View metadata, citation and similar papers at core.ac.uk
brought to you by CORE
provided by Columbia University Academic Commons

Initiative for Policy Dialogue Working Paper Series

April 2009

How, if at all, Should Credit Ratings Agencies (CRAs) be Regulated?

C.A.E. Goodhart

Financial Markets Reform

No part of this working paper may be reproduced or utilized in any form or by any means, electronic or mechanical, including photocopying, recording, or by information storage or retrieval system, without permission from the Initiative for Policy Dialogue.

HOW, IF AT ALL, SHOULD CREDIT RATINGS AGENCIES (CRAs) BE REGULATED?[1]

C.A.E. Goodhart[2]

Introduction

The role of credit ratings agencies (CRAs) is to forecast the probability that the issuer of a debt liability will default on the due repayment (its probability of default, PD). In this respect, CRAs are one of a large set of institutions and people who seek to forecast certain aspects of the future.[3] As a generality, the *only*, or at any rate the most important, requisite of a forecast is its accuracy. So long as the forecast is accurate, it is largely beside the point how the forecaster behaves otherwise, whether they lead a blameless life, or alternatively are rude to their parents, beat their children or cheat on their spouses, etc. Moreover, in the case of CRAs, (unlike the Delphic oracle), the forecast is not only *relatively* clear in content, (though we shall consider later how it could, and should, be made even clearer), but also the status of the event being forecast, i.e. whether the issuer defaults, or not, on due repayment, is also relatively clear – and any remaining fuzziness often becomes subject to a legal decision. So the forecasting activities of CRAs should be susceptible to ex post accountability. Compare forecast with out-turn; assess and publish the comparative accuracy of the various CRAs' and leave competition[4] to do the rest. We shall review what extra steps need to be taken to enhance such ex post accountability, comparing forecast with outcome, and comment briefly on how, perhaps, to enhance competition.

If the time gap between forecast and out-turn was very short, as for example in the case of someone tipping horses for that day's races (though even here the tipster may have a separate agenda – a principal/agent problem), it is arguable that proper ex post accountability is all that is needed. A cause for concern with CRAs is, however, that the lapse of time, between forecast and out-turn, is often rather long, measured in years rather than days. Hence, if the CRA is paid by the issuer of the debt, it may pay

the current CRA executives to shade their forecast in a more favorable light. By the time that their more enthusiastic prediction is shown to be ex post over-optimistic, these executives will have probably moved on to another job, or retirement, having pocketed enhanced earnings along the way. Even if such concerns amongst the users of ratings are exaggerated and misplaced, as they probably are, they serve to damage CRAs' credibility. Like Caesar's wife, the mechanism for making payments to them should place them beyond suspicion. Again, we shall discuss how this might be done below.

In this chapter, I shall start with a brief record of the recent history of the attempts to regulate the CRA. Then I consider whether the current payment system does involve conflicts of interest, and, if so, what to do about that. In the third section I briefly discuss why, besides conflicts of interest, there may be a case for some kind of official intervention, and what forms it should *not* take, i.e. some other proposals for reform. The fourth section describes how, and why, existing ratings are systematically misused by *investors*, and then go on to unveil my main recommendation which is the establishment of an independent body, (to be paid for by the CRAs) to assess and publish reports on the relative accuracy of such CRAs. In the sixth section, we review whether there is a case for additional, pecuniary, penalties on CRAs with a forecasting record worse ex post than they have advertised ex ante (to try to establish truth in advocating/forecasting). In the seventh section, we consider what effects these proposals may have on competition amongst, and entry into, the set of CRAs. In the eighth section, the question of how ratings *transitions* should be estimated and reported is discussed. This chapter concludes with a summary of recommendations.

Some Recent History

The most important market for CRAs is the United States. In the United States, CRAs have come under the oversight of the Securities and Exchange Commission (SEC).

> Since 1975, the SEC has relied on credit ratings from 'market-recognised credible' rating agencies in order to distinguish between grades of creditworthiness in various regulations under the U.S. federal securities laws.[5]

These credit rating agencies, known as "nationally recognized statistical rating organizations" or "NRSROs", are recognized as such by SEC staff based on, among other things, acceptance of a firm's credit ratings by predominant users of securities ratings. While eight firms have been recognized as NRSROs to date, consolidation has resulted in the following four NRSROs at present: Moody's Investors Service, Inc., Fitch, Inc., Standard & Poor's, a division of The McGraw-Hill Companies, Inc., and Dominion Bond Rating Service Limited.

During the past thirty years, SEC staff has developed a number of objective criteria for assessing NRSRO status. Under current practice, the SEC staff reviews a credit rating agency's operations, position in the marketplace, and other specific factors to determine whether it should be considered an NRSRO.

The single most important factor in the SEC staff's assessment of NRSRO status is whether a credit rating agency is "nationally recognized" in the United States as an issuer of credible and reliable ratings by the predominant users of securities ratings. The SEC staff also reviews the operational capability and reliability of each

credit rating agency. In view of the growing importance of credit ratings to investors and other market participants, and the influence credit ratings have on the securities markets, in recent years, the SEC and U.S. Congress have reviewed a number of issues regarding credit rating agencies and, in particular, the subject of their regulatory oversight." (CESR/05 – 139b, CESR's technical advice to the European Commission on possible measures concerning credit rating agencies, pp 7/8).

What sparked the first round of concern with CRAs in the current century was the collapse of Enron and of several other companies which were found to be fraudulent after the bust of the NASDAQ (National Association of Securities Dealers Automated Quotations) bubble in 2001. The CRAs had been patently slow in spotting these, and some maintained that they should, and could, have done better in this respect. Moreover, any such shortcomings amongst CRAs were becoming more worrying in view of their potentially enhanced role under the standardized version of Pillar 1 of Basel II.

So the aftermath of the Enron debacle led to a flurry of exercises to explore what might be done to improve the workings of CRAs, both nationally and internationally. Nationally, the most important study was done by the SEC[6], though France and the UK also participated via the AFTE (Association Francaise des Tresoriers d'Entreprise) and ACT (Association of Corporate Treasurers) respectively in such exercises. Since the main CRAs all operated internationally, arguably the more important forum became the Technical Committee of the International Organization of Securities Commissions (IOSCO), which formed a taskforce, under the Chairmanship of Commissioner Campos of the SEC "to examine certain key issues regarding the role CRAs play in securities markets", (IOSCO, 'Report on the Activities of Credit Rating Agencies', September 2003, p. 1). This issued two

Reports in September 2003; the first, above-mentioned, report provided a general, and excellent, description[7] of the work of CRAs, informed by a questionnaire to, (amongst others), and discussions with the CRAs. The second Report was the more important. Its main content was a Statement of Principles to be used by CRAs, as indicated by its title, 'IOSCO Statement of Principles regarding the Activities of Credit Rating Agencies', (25 September 2003).

