



European Securities and
Markets Authority

Technical Advice

On reducing sole and mechanistic reliance on external credit ratings

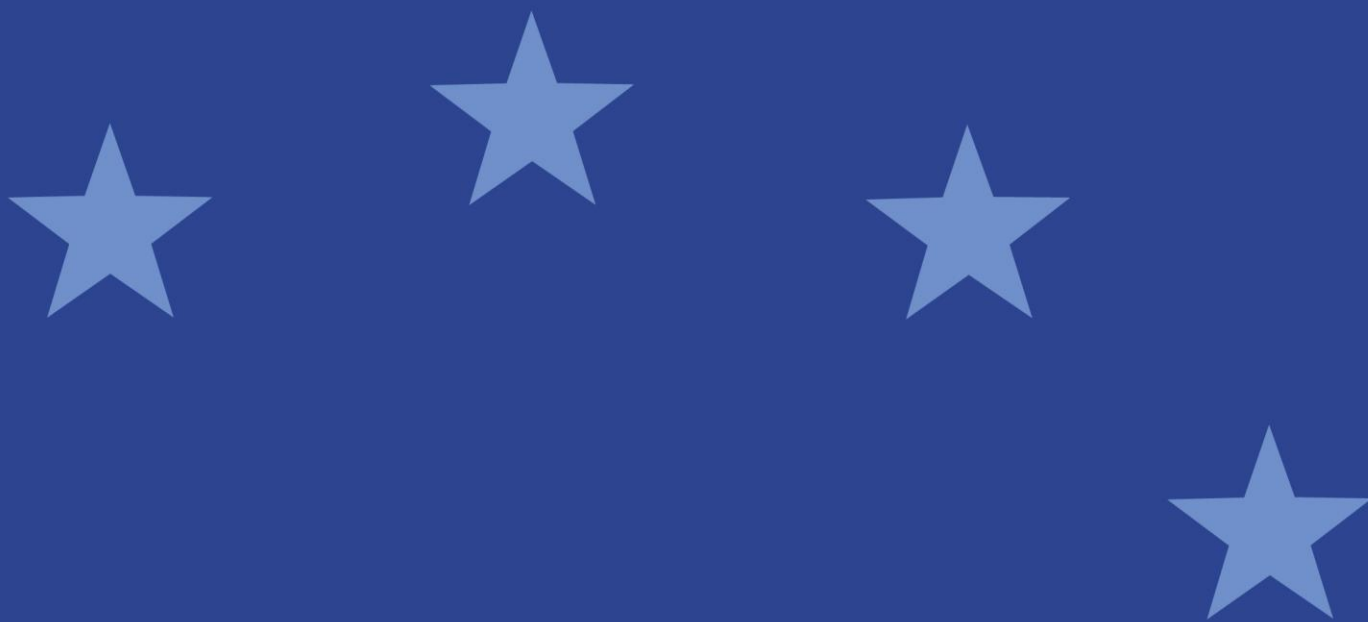


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Acronyms used

AIFMD	Alternative Investment Fund Managers Directive - Directive 2011/61/EU
BCBS	Basel Committee on Banking Supervision
CCP	Central Counterparties
CDS	Credit Default Swap
CEBS	Committee of European Banking Supervisors
CEIOPS	Committee of European Insurance and Occupational Pensions Supervisors
CESR	Committee of European Securities Regulators
CIS	Collective Investment Scheme
CIU	Collective Investment Undertaking
CRA	Credit Rating Agency
CRA Regulation	Credit Rating Agencies Regulation - Regulation (EC) No 1060/2009
CRD IV	Capital Requirements Directive - Directive 2013/36/EU
CRR	Capital Requirements Regulation - Regulation (EU) No 575/2013
EBA	European Banking Authority
EC	European Commission
ECAI	External Credit Assessment Institution
EIOPA	European Insurance and Occupational Pensions Authority
EMIR	European Market Infrastructures Regulation - Regulation (EU) No 648/2012
ESA	European Supervisory Authority
ESMA	European Securities and Markets Authority
ETF	Exchange Traded Fund

FSB	Financial Stability Board
HQLA	High Quality Liquidity Assets
IOSCO	International Organization of Securities Commissions
IORP	Institutions for Occupational Retirement Provision
IORP Directive	Institutions for Occupational Retirement Provision Directive - Directive 2003/41/EC
JC	Joint Committee
MMI	Money Market Instrument
NRSRO	Nationally Recognized Statistical Rating Organizations
OTC	Over the Counter
RTS	Regulatory Technical Standards
SCA	Sectoral Competent Authority
SFI	Structured Finance Instrument
UCITS	Undertakings for Collective Investment in Transferable Securities
UCITS Directive	Undertakings for Collective Investment in Transferable Securities Directive - Directive 2009/65/EC

I. Executive Summary

Reasons for publication

Article 39b(1) of the CRA Regulation states that the Commission shall adopt a report by end 2015 – after receiving ESMA’s technical advice – on:

- (a) Steps taken as regards the deletion of references to credit ratings which trigger or have the potential to trigger sole or mechanistic reliance thereon; and.
- (b) Alternative tools to enable investors to make their own credit risk assessment of issuers and financial instruments.

In its request for advice, the Commission asked ESMA to provide:

- A screening of remaining references to ratings in existing national supervisory guidelines and technical standards.
- A screening of the lessons drawn from supervisory experiences and best practices in the EU by national supervisors on mitigating the risks related to over-reliance on ratings.
- A screening of available alternatives to credit ratings employed by market practitioners as identified by ESMA.

Methodology

As the subject matter of this Technical Advice is cross-sectoral ESMA has sought to draw upon the following internal and external sources. In particular, ESMA has drawn directly on information from EU sectoral competent authorities via:

- A two day workshop with representatives from EU sectoral competent authorities.
- A questionnaire from a representative sample of 17 EU SCAs on the Use of Credit Ratings by Financial Intermediaries.

ESMA has also drawn upon the technical work produced by the Task Force for Credit Ratings of the Joint Committee of the European Supervisory Authorities, in particular:

- Joint Committee Final Report on Mechanistic References to Credit Ratings in the ESA’s Guidelines and Recommendations.
- Joint Committee Discussion Paper on ‘The Use of Credit Ratings by Financial Intermediaries’.
- Responses received from Financial Market Participants to Joint Committee Discussion Paper.

As an additional input ESMA also procured the following third party report:

- Technical Report from Professor Frank Partnoy of the University of San Diego.

Finally, to ensure the views presented in this report reflect the current debate on this subject the following

supervisors and global regulatory bodies are also referenced:

- IOSCO
- Financial Stability Board
- Basel Committee
- Securities and Exchange Commission of the United States of America

Contents

This Technical Advice provides a background to steps taken so far to reduce reliance on credit ratings by market participants, ESMA's views in respect of the use of ratings across certain member states, the views of market participants on credit ratings and potential alternative indicators, the role of ratings within collateral assessment frameworks and some working examples of alternatives to credit ratings.

This is presented in the following sequence:

1. Steps taken to reduce reliance on ratings within international fora and other jurisdictions.
2. References to ratings at a national level within the EU.
3. References within EU legislation and collateral assessment frameworks of EU Central Banks.
4. Market Participants and Credit Ratings Agencies' views and experiences.
5. Possible practices for the mitigation of reliance on ratings within internal credit assessments.

Findings

The reduction of reliance on ratings by financial market participants has been an ongoing process since the global financial crisis. Within global standard setting bodies there have already been a number of complimentary stocktaking exercises completed and best practices identified. While within IOSCO and the Basel Committee work is underway or has been completed in respect of Large Financial Intermediaries, Asset Managers and Credit Institutions. It is important that any further initiatives to reduce reliance on ratings do so in a coordinated and complementary manner with these existing efforts.

Although some steps have already been taken in these fora to mitigate reliance on ratings by financial market participants there still remain instances of references to ratings within national and EU sectoral legislation. In particular, CRR and Solvency II contain references to ratings in a number of critical areas, most notably capital requirement calculations. While these references remain, reducing reliance on ratings for these entities will remain challenging.

The process to reduce reliance on ratings in a European context can therefore be said to be at an early stage, with some work done on agreeing high level principles and goals but more to be done in terms of mitigating mechanistic reliance and proposing alternatives.

However, one example of a positive development is the recent Regulatory Technical Standards under EMIR which provide a working example as to how mechanistic reliance on ratings can be mitigated within EU sectoral legislation.

Outside of EU legislation it should be noted that credit ratings remain a factor within the collateral assessment frameworks of some central banks in the EU. As these frameworks may have significant knock on effects for financial market participants' own internal assessment procedures reducing mechanistic reliance on ratings within these frameworks is a desirable objective.

It should also be acknowledged that even for some larger financial market participants credit ratings remain, at the least, a factor in their internal credit worthiness assessments. While many smaller, less sophisticated market participants find it difficult to fully adopt alternatives due to lack of resources and expertise. For these reasons, it may not be practical to completely remove references to ratings within EU legislation and as such the focus of any future initiatives should be on the mitigation of mechanistic reliance on ratings rather than their removal altogether.

In this regard one particular set of alternative indicators that could be used to mitigate reliance on credit ratings are market-based indicators such as information based on the pricing of fixed income securities and credit default swaps. For smaller market participants mitigation of reliance on a particular rating could be achieved by the publication of credit rating data on the forthcoming European Ratings Platform.

II. International Coordination

Financial Stability Board

1. In May 2014, The Financial Stability Board (FSB) published its final peer review report on national authorities' implementation of the FSB 'Principles for Reducing Reliance on CRA Ratings'.¹ The FSB previously had set forth a roadmap for implementing the reduction of mechanistic reliance on CRA ratings in standards, laws, regulation. The FSB has both gathered information about references to CRA ratings in various national laws and regulations, and focused on action plans by national authorities to implement the FSB roadmap. The FSB's review found that progress toward removing references to ratings was 'uneven' across various jurisdictions and sectors, and noted that private sector reliance on ratings also needs to be reduced. The FSB has further noted the challenge of developing alternative standards of creditworthiness and processes so that CRA ratings are not the sole input to credit risk assessment.
2. Specifically the FSB has stated: "The 'hard wiring' of CRA ratings in regulation has been wrongly interpreted as providing those ratings with an official 'seal of approval' and has reduced incentives for firms to develop their own capacity for credit risk assessment and due diligence. As demonstrated during the financial crisis, reliance on external ratings to the exclusion of internal credit assessments can be a cause of herding behaviour and of abrupt sell-offs of securities when they are downgraded ('cliff effects'). These effects can amplify pro-cyclicality and cause systemic disruption."²

¹ Thematic Review on FSB Principles for Reducing Reliance on CRA Ratings http://www.financialstabilityboard.org/wp-content/uploads/r_140512.pdf

² Thematic Review on FSB Principles for Reducing Reliance on CRA Ratings http://www.financialstabilityboard.org/wp-content/uploads/r_140512.pdf

3. In particular, the FSB has stated that national authorities need to focus on establishing stronger internal credit risk assessment practices, which, in some instances, might require a fully independent risk assessment (although the FSB has indicated that such an assessment might include CRA ratings as one indicator of credit risk). In response to the FSB's actions, its members prepared action plans, though these plans vary in terms of their scope, detail, and definiteness. Overall, the FSB has encouraged market participants to adopt alternatives to mechanistic reliance on CRA ratings, but has warned against replacing such mechanistic reliance with alternative mechanistic reliance, which could be lead to pro-cyclicality and herding behaviour.

Basel Committee & the Standardised Approach

4. In late 2014, the Basel Committee on Banking Supervision issued a new statement on standardised credit risk, and sought public comment until March 27, 2015.³ The Basel document seeks to strengthen existing capital requirements in several ways and is intended to supplant the existing credit risk standards approved by the Basel Committee in 2006 as part of the Basel II accords.
5. The main goals of the revision are outlined as:
 - Reducing reliance on external credit ratings.
 - Enhancing granularity and risk sensitivity.
 - Updating risk weight calibrations.
 - Increasing comparability with the internal ratings based approach.
 - Providing better clarity on the application of standards.⁴
6. ESMA awaits the conclusion of this important consultation and welcomes the comprehensive nature of the review.

IOSCO Committee 5 Good Practices within Asset Management⁵

7. On 25 June as a follow up to its Consultation Report on the topic, IOSCO issued its Final Report for Good Practices on Reducing Reliance on Ratings in Asset Management. The purpose of the report is to provide a set of good practices for reducing over-reliance on credit ratings in the asset management industry.
8. In total the report lists eight good practices that asset managers may consider when resorting to external ratings, namely:
 - 1) Asset Managers make their own determinations as to the credit quality of a financial instrument before investing and throughout the holding period.

³ Basel Committee on Banking Supervision Consultative Document: Revisions to the Standardised Approach.
<http://www.bis.org/bcbs/publ/d307.pdf>

⁴ <http://www.bis.org/bcbs/publ/d307.htm>

⁵ <http://www.iosco.org/library/pubdocs/pdf/IOSCOPD488.pdf>

- 2) Asset managers have the appropriate expertise and processes in place to perform credit risk assessment appropriate to the nature, scale and complexity of any investment strategy they implement and the type and proportion of debt instruments they invest in, and should refrain from investing in products / issuers when they do not have enough information to perform an appropriate credit risk assessment.
- 3) External credit ratings may form one element, among others, of the internal assessment process but do not constitute the sole factor supporting the credit analysis.
- 4) The manager's internal assessment process is regularly updated and applied consistently.
- 5) Where external credit ratings are used, asset managers understand the methodologies, parameters and the basis on which the assessment of a CRA was produced, and have adequate means and expertise to identify the limitations of the methodology and assumptions used to form that assessment.
- 6) Asset Managers review their disclosures describing alternative sources of credit information in addition to external credit ratings and make available to investors, as appropriate, a brief summary description of their internal credit assessment process, including how external credit ratings may be used to complement or as part of the manager's own internal credit assessment methods.
- 7) When assessing the credit quality of their counterparties or collateral, asset managers do not rely solely on external credit ratings and consider alternative quality parameters (e.g. liquidity, valuation, correlation etc.).
- 8) Where external credit ratings are used, a downgrade does not automatically trigger the immediate sale of the asset. Should the manager/board decide to divest, the transaction is conducted within a timeframe that is in the best interests of the investors.

IOSCO Committee 3

Sound Practices at Large intermediaries for assessing risk⁶

9. On 7 May 2015, IOSCO Committee 3 issued its own Consultation Report on sound practices at large intermediaries for assessing credit risk.
10. The purpose of this report is to identify sound practices regarding suitable alternatives to credit ratings for assessing credit risk in order to assist in reducing over-reliance on credit ratings by these large intermediaries, the proposed draft practices are as follows:
 - 1) Establish an independent credit assessment function that is clearly separated from other business units, including the development of appropriate policies and procedures to ensure that decision-making is not unduly affected by operations from other areas of the firm.

