

# Basel Committee on Banking Supervision

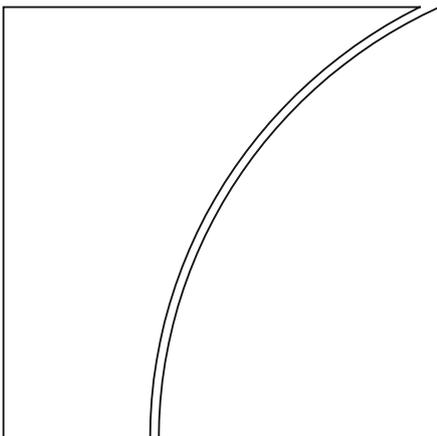
## Second consultative document

### Standards

#### Revisions to the Standardised Approach for credit risk

Issued for comment by 11 March 2016

December 2015



**BANK FOR INTERNATIONAL SETTLEMENTS**

This publication is available on the BIS website ([www.bis.org](http://www.bis.org)).

© *Bank for International Settlements 2015. All rights reserved. Brief excerpts may be reproduced or translated provided the source is stated.*

ISBN 978-92-9197-380-4 (print)

ISBN 978-92-9197-381-1 (online)

## Contents

Revisions to the standardised approach for credit risk.....	1
Introduction.....	1
Section 1: Proposed revisions to the standardised approach for credit risk.....	3
1.1 Exposures to banks and corporates .....	3
1.1.1 Exposures to banks.....	4
1.1.2 Exposures to corporates .....	7
1.2 Specialised lending exposures to corporates .....	8
1.3 Subordinated debt, equity and other capital instruments .....	8
1.4 Retail portfolio .....	9
1.5 Real estate exposure class.....	11
1.5.1 Residential real estate exposures.....	12
1.5.2 Commercial real estate exposures.....	13
1.5.3 Land acquisition, development and construction (ADC) exposures .....	14
1.6 Risk weight add-on for exposures with currency mismatch.....	14
1.7 Off-balance sheet exposures.....	15
1.8 Defaulted exposures.....	16
1.9 Exposures to multilateral development banks (MDBs).....	17
1.10 Other assets .....	18
Section 2: Proposed revisions to the credit risk mitigation framework for exposures risk-weighted under the standardised approach .....	18
Section 3: Objectives of the SA review in light of current proposals.....	21
Annex 1 Proposals on risk weighting for exposure classes and credit risk mitigation .....	24
Introduction.....	24
A. Individual exposures .....	25
1. Exposures to sovereigns.....	25
2. Exposures to non-central government public sector entities (PSEs).....	26
3. Exposures to multilateral development banks (MDBs).....	26
4. Exposures to banks .....	27
5. Exposures to securities firms and other financial institutions.....	30
6. Exposures to corporates.....	30
7. Subordinated debt, equity and other capital instruments .....	33
8. Retail exposures.....	33

9. Real estate exposure class.....	34
10. Add-on risk weight to certain exposures with currency mismatch.....	38
11. Off-balance sheet items.....	38
12. Defaulted exposures.....	39
13. Other assets.....	40
B. Recognition of external ratings by national supervisors.....	41
C. Implementation considerations in jurisdictions that allow use of external ratings for regulatory purposes.....	42
D. Credit risk mitigation techniques for exposures risk-weighted under the standardised approach.....	45
1. Overarching issues.....	45
2. Overview of credit risk mitigation techniques.....	47
3. Collateralised transactions.....	48
4. On-balance sheet netting.....	57
5. Guarantees and credit derivatives.....	58
Annex 2 Summary of results from first QIS on 2014 consultative document.....	63

# Revisions to the standardised approach for credit risk

## Introduction

This is the Committee's second consultation on *Revisions to the Standardised Approach for credit risk*. The Committee wishes to thank all respondents for their extensive feedback on its first consultative document, which was published in December 2014.<sup>1</sup> The revised proposals in this second consultative document aim to address the issues raised by respondents with respect to the initial proposals. These revised proposals also seek to achieve the objectives set out in the first consultative document to balance simplicity and risk sensitivity, to promote comparability by reducing variability in risk-weighted assets across banks and jurisdictions, and to ensure that the standardised approach (SA) constitutes a suitable alternative and complement to the Internal Ratings-Based (IRB) approach.

