Efficient, commonsense actions to foster accurate credit ratings

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Key points

- Three factors have made investors, debt issuers and regulators highly dependent on credit rating agencies (CRAs) and thus vulnerable to rating failures: the oligopolistic structure of the credit rating market; the use of ratings in regulatory rules; and the CRA business model. In the 1990s, the advent of structured finance (SF) products and the proliferation of derivative contracts deepened dependence on CRAs, which, in turn, incentivized them to inflate SF ratings and to underestimate credit losses from derivative contracts in all sectors.
- The Dodd–Frank Act of 2010 passed rule-making requirements to address the sources of flawed CRA ratings; the US Securities and Exchange Commission (SEC) belatedly implemented some of the requirements and omitted other key ones. To redress the SEC omissions, this article makes two series of proposals that will foster rating accuracy.
- To mitigate the internal conflict of interest that originates from senior management of CRAs, the SEC should: subject CRAs to expert liability as expressed in the plain language of the Dodd–Frank Act; establish quality assurance structures; require greater transparency for certain rating actions; monitor CRA investment in analytical staff; and encourage investors to make their own credit assessments.
- To assign accurate ratings that are not based on an expectation of future bailouts, CRAs must overhaul methodologies to project reductions in the net assets and available cash of an issuer that will result from interconnected changes in market indices and the credit worthiness of obligors such as other bond issuers and derivative counterparties. As examples, SF methodologies should assign losses to a derivative contract with a complex, and potentially unenforceable, flip clause; bank and sovereign methodologies should assign losses to holdings of SF debt; and all methodologies should assign losses to a derivative contract based on its tenor.

In July 2008, the US Securities and Exchange Commission (SEC or Commission) identified flaws in credit rating agencies' (CRAs) models and practices that had produced inaccurate structured finance (SF) ratings.[1] Afterwards, the SEC and the Permanent Subcommittee on Investigations (PSI) of the US Senate released, respectively, a report and a memorandum that helped illuminate how and why CRAs had failed in their roles as

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1 SEC, 'Summary Report of Issues Identified in the Commission Staff's Examinations of Select Credit Rating Agencies' (8 July 2008).

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debt-market gatekeepers.[2] These documents provided the basis for Title IX, Subtitle C ('Improvements to the Regulation of Credit Rating Agencies') of the Dodd–Frank Act of July 2010. Nevertheless, 4 years later, 11 US senators wrote to SEC Chair Mary Jo White bemoaning the fact that the Commission had not yet put into place 'critical investor and systemic risk protections related to securitization and structured finance markets' as set out in the Dodd–Frank Act.[3] The senators' letter—which openly questioned the SEC's willingness to regulate CRAs—spurred this article.[4] After examining the factors that induce CRAs to underestimate credit risk, we analyse measures to date that ostensibly address this shortcoming and propose more effective alternatives for fostering rating accuracy.[5]

1. How CRAs have been induced to overlook credit risk

Never before have so many outsourced so much to so few

Since the 1970s, three factors have made investors, debt issuers and regulators highly dependent on CRAs and thus vulnerable to rating failures: the oligopolistic structure of the credit rating market; the use of ratings in regulatory rules; and the CRA business model.

Fitch Ratings (Fitch), Moody's Investors Service (Moody's) and Standard & Poor's (S&P) have historically dominated the credit rating business; as of 31 December 2014, they had a combined world market share of 96 per cent.[6] The success of these three CRAs has been driven by the bond market boom that started in the 1980s, investor reliance, low substitutability of services and an external growth strategy.[7] The oligopolistic structure of the credit rating business was codified in 1975 by the SEC's amendment of Rule 15c3-1, which introduced the concept of a nationally recognized statistical rating organization (NRSRO) for the purpose of categorizing debt as investment grade or non-investment grade in calculating broker–dealer capital. The initial NRSROs—Fitch, Moody's and S&P[8]—preserved their oligopoly as more CRAs became NRSROs by subsequently acquiring several of them.[9]

2 SEC, 'The SEC's Role Regarding and Oversight of Nationally Recognized Statistical Rating Organizations (NRSROs)', Report No 458 (27 August 2009) and US Senate, PSI, 'Exhibits – Hearing on Wall Street and the Financial Crisis: The Role of Credit Rating Agencies' (23 April 2010).

3 US Senate, 'Re: Implementation of Dodd–Frank Act Securitization Reforms', Letter to the Honorable Mary Jo White (28 July 2014).

4 According to Edward F Greene, the aims of the Dodd–Frank Act are comprehensive, but a principal means to achieving these aims—investing the same regulators who oversaw pre-crisis practices with broad discretion in rule-making—may be too open-ended to be effective. See Edward F Greene, 'Dodd–Frank: A Lesson in Decision Avoidance' (2011) 6(1) CMLJ 29.

5 Defaults or other significant credit impairments of issuers that were initially rated in the top categories must be exceedingly rare, ie non-existent in the short term and almost non-existent in the long term. Moreover, the absence of defaults or other significant credit impairments should be wholly attributable to the ability of each such issuer to meet all payment obligations, including those to debt holders and derivative counterparties, rather than either individual or systemic support from taxpayer bailouts.

6 US Government Accountability Office (GAO), 'Credit Rating Analysts', GAO 15-591 (July 2015) 6. Fitch is owned by Fimalac and Hearst, Moody's is a public company and S&P is a subsidiary of McGraw Hill Financial.

7 Between 2000 and 2008, Fitch, Moody's and S&P acquired more than 30 firms that issued ratings or provided credit analysis tools; see Norbert Gaillard, Les agences de notation, La Découverte (2010).

8 SEC, 'Definition of Nationally Recognized Statistical Rating Organization', Release No 33-8570 (19 April 2005).

9 As of 1 December 2014, in addition to Fitch, Moody's and S&P, seven small companies were registered as NRSROs. See SEC, '2014 Summary Report of Commission Staff's Examinations of Each Nationally Recognized Statistical Rating Organization' (December 2014).

The NRSRO concept not only stifled competition but also paved the way for the 1982 amendment to Section 11 of the Securities Act of 1933; this amendment exempted NRSROs from expert liability[10] and resulted in the ratings of Fitch, Moody's and S&P being cited extensively in regulations.[11] This delegated monitoring eroded standards of accountability and responsibility among market participants—NRSROs, investors, issuers and regulators[12]—with ruinous consequences. Investors and regulators were not compelled to develop independent capabilities for assessing credit risk. The mechanistic use of NRSRO ratings exacerbated procyclicality.[13] And the three large NRSROs postponed being the bearers of bad news for as long as possible by adjusting policies and methodologies to leave ratings at inflated levels rather than by adjusting the ratings themselves in multiple-notch downgrades as soon as warranted.[14] One may argue that NRSROs should have assigned accurate ratings from the outset but their business model rewards the opposite action, ie assigning inflated ratings.

For almost six decades beginning in 1909, CRA revenues came from investors who purchased rating reports. In 1968, S&P shifted to the issuer-pay model to 'cover the cost of supporting the staff required to perform rating functions'[15] and Moody's followed suit in 1970, but both continue to sell publications and rating data to subscribers. Subsequently, the top three CRAs' business model has underpinned a very profitable two-sided market.[16] On one side, Fitch, Moody's and S&P have charged modest subscription fees to investors to discourage them from developing internal ratings or alternative credit assessments. On the other side, the CRAs have charged increasingly higher fees to captive bond issuers,[17] who are bound by regulations, investor guidelines and industry conventions[18] to obtain an NRSRO rating. For their part, investors and issuers alike have pressed CRAs to assign inflated ratings that underestimate credit risk.[19] Inflated ratings lower capital requirements for investors, cut risk premia for issuers and broaden the marketability of rated debt for the benefit of investors, issuers and CRAs. Over time,

10 This exemption regime, established by Rule 436(g), came into force in 1982; see SEC, 'Adoption of Integrated Disclosure System', Release No 33-6383 (3 March 1982).

11 Though it started in the USA as early as 1931, this practice has become widespread since the 1980s. See Richard Cantor and Frank Packer, 'The Credit Rating Industry' (Summer-Fall 1994) 16 FRBNY Quarterly Review 1–26; Timothy Sinclair, *The New Masters of Capital* (Cornell University Press 2005); and Bank for International Settlements, Stocktaking on the Use of Credit Ratings (Basel Committee on Banking Supervision, June 2009).

12 Financial Stability Board (FSB), 'Principles for Reducing Reliance on CRA Ratings' (27 October 2010).

13 Norbert Gaillard, *A Century of Sovereign Ratings* (Springer 2011), provides an example in the sovereign bond market.

14 See the report by William J Harrington, 'Re: File Number S7-18-11 – Request for Re-proposal Relating to Nationally Recognized Statistical Rating Organizations', Comment to the SEC (29 May 2014) for a current illustration in the SF market.

15 Brenton W Harries, 'Standard & Poor's Corporation New Policy on Rating Municipal Bonds' (1968) 24(3) Financial Analysts Journal 68.

16 See Marc Rysman, 'The Economics of Two-Sided Markets' (2009) 23(3) Journal of Economic Perspectives, for an analysis of this type of market.