⁶ <https://www.iosco.org/library/pubdocs/pdf/IOSCOPD486.pdf>

- 2) Involve senior management in order to ensure the successful implementation of a robust credit assessment process, including promotion of a risk sensitive culture throughout the organisation. Such involvement would entail oversight of the credit risk assessment process by a dedicated risk management team that reports to high level management, such as a separate independent credit committee.
- 3) Establish a coherent oversight structure to ensure that the credit assessment process is properly implemented and adhered to, including the establishment of reporting lines and responsibilities that are clearly articulated and followed.
- 4) Take steps to ensure that a firm's governing committee receives an appropriate level of information on the amount of credit risk to which the firm is exposed. This may include policy exemptions, limit breaches, stress testing analysis concentrations, watch lists, and top exposures, among other things.
- 5) Invest in staff and other resources necessary to develop a robust internal credit assessment management system that appropriately reflects the nature scale and complexity of its business. This includes having in-house the necessary staff expertise and technological ability to analyse effectively the firm's portfolio and to stay abreast of market indicators.
- 6) Avoid exposure to particular credit risks whenever the firm does not have the internal capability to independently and adequately assess the exposure.
- 7) Take creditworthiness assessment capabilities into account when considering the firms business growth plans and deciding how to structure its portfolios or whether to take on additional leverage.
- 8) Incorporate a wide variety of qualitative measures into robust credit assessment processes in addition to quantitative measures. This can help a market intermediary firm avoid excessive concentration risk in certain areas and provide a more holistic view of creditworthiness than simply relying on quantitative factors alone.
- 9) Prescribe risk levels and investment appetites for the assessment of creditworthiness that focus on the fundamental value of the instrument to set limits and risk. These levels might distinguish between various categories, such as industry or on a geographical basis and be reflected in the policies and procedures that set out the operating standards that must be followed by teams or individuals responsible for the assessment of credit risk.
- 10) Subject non-investment grade financial products to enhanced scrutiny, including bifurcation of the internal ratings of investment and non-investment grade securities e.g. a separate review process.
- 11) Avoid mechanistically relying on external CRA Ratings. View such ratings as only one factor among several that may be used in a comprehensive credit assessment process. Carefully consider the effect of using external credit ratings as parameters to assess the creditworthiness of

investments or to decide whether to invest or disinvest. Recognise and understand the possible limitations of CRA ratings and become familiar with CRA credit risk assessment methodologies. For example, CRA ratings could be a lagging indicator of more general credit risks and do not always reflect the most recent factors affecting creditworthiness.

- 12) Strive to update and improve continually the firm's credit risk assessment practices to help ensure that they remain abreast of developments that could have a material adverse effect on the firm's portfolio and counterparty relationships.
- 13) Ensure internal audit and another independent party performs regular reviews of policies and procedures.

Summary

11. ESMA supports the role of global standard setting bodies in their efforts to reduce reliance on ratings stressing the importance that such initiatives take place in a coordinated manner. The stocktaking exercise of the Financial Stability Board provides a valuable international and cross sectoral overview of progress made so far as well as the difficulties facing national authorities in reducing reliance on ratings among their supervised entities.
12. The work of IOSCO in developing good practices and recommendations for specific types of intermediaries is also welcomed as a positive development and an example of this coordinated approach.
13. It will be important in a European context that any further initiatives to reduce reliance on ratings take these existing principles and practices into account to avoid unnecessary duplication or contradiction.

III. Lessons from Reducing Reliance on Ratings in the context of the United States

Process of Removal of References to Ratings by United States Federal Agencies⁷

14. Prior to the crisis NRSRO ratings featured heavily across a large section of financial regulation in the United States.
15. For example in 2008 the SEC stated that it had identified references to ratings in 44 of its rules or forms, proposing changes to 38 and recommending changes to 38 (deletion of references from 11, substitution of standards in 27).⁸

⁷ For a more detailed overview of the precise treatment of steps taken with regards to the removal of ratings from sectorial legislation concerning Banks, Central Bank Operations, Investment Fund Managers, CCPs, Securities Issuance and Securities firms please consult the United States submission to the Financial Stability Board peer review. [http://www.financialstabilityboard.org/wp-content/uploads/c_140429z.pdf?page_moved=1]

⁸ Report on Review of Reliance on Credit Ratings: <https://www.sec.gov/news/studies/2011/939astudy.pdf>

16. In its report to Congress of 2011⁹ the US Federal Reserve identified 46 references to, or requirements regarding, credit ratings within its Regulations. The majority of these references appearing in its capital adequacy guidelines for state member banks and bank holding companies (capital requirements).
17. Likewise in its own report to Congress¹⁰ the FDIC also identified 6 of its own regulations that contained references to credit ratings, with 66 sections containing specific references to credit ratings or credit rating agencies. As outlined in the report submitted to congress these references were generally used for the purposes of capital calculations, risk assessments and disclosure purposes.
18. With regards to the promotion of alternatives standards of creditworthiness further details on the SEC's progress in this regard for Broker Dealers and Money Market Funds are discussed in section IX "Alternative Internal Assessment Methodologies".

Dodd Frank Act 2010

19. As the key piece of legislation for the reduction of reliance on ratings in the United States the Dodd Frank Wall Street Reform and Consumer Protection Act 2010 sought to remedy identified rating agencies shortcomings by simultaneously deemphasising reliance on credit ratings as proxies for credit risk as well as enhancing disclosures and imposing greater public oversight¹¹.
20. Dodd Frank Section 939a required each federal agency to review any references to or requirements in such regulations regarding credit ratings. Following which each agency was required to modify any identified regulations and remove any reference to or requirement of reliance on credit ratings and substitute alternative standards of credit-worthiness as each respective agency shall determine as appropriate statutory references to ratings.
21. However, even though the U.S. Congress cited many of the most important references to CRA ratings in the Dodd-Frank legislation, including banking and securities references, it failed to provide for the removal of every statutory reference to ratings. For instance, the Dodd-Frank legislation did not remove statutory references to ratings in Title 20 with respect to student loans, Title 23 with respect to highways and infrastructure finance, Title 47 with respect to telephone media rules and loan guaranties.¹²
22. In addition, and in a situation not dissimilar to that in the EU, it is noted that while there has been an effort to review and remove references to ratings at a federal level, reference to ratings remain within State level rules in areas governing investment by public funds¹³ as well as state banking regulations.¹⁴

⁹ Report to the Congress on Credit Ratings July 2011 <http://www.federalreserve.gov/publications/other-reports/files/credit-ratings-report-201107.pdf>

¹⁰ References to Credit Ratings in FDIC Regulations: <https://www.fdic.gov/regulations/reform/LA11-NI0117.pdf>

¹¹ Jeffrey Manns, Downgrading Rating Agency Reform: http://papers.ssrn.com/sol3/papers.cfm?abstract_id=2174802

¹² Aline Darbellay, Frank Partnoy: http://papers.ssrn.com/sol3/papers.cfm?abstract_id=2042111

¹³ <http://codes.ohio.gov/orc/135.143>

¹⁴ <http://codes.ohio.gov/orc/1151.34>

Conclusion

23. In contrast to the situation in the United States there has been no mandated removal of references to credit ratings within EU legislation. The experience within the US does however highlight the difficulties involved in this approach, with the potential for state level discrepancies for certain types of financial institution or federal level discrepancies for certain types of financial product.

IV. References to Ratings in EU Sectoral Legislation

24. In 2009 the Joint Forum of Financial Conglomerates published a survey that revealed financial regulators continued to rely on credit ratings for the purposes of prudential regulatory requirements.¹⁶ Composed of thirteen members, the Joint Committee classified that the main uses of external ratings within the regulatory frameworks were for the purposes of:

- Calculating Regulatory Capital Requirement.
- Classifying the riskiness and concentration level of assets for regulated institutional investors, such as pension funds and life insurance companies.
- Assessing the credit risk of securitised instruments based on the underlying riskiness of their assets.
- Assessing the credit risk of issuers of listed securities as part of overall capital market disclosures requirements.
- Determining eligibility of a prospectus for public offering.

25. These conclusions have been broadly reflected within the work of the Joint Committee in the area of reducing reliance on ratings¹⁷, the following is a cross sectoral illustration of instances where references to credit ratings arise within EU legislation that have been identified throughout the course of this work.

Credit Institutions

26. Within the EU the CRR and CRD IV are the principal legal source of reference to ratings for credit institutions.
27. In accordance with the CRR, external ratings are used for determining capital requirements through direct or indirect reference to the rule on own fund requirements in the banking book. References to external credit ratings are easily identifiable in the following areas.

¹⁵ <http://codes.ohio.gov/orc/1161.54>

¹⁶ Joint Forum Stocktaking on the use of credit ratings: <http://www.bis.org/publ/joint22.pdf>

¹⁷ Joint Committee Consultation Paper on Mechanistic references to credit ratings in the ESAs guidelines and recommendations https://www.esma.europa.eu/system/files/jc-cp-2013-02_mechanistic_references_to_credit_ratings.pdf, Joint Committee Final Report on mechanistic references to credit ratings in ESA's guidelines and recommendations https://www.esma.europa.eu/system/files/jc_2014_004_final_report_mechanistic_references_to_credit_ratings_rect.pdf, Joint Committee Discussion Paper on the use of credit ratings by financial intermediaries https://www.esma.europa.eu/system/files/jc_dp_2014_01_-_discussion_paper_on_use_of_credit_ratings_by_financial_intermediaries.pdf

28. **Credit risk:** under the standardised approach, credit quality may be determined by reference to the credit assessments of ECAIs or the credit assessments of export credit agencies in particular concerning assignment of risk weights to exposures to central governments and central banks, regional governments and local authorities, public sector entities, institutions, corporate, covered bonds, exposures in the form of units or shares in CIUs, exposures as credit protection for n-th default baskets, a securitisation or re-securitisation position.¹⁸ For the credit risk mitigation techniques¹⁹, i.e. the collateral framework, the credit quality of the protection provider may be determined by references to the credit assessments of ECAIs. Also under the internal rating-based approach²⁰ securitisation and re-securitisation position have a credit quality determined by reference to the credit assessments of ECAIs.
29. **Counterparty credit risk:** under the standardised method²¹, interest rate risk positions to hedging sets may refer to external ratings (although of very limited relevance in practice).
30. **Market risk:** under the standardised approach for specific risk, references to external rating play an important role in the own funds requirement for debt instruments²² and the standardised approach for own funds requirement for securitisation instruments.²³ Although less material in practice, references to ratings are also present in the allowance for hedges by first and nth-to default credit derivatives²⁴. The scope and the parameters in the internal model approach to measure the incremental default and migration rely on external ratings migration.²⁵
31. **Large exposures:** Credit quality of the protection provider may be determined by references to the credit assessments of ECAIs.²⁶

Examples of Tables referencing Credit Quality Steps and Risk Weightings within CRR

Article 120 Exposures to Rated Institutions²⁷

1. *Exposures to institutions with a residual maturity of more than three months for which a credit assessment by a nominated ECAI is available shall be assigned a risk weight in accordance with Table 3 which corresponds to the credit assessment of the ECAI in accordance with Article 136.*

18 Articles 114, 115, 116, 119-121, 122, 129, 132, 134 (6), 251 of the CRR.

19 Article 192 ff. of the CRR

20 Article 261 of the CRR.

21 Article 281(2) of the CRR.

22 Article 336(1) of the CRR.

23 Article 337 (1) of the CRR.

24 Article 347 (1) of the CRR.

25 Article 374 (1) of the CRR

26 Article 401 (1) of the CRR

²⁷ EBA Interactive Single Rule Book Article 120 Exposures to Rated Institutions: <https://www.eba.europa.eu/regulation-and-policy/single-rulebook/interactive-single-rulebook/-/interactive-single-rulebook/article-id/1224>

Table 3

Credit Quality Step	1	2	3	4	5	6
Risk Weight	20%	50%	50%	100%	100%	150%

Article 121 Exposures to unrated institutions²⁸

1. *Exposures to institutions for which a credit assessment by a nominated ECAI is not available shall be assigned a risk weight in accordance with the credit quality step to which exposures to the central government of the jurisdiction in which the institution is incorporated are assigned in accordance with Table 5.*

Table 5

Credit Quality Step to which central government is assigned	1	2	3	4	5	6
Risk Weight of exposure	20%	50%	100%	100%	100%	150%

32. The ESAs also introduced references to external ratings in additional reports and consultation papers which may be translated into regulation in the near future. For example, the EBA report²⁹ on HQLAs and the ESAs consultation paper on margin requirements for non-centrally cleared OTC derivatives.³⁰

Investment Firms

33. As is the case with credit institutions, CRD IV and CRR are the primary legal basis for the reliance on credit ratings by investment firms. Similar to credit institutions this reliance may arise with respect to the calculation of credit risk within the standardised approach, where institutions use external ratings to assign risk weights to exposures in order to determine capital requirements, calculation of collateral haircuts and liquidity requirements.

Insurance/Reinsurance Entities

34. External credit assessments form a key part of the Solvency II framework. Capital requirements are calculated using a standard formula or, subject to supervisory approval, a full or partial internal model. Article 4 sets out the general requirements for the use of external credit assessments, and establishes

²⁸ EBA Interactive Single Rule Book CRR Article 121 Exposures to Unrated Institutions <https://www.eba.europa.eu/regulation-and-policy/single-rulebook/interactive-single-rulebook/-/interactive-single-rulebook/article-id/1230>

²⁹ Report on appropriate uniform definitions of extremely high quality liquid assets (extremely HQLA) and high quality liquid assets (HQLA) and on operational requirements for liquid assets under Article 509(3) and (5) CRR.

³⁰ Joint Consultation on draft RTS on risk-mitigation techniques for OTC-derivative contracts not cleared by a CCP (JC/CP/2014/03).

that insurance or reinsurance undertakings may use an external credit assessment issued or endorsed in accordance with the CRA Regulation for the calculation of the Solvency Capital Requirement.

35. External credit ratings are used to estimate the market risk ('market risk module'), and most specifically the spread risk ('spread risk' sub-module) and the concentration risk ('market risk concentration' sub-module) of insurance and reinsurance undertakings' exposures when they use the Standard Approach.
36. They are also used to estimate the counterparty risk ('counterparty default risk module'). Counterparties' default probabilities are indeed assigned in accordance with the credit assessments of the exposure made by (a) nominated ECAI(s).
37. Paragraphs 5 & 6 of Article 141 of the Draft Delegated Acts explicitly mention the cases in which undertakings shall have their own internal credit assessments of items (securitisations of type 2, resecuritisation positions, etc.), and allocate them directly to one of the CQS through a credit quality assessment scale.
38. Article 109a of Solvency II requires the ESAs through the Joint Committee to develop draft implementing technical standards on the association of ECAIs to an objective scale of credit quality steps applying the steps specified in accordance with Article 111(1)(n) of Directive 2009/138/EC governing the general requirements on the use of credit assessments states that insurance or reinsurance entities may use an external credit assessment for the calculation of the Solvency Capital Requirement where it has been issued or endorsed by an ECAI in accordance with the CRA regulation.
39. In Solvency II this mapping will serve the purpose of assigning risk factors which depend on the CQS of the exposure as set out in Article 176,178,179,180,181,185,186,187,193,199.
40. An example of how this mapping could be applied is Article 199 (2) which sets out that a "single name exposure i for which a credit assessment by a nominated ECAI is available shall be assigned a probability of default PDi , in accordance with the following table"

Credit Quality Step	0	1	2	3	4	5	6
Probability of Default	0.002%	0.01%	0.05%	0.24%	1.20%	4.2%	4.2%

Investment Managers/AIFMD/UCITS

41. Within the EU, all investment funds (or their managers) fall under either the UCITS Directive or the AIFMD. Both directives place obligations on investment fund managers regarding the establishment of

sound risk and liquidity management policies and procedures.³¹ These requirements are aimed at ensuring that the risk profile of the fund's investments are suitable to its redemptions policy and that the adopted mechanisms, procedures and techniques are proportional to the nature, dimension and complexity of the services and activities provided by the management company and their managed CIS, while also being consistent with their risk profile.

42. The UCITS Directive and AIFMD³² also aim at ensuring that the risk management policy of a management company should predict and analyse the investment's contribution to the composition, liquidity, risk and income profiles of the CIS's portfolio before execution. These analyses should be based on reliable and updated information that is both qualitative and quantitative.
43. Where an in-depth credit analysis based on an internal credit quality assessment of instruments and issuers does not take place, management companies will at least have to conduct a plausibility check of such external ratings by comparison with economic and business indicators and market data. In these situations, too, the credit quality assessment should include qualitative factors additional to quantitative factors.

