Highlights

• Credit rating agencies have been under the spotlight since the beginning of the current financial crisis. They failed in their assessment of US residential mortgage-based securities in the mid-2000s. Nevertheless, investors generally consider credit ratings useful to help form their views on credit risks.

• The global market for credit ratings is very concentrated, ostensibly as a consequence of high natural barriers to entry. All three leading rating agencies have headquarter functions in the US, but there is no compelling evidence that this has created an analytical bias.

• Tighter regulation of rating agencies can be envisaged but is unlikely to have a material positive effect on ratings quality. Better standardised public disclosures on risk factors by issuers are the most promising avenue for future improvements in credit risk assessments.

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RATE EXPECTATIONS: WHAT CAN AND CANNOT BE DONE ABOUT RATING AGENCIES

NICOLAS VÉRON, OCTOBER 2011

CREDIT RATING AGENCIES (CRAs) are prominent participants in the assessment of credit risk by financial markets. They determine and publish credit ratings, which represent the CRAs’ opinions on issuers’ relative probability of default. The market for credit ratings is currently dominated in most western countries by three players:

- **Standard & Poor’s (S&P)** is a division of the McGraw-Hill Companies, a US-based media group whose ownership is dispersed (the largest shareholder is Capital Group, with 12 percent of shares);
- **Moody’s Corporation** is an autonomous US-based listed company with dispersed ownership (the largest shareholder is Berkshire Hathaway, with 12.5 percent of shares);
- **Fitch Ratings**, a division of the Fitch Group which is jointly owned by Fimalac, a Paris-based listed investment vehicle (60 percent of shares), and the US-based Hearst Corporation (40 percent of shares).  

Other notable rating agencies include AM Best (US-based, specialised in the insurance industry); Egan Jones (US); Kroll Bond Rating Agency (US); the ratings unit of Morningstar (US); Dominion Bond Rating Service (Canada); Japan Credit Rating Agency (Japan); Rating & Investment Information (Japan); and Dagong Global (China). However, their volumes of activity are dwarfed by those of the ‘big three’, as Table 1 suggests.

CRAs rate different types of issuers or issuances. For example, Fitch reports that in 2009-10 it rated around 6,000 financial institutions, 2,000 non-financial corporates, 100 sovereign states and 200 territorial communities, 300 infrastructure bond issuances, 46,000 US municipal bond issuances, and 8,500 structured product issuances. A simplistic but common way of segmenting the market is between sovereign ratings, corporate ratings, and structured credit ratings.

THE PROBLEMS WITH CRAS

This section summarises the most often mentioned problems linked to CRA activity, and assesses their materiality.

1 CRAs are unreliable

Measuring the accuracy of credit ratings is intrinsically difficult, even with hindsight, because they correspond to probabilities. A poorly-rated issuer may avoid a default even though the probability of default was high; conversely, a highly-rated issuer may default even though the probability of it was low. Thus, strictly speaking ratings quality can only be measured on average over many rating

### Table 1: Dominance of the ‘big three’ CRAs

<table>
<thead>
<tr>
<th></th>
<th>S&amp;P</th>
<th>Moody’s</th>
<th>Fitch</th>
<th>Others*</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Revenue (US$m)</strong></td>
<td>1,696</td>
<td>2,032</td>
<td>657</td>
<td>n.a.</td>
</tr>
<tr>
<td>Share of ‘big three’ total</td>
<td>39%</td>
<td>46%</td>
<td>15%</td>
<td></td>
</tr>
<tr>
<td><strong>Operating earnings (US$m)</strong></td>
<td>762</td>
<td>773</td>
<td>200</td>
<td>35</td>
</tr>
<tr>
<td>Share of total</td>
<td>43%</td>
<td>44%</td>
<td>11%</td>
<td>2%</td>
</tr>
<tr>
<td><strong>Outstanding credit ratings</strong></td>
<td>1,190,500</td>
<td>1,039,187</td>
<td>505,024</td>
<td>81,888</td>
</tr>
<tr>
<td>Share of total</td>
<td>42%</td>
<td>37%</td>
<td>18%</td>
<td>3%</td>
</tr>
<tr>
<td><strong>Credit analysts and supervisors</strong></td>
<td>1,345</td>
<td>1,204</td>
<td>1,049</td>
<td>392</td>
</tr>
<tr>
<td>Share of total</td>
<td>34%</td>
<td>30%</td>
<td>26%</td>
<td>10%</td>
</tr>
</tbody>
</table>