17 'Undue Credit – Regulation is Helping the Very Firms it is Designed to Tame' *The Economist* (London, 30 May 2015). 'Rating agencies are thriving. Demand has been so strong. . . that they have been able to raise their prices by about 4% a year since 2010.'

18 Gretchen Morgenson, 'Pension Funds, Dancing a Two-Step with Rating Firms' *New York Times* (14 June 2014) describes the ongoing demand for NRSRO ratings by the pension funds of the same US states whose Attorneys General have sued NRSROs with respect to flawed SF ratings.

19 The issuer-pay model led to inflated corporate ratings as early as the mid-1970s; see John Jiang, Mary Stanford and Yuan Xie, 'Does it Matter Who Pays for Bond Ratings? Historical Evidence' (2012) 105(3) Journal of Financial Economics 608. For recent examples, see US Senate, PSI, 'Hearing on Wall Street and the Financial Crisis' (23 April 2010).

debt issuers have explicitly shopped for inflated ratings (ie solicited ratings from several CRAs only to transact with those that assigned the highest ratings).[20]

The advent of SF and the proliferation of derivative contracts in the 1990s exacerbated over-reliance on CRAs and rating inflation. SF issuance is conditioned on obtaining a specific rating with a commensurately minuscule loss estimate,[21] whereas derivative contracts are generally unrated.[22] (One NRSRO will assign a rating to a subset of the payment obligations of an SF issuer under a swap contract.[23]) Accordingly, CRAs built up their SF capabilities but relied on issuers to track obligations under derivative contracts[24] even as over-the-counter notional amounts increased seven-fold, to $770 trillion, between January 2001 and June 2008, gross market values exceeded $20 trillion,[25] and sector after sector recorded headline derivative losses.

1.1 Rating SF debt: quod me nutrit me destruit

Structured finance is a major source of funding for commercial and consumer activities in the US economy. As of year-end 2014, outstanding SF debt equalled $10 trillion:[26] $1.4 trillion financed borrowing by companies to fund general operations and acquisitions of equipment and real estate; $600 billion financed non-mortgage borrowing by individuals to acquire autos, credit card purchases, and post-secondary education; and $8 trillion financed residential mortgages, approximately 85 per cent of which were either explicitly or implicitly guaranteed by the US government. Funding for non-guaranteed mortgages has been negligible since the implosion of private-label residential mortgage-backed securities (RMBS) in 2007–2008.[27] A niche and shrinking source of funding in the EU, SF

20 Vasiliki Skreta and Laura Veldkamp, 'Ratings Shopping and Asset Complexity: A Theory of Ratings Inflation' (2009) 56(5) Journal of Monetary Economics. For attestations by rating shoppers themselves, ie underwriters, see Cezary Podkul, 'What Investment Bankers Say about Rating Agencies Behind Their Backs' *ProPublica* (New York, 23 December 2014) <http://www.propublica.org/article/tobacco-quotes> accessed 28 December 2015.

21 Moody's, 'Moody's Approach to Rating US REIT CDOs' (4 April 2006). The maximum 10-year expected loss tolerances continue to equal 0.006 per cent for AAA, 0.11 per cent for Aa2 and 0.66 per cent for A2, respectively. CDOs are collateralized debt obligations.

22 Moody's, 'Bank Rating Methodology' (16 March 2015). Moody's, 'Bank Methodology' (2015) hereafter. Moody's has introduced a Counterparty Risk Assessment (CR Assessment) that lumps together payment obligations under derivative contracts and many other contracts such as covered bonds, secured transactions, letters of credit, third-party guarantees and servicing and trustee obligations. According to Moody's, the CR Assessment is 'not a rating, but an assessment of the ability of an issuer to avoid defaulting on its operating obligations taking into account the issuer's intrinsic standalone strength as well as our assessment of the likelihood of affiliate and government support' (120).

23 A Counterparty Instrument Rating (CI Rating) assesses the obligations of an SF issuer to make scheduled payments under a swap contract but carves out termination payments. This rating is applicable only to the specified derivative provider and is extinguished upon transfer of the contract to a second provider. Moody's, 'Moody's Approach to Counterparty Instrument Ratings' (16 June 2015). S&P, 'Request for Comment: Counterparty Instrument Ratings and Methodology' (30 September 2015).

24 Moody's, 'Bank Methodology' (2015). In determining a CR Assessment, a Moody's rating team is to 'focus purely on subordination (which provides a cushion against default) and take no account of the volume of the instrument class (which affects loss given default)' (69). In short, Moody's neither measures payment obligations under derivative contracts nor assesses their priority vis-à-vis the many other payment obligations that are covered by the CR Assessment.

25 FCIC, 'Financial Crisis Inquiry Final Report' (January 2011) 38.

26 SIFMA, 'SIFMA Research Statistics' (13 January 2015). SIFMA data are updated continuously and are available at <http://www.sifma.org/research/statistics.aspx>.

27 US Treasury, 'U.S. Treasury Department Seeks Public Comment on the Development of a Responsible Private Label Securities Market' (26 June 2014).

debt contracted to €510 billion at year-end 2014:[28] €140 billion financed company operations; €50 billion financed commercial real estate; and €320 billion financed residential mortgages and auto loans in a few EU countries.

The basic features of the SF rating market identified so far—the NRSROs' oligopoly and exemption from expert liability, rating shopping, the laissez-faire approach to evaluating derivative contracts, and iterative structuring based on back-and-forth dialogue with NRSROs—optimized rating inflation to the overwhelming benefit of both issuers and NRSROs.[29] Rating inflation maximizes issuer proceeds from each ring-fenced pool of receivables that is securitized[30] and also maximizes NRSROs' revenues[31] without courting new regulatory sanctions,[32] jeopardizing the gatekeeper roles in SF sectors that US and EU financial policy-makers want to revive or incubating alternatives to SF ratings. By 2015, market valuations of NRSROs had reached all-time highs,[33] and NRSROs continued to acquire formerly independent providers of SF analytics.[34]

Bank underwriters, often the principal agents for SF issuers, honed rating shopping into a comparative advantage with in-house models that replicated those of the NRSROs and buttressed lobbying for favourable recalibrations that would lower loss outputs.[35] Minuscule loss tolerances for SF ratings reward deep inquiry by bankers into NRSRO models to help circumvent analytical roadblocks, cast iterative structuring as technical adjustments and pose as NRSRO proxies to issuers and regulators.[36]

Minuscule loss tolerances for SF ratings oblige NRSROs to minimize idiosyncratic risks, ie those of assets being securitized, and ignore systemic risks such as those that accrue under derivative contracts.[37] The inflationary bias of SF ratings was not discerned at securitization's advent when NRSROs were expected to play their traditional role of evaluating standalone credits. 'Rating agencies and insurers will catch a firm that is a real

28 JP Morgan, 'International ABS & CB Weekly' (9 January 2015). This excludes €775 billion posted as collateral to central banks. See Jim Brunsden and Thomas Hale, 'EU Plan to Revive ABS Faces Challenge', Financial Times (30 September 2015), which charts the yearly declines in ABS issuance from 2008 to 2015.

29 Patrick Bolton, Xavier Freixas and Joel Shapiro, 'The Credit Ratings Game' (2012) 67(1) Journal of Finance.

30 Cezary Podkul, 'Tobacco Settlements Fund Sprinklers, Golf Carts, and a Grease Trap' *ProPublica* (24 October 2014).

31 'The rating of structured finance products... made up close to half of Moody's rating revenues in 2005, 2006, and 2007. From 2000 to 2007, revenues from rating such financial instruments increased more than fourfold' (FCIC 2011) 118.

32 See Harrington (n 14) for details on warnings to regulators of reinflation of ratings from 2010 onward.

33 On 19 March 2015, McGraw Hill Financial, Inc. stock (symbol MHFI on the New York Stock Exchange) closed at a record high of $108.59. On 20 July 2015, Moody's Corporation stock (symbol MCO on the New York Stock Exchange) closed at a record high of $112.90, a seven-fold increase from the 1 February 2009 close of $17.95. For the valuation of a small, privately-held NRSRO, see Mike Stone, 'Carlyle and Warburg Pincus to buy credit rating agency DBRS' *Reuters* (New York, 22 December 2014).

34 'Moody's Acquires Lewtan Technology', Moody's Announcement (27 October 2014).

35 Ann Rutledge and Robert E Litan, 'A Real Fix for Credit Ratings' *Economic Studies* (Brookings, June 2014).

36 Cezary Podkul and Stan Alcorn, 'How Bankers Muscled Rating Agencies on Tobacco Bonds' *MarketPlace* and *ProPublica* (23 December 2014).

