

Agenda

Advancing economics in business

Credit rating agency regulation: what is different this time?

The financial crisis has re-ignited concerns about the role of credit rating agencies, and there have been calls for increased regulation, including draft proposals by the European Commission for legislation to address, in particular, the rating of structured finance products. This article examines some of the causes of inefficient outcomes in the market for credit ratings, and contributes to the debate on the future regulation of credit rating agencies

Credit rating agencies (CRAs) have a critical role as information intermediaries in financial markets. Regulators as well as investors have become increasingly reliant on CRAs as providers of credit analysis. This reliance is driven by the nature of modern financial markets—providers of capital may be many steps removed from the eventual users of capital. While this widens the realm of potential investment opportunities, it also increases the challenges to investors of performing adequate due diligence and monitoring of their portfolios.

In this context, there is a role for a system that enables independent screening of the credit risk of securities and corporates on a large scale. The credit rating scale used by CRAs provides such a system, which is relied on by investors, financial institutions and regulators to categorise and compare the risks of securities with a diverse range of underlying characteristics.

In the USA, this reliance, or the 'bond of trust', has been recognised by Henry Waxman, Chair of the House of Representatives Committee on Oversight and Government Reform, who at the same time suggested that the ongoing financial crisis has put that trust into question:

The credit rating agencies occupy a special place in our financial markets. The ratings agencies broke this bond of trust.¹

Henry Waxman's suggestion of the potential breakdown of this 'bond of trust' raises at least two key questions:

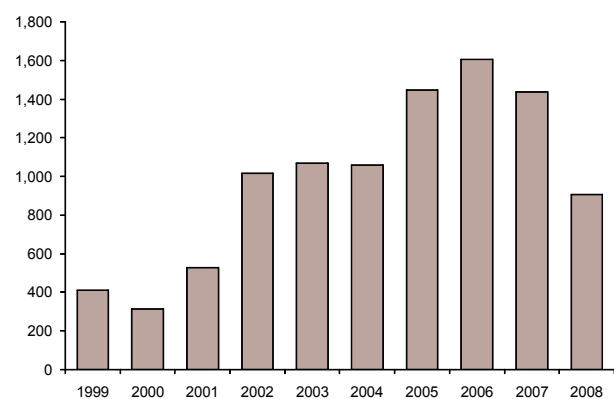
- is it appropriate for investors to rely on credit ratings without having an adequate understanding of what these ratings mean and how they are reached?
- are credit ratings a suitable basis for investment

decisions, or are they incomplete, or potentially even biased, measures of credit risk?

These issues are not new, but have been recently highlighted, particularly in the context of the rapid growth of the structured finance market followed by this market's role in the financial turmoil. The scale of this growth and the subsequent collapse is clear from the change in the annual value of mortgage-backed securities issued globally over recent years (Figure 1).

The combination of the volume of securities being issued with the inherent complexity of structured products has led investors to further outsource the analysis of risk. As noted in another article in this edition of *Agenda*, investors were heavily reliant on CRAs to perform this analysis, which enhanced the role of the CRAs at the heart of the structured finance market.² As the Chief Executive of Goldman Sachs has stated:

Figure 1 Global issuance of mortgage-backed securities (\$ billion)



Source: Dealogic.

In January 2008, there were 12 triple A-rated companies in the world. At the same time, there were 64,000 structured finance instruments, such as collateralised debt obligations, rated triple A.³

By February 23rd 2009, 71% of US residential sub-prime mortgage-backed securities originally issued as investment grade between 2005 and 2007 had been downgraded.⁴ In this context, concerns have re-emerged about the quality and timeliness of the rating analysis and about disclosure of information: does the financial turmoil represent an extremely unusual event that was implicitly considered (albeit with a very low probability), or were the ratings fundamentally too optimistic in terms of the underlying assumptions about the probability of such an event?

The European Commission has published draft legislation to address these concerns with reference to the rating of structured products.⁵ The key challenges and objectives of this legislation are to:

- target the underlying issues of asymmetric and imperfect information that may have contributed to inefficient outcomes in the credit rating market;
- provide a proportionate response given the uncertainty inherent in the analysis of credit risk.

This article discusses how analysis of the incentive structures in the credit rating market and the characteristics of structured finance products can be used to evaluate the proposed regulatory solutions.