No serious rationale was provided to explain why a code of conduct or statement of principles would be helpful.[8] Admittedly, regulators were then so engaged in the process of drawing up standards, codes of conduct, principles, etc.—all to be checked by the IMF (International Monetary Fund) in its ROSC (Report on Observance of Standards and Codes) exercises—that any justification may have seemed otiose. There were four main principles discussed.

Quality and Integrity of the Rating Process.

CRAs should endeavor to issue opinions that help reduce the asymmetry of information among borrowers, lenders and other market participants. [with five sub-headings]

Independence and Conflicts of Interest

CRA ratings decisions should be independent and free from political or economic pressures and from conflicts of interest arising due to the CRAs' ownership structure, business or financial activities, or the financial interests of the CRAs' employees. CRAs should, as far as possible, avoid activities, procedures or relationships that may

compromise or appear to compromise the independence and objectivity of the credit rating operations. [plus six sub-headings]

Transparency and Timeliness of Ratings Disclosure

CRAs should make disclosure and transparency an objective in their ratings activities. [with five sub-headings]

Confidential Information

CRAs should maintain in confidence all non-public information communicated to them by any issuer, or its agents, under the terms of a confidentiality agreement or otherwise under a mutual understanding that the information is shared confidentially. [with two sub-headings]

In the introduction, I claimed that there were two key issues for forecasters—CRAs ex post accountability and conflicts of interest—with a third important question of competition. The only sub-heading on ex post accountability (3.4)[9] left it to the CRAs themselves what to publish. The key section on conflicts of interest (2.4)[10] was a perfectly reasonable statement of objectives rather than providing any guidance on how to identify and remove such conflicts. There was no mention of competition between CRAs. Since there is no international law on issues such as this, international bodies, such as IOSCO or BCBS (Basel Committee on Banking Supervision), cannot and do not discuss the question of sanctions for non-performance or how to enforce any such principles, except by peer pressure.

Following this Statement of Principles, the main CRAs issued their own individual codes. What changes of behavior followed, if any, are difficult to ascertain. In particular, they have not prevented the CRAs from coming under renewed attack in the last couple of years, notably for having over-optimistic ratings for mortgage-backed structured products,[11] in some part, it is alleged, because of continuing conflicts of interest.[12]

Nevertheless, until at least very recently, the IOSCO code of conduct has remained the centerpiece of such regulatory efforts and discussion, vis-à-vis the CRAs, as have continued. In December 2004, IOSCO extended the Principles into "a more specific and detailed code of conduct giving guidance on how the Principles could be implemented in practice" (Code of Conduct Fundamentals for Credit Rating Agencies, Technical Committee of IOSCO, December 2004). This took the four main principles, with the wording marginally revised, and expanded the number of sub-headings to 18, 16, 18 and 2 respectively. There were some additional conflicts of interest, (in Sections 2.5 and 2.8).[13] How far these extra clauses altered CRA procedures would be difficult to discover without an in-depth exercise. The one section on checking outcomes, (now 3.8), remained essentially unchanged, and there continued to be nothing about competition.

Other reviews, apart from that of the Technical Committee of IOSCO, have been done by the Committee on European Securities Regulation (CESR), which has published three such reports in March 2005 on "CESR's technical advice to the European Commission on possible measures concerning credit ratings agencies" (CESR/05 – 139b). This report largely rubber-stamped the earlier IOSCO reports and two more recent studies on 'The role of credit rating agencies in structured finance' (February 2008)and its second report on the same topic (CESR/08 – 277 May 2008).[14]

This latter continued to advocate making a voluntary code of conduct the centerpiece of regulatory oversight, but now to be overseen by an additional monitoring body.[15] How anyone can monitor such a waffly set of pious objectives is far from clear.

Meanwhile the Technical Committee of IOSCO has now also reported in March 2008 with a consultation paper on 'The Role of Credit Rating Agencies in Structured Markets'. In this paper, the Committee proposed a number of minor modifications to their original code of conduct, (see Section on 'Recommendations'). They have followed this with a further note (Final Report) on 'The Role of Credit Rating Agencies in Structured Finance Models', (May 2008). Apart from a new section on 'Competition' (pp 13/14), which does not provide any recommendations, it offers yet another marginal re-write of the Code of Conduct.

But not everyone remained convinced that a revamp of the existing codes of conduct would do. Particularly, in, a column in the Financial Times on 16 June 2008, Nicki Tait and Gillian Tett reported on a forthcoming speech by Charlie McCreevy, the EU internal markets commissioner entitled 'Brussels to crack down on ratings agencies'.

> "Mr. McCreevy is to make clear that nothing short of regulatory supervision will do. I am now convinced that limited but mandatory, well-targeted and robust internal governance reforms are going to be imperative to complement stronger external oversight of rating agencies … I have concluded that a regulatory solution at the European level is now necessary to deal with some of the core issues."

The announcement comes just weeks after the International Organization of Securities Commissions proposed changes to the industry code of conduct, a code Mr. McCreevy will make clear falls far short of what is needed.

In withering language, Mr. McCreevy will describe the code as "a toothless wonder" and point out that "no supervisor appears to have got as much as a sniff of the rot at the heart of the structured finance rating process before it all blew up". He will say that he is "deeply skeptical" about its usefulness. "Many of the recent IOSCO task-force recommendations do not appear enforceable in a meaningful way," he will suggest."

Similarly Mr. Cuomo, the Attorney General in New York State moved to introduce new constraints on CRAs' pricing of their services in respect of rating structured products. It is to this subject that we now turn.

Conflicts of Interest: Notably in the Ratings of Structured Products

There are two dimensions to criticism of CRAs in their relationship with issuers of structured products, one that I regard as largely invalid, but one that may have some force.

Let us turn now to the first, mainly incorrect, allegation—that CRAs provided undue assistance to issuers of securitized products. This is a misplaced criticism, not because the CRAs did not provide such help, but because it was their duty to do so. Thus, IOSCO's own code of conduct, Sections 3.5 and 3.7[16] state:

> the CRA should inform the issuer of the critical information and principal considerations upon which a rating will be based and afford the issuer an

> opportunity to clarify any likely factual misperceptions or other matters that the CRA would wish to be made aware of in order to produce an accurate rating."

In short, a CRA is obliged to inform issuers of the details of the techniques used to assign ratings and to answer questions of clarification about such methodologies. Of course, issuers of structured products can, and will, use such assistance to place their product just above some desired threshold.

Irrespective of the fact that IOSCO's own code of conduct requires CRAs to assist issuers of securitized products with information to enable them to structure their product so as to achieve a desired rating, why might this practice be undesirable? More information is better than less. It is only if CRAs, and issuers, jointly apply a rating that CRAs, at bottom, believe are too high is there a problem here. So long as CRAs assess PDs correctly, and make that information public, then this question of inappropriate relationships, and conflict of interest, can be seen as a canard.

The latter is the real question. Might conflicts of interest lead to a distortion of publicly stated ratings of securitized products, especially since ratings agencies are paid by the issuers, not by investors? In general, the accuracy of a CRA's ratings is protected by its need to maintain its reputation. The importance of reputation was spelt out in IOSCO's September 2003 Report, (p. 10/11).