Source: annual reports and SEC (2011a and 2011b), author’s calculations.
opinions, based on the law of large numbers, and not on individual ratings. Moreover, according to the CRAs, their ratings measure relative probabilities of default, not absolute ones. An AA rating signals a lower probability of default than a BBB, but CRAs do not provide a numerical estimate of the respective probabilities (even though they do publish historical data on the frequency of default associated with different past ratings).

From this standpoint there was a clear failure of CRAs when it came to US mortgage-based structured products in the mid-2000s. Many mortgage-based securities were highly rated but had to be downgraded in large numbers following the housing market downturn in 2006-07, especially in the subprime segment. Subsequent enquiries, in particular SEC (2008) and FCIC (2011), have convincingly linked the CRAs’ failure to a quest for market share in a rapidly growing and highly profitable market segment. Under commercial pressure, CRAs failed to devote sufficient time and resources to the analysis of individual transactions, and also neglected to back single transaction assessments with top-down macroeconomic analysis that could have alerted them to the possibility of a US nationwide property market downturn.

While the CRAs fully merit blame for this failure, it should be noted that the provision of credit ratings for residential mortgage-based securities in the 2000s was a relatively recent activity compared to corporate and sovereign ratings, and that the subprime segment was new within the larger US mortgage market. In other segments, including corporate and sovereign ratings, CRAs could rely on much longer and deeper experience of risk factors and past failure patterns. In these more ‘traditional’ segments, statistical tables published by the CRAs and others (e.g. IMF, 2010, Figure 3.7) suggest a generally strong correlation between past ratings and relative average probabilities of default as observed ex post over large numbers.

That said, there have been several past cases in which rating agencies clearly failed to spot deteriorations of sovereign or corporate creditworthiness in due time: this was particularly true of Lehman, AIG or Washington Mutual, which kept investment-grade credit ratings until 15 September 2008. CRAs were similarly criticised for their failure to anticipate the Asian crisis of 1997-98 or the Enron bankruptcy in late 2001.

It appears fair to conclude that all three main CRAs have a decent though far from spotless record in sovereign and corporate ratings, but that their hardly excusable failure over the rating of US residential mortgage-based securities in the mid-2000s has lastingly damaged their brands and reputations.

2 CRA downgrades can trigger sudden shifts in risk perceptions

Since the beginning of the crisis, CRAs have frequently been accused of timing their downgrades badly and of precipitating sudden negative shifts in investor consensus. However, it is infrequent that rating downgrades surprise markets – generally they follow degradations of market sentiment rather than precede it. When CRAs do anticipate, they are often not given much attention by investors, such as when S&P started downgrading Greece in 2004.

Specifically, the evolution of euro-area sovereign yields since 2008 suggests that the biggest and most sudden shifts in investor sentiment have been triggered by new information from the policy sphere – such as, among others, the announcement by Greece of worse deficits than previously disclosed, the French-German Deauville declaration of 18 October 2010, or the euro-area President’s suggestion of a ‘re-profiling’ on 16 May 2011. These policy signals have had demonstrable impacts on risk perceptions, as the Bank for International Settlements noted in the case of the Deauville declaration. By comparison, CRA downgrades of euro-area countries so far have had limited market impact, if any.

5. It should also be noted that no comparable failure has been observed in other asset-backed securities markets in the US, or in Europe or Asia, whose structured securities markets are smaller and more recent than those in the US.
The sovereign downgrade of the US by S&P on 5 August 2011 was a special case, to the extent that the US sovereign debt market has a specific anchoring role for the global financial system and there had never been a downgrade of US sovereign debt in living memory. Ironically, it coincided with a sharp increase in risk aversion which resulted in a short-term decrease of yields on US debt. The downgrade may have contributed to market jitters about France’s creditworthiness and French banks’ prospects in the days that followed. However, at the time of writing there does not appear to be an analytical consensus on its role in triggering these market developments compared to other simultaneous factors.