37 By assigning SF ratings that ignore the systemic risks of derivative contracts, NRSROs link SF debt more closely to the credit profiles of financial institutions and thereby ratchet up systemic risks worldwide and increase the likelihood of government support. See Lukas Becker and Catherine Contiguglia, 'Moody's Bank Swap Ratings May Halt ABS Downgrades' (*Risk.net*, 12 June 2015). 'Several dealers involved in ABS deals have fallen below the second trigger following a series of bank ratings downgrades since 2012. However, finding other counterparties to step into the trades has been extremely tricky due to the dearth of highly rated banks and the complexity of the pricing involved.' Also, Catherine Contiguglia, 'Fitch Cautious on Bank Swap Ratings' (*Risk.net*, 17 June 2015). 'Fitch Ratings is considering becoming the second rating agency to rate some banks' derivatives liabilities higher than senior unsecured debt... European dealers have particularly welcomed the rating agencies' move to introduce derivatives liabilities ratings, as it can haul some banks' ratings above the two contractual triggers included in swaps with special purpose vehicles.'

lemon', assured Claire E. Hill as early as 1996,[38] appreciating neither that inflated SF ratings would facilitate borrowing on artificially advantageous terms and seed entire lemon orchards[39] nor that each new issuance of SF debt is packaged with a lifetime supply of fertilizer—ie RAC provisions that can hollow-out existing ratings.[40]

A RAC provision enables the third-party trustee to a seasoned SF transaction to effect a change to its structure, governing documents, or non-investor parties without obtaining noteholder consent by instead obtaining a written affirmation from an NRSRO that the change, when considered in isolation, will not result in an immediate downgrade of the rating of any class of SF debt.[41] Non-investor parties to an SF transaction, such as a collateral manager or a derivative counterparty, can direct a trustee to submit a request to an NRSRO for a RAC with respect to one or more changes even if they unequivocally disadvantage investors.[42] An NRSRO is never obligated to issue a RAC,[43] but is paid out of transaction funds to do so regardless of whether the associated changes enhance investor protections, leave them intact, or unilaterally strip them away without providing offsetting compensation such as alternative investor protections, remuneration or other forms of consideration.[44]

The human concerns of NRSRO management and analysts perpetuate SF rating inflation by delaying downgrades, particularly ones with systemic implications. In 2007–2008, protracted RMBS downgrades impeded downgrades of SF sectors that owned RMBS.[45] In 2010, looming bank downgrades and a US ruling with respect to a flip clause[46]

38 Claire E Hill, 'Securitization: A Low Cost Sweetener for Lemons', (1996) 74(4) Washington University Law Quarterly 1061.

39 Michael Corkery and Jessica Silver-Greenberg, 'Investment Riches Built on Subprime Auto Loans to Poor' *New York Times* (New York, 26 January 2015).

40 The acronym RAC is industry shorthand for a range of analogous terms such as 'rating agency confirmation' and satisfaction of the 'rating agency condition' that have been used by different NRSROs at different times over the last 20 years. As an example, see, 'Moody's Clarifies Policy for the Issuance of RACs', Moody's Announcement (13 January 2012).

41 A RAC does not indicate that the associated change or changes has not increased the probability of default or loss measure of any class of SF debt. Rather, a RAC merely indicates that any such increase is not so large as to result in the post-change probability of default or loss measure exceeding the maximum boundary of the pre-change rating category. For a practical illustration, see the table of the minimum and maximum boundaries of expected loss for each category of Moody's SF rating contained in 'Moody's Approach to Rating US REIT CDOs' (4 April 2006). So long as a new, higher expected loss remains below the upper boundary for an existing rating, an SF rating can be left unchanged.

42 See 'Counterparty conundrums', Structured Credit Investor (2 August 2013), App B in the report by William J Harrington to the SEC and ESMA (11 September 2013) on 95 RACs that effected unilateral changes to existing swap contracts in 175 SF transactions that stripped out investor protections to the advantage of derivative counterparties <http://wikirating.org/data/other/20130911_Harrington_J_William_ABS_Losses_Attributable_to_Securitization_Swaps.pdf> accessed 28 December 2015.

43 At least one NRSRO has curtailed its issuance of RACs, but this has not served to protect investors. See Fitch, 'Proposed Amendment to Remove Fitch RAC Requirement Would not Affect Capmark CDO Ratings' (2 July 2009). In practice, Fitch rarely downgrades SF debt in response to changes that have been effected by a trustee.

44 See US Commodities Futures Trading Commission (CFTC), 'Re: No Action Position: Certain Commission Regulations Applicable to Swaps with Legacy Special Purpose Vehicles', CFTC Letter No 15-21 (31 March 2015). Derivative providers have obtained RACs to avoid posting collateral and performing other remedial actions specified in swap contracts with SF transactions by convincing NRSROs that the fourth 'Remedial Action' listed on p. 5 of the CFTC Letter No. 15-21—'Taking any other action as agreed with each relevant rating agency through procedures that are specified in the Legacy SPV Swap Documentation'—can be simply doing nothing.

45 See William J Harrington, 'Re: File Number S7-18-11 – Comment on SEC Proposed Rules for Nationally Recognized Statistical Rating Organizations', Comment to the SEC (8 August 2011) 38 for a description of delayed downgrades to collateralized debt obligations.

46 See Robert J Rosenberg and others, 'The 'flip' flap: Lehman bankruptcy judge invalidates payment priority clause' (Latham & Watkins LLP, 13 May 2010), which summarizes the ruling. A flip clause, which subordinates payments owed by an SF issuer to a

mandated yet more downgrades per existing derivative methodologies. However, rather than downgrade most SF sectors, each NRSRO diluted its respective derivative methodology to retain the common rating assumption of zero losses attributable to counterparty insolvency.[47]

SF rating inflation magnified deficiencies that have inflated non-SF ratings as well. In 2009–2010, EU sovereign ratings were downgraded very slowly.[48] In 2011, a mammoth transfer of derivative contracts into a government-insured bank subsidiary had no rating impact.[49] Ratings still do not reflect the disadvantageous provisions in derivative contracts that end-users routinely execute,[50] nor do they trace the overuse of derivative contracts by municipalities[51] or derivative obligations that course between the SF, banking and sovereign sectors.[52]

Various laws and regulations in the USA and in Europe have tried to address these issues.

2. Key laws enacted in the aftermath of the SF crisis

Regulations of 16 September 2009 and 21 May 2013 passed by the EU

Regulations enacted in Europe, the second largest revenue source for the top three CRAs,[53] require a close examination. Two major legislative texts were passed: Regulation (EC) No 1060/2009 of the European Parliament and of the Council of 16 September 2009 on CRAs and Regulation (EU) No 462/2013 of the European Parliament and of the Council of 21 May 2013 amending Regulation (EC) No 1060/2009.

CRAs have been obliged to register with the European Securities and Markets Authority (ESMA) to issue credit ratings in the European Union. ESMA also supervises registered CRAs[54] on an ongoing basis and may withdraw registration for a CRA that has provided no credit ratings for the preceding six months, that obtained the registration by making false statements or that no longer meets the conditions under which it was

derivative counterparty in specified instances of its credit impairment, is a common provision in SF transactions. See also the Structured Finance Industry Group letter to Prudential Regulators of 24 November 2014, fn 11.

47 Harrington (n 14, n 42). In 2015, Moody's again diluted its SF methodology for derivative contracts and Fitch issued a comment request that proposed doing the same. See Moody's, 'Moody's Approach to Assessing Swap Counterparties in Structured Finance Cash Flow Transactions' (16 March 2015) and Fitch, 'Bank Counterparty Risk: Implications for Bank Counterparties of Maturing Bank Resolution Frameworks' (16 June 2015).

48 Gaillard (n 13); Norbert Gaillard, 'How and Why Credit Rating Agencies Missed the Eurozone Debt Crisis' (2014) 9(2) CMLJ 121.

49 Harrington (n 14) 8.

50 See Charles Levinson, 'Vanishing Act - U.S. Banks Moved Billions of Dollars in Trades Beyond Washington's Reach' *Reuters* (21 August 2015), which describes major US banks obtaining end-user consents for amendments that allow the banks to transfer 'hundreds of thousands' of derivative contracts to offshore subsidiaries.

51 Andrew Ang and Richard C Green, 'Lowering Borrowing Costs for States and Municipalities Through CommonMuni' (February 2011) The Hamilton Project, Discussion Paper 2011-01 <https://www0.gsb.columbia.edu/faculty/aang/papers/THP%20ANG-GREEN%20DiscusPape_Feb2011.pdf> accessed 28 December 2015.

52 Levinson (n 50). '. . . some people in the markets. . .say the big American banks are still on the hook for swaps they're parking offshore with subsidiaries. This worries some regulators, who fear that Washington, in turn, will be on the hook for another bailout if these 'too big to fail' banks are hit by a fresh shock – such as a rash of defaults in a recession'.

53 See Fimalac, '2014 Annual Report' (2015), Moody's Corporation, 'Annual Report 2014' (2015), and McGraw Hill Financial, '2014 Annual Report' (2015).

54 arts 14–19 of Regulation (EC) No 1060/2009 and art 1 of Regulation (EU) No 1095/2010 of the European Parliament and of the Council of 24 November 2010 establishing a European Supervisory Authority (European Securities and Markets Authority).

registered.[55] Registered CRAs must submit exhaustive rating information to ESMA, which is published on its rating platform.[56]

CRAs must publish methodologies, review all ratings at least annually,[57] identify unsolicited ratings, assign differentiated ratings to SF instruments and publish performance data for all ratings.[58]

CRAs must ensure that the assignment of a rating is not affected by existing or potential conflicts of interest or business relationships.[59] Fees charged for rating services must not depend on the level of the rating assigned or other outcome of the work performed.[60] A CRA that has entered into a contract to assign ratings to a re-securitization must wait four years before assigning ratings to a new re-securitization with underlying assets from the same originator.[61]

CRA competition is promoted by encouraging a debt issuer to engage at least one CRA with no more than 10 per cent of the total market share when engaging two or more CRAs to rate the same issuance or entity.[62]

A civil liability regime is established[63] under which investors and issuers may claim damages from a CRA that has committed, either intentionally or with gross negligence, any infringement listed in Annex III of Regulation (EC) No 1060/2009 as inserted by Regulation (EU) No 462/2013.