The most common conflict of interest cited by taskforce members was that larger CRAs receive most of their revenue from the issuers that they rate. Where a CRA receives revenue from an issuer, the CRA may be inclined to downplay the credit risk it poses in order to retain the issuer's business. The CRAs responding to the Task Force's questionnaire stated that they are aware of this potential conflict of

interest and attempt to mitigate its influence by ensuring that no particular issuer constitutes any significant portion of the CRA's overall revenue. These firms claim that, because credit ratings from a particular firm are only valuable insofar as the firm maintains a reputation for independence, accuracy and thoroughness, CRAs would be unwilling to risk damaging their reputations just to retain a single client. Furthermore, while issuers may prefer to use a credit rating from a firm with relatively lax rating standards, investors are unlikely to accord such ratings much weight and the issuer would pay higher costs for the capital it is trying to raise.

CRAs also note that CRA analyst compensation is not linked to issuer fees. According to the CRA respondents, this, combined with the use of rating committees, removes the likelihood that the rating process will be inappropriately influenced.

Competition is also important. Insofar as debt issuers are rated by two or more agencies and/or that identical products are rated by different agencies, a tendency for one agency to become systematically lax should become evident quite quickly, even before actual default events could demonstrate the relative accuracy of the CRAs. Of course collusion is possible, but the damage to reputation, if caught, would be overwhelming.

So, the essential question is whether there are some features of the process of rating structured products that make the standard safeguards of reputation and competition less effective in their case. This may be so. The incentive to over-rate to gain a fee is negligible on traditional corporate business. Corporate rating fees are quite small—why risk the company's reputation to gain a fee? But structured issues are different in two respects. First, it was a new business and has been earning super-normal profits – especially for the investment bankers proposing the issues, but also (in a smaller way) for the CRAs. With fees generally higher in relation to marginal

costs than is the case for a corporate rating, the incentive to over-rate to secure a fee is that much greater. (And the investment bankers proposing a deal can be demanding—they want their high bonuses for getting the issue away). Secondly, whereas a company would normally want to be rated by all the major agencies—or at least two of them—structured issues are often rated by only one or two agencies. The company seeks out the agency that will give the highest rating (or demand the least credit-enhancement to achieve the desired ratings); the other agencies are then not used. That indicates a prima facie case for bias.

This analysis suggests potential remedies, much along the lines already proposed by New York Attorney General Andrew Cuomo (Dow Jones News services, June 6, 2008). First, require all issuers to pay for advice/analysis separately from the rating to prevent issuers asking several CRAs for their ratings assessment, and then only paying the agency offering the most optimistic rating. Second, require more precise disclosure of ratings' fees. Third, require all issuers of structured, securitized products, to obtain, and have published, a rating from two or more, CRAs. This latter obligation would also be justifiable on the grounds that such products are more complex and opaque. It could also serve to encourage more competition amongst CRAs. Finally, there is a major need, as elaborated below, for an independent assessment body to check on the accuracy of CRAs' predictions of PD.

An alternative approach has been proposed in the consultation document issued by the SEC (17 CFR Parts 240 and 249b, RIN 3235 – AK14, June 11, 2008. p. 30).

> To address this conflict…as a condition to the NRSRO rating a structured finance product the information provided to the NRSRO and used by the

> NRSRO in determining the credit rating would need to be disclosed through a means designed to provide reasonably broad dissemination of the information. The intent behind this disclosure is to create the opportunity for other NRSROs to use the information to rate the instrument as well. Any resulting 'unsolicited ratings could be used by market participants to evaluate the ratings issued by the NRSRO hired to rate the product and, in turn, potentially expose an NRSRO whose ratings were influenced by the desire to gain favor with the arranger in order to obtain more business.

While there are several features to be applauded in this proposal, notably the use of ex post accountability rather than codes of conduct, the encouragement of competition and the reliance on market mechanisms rather than government intervention, I doubt they would work for several reasons. First, it requires any issuer, either directly or via its CRAs of such a product, to provide full details of any new structured product to *any* potential CRA. What might happen if a competitor were to set up a subsidiary CRA with the purpose of discovering competitive details? Could such details be kept confidential in such a regime? I wonder whether issuers of structured products would be willing to accept such a disclosure obligation.

Second, the proposal would work by having CRA competitors undertake more conservative (i.e. less favorable) unsolicited ratings. A representative sample of such products would have to be rated by the unsolicited CRA in order to establish that the initial (solicited) CRA had a pattern of excessively optimistic ratings. This would be quite expensive. Insofar as ratings were paid for by issuers, it is not clear why the publication of such "knocking copy", in the guise of lower unsolicited ratings, would ever gain more commissions.

So this proposal could only benefit those CRAs whose receipts came from the "buy-side", e.g. Egan Jones. While it might provide them with an enhanced marketing benefit, it would lead to another problem. Suppose that those unsolicited ratings, sold onto subscribers, were in some sense superior. Then these subscribers would be in command of relevant market information not available to others. In line with the SEC's own disclosures rules, unless specifically amended to promote buy-side CRAs, such unsolicited ratings would have to be publicly published. In which case they would be valueless, and there would be no incentive for such "unsolicited ratings" to be undertaken.

The SEC and IOSCO have then faced a conundrum. It could promote buy-side CRAs, enhance competition and encourage cross-checking of accuracy, but only if it is prepared to soften its own rulings of common disclosure of market relevant information. Alternatively, it could stick by its own disclosure rules, and then these proposals would fail to achieve their intended purpose.

Some Other Proposals for Reform

In the pantheon of villains, on whom the current financial crisis is blamed, CRAs usually now receive a (dis)honorable mention, if not quite pride of place. This has led to a wild variety of proposed "reforms".

Perhaps almost as serious from the standpoint of the CRAs, their reputation has been damaged, and reputation is the key to their brand name.

It would be easy enough to put CRAs out of business, and some of the proposed reforms for them could do just that. The problem is that CRSs do perform a public service. It would be a massive waste of time if all investors had to run a

complete information-gathering exercise (due diligence) on all of their investments, however small a share of their overall portfolio. They could not, and would not, do that. So it represents a huge economy of time and effort to delegate such information gathering, sifting and dissemination to specialists, *so long as one can trust them.*

This latter is quite a qualification. How does one ensure that CRAs are trustworthy? There are numerous suggestions. Most of them are, I believe, unworkable. I list a number of the more common suggestions below:

Involve the government, either as supervisors or as promoting an additional CRA to compete with the private CRAs

To many, the idea that a public-sector CRA would be more trustworthy than a private sector CRA when rating public-sector debt, a local "national champion" or a failing company of political significance is an oxymoron. Who would, for example, trust a French publicly established ratings agency to rate French "champion" objectively? More generally, any public sector involvement with CRAs as supervisor or overseer would tend to be held, by the public, as leading to public sector responsibility for the accuracy of CRA forecasts/opinions. If a public sector body was to supervise a CRA in any way, it would be held to have given its imprimatur to such forecasts.