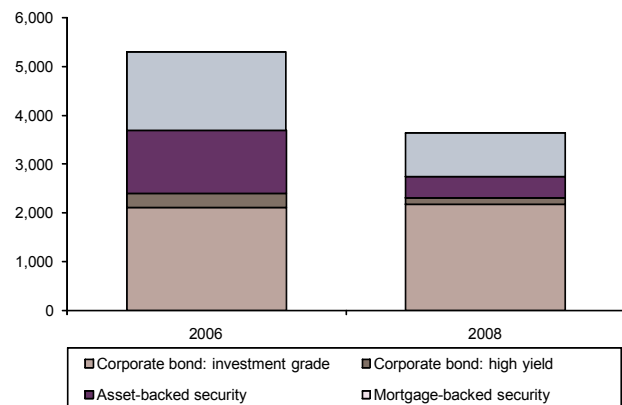
Conflicts of interest and independence of rating analysis

The perception that CRAs might have been influenced by different stakeholders, including the banks that advised on and arranged structured products, has grown since the financial crisis. A major contributory factor has been the increase in default rates. According to Standard & Poor's, defaults and near-defaults for AAA rated securities in 2008 were the highest ever.⁶

In general, rating a structured product often involves the advising bank consulting CRAs about the characteristics of the collateral, deal structure, and covenants required for the particular issue. Given that this interaction might provide an opportunity for the bank to influence the CRA's perception of risk, this has become an area where the issue of independence and conflicts of interest has come under particular scrutiny.

To the extent that CRAs might now be perceived as either not being able to effectively assess risk, or not to have maintained an unbiased approach in working with issuers and underwriters, investors' trust in the ratings of structured products will have decreased. This potential loss of trust that investors have in risk

Figure 2 Global corporate fixed-income security issuance, 2006 and 2008 (\$ billion)



Source: Dealogic.

analysis—including credit ratings—may have been one of the key factors behind the decline in issuance of fixed-income securities shown in Figure 2.

Concerns about the independence of institutions publicly issuing opinions about the financial position of firms last gained prominence in the financial scandals that affected the audit and credit rating markets during 2000–02. Regulatory action was subsequently taken in both the USA and Europe. At the time, the Securities and Exchange Commission held a formal review of CRAs, which led to the Credit Rating Agency Reform Act in 2006. In the same year, the Committee of European Securities Regulators (CESR) reported to the European Commission about the compliance of CRAs with the IOSCO (International Organisation of Securities Commissions) Code of Conduct.⁷ At this time, modifications to rules governing ownership structures were explored as potential ways of mitigating independence issues and conflicts of interest.

The very high level of market concentration has resulted in a focus on the ownership of the three largest CRAs, which are all ultimately owned by publicly listed companies.⁸ This has raised concerns that strategic business decisions could compromise the independence of credit rating analysis.

The notion of independence is essential to the credibility of the services provided—not just by CRAs, but also other industries, notably the audit and legal sectors. Oxera has previously analysed the interaction between ownership rules, incentives for management, and independence in the audit market.⁹ Audit firms are typically employee-owned, often in a form that resembles a partnership. This structure can ensure compliance with regulations that impose restrictions on management structures and require the partners to commit a proportion of their financial capital to the firm. As such, one view might be that the time horizons of owners may be better aligned with the long-term

reputation of their firm when the firm is structured as a partnership. This might suggest that restrictions on the ownership of CRAs and management structures could be considered a solution to the potential issues of independence and conflicts of interest.

However, it is unclear why, in the long term, incentives faced by employee-owners would be fundamentally different to those of external investors. Specifically, both categories of owner have an interest in protecting the reputation of the firm for producing high-quality, reliable products. Furthermore, the audit scandals of Enron and WorldCom between 2000 and 2002 show that a structure of employee-ownership might not be an effective guarantee of independence, and other measures might need to be considered.

There has also been debate over whether law firms could adopt alternative ownership structures, and whether this would affect their independence. In the UK this has centred on the Clementi report that emerged from the Department for Constitutional Affairs' review of the legal services market.¹⁰ The report considered how these structures could be opened up to non-lawyers, and noted that this might require safeguards to protect the reputation of the legal profession against commercial interests, including limiting the roles and influence of non-lawyers in operational matters.