The current SA prescribes the use of external credit ratings to determine risk weights for certain exposures. In line with the objective of reducing mechanistic reliance on credit rating agency (CRA) ratings,<sup>2</sup> the Committee proposed, in its first consultative document, an approach for exposures to banks and corporates that removed references to external ratings and assigned risk weights based on two risk drivers. Respondents expressed significant concerns, suggesting that the complete removal of references to ratings was unnecessary and undesirable. Some respondents were of the view that the approach would be overly complex, while others argued that it would be extremely insensitive to risk. Acknowledging the limitations of removing all references to external ratings, the Committee proposes, in this second consultative document, to reintroduce external ratings, in a non-mechanistic manner, for exposures to banks and corporates. However, alternative approaches are also proposed for jurisdictions that do not allow the use of external ratings for regulatory purposes. While this set of proposals aims to balance risk sensitivity and complexity, the Committee recognises that there could be a lack of comparability between jurisdictions that use ratings for regulatory purposes and those that do not. The Committee's objective is to limit the differences in outcomes between such approaches. The Committee welcomes respondents' views (and evidence) on whether, and how, such differences can be further mitigated.

The Committee proposes to risk weight exposures to banks as follows:

- In jurisdictions that allow the use of ratings for regulatory purposes, ratings would be the primary basis to determine risk weights for rated exposures. To reduce mechanistic reliance on ratings, this approach would be subject to due diligence requirements, which could result in a higher risk weight than that determined by ratings.
- In jurisdictions that do not allow the use of ratings for regulatory purposes, and for unrated exposures in all jurisdictions, banks would classify exposures into three different buckets (A, B and C) provided that certain minimum criteria are met. Due diligence could also result in the classification of an exposure into a higher-risk grade even if the minimum criteria of a lower risk grade are met.

For exposures to corporates, the following approach for risk weighting and credit risk mitigation purposes is proposed:

<sup>1</sup> Available at [www.bis.org/bcbs/publ/d307.pdf](http://www.bis.org/bcbs/publ/d307.pdf).

<sup>2</sup> See the Financial Stability Board (FSB) *Principles for reducing reliance on CRA ratings* (FSB principles), available at [www.financialstabilityboard.org/wp-content/uploads/r\\_101027.pdf](http://www.financialstabilityboard.org/wp-content/uploads/r_101027.pdf).

- In jurisdictions that allow the use of ratings for regulatory purposes, ratings would be the primary basis to determine risk weights for rated exposures. As in the case of exposures to banks, due diligence could result in a higher risk weight than that determined by ratings. Unrated exposures would be risk weighted at 100%, as under the current approach. The criteria for eligibility of guarantors and financial collateral would be primarily based on external ratings, as in the current approach.
- In jurisdictions that do not allow the use of ratings for regulatory purposes, a lower risk weight of 75% would apply to certain corporates deemed to be “investment grade”. Other exposures would receive a 100% risk weight. “Investment grade” entities and debt securities issued by them, would be allowed as eligible credit risk mitigants.
- In all jurisdictions, exposures to small and medium entities (SMEs) in the corporate exposure class would receive an 85% risk weight.<sup>3</sup>

For other exposure classes the Committee has built on the first consultative proposals as well as on feedback received and evidence from the first Quantitative Impact Study (QIS) to improve the current approach. For exposures secured by real estate, the Committee proposes to use the loan-to-valuation (LTV) ratio as the main risk driver for risk weighting purposes, and to use a three-category classification (from less to more risky) as follows:

1. General treatment for exposures secured by real estate where repayment is not materially dependent on rent/sale of the property;
2. A more conservative treatment for exposures secured by real estate where repayment is materially dependent on cash flows (ie rent/sale) generated by the property. Specialised lending (corporate) exposures assigned to “income-producing real estate” under the IRB approach would be classified under this category;
3. A conservative, flat risk weight for specialised lending real estate exposures defined as “land acquisition, development and construction” (ie loans to companies or SPVs, unfinished property meeting the definition of specialised lending).

This consultative document also includes proposals for exposures to multilateral development banks, retail and defaulted exposures, as well as off-balance sheet items. The SA treatment for sovereigns, central banks and public sector entities are not within the scope of these proposals. The Committee is considering these exposures as part of a broader and holistic review of sovereign-related risks.