Make the CRAs legally liable for their forecasts/opinions

I cannot help wondering what would happen if governments, central banks, think-tanks and economists were also to be made legally liable for their forecasts/opinions. We cannot see how such forecasting could continue. Once legal liability is applied, the potential for open-ended damages, especially in the U.S. legal system, would, I

believe, make the whole business model of CRAs non-viable. Those who press this line of attack need to explain how legal liability can remain sufficiently constrained to enable the services of CRAs to continue.

Although the most virulent attacks on CRAs have mostly come from the United States, the CRAs are, perhaps, more at risk from legal challenge in Europe where constitutional defense has less resonance.

Prevent debt issuers paying CRAs, so the CRAs are forced to see payment from investors (the buy-side)

The problem with this approach is that information, once publicly revealed, becomes a free public good. In principle, every investor could subscribe individually and privately to one or more CRA *and* promise not to pass on that information.[17] A problem is that promise would be hard to enforce. Hundreds of employees at many financial institutions would have access to such ratings and could undercut the CRAs by making secondary markets. Moreover, the information content in the ratings could soon be deduced from the actions of subscribing investors. Newspapers would have an incentive to glean and publish accurate estimates of CRA ratings.

Furthermore, in a context in which transparency is held to be a desideratum in almost all cases, is it appropriate to move to a system in which the business of providing ratings can only work if these are maintained privately by individual subscribers?[18] Also, how do you price subscriptions so that retail investors can afford to see ratings, while banks/Other Financial Institutions (OFIs) pay massively more? Not impossible, but difficult/costly to get right. Such a system would also be more difficult and time-consuming to run than the present one.

Some Failings in the Use of CRA Ratings

Much of the problem with CRA ratings resides with their misuse by users rather than the mechanisms of their provision.

Misuse of forecasts

Forecasts tend to be systematically misused by their recipients *n.b.* this is usually only partially the fault of their providers. Recipients of forecasts tend to focus unduly on the modal (or mean) forecast while ignoring or discounting the wide probability distribution (the higher moments), especially the uncertainty (confidence limits) and skewness of the forecast. This has been encouraged by CRAs by the emphasis placed on the particular rating *e.*g. A or BBB, rather than the probability distribution of implied credit default or the potential volatility of ratings migration in each case.

When he introduced The Inflation Report in the UK in 1992/93, Mervyn King, then-Chief Economist at the Bank of England, tried to wean the recipients of his forecasts away from focusing on the most likely modal outcome by refusing to publish that number and publishing a fan chart instead. It may well be the case that CRAs would have been prepared to publish similar fan charts of the one-sided probability of default for each rating notch had investors asked for that. But they did not. I believe that such forecast data can and should be made available. I would propose that all ratings *should* be accompanied by a fan chart showing not only the prospective default probabilities attached by that CRA to that rating for each year[19] of the rated product's life, but also a measure of the uncertainty of that measure.
An example is provided in Figure 9.1.

<Insert Figure 9.1>

Where X is a central tendency of PD, mean or mode and + and * are one-sided estimates, e.g. confidence interval, of the upward uncertainty relating to that forecast of PD. Here, + shows the confidence interval for the mortgage-based structured product, while * gives the same confidence interval for a corporate bond. The two have a completely different time path, even when the expectation of mean PD is, by construction, taken to be the same. Under normal circumstances, uncertainty increases and confidence limits widen as the time horizon lengthens, i.e. the further into the future one looks. This is, however, not so with mortgage-based structured products, as Mason and Rosner (2007) report[20](Part III, pp 34-51, especially p. 48).

> In summary, because RMBS [Residential Mortgage Backed Securities] are constructed on the basis of mortgage pools that consist of static portfolios of fixed-income investments that become seasoned over time, performance over time becomes increasingly predictable. That increased predictability results in RMBS ratings that telescope in quality towards either default or AAA. Furthermore, all the tranches of securities associated with a specific mortgage pool will migrate toward default or AAA together. This all-or-nothing nature of the risk in structured finance is the source of relatively high AAA yields (and yields across the credit spectrum) that attract investors to the sector, as well as the source of concentrated defaults that have historically hit various ABS and RMBS sectors to date. The problem with rating RMBS therefore is not that the future is hard to predict. The problem is that the traditional ratings

process, when applied to RMBS, is being used to do things for which it is not designed.

It is in this sense that RMBS have been sometimes described as “economic catastrophe” bonds. It has yet to be completely determined how far the CRAs systematically underestimated mean PDs for RMBS, mainly by giving too little weight to the probability of housing price declines throughout the United States, and to the subsequent effect on default—‘jingle mail’.[21] But what is clear is that once conditions started to deteriorate with RMBS, the volatility of ratings migration downwards was far more extreme than for plain corporate debt. My assertion here is that difference in the essential kind can only be met by CRAs publishing additional detail on the prospective confidence limits (volatility) of their forecasts.

There may be little initial enthusiasm amongst investors for such extra information. What most forecast users want is a simple mental crutch in the guise of a point forecast, rather than a more careful assessment of uncertainties. Investors are ordinary people, and ordinary people are lazy. Some may also have been complicit, in that they know that structured product ratings had greater risk, but consciously sought to move further along their return/risk-curve than their own investment constraints normally allowed. Investors <u>should</u>, as a matter of public policy, be made aware of the uncertainties surrounding future forecasts of PD. Suggestions have been made that ratings of structured products carry a different symbol. That does not really catch the point that the risks of ratings migration are quite different and in a way that can be quantified and estimated, for RMBS as compared with corporate debt.

The rating applied to a structured product <u>cannot</u> imply the same probability of default as an exactly similar rating applied to an underlying instrument

The point is that a structured product is precisely structured to achieve a particular ratings level. Thus in the aggregate of such structured products, the mass is right at the bottom of the set of allowable conditions. So the expected probability of default (PD) of a portfolio of structured instruments, all of which are correctly awarded an A rating, can potentially be higher than that of a portfolio of original underlying instruments of the same A rating. Again, the proper way to handle this is to require CRAs to publish fan charts of PDs over the expected life of each product. Then it will immediately become obvious that an AA of a structured product is not, and cannot, be the same as an AA of an underlying product.

CRAs will be unduly pressured to provide ratings too soon

Because of information asymmetries, a market for innovative investment products needs to have these rated. Almost by definition, such products will be launched in favorable conditions. So the CRAs will not know what will happen to correlations, PDs, etc., in adverse times for such instruments. But they will nonetheless be under great pressure to issue such ratings, and their self-interest will tempt them to proceed despite the lack of sufficient time and life-history.

Once more, the correct approach is not to ban ratings of new products, but to require the CRAs to expose their uncertainty by publishing fan charts, applicable to any rated new product, in which the upper line, recording uncertainty, should deviate much further from the modal forecast. Of course, CRAs may fail to appreciate this problem (of too short of a data set) or knowingly publish tighter fan charts as a sales mechanism, but that is where the assessment and perhaps the penalties or pre-

commitment mechanism kicks in. If their estimate of PDs turns out to be overly optimistic, they are penalized.