Central Counterparties

44. As outlined in the Joint Committee Discussion Paper on the use of credit ratings by financial intermediaries, EMIR³³ and its related Regulatory Technical Standards have introduced regulatory requirements for CCPs to ensure they do not rely on external credit ratings in a mechanistic fashion.³⁴
45. Specifically, the RTS requires that CCPs employ a defined and objective methodology which does not rely solely on external opinions in performing the assessment of the level of credit (and/or market) risk associated with:
 - a. The type of assets accepted as collateral, including:
 - i. The credit risk of financial instruments' issuer (Annex 1, section 1 (a) of RTS).
 - ii. The market risk of the financial instruments (Annex 1, section 1 (b) of RTS).
 - iii. The determination of haircuts to apply to collateral (art.41.2 (a) of RTS).
 - iv. The determination of concentration limits ensuring sufficient collateral diversification (art. 42.3(b) of RTS)).
 - b. The issuers of bank guarantees accepted as collateral (Annex 1, section 2 (a) of RTS).

³¹ See in particular Article 15 and 16 of the AIFMD, and Article 38-40 of Directive 2010/43/EU (the UCITS Level 2 Management Company Passport Directive)

³² In the AIFMD context, see in particular Articles 38-42 of the AIFMD Level 2 Regulation. For UCITS, the Risk Management Principles adopted by CESR are also relevant (http://www.esma.europa.eu/system/files/09_178.pdf).

³³ Regulation (EU) No 648/2012 of the European Parliament and of the Council of 4 July 2012 on OTC derivatives, central counterparties and trade repositories.

³⁴ Commission Delegated Regulation (EU) No 153/2013 of 19 December 2012 supplementing Regulation (EU) No 648/2012 of the European Parliament and of the Council with regard to regulatory technical standards on requirements for central counterparties.

- c. The debt instruments that can be considered highly liquid financial instruments (Annex II.1 (b) of RTS), for the purposes of eligibility of such instruments as collateral and as instruments in which CCP's financial resources can be invested.
- d. The authorised credit institutions and third country financial institutions that can be used as depositories for:
 - i. The deposit in custody of financial instruments posted as collateral, or default fund contributions or contributions to other resources (art 44.1.(b) and (c) of RTS).
 - ii. The deposit of cash (art 45.1.(b)(i) and (ii) of RTS).
 - iii. The deposit of gold (Annex 1, section 3 (c) and (d) of RTS).

46. As all CCPs authorised under EMIR have been deemed compliant with the above requirements this can be seen as a positive example of how mechanistic reliance on ratings can be mitigated within EU Sectoral legislation.

V. References to Ratings in National Legislation and Guidelines

47. The following section presents a screening of references to credit ratings within national jurisdictions identified by ESMA. The source for this feedback is a questionnaire ESMA issued to national competent authorities in February 2014³⁵.

Croatia

Insurance and Reinsurance Undertakings

48. *Ordinance on types and characteristics of assets covering technical provisions, rules for diversification and limitations on asset investments, their valuation and compliance with the law, rules for the use of derivative financial instruments, as well as the manner and time limits for reporting (Official Gazette 119/09, 155/09, 1/12, 39/12, 79/13, 105/13).*

49. Article 10 of this ordinance says that an Issuer referred to in Article 115. paragraph 1. subparagraph 1. i 3. of the Insurance Act (Official Gazette 151/05, 87/08, 82/09, 54/13, hereinafter: Insurance Act) and Article 122. paragraph 1. subparagraphs 1. i 3. of the Insurance Act i.e. guarantor as referred to in Article 115. paragraph 1. subparagraph 2. i 4. of the Insurance Act and Article 122. paragraph 1. subparagraphs 2. i 4. of the Insurance Act must have at least foreign currency long-term credit rating equal to Republic of Croatia credit rating according to the Standard & Poor's or Moody's.

³⁵ For further details with regards to national action plans for reducing reliance on ratings and references to ratings in national sectoral legislation please see Basel Joint Forum Stocktaking exercise (<http://www.bis.org/publ/joint22.pdf>) and the FSB peer review (http://www.financialstabilityboard.org/wp-content/uploads/r_140512.pdf).

Hungary

50. Regarding reinsurance, the National Bank of Hungary requires that insurance undertakings use reinsurers rated by external CRAs and the rating should be above a prescribed grade.

Ireland

51. *The Central Bank of Ireland has issued Guidelines³⁶ on the reinsurance cover of primary insurers and the security of their reinsurers which state that for reinsurance/retrocession protection:*

“The rating of a reinsurer by an independent source is a second security criterion that may be used in conjunction with size. A rating is a relative benchmark, based on rigorous, objective and independent analysis and opinions developed using a consistent and predictable methodology by experts in the complex field of global financial markets.”

52. *In asset selection, investment risk appetites must include:*

“An exhaustive list of permissible investments and, as appropriate, derivative instruments, including details of any restrictions as to markets (e.g. only securities listed at specified stock exchanges), minimum rating requirements or minimum market capitalisation, minimum sizes of issues to be invested in, diversification limits and related quantitative or qualitative limits.”

53. Similarly for investment funds there are examples where the Irish regulatory framework provides for some references to credit ratings. These are direct references imposed by the Central Bank as conditions on investment funds under powers granted by the various pieces of investment fund legislation.

54. The Central Banks' regulatory requirements require the following in relation to collateral received by investment funds (UCITS³⁷ and Retail AIFs³⁸):

- Collateral provided to an investment fund (UCITS and Retail AIF) to reduce counterparty exposure: Where non-cash collateral is not rated A-1, conservative haircuts must be applied. Cash collateral must only be invested in risk-free assets.
- Collateral obtained by an investment fund (UCITS and Retail AIF) pursuant to a securities lending or repo transaction: Where non cash collateral is not rated A1, conservative haircuts must be applied. Investment of cash collateral in money market funds is restricted to AAA rated funds.

Spain

55. **Art 50.2.b. Royal Decree 1082/2012:** A CIS can invest up to 35% of its assets in transferable securities or money market instruments issued by the same body if they are issued or guaranteed by

³⁶ <http://www.centralbank.ie/regulation/industry-sectors/insurance-companies/reinsurance-companies/Pages/requirements-guidance.aspx>

³⁷ <http://www.centralbank.ie/regulation/industry-sectors/funds/Documents/UCITS%20NOTICES.pdf>

³⁸ <http://www.centralbank.ie/regulation/industry-sectors/funds/aifmd/Documents/AIF%20Rulebook%20JULY%202013.pdf>

a third country with a rating not less than that of the Kingdom of Spain at all times. Also, the management company shall conduct a comprehensive analysis of this issue in order to prove that solvency.

56. **Orden EHA 2682/2012:** A special category of Spanish mutual funds are those that invest most of their assets in Spanish Treasury Securities. These funds are allowed to invest up to 30% of their total assets in fixed income, deposits in credit institutions and money market instruments different from Spanish Government Debt, as long as the issuers have a credit rating awarded by a CRA not lower than that of Spanish Kingdom in the moment when the management company make the investment decision. If the issuance loses the credit rating later, the CIS is allowed to maintain this investment as long as the management company determines, according its internal credit assessment, that the instrument has an enough creditworthiness.
57. **Rule 20 of the Circular 6/2010 of the CNMV about CIS investment on derivatives instruments:** A CIS can enter into an OTC contract as long as the management company, after carrying out an internal assessment, concludes that the counterparty creditworthiness is enough to meet its commitments.
58. **Rule 26.5 of the Circular 6/2010 of the CNMV about CIS investment on derivatives instruments,** A CIS to invest in derivatives instruments exceeding the established market and counterparty risk limits, as long as a third entity, different from the CIS or the management company, guarantees a minimum performance of a CIS. This guarantor should have a credit rating not lower than that of the Kingdom of Spain at all times, and also should have sufficient solvency in opinion of the management company to fulfil its obligations as a guarantor.
59. **Rule 4 of the Circular 6/2009, regulation on management company internal control:** Management companies should not only take into account the CRA ratings when assessing the portfolio of a CIS and make their own credit assessment.
60. **According to Circular 2/2013, regulation of KIID and prospectus of the CIS,** prospectus includes, if applicable, CIS rating. KIID, in the investment policy description, shall include the kind of fixed income asset allowed to invest in, and, if applicable, any minimum rating required.

Latvia

61. **Law on Insurance Companies and Supervision Thereof, Article 42:** Debt securities may be accepted as cover for technical provisions if they have been admitted to trading on a regulated market of the Republic of Latvia or another Member State, or an OECD Member State or have been registered in the Republic of Latvia or another Member State, or an OECD Member State and at least one international rating agency has assigned a rating grade in the investment-grade category. The above debt securities may not be accepted as cover for technical provisions where it has been established that any of rating agencies has assigned a rating category lower than the investment-

grade category. This restriction shall not apply to debt securities of the Republic of Latvia or another Member State, or an OECD Member State that have been issued by the State or local governments.

62. **With regard to reinsurance cessions and retrocessions to a non-member state insurer or reinsurer the following requirement applies, Article 60:** The insurance company or the branch of the non-Member State insurer is entitled to transfer risks for reinsurance only to a non-Member State insurer or reinsurer having valid licences to provide insurance or reinsurance in the home (registration) country and whose rating assigned by international rating agencies belongs to the investment grade category and whose ability to perform its obligations has not been questioned by any international rating agency.
63. **With regard to reinsurance retrocessions to a non-member state insurer or reinsurer the following requirement applies, Article 67:** The reinsurance company or the branch of the non-Member State reinsurer is entitled to transfer risks for retrocession only to a non-Member State insurer or reinsurer having valid licences to provide insurance or reinsurance in the home (registration) country and whose rating assigned by international rating agencies belongs to the investment grade category and whose ability to perform its obligations has not been questioned by any international rating agency.
64. **Law on Private Pension Funds, Article 23:** The assets of a pension scheme may be invested in the following...2) Securities or money market instruments issued or guaranteed by member states of the Organisation for Economic Cooperation and Development provided that the long-term credit rating of the relevant state in foreign currency has been evaluated as investment-grade by international rating agencies.

VI. References to Ratings in the Collateral Assessment Frameworks of EU Central Banks

65. In order to better understand the role of ratings within the collateral assessment frameworks of EU Central Banks, ESMA through its role in the Joint Committee of the ESAs, requested the European Systemic Risk Board to provide its view regarding the reliance on credit ratings in the area of collateral eligibility assessments by central banks and to highlight possible steps to reduce reliance therein.
66. In response the ESRB has outlined to ESMA the following situation among key EU central banks:

Eurosystem

67. In the euro area setting, the Eurosystem accepts a wide range of marketable and non-marketable assets as eligible collateral in central bank credit operations. The list of these assets has been significantly broadened in recent years to enhance the functioning of the monetary policy transmission mechanism. These measures have also mitigated systemic risks, including those which might involve cliff-effect or herding behaviour, and therefore might negatively affect large parts of the financial

market.

68. Although the reliance on CRA ratings in collateral eligibility criteria has been tangibly reduced, an ultimate and complete elimination of their use may prove difficult. Nevertheless, the practices of the Eurosystem are consistent with the Financial Stability Board principles on reducing reliance on CRA ratings. In fact, the Eurosystem does not rely on CRA ratings in a mechanistic way. For instance, the Governing Council has the right to determine on a discretionary basis if an asset fulfils the Eurosystem credit quality requirements so as to become eligible as collateral for credit operations with the central bank. The ECB has repeatedly used this possibility in recent years in the context of assets from countries under an economic and financial adjustment programme.

69. In the same vein, to further reduce the reliance on external ratings provided by External Credit Assessment Institutions (ECAIs), the internal risk assessment capabilities are being enhanced within the Eurosystem Credit Assessment Framework (ECAAF). In particular, more national central banks are developing their in-house credit assessment systems, providing the Eurosystem with credit quality data alternative to CRA ratings. Another example is represented by credit risk assessments for the recent Asset-Backed Securities Purchase Programme (ABSPP): CRA ratings represent only one of the eligibility criteria and appropriate credit risk and internal due diligence procedures are conducted so that the Eurosystem's own informed opinion is the main driver for the purchase decision.

Bank of England

70. Outside the Eurosystem, the Bank of England has taken steps to reduce its reliance on CRAs for the purposes of determining collateral eligibility for its operations. These steps have included removing any reference to ratings in its eligibility criteria. This means that a CRA rating is no longer required for collateral to be made eligible; however, when one CRA rating is available, it is still used as valuable information which is considered as part of the Bank of England's assessment. The majority of collateral now eligible in the Bank of England's operations is also positioned as loan pools (or credit claims), which require no input from CRAs as the eligibility, risk and valuation assessment is completed in-house.

Sveriges Riksbank

71. Sveriges Riksbank accepts a broad range of marketable securities as eligible collateral. In the acceptance process, external ratings play an important role and will likely remain important for some time. However, the Riksbank does not rely on external ratings in a completely mechanistic way. It always has the possibility to finally decide if a certain security meets its own requirements for creditworthiness, regardless of any external ratings. Moreover, if a security has its external rating downgraded in a way that would make it ineligible, there is a discretionary process that involves a broad internal consultation, prior to a potential exclusion of the security from the list of eligible assets.

Narodowy Bank Polski

72. As regards the credit rules determined by Narodowy Bank Polski (NBP), CRA ratings represent only

part of the overall assessment process, since balance sheet and financial market data are also important in this process. These data cover the assessment of issuer and collateral credit risks. Nevertheless, it must be taken into consideration that - in the Polish case - internal credit assessment may be problematic, especially due to the limited access to the qualitative and quantitative data needed. Moreover, the perceived lack of transparency of the assessment process could be a source of reputational risk. Therefore, introducing an in-house internal rating system at the NBP would be of great importance to foster the development of the domestic bond market, by allowing a broader spectrum of bonds to be eligible as collateral in central bank operations.

VII. Views of Market Participants

73. On 23 December 2014 the Joint Committee published a Discussion Paper on the use of Credit ratings by financial intermediaries – Article 5(a) of the CRA regulation.
74. Many respondents to the paper identified credit ratings as a common language used by all market participants that facilitate comparison of credit risk among asset classes. Independence, expertise, experience and the access to information that CRAs possess were all highlighted as advantages of credit ratings.
75. The analysis of responses confirmed that credit ratings are used across a wide variety of different sectors including investment management (asset selection and allocation), risk management (credit and counterparty risk, investment limits), selection of eligible collateral and level of haircut. In addition, ratings are used as an input for the implementation of reporting requirements as well as for marketing and sales purposes.
76. It was indicated that external ratings feature prominently in credit institutions own investment business and in their customers' security deposits business. However ratings play a less important role for credit institutions in their lending business as clients do not usually have an external rating. An additional response indicated that small and mid-size credit institutions may be deterred to develop sound internal creditworthiness assessment processes due to the substantial resources needed.
77. Smaller investment firms may typically rely more heavily on external ratings as they do not have the technical ability and resources to create an entire internal rating model for credit risk estimation. At the same time however, larger firms find it difficult to cover all segments of the market and as such use external ratings as a reference.
78. Professional investors such as, but not limited to, banks and insurance undertakings still have strong requirements for use of ratings resulting from regulatory frameworks, namely: CRD IV, Solvency 2, local regulations and ISDA master agreements/CSA documentation for derivative transactions.
79. Current alternatives used by the market participants highlighted in responses include:

- Internal assessments,
- Credit-spreads,
- Financial information (e.g. credit ratios, profitability and leverage ratios),
- Reports of the entities that are assessed,
- Market data on transactions and prices (e.g. CDS spread),
- Brokers and investment companies' research reports,
- Plausibility checks,
- Stress tests and concentration-limits.