The Committee notes that the SA is a global minimum standard and that it is not possible to take into account all national characteristics in a simple approach. As such, national supervisors should require a more conservative treatment if they consider it necessary to reflect jurisdictional specificities. Furthermore, the SA is a methodology for calculating minimum risk-based capital requirements and should in no way be seen as a substitute for prudent risk management by banks.

The consultative document is structured as follows. Sections 1 and 2 describe the revised proposals (for which the standards text is proposed in Annex 1), as well as the underlying rationale based on the first consultative proposals and feedback received. Section 3 discusses how the revised proposals are designed to achieve the objectives and principles of the review. Annex 2 includes a summary of the QIS conducted during the first consultation.

<sup>3</sup> SME exposures in the retail exposure class would continue to receive a 75% risk weight.

## Next steps

The Committee welcomes comments on all aspects of the revised proposals, particularly in relation to specific questions included in this consultative document. Comments should be uploaded at [www.bis.org/bcbs/commentupload.htm](http://www.bis.org/bcbs/commentupload.htm) by **Friday 11 March 2016**. All comments will be published on the website of the Bank for International Settlements unless a respondent requests confidential treatment.

The Committee will conduct a comprehensive QIS as part of the Basel III monitoring exercise collecting data as of end-December 2015. All calibrations in the consultative document are preliminary, and will be subject to revisions post-consultation and based on evidence from the second QIS. The Committee will assess the proposals and will adjust calibrations where necessary, to ensure overall consistency within the capital framework. Increasing overall capital requirements under the SA for credit risk is not an objective of the Committee; rather, capital requirements should be commensurate with the underlying risk.

The Committee encourages market participants to contact their national supervisors if they wish to participate in the QIS on a best-efforts basis. Extensive and good quality data will be crucial in supporting an appropriate calibration of the revised standardised approach.

Prior to finalising the revised SA, the Committee will evaluate appropriate implementation arrangements, including transitional or grandfathering provisions where necessary, and will provide sufficient time for implementation taking into account the range of other reforms that have been, or are due to be, agreed by the Committee.

## Section 1: Proposed revisions to the standardised approach for credit risk

### 1.1 Exposures to banks and corporates

#### Background

The current SA references external ratings for rated exposures to banks and corporates; and applies a flat risk weight for unrated exposures.

Consistent with the aim of reducing mechanistic reliance on external ratings, the Committee proposed, in its first consultative document, an approach that removed references to external ratings and assigned risk weights based on two risk drivers. The Committee proposed measures of capital adequacy (ie Common Equity Tier 1 (CET1) risk-based capital ratio) and asset quality (ie net non-performing assets (NPA) ratio) as risk drivers for risk-weighting exposures to banks; and revenue and leverage for risk weighting exposures to corporates. Industry respondents expressed significant concerns about the proposals. Some respondents were of the view that the two-risk driver approach was overly simplistic and would result in a loss of risk information. Others pointed out that the poor performance of, and overreliance on, external ratings were mainly focused on securitisations and sovereigns. The elimination of references to ratings for exposures to banks and corporates was thus viewed as unnecessary and undesirable.

With respect to the specific risk drivers identified for exposures to banks, most respondents could accept the use of a capital adequacy ratio, although preferences and concerns varied regarding the most appropriate capital ratio to apply (eg the proposed risk-based CET1 or, alternatively, the Tier 1 risk-based capital or leverage ratios). Many respondents expressed serious concerns that a net NPA ratio could result in significant comparability issues due to different accounting regimes. As for the risk drivers identified for exposures to corporates, the use of leverage was deemed inappropriate without

consideration of a corporate's industry sector. The use of revenue was also criticised as it would penalise SMEs.

The Committee acknowledges the limitations of its first consultative proposals, many of which were anticipated in the 2014 consultative document. Taking into account respondents' feedback, the Committee has considered possible alternatives to the two-risk driver approach. However, to maintain the same level of risk sensitivity of the current SA where ratings are referenced, the Committee has concluded that most alternative approaches, including more quantitative risk factors that reflect credit risk characteristics, would significantly increase the complexity of the SA.

Following extensive discussions and deliberations, the Committee is setting out a revised approach that combines elements of the current SA and the 2014 consultative document. This revised approach aims to improve the current SA by addressing concerns highlighted by respondents during the first consultation. It is also a reflection of the Committee's efforts to strike an appropriate balance among simplicity, risk sensitivity and comparability.