The specific internal governance systems that both CRAs and audit firms have to limit the ability of owners and senior management to influence the credit rating or audit processes may be more important than ownership restrictions for protecting independence. Standard & Poor's already requires that analysts directly involved in the rating process shall not initiate or participate in any discussion regarding fees or payments from any entity that they rate.¹¹ As such, the risk of external shareholders in CRAs having an influence on credit rating decisions would appear to be small. Yet the issue remains as to whether long-term incentives are appropriately reflected at the individual analyst level, whose outlook, as in the case of bank employees, might be more short-term. Analysts might be exposed to pressure from the client and the underwriters, while having only remote associations with the ultimate owners of CRAs.

In the audit and legal markets, employees have an additional incentive beyond the preservation of the reputation of their firm to produce high-quality products, which is derived from the requirements for employees to hold a minimum level of qualifications and to be a member of a professional body. The combination of the investment of time and forgone income in acquiring a qualification, together with the risk of dismissal from the professional body and consequent barriers to practising in the future, increase the expected cost to the individual of failing to exercise due care.

A similar system of compulsory training and registration for credit rating analysts might be one element of a suitable regulatory approach to mitigating the potential for conflicts of interest to influence ratings. However, if the skills of credit rating analysts are more easily transferable to other forms of employment, this may not provide incentives that are as strong as those in the audit and legal markets.

The 'issuer-pays' funding model, whereby CRA fees are paid by the issuers of the securities that they rate, creates a potential conflict between the interests of CRAs with respect to investors and issuers. CRAs have mechanisms to mitigate this conflict, such as insulating analysts from commercial negotiations with issuers, but alternatives to the issuer-pays funding model might need to be considered.

One possibility is to implement a form of the 'user-pays' model, which would remove the potential incentive for credit ratings to be biased because the fees would be paid by investors rather than the issuers of fixed-income securities. The investors would be interested in an accurate assessment of credit risk, whereas the issuers might be interested in increasing the perceived value of their securities. At the same time, the ability of modern communications technology to duplicate and disseminate information at low cost has undermined the revenues of user-pays models in some other content-based industries, and may have a similar effect on credit rating research. Therefore, the viability of a user-pays model as a sustainable means of funding expensive credit research might require a carefully constructed framework to prevent free-riding.

Another model, where credit research is funded by a special duty on fixed-income security issuance and conducted by a not-for-profit institution, would also remove the incentive for any potential bias. This could be seen as distinct from the 'public utility' model referred to in the European Commission's impact assessment in that it would be funded by the industry rather than from general taxation revenues.¹² As such, two of the disadvantages of the model described by the Commission—conflicts of interest when rating government debt and cost to the taxpayer—would not apply for the industry-funded model. However, the issue of choice and the nature of the credit rating as a commercial product might need to be re-examined in this context.

Disclosure and transparency

One of the purposes of CRAs is to act as an information intermediary and minimise the costs investors face in gathering and analysing information on debt securities. The complexity and volume of structured products issued in the years preceding the crisis increased to a level where relatively few market

participants had sufficient expertise and resources to conduct thorough independent analysis. Indeed, these costs increased to a point where many fund managers 'let a third party do the hard work and failed to validate the fact that the work was done'.¹³ The increasing use of credit ratings as an input to regulation—eg, the Basel II framework—means that financial regulators were also reliant on the CRAs for credit analysis.

Disclosure requirements need to be drafted with care to reflect the fact that proprietary information and techniques represent an element of CRAs' intellectual capital. Indeed, full disclosure, if at all possible, would potentially allow replication of CRAs' analysis at low cost, undermining their commercial viability. However, disclosure of information on the rating methodologies, such that the factors that are and are not considered in CRAs' analysis could be identified more clearly, should be possible. This would allow investors, financial institutions and regulators to focus their analysis on the outstanding unanalysed risk issues, and to form their own views on individual securities instead of relying on outsourced, third-party opinions.

The European Commission proposals for CRA regulation focus on the asymmetry of information between users and producers of credit ratings. A further asymmetry that is relevant in the case of structured finance products may arise if there is additional information and analysis held by the financial institutions that advise, arrange and structure these products. This suggests that regulation of disclosure by arrangers that structure securities might be effective in increasing transparency and trust in credit ratings. One option might be to require banks to share all of their internal analysis, including financial models, with CRAs or investors.

Another element of the European Commission proposals is to require credit ratings for structured finance products to be differentiated from those for conventional fixed-income instruments. While the fundamentals of the available asset pricing models have general applicability to all types of asset, known deficiencies of these models are also relevant for all assets. These models are based on the key characteristics of the expected level, volatility, and correlation of cash flows that are derived from the assets underlying any security. Therefore, to the extent that the analysis conducted by CRAs draws on robust asset-pricing models developed in corporate finance, it would be expected to produce conclusions that are comparable across different asset classes. This might suggest that using different rating scales for conventional and structured products would be unnecessary.