The over-reliance on credit ratings was addressed by obliging the European Banking Authority, the European Insurance and Occupational Pensions Authority and ESMA to remove references to credit ratings in guidelines and recommendations by 31 December 2013. Institutional investors are encouraged to make their own assessments of the creditworthiness of an entity or financial instrument and not rely solely or mechanistically on credit ratings.[64]

Lastly, several provisions of Regulation (EU) No 462/2013 cover sovereign and sub-sovereign ratings exclusively. At each year-end, CRAs must publish on their website and also submit to ESMA a schedule of publication dates for sovereign and sub-sovereign rating announcements in the ensuing 12 months.[65] In announcing each rating change or confirmation, a CRA must provide detailed evaluation of modifications to underlying

55 art 20 of Regulation (EU) No 513/2011 of the European Parliament and of the Council of 11 May 2011 amending Regulation (EC) No 1060/2009.

56 art 11a of Regulation (EC) No 1060/2009 as inserted by Regulation (EU) No 462/2013.

57 art 8 of Regulation (EC) No 1060/2009.

58 arts 10 and 11 of Regulation (EC) No 1060/2009.

59 art 6 of Regulation (EC) No 1060/2009.

60 Annex I, s B, point 3c to Regulation (EC) No 1060/2009 as amended by Regulation (EU) No 462/2013.

61 art 6b of Regulation (EC) No 1060/2009 as inserted by Regulation (EU) No 462/2013. This provision does not apply if at least four CRAs each rate more than 10 per cent of the total number of outstanding rated re-securitizations.

62 art 8d of Regulation (EC) No 1060/2009 as inserted by Regulation (EU) No 462/2013.

63 art 35a of Regulation (EC) No 1060/2009 as inserted by Regulation (EU) No 462/2013.

64 arts 5a and 5b of Regulation (EC) No 1060/2009 as inserted by Regulation (EU) No 462/2013.

65 art 8a of Regulation (EC) No 1060/2009 as inserted by Regulation (EU) No 462/2013.

quantitative assumptions, and must not make policy recommendations or prescriptions, nor issue guidelines for rated entities to follow.[66]

The Dodd–Frank Act of July 2010

The Dodd–Frank Act[67] sets overarching aims (eg to promote the financial stability of the United States by improving accountability and transparency in the financial system and to protect the American taxpayer by ending bailouts) that are to be achieved in part by revising the role of CRAs and strengthening their supervision. Dodd–Frank provisions generally pertain to NRSROs only and not to other CRAs. Many provisions are implemented by SEC rule-making and oversight, although some provisions are self-effecting.

Rules regarding rating methodologies focus on NRSRO development of an 'effective internal control structure', the consistent application of methodologies across ratings, and disclosures in rating announcements.[68] All ratings must assess the probability of default or apply another loss measure, and the measure must be used consistently.[69] The accuracy of individual ratings is not addressed per se, but NRSROs must enhance transparency by publishing the evolutions of all ratings that facilitate comparisons across issuers, sectors NRSROs, and time.[70] Rating inaccuracies expose an NRSRO to SEC sanctions such as license revocation[71] and investor actions.[72]

Mitigations against conflicts of interest that may induce NRSRO employees to corrupt rating processes are prescribed,[73] tepid boosters to analyst independence are set out[74], and the new Office of Credit Ratings is given broad discretion in rule-making and oversight[75] to ensure that ratings are not 'unduly influenced by conflict of interest'. At least annually, this office must examine each NRSRO for adherence to internally developed policies and Commission rules and make findings publicly available.[76]

Three sets of Dodd–Frank provisions are largely self-effecting. One set strips references to ratings from several statutes and directs federal agencies to insert their own standards of credit worthiness in regulations.[77] A second set amends the Securities Exchange Act of 1934 to impose obligations on NRSROs with respect to issuer information that is received

66 Annex I, s D, Part III of Regulation (EC) No 1060/2009 as inserted by Regulation (EU) No 462/2013. This provision is a response to the recurring controversies that have erupted between national governments and CRAs. Report to Sinclair (n 11) and Gaillard (n 48).

67 The full title is the Dodd–Frank Wall Street Reform and Consumer Protection Act, Pub L No 111-203, 124 Stat 1376 (2010).

68 Dodd–Frank Act, s 932(a)(2)(B). Internal Controls over Processes for Determining Credit Ratings; s 932(a)(8). Credit Ratings Methodologies; and s 932(a)(8). Transparency of Credit Ratings Methodologies and Information Reviewed.

69 s 938. Universal Ratings Symbols.

70 s 932(a)(8). Transparency of Ratings Performance.

71 s 932(a)(3). Suspension or Revocation for Particular Class of Securities.

72 s 933. State of Mind in Private Actions and s 939G. Effect of Rule 436(g).

73 s 932(a)(4). Separation of Ratings from Sales and Marketing; s 932(a)(4). Look-Back Requirement; and s 932(a)(4). Report to Commission on Certain Employment Transitions.

74 s 936. Qualification Standards for Credit Rating Analysts and s 939E. Government Accountability Office on the Study of the Creation of an Independent Professional Analyst Organization.

75 s 932(a)(3). Suspension or Revocation for Particular Class of Securities; s 933. State of Mind in Private Actions; s 939F. Study and Rulemaking on Assigned Credit Ratings and s 939H. Sense of Congress.

76 s 932(a)(4). Look-Back Requirement.

77 s 939. Removal of Statutory References to Credit Ratings; s 939A. Review of Reliance on Ratings; and s 939B. Elimination of Exemption from Fair Disclosure Rule.

from credible third-party sources.[78] A third set nullifies a provision of the Securities Act of 1933 and amends the Securities Exchange Act of 1934 to hold CRAs accountable for statements in a manner that more closely matches accountability for other gatekeepers, such as security analysts and auditors. Of particular note, SEC Rule 436(g), which exempted NRSRO ratings from being considered part of a registration statement prepared or certified by an expert, is nullified.[79]

This last provision took immediate effect on 22 July 2010, but its operation on Regulation AB[80] was pre-emptively suspended by the SEC Division of Corporate Finance in a letter that was requested by and issued to Ford Motor Credit Company LLC on the same date.[81] This letter states that no enforcement action will be recommended if an asset-backed issuer omits a rating disclosure newly required under Regulation AB by operation of Section 939G and cites as the rationale the unwillingness of NRSROs to provide consent to being named as experts.

In a 28 July 2014 letter to Chair White, 11 senators expressed concern that 'critical investor and systemic risk protections related to securitization' as set out in the Dodd–Frank Act had not been established.[82] With respect to NRSROs, the letter cites the ongoing suspension of the operation of Section 939G 'with no end in sight' and bemoans the fact that the SEC failed 'to eliminate conflicts of interest, establish minimum internal controls, ensure risky financial products receive lower ratings, or strengthen ratings disclosure'.

Chair White convened an Open Meeting for 27 August 2014 to consider both amendments to Regulation AB and the 18 May 2011 SEC rule proposal for NRSROs, which incorporate selected aspects of the Dodd–Frank Act.[83] The Commission voted 5-0 to approve the Regulation AB amendments but only 3-2 to approve the final NRSRO rules.[84] Commissioners Piwowar and Gallagher both read dissenting statements that criticized the hurried preparation of the NRSRO rule after receipt of the senators' letter and voiced support instead for a rule re-proposal that would have incorporated ongoing assessments from staff examinations of NRSROs.[85]

78 s 934. Referring Tips to Law Enforcement or Regulatory Authorities and s 935. Consideration of Information from Sources Other than the Issuer in Rating Decisions.

79 s 933. State of Mind in Private Actions and s 939G. Effect of Rule 436(g).

80 Items 1103(a)(9) and 1120 of Regulation AB require disclosure of whether an issuance or sale of any class of offered asset-backed securities is conditioned on the assignment of a rating by one or more rating agencies. If so conditioned, those items require disclosure about the minimum credit rating that must be assigned and the identity of each rating agency. Item 1120 also requires a description of any arrangements to have such ratings monitored while the asset-backed securities are outstanding.

81 Citation of 22 July 2010 No-Action Letter addressed to Ford Motor Credit Company LLC in successor letter of 23 November 2010. This successor letter extended the effect of the 22 July 2010 letter indefinitely and remained outstanding at the time of this writing.

82 28 July 2014 Letter to Hon Mary Jo White, 'Re: Implementation of Dodd–Frank Act Securitization Reforms' <http://www.sec.gov/comments/s7-08-10/s70810-307.pdf> accessed 28 December 2015.

83 SEC, 'Proposed Rules for Nationally Recognized Statistical Rating Organizations', Release No 34-64514 (18 May 2011).

84 SEC, 'Nationally Recognized Statistical Rating Organizations', Release No 34-72936 (27 August 2014 – updated to include Federal Register corrections dated 14/10/2014). SEC, 'Final NRSRO Rules' (2014) hereafter.