The upshot is that instances in which CRA downgrades materially affect general market sentiment seem to be possible but very rare, and that none has been compellingly observed recently in the context of the euro-area crisis.

3 Rating downgrades can trigger pro-cyclical effects due to automatic contractual or regulatory mechanisms

References to credit ratings are embedded in a number of contractual and regulatory provisions throughout the financial system. Thus, even though CRAs argue that their ratings are mere opinions intended for the judgment of market participants, they can have a mechanical, pro-cyclical effect if such provisions result in, for example, forced selling of a security as a consequence of its downgrade. The collateral policy of the European Central Bank (ECB) is one example.

However, the actual extent of such mechanical pro-cyclical effects is limited by several factors. Most investment mandates now have significant built-in flexibility to reduce dependency on individual rating changes. The ECB has displayed considerable flexibility in adapting its collateral policy to new developments, including rating downgrades, throughout the crisis. Strikingly, as observed above, no large pro-cyclical effect on US debt markets has been observed following the downgrade of the US by S&P in August 2011.

While credit ratings are affected by economic cycles, they tend to be much more stable than market-based indicators of creditworthiness (Moody’s, 2009). Thus, replacing credit ratings with market-based measures would reinforce procyclicality.

In short, mechanical pro-cyclical effects of rating downgrades are a legitimate concern, even though CRAs are not to blame for them. However, these effects seem to be already mitigated to a significant extent.

4 CRAs escape local regulations

CRAs started life outside the scope of public regulation, often in connection with media and/or advisory businesses. The US introduced the NRSRO process of administrative recognition of CRAs in 1975, and a more hands-on registration regime was introduced by the US Credit Rating Reform Act of 2006. In the European Union, the regulatory framework was not intrusive until the crisis, but has evolved rapidly with the adoption of successive regulations in September 2009 (known as CRA 1) and May 2011 (CRA 2); a third regulation is at an early stage of development. Other jurisdictions, including Japan, Australia and Hong Kong, have also adopted a new CRA regulatory framework since the crisis.

As with other financial information intermediaries, territoriality is a difficult issue in the context of such regulations. In principle, creditworthiness analysis of any issuer can be done from any location. Moreover, the global consistency of credit ratings is viewed by most market participants as a significant benefit. The combination of these two factors potentially reduces the scope and effectiveness of territorial regulation.

Within the EU, this issue has been addressed with the devolution of most regulatory and supervisory tasks regarding CRAs to the recently created European Securities and Markets Authority (ESMA), which in principle guarantees regulatory consistency across all EU member states. However, the risk remains of inconsistency or interference with regulatory regimes in non-EU jurisdictions.

5 The market for credit ratings is oligopolistic

The ‘big three’ CRAs account for most of the market
for credit ratings in all western countries, with a dominant market share in the hands of S&P and Moody’s alone. The existence of high barriers to entry is corroborated both by the incumbents’ high profit margins and by the absence of major successful new entrants for almost a century. Specifically, the operating profitability over the last reported fiscal year was 45 percent for S&P, 38 percent for Moody’s and 30 percent for Fitch Ratings, measured as ratio of operating income to total revenue. S&P, Moody’s and Fitch trace their origins back to 1860, 1909 and 1913 respectively.

The high degree of market concentration need not be a problem *per se*. Some markets are highly concentrated yet highly competitive: an oft-cited case is the market for colas, with the global dominance of Coca-Cola and PepsiCo. Market concentration is common in other financial information segments, including international financial dailies (Financial Times and Wall Street Journal) and financial market data providers (Thomson Reuters and Bloomberg). Market participants may not want to handle many different rating scales or methodologies, in which case a substantially less concentrated market structure might not be sustainable. As noted in a World Bank policy brief on CRAs, “there may be a benefit in having a limited number of global credit rating agencies” (Katz, Salinas & Stephanou, 2009).

Nevertheless, concerns about market structure appear warranted. They relate less to predatory pricing than to the possibility of a negative impact of market concentration on the quality of ratings. Without competitive pressure, CRAs could become complacent, and neglect analytical rigour and the defense of their reputation for integrity. Perhaps less obviously, the CRA incumbents have not caught up well with changes in financial technology. Their linear rating scales focusing on default probability are well suited to a world where probability distributions are normal (Gaussian), but become insufficient as risk-transfer techniques, such as the use of derivatives, enable the creation of skewed distributions. A more competitive market landscape could arguably be more effective at fostering innovative approaches that would successfully meet such new challenges.