80. Some market participants, e.g. fund investors, IORPS and insurance undertakings, review credit rating methodologies and rely on credit ratings issued by different agencies as to reduce dependence on one single CRA's opinion.

81. One respondent stated that it is very difficult to find an efficient alternative to external ratings in the case of collateral for repos and swaps and in general in all cases where external ratings are used as a common language to limit credit exposure in investment contracts, for example to define which type of collateral could be posted. Moreover, according to some respondents, internal ratings determined by contractual parties could raise conflict of interests and investors might prefer third-party opinions.

82. Responses also highlighted that while large asset managers generally try to anticipate downgrades they also implement some mitigation provisions in contractual agreements such as: a grace period following a downgrade whereby the asset manager can delay closing the position or keep it till maturity; a requirement to consult the investor before taking action following a downgrade; a wording in funds prospectuses referring to the use of additional analysis criteria such as market or internal credit risk assessments in line with the CRA Regulation.

83. One respondent provided the following overview of the different criteria used for the evaluation of corporate and financial issuer demonstrating possible differences in approach towards the evaluation of these categories of issuer.

Corporate issuer

- Understanding of the issuer's business lines, underline market trends, risk related to its clients/suppliers, competitive environment, technological and regulatory developments.
- Relevance of issuer business strategy, governance and shareholders composition.
- Financial statements.
- Credit ratio analysis, profitability, interest coverage and leverage metrics.
- Liquidity of the issuer.

- Event risk related to potential mergers & acquisitions.
- Litigation risk.
- Maturity and seniority of debt, documentation including change of control clauses, coupon step-ups/step downs, call features.
- Understanding of credit rating agencies' views of the issuer to anticipate any external rating changes.

Financial Issuer

- Definition of the business profile and understanding of the issuer's business lines.
- Geographic diversification and market positioning in the different countries.
- Relevance of issuer business strategy, governance and shareholders composition.
- Impact on the issuer from regulatory constraints and jurisdictions.
- Maturity and seniority of debt and related risk such as non-payments of coupon and loss absorbing capacity.
- Financial statements.
- Credit ratio analysis, profitability, interest coverage and leverage metrics, liquidity.
- Litigation risk.
- Understanding of credit rating agencies' views of the issuer to anticipate any external rating changes.
- For covered bonds the legal framework of each jurisdiction as well as the cover pool quality of each programme.

VIII. Analysis of Potential Substitutes for Credit Ratings

84. To further develop the discussion on possible alternatives to credit ratings ESMA procured a third party report from Professor Frank Partnoy of the University of San Diego. What is presented here is the element of the report that discusses the use of alternative metrics for the assessment of risk. These will be addressed here under two main categories of substitutes, namely market based alternatives and internal assessment alternatives.

85. Market based alternatives are based on market-based pricing information, and can include:

- Bond prices.
- Credit spreads.
- Pricing of comparable fixed income instruments and related securities.
- Credit default swap pricing information.
- Credit default swap spreads for comparable instruments.

86. Some of the advantages of market-based alternatives are that they aggregate information among a

range of market participants and reflect actual external supply and demand for particular instruments. To the extent market-based alternatives are available, they frequently are relatively low cost and it has been demonstrated that they generally are more accurate and responsive than CRA ratings.

87. Internal assessment alternatives can include various internal risk assessment methodologies, including:

- Default statistics.
- Financial indices.
- Securities-related research.
- Financial modelling.
- Analysis of underlying assets (particularly for structured finance instruments).
- Degree of volume and liquidity in the relevant markets.
- Analysis of the relevant market.
- Analysis of the structural aspects of the relevant instruments (including priorities and enhancements).

88. Some of the advantages of internal assessment alternatives is that they reflect an institution's own analysis and expertise, and can be customised based on a particular understanding of an institution's needs. Internal assessment can be costly, depending on the type of assessment.

89. There are numerous approaches under each category of alternatives. Moreover, various aspects of each category can be combined to harness the advantages of each. The following sections discuss these approaches in further detail, along with various statistical techniques that could be used to avoid informational irregularities and potential moral hazard, and the appropriate historical time frames for substitute data for market based alternatives.

a. Bond Pricing Information

90. Bond pricing information is a strong candidate under certain circumstances as an appropriate substitute for credit ratings. There are a range of data based on bond prices that potentially could be used as substitutes, including credit spreads, pricing of comparable fixed income instruments, and pricing of related securities.

91. Credit spreads reflect market participants' assessment of the credit risk associated with a bond. A credit spread generally describes the difference between the yield to maturity of a particular bond and the yield to maturity of a government bond of similar structure and maturity. For example, if a corporation has issued 10-year bonds, then the credit spread could be calculated by subtracting the yield to maturity on those bonds from the yield to maturity of a 10-year government bond.

92. Credit spreads are a commonly used statistic in the financial markets. They are not difficult to

calculate, although there can be nuances in the assessment of credit spreads, depending on the structural features of bonds (e.g., callability, amortization) and on the availability of comparable government bond pricing information. Market participants commonly calculate credit spreads on bonds based on pricing information, and construct “credit curves” for particular issuers – corporate or sovereign – based on the price points derived from bonds of various maturities.

93. Likewise, the pricing of comparable fixed income instruments and related securities can be used to provide market-based information about the credit risk associated with particular instruments. For example, one might obtain information about the credit spreads associated with similar and competing corporations with respect to corporate bonds, or similar countries with respect to sovereign bonds. One might obtain information about the credit spreads associated with different bond risks during different periods of time. All of this information can be helpful in assessing the risk of a particular credit. Moreover, there is substantial evidence that bond credit spreads are correlated with actual default experience.
94. Some market participants have criticised the potential use of bond pricing information, for various reasons. One argument is that bond prices are volatile, or reflect short-term market changes that might not matter to a particular investment or regulatory objective. At the outset, it is a debatable proposition whether bond price volatility or short-term bond price changes should be irrelevant to such objectives. Market reactions, even in the short term, can be valuable indicators of information about risk. Bonds with high price volatility generally pose risks that arguably should be taken into account by both institutions and regulators, even if there is little or no credit rating volatility associated with such bonds.
95. Nevertheless, to the extent there are concerns about price volatility or short-term price changes, those concerns can be overcome by using statistical techniques, such as rolling averages of price information. For example, the use of a 30-day or 90-day rolling average of bond credit spreads or bond pricing information.
96. Using a rolling average would make it more difficult for a market participant to trade strategically to affect a bond issue’s price in an advantageous way, thus reducing moral hazard. Moreover, a longer-term rolling average would not be subject to the same criticism with respect to volatility and the short-term nature of bond prices.
97. The key question is the moral hazard question: whether market participants could manipulate a market-based measure (for example, by buying or selling in order to trigger a regulatory consequence). If the markets that regulators are relying on are sufficiently deep, and the time period of the rolling average is sufficiently long, that degree of manipulation is unlikely. A method that warrants consideration is to take into account lagged market-based measures, for instance 30-day or 90-day rolling averages. The advantage would be to remove the volatility arising out of a day-to-day basis measure. It will in any event be important to go beyond a simple letter rating of risk.

98. Rolling averages of market prices at least potentially reflect a wider range of available information than credit ratings, and may be a more timely and accurate measure of credit risk. Rolling averages also more accurately reflect available information than credit ratings and are not likely to be subject to manipulation or abuse.
99. Market participants could therefore select the optimal time length to use, and could implement delays of weeks, months, or even longer if appropriate. Market prices reflect valuable information in both the short-term and the longer-term, and they therefore are a potentially useful substitute for credit ratings.

b. Credit Default Swap Pricing Information

100. In addition to bond pricing information, for many counterparties there is available pricing information for credit default swaps, or CDS. In a typical CDS transaction, one counterparty (the buyer of protection) agrees to pay a periodic premium to the other counterparty (the seller of protection). In return, the seller of protection agrees to compensate the buyer of protection if a reference entity specified in the CDS contract experiences a default or similar “credit event.” For simple CDSs, the reference entity might be a corporation or government entity. For more complex CDSs, the reference entity might be a portfolio of structured financial instruments. Parties usually document the various CDS terms through a standard ISDA or similar form agreement.
101. CDS “prices,” as measured in the market, represent the size of the premium paid by the buyer of protection and are generally known as CDS “spreads.” CDS spreads change over time based on supply and demand for particular CDS contracts. CDS spreads are analogous to insurance premiums and similarly reflect market participants’ assessment of the risk of a default or credit event associated with the underlying obligation.
102. Many CDSs are widely and deeply traded, and they help to reflect market information about the credit risk of underlying financial obligations. CDS markets generally reflect valuable information, and reflect that information more promptly than changes in CRA ratings, even during periods of intense market discord. For example, CDS spreads increased during 2007 and 2008 as information became available showing that the probability of defaults by financial institutions was increasing. During this same period, CRA ratings nevertheless remained relatively unchanged.

c. Internal Risk Assessment Methodologies

103. In addition, or in combination, financial institutions can and do use internal risk assessment methodologies as alternatives to CRA ratings. Internal risk assessment alternatives can incorporate market-based pricing information to varying degrees, and also can incorporate other factors involving internal assessments, judgment, and independent analysis.
104. It is worth considering the approaches identified by the U.S. Securities and Exchange Commission in this context. The SEC has identified several factors that financial institutions may consider when

assessing credit risk. For example, with respect to broker-dealer considerations of whether issues of commercial paper, nonconvertible debt, or preferred stock are of minimal credit risk, the SEC has cited the following factors: (1) credit spreads; (2) securities-related research; (3) internal or external credit risk assessments; (4) default statistics; (5) inclusion in an index; (6) priorities and enhancements; (7) price, yield and/or volume; and (8) asset class-specific factors. See Removal of Certain References to Credit Ratings under the Securities Exchange Act of 1934, 76 Federal Register at 26552–26554.

105. Note that the SEC’s alternative approach is a subjective one in that it permits financial institutions to make credit assessments in the first instance without reference to specific objective criteria, such as CRA ratings. It also relies extensively on the market-based measures noted in the subsection above. Yet it also inevitably involves internal assessments and analysis.

106. Likewise, the SEC has followed a subjective approach with respect to broker-dealer determinations of haircut requirements. In these rules, the SEC cites the same categories of factors, but also describes some additional detail. Specifically, the SEC rules provide that: “When assessing whether a security or money market instrument has only a minimal amount of credit risk for purposes of Rule 15c3–1, a broker- dealer could consider pursuant to the policies and procedures it establishes, documents, maintains, and enforces the following factors, to the extent appropriate:

- Credit spreads (i.e., whether it is possible to demonstrate that a position in commercial paper, nonconvertible debt, and preferred stock has only a minimal amount of credit risk based on the spread between the security’s yield and the yield on Treasury or other securities, or based on the spreads of credit default swaps that reference the security or money market instrument);
- Securities-related research (i.e., whether providers of research about securities or money market instruments believe the issuer of the security or money market instrument will be able to meet its financial commitments, generally, or specifically, with respect to securities or money market instruments held by the broker-dealer);
- Internal or external credit risk assessments (i.e., whether credit assessments developed internally by the broker-dealer or externally by a credit rating agency, irrespective of its status as an NRSRO, express a view as to the credit risk associated with a particular security or money market instrument of the issuer thereof);
- Default statistics (i.e., whether providers of credit information relating to securities or money market instruments express a view that specific securities or money market instruments (or their issuers) have a probability of default consistent with other securities or money market instruments that have only a minimal amount of credit risk);
- Inclusion in an index (i.e., whether a security, money market instrument, or the issuer of a security or money market instrument, is included as a component of a recognized index of instruments that have only a minimal amount of credit risk);
- Enhancements and priorities (i.e., the extent to which a security or money market instrument is covered by credit enhancements, such as overcollateralization and reserve accounts, or has priority under applicable bankruptcy or creditors’ rights provisions);

- Price, yield and/or volume (i.e., whether the price and yield of a security or money market instrument or a credit default swap that references the security or money market instrument are consistent with other securities or money market instruments that the broker-dealer has determined have only a minimal amount of credit risk and whether the price resulted from active trading); and
 - Asset class-specific factors (e.g., in the case of structured finance products, the quality of the underlying assets).” See SEC Net Capital Rules, 79(5) Federal Register, Jan. 8, 2014, at 1527-28.
107. The SEC notes that it does not intend this list of factors to be exhaustive or mutually exclusive. For example, other factors may be appropriate for assessing creditworthiness and, in particular, whether a position has only a minimal amount of credit risk. These determinations necessarily involve some degree of subjectivity and internal assessment of risks.
108. Other factors that might be considered include internal assessments of credit risk and the degree of liquidity. For example, instead of requiring that collateral consist of securities with a particular rating, one might instead require that an issuer has satisfied certain minimal “credit” and “liquidity” determinations. One might require that financial institutions determine that collateral be sufficiently liquid and also issued by a creditworthy counterparty. Note that liquidity is important in part because of the assumption that if a market is sufficiently liquid, then prices will reflect a high degree of market-based information. The same approach for collateral also could be followed with respect to haircuts.
109. A similar alternative would look to both the size and liquidity of an issue. For example, the SEC has recommended replacing reliance on CRA ratings for securities registration Forms S-3 and F-3 and related forms and rules with provisions designed to determine whether issuers are widely followed in the market. Liquidity risk is also becoming a more important part of investment decision making, and is not covered by CRA ratings. Many relatively new information intermediaries have developed competing analytic systems for assessing both credit and liquidity risk.
110. Here, also, the SEC has provided some guidance. With respect to money market funds, the SEC has adopted a rule that “replaces the requirement that collateral for repurchase agreements consist of securities rated in the highest category by the requisite NRSROs (other than cash and government securities) with a requirement that the collateral other than cash and government securities consist of securities issued by an issuer that has an exceptionally strong capacity to meet its financial obligations and that are sufficiently liquid.” 79 Federal Register, Jan. 8, 2014, at 1321.
111. The details of this approach are set forth below:
- “Under the amended forms, funds that choose to depict portfolio holdings according to credit quality must include a description of how the credit quality of the holdings was determined. This description should include a discussion of the credit quality evaluation process, the rationale for its selection, and an overview of the factors considered, such as the terms of the security (e.g.,*

interest rate, and time to maturity), the obligor's capacity to repay the debt, and the quality of any collateral. If the fund uses credit ratings issued by a credit rating agency to depict credit quality, the fund should explain how the credit ratings were identified and selected, and include this description near, or as part of, the graphical representation. This description should include, if applicable, a discussion of: (i) The criteria considered or process used in selecting the credit ratings (e.g., the fund might use the median credit rating from among three rating agencies); (ii) how the fund evaluated those criteria (i.e., the due diligence performed); (iii) how the fund reports credit ratings for any security that is not rated by the credit rating agency selected if the fund has a policy of using the ratings of a single rating agency (e.g., has the fund selected a designated alternate rating agency); (iv) how the fund reports credit ratings for any security that is not rated by any credit rating agency (i.e., the process for self-rating); or (v) other fund policies on selecting credit ratings for purposes of disclosure. We expect that this discussion, modified and expanded upon by funds as appropriate, will provide investors with insight into how the fund identified and selected the credit ratings used in depicting the fund's portfolio by credit quality." Federal Register, Jan. 8, 2014, at 1322-23.