85 For instance, Commissioner Gallagher argued that this release reflected 'the last-minute imposition of ill-conceived and hastily drafted rule provisions. . . . These concerns were best set forth in a comment letter the Commission received that laid out, among other things, a pair of weighty concerns the Commission purports to address with regard to internal control requirements and the prohibition on allowing sales and marketing considerations to influence the rating process. . . . In the case of internal controls, the

These fissures between SEC commissioners reflect how badly NRSRO regulation has failed. More than seven years after the hollowness of SF ratings was first revealed, it is time to implement practical and efficient measures to foster accurate ratings.

3. Unfinished work: new initiatives for regulators to promote rating accuracy

Let Dodd–Frank 939G take effect and subject NRSROs to meaningful liability

To encourage NRSROs to assign accurate SF ratings, the SEC should withdraw the 23 November 2010 letter issued to Ford Motor Credit Company LLC. This letter preserves the operation of Rule 436(g) with respect to SF issuers and thereby contravenes the clear intent of Congress as expressed in the plain language of Dodd–Frank Section 939G. The continued operation of Rule 436(g) supports NRSROs in assigning inflated ratings to SF debt and perpetuates the NRSRO oligopoly by disadvantaging other CRAs that are not similarly exempted from expert liability.

SF markets may be disrupted in the near term—new issuance may halt completely until NRSROs consent to being named as experts—but accurate ratings will thereafter strengthen investor protections in SF markets[86] and improve the accuracy of price signals throughout the US economy.[87] However, 2015 is not 2010, when NRSROs faced existential threats from regulators and investors and decade-low market valuations, as well as moribund SF issuance, and had little to lose in not consenting to being named experts in SF registration statements. In 2015, NRSROs must assign new ratings in all sectors to sustain market valuations and the stronger US economy can withstand an NRSRO strike.

The SF market—issuers, investors, underwriters, counsel, auditors, trustees, NRSROs and regulators—has had more than five years to prepare for the undoing of Rule 436(g) and deflation of inaccurate SF ratings. In the event that NRSROs withhold their consents, investors can suspend their own internal guidelines that cite NRSRO ratings and tailor new guidelines that reflect individual tolerances for exposure to SF credit losses. In other words, investors can themselves fulfil the congressional mandate to reduce systemic reliance on ratings that is clearly laid out in the Dodd–Frank Act.

concern expressed was that the proposed rule failed sufficiently to set standards for such controls, leaving too much discretion to the NRSROs themselves' <http://www.sec.gov/News/PublicStmt/Detail/PublicStmt/1370542775101> accessed 28 December 2015.

86 Frank Partnoy, 'Rethinking Regulation of Credit Ratings: An Institutional Investor Perspective', prepared for the Council of Institutional Investors (April 2009) and presented at the 2009 SEC roundtable on CRA accountability. Partnoy also argues that ending the NRSRO exemption from expert liability will lessen the onus on regulators to develop all-encompassing regulations.

87 SF debt that is accurately rated will carry higher coupons than debt with inflated ratings, ie will be more expensive to issue. In return, investors will be more appropriately compensated for SF risk, SF issuers will price credit to borrowers more accurately, and the scale of SF rating implosions will be constrained.

Empower analysts to preserve rating accuracy at each stage of the rating process

The SEC has implemented measures that give NRSRO management great leeway in developing internal control structures;[88] now the SEC should use its statutory discretion in oversight and rule-making to direct NRSROs to establish quality assurance structures that evaluate the workings of NRSRO assembly lines and their finished products—namely, rating committees and ratings, respectively. As the SEC detailed in December 2014,[89] no NRSRO, large or small, had yet developed effective controls. For instance, the S&P assembly line applied ad hoc methodologies in surveilling the ratings of 150 RMBS in 2013 and 2014,[90] assigned inflated ratings to new issues of commercial mortgage-backed mortgages (CMBS) in 2011[91] and justified these inflated ratings by publishing misleading research.[92] These failures in rating accuracy, transparency and process validate the concerns expressed by Commissioners Piwowar and Gallagher at the 27 August 2014 Open Meeting: NRSROs have been given excessive discretion in establishing internal control systems.

Quality assurance structures will assess an analyst's contributions to all rating committees in which she has participated either as a voting member or a non-voting observer. These assessments, which will form the core of an analyst's performance reviews, will probe how an analyst weighs quantitative and qualitative information presented in committees, as well as how she discounts human concerns such as supporting a peer, preserving career goals, staying in management's good graces or being distracted by putatively systemic concerns. Equally important, analyst assessment will incorporate evaluations by fellow committee members regarding an analyst's preparation, contributions to debate and openness to diverging views.[93]

To promote rating accuracy, the quality assurance function must report directly to an independent board member of an NRSRO, ie bypass management entirely so that an analyst will not be penalized for voting to assign an accurate rating when an inaccurate rating better serves management's goals.[94] The focus by all levels of NRSRO management on earnings, as well as on the human concerns of job security, professional status, career advancement and deflecting blame, leads to the primary conflicts of interest that incentivize management to corrupt all stages of the rating process so that a committee vote to assign an inaccurate rating becomes almost inevitable.

88 SEC, 'Final NRSRO Rules' (2014) 56–94.

89 SEC, '2014 Summary Report of Commission Staff's Examinations of Each Nationally Recognized Statistical Rating Organization' (December 2014).

90 SEC, 'Administrative Proceeding File No 3-16347 in the Matter Against Standard & Poor's Rating Services, Respondent', Release No 34-74103 (21 January 2015).

91 SEC, 'Administrative Proceeding File No 3-16348 in the Matter Against Standard & Poor's Rating Services, Respondent', Release No 33-9705 (21 January 2015).

92 SEC, 'Administrative Proceeding File No 3-16346 in the Matter Against Standard & Poor's Rating Services, Respondent', Release No 33-9704 (21 January 2015).

93 Harrington (n 45) 18–24, 38–50.

94 Harrington (n 14) 16–17.

Free from management interference, a quality assurance function will provide support for an analyst to reference external benchmarks that support accurate ratings, such as expert liability and Dodd–Frank directives to consider independent information from credible third-party sources, as well as to challenge internal benchmarks, such as rating standards that differ among sectors.[95] The focus on committee proceedings will also allow analysts to challenge deficient aspects of any stage of rating production that precedes a committee vote, such as methodology development, hiring practices, and training, as well as deficient outcomes, eg perfunctory, lopsided votes for a management-supported rating. A quality assurance function also improves on the suggestion in Section 939E of the Dodd–Frank Act regarding the establishment of an independent professional organization for analysts. Given the small number of NRSRO analysts (4,539 worldwide)[96] and the NRSRO oligopoly, an industry-wide organization would lack critical mass[97] and, moreover, could not offer the employment protections needed to draw out frank assessments by analysts regarding their firms' rating production and accuracy.

Enable investors to reassess NRSRO conflict of interest with each rating disclosure

The SEC should invoke its clear mandate under Section 932(a)(8) of the Dodd–Frank Act to specify 'easy to use' and 'helpful' information that an NRSRO must include in a public announcement of a rating action. In particular, the SEC should require an NRSRO to provide exhaustive information when announcing: a RAC with respect to the impact on the rating of each class of SF debt from changes to a transaction's structure, governing documents, or non-investor parties; or a rating action in any sector that was re-evaluated because of a flawed rating process, ie a failure of internal controls. Either type of rating action may be the outcome of an NRSRO conflict of interest: an NRSRO is paid to issue a RAC, which in turn enables a non-investor party to effect changes to a seasoned SF transaction without obtaining noteholder consent, and NRSRO management may invoke a failure of internal controls to revisit a rating action that does not suit an issuer.[98]

The announcement of a rating action whose production, at any stage, violated an internal control should state this fact clearly, provide information on the nature of the violation, and disclose whether a committee was reconvened as a result. If a committee

95 Marc D Joffe, 'Public Disservice: The Negative Impact of Credit Ratings on US Municipal Bond Issuers' (Social Science Research Network, 3 January 2015). Joffe finds that NRSROs maintain a 'dual rating system' that deflates ratings of municipal issuers compared to bond insurers, thereby creating artificial demand for bond insurance. Unlike the comparatively small number of SF issuers and even smaller number of bond insurers, any single municipal issuer is only one among very many similar issuers and thus has little leverage to shop for ratings.

96 GAO (n 6) 6.

97 ibid. The chief finding of the GAO study, encapsulated in the subtitle 'Views Varied on Merits of a Professional Organization, but Creating One Now Viewed as Premature', is based in part on this same observation, ie that the number of NRSRO analysts worldwide is extremely small.

98 Harrington (n 45) 61–71, describes two separate attempts in 2009 by Moody's compliance department to reverse a month-long rating process that had downgraded a derivative counterparty to insurer AIG, citing as its rationale a failure of internal controls. Commissioner Aguilar cited these attempts in his comments at the Open Meeting of 27 August 2014, 'Restoring Integrity to the Credit Rating Process', fn 16.

was reconvened, the announcement should disclose whether this resulted in the rating being higher, lower or unchanged from the initial committee vote. These disclosures will allow rating users to track the integrity of rating processes with respect to issuers and sectors and will also discourage management from trying to reverse committee decisions that are perceived to harm the earnings potential of a rating franchise.