### 6 Leading CRAs are non-European

The three leading CRAs retain most headquarter functions in New York, even though one of them (Fitch) is majority-owned by a Paris-based financial group. This also reflects the dominance of the US in the CRAs’ business: the US accounts for 54 percent of Moody’s total revenue, and 52 percent of its global staff is located there; for Fitch Ratings, the corresponding ratios are 42 percent and 35 percent respectively.

This would be a problem if it resulted in a rating bias benefitting the US or US national interests. The existence of such a bias is questionable. First, CRA teams tend to be highly internationalised. For example, S&P’s head until September 2011, Deven Sharma, was born in India, and the number two executive at Moody’s, Michel Madelain, is French. Second, there has been no compelling evidence so far that the CRAs’ corporate culture and management practices result in the promotion of US interests to the detriment of ratings quality.

Most recently, the downgrade of the US sovereign credit rating by S&P, which was aggressively criticised by the US government (on 7 August, Treasury Secretary Timothy Geithner said S&P had “shown really terrible judgment and they’ve handled themselves very poorly”), has added credence to the view that CRA judgments are not materially affected by territorial bias.
POSSIBLE SOLUTIONS

This section reviews and briefly evaluates possible policy initiatives, most of them referred to in recent public debates.

1 Forbid ratings

Suppressing ratings activity, either on a permanent or a temporary basis (eg in turbulent market conditions, or for countries receiving support from the International Monetary Fund or other sources), would represent a significant constraint on the freedom of speech and opinion that cannot be envisaged lightly. Given what is known of the impact of credit ratings, there does not appear to be a public-interest motive that would justify such a radical measure.

2 New CRAs

As outlined in the previous section, more competition in the ratings market is desirable. On this basis, there have been calls for the EU to take the initiative and publicly sponsor the creation of a European CRA that would compete with the established ‘big three’. In a recent resolution, the European Parliament asked the European Commission to study the creation of a new European Credit Rating Foundation (European Parliament, 2011).

However, it is not evident that the current conditions that frame this market, including the regulatory framework, would allow a lower degree of concentration to be reached and sustained on an ongoing basis. Attempts by new ventures to enter the market can be welcomed, but their eventual success cannot be taken for granted11.

A new publicly-sponsored CRA may find it difficult to establish credibility among financial market participants, especially in the sovereign ratings segment as there would inevitably be a suspicion that its ratings may be tainted by political considerations. It appears reasonable to anticipate that, in order to be a credible alternative to the incumbents, any new entrant will need to be able to present itself as essentially independent from specific political interests, and to convince market participants that its ‘nationality’ (however defined) is irrelevant to its ratings decisions.

3 Public standardisation of ratings methodologies

The methodologies and criteria used by CRAs to prepare ratings have a significant impact on ratings outcomes, and are inevitably open to debate. For example, S&P has been criticised for having included an analysis of political dynamics in its recent downgrade of US creditworthiness. However, the temptation to publicly regulate ratings methodologies should be resisted, as it would collide with the justification of ratings as independent opinions. In the absence of a global level of public standardisation, such an approach would also threaten the international comparability of ratings.

Thus, the EU and US have been right to commit themselves to refraining from the direct regulation of CRA methodologies so far. A US Treasury official declared in the Dodd-Frank legislative debate that “the government should not be in the business of regulating or evaluating the [CRAs’] methodologies themselves”12. The EU’s second regulation on rating agencies (11 May 2011) specifies: “In carrying out their duties under this Regulation, ESMA, the [European] Commission or any public authorities of a Member State shall not interfere with the content of credit ratings or methodologies” (Article 23).

4 Changes in the CRAs’ business model

During their first decades of activities, CRAs mostly relied on investors as their main customers, but shifted to their current ‘issuer-pays’ business model during the 1970s as their activity expanded significantly. This raises the possibility of a conflict of interest, because an issuer might leverage the commercial relationship to obtain a higher rating. A different business model could be imposed as a condition for public registration.