No mechanism for ex post evaluation of ratings

The CRAs keep a record of the outcome of all their rated instruments, (default and when, or not). They need this to revise their own methodologies. Moreover, they mostly publish an account of their default and transition studies, though in some cases with full access limited to subscribers. For example Fitch's latest reports on structured and corporate ratings are available at the following links: http://www.fitchratings.com/corporate/reports/report_frame.cfm?rpt_id=384724 and http://www.fitchratings.com/corporate/reports/report_frame.cfm?rpt_id=383102.

But what they publish is what they independently choose to publish, which may incorrectly evoke some public cynicism because they can select what to report. Moreover, such independent publication of results makes comparison of relative accuracy *between* CRAs difficult or impossible.

Therefore, comparisons of relative forecast accuracy among CRAs cannot be made. Moreover, there is relatively little call amongst investors for such comparative exercises to be done. After the event, individual issuers and investors have no further *individual* interest in providing a public record of what happened and of how accurate the CRAs were. However, there is a *public* interest in achieving ex post accountability.

An Independent Assessment Institution

This leads directly to my main proposal, which is the establishment of an independent assessment institution to assess the accuracy of CRA estimates of PD and to publish comparative studies of such accuracy. It would *not* have a wider responsibility for monitoring the behavior of some amorphous code of conduct. Indeed, as noted at the outset, so long as the forecasts are accurate, the behavior of the forecaster in other respect is largely immaterial. A subsidiary proposal, therefore, is that IOSCO's code of conduct be scrapped.

What is needed is a small independent body—a CRA Assessment Centre (CRAAC). All CRAs in every country should be required to place with CRAAC a record of each product rated and an initial quantified forecast of expected PD and a measure of the uncertainty of that forecast annually through the life of that product. At the extinction of the product (default, payment or repackaging) the CRA would again inform CRAAC. The Centre would be essentially a data handling centre with few staff. Members could have the ability to cross-check on the validity of CRA information. It would be global in scope. It would have to be set up under some national law and there should be a right of judicial repeal. It should have the right to request information form CRAs.

Unfortunately, it would not be credible for the industry to set up such a body under its own direct control. It would be for discussion whether the industry could finance a third party, perhaps a large accounting firm, to set up and establish the CRAAC or whether it would have to be done by governments. As Willem Buiter has noted, 'Self-regulation is to regulation, as self importance is to importance'. Moreover, penalties, some combination of reputation and pecuniary loss, may be necessary to insure that CRA estimates of PD are both as honest and accurate as possible, and are seen to be such.

The key issue is to ensure that the product, a securitized instrument, is correctly rated at the outset when it is originated and sold. At first sight, it might seem a reasonable idea, insofar as such ratings are based on fallible models, for the CRAAC also to be asked for a second opinion on model architecture and assumptions, but that would be dangerous since (a) there are fashions and common errors in model construction techniques as in most everything else; and (b) it would tend to make CRAAC complicit, rather than independent, in assessing model outcomes. There may be a case for having such an independent body also assess the relative speed and accuracy of ratings transitions, but that could be left for later when the assessment body had been properly established, and was running effectively. This is discussed further in the first section.

Again, it may be helpful to compare and contrast the proposal here with that contained in the SEC's June 2008 consultation paper. The SEC would have CRAs provide sufficient extra data to allow assessments of ex post accountability to be undertaken, but they would have the data made available to everyone whereas we would only require the CRAs to send it confidentially to CRAAC. So the CRAs themselves would, I believe, find our proposal more acceptable.

Then, having obtained this massive accumulation of data, the SEC would leave it to:

> the marketplace to use the information on the history of each credit rating [to] create the opportunity for the marketplace to use the information to develop performance measurement statistics that would supplement those required to be published by the NRSROs themselves in Exhibit 1 to Form NRSRO.[22]

Whilst the intention and objective is laudable, and in line with our own proposal, I doubt whether it is practicable to leave it to "the marketplace". Doing such comparative exercises would have to be continuous and consistent; it would also be expensive. Who would pay for it? The "free rider" problem would be huge. It *has* to be a separately established independent agency, though exactly who establishes it, either the government or the private sector, could be for discussion.

As a primarily statistical body, *without* concern for conduct, it should be possible to set a CRAAC up quite cheaply. The industry would, I assume, initially pay for it *pro rata* to earnings. Perhaps in subsequent years, the payment/premium could be related to the assessed relative accuracy, with those who did worst paying most. Note that there are two dimensions to such accuracy; first, how close was mean predicted PD to actual average outturn PD; second, did the expected number of defaults lie within the upper confidence band. Some method of weighting those two dimensions would need to be found.

This is not such a large step and, indeed, the SEC, as noted above, is considering imposing even stronger data reporting requirements. Moreover, IOSCO has requested CRAs to publish information on historical default rates "in such a way to assist investors in drawing performance comparisons between different CRAs" (March 2008 proposed modification to Code of Conduct Section 3).[23] Again and perhaps more important, the CESR May 2008 Report (CESR/08 – 277), p. 17, para 72, records the following.

> The Participating CRAs continue to meet to discuss and develop potential initiatives and measures aimed at promoting confidence in the credit rating

process and structured finance market. In their latest update[24] the group is presenting a number of recommendations that the members are committed:

- Plainly stating that the Participating CRAs do not and will not provide consulting, or advisory services to the issuers they rate, nor do their analysts make proposals or recommendations regarding the structure or design of structured finance products.
- Conducting regular, periodic reviews of staffing needs, training and competences, as well as formal, internal reviews of remuneration policies and practices to ensure that they do not compromise analyst objectivity.
- Working with market participants on measures that could enhance the quality and transparency of information regarding assets underlying structured finance securities available to the investing public.
- Creating an industry portal to house the Participating CRAs' performance studies and other relevant data.
- Providing more disclosure about key model and methodology assumptions and stress-testing of assumptions."

Perhaps the key difference here is the insistence that the comparative assessment body should be independent of the CRAs themselves.

Penalties and Pre-commitment?

What is being proposed here is a quantification of ratings, so that ex post accountability can be more easily achieved in two dimensions. The first and easiest is

a numerical estimate of the mean expected cumulative probability of default (PD), annually over its stated life for a debt instrument assessed as being within a given ratings class. The second is a measure of the confidence with which that forecast is held, expressed as an upper band, which the distribution of defaults should only breach, say, 1 percent or 2½ percent of the time. Both sets of data, on central tendencies and expected variance of PDs, provide necessary information for investors.

Pure concerns of reputation are likely to provide sufficient incentive for CRAs to aim to achieve the best possible point forecast so long as the initial forecast can be properly compared with actual outcome and comparisons between CRAs are published by an independent assessor. But one of the problems with forecasts, especially with forecasts of PDs for innovative products, is that recipients have little idea of the uncertainty of such forecasts. There is little incentive for the CRAs to reveal just how uncertain they may be.