The announcement of a RAC should clearly disclose its origins, ie both the entity that requested the RAC and the entity that is paying the NRSRO in conjunction with the RAC. A RAC announcement should also disclose the difference in the probability of default or other loss measure of each class of rated debt that has occurred as a result of the associated changes, as well as an explicit statement as to whether each difference represents an increase, a decrease, or no change compared to the same measurement immediately prior to the change. RACs should also be added to the history of rating actions for each SF rating under the '100% Rule' so that a rating user can assess whether one or more RACs eroded investor protections and contributed to subsequent downgrades, credit losses or defaults.[99]

More generally, disclosures of probability of default or other loss measure in all announcements of SF rating actions will obligate an NRSRO to evaluate all aspects of a complex SF transaction, rather than simply the asset pool. An NRSRO calculates an improbably precise probability of default or measure of loss for SF debt to assign a rating that is consistent with the minuscule loss targets associated with SF ratings such as AAA, AA and A. These precise measurements and minuscule loss targets are not easily reconciled with a commonsense evaluation of SF debt, which is repaid solely by cash flows from a finite, ring-fenced pool of assets, which, in turn, is monitored by a third-party trustee who also tracks all other exposures, eg to a derivative contract, a custodian, other transaction vendors and evolving legal issues.

Focus on management conflict of interest and dispose of canard of 'rogue' analysts

The clear intent of the US Congress, as expressed in the plain language of the Dodd–Frank Act, to mitigate a widely presumed, but unfounded conflict of interest with respect to an NRSRO analyst and her prospects for post-NRSRO employment harms rating accuracy.[100] As a corrective, the SEC should immediately post a no-action letter addressed to all NRSROs[101] informing them that they no longer need to: (1) perform a 'look-back' review when an analyst joins an entity that is either rated by the NRSRO or sponsored by a rated entity; or (2) track the employment progression of a former employee who has left the NRSRO in the previous five years.[102] As a result, an NRSRO

99 See SEC, 'Final NRSRO Rules' (2014) 216–17, 293, for the exclusion of ratings affirmation such as RACs from the types of rating actions that must be compiled for each SF rating under the '100% Rule'.

100 Harrington (n 45) 35–36, 43–45, describes the negative impact of look-back reviews on analysts' ability to assign accurate ratings.

101 SEC guidance for requesting a no-action letter is available at <https://www.sec.gov/forms/corp_fin_noaction>.

102 See SEC, 'Final NRSRO Rules' (2014) 153–55 for a description of NRSRO obligations with respect to former employees who had participated in rating processes.

will conduct look-back reviews and report on employment transitions only with respect to former managers of rating processes who have left the NRSRO.

As its rationale, the SEC can cite the look-back reviews conducted to date, ie those reviews conducted by all NRSROs since 2010[103] and those conducted by S&P in 2008–2009, as well.[104] These reviews have not uncovered a single instance of a former analyst either having induced a rating committee to assign a higher-than-warranted rating to her subsequent employer, or having successfully corrupted earlier stages of the rating process to obtain a similar result. Commissioner Aguilar posited that these look-back reviews had not been rigorous enough, but a simpler explanation is more convincing: what does not exist cannot be found. Simply put, a lone analyst doesn't have the ability to hoodwink many similarly informed rating participants into assigning indefensibly strong ratings to one issuer that immediately make it an outlier within its cohort. Nor does a lone analyst have the ability to hoodwink an issuer's cohort into accepting their relative disadvantage; the SEC settlement with S&P describes CMBS issuers quickly complaining to senior S&P management when outlier ratings of AAA were announced for the outlier CMBS. These issuer complaints, and not earlier warnings from S&P analytical staff, prompted the resulting inquiry by senior S&P management.

The conflict of interest that has been ascribed to individual analysts is a distraction from the principal conflict of interest that distorts ratings, namely, the NRSROs' imperative to maximize revenues and earnings.[105] The S&P settlements with the US Department of Justice[106] and the S&P settlements with the SEC document that one or a few managers can manipulate all steps of a rating process, including the publication of supportive research. Arguably, look-back rules incentivize an analyst to follow management's lead when participating in any stage of the rating process; this safe strategy will minimize the risk that an analyst's role will be misrepresented after she has left the NRSRO, when defending her work and reputation will be difficult.

The US Congress, the SEC and other regulators operate in a revolving-door environment[107] and may lack the perspective to understand that NRSRO analysts do not.[108] To the extent that an employer values the ability of a former NRSRO employee to influence rating processes, it is for her ability to do so in the future, for instance, by

103 See Commissioner Aguilar's comments at the Open Meeting of 27 August 2014, 'Restoring Integrity to the Credit Rating Process', fn 16.

104 See the letter from Deven Sharma, president of Standard & Poor's, 'Re: File Number S7-18-11 – Proposed Rules for Nationally Recognized Statistical Rating Organizations', Comment to the SEC (8 August 2011) 20. 'In our experience to date, our look-back reviews have not led to ratings changes, an outcome that makes sense considering that our ratings are arrived at through a committee process that is subject to numerous controls and where no one analyst is in a position to dictate a particular view.'

105 Section 'Monitor CRA Investment in Analytical Staff' discusses the other half of maximizing earnings, ie minimizing expenses.

106 US Department of Justice, 'Justice Department and State Partners Secure $1.375 Billion Settlement with S&P for Defrauding Investors in the Lead-Up to the Financial Crisis' *Justice News* (3 February 2015).

107 Michael Smallberg, 'Much Ado About Nothing' (*Project on Government Oversight*, 11 February 2013). A Linked-In search in February 2015 showed seven SEC officials with oversight of NRSROs who had previously worked at S&P managing SF rating processes for an average of 10 years up to and during the financial crisis.

108 International Organization of Securities Commissions (IOSCO), 'Supervisory Colleges for Credit Rating Agencies' (July 2013) also focuses on individual analysts' conflicts of interest.

helping her new employer present itself to an NRSRO as effectively as possible. However, if the SEC believes that a significant source of rating inflation stems from a lateral conflict of interest between an individual analyst and her prospective employers, the SEC should institute both an appeal process so that a former analyst can potentially clear her name and a sanction system against issuers that attempt to obtain inaccurate ratings by promising future employment. Also, the quality assurance function of an NRSRO must poll each analyst periodically to learn whether she has been offered a *quid pro quo* of future employment for better ratings; if so, the ratings of an issuer that has made such a proposal should be immediately withdrawn.

Monitor CRA investment in analytical staff

Understaffing[109] and a lack of experienced quantitative analysts[110] in CRAs were fundamental weaknesses and core management policies that led to inaccurate ratings. The SEC has partly addressed the problem by imposing standards of training, experience and competence for NRSRO employees who participate in rating processes,[111] but the SEC has been silent on appropriate staffing levels.

The increase in Fitch, Moody's and S&P staffs between December 2008 and December 2014 was dwarfed by the surge in their respective operating income.[112] As a result, the CRAs' willingness to employ adequate resources must continue to be questioned. Recognizing the difficulties in assessing the optimal number of analysts needed, the SEC could implement and track a workload indicator for each asset class; observations of blatant or persistent understaffing would provide grounds for the SEC to suspend or revoke the registration of the delinquent NRSRO with respect to the affected class of securities, as suggested by Section 932 of the Dodd–Frank Act. In the meantime, regulators can also check, through ad hoc interviews, that a portion of a CRA's analysts has sufficient time to conduct research or, at least, keep abreast of recent research in their respective fields.[113]

Find alternatives to credit ratings while avoiding new forms of over-reliance

In July 2011, in accordance with Section 939A of the Dodd–Frank Act, the SEC adopted amendments to remove references to credit ratings in rules and forms promulgated under the Securities Act of 1933 and the Securities Exchange Act of 1934.[114] Under the changes to Forms S-3 and F-3 adopted by the SEC,[115] the investment grade rating criterion was

109 Eric Kolchinsky, 'Statement and Testimony before the Financial Crisis Inquiry Commission' (2 June 2010).

110 Gary Witt, 'Statement and Testimony before the Financial Crisis Inquiry Commission' (2 June 2010) and Harrington (n 45) 17. CRAs preferred hiring junior analysts, who were 'cheaper' and easily influenced by top managers.

111 SEC, 'Final NRSRO Rules' (2014) 431–54.

112 See SEC, 'Annual Report on Nationally Recognized Statistical Rating Organizations' (September 2009); SEC, 'Final NRSRO Rules' (2014); Fimalac, 'Annual Report 2007/2008' (2009) and '2014 Annual Report' (2015); Moody's Corporation, '2008 Annual Report' (2009) and 'Annual Report 2014' (2015); McGraw-Hill Companies, '2008 Annual Report' (2009) and McGraw Hill Financial, '2014 Annual Report' (2015).

113 Witt (n 110).

114 SEC, Release No 33-9245 (27 July 2011).

115 Forms S-3 and F-3 are the short forms that eligible issuers can use to register securities offerings under the Securities Act of 1933.

replaced with five alternative criteria. Satisfaction of any one of the five criteria enables an issuer to use Form S-3 or F-3 for offerings of non-convertible securities other than common equity.