112. Note the degree to which the new recommended rules for U.S. money market funds rely on internal assessments (based in part on market-based information), as contrasted with CRA ratings. The earlier version of Rule 2a-7 of the Investment Company Act limited a money market fund's portfolio investments to securities that have received credit ratings from CRAs in one of the two highest short-term rating categories. See Investment Company Act, Rule 2a-7(a)(10), (21). The SEC recommended replacing this CRA-based "regulatory license" with a requirement that money market fund boards of directors determine "that each portfolio instrument presents minimal credit risks."³⁹
113. It is reasonable to require that market participants make a determination that a portfolio presents "minimal credit risks." Market participants, who cannot make such determinations on their own, without mechanistic reliance on CRA ratings, arguably should not be involved in making credit-related decisions. In making the determination of whether "minimal credit risks" are present, a financial institution might rely on a range of information, including both market-based information. CRA ratings can be one factor, though not the primary or exclusive factor.
114. As noted above, the assessment of credit risk, at its core, includes analysis and conclusions with respect to the variables underlying CRA ratings, particularly the expected probability of default, recovery in the event of default, and default correlation, when relevant. For example, an investor might amend its investment guidelines or other internal regulations to state it would only purchase bonds with an expected probability of default of 1% or less during maturity. The decision about expected probability of default then could be made based on a wide range of information.
115. Internal assessments also might rely in part on market-based information, including bond pricing. It is not difficult to obtain the default probability implied by a bond's price, not only at the time of

³⁹ See Securities and Exchange Commission, 2008, References to Ratings of Nationally Recognized Statistical Rating Organizations, Release Nos. IC-28327, at 8.

purchase but over time, as part of the portfolio management process as prices change. Many third-party services provide such information. Indeed, CRA ratings increasingly incorporate such market measures into their own ratings, though on a lagged basis. As noted above, investors concerned about the volatility of market prices could use 30-day or 90-day rolling averages. Also as noted above, rolling averages of market prices likely reflect a wider range of available information than CRA ratings, and do so in a more timely fashion.

116. Internal assessments might involve professional judgment following a blended standard, with some information based on market-based measures of risk and others derived from other sources of information. For example, financial institutions might rely on a combination of:

- Private information obtained through due diligence.
- Publicly available 'soft' information.
- Market-based measures and prices.

117. The blended information might include CRA ratings, though not as the primary or exclusive source of information.

118. Combining internal assessment with rolling averages of market-based information is one particularly attractive approach. Basing investment decisions on a rolling average of market measures may motivate investors to assess early on the risks associated with investments and to limit their exposure in the event of a market downturn. Some institutions might be forced to sell during periods of price declines, but those that do so may avoid more sustained declines that occur when stale ratings permit investors to continue to hold and to deny that investments have declined in value. Moreover, to the extent forced sales occur relatively early, these new policies may help deter prolonged crises. In any event, internal assessment can help institutions avoid forced sales.

119. Finally, with respect to internal assessments of credit risk, financial institutions might use stress tests and/or concentration limits. Many institutions have the ability to run stress tests on their portfolios, and indeed are required to do so by a range of global regulators. Likewise, many institutions are accustomed to employing concentration limits, which prohibit investment beyond certain levels in particular assets or groups of assets. Either or both of these approaches might be incorporated into internal assessments of credit risk.

IX. Example of an Internal Assessment

120. As noted above, internal assessments might incorporate market pricing as part of an analysis of credit risk. As one case study, consider how institutions might have assessed the risk of Bear Stearns during the time before the Global Financial Crisis. Instead of mechanically assuming that the CRA ratings for Bear Stearns accurately reflected that institution's credit risk, they might have gathered independent information about Bear Stearns, examined financial reports and securities research, and independently assessed the risks as disclosed in Bear Stearns's financial statements and footnotes –

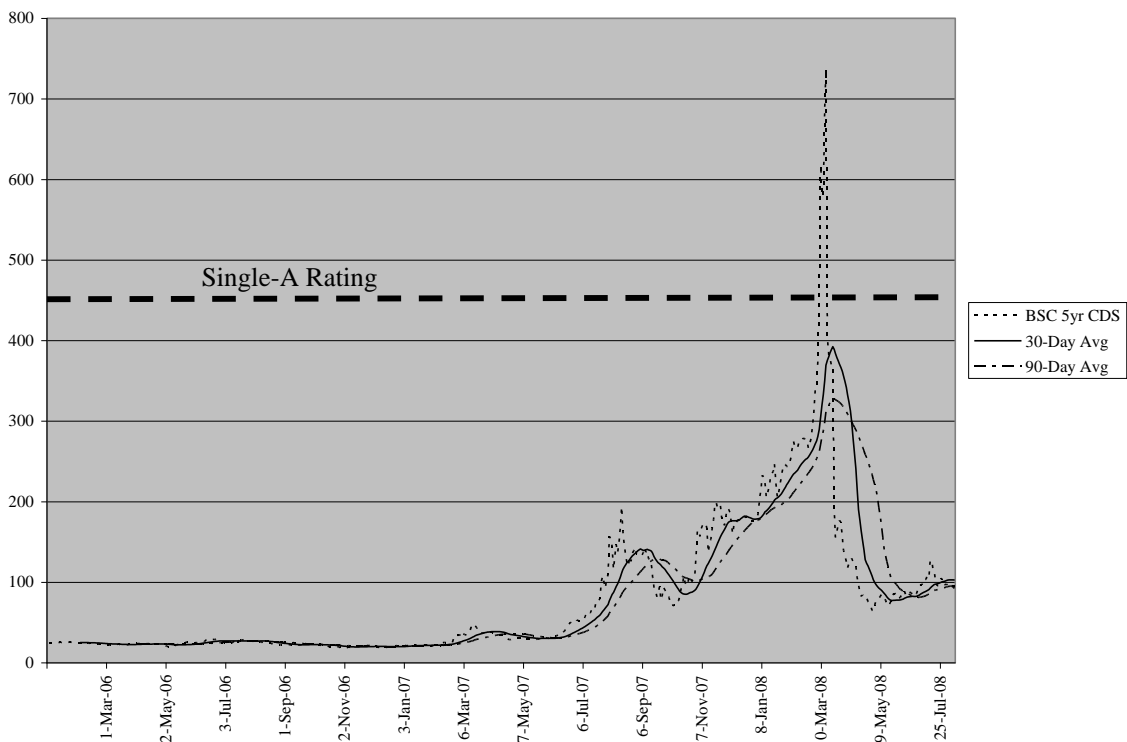
and also, most crucially, incorporated into their internal assessment a range of market-based information about credit risk.

121. Specifically, one might incorporate bond pricing and CDS data into that analysis, not necessarily to require as a hardwired rule that an asset manager or bank must sell Bear Stearns bonds if CDS spreads rose to a certain level, but instead as one additional factor in making an internal credit determination. For example, an institution might have required that additional independent analysis take place to justify continuing to hold a position in Bear Stearns, or rely on Bear Stearns collateral, or accept Bear Stearns as a counterparty, when bond credit spreads rose above the level of 1%, or when CDS spreads rose to above 100 basis points.

122. This example of the usefulness of CDS spreads is taken from the period immediately prior to the recent Global Financial Crisis and is drawn from Flannery, Houston and Partnoy⁴⁰. The example relies on data provided by Markit Group Limited as to credit default swap pricing and other data that investors could use to assess the risk of their portfolios over time.

123. The chart below depicts the daily 5-year Bear Stearns senior credit default swap closing spreads, along with a 30 and 90-day rolling average of these spreads. Note that unlikely the credit ratings applicable to Bear Stearns's senior debt, which were constant at single-A throughout this period, the CDS spreads served as valuable indicators of information about the increasing riskiness of Bear Stearns fixed income instruments.

Bear Stearns 5-Year CDS Market Spreads (bp) (Source: Markit)



⁴⁰ Mark J. Flannery, Joel F. Houston and Frank Partnoy, Credit Default Swap Spreads as Viable Substitutes for Credit Ratings, University of Pennsylvania Law Review, Vol. 158, 2010, San Diego Legal Studies Paper No. 10-031 http://papers.ssrn.com/sol3/papers.cfm?abstract_id=1666350

124. As the above chart illustrates, it would be straightforward to reference a rolling average like one of those depicted above. Reliance on market measures instead of CRA ratings likely would have led institutions with exposure to Bear Stearns securities to assess their exposure more closely during the period leading up to that firm's collapse. Instead of making investment decisions based on a Bear Stearns credit rating that remained unjustifiably high and unchanged during that bank's crisis and collapse, institutions instead could have looked to a rolling average of market measures. Credit default swap spreads provided an early warning to market participants regarding Bear Stearns.

125. Market participants also might incorporate bond or stock price trading data into their assessments of credit risk. For example, even the Bear Stearns stock price changes reflected significant increases in risk during the period when CRA ratings nevertheless were consistently high and stable. This was particularly true during the relevant period of time before the market collapse during September 2008. As is illustrated in the stock price chart below for BSC (the ticker symbol for Bear Stearns stock, traded on the New York Stock Exchange), the market reaction during 2007, more than a year earlier, was significantly negative, based on New York Stock Exchange data.



126. Essentially, Bear Stearns stock lost half of its value during 2007. Although such stock price declines are not necessarily a predictor of default, they are an indicator of declining valuations and, potentially, of increasing default risk. Such pricing information is publicly available and can easily be incorporated into an assessment of risk at very low cost.

127. To the extent a company has bonds that are publicly traded, those prices likewise are publicly available. Most financial institutions have access to pricing services that provide bond pricing data on at least a daily basis. For example, as of June 2015, FINRA TRACE provided market measures of bond prices for more than 6,000 bond issues traded in the U.S.⁴¹. As the chart below illustrates for June 5, 2015, market data from FINRA TRACE is freely accessible for bond issues:

<u>Issuer Name</u>	<u>Coupon</u>	<u>Maturity</u>	<u>Moody's/S&P/Fitch</u>	<u>Price</u>	<u>Yield%</u>
AT&T INC	4.75%	5/15/46	Baa1/BBB+/A-	94.51	5.104
APPLE INC	3.20%	5/13/25	Aa1/AA+/	99.26	3.288
AMERICA MOVIL SAB	2.38%	9/8/16	A2//A	101.60	1.077
ACTAVIS FDG SCS	3.80%	3/15/25	Baa3//BBB-	98.57	3.978
ANHEUSER BUSCH INBEV	3.70%	2/1/24	A2//A	102.29	3.392
ABBVIE INC	3.60%	5/14/25	Baa1/A/	98.58	3.772
ABBVIE INC	4.70%	5/14/45	Baa1/A/	99.27	4.746
ANHEUSER BUSCH INBEV	0.80%	7/15/15	A2//A	100.05	0.319
AT&T INC	5.50%	2/1/18	Baa1/BBB+/A-	109.49	1.805
JPMORGAN CHASE & CO	3.40%	6/24/15	A3/A/A+	99.95	4.692
GENERAL MTRS FINL CO	4.75%	8/15/17	Ba1/BBB-/BB+	105.00	2.382
DISH DBS CORP	5.88%	11/15/24	Ba3/BB-/BB-	100.31	5.831
INTELSAT LUXEMBOURG	7.75%	6/1/21	Caa2//	87.88	10.535
GENERAL MTRS FINL CO	4.00%	1/15/25	Ba1/BBB-/BB+	97.64	4.302
TENET HEALTHCARE CORP	4.38%	10/1/21	Ba2/BB-/BB	96.75	4.982
CHS/CMNTY HEALTH SYS	6.88%	2/1/22	B3/B-/B+	106.63	5.246
GOODYEAR TIRE & RUBR	8.25%	8/15/20	B1/BB/BB-	104.88	3.810
CCO HOLDINGS LLC	5.75%	1/15/24	B1/BB-/BB-	102.25	5.312
HCA INC	5.38%	2/1/25	B2/B+/BB-	101.00	5.240
CALIFORNIA RES CORP	6.00%	11/15/24	Ba2/BB/	91.25	7.299

128. Likewise, similar data is available from other subscription services. In sum, the example of Bear Stearns and the information market for bonds generally illustrates that pricing data based on market measures is valuable and available at low cost.

X. Conclusion

129. The reduction of reliance on ratings by financial market participants has been an ongoing process since the global financial crisis. Within global standard setting bodies there have already been a number of complimentary stocktaking exercises completed and best practices identified. While within IOSCO and the Basel Committee work is underway or has been completed in respect of Large Financial Intermediaries, Asset Managers and Credit Institutions. It is important that any further initiatives to reduce reliance on ratings do so in a coordinated and complementary manner with these existing efforts.

⁴¹ See <http://finra-markets.morningstar.com/BondCenter/TRACEMarketAggregateStats.jsp>.

130. Although some steps have already been taken within these fora to mitigate reliance on ratings by financial market participants there still remain instances of references to ratings within national and EU sectoral legislation. In particular, CRR and Solvency II contain references to ratings in a number of critical areas, most notably capital requirement calculations. While these references remain, reducing reliance on ratings for these entities will remain challenging.
131. The process to reduce reliance on ratings in a European context can therefore be said to be at an early stage, with some work done on agreeing high level principles and goals but more to be done in terms of mitigating mechanistic reliance and proposing alternatives.
132. However one example of a positive development is the recent Regulatory Technical Standards under EMIR which provide a working example as to how mechanistic reliance on ratings can be mitigated within EU sectoral legislation.
133. Outside of EU legislation it should be noted that credit ratings remain a factor within the collateral assessment frameworks of some central banks in the EU. As these frameworks may have significant knock on effects for financial market participants' own internal assessment procedures reducing mechanistic reliance on ratings within these frameworks is a desirable objective.
134. It should also be acknowledged that for some larger financial market participants credit ratings remain, at the least, a factor in their internal credit worthiness assessments. While many smaller, less sophisticated market participants find it difficult to fully adopt alternatives to ratings due to lack of resources and expertise. For these reasons, it may not be practical to completely remove references to ratings within EU legislation and as such the focus of any future initiatives should be on the mitigation of mechanistic reliance on ratings rather than their removal altogether.
135. In this regard one particular set of alternative indicators that could be used to mitigate reliance on credit ratings are market-based indicators such as information based on the pricing of fixed income securities and credit default swaps. For smaller market participants mitigation of reliance on a particular rating could be achieved by the publication of credit rating data on the forthcoming European Ratings Platform⁴².

⁴² <http://eur-lex.europa.eu/legal-content/EN/TXT/PDF/?uri=CELEX:32015R0002&from=EN>

Annex I

The Standardised Approach under CRD IV legislation⁴³

EBA collects aggregate statistical data on key aspects of the implementation of the prudential framework in each Member State.⁴⁴ The disclosure provided includes national statistical data on the banking sector, credit risk, operational risk, market risk, and supervisory actions and measures. The most recent data are only available for a subset of Members States and for the years 2007 to 2012.

Under CRD III and CRD IV, credit institutions have the possibility to obtain an approval for the use of one of the three main approaches to compute own funds requirements for credit risk: the Foundation Internal Ratings Based approach (FIRB), the Advanced Internal Ratings Based approach (AIRB) and the Standardised Approach (SA).

Table 5 below shows the percentage of credit institutions using the various approaches according to the survey of 2012.

Table 5: Percentage of credit institutions using the three approaches to credit risk in year 2012: Foundation Internal Ratings Based approach (FIRB), the Advanced Internal Ratings Based approach (AIRB) and the Standardised Approach (SA).

	Number of credit institutions	Percent with respect to the number of institutions				Number of credit institutions	Percent with respect to the number of institutions		
		SA	FIRB	AIRB			SA	FIRB	AIRB
AT	809	92%	7%	0%	IT	706	92%	3%	5%
BE	104	84%	3%	13%	LV	29	90%	10%	0%
BG	31	96%	4%	0%	LT	18	69%	15%	15%
CZ	43	71%	29%	N/A	LU	141	81%	8%	11%
DE	1,737	100%	1%	2%	MT	28	88%	8%	4%
DK	106	89%	5%	7%	NO	223	89%	4.5%	6.5%
EE	16	100%	25%	25%	PL	642	100%	0%	0%
ES	302	100%	9%	15%	SE	113	98%	12%	12%
FI	313	97%	3%	0%	SI	21	90%	0%	10%
FR	381	39%	0%	61%	SK	31	64%	36%	0%
IE	38	97%	24%	29%					

Note: Rows may not add up to one hundred percent due to some institutions authorised to use more than one approach; in such cases some double counting is possible.
Source: EBA

Own funds requirements for credit risk can be expressed in percentage of the total own funds requirements. Table 6 below shows the percentage of own funds requirements for credit risk as percentage of the total own funds requirement under the various approaches according to the survey of year 2012. The same table also shows the total assets held by credit institutions and investments firms aggregated at country level. The second column reports the corresponding aggregate own funds requirements. Figures reported in currencies different from EUR have been converted to facilitate comparison.