So there is a case for requiring the CRAs not only to report an upper band, beyond which they expect defaults for any given asset class to fall very rarely (say 1 percent or 2½ percent of the time) but also to pay a modest penalty if this is breached more often than expected. This would be akin to the pre-commitment approach devised by Paul Kupiec for application to bank capital in several articles in the 1990s. The purpose of the penalties would be to provide a balance between CRA desire to indicate confidence in their own forecast by implying little uncertainty for promotional reasons against the cost and shame of having to pay such a penalty if the upper band was breached.

If the occasion of such a penalty being levied were to be published, as I would advocate, the cost to reputation would be greater and the actual amount of the

pecuniary penalty kept small. It could then be applied to meet the running costs of the independent assessment body (CRAAC).

An alternative and possibly preferable approach, which I owe to Prof. Perry Mehrling, would be to require CRAs to purchase credit default swaps on the issues that they rate at the date of issuance and configured so that a default rate on such products greater than the upper confidence limit predicted by each CRA would generate a transfer to the current holder of that product.[25] While this is a nice idea, whether CDSs could in practice be so configured is an issue beyond the limits of this paper.

Competition

There are only two big American-based CRAs, Moody's and Standard & Poor's, and one European-owned rival, Fitch, Inc. This is not enough to provide proper competition. The NRSRO procedure is not helpful (a kind of Catch 22).[26] As argued earlier, government-backed agencies would not be credible.

The proposal here to provide independently assessed and quantified comparisons of ex post accuracy might help generate more competition. A new entrant could establish a track record for greater accuracy (this is <u>independently assessed</u>) in a particular niche by exploiting a comparative advantage, perhaps rating one particular product line, with a small staff, and then build from that. What investors want is forecast accuracy. At present, they have no simple or straightforward way of doing that, (though large investors might do so by comparing the historical records of each of the large CRAs). Consequently, most investors fall back on reliance on brand names which reinforces oligopoly.

Ratings Transitions

The main role of CRAs is to give a credit rating to new debt issues at the time of issuance. One of the criticisms of CRAs is that they lag badly behind events in adjusting ratings in response to subsequent changes in the condition of such instruments. While that charge is surely justified and has been empirically demonstrated, it is on this view, a misperception to expect CRAs to do much better than now. They do not get paid for making ratings transitions[27], and hence have neither the incentive nor the staff to monitor continuously the idiosyncratic behavior of myriads of individual debt issues. They do have Merton-type time-to-default models, e.g. KMV, but these by definition lag behind market data and given model uncertainty, the CRAs would not necessarily rush to use such model estimates to make rating transitions. If the issuer of existing debt instruments should issue a new instrument, that also may give a CRA grounds for revising earlier ratings; but issuers, in conditions where they face a potential down-grade, may defer new issues.

There may be a better way. Banks have more incentive to maintain continuous monitoring of all their credit claims. Moreover, under Basel II the larger banks are adopting the two Internal Ratings Based (IRB) approaches. Why not require the IRB banks to confidentially report their current ratings assessments on a limited number of representative credit holdings? The independent assessment body (CRAAC) would then average these,[28] and publish them. It would have much in common with the publication of London Inter-Bank Offer Rate (LIBOR) estimates from individual bank data.

This would provide a service to the banks that could compare their own assessment with the industry average. It would provide a service for CRAs who would become free of an expensive and poorly provided requirement to provide subsequent ratings transition. It would provide a service to investors who should then receive quicker and better information on ratings transitions.

Summary of Recommendations

(1) All CRAs should be required to provide confidential details of their ratings in a numerically quantified format to the Credit Rating Agency Assessment Centre (CRAAC), an independent assessment body

(2) CRAAC should maintain ex post accountability of CRAs by comparing forecasts with out-turn and publish reports on comparative accuracy.

(3) CRA forecasts should have two numerical dimensions, central tendency and a measure of uncertainty (forecast confidence). The latter may need support from a modest pre-commitment penalty or by some other equivalent mechanism.

(4) Ratings transitions should come from an averaging of IRB internal ratings, not from CRAs.

(5) The industry should pay the costs of CRAAC.

(6) Because of the long lag between forecast and out-turn, conflicts of interest do remain a valid concern. This can be handled by appropriate adjustment of the payment mechanism and by requiring all products to be rated by two or more CRAs.

(7) The IOSCO Code of Conduct is best forgotten. No other government intervention is necessary or desirable *except* to insure that CRAAC is independent, not captured by CRAs and adequately resourced from the industry. Whether the CRAAC would be set up by the private sector or by the government would be for discussion, but it *must* be independent of the CRAs themselves.

Bibliography

CESR (2005). 'CESR's technical advice to the European Commission on possible measures concerning credit rating agencies_05-139b'. pp 7/8_CESR, Paris, France.

_________ (2008). 'CESR's Second Report to the European Commission on the compliance of credit rating agencies with the IOSCO Code and the role of credit rating agencies in structured Finance' *CESR/08 – 277.* p. 17, CESR Paris, France.

_________ (2008) 'CESR Consultation Paper: The Role of Credit Rating Agencies in Structured Finance'. Paris, France, (February).

IOSCO (2004). 'Code of Conduct Fundamentals for Credit Rating Agencies'. Technical Committee of IOSCO. Madrid, Spain.

___________ (2004). ' Public Comment on Code of Conduct Fundamentals for Credit Rating Sections 3.5 and 3.7'. IOSCO Madrid, Spain.

_________ (2003). 'Report on the Activities of Credit Rating Agencies'. p. 1, 10, 11 IOSCO Madrid, Spain.

Mason, J.R. and Rosner, J. (2008). 'How Resilient Are Mortgage Backed Securities to Collateralized Debt Oblication Market Disruptions?'. Hudson Institute New York, NY.

SEC (2008). 'Amendments to Rules for Nationally Recognized Statistical Rating Organizations'. 17 CFR Parts 240 and 249b, RIN 3235 – AK14, p30. SEC Washington DC.

[1] My thanks are due, amongst others, to Jon Danielsson, Perry Mehrling, Robin Monro-Davies and Lionel Price for advice and suggestions, but all opinions and errors remain my own.

[2] *Financial Markets Group and London School of Economics.*

[3] The forecasting profession is, however by nature, somewhat disreputable. Since all we have to go on, the available evidence, is historical experience, the basic assumption is that the future will be like the past, i.e. that the world and the economic/financial system within it is stationary; that assumption is most often invalid (black swans, etc.). Moreover, our available data base is either too short to allow accurate statistical inferences, at least of extreme events, or so long as to include major structural regime changes, thereby making the earlier data irrelevant, or both at the same time.

[4]One common complaint of regulators is that there is no central coordinating body for the CRAs, with which regulators can communicate; no Self Regulating Organization (SRO). Given the importance of clean competition amongst CRAs, especially when there are so few, their reluctance to form a common organization is understandable and even commendable. Making communications easier for regulators should not be a high priority.

