIL's P-1 to P-5 Short Term Instruments Rating Scale.
[40] Reserve Bank of India, 2006. *Guidelines on Securitization of Standard Assets*, February 2, 1–23.
[41] The Securities and Exchange Board of India, which is the regulatory authority for the Indian securities market.

9.1.3 Investor Protection

While the goal of every financial regulation can ultimately be traced to investor protection, certain regulations serve this end more directly. Examples of these can be found in many countries, and in particular those regulations that govern the activities of collective investment vehicles that serve the interests of a large number of investors.

Examples of such regulations in the US can be found in Exhibit 9.1. Rule 2a-7 of the US Investment Company Act of 1940 limits money market funds to investing only in high-quality short-term instruments, and NRSRO ratings can be used as benchmarks for establishing minimum quality investment standards. Under Rule 2a-7, a money market fund is limited to investing in securities rated by an NRSRO in the two highest ratings categories for short-term debt (or un-rated securities of similar quality), and there are limitations on the amount of securities the fund can hold that are not rated in the highest rating category (or are not un-rated securities of similar quality).[42] Pension fund investments in ABS were allowed only in 1989, and only in those securities with an investment grade rating. In the same year, Congressional promulgation of the Financial Institutions Recovery and Reform Act of 1989 prohibited Savings and Loans from investing in bonds below investment grade.

In India, the RBI imposes several minimum rating standards to protect investors. For example, it requires that a NBFC (Non-Banking Financial Company) must have a minimum investment grade credit rating from an approved CRA[43] for it to accept public deposits.

In France, money market fund portfolios have been subject to credit rating restrictions since 1991. For example, they can only hold up to 25% of their assets in the form of securities issued by a single credit institution if the institution in question is rated.

Similarly, in Canada, there are several such regulations. Under the Canada Marine Act (a Federal regulation), a port authority may invest in debt that is rated by at least two specified rating agencies, one of which must be Moody's or S&P, if either of them assigns a rating for the investment. Several other regulations at the provincial level involving investments by credit unions, school boards, power authorities, municipalities, etc., specify minimum ratings for eligible debt securities.[44] And under a Federal statute, a money market mutual fund, among other things, must have at least 95% of its assets invested in cash, cash equivalents, or debt issued by an issuer whose commercial paper has received an approved credit rating (specific credit rating organizations are listed).[45]

In summary, the regulatory use of ratings has become widespread. It covers several applications: prudence, particularly capital requirements; market access; and investor protection. It spans the globe: any economy with investable financial assets and institutionalized intermediation has ratings-based regulations, to a greater or lesser extent. This has undoubtedly sharpened the interest of market participants and the public at large in credit ratings. It has also encouraged issuers of securities to have their securities rated, probably making the demand for ratings, especially from the dominant agencies, stronger than it might otherwise have been. This undoubtedly contributed to impulses to regulate the credit rating industry.

[42] US Securities and Exchange Commission, 2005. Proposed rule – definition of Nationally Recognized Statistical Rating Organizations, April 19, 1–74, page 6.
[43] Same as those mentioned in footnote 38.
[44] Nicholls, C.C., 2005. *Public and Private Uses of Credit Ratings*, Policy series: Capital Markets Institute (Canada), August, 1–47, pages 28–30.
[45] Nicholls, C.C., 2005. *Public and Private Uses of Credit Ratings*, Policy series: Capital Markets Institute (Canada), August, 1–47, page 29.