Whether this measure would be beneficial, however, is questionable. The most likely outcome would be a significant decrease in the overall resources of regulated CRAs, as investors have until now seemed unwilling to pay significant amounts for credit ratings. One US-based CRA, Egan-Jones, is financed by investors but its size remains limited: it has five credit analysts and a
'Regulation of CRAs by the Securities and Exchange Commission did not prevent the subprime debacle. Europe’s regulatory screws on CRAs are already quite tight, and full implementation of the existing regulations would be warranted before envisaging their further tightening.'

total staff of 22, or 200 times fewer than Moody’s13. Moreover, an ‘investor-pays’ model would by no means eliminate conflicts of interest, as (for example) investors who hold a security may desire it to be highly rated. Finally, it is to be noted that while conflicts of interest have been a significant issue in structured ratings, and to an arguably lesser extent in corporate ratings, they are essentially absent from the sovereign ratings market from which major CRAs derive a very small fraction of their revenue.

5 Tighter regulation and supervision

The two successive EU regulations adopted in 2009 and 2011 resulted in significant regulatory and supervisory powers for ESMA. Unfortunately, there is no reason to believe such regulation will be enough to eliminate imperfections in the credit ratings market. Obviously, regulation of CRAs by the SEC (in place since 1975 and reinforced by the Credit Rating Reform Act of 2006) did not prevent the subprime debacle. Europe’s regulatory screws on CRAs are already quite tight, and full implementation of the existing regulations would be warranted before envisaging their further tightening.

Moreover, both theory and experience suggest that regulation generally reinforces barriers to entry in concentrated markets, and there are no reasons to believe the market for credit ratings is an exception. Thus, tighter regulation and/or supervision are unlikely to address the problem of market concentration. If anything, they could make it more intractable. Moreover, CRA regulatory regimes in the EU and elsewhere are highly prescriptive as to how CRAs should organise themselves and conduct their business, which could discourage innovation and the pursuit of new organisational or operational practices that may eventually lead to better ratings.

6 Assertive application of competition policy

No past competition enquiries targeted at the market for credit ratings have been identified in the research for this Policy Contribution14. Nor have reports of anti-competitive practices been found. However, a sector enquiry could be envisaged to address concerns about the possible existence of such practices by incumbent CRAs.

7 A liability regime for ratings mistakes

CRAs maintain that their ratings are independent judgments and are protected by the freedom of opinion. Existing regimes make CRAs legally liable for failure to comply with regulatory requirements or with minimum standards of due process15. In view of their market impact, however, there have been calls to make them liable for misjudgments or inappropriate intent16. France has adopted legislation that goes in that direction.

Such an idea may entail difficulties in terms of freedom of speech and opinion. Moreover, its impact in terms of ratings quality would not necessarily be positive. Fear of liability could lead CRAs to become cautious to an extent that would distort ratings outcomes. As previously exposed, ratings represent probabilities, and therefore the identification of individual ratings mistakes may prove to be inextricably difficult.

8 Reduced regulatory reliance on ratings

As many policymakers and CRA executives themselves17 have noted, it is desirable to eliminate references to ratings in contracts and regulations, in order to prevent pro-cyclicality in the financial system. Efforts have been undertaken in this direction, by both the private and public sectors18. However, in some cases there are no easy alternatives at hand. In contracts, replacing third-party ratings with an opinion on creditworthiness emanating from the contractual parties themselves can create legal uncertainty. In regulations, eliminating ratings results in shifting the burden of creditworthiness assessment either to regulated entities, with a risk of poor analysis or self-serving manipulation, or to public authorities, with the risk of making the

14. S&P has been the subject of a probe by the European Commission’s Directorate-General for Competition over fees it charged for the distribution of International Securities Identification Numbers, which it agreed to cut in May 2011. However, this relates to S&P’s non-rating activities.
15. The US Dodd-Frank Act of 2010 makes CRAs liable for “a knowing or reckless failure to conduct a reason-able investigation of the facts or to obtain analysis from an independent source”.
17. See for example Sharma (2011).
18. On the private-sector side see for example EFAMA, ESF and IMA (2008).
assessment more vulnerable to political or opportunistic considerations.