Table 6: Percentage of credit institutions using the three approaches to credit risk in year 2012: this table shows the own funds requirements for credit risk as percentage of the total own funds

⁴³ Regulation EU No. 575/2013 (CRR) and Directive 2013/36/EU.

⁴⁴ www.eba.europa.eu/supervisory-convergence/supervisory-disclosure/aggregate-statistical-data

requirements and the own funds requirements under each approach with respect to the own fund requirements for credit risk.

	Total assets Euro mln ⁽¹⁾	Own funds requirements Euro mln ⁽¹⁾	Credit over total own funds requirement ⁽²⁾	Own funds requirements by approach ⁽³⁾		
				SA	FIRB	AIRB
AT	982,114	37,452	91%	72%	15%	13%
BE	1,098,818	29,474	86%	39%	11%	51%
BG	42,122	3,372	87%	81%	19%	0%
CZ	184,226	6,455	84%	38%	62%	N/A
DE	8,593,230	215,060	85%	60%	16%	25%
DK	1,042	317	N/A	83%	84%	85%
EE	19,370	9,050	86%	27%	54%	20%
ES	3,145	136	87%	61%	6%	34%
FI	104,192	20,769	83%	77%	23%	0%
FR	7,128,088	172,728	84%	56%	0%	44%
IE	950,613	28,347	82%	57%	16%	26%
IT	3,803,056	118,815	N/A	75%	2%	23%
LV	28,432	1,299	88%	62%	38%	0%
LT	22,749	1,069	80%	52%	35%	13%
LU	735,060	17,736	N/A	65%	14%	21%
MT	52,894	1,286	90%	89%	11%	0%
NO	817,884	345,080	91%	56%	16%	28%
PL	336,034	17,121	87%	84%	0%	16%
SE	202,178	6,074	54%	22%	50%	28%
SI	45,352	2,827	93%	96%	0%	4%
SK	55,772	2,671	87%	51%	36%	14%

(1) Figures reported in other currencies are converted in EUR.

(2) Own Funds requirements for credit risk as percentage of total own funds requirements.

(3) Own funds requirements by approach over total own funds requirements for credit risk.

Source: EBA

136. Furthermore, according to the same dataset only a very small subset of investment firms (one case in France) are authorised to use the IRB approached for own funds requirements. All the other investment firms rely on the Standardised Approach.

Annex II⁴⁵

References to credit ratings in the Solvency II Directive

Article 141 UECAI2 (Art. 109a of Directive 2009/138/EC)

Article 4

COMMISSION DELEGATED REGULATION (EU) 2015/35 OF OCTOBER 2014

Supplementing Directive 2009/138/ec of the European Parliament and Council on the taking up and pursuit of the business of Insurance and Reinsurance (Solvency II)

General requirements ON THE USE OF CREDIT ASSESSMENTS

(1) An insurance or reinsurance undertaking shall nominate one or more ECAI to be used for the determination of the different parameters to derive the capital requirements of the various modules of the Solvency Capital Requirement standard formula and, where relevant, to derive the matching premium.

(2) The use of ECAI credit assessments shall be consistent and such assessments shall not be used selectively.

(3) When using credit assessments, insurance and reinsurance undertakings shall comply with the following requirements:

- (a) an insurance or reinsurance undertaking which decides to use the credit assessments produced by a nominated ECAI for a certain class of items shall use those credit assessments consistently for all items belonging to that class;
- (b) an insurance or reinsurance undertaking which decides to use the credit assessments produced by a nominated ECAI shall use them in a continuous and consistent way over time;
- (c) an insurance or reinsurance undertaking shall only use nominated ECAI credit assessments that take into account all amounts of principal and interest owed;
- (d) where only one credit assessment is available from a nominated ECAI for a rated item, that credit assessment shall be used to determine the capital requirements for that item;
- (e) where two credit assessments are available from nominated ECAs and the two correspond to different parameters for a rated item, the assessment generating the higher capital requirement shall be used;
- (f) where more than two credit assessments are available from nominated ECAs for a rated item, the two assessments generating the two lowest capital requirements shall be referred to. If the two lowest capital requirements are different, the assessment generating the higher capital requirement of those two credit assessments shall be used. If the two lowest capital requirements are the same, the assessment generating that capital requirement shall be used;
- (g) where available, insurance and reinsurance undertakings shall use both solicited and unsolicited credit assessments.

⁴⁵ https://www.esma.europa.eu/system/files/jc_2014_004_final_report_mechanistic_references_to_credit_ratings_rect.pdf

(4) If an item is part of the larger or more complex exposures of the insurance or reinsurance undertaking, the undertaking shall have its own internal credit assessment of the item and allocate it to one of the seven steps in a credit quality assessment scale ('reassessment'). If the own internal credit assessment generates a lower capital requirements than the one generated by the credit assessments available from nominated ECAIs, then this own internal credit assessment shall not be considered for the purpose of this Regulation.

(5) For the purpose of paragraph 4, the larger or more complex exposures of an undertaking shall include tradable securities or other financial instruments based on repackaged loans and those defined in the implementing technical standards adopted in accordance with Article 111(c) of Directive 2009/138/EC.

Article 142 UECAI3 (Art. 109a of Directive 2009/138/EC)

Article 5 ISSUERS AND CREDIT ASSESSMENT

Issuers and issue credit assessment

(1) Where a credit assessment exists for a specific issuing program or facility to which the item constituting the exposure belongs, then this credit assessment shall be used to determine the capital requirement and, where relevant, to derive the matching premium to be assigned to that item.

(2) Where no directly applicable credit assessment exists for a certain item, but a credit assessment exists for a specific issuing program or facility to which the item constituting the exposure does not belong or a general credit assessment exists for the issuer, then that credit assessment shall be used in either of the following cases:

(a) it produces the same or higher capital requirement than would otherwise be the case and the exposure in question ranks *pari passu* or junior in all respects to the specific issuing program or facility or to senior unsecured exposures of that issuer, as relevant;

(b) it produces the same or lower matching premium than would otherwise be the case and the exposure in question ranks *pari passu* or junior in all respects to the specific issuing program or facility or to senior unsecured exposures of that issuer, as relevant.

(3) In cases which do not meet either points (a) or (b) of paragraph 2, it shall be considered that there is no credit assessment by a nominated ECAI available for the exposure.

(4) Paragraphs 1 and 2 shall not to prevent the application of Articles 163(1) and 170(1).

(5) Credit assessments for issuers within a corporate group shall not be used as the credit assessment for another issuer within the same corporate group.

Article 142bis UECAI3bis (Art. 109a of Directive 2009/138/EC)

Article 6 DOUBLE CREDIT RATING FOR SECURITISATION POSITIONS

Double credit rating of tradable securities or other financial instruments based on repackaged loans

Notwithstanding Article 141 UECAI2 (3)(d), where only one credit assessment is available from a

nominated ECAI for a tradable security or other financial instrument based on repackaged loans, that credit assessment shall not be used. and the capital requirements for that item shall be calculated and, where relevant, the matching premium shall be derived as if no credit assessment by a nominated ECAI is available.

Annex III

Paper from ESMA's Securities and Markets Stakeholder Group

1. Legal Background (CRA-Regulation)

137. One of the objectives of the last reform of the CRA-Regulation in 2013 was to reduce over-reliance on credit ratings by financial institutions and other market participants. Similar to the regulation in the US, financial institutions should avoid entering into contracts where they solely or mechanistically rely on credit ratings and should avoid using them in contracts as the only parameter to assess the creditworthiness of investments or to decide whether to invest or divest (cf. recital 9 CRA3-Regulation). To this end, a couple of provisions were introduced in the Union law. These include the following ones:
138. Financial institutions and other entities shall make their own credit risk assessment and shall not solely or mechanistically rely on credit ratings for assessing creditworthiness of an entity or financial instrument. SCAs in charge of supervising financial institutions shall monitor the adequacy of their credit risk assessment processes, assess the use of contractual references to credit ratings and encourage them to mitigate the impact of such references, with a view to reducing sole and mechanistic reliance on credit ratings (Art. 5a CRA-Regulation).
139. The Commission shall review whether references to credit ratings in Union law trigger or have the potential to trigger sole or mechanistic reliance on credit ratings by the competent authorities, entities (credit institutions etc.) or other financial market participants with a view to deleting all references to credit ratings in Union law for regulatory purposes by 1 January 2020, provided that appropriate alternatives to credit risk assessment have been identified and implemented (Art. 5c CRA-Regulation).

2. ESAs Tasks

140. On 6 February 2014 the ESAs published their "Final Report on mechanistic references to credit ratings in the ESAs' guidelines and recommendations" (JC 2014 004). The Report defines the terms "sole and mechanistic reliance" as follows (cf. para. 26).
141. It is considered that there is sole or mechanistic reliance on credit ratings (or credit rating outlooks) when an action or omission is the consequence of any type of rule based on credit ratings (or credit rating outlooks) without any discretion.
142. On 23 December 2014 the ESAs published a Discussion Paper on "The Use of Credit Ratings by Financial Intermediaries – Art. 5(a) of the CRA Regulation" (hereinafter: Discussion Paper). It reflects international developments in reducing reliance on ratings (FSB Principles, IOSCO and Basel Committee, US SEC and AFM Report) and summarizes responses to the ESA questionnaire on the use of credit ratings received by national supervisory authorities (SCAs). The Discussion Paper focuses on challenges encountered in reducing contractual reliance and potential alternatives to credit ratings. It seeks input by stakeholders on these topics by 27 February 2015.

3. Comments

143. The CRA3-Regulation intends to tackle the problem of automatic effects deriving from credit ratings. However, reliance on ratings shall only be reduced under the condition that alternatives exist. This is made clear by the wording of the above mentioned provisions of the CRA-Regulation: SCAs shall, where appropriate, encourage financial institutions to mitigate the impact of contractual references to credit ratings. All references to credit ratings in Union law for regulatory purposes shall be deleted provided that appropriate alternatives to credit risk assessment have been identified and implemented.

3.1 References to credit ratings in Union law

144. References to credit ratings in Union law can be widely observed. In particular capital requirements under Basel II and Basel III/CRR acknowledge that credit risk exposure is measured by using credit ratings. Furthermore, credit ratings are still a prerequisite for an issuer to access financial markets.

3.1.1 Credit spreads

145. It is proposed in literature that Credit Default Swap (CDS) spreads might be a substitute for credit ratings (e.g. empirical study by Flannery/Houston/Partnoy 2010: "CDS spreads are a promising market-based tool for regulatory and private purposes" and "reflect information more quickly and accurately than credit ratings"; Partnoy/Skeel 2007).

146. However, this alternative is viewed quite critically by regulators and literature. Credit spreads are highly volatile and are consistently changing (Coffee 2011; Hunt 2011; Manns 2013 Richter 2008; Schroeter 2014). Unlike credit ratings, credit spreads are determined by many factors, such as the liquidity of financial instruments and other risk factors. Furthermore, credit spreads are not available on primary markets (Rhee 2013). Thus, CDS spreads are not viewed as a viable alternative to credit ratings by the dominant opinion.

3.1.2 Internal ratings

147. A further approach could be a risk assessment by regulated entities themselves. It is discussed intensively in the US due to the Dodd-Franc Act.⁴⁶ In a number of cases US federal agencies acknowledged internal ratings as an alternative to credit ratings.

148. But this approach is also viewed critically (Hunt 2009; Schroeter 2014). It appears doubtful whether financial market participants have the relevant expertise for evaluating the creditworthiness of issuers and in particular whether they are able to assess complex instruments (Coffee 2011; Jones 2010:

⁴⁶ Sec. 939A requires each federal agency to review its regulations and identify (i) any regulation that requires the use of an assessment of the creditworthiness of a security or money market instrument and (ii) any references to or requirements in such regulations regarding credit ratings. Each federal agency has to modify the regulations identified in the review by removing all references to or requirements of reliance on credit ratings and substituting alternative standards of creditworthiness.

“The assumption that investors must do an independent analysis without relying on agencies ignores the realities of the industry.”).

149. A second argument refers to the problem of conflict of interests. Issuers and other market participants might have diverse incentives to determine if a financial instrument meets the standard in order to get favourable treatment under the regulation (even acknowledged by the SEC in the US). A further problem is that market participants tend to be over-optimistic (Schroeter 2014).
150. A different matter is whether market participants should be required to themselves also assess the creditworthiness. This might be a convincing way to reduce systemic risks: If market participants do not react to changes in ratings in a uniform way, the systemic nature of rating effects could be reduced. However this approach is also criticized. One argument is a general one: There are again doubts whether fund managers are better suited to evaluate the risk of a default than rating agencies. This might only be the case for larger, more sophisticated institutions. A further argument relates to the purpose of an additional risk assessment: Systemic risks deriving from a sole and mechanistic reliance on ratings are only tackled if at least a significant portion of market participants react in a different way than the majority. This is questioned by literature (Schroeter 2014: “regulatory placebo”). In addition as the research carried out by the AFM makes clear requiring all firms to carry out internal assessments would put smaller intermediaries at a distinct disadvantage and could drive them from the industry.

3.1.3 Conclusion

151. Since no adequate substitute for ratings appears to exist, it will be very difficult to delete references to credit ratings in Union law. This might only be possible in particular areas of the law. Of course it is valuable to evaluate how to reduce sole or mechanistic reliance on credit ratings for assessing creditworthiness, but one should not expect too much from this approach.

3.2 Contractual references to credit ratings

152. Contractual references to credit ratings are widely used by market participants. On the one hand, they are provided in investment guidelines/policies of institutional investors. In order to obtain as high a return as possible and as a consequence a higher remuneration, fund managers might take disproportional risks. The purpose of contractual references is therefore to limit the fund manager’s investment discretion. Typically investment policies require an „investment grade“ as minimum rating; other degrees of rating can hardly be observed. Once this threshold is reached, fund managers have to sell the bonds or other financial instruments of the respective issuer. The consequences of such forced sales are severe: Massive negative influence on exchange rates have been empirically proven (e.g. Steiner/Heinke 2001).
153. On the other hand, references to ratings can be found in loan contracts. The best known example of this were the rating triggers in Enron’s loan contracts (2001). According to such rating triggers, the

creditor may terminate the contract or may request further security. This leads to a so-called credit cliff.

3.2.1 Prohibition

154. A possibility would be to prohibit rating triggers in investment policies and contracts. However, the approach restricting contractual freedom would be a very strict one and an exception in financial markets law. Therefore a prohibition has to be justified by imperative reasons of public interest.

3.2.2 Disclosure

155. A further way to tackle the problems could be to require disclosure of rating triggers either towards the markets or towards rating agencies.

156. A duty to disclose rating triggers towards the markets has already been proposed by the former CESR. In fact, a prospectus published in accordance with the European prospectus regime (Prospectus Directive and Regulation) must provide information about rating triggers in important contracts. There are however no equivalent disclosure obligations on secondary markets. Furthermore it is doubtful whether market participants would be able to evaluate disclosed rating triggers.

157. A promising approach could be to require disclosure of rating triggers towards rating agencies, who then would be able to consider all rating triggers when evaluating the creditworthiness of an issuer (Schroeter 2014). Such a disclosure obligation does not yet exist in European law. But it appears to be the accepted practice of rating agencies to ask issuers about existing rating triggers in relevant contracts. The downside could be that rating triggers will be anticipated (self-fulfilling prophecy).