The five alternative criteria are: the issuer has outstanding (as of a date within 60 days before the filing of the registration statement) at least $750 million of non-convertible securities, other than common equity, issued in primary offerings for cash, not exchange, registered under the Securities Act, or has issued at least $1 billion in non-convertible securities over the prior three years; the issuer is a wholly owned subsidiary of a well-known seasoned issuer (WKSI) as defined in Rule 405 under the Securities Act or is a majority-owned operating partnership of a real estate investment trust that qualifies as a WKSI; or the issuer discloses in the registration statement that it has a reasonable belief that it would have been eligible to register the securities offerings proposed to be registered under such registration statement pursuant to General Instruction I.B.2 of Form S-3 or Form F-3 in existence prior to the new rules, and discloses the basis for such belief.

However, these alternatives to credit ratings have a core failing: they do not reflect the solvency of the issuer. The SEC enacted better rules when it amended Forms N-1A, N-2 and N-3 in December 2013[116] and stated that funds that choose to use credit quality categorizations in the required table, chart, or graph of portfolio holdings were no longer required to use NRSRO ratings. Accordingly, funds can either use alternative categorizations that are not based on NRSRO ratings and describe how the credit quality of the holdings was determined, or use credit ratings and explain how they were identified and selected.[117]

Replacing ratings with alternative indicators of credit risk (eg credit default swaps) is likely to be self-defeating by facilitating, once again, the mechanistic use of credit indicators. Regulators should let investors make their own credit assessments and only check the adequacy of financial institutions' own credit assessment processes to prevent upward biases in their internal ratings.[118]

4. CRA homework: overhaul methodologies for the interconnected world of the twenty-first century

To assign accurate ratings that are not based on an expectation of future bailouts, a CRA must add components to all methodologies that project reductions in both the net assets of an issuer and its available cash that will result from interconnected changes in market indices and the credit worthiness of obligors such as other bond issuers and derivative counterparties. Otherwise, a CRA must disclose with each rating action that a prime rationale in support of the rating is the expectation of future bailouts.

116 Forms N-1A, N-2 and N-3 contain the requirements for shareholder reports of mutual funds, closed-end funds and certain insurance company separate accounts that offer variable annuities.

117 SEC Commission, 'Removal of Certain References to Credit Ratings under the Investment Company Act', Release No 33-9506 (27 December 2013).

118 This proposal is in line with that advanced by the FSB (2010).

Twenty-five years overdue: connect the derivative dots across all sectors

NRSRO methodologies must assess how the obligations of each of the two parties to a derivative contract can reduce their respective net assets and available cash over the life of the contract. In one common instance, when a derivative contract contains a flip clause or other walkaway provision that enables one party to repudiate amounts owed the second party when it is credit-impaired, methodologies must allocate credit losses to the two parties that are equal to full contract value.[119] In another common instance, when a derivative contract has facilitated an upfront loan to one party from the second, methodologies must add the amount borrowed to the outstanding debt of the first party and to the credit charge against outstanding receivables of the second party.[120] Methodologies must also track the derivative counterparties for all issuers in a sector and assign credit losses that reflect outsized exposure of the sector to an individual counterparty. For most derivative contracts worldwide, the two parties are one of the world's largest financial institutions on one side, and a common issuer—municipal, corporate, sovereign, supranational, SF or smaller financial entity—on the other side.

To date, NRSROs have preserved methodologies that treat entry into a derivative contract as mutually beneficial to both parties; an issuer benefits from having smoothed out otherwise volatile cash flows and a large bank benefits from having booked a new source of stable earnings in its enormous, and prudently managed, portfolio of derivative contracts. These methodologies extend the win–win assessments of derivative contracts further by also assuming that all derivative contracts will be protected by proactive regulators and, if necessary, propped up by taxpayer bailouts.[121] If a bank cannot make payments or perform other obligations of its portfolio of derivative contracts, regulators will assign the entire portfolio to competitors in an optimal manner that preserves full value for counterparties and at least partial value for the bank's subordinated debt.[122] As a last resort, should any bank or non-bank issuer record material losses from one or more derivative contracts, that issuer can simply be downgraded.

119 NRSROs have strenuously avoided doing so, eg by introducing new types of assessments (such as the CR Assessment) and ratings (such as CI Ratings) in tandem with diluting existing methodologies for SF swap contracts. As an example, Moody's assigns three interconnected evaluations of an SF swap contract with a flip clause: the CR Assessment of the derivative provider, the CI Rating of a subset of the payment obligations of the SF issuer to the derivative provider and the ratings of SF debt. Together, the two ratings and the assessment mask losses under the swap contract from the flip clause and other early termination events rather than tally the losses and allocate them between the derivative provider and SF debt.

120 For example, Greece borrowed €5 billion in an off-market swap contract with a flip clause embedded in SF debt; see Tyler Durden and Marla Singer, 'Is Titlos PLC (Special Purpose Vehicle) the Downgrade Catalyst Trigger Which Will Destroy Greece?' (*Zero Hedge*, 15 February 2010). Many CDOs also borrowed under swap contracts with flip clauses provided by AIG; see Harrington (n 45) 63.

121 NRSROs entirely forgo analysis in formulating methodologies for government support of derivative contracts and instead tout well-developed abilities in reading the minds of regulators and perceiving the moods of their respective bodies politic. See Moody's, 'Bank Methodology' (2015). 'Our approach to government support is similar to that for determining support from an affiliate. Our assessment is designed to be qualitative and flexible in nature, enabling us to incorporate the often subtle real-world shifts that define attitudes to support for bank creditors' (80).

122 In circular fashion, regulators, central banks, and academicians cite NRSRO bank methodologies and ratings as objective corroboration that resolution regimes are robust and should not require taxpayer bailouts. See US Financial Stability Oversight Council, '2015 Annual Report' (2015) 117–18; Lucy Chennells and Venetia Wingfield, 'Bank failure and bail-in: an introduction' (2015) Bank of England Quarterly Bulletin 2015 Q3, p. 238; and Timothy C Irwin, 'Getting the Dog to Bark: Disclosing Fiscal Risks from the Financial Sector' (2015) International Monetary Fund Working Paper 15/208, 7, 11–12, 14–15.

In preserving methodologies that define credit risk so narrowly as to exclude reductions in both the net assets and available cash of an issuer that are attributable to a derivative contract, NRSROs inflate ratings in all sectors while still conforming to the letter of the SEC Final Rules. These rules merely obligate an NRSRO to apply a methodology consistently to all associated ratings, the merits or deficiencies of the methodology notwithstanding. As a result, the vast majority of NRSRO ratings contain no forward-looking information regarding a major component of the credit profiles of individual issuers, sectors, asset classes, and the world financial system as a whole. Put another way, NRSRO ratings project that no systemic losses will originate from derivative contacts in any financial system over any time horizon.

Meanwhile, since 2010, the gross notional amount of derivative contracts worldwide has averaged \$550 trillion.[123] As of the first half of 2015, four of the largest US banks were counterparty to roughly a third of these derivative contracts and the un-netted valuation of these contracts was measured as \$6 trillion.[124] However, this valuation is subject to very large rounding error, given that the estimate of value for even a single derivative contract evolves continuously with the credit profiles of the two parties, the market volatility of reference indices, the interplay of the idiosyncratic terms contained in the contract itself, and the ability to transfer the contract to a third party without incurring a loss. By being concentrated in just a few very large banks,[125] this rounding error ratchets up systemic risk and devoids bank ratings of useful information. For instance, in December 2014, NRSROs provided no rating guidance on the impact of either the pending push-outs of derivative contracts with notional amounts of several trillion dollars from the government-insured subsidiaries of two large banks to their holding companies as specified by the Dodd–Frank Act, or the subsequent cancellation of these push-outs as part of the omnibus spending bill for 2015.[126] More generally, ratings provide no forward-looking information on the relative credit profiles of individual issuers, or the financial system as a whole, when issuers clear derivative contracts at central clearing houses, post margin against uncleared derivative contracts, or do neither.

Big lesson of the bailouts: interconnectedness of key sectors reduces systemic diversity

Cross-sector holdings of bonds, loans and other receivables, whether as an outright investment, collateral held against repayment of borrowed money or margin received against the market valuation of a derivative contract, increase the correlation of credit risk across all sectors. NRSRO methodologies must capture this correlation; most sector methodologies—municipal, corporate, regional and national financial, global financial, SF, supranational and even sovereign—aggregate credit risk on a self-contained,

123 SIFMA (n 26).

124 Office of the Comptroller of the Currency, 'OCC's Quarterly Report on Bank Trading and Derivatives Activities' (Second Quarter 2015) <http://www.occ.gov/topics/capital-markets/financial-markets/trading/derivatives/dq215.pdf>.