Efforts to reduce the reliance of contracts and regulations on ratings should be pursued. However, some reliance on ratings is likely to remain as in certain cases it might remain preferable to any available alternative arrangement. In its Principles for Reducing Reliance on CRA Ratings, the Financial Stability Board concludes cautiously that “in certain cases, it may take a number of years for market participants to develop enhanced risk management capability so as to enable reduced reliance on credit rating agencies” (FSB, 2010).

9 A global regulatory/supervisory regime for CRAs

To the extent that credit ratings are useful, their comparability across borders is a global public good in the context of international financial market integration. The risk of fragmentation due to regulatory differences was minimal before the crisis, as only one major jurisdiction (the US) materially constrained the behaviour of CRAs through regulation. Now that the EU, Japan, India, Australia, Hong Kong and other jurisdictions have started to regulate CRAs, however, there is an increasingly material risk of different regulators imposing different standards resulting in a reduction of cross-border ratings comparability.

A constructive step to address this risk would be the adoption of global standards that would determine the content of jurisdictional regulations applicable to CRAs with the aim of maximum harmonisation. The International Organisation of Securities Commissions (IOSCO) would be the logical forum for the discussion and preparation of such standards, as it has done in the past for less hands-on regulatory approaches such as its 2004 ‘code of conduct fundamentals for CRAs’ (IOSCO, 2004). A more radical initiative would be the establishment of a global public (treaty-based) authority to which individual jurisdictions would delegate the supervision of CRAs, thus ensuring global supervisory consistency.

10 Increased public transparency from issuers

Last, but by no means least, more could be done to reduce the role of CRAs by better empowering investors and the wider public to make their own judgments on issuers’ creditworthiness. This could be achieved through a significant increase of public disclosure requirements on issuers, and a corresponding reduction of CRA’s access to non-public (privileged) information. Such an effort would take different forms in the different segments of the credit ratings market:

- **Structured credit:** ideally, the assets underlying structured securities should be described in detail to investors so that the CRAs that rate them do not rely on any privileged information. Some steps have been taken in this direction since the start of the crisis, but more remains to be done.

- **Corporate issuers:** new regulations could prevent CRAs from accessing non-public information as they currently do with issuers, in a manner similar to what is already in place for equity analysis (Regulation Fair Disclosure in the US, and the Market Abuse Directive in the EU). Simultaneously, issuers should be required to disclose more standardised and audited information about their risk factors and financial exposures. This is especially true of financial institutions. The EU banking stress tests of 2010 and 2011 have illustrated the benefits of such transparency for establishing investor trust, and some of the disclosures imposed on stress-tested banks in the July 2011 exercise could be made a permanent requirement. In practice, this may be achieved through a combination of accounting disclosure requirements (IFRS and related ESMA statements) and prudential standards (under the Basel Accords’ so-called Pillar Three).
• **Sovereign issuers:** in this segment particularly, better public disclosure could go a long way towards reducing the gatekeeping role of CRAs. Government accounts and risk disclosures are not well standardised and can be highly unreliable as the 2009 Greek episode has shown. A coordinated international approach towards better standardisation and more robust verification processes would be highly desirable, including major steps towards the generalisation of accrual accounting by governments as has already been tried in an increasing number of countries

Our constantly developing financial system needs better risk assessment than CRAs have been collectively able to deliver in recent times. More comprehensive public disclosure by issuers on their financial risks, which would not require intermediation by CRAs, is the best chance for new and better risk assessment methodologies and practices to emerge. To put it in a simplistic but concise way, what is needed is a John Moody for the twenty-first century. CRAs themselves can perhaps be somewhat improved by adequate regulation and supervision, but public policy initiatives that focus only on CRAs are unlikely to adequately address the need for substantially better financial risk assessments. If real progress is to be made towards a better public understanding of financial risks, it will have to involve innovative approaches that even well-regulated CRAs, on the basis of recent experience, may not be the best placed to deliver.

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22. International Public Sector Accounting Standards (IPSAS) have been developed since 1997 by an autonomous board hosted by the International Federation of Accountants (IFAC). They have been adopted by a limited number of countries so far, as well as a handful of international institutions including the European Commission.

23. See Véron (2009) for a more detailed development of this argument.

24. To the extent that John Moody, the founder of Moody’s, can be considered the inventor of credit ratings as we know them, and which he started publishing in New York in 1909.