3.2.3 Conclusion

158. Disclosure obligations might be a way to reduce systemic risks deriving from contractual references to credit ratings. However, this solution does not work for rating triggers provided by investment policies/guidelines. Therefore these should make clear that ratings do not exempt managers from making their own investment decisions.

4. Summary and conclusion

159. Union law is still based on the assumption that credit rating agencies are best placed to assess the creditworthiness of issuers. This is mainly due to the fact that rating agencies have the necessary expertise. In addition, ratings are easy to comprehend, made available to the public free of charge and regularly updated and adjusted (Schroeter 2014). This explains the difficulties to develop alternatives to credit ratings and reduce over-reliance.

160. Internal ratings are generally not adequate substitute for ratings. Firstly, it is doubtful whether persons evaluating the creditworthiness of issuers or financial instruments have the relevant expertise. Secondly, an internal rating always gives rise to massive conflicts of interests.

161. Systemic risks deriving from investment policies and contractual references might be countered by different approaches. As to investment policies, regulators should make clear that managers have to make their own investment decisions; a rating is only one aspect of many others to be taken into account by the manager. As to contractual references, disclosure obligations could be strengthened.
162. CRA-3 8(d) imposes an obligation on manufacturers of structured products to get ratings from two CRA and further that one of the ratings should come from a CRA with less than 10% market share. With regard to all ratings, not just those for structured products, it seems sensible when ratings are used as part of an investment policy, or contract, to remove any reference to the ratings being provided by a specific credit rating agency (typically contracts refer to S&P, Fitch and Moody's) and instead specify that a rating can come from "any authorized CRA". Risk methodology varies from CRA to CRA so it seems sensible to broadening out the pool of CRAs who can provide a rating.
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Impact Assessment on reducing sole or mechanistic reliance on credit ratings

Introduction

163. This cost-benefit analysis provides the reader with an overview of the findings as regards the problem identification, the options identified to remove the problem and their potential impacts.
164. Among the observable effects of mechanistic reliance, the European Commission indicates that it would be desirable to reduce so-called 'cliff effects', which it defines⁴⁸ as 'sudden actions that are triggered by a rating downgrade under a specific threshold, where downgrading a single security can have a disproportionate cascading effect'. Fire sales of assets may, for example, affect the downgraded issuer 'because its access to the money market funding may suddenly close, which may affect its viability'.⁴⁹
165. The acknowledgement of cliff effects builds on prior work from the Financial Stability Board and the IMF, with the latter highlighting⁵⁰ the 'second-round liquidity effect' that a rating change may trigger, whereby the credit quality of a rated entity can be affected by the higher cost of capital resulting from a rating change. The higher cost of capital following downgrades is also referred to in the academic literature⁵¹, as 'a rating downgrade may lead to higher cost of capital for the borrowing firm because it induces a deterioration in investors' perceptions about the credit quality of the borrowing firm, because of regulations that restrict investors' holdings of lower rated bonds, or because of rating triggers in financial contracts'.
166. In October 2010, the FSB endorsed principles to reduce public authorities' and financial institutions' reliance on credit rating agency ratings.⁵² The goal of these principles is to end mechanistic reliance on ratings by banks, institutional investors and other market participants. To accelerate implementation, the FSB published a roadmap with timelines in November 2012. The roadmap suggests a two-pronged approach: (1) reducing mechanistic reliance in standards, laws and regulations; and (2) encouraging financial institutions to strengthen and disclose their credit risk assessment processes. The FSB is also undertaking a thematic peer review, whose main objective is to help national authorities fulfil their commitments under the roadmap.

⁴⁷ https://www.esma.europa.eu/system/files/jc_2014_004_final_report_mechanistic_references_to_credit_ratings_rect.pdf

⁴⁸ European Commission Impact Assessment accompanying the document the "Proposal for a Regulation amending Regulation (EC) No 1060/2009 on credit rating agencies" and a "Proposal for a Directive amending Directive 2009/65/EC on coordination on laws, regulations and administrative provisions relating to undertakings for collective investment in transferable securities (UCITS) and Directive 2011/61/EU on Alternative Investment Fund Managers" (http://ec.europa.eu/internal_market/securities/docs/agencies/SEC_2011_1354_en.pdf)

⁴⁹ European Commission Impact Assessment accompanying the document "Proposal for a Regulation of the European Parliament and of the Council on Money Market Funds" (http://ec.europa.eu/internal_market/investment/docs/money-market-funds/130904_mmfs-impact-assessment_en.pdf)

⁵⁰ IMF Global Financial Stability Report, October 2010, Chapter 3: "The uses and abuses of sovereign credit ratings" (<http://www.imf.org/external/pubs/ft/gfsr/2010/02/pdf/chap3.pdf>)

⁵¹ G. Manso, UC Berkeley, "Feedback effects of credit ratings" (<http://faculty.haas.berkeley.edu/manso/ratings.pdf>)

⁵² http://www.financialstabilityboard.org/publications/r_101027.pdf

167. This preliminary impact assessment can be summarised in three main points. First, there could be potentially significant cliff effects from the EU money market funds industry, which has about EUR 1tn in assets under management, due to mechanistic reliance on external ratings in the current investment guidelines that could result in sudden and substantial changes in the universe of investable assets. Second, the vast majority of banking institutions across EU Member States currently use the SA to calculate their capital requirements for credit risk. Nonetheless, it is thought that a very small part of the exposures is associated to external ratings. In the insurance sector, the use of credit quality steps as part of the solvency capital requirement for the calculation of the spread risk capital charge could eventually lead to additional mechanistic reliance on external ratings and therefore potentially to cliff effects.

168. These examples illustrate the importance of reducing mechanistic reliance on external ratings in certain areas as it may have the potential to disrupt financial markets, reduce the benefits brought about by various regulatory initiatives and threaten the ESAs' financial stability objective.

1. CESR/ESMA MMF Guidelines

a. EU MMF industry

169. In these guidelines, money market funds are split between short-term money market funds (STMMFs) and money market funds (MMFs). For the purpose of this impact assessment, the following two points are relevant in that distinction:

- STMMFs are required to invest in securities with a residual maturity of less than or equal to 397 days and have a portfolio-weighted average maturity that does not exceed 60 days, while MMFs do not face the same security maturity restriction as long as their portfolio-weighted average maturity does not exceed 6 months⁵³;
- STMMFs are required to invest in securities that have been awarded 'one of the two highest available short-term credit ratings by each recognised credit rating agency, or non-rated securities with credit quality equivalent to one of these two ratings, while MMFs may also invest in sovereign debt instruments rated at least investment grade⁵⁴.

170. Although growth of the EU MMF industry has slowed in recent years, it remains significant nonetheless. In the peer review of MMF Guidelines⁵⁵ conducted last year, ESMA gathered information from NCAs on the number of MMFs in the EU and MMF assets under management (Table T.01). According to this data, EU MMF assets amounted to EUR 1,039bn in 2012, including EUR 779.9bn for STMMFs only, and the number of funds totalled 1,242.

⁵³ Box 2 points 5 and 7, and Box 3 point 5 of the MMF guidelines.

⁵⁴ Box 2 point 4 and Box 3 points 1 and 2 of the MMF guidelines.

⁵⁵ ESMA Peer Review – Money Market Fund Guidelines ([http://www.esma.europa.eu/system/files/2013-476 - peer review - money market fund guidelines.pdf](http://www.esma.europa.eu/system/files/2013-476_-_peer_review_-_money_market_fund_guidelines.pdf))

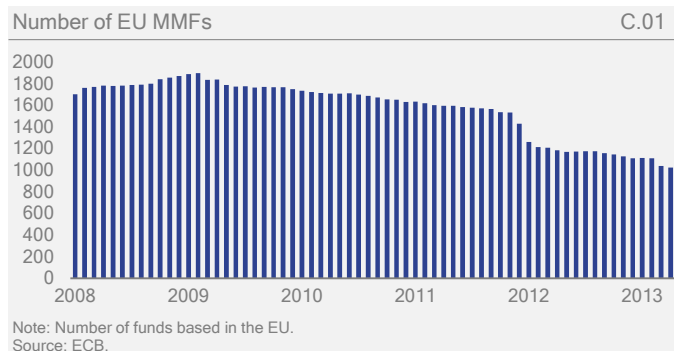
STMMF and MMF overview						T.01
	Number of funds			Assets under management (EUR mn)		
	STMMF	MMF	Total	STMMF	MMF	Total
AT		7	7		405	405
BE	2	7	9	165	507	672
BG	0	7	7			
CZ		3	3		104	104
DE		24	24		4 089	4 089
DK		2	2		191	191
EL	5	17	22	52	673	725
ES	4	67	71	207	8 757	8 964
FI	3	10	13	843	2 925	3 768
FR	295	346	641	221 936	175 388	397 324
HU	32	25	57			
IE	97	5	102	303 510	1 966	305 476
IT	0	12	12		8	8
LT		1	1		12	12
LU	95	108	203	247 167	52 183	299 350
LV	0	2	2			
MT	4	2	6	33	197	230
NL		1	1		150	150
PL		2	2		196	196
PT		9	9		275	275
RO		1	1		3 690	3 690
SE	13	11	24	2,236	6 255	8 491
SI		3	3		23	23
SK		2	2		172	172
UK	10	8	18	3,779	1,035	4,814
Total EU	560	682	1 242	779 928	259 201	1 039 130

Note: Data and ECB exchange rates (for funds based outside the EA) as of 21 September 2012, which was the questionnaire deadline. Countries with no data were left out (EE, LI). STMMFs and MMFs listed based on self-declaration by funds.

Sources: National competent authorities, ECB, ESMA.

171. MMFs are highly concentrated geographically with more than 50% based in FR (641) and another 25% based in LU (203) and IE (102). Assets under management reflect this concentration with 38.2% of the total in FR, 29.4% in IE and 28.8% in LU.
172. ECB data provides a broadly similar picture with 1 157 EU MMFs as of September 2012 and EA MMF assets adding up to EUR 961.2bn (compared with EUR 1 021.6bn using the ESMA dataset). The ECB data shows slightly less concentration with 430 MMFs in FR (37% of the total), 294 in LU (25%) and 100 in IE (9%).
173. ECB data shows that the number of EU MMFs has declined by nearly 50% from a high of 1 896 in February 2009 to 1 012 as of May 2013. According to the ESRB, part of this decline 'occurred in the

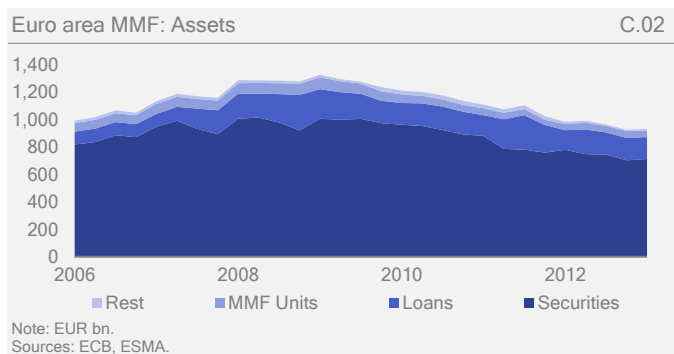
form of a consolidation of the sector following the implementation of the CESR/ESMA guidelines [MMF Guidelines]⁵⁶.



b. Euro area MMF assets

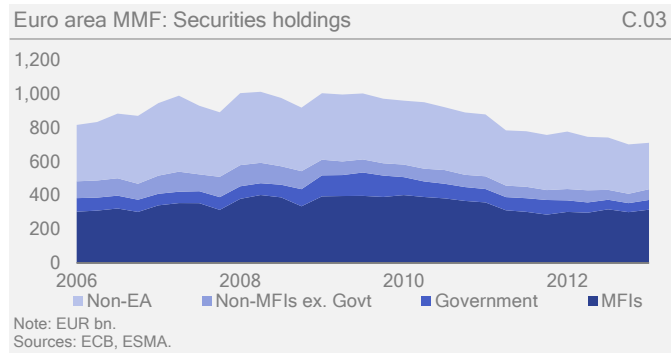
174. The ECB dataset also includes useful details on the assets of MMFs based in euro area (EA) countries, which amounted to 98.3% of total EU MMF assets (based on the data gathered by ESMA in its peer review of MMF Guidelines). EA MMF assets comprise a significant amount of debt securities (EUR 741.6bn as of Q3 2012, or 77.2% of total assets), followed by loans (EUR 161.6bn, 16.8% of assets) and shares of other MMFs (EUR 47.5bn, 4.9% of assets). The shares of these assets in MMF balance sheets have remained broadly constant over time, as illustrated in C.02.

175. The securities held by EA MMFs were largely issued by other EA MFIs (EUR 317bn, 42.7% of all securities held by MMFs), and to a lesser extent by EA governments (EUR 56.7bn, 7.6% of the total) and non-MFIs excluding governments (EUR 58.4bn, 7.9% of the total). The share of EA government securities has decreased over time, from 14% in Q1 2009 to 8% in Q3 2012 (Chart C.03). Holdings of securities issued by non-EA entities—for which the data is not as granular—amounted to a total of EUR 309.4bn.



⁵⁶ Annex to the ESRB Recommendation on money market funds

(http://www.esrb.europa.eu/pub/pdf/recommendations/2012/ESRB_2012_1_annex.en.pdf?693f2e8ca5f8e87fa7ad424aca81fa52)



176. These numbers are broadly comparable with data from the ESRB survey, which show that both STMMF and MMF portfolios are heavily weighted towards MFI assets, with a much smaller proportion of non-financial corporations and government assets (T.02).

EU MMF securities portfolio				T.02
	MFIs	Non-financial corporations	Government	Other financial intermediaries
ESRB Survey	75.2	9.6	13.1	2.1
ECB Data	75.5	6.6	11.1	6.9

Note: EU MMF holdings of securities by type of issuer, in % of total.
Sources: ESRB, ECB.

c. Investable universe and cliff effects

177. As required in the MMF Guidelines, to ensure portfolio are high quality, EU MMFs can only invest in specific assets (see box). As a case study, this impact assessment focuses on the investable universe of EU MMF in relation to EU sovereign debt securities. The case of sovereign downgrades is of particular interest as these have significant spill-over effects, as highlighted in the economic literature⁵⁷.

Quantifying the investable universe

The investable universe of EU MMF is defined in the MMF Guidelines. The guidelines disclose the rating requirements for STMMFs in Box 2, ‘a money market instrument [is considered] not to be of high quality unless it has been awarded one of the two highest available short-term credit ratings by each recognised credit rating agency that has rated the instrument’. Regarding MMFs other than STMMF, Box 3 adds that these may ‘hold sovereign issuance of at least investment grade quality’. Despite the non-binding dimension of these guidelines, ESMA saw that 19 out of 27 NCAs have followed the CESR recommendations by establishing a distinction between STMMF and MMF, with

⁵⁷ Rabah Arzeki, Bertrand Candelon and Amandou N.R.Sy, IMF Working Paper, *Sovereign Rating News and Financial Markets Spill-overs: Evidence from the European Debt Crisis*, March 2011, WP/11/68.

18 countries complying with the sovereign debt requirement. All the major MMF host countries have complied with the Guidelines.

In order to estimate the MMF investable universe, the first step was to collect the short-term ratings of each Member State as of the end of 2012 from the three major CRAs (T.03). Although there are more than three CRAs in the EU, credit ratings tend to be aligned⁵⁸ and these three CRAs account for a significant share of the overall market. EU Member States were then split between three categories:

- those with one of the two highest available short-term credit ratings;
- those with an investment grade but not eligible for EU STMMF investment;
- those with a non-investment grade.