[5]Whilst the SEC found the output of the CRAs to be useful for this purpose, the SEC otherwise left them largely unsupervised and on their own prior to the Enron debacle. Between 1975 and then, there were virtually no visits to NRSRO SRAs by the SEC. Rosner and Mason (2007) state, p. 29, that "The SEC examines the ratings agencies every five years".

[6] "Following the Enron collapse, the SEC submitted to Congress in January 2003 its report on the roleand function of credit rating agencies in the operation of securities markets in response to the Congressional directive contained in Section 702 of the Sarbanes-Oxley Act of 2002.
The report was designed to address each of the topics identified in Section 702, including the role of credit rating agencies and their importance to the securities markets; impediments faced by credit rating agencies in performing that role; measures to improve information flow to the market from credit rating agencies; barriers to entry into the credit rating business; and conflicts of interest faced by credit rating agencies. The report addressed additional issues such as allegations of anti-competitive or unfair practices; the level of due diligence performed by credit rating agencies when taking rating actions; and the extent and manner of SEC oversight of credit rating agencies…..
On 4 June 2003, the SEC issued a Concept Release, submitted for public comments until 28 July 2003. This work was considered by the SEC as part of their review of the role of credit rating agencies in the operation of securities markets.
The SEC was seeking comment on several issues relating to credit rating agencies, including whether credit ratings should continue to be used for regulatory purposes under U.S. federal securities law and, if so, the process of determining whose credit ratings should be used, as well as the level of oversight that should be applied to such credit rating agencies."
From CESR/05 – 139b, (ibid), pp 8/9. This Concept Release and the SEC study formed the basis for the CRA Reform Act, which became effective in June 2007. Nine CRAs have registered as NRSROs under this legislative framework, as of May 2008, being:-

"A.M. Best Company, Inc., DBRS Ltd., Fitch, Inc., Japan Credit Rating Agency, Ltd., Moody's Investor Service, Inc., Rating and Investment Information, Inc., Standard & Poor's Ratings Services, LACE Financial Corp. and Egan-Jones Rating Company."

See CESR's "Second Report to the European Commission on the compliance of credit rating agencies with the IOSCO Code: The role of credit rating agencies in structured finance.", CESR/08 – 277, p. 11.

[7] "This report does not propose a preferred method for addressing CRA-related issues. Nor does this report endorse any particular regulatory approach jurisdictions may take regarding CRAs. Moreover, the report does not make judgments regarding the methodologies, approaches or business models CRAs may use. Rather, this report discusses certain key issues that securities regulators, CRAs and others may wish to consider when deliberating policy choices in this area. While some jurisdictions may decide to address the issues highlighted in this report through market mechanisms, others may decide to consider regulatory or other methods to address them." Ibid, p. 2.

[8] "Rating agencies that the market recognizes as credible and reliable can play a valuable role in global securities markets. Consequently, the Technical Committee has concluded that a set of IOSCO principles regarding the activities of CRAs would be a useful tool for securities regulators, ratings agencies and others wishing to improve how CRAs operate and how the opinions CRAs assign are used by market participants. As CRAs are regulated and operate differently in different jurisdictions, the following principles do not lay out a "one-size-fits-all" approach, but state high-level objectives for

which ratings agencies, regulators, issuers and other market participants should strive in order to improve investor protection and the fairness, efficiency and transparency of the securities markets and reduce systemic risk." p. 1

[9] "3.4. CRAs should publish sufficient information about the historical default rates of CRA rating categories and whether the default rates of these categories have changed over time, so that interested parties can understand the historical performance of each category and if and how ratings categories have changed."

[10] "2.4 Reporting lines for CRA staff and their compensation arrangements should be structured to eliminate or effectively manage actual and potential conflicts of interest. A CRA analyst should not be compensated or evaluated on the basis of the amount of revenue that a CRA derives from issuers that the analyst rates or with which the analyst regularly interacts."

[11] Whereas the spate of down-grades of such ratings is evidence of that failure, we do not yet have complete data on the incidence of default, so the full story has yet to unfold.

[12]In my view, the main problem was the failure of the model-builders in the CRAs to attach sufficient probability to a generalized price decline in US housing, on the grounds that it had not previously occurred in the historical data set that they were using.

[13] "2.5 The CRA should separate, operationally and legally, its credit rating business and CRA analysts from any other businesses of the CRA, including consulting businesses that may present a conflict of interest. The CRA should ensure that ancillary business operations which do not necessarily present conflicts of interest with the CRA's rating business have in place procedures and mechanisms designed to minimize the likelihood that conflicts of interest will arise.

2.8 The CRA should disclose the general nature of its compensation arrangements with rated entities. Where a CRA receives from a rated entity compensation unrelated to its ratings service, such as compensation for consulting services, the CRA should disclose the proportion such non-rating fees constitute against the fees the CRA receives from the entity for ratings services."

[14]Also see, Daenen, P., (2008), 'Rating and Regulation: Current Turbulent Conditions could be an Opportunity to Reform', paper presented at the Finlawmetrics Conference at Bocconi University, Milan, organized by Prof. D. Masciandaro, June 12/13, 2008.

[15] "Conclusion: CESR's policy proposal

7. CESR and market participants believe that there is no evidence that regulation of the credit rating industry would have had an effect on the issues which emerged with ratings of US sub prime backed securities and hence continues to support market driven improvement. Despite this conclusion CESR recognizes that there needs to be a much greater involvement from market participants including issuers and investors as well as the CRAs themselves to ensure improvement and discipline. Also CESR recognizes that the use of ratings in the regulatory and supervisory framework, such as the ECAI in the CRD, could induce uncritical reliance on ratings as a substitute for independent evaluation.

8. CESR considers the IOSCO Code to be the standard on which CRA conduct of business should be assessed and believes that the IOSCO Code, including the proposed modifications, should be regarded as the minimum upon which to build the enhanced framework that CESR is now suggesting. CESR considers that the updated Code satisfactorily addresses most of the concerns raised in the areas covered in the report except those regarding ancillary and advisory services where there is a need for more clarity. CESR has informed IOSCO about this concern.

9. Moreover, CESR does not consider the initiatives taken through the improvement of the IOSCO Code and the initiatives taken by the CRAs both as a group and individually, are sufficient given the influential role CRAs play in the structured finance sector. This leads CESR to believe there is a strong need to take a step forward in ensuring integrity and confidence in the rating industry and encouraging the effective use of ratings by investors.

10. CESR therefore urges the Commission as an immediate step to form an international CRAs standard setting and monitoring body to develop and monitor compliance with international standards in line with the steps by IOSCO, using full public transparency and acting in a 'name and shame' capacity to enforce compliance with these standards via market discipline.

11. In order for this body to work, CESR believes it needs the full support of the market and considers that it should be formed of senior representatives of the investor, issuer and investment firms' communities from across various geographic areas to ensure market buy-in and the international nature of the body. In addition, CRAs should also be part of the body when acting in its standard setting capacity but not when performing its monitoring activity. The members of the body would be appointed in the majority by the international regulatory community and would be accountable to those that appoint them.