At the same time, correlation of the returns of the underlying loans in the portfolio is a key and somewhat unique characteristic of structured products as pools of

assets, which might have not been properly addressed. While the portfolio of underlying assets makes these products suitable for statistical analysis based on an assumed distribution of returns and interdependencies of the underlying assets, it also poses numerous challenges to robust quantitative analysis. In contrast, the credit quality of corporate bonds is more typically dependent on a mixture of quantitative and qualitative factors, including management strategy, given the degree of managerial discretion that typically characterises corporate entities as opposed to legal vehicles issuing asset-backed securities. As such, credit ratings for structured products and corporate bonds must summarise different types of underlying risk drivers.

Furthermore, the standard rating scale has a single parameter to describe expected loss. Although this might be appropriate for conventional fixed-income securities where statistical parameters are not available, it is unlikely to be sufficient to describe the full distribution of possible outcomes in the case of structured securities as modelled by CRAs. For example, investors might be interested in the degree to which the distribution of outcomes is assumed to be negatively skewed, or the degree of covariance in returns between underlying assets that is assumed in the model. Therefore, a more sophisticated framework that conveys more information than is possible through a single parameter may be required for structured products.

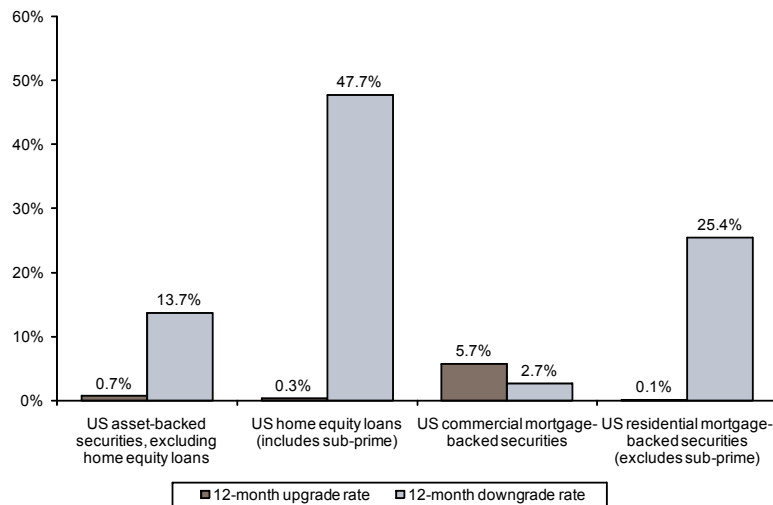
Overall, some form of increased disclosure may be necessary if the information asymmetries in the credit rating market are to be reduced. Investors may also need to spend more time analysing the outcomes of the credit analysis. A key challenge is how to achieve disclosure of the information that is useful to investors, while recognising the proprietary nature of certain information.

Quality of methodologies

The financial turmoil has exposed certain weaknesses in the methodologies used to rate structured finance products. Statistical models of credit risk appear to have been based on unrealistic assumptions about the distribution of potential returns of the assets underlying structured products. Credit ratings produced from these models appear to have been over-optimistic. For example, Figure 3 illustrates the very high downgrade rate for the 12 months to the end of September 2008 for US asset-backed securities and residential mortgage-backed securities rated by Moody's.

Credit ratings have much in common with forecasts, and there is always a chance that, ex post, they will appear to have been under- or over-optimistic. It is therefore difficult to assess the quality of a rating at the time of issue, or indeed even ex post. By the time a

Figure 3 Upgrade and downgrade rates for structured finance cohorts ending September 30th 2008



Source: Moody's Investor Services (2008), 'September 2008 Structured Rating Transitions', October.

concern about the quality of a rating is raised, it may be too late to avoid the consequences, and it is unclear to what extent any particular default represents the occurrence of an extreme scenario that was assumed ex ante as being of low probability. Without an accurate and timely way of measuring rating quality over time, it may be difficult to prescribe legislation aimed at increasing this quality. A particular challenge in this context is the infrequent occurrence of very negative outcomes—eg, financial crises—as well as the short history of past performance for some types of assets and securities.