We then calculated the amount of sovereign debt for each category in order to estimate the eligible investable universe. The EU sovereign debt data include short-term (with maturity equal to or less than a year) and long-term securities from Eurostat's government finance statistics, with an aggregate value of EUR 8.8tn. Although not all government debt securities are marketable, the lack of consistency between estimates of marketable debt across the EU led us to simply use gross debt data from Eurostat without retreatment.

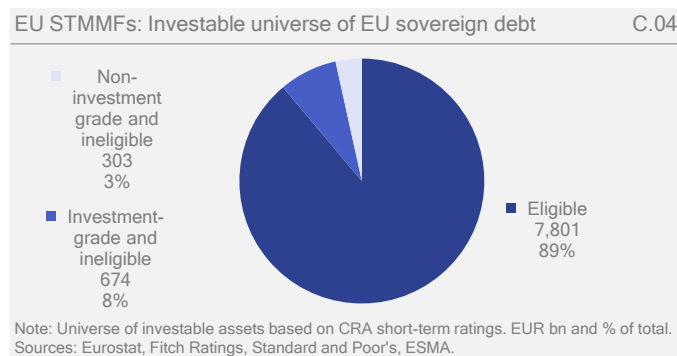
Short-term rating eligibility for EU STMMF			T.03
	Fitch Ratings	Moody's	S&P
Eligible under MMF Guidelines	F1+	P-1	A-1+
	F1		A-1
	F2	P-2	A-2
Ineligible	F3	P-3	A-3
	B, C	Not Prime	B, C
	RD, D		SD, D

Note: S&P's and Fitch's top ratings are split between A-1+ and A-1 and F1+ and F1, respectively. Therefore the three highest ratings from S&P and Fitch are eligible for EU STMMF investment. Since F3, P-3 and A-3 are investment grades, these ratings are eligible for MMFs but not eligible for STMMFs. Non-investment grades start at B and Not Prime. Source: Fitch Ratings, Moody's, Standard & Poor's, ESMA.

178. The EU sovereign debt instruments eligible for EU STMMF investment under the MMF guidelines amounted to EUR 7.8tn as at the end of 2012, equivalent to 88.9% (96.5% of the total) of all EU government debt securities (C.04). This number is larger (EUR 8.5tn) for MMFs other than STMMFs, as the investment guidelines for the latter category are stricter. The gradual deterioration in creditworthiness of some EU sovereigns led to a shrinkage in the investable universe, which in turn

⁵⁸ Annalisa Croce, Stefano Lugo and Robert Faff (2011), *Rating alignment, Rating shopping and Reputation of credit rating agencies: evidence from the subprime crisis*.

may have led to a concentration of MMF investments in eligible EU sovereign debt that could potentially magnify future cliff effects.



179. The case of Spanish (ES) government bonds in October 2012 provides an example of a sudden shrinkage in STMMF investable universe and potential cliff effect. ES government bonds account for 7.6% of all EU sovereign debt securities (EUR 669bn) and a significant portion were eligible for STMMF investment until the October 2012. On 12 October 2012, Spain's short-term debt rating was downgraded by S&P's from A-2 to A-3, making all ES sovereign debt securities overnight ineligible for EU STMMF investments.⁵⁹

180. There are currently eight Member States with a short-term rating of A-2 from S&P and a rating of F2 or higher from Fitch Ratings (T.04). In each case, a downgrade by S&P would result in ineligibility of the sovereign debt stock for STMMF investment. Such a rating change for any individual Member State would shrink the investable universe of STMMFs further by between EUR 3.9bn and 1.655bn (the latter figure amounts to 18.9% of total EU sovereign debt securities). In an extreme case, a hypothetical downgrade of all A-2 rated Member States would lead to an equivalent reduction of the investable universe by around 1.9tn.⁶⁰

EU sovereign debt securities and short-term ratings			T.04
	Amount	S&P	Fitch
AT	185,116	A-1+	F1+
BE	330,132	A-1+	F1+
BG	4,929	A-2	F3
CY	9,186	C	B
CZ	62,651	A-1+	F1
DK	91,837	A-1+	F1
EE	246	A-1+	F1
ES	669,027	A-3	F2

⁵⁹ In addition, given the alignment of many non-sovereign debt ratings to the sovereign and that several banks are in the process of being recapitalised, the overall reduction in investable universe may be even larger than the impact in the sole area of sovereign debt securities.

⁶⁰ In addition, mechanistic reliance may have the undesirable consequence of STMMFs anticipating potential future downgrades and assets ineligibility, with some MMFs reducing early their holdings of government and/or private sector debt, thereby affecting the liquidity position of the sovereign and/or private entities and adding to the pressure on their creditworthiness.

FI	83,020	A-1+	F1
FR	1,546,058	A-1+	F1
DE	1,547,158	A-1+	F1
GR	93,614	SD	B
HU	59,118	B	B
IE	89,289	A-1+	F1+
IT	1,655,283	A-2	F2
LV	3,866	A-2	F2
LT	10,671	A-2	F2
LU	5,000	A-1+	F1+
MT	4,477	A-2	F1
NL	331,257	A-1+	F1+
PL	181,244	A-2	F2
PT	110,661	B	B
RO	30,899	B	F3
SK	32,799	A-1	F1
SI	16,252	A-2	F2
SE	119,194	A-1+	F1+
UK	1,505,769	A-1+	F1

Note: Data as of end 2012 in EUR million. Moody's short-term ratings were not used due to their limited availability. Sources: Eurostat, Fitch Ratings, Standard & Poor's.

2. The standardised approach under CRD IV legislation⁶¹

181. Under the IV, credit institutions can choose between two approaches for the calculation of capital requirements for credit risk, namely the standardised approach (SA) and the internal ratings-based approach (IRBA).
182. The SA is widely used among European banks. While many institutions rely fully on the SA, banks using the IRBA also tend to have significant exposures under the SA, subject to the partial use requirements in the CRR. A recent study by the EBA found that out of a sample of 89 IRBA banks on average 30% of risk weighted assets stemmed from the SA.⁶²
183. The impact of prohibiting the use of external ratings could be substantial, given the wide usage of the SA. However, in many cases the capital requirements under the SA do not depend on the use of external ratings, as explained in detail below. Furthermore, given that this Report does not propose any changes at this point in time, there will be no immediate impact of this proposal.
184. When assessing the impact of reducing the reliance on external ratings by prohibiting their use under the SA, for many types of exposures under the SA banks will not be allowed to use an external rating when determining capital requirements. This relates to the following exposure classes under the SA: exposures to certain international organisations; retail exposures; exposures secured by mortgages

⁶¹ Regulation EU No. 575/2013 (CRR) and Directive 2013/36/EU

⁶² [Review on the consistency of Risk Weighted Assets, First interim Report on the review of the consistency of risk-weighted assets.](#)

on immovable properties; exposures in default; exposures associated with particularly high risk; equity exposures; and some other items. Those exposure classes where external ratings may be used are exposures to central governments or central banks; exposures to regional governments or local authorities; exposures to public sector entities; exposures to multilateral development banks; exposures to institutions; exposures to corporates; exposures in the form of covered bonds; items representing securitisation positions; and exposures in the form of shares in collective investment undertakings.

185. In many cases external ratings are not available for exposures falling within the abovementioned exposure classes and/or the current provisions of the CRR already provide incentives not to use external ratings:
186. Exposures to Member States' central governments and central banks denominated and funded in domestic currency will receive a 0% risk weight, regardless of an external rating of the Member State. Until the end of 2017 (transitional rule set out in Article 495(2) of the CRR) the same risk weight will apply if exposures are denominated and funded in the domestic currency of any other Member State. After that date, those exposures will be risk weighted according to external ratings (if available). With these rules, a large portion of banks' exposures to sovereigns and central banks will already be covered without the reliance on external ratings. In addition, banks may use the credit assessments by export credit agencies to determine the capital requirements for exposures to central governments or central banks. Only in all remaining cases may the capital requirements maybe linked to external ratings, the most notable example being exposures in the form of US government bonds.
187. Exposures to regional governments, local authorities and public sector entities can, under certain conditions, be treated as exposures to the central government with the exemptions applicable as explained above. Only in cases where this preferential treatment is not applicable may banks use external ratings.
188. For exposures to multilateral development banks (MDBs), the CRR allows the application of a 0% risk weight for a specific list of MDBs. Banks may use external ratings only for exposures to MDBs not included in this list.
189. The materiality of the use of external ratings will also likely be low for exposures to corporates. Typically, only very large corporates will have an external rating. In many jurisdictions, smaller and medium-sized companies will be unrated and the 100% risk weight will apply. Furthermore, rated corporates will usually be assigned to CQS 2 and below where the effect of using an external rating will in most cases be not material (for CQS 3 and 4 the risk weight is 100%). Therefore, the incentive for banks to use external ratings for the corporate exposure class may only be very limited. Large corporates, which typically are externally rated, tend to be customers of larger institutions, who are more likely to use IRB models. Therefore also limited use of ratings appears likely, although this is a statement that can only be made with some caution.

190. The use of external ratings will be much more material for exposures to institutions and exposures in the form of covered bonds. Banks have a strong incentive to rely on external ratings for both these exposure classes. For exposures to institutions with an external rating qualifying for CQS 1 to 3 the corresponding risk weight will be below 100%. If the institution is unrated but there is an external rating available for the central government of the jurisdiction in which the institution is incorporated, the risk weight will also be below 100% if the external rating of the central government is assigned to CQS 1 or 2. A similar treatment applies to exposures in the form of covered bonds.
191. The use of external ratings of exposures representing securitisation positions is also very material. Institutions have a strong incentive to use external ratings because unrated securitisation positions will receive a 1.250% risk weight, subject to some limited exemptions.

Annex V

Questionnaire drafted by EBA, EIOPA, and ESMA on the use of credit ratings by financial intermediaries

Sectoral Competent Authorities are kindly requested to submit their final answer to this questionnaire by 30 April 2014. However, your preliminary ideas will be discussed on the second day of our workshop, 21 March 2014. To have a constructive discussion, it would be appreciated if participants could prepare a draft answer sheet before attending the seminar.

Article 3(1)(r) of the CRA Regulation⁶³ identifies Sectoral Competent Authorities (SCAs) as the national competent authorities designated under the relevant sectoral legislation for the supervision of the financial intermediaries listed in Table 1 below.

Article 25a of the CRA Regulation states that SCAs are responsible, among other things, for the supervision and enforcement of Article 4(1) of the CRA Regulation (use of ratings for regulatory purposes by financial institutions). As provided in Article 5a of the CRA Regulation (see below box), SCAs have to monitor that credit assessment processes and reference to ratings in the investment policies by financial intermediaries mentioned in Art 4(1) of the CRA Regulation do not rely mechanistically on ratings, and where appropriate encourage mitigation of the potential impact of contractual references to ratings.

Article 5a

Over-reliance on credit ratings by financial institutions

- 1. The entities referred to in the first subparagraph of Article 4(1) shall make their own credit risk assessment and shall not solely or mechanistically rely on credit ratings for assessing the creditworthiness of an entity or financial instrument.*
- 2. Sectoral competent authorities in charge of supervising the entities referred to in the first subparagraph of Article 4(1) shall, taking into account the nature, scale and complexity of their activities, monitor the adequacy of their credit risk assessment processes, assess the use of contractual references to credit ratings and, where appropriate, encourage them to mitigate the impact of such references, with a view to reducing sole and mechanistic reliance on credit ratings, in line with specific sectoral legislation.*

This questionnaire is aimed at gathering feedback from SCAs on the following issues:

Q1. Have specific supervisory actions been already considered by SCAs to encourage reduction of contractual reference to credit ratings?

Please provide your answer in a separate document.

Q2. Can you already identify some of the main obstacles preventing your SCA from encouraging mitigation of contractual references to credit ratings?

Please provide your answer in a separate document.

Q3. Do you know whether the financial intermediaries under your supervision already use tools for the credit quality assessment other than external credit ratings?

Please provide your answer in a separate document.

⁶³ Regulation (EC) No 1060/2009 of the European Parliament and of the Council on credit rating agencies of 16 September 2009. The consolidated version of the Regulation is available at: <http://eur-lex.europa.eu/LexUriServ/LexUriServ.do?uri=CONSLEG:2009R1060:20130620:EN:PDF>

Q4. SCAs are also kindly invited to provide information on which financial intermediaries make use of credit ratings for the purposes indicated in Table 1 below.

Please specify in a separate document for what purpose and under what legal basis credit ratings are used by the relevant financial intermediary. Please also do not hesitate to specify whether the financial intermediaries you supervise refer to credit ratings for other purposes than the ones specified in Table 1.

Table 1: Use of ratings by institutions supervised by SCAs according to Article 5a and 25a of the CRA Regulation

This table provides an overview of the possible uses of credit ratings by financial institutions. SCAs are kindly invited to: (i) tick the box or boxes that apply to their supervised institutions; (ii) provide a detailed explanation for each ticked box in a separate document.

Users of credit ratings*	Legal source of reference to ratings	Raising money / finance cost	Benchmark	Investment decision	Investment advice	Mandate to an asset manager including portfolio management	Capital requirements	Collateral	Prospectus	Communication
Credit institutions										
Investment firms										
Insurance undertakings										
Reinsurance undertakings										
Institutions for occupational retirement provision (IORPs)										
Management companies										
Investment companies										
Alternative investment fund managers										
Central counterparties										

* This column refers to the financial institutions under the supervision of SCAs according to Art. 5a and 25a of the CRA Regulation. Article 3(1) of the CRA Regulation provides definitions for the financial institutions.

Annex VI

Request for Technical Advice

As required by Regulation (EU) No 1060/2009 on credit rating agencies (CRAs), the Commission shall submit two reports to the European Parliament and to the Council by the end of 2015 and one report by 1 July 2016. For these reports, the CRA Regulation provides that the Commission shall obtain technical advice from ESMA.

For the first report, the Commission shall report on the steps taken to delete references in European legislation to credit ratings which trigger, or have the potential to trigger, sole and mechanistic reliance on credit ratings and on the development of alternative tools to enable investors to make their own credit risk assessment of issuers and of financial instruments.

In the second report, the Commission shall review the situation in the credit rating market. Following this review, the Commission shall submit a report assessing the application of existing provisions of the CRA Regulation as well as the need to extend a number of provisions of the CRA Regulation. This report should cover issues such as rotation, competition and conflicts of interest.

For the third report, the Commission shall review the situation in the credit rating market for structured finance instruments, in particular the credit rating market for resecuritisations. As a follow up of this review, the Commission shall submit a report assessing the availability of sufficient choice in the structured finance industry to comply with requirements on rotation and double ratings for structured finance instruments.

In light of the above, we are seeking high quality and timely technical input from ESMA on the issues of reducing reliance on credit ratings, the situation in the credit rating market in general, and in the credit rating market for structured finance instruments in particular, as outlined in the Annex to this letter. This technical advice will serve, among other sources, as a basis for potential future policy development by the Commission.

Given the deadlines for the Commission reports by 31 December 2015 and 1 January 2016, for the first two reports we would like to receive ESMA's input by 30 June 2015. For the third report, with deadline 1 July 2016, we would like to receive ESMA's input by 31 December 2015. Timely exchanges and delivery of these inputs will allow the Commission to meet its obligations to report to the European Parliament and Council on time.

Technical advice for the report on over-reliance

On the topic of alternatives to credit ratings, the technical advice shall cover:

- A screening of remaining references to ratings in existing national supervisory guidelines and

technical standards.

- A screening of the lessons drawn from supervisory experiences and best practices in the EU by national supervisors on mitigating the risks related to over-reliance on ratings.
- A screening of available alternatives to credit ratings employed by market practitioners as identified by ESMA.