125 John C Coffee, Jr, 'Ratings Reform: The Good, the Bad, and the Ugly' (2011) 1(1) Harvard Business Law Review 238.

126 Ben Protess, 'Wall Street Seeks to Tuck Dodd–Frank Changes in Budget Bill' *New York Times* (New York, 9 December 2014).

standalone basis that effectively defines cross-sector correlation as being 0.0 per cent. In other words, the aggregate of NRSRO ratings underestimates system-wide credit risk because the aggregate ratings of each sector underestimate the credit risk of their own segment. Bank methodologies inflate the value of SF debt held as capital. Sovereign methodologies inflate the value of SF debt posted as collateral to central banks. SF methodologies ignore the credit risk from bank counterparties to derivative contracts and all methodologies underestimate the counterparty exposure of derivative contracts with maturities longer than a few years. By overestimating the diversification of assets held by most issuers in most sectors, NRSRO methodologies underestimate the likelihood that these same issuers will lobby governments to bail out any individual sector in distress.[127]

As a correction, NRSRO methodologies must calibrate key inputs that are common to all ratings of all issuers in all sectors, such as the recovery rate of a defaulted instrument and the market volatility of issuer assets and liabilities, using 2007–2009 data adjusted to reflect outcomes as if the bailouts had never occurred; that is, methodologies must assess the baseline condition of issuers that makes the aggregate system susceptible to failures in the first place. Recovery rates will be lower, market volatility will be higher, ratings will be more accurate, and the likelihood that inflated ratings will make more bailouts a self-fulfilling prophecy will be reduced.

The SEC should also incorporate the costs of the 2007–2009 bailouts when establishing a baseline for measuring the economic impact of a proposed rule. Unfortunately, the baseline used in the SEC Final Rules omits bailout costs entirely[128] and focuses only on small, self-contained costs incurred by NRSROs in assigning ratings and by investors in accessing ratings. As a result, the SEC Final Rules fail a basic litmus test: had the rules been in place in 2004, they would not have improved rating accuracy or mitigated the resulting financial catastrophe.

Stop bailouts at their source: fix SF methodologies

As of year-end 2014, the SF sector had more than 178,000 ratings outstanding, more than either the financial or the corporate sector.[129] The Dodd–Frank Act singles out SF ratings for additional oversight and rule-making so that an NRSRO will not be incentivized to inflate a new SF rating or to prop up an existing one by issuing RACs and delaying downgrades. However, the SEC Final Rules do not subject SF ratings and rating processes to meaningful scrutiny. At most, rules that govern SF and non-SF sectors alike, such as those that obligate NRSROs to use the same default probabilities or loss measures in assigning a rating, monitoring it, and publishing its transition, will memorialize rating inflation so that future rating implosions can be tied to SF sectors and individual NRSROs.

127 The moral hazard problem and the quest for 'too big to fail' status by some financial institutions were presciently analysed by Arthur E Wilmarth, Jr as early as 2002. See Arthur E Wilmarth, Jr, 'The Transformation of the U.S. Financial Services Industry, 1975-2000: Competition, Consolidation, and Increased Risks' (2002) 2002(2) University of Illinois Law Review.

128 SEC, 'Final NRSRO Rules' (2014) 35–55.

129 This figure is the sum of the ratings assigned by Fitch, Moody's and S&P to all SF products. Based on <http://cerep.esma.europa.eu/cerep-web/statistics/ratingActivity.xhtml>.

The ratings of the approximately $1 trillion of outstanding SF debt that has been issued in the US since 2009 indicate that a new cycle of rating inflation is well underway in all SF sectors and by all NRSROs. A compilation of NRSRO ratings as of 30 June 2015 projects that, for the 10-year period from 2016 to 2025, this $1 trillion in debt will experience total credit losses of $13 billion, ie just 1.3 per cent.[130] Moreover, most of these credit losses—$12 billion of the total $13 billion—affect only the $130 billion subset of SF debt that is rated BBB or lower. The remaining $870 billion of SF debt that is rated A or higher is projected to incur credit losses of just $1 billion, ie to be 99.9 per cent immune from credit loss.

This optimism means that SF rating inflation cannot be fixed by simply fine-tuning existing methodologies. Instead, SF methodologies must start from the commonsense premise that, but for the bailouts of both the SF sector under the Troubled Asset Relief Programme (TARP) and the financial sector under a series of government measures, all SF sectors would have incurred larger credit losses and experienced more pronounced rating implosions than was the case in 2007–2009. NRSROs have adopted this insight for a few headline sectors—namely, US RMBS (but not EU and Australian RMBS) and some CDOs.

SF methodologies focus disproportionately on asset pools, even though an SF rating ostensibly incorporates credit risk to SF debt from all aspects of its structure, not simply from the credit risk of assets if held to maturity.[131] These other aspects of an SF structure include: reliance on a third-party trustee for enforcement of contractual protections for investors; the validity of legal underpinnings of the structure; market losses from selling assets at discounts; and counterparty exposure under a derivative contract.[132] By evaluating only an asset pool rather than all contributions to the credit risk of SF debt, an NRSRO makes itself dependent on asset-specific information provided by an issuer. As a result, SF methodologies remain lenient enough to support AAA ratings in most sectors.[133]

An NRSRO can easily make accurate projections of credit losses, ie ones well above 0.0 per cent, attributable to sources of credit risk apart from an asset pool. For instance, a large NRSRO simply has to create a central group that taps into its existing analytical and legal resources, as well as its in-house networks of information that span the world economy. Small NRSROs, which may have fewer than 100 analysts in total,[134] can still develop robust methodologies that apply standard, non-zero estimates of credit loss to non-asset aspects of SF debt; ie start with the assumption that all SF debt is exposed to material credit risk over a 10-year horizon.

130 Combined ratings of outstanding SF debt by sector from SIFMA (2015). SF expected losses from Moody's (2006). The SIFMA data assign the lowest of the Fitch, Moody's and S&P ratings to all rated SF debt; debt rated C, CC and D (in most cases, CDOs) was assumed to have been issued prior to 2009 and excluded from the analysis.

131 Individual assets in an asset pool, and not the pool itself as a standalone entity, may be rated.

132 The SEC could help investors evaluate these risks by requiring an SF issuer to disclose its priority of payments. See Commissioner Stein's comments at the Open Meeting of 27 August 2014, 'Asset-Backed Securities Disclosure and Registration': 'Unfortunately, the Commission has put on hold its work to provide investors with a software engine to aid in the calculation of waterfall models. . . . We should return to this important initiative to provide investors with the mathematical logic that forms the basis for the narrative disclosure within the prospectus.'

133 See Marc D Joffe, 'SEC Shines a Light on Inflated CMBS Ratings' (*Wikirating.org*, 28 January 2015). Joffe cites the unreliability of minuscule loss measurements of highly rated, single-asset CMBS.

134 SEC, 'Final NRSRO Rules' (2014) 22.

As an example, SF methodologies must distinguish between types and tenors of derivative contracts, as well as between credit profiles of derivative counterparties and whether or not they have grounds to challenge a flip clause, so that ratings reflect forward-looking estimates of credit losses attributable to the insolvency of a derivative counterparty. The bankruptcy of Lehman Brothers has shown that industry-standard swap contracts with flip clauses do not insulate SF debt from credit losses and also that cross-currency derivative contracts expose SF debt to outsized credit losses compared to other derivative contracts. However, all NRSROs continue to project that AAA-rated debt will be 99.995 per cent immune to credit losses regardless of whether an issuer is party to: a large, complex long-dated swap contract with a flip clause provided by a US counterparty that has a senior unsecured rating of BBB or BB; a small, short-dated swap contract with no flip clause provided by a counterparty that has a senior unsecured rating of A; a fully paid interest cap provided by a counterparty with a senior unsecured rating of AAA; or no derivative contract at all.[135]

5. Conclusion

Despite the fact that the Dodd–Frank Act of 2010 and Regulation (EU) No 462/2013 of the European Parliament and of the Council removed statutory references to credit ratings, CRAs continue to act as gatekeepers in world debt markets. The sustained growth of these debt markets and the reluctance of investors to develop their own assessments of credit risk are driving the continued demand for ratings. In response, regulators should take all measures within their power to improve the quality of rating methodologies, foster rating accuracy and make CRAs accountable.

The investigations and hearings conducted by the US Senate, the Financial Crisis Inquiry Commission (FCIC) and the SEC between 2008 and 2011 showed that the major CRAs did not assign reliable ratings to SF debt such as CDOs, RMBS and CMBS. The settlement between the US Department of Justice and S&P on 3 February 2015 to resolve allegations that S&P had engaged in a scheme to defraud investors in SF products pinpointed the inherent conflict of interest that produced unreliable ratings—S&P admitted it had continued to issue positive ratings on securities despite having been repeatedly alerted by its analysts that the ratings were inaccurate. CRAs still do not assign adequate SF ratings and CRA management still overrules analysts who press for reliable ratings, as S&P admitted on 21 January 2015 in its three separate settlements with the SEC. The new SEC Office of Credit Ratings may prod CRAs to improve the reliability of SF ratings, but whether this occurs proactively or only after another series of rating implosions remains to be seen.

135 Fitch, 'Counterparty Criteria for Structured Finance and Covered Bonds' (May 2014) and 'Derivative Addendum' (May 2014). Moody's, 'Moody's Approach to Assessing Swap Counterparties in Structured Finance Cash Flow Transactions' (16 March 2015). S&P 'Counterparty Risk Framework Methodology and Assumptions' (25 June 2013) and 'Global Derivative Agreement Criteria' (24 June 2013).