### Reducing mechanistic reliance on ratings

The primary objective of the FSB Principles is to discourage banks from relying *mechanistically* on external ratings for the assessment of an asset's creditworthiness. Banks should be able to conduct their own assessment of the creditworthiness of, and other risks relating to, the financial instruments to which they are exposed, and satisfy their supervisors of that capability. As long as banks continue to have SA capital requirements based on external ratings, banks should also put in place processes to ensure that they have an appropriate understanding of the uses and limitations of external ratings.

Consistent with these principles, the Committee proposes to introduce under Pillar 1 due diligence requirements for assessing the creditworthiness of a bank's counterparties, and to enhance the requirements surrounding the use of external ratings. This is to ensure that banks undertake their own due diligence and internal risk management and do not rely exclusively on external ratings for risk-weighting purposes. The proposed standards text on due diligence is in Annex 1, paragraphs 14 and 15.

#### 1.1.1 Exposures to banks

The revised approach for exposures to banks prescribes a hierarchy of approaches to ensure that banks do not have the discretion to "cherry-pick" the approaches. Exposures are risk-weighted based on the following hierarchy:

- (a) External Credit Risk Assessment Approach (ECRA): for rated exposures of banks incorporated in jurisdictions that allow the use of external ratings for regulatory purposes.

As a starting point, a bank would determine the "base" risk weight of an exposure based on the external rating of the counterparty/exposure using a look-up table. The bank would perform due diligence to ensure that the external rating appropriately and conservatively reflects the credit risk of the exposure. If the due diligence assessment reflects higher risk characteristics than that implied by the external rating of the exposure, the bank would apply a higher risk weight for the exposure. Due diligence analysis should never result in the application of a lower risk weight than that determined by the external rating.

The Committee believes that banks' external ratings as used for regulatory capital purposes should exclude government support.<sup>4</sup> This is in line with the objective of breaking the link between banks and their sovereigns (which is also achieved by eliminating from the current framework the option of risk-weighting bank exposures based on their sovereigns' ratings). Since the Committee recognises that bank ratings without government support may not be currently available, the Committee welcomes

<sup>4</sup> External ratings of public banks owned by their governments are excluded from this requirement.

feedback from market participants and credit rating agencies to assess the feasibility and appropriateness of implementing this proposal.

- (b) Standardised Credit Risk Assessment Approach (SCRA): for unrated exposures of banks incorporated in jurisdictions that allow the use of external ratings for regulatory purposes; and for all exposures of banks incorporated in jurisdictions that do not allow the use of external ratings for regulatory purposes.

As part of its due diligence assessment, a bank should be able to assess the credit risk of an exposure and classify the exposure as Grade A, B or C. A bank may classify an exposure to a higher-risk grade (ie with a higher risk weight) even if it meets the minimum criteria set out for a lower risk grade, or has not breached the triggers of the higher risk grade. Due diligence should never result in a risk weight lower than that determined by the criteria set out for each grade below.

### *Criteria and triggers for assigning bank exposures to SCRA grades*

Grade A: This grade bucket would include exposures to bank counterparties that have adequate capacity to meet their financial commitments (including repayments of principal and interest) in a timely manner, for the projected life of the assets or exposures, and irrespective of economic cycles or business conditions.

If a counterparty exceeds the published minimum regulatory requirements (eg leverage, liquidity and risk-based capital ratios) and buffers (eg GSIB surcharge, capital conservation and countercyclical capital buffers) established by its national supervisor as implemented in the jurisdiction where the borrowing bank is incorporated, a bank may apply a risk weight of 50% to its exposures to that bank counterparty.

A bank may classify an exposure to a higher risk grade even if it meets the above minimum criteria. If a bank judges that a counterparty might have inadequate capacity to meet its financial commitments in the event of adverse changes in business or economic conditions, the exposure(s) to such a counterparty should be assigned to a riskier grade.

Grade B: This grade bucket would include exposures to bank counterparties that are subject to substantial credit risk, with repayment capacities dependent on stable or favourable economic or business conditions. If a counterparty does not meet one or more of the applicable published buffers (eg GSIB surcharge, capital conservation and countercyclical capital buffers) required by its national supervisor as implemented in the jurisdiction where the borrowing bank is incorporated, a bank would apply a risk weight of 100% to its exposures to that bank counterparty, as long as none of the triggers for Grade C is breached.

Grade C: This grade bucket would include higher credit risk exposures to counterparties that have material default risks and limited margins of safety. For these counterparties, adverse business, financial, or economic conditions are very likely to lead, or have led, to an inability to meet its financial commitments.

At a minimum, a bank would apply a Grade C risk weight if any of the triggers below is breached:

- The bank counterparty has breached any of the published and binding<sup>5</sup> minimum regulatory requirements determined by national supervisors as implemented in the jurisdiction where the borrowing bank is incorporated; or

5 National supervisors may allow banks to be below minimum liquidity requirements during a period of financial stress in order to avoid undue negative effects on the bank and other market participants. To this end, liquidity requirements would not be

- Where audited financial statements are required on the bank counterparty, the external auditor has issued an adverse audit opinion, or it has expressed substantial doubt about the counterparty's ability to continue as a going concern in its financial statements or audited reports within last 12 months.

Even if these triggers are not breached, a bank may judge that an exposure meets the definition of Grade C. In that case, the exposure should be classified as Grade C and risk-weighted at 150%.

If the exposure is in default according to the definition in paragraph 75, it would also receive a 150% risk weight (see paragraph 77).

### *Risk weight floor*

The Committee agrees with industry respondents that the assessment of the credit risks of an exposure to a counterparty should take into account the macroeconomic environment and risks of the counterparty's country of primary operations. Where external ratings are available and used, these risks would be assessed as part of the overall ratings assignment by the credit rating agencies. Where external ratings are not available or used, however, the Committee is of the view that this may be reflected by incorporating country ratings (eg OECD country ratings) as an objective criterion for each grade bucket, or by imposing a risk weight floor based on the risk weight applied to the sovereign exposures (as a proxy).<sup>6</sup> The Committee seeks respondents' views on this approach, including alternative suggestions, on how the macroeconomic environment and risks of the counterparty's country of primary operations may be considered under the SCRA.

### *Short-term interbank exposures*

As in the 2014 consultative document, the Committee proposes to maintain a preferential risk weight for short-term interbank exposures, so as not to negatively impact market liquidity in interbank markets.

For the purposes of applying a preferential risk weight, short-term interbank exposures are defined as having an original maturity of three months or less. Interbank exposures with an original maturity longer than three months would not qualify for the preferential treatment.

While some respondents requested that the definition of short-term interbank exposures be changed to those having a residual maturity of three months or less, the Committee believes this would not be prudent. This preferential treatment is not thought of as a maturity adjustment to exposures with a shorter maturity (the SA does not have maturity adjustments as provided in the IRB approach). Rather, the rationale for this preferential risk weighting is to avoid interference with monetary policy channels and to prevent any negative impact on market liquidity in interbank markets. Evidence suggests that most short-term exposures related to monetary policy are, in fact, shorter than three months at origination.

The proposed risk weights are presented in Annex 1, paragraphs 18 and 28.

### *Considerations about the proposal*

Reducing mechanistic reliance on ratings and enhancing the role of due diligence processes might impair the comparability of capital requirements.

To address this concern, the Committee is considering whether to further enhance disclosure requirements. In particular, the FSB Principles recommended that, in order to provide market discipline,

considered binding. See *Basel III: The Liquidity Coverage Ratio and liquidity risk monitoring tools*, January 2013, [www.bis.org/publ/bcbs238.pdf](http://www.bis.org/publ/bcbs238.pdf).

<sup>6</sup> The Committee is currently reviewing the treatment of sovereign exposures for capital purposes as part of its broader and holistic review of sovereign-related risks.

banks should publicly disclose information about their credit assessment approach. The Committee welcomes feedback on the appropriateness of implementing this recommendation.

### 1.1.2 Exposures to corporates

The Committee considered applying the hierarchy of approaches (ie ECRA and SCRA) described above for bank exposures to corporate exposures, but it was not possible to identify objective criteria to classify corporate counterparties into grades A, B or C under the SCRA. Concerns about comparability and subjectivity, as well as the additional burden on supervisors and banks, were especially acute for corporate exposures assessed under the SCRA. Therefore, unlike the hierarchy of approaches for bank exposures, the Committee proposes two different approaches for corporate exposures, dependent on whether a jurisdiction allows the use of external ratings for regulatory purposes. This approach would be consistent with the credit risk mitigation framework, which also proposes alternative definitions of financial collateral and eligible guarantee for jurisdictions that do not allow the use of external ratings for regulatory purposes. The two proposed approaches to risk-weighting corporate exposures are as follows:

- (a) For banks incorporated in jurisdictions that allow the use of external ratings for regulatory purposes:
  - For rated corporate exposures: A bank would determine the "base" risk weight of the exposure according to a look-up table based on external ratings. Due diligence analysis may result in the application of a higher risk weight than that determined by the external rating (as described above for bank exposures).
  - For unrated corporate exposures: As in the current approach, a bank would assign a 100% risk weight (unless the exposure is in default).
- (b) For banks incorporated in jurisdictions that do not allow the use of external ratings for regulatory purposes:
  - For "investment grade" corporate exposures: A bank would assign a 75% risk weight to corporate exposures to counterparties that meet the definition of "investment grade", as defined in Annex 1, paragraph 173.
  - For all other corporate exposures: A bank would assign a 100% risk weight (unless the exposure is in default).

In addition, the Committee proposes to apply a lower risk weight of 85% for exposures to SMEs.<sup>7</sup> The Committee intends to collect evidence during the consultation and QIS to assess whether such preferential risk weight is warranted. Some respondents noted that a lower risk weight may be justified for SME exposures due to the following reasons:

- Unrecognised collateral: SMEs typically provide more physical collateral than other large corporates. This collateral, despite not being recognised under the SA's credit risk mitigation framework, may offer protection against credit losses and result in lower average losses given default compared to other large corporate exposures.<sup>8</sup>
- Low correlation: The IRB approach also includes a firm size adjustment for SME exposures to reflect the lower asset value correlation, which results in lower risk weights for such exposures.

<sup>7</sup> It is proposed to apply the same definition of SME that is used in the IRB approach to distinguish SMEs from large firms in the corporate portfolio, ie entities where the reported sales of the consolidated group of which the firm is a part are less than €50 million (see Basel II, paragraph 273).

<sup>8</sup> The acknowledgement that non-eligible collateral can provide protection against credit losses is implicit in the current Basel II treatment of past due exposures (see Basel II, paragraph 77).

## 1.2 Specialised lending exposures to corporates

In the 2014 consultative document, the Committee proposed to increase the risk sensitivity of the SA and align the SA with the IRB approach by introducing the IRB's five subcategories of specialised lending exposures. The rationale is that these exposures generally exhibit higher risks and losses than other types of corporate exposures. For simplicity, the proposed risk weights were:

- For project finance, object finance, commodities finance and income-producing real estate finance: A bank would assign the higher of a 120% risk weight and the risk weight of the counterparty; and
- For land acquisition, development and construction finance: A bank would assign the higher of a 150% risk weight and the risk weight of the counterparty.

While respondents generally agreed that specialised lending should receive a distinct treatment under the revised SA, many asserted that the proposal was overly conservative and not sufficiently risk-sensitive, particularly as a basis for the capital floor to the IRB approach. Some respondents requested that the Committee consider either (i) a supervisory slotting approach, which is generally consistent with the IRB approach, or (ii) increase granularity to better reflect the risks under pre-operational and operational phases in the case of project finance. In addition, respondents were of the view that the risk of the counterparty is not relevant in the case of specialised lending exposures given their inherent risk mitigation structures (eg ring-fenced structures, assets provided as collateral and, in some cases, tangible cash flows).

Consistent with the reintroduction of external ratings for risk-weighting exposures to banks and corporates, the Committee also proposes to reintroduce the use of external ratings for specialised lending exposures. In particular, the Committee proposes to use *issue-specific* external ratings for project finance, object finance and commodities finance. The applicable risk weight would be determined by the same risk-weight look-up table that would apply to general corporate debt exposures.

Where issue-specific external ratings are either not available or not allowed for regulatory purposes in a jurisdiction, the Committee proposes:

- For object and commodity finance exposures: A flat risk weight of 120% would apply (irrespective of the counterparty's risk weight); and
- For project finance: A 150% risk weight would apply in the pre-operational phase, and a 100% risk weight in the operational phase (see Annex 1, paragraph 41 for the definition of phases). Respondents' views are sought on the practical application of the proposed definition.

The Committee is of the view that these proposals strike the right balance between simplicity and risk sensitivity, and