In structured finance, a significant amount of information on the performance of some structured products and the sensitivity of their returns to the underlying assets relates to a period of relatively stable economic conditions. The analysis of credit risk has therefore been heavily dependent on the assumptions of the credit rating models and the extent to which the assumed distributions of outcomes realistically incorporated the probability of extreme but infrequent events.

Extreme events tend to be characterised by dramatic increases in the correlation of returns across assets and asset classes. In the current crisis, the pooling of risks from multiple assets and securitisation of their cash flows will have led to an under-pricing of the risk of the portfolio of assets if the expected correlation between the returns of these assets was underestimated. This suggests that extensive revisions to existing models might be required and that stress-tests of correlation assumptions need to be more demanding given the apparent limits to diversification.

The above issues cannot be considered exclusively in a static framework. The true market value of structured

finance products is also likely to change over time as the underlying distribution of risks changes and new information becomes available. CRAs might have the strongest incentives for devoting resources to credit analysis at the time of issue if they receive the majority of their fees at that time. If the incentives for ongoing monitoring of credit ratings are weaker, there may be a risk that ratings will not be updated in a timely manner, and that the scope of review will be too narrow and will not consider whether the modelling assumptions at the time of issue are still valid.

Conclusions

Although changes to the ownership structure of CRAs are unlikely to mitigate conflicts of interest, improvements to internal governance systems may be necessary. A potential

policy option that could be analysed further is whether a system of professional qualifications and registration similar to those in the audit and legal markets might increase the incentives for credit rating analysts to produce independent and high-quality analysis. Alternatives to the 'issuer-pays' funding model would also be worthy of further consideration.

In terms of disclosure, a key element is to achieve a sharper delineation between what is considered in CRAs' analysis, and what risk analysis the investor is responsible for. Investors taking high credit ratings as a signal that further analysis of credit risks is unnecessary would seem unsatisfactory. A separate rating scale for structured products may be one way of communicating to investors that these ratings imply that a particular set of risk factors have been taken into consideration, and that these differ from the factors represented by corporate ratings. Modifications to the outputs of the rating analysis may also be required to communicate more information about the results. A further improvement in disclosure might be achieved by requiring financial advisers and arrangers who structure products to give CRAs and investors greater access to their financial analysis.

The financial crisis has shown that the models used to price structured finance products may have been inadequate and need revisions to incorporate more realistic assumptions about the distributions of possible outcomes and the correlations of these outcomes. Given that the incentives for the continual updating of credit ratings may be weak relative to the initial rating, the extent to which these models are updated to reflect market events, and credit ratings revised in a timely manner, may also need to be clearly communicated to investors.

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- ³ Blankfein, L. (2009), 'Do not Destroy the Essential Catalyst of Risk', *Financial Times*, February 8th.
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- ⁵ European Commission (2008), 'Proposal for a Regulation of the European Parliament and of the Council on Credit Rating Agencies', November 12th.
- ⁶ Standard & Poor's (2009), 'Global Structured Finance Default and Transition Study: 1978–2008—Credit Quality of Global Structured Securities Fell Sharply in 2008 Amid Capital Market Turmoil', reprinted from RatingsDirect, February 25th.
- ⁷ CESR (2006), 'CESR's Report to the European Commission on the Compliance of Credit Rating Agencies with the IOSCO Code', December.
- ⁸ The parent companies of Moody's Investor Services and Standard & Poor's are listed on the New York Stock Exchange, and the parent company of Fitch Ratings is listed company on the Euronext Paris Exchange.
- ⁹ Oxera (2007), 'Ownership Rules of Audit Firms and their Consequences for Audit Market Concentration', report prepared for DG Internal Market and Services, September. Available at www.oxera.com.
- ¹⁰ Clementi, D. (2004), 'Review of the Regulatory Framework for Legal Services in England and Wales', final report, December.
- ¹¹ Standard & Poor's (2008), 'Ratings Services Code of Conduct', December.
- ¹² European Commission (2008), 'Commission Staff Working Document Accompanying the Proposal for a Regulation of the European Parliament and of the Council on Credit Rating Agencies: Impact Statement', November 12th.
- ¹³ Christopher Whalen, Institutional Risk Analytics, quoted in *Financial Times* (2009), 'Investment and the Crisis: An Error-laden Machine', March 2nd.

If you have any questions regarding the issues raised in this article, please contact the editor, Derek Holt: tel +44 (0) 1865 253 000 or email d_holt@oxera.com

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