12. CESR takes for granted that CRAs will provide sufficient information to this body in order for it to fulfill its monitoring objective.

13. If international regulatory involvement cannot be achieved in the short term, CESR recommend that this body is formed at an EU level.

14. In the absence of support from market participants or failure of the body to meet the objectives of ensuring the integrity and transparency of ratings, CESR considers that this initiative would not add value and that the supervisory authorities should step in to ensure, probably through regulation, the integrity and quality of the rating process." CESR/08 – 277, p. 3.

[16] "3.5 The CRA should publish sufficient information about its procedures, methodologies and assumptions (including financial statement adjustments that deviate materially from those contained in the issuer's published financial statements) so that outside parties can understand how a rating was arrived at by the CRA. This information will include (but not be limited to) the meaning of each rating category and the definition of default or recovery, and the time horizon the CRA used when making a rating decision.

3.6 When issuing or revising a rating, the CRA should explain in its press releases and reports the key elements underlying the rating opinion.

3.7 Where feasible and appropriate, prior to issuing or revising a rating, the CRA should inform the issuer of the critical information and principal considerations upon which a rating will be based and afford the issuer an opportunity to clarify any likely factual misperceptions or other matters that the CRA would wish to be made aware of in order to produce an accurate rating. The CRA will duly evaluate the response. Where in particular circumstances the CRA has not informed the issuer prior to issuing or revising a rating, the CRA should inform the issuer as soon as practical thereafter and, generally, should explain the reason for the delay."

[17] There is at least one agency, Egan Jones, working on this principle, and it now has SEC approval. The proprietors point to some good "calls" (though of course we do not know what bad calls they have made) and it seems to be making a profit. But the business may work only because it is tiny – few enough subscribers not to spill the beans, but too few analysts to provide comprehensive coverage.

[18] This was noted by the Technical Committee of IOSCO in their September 2003 Report, pp 13/14,

"Another factor some commentators have suggested regulators may wish to consider is whether CRA subscribers receive 'material information' that places them at an advantage vis-à-vis investors relying exclusively on freely available public information. This will depend on a jurisdiction's definition of 'material information'. While some jurisdiction with selective disclosure prohibits explicitly exempt CRAs from this prohibition, many of these same jurisdictions only allow for this exemption if the CRA distributes the rating to the public."

"For example, the U.S. Securities and Exchange Commission's 'Regulation Fair Disclosure' specifically exempts CRAs from its prohibitions on selective disclosure by issuers of material non-public information, provided the CRAs use the material non-public information solely for developing a rating, and the CRAs' ratings are publicly available.

[19] Requiring the CRAs to do this annually would help to resolve the tedious, and often unhelpful, distinction between 'through the cycle' (TTC) and point in time (PIT) ratings. At issue the estimate of PD over the next few years would have to be, in effect, PIT, whereas the estimates over the longer run would revert to TTC, as would be both desired and expected.

For a brief discussion of subsequent ratings' migration estimates see Section I below.

[20] Mason, J.R. and J. Rosner, (2007), 'Where did the risk go? How misapplied bond ratings cause mortgage backed securities and collateralized debt obligation market disruptions', (May), available electronically at http://ssrn.com/abstract=1027475.

[21] In the USA, unlike the UK and most of Europe, mortgage lending is 'without recourse', which means that once the lender has recovered possession of the house from a defaulting borrower, the lender cannot make any further claims on that borrower's other assets or income. So, when mortgage borrowers in the USA found themselves in negative equity, they would often walk away, posting the keys of the house back to the mortgage originator. Mail with keys in it jingled; hence the term 'jingle mail'.

[22] The full quotation from pp 67-69 runs as follows:-

"The Commission is proposing to amend Exchange Act Rule 17g-2 to add a new paragraph (8) to Rule 17g-2 that would require a registered NRSRO to make and retain a record showing all rating actions (initial rating, upgrades, downgrades, and placements on watch for upgrade or

downgrade) and the date of such actions identified by the name of the security or obligor and, if applicable, the CUSIP for the rated security or the Central Index Key (CIK) number for the rated obligor. Furthermore, the Commission is proposing to amend Rule 17g-2(d) to require that this record be made publicly available on the NRSRO's corporate Internet Web site in an interactive data file that uses a machine-readable computer code that presents information in eXtensible Business Reporting Language ("XBRL") in electronic format ("XBRL Interactive Data File"). The purpose of this disclosure is to provide users of credit ratings, investors, and other market participants and observers the raw data with which to compare how the NRSROs initially rated an obligor or security and, subsequently, adjusted those ratings, including the timing of the adjustments. In order to expedite the establishment of a pool of data sufficient to provide a useful basis of comparison, this requirement would apply to all currently rated securities or obligors as well as to all future credit ratings.

The goal of this proposal is to foster greater accountability of the NRSROs with respect to their credit ratings as well as competition among the NRSROs by making it easier for persons to analyze the actual performance of the credit ratings the NRSROs issue in terms of accuracy in assessing creditworthiness. The disclosure of this information on the history of each credit rating would create the opportunity for the marketplace to use the information to develop performance measurement statistics that would supplement those required to be published by the NRSROs themselves in Exhibit I to Form NRSRO. The intent is to tap into the expertise and flexibility of credit market observers and participants to create better and more useful means to compare credit ratings. This goal is to make NRSROs more accountable for their ratings by enhancing the transparency of the results of their rating processes for particular securities and obligors and classes of securities and obligors and encourage competition within the industry by making it easier for users of credit ratings to judge the output of the NRSROs."

[23] "A CRA should publish verifiable, quantifiable historical information about the performance of its rating opinions, organized and structured, and, where possible, standardized in such a way to assist investors in drawing performance comparisons between different CRAs."

[24] "Credit Rating Agencies' Statement and Progress on Initiatives to Strengthen CRA Performance and Enhance Confidence in the Credit Rating Process, April 2008."

[25] A credit default swap requires the protection seller, in this case the CRA, to pay over the nominal value of the bond in the event of that bond defaulting, to the protection buyer. The purpose of the exercise is to impose a financial loss on the CRA giving the rating, should the outcome of that class of bonds be significantly worse than the CRA had predicted.

[26] As recorded by the May 2008, Technical Committee of IOSCO Report, p. 13:-

"Where government CRA recognition criteria are based on how extensively a CRA's opinions are used by issuers and investors, such a situation obviously discriminates against new entrants. Moreover, to the extent that regulatory recognition is based on reliance by the market, and market reliance is influenced by regulatory recognition, the cycle of discrimination is perpetual..."

[27] This needs some minor qualification. Some 15 percent of CRA income comes from their general research activities which includes the work that would lead to ratings' migration. The CRAs regard this as an integral part of their (research) role. Even so, so long as it is not, and probably cannot be, a profit centre for them, they do not have sufficient incentives to carry out this task.

[28] CRAAC would also have to propose a common numerical scale for PD ratings in order to be able to average the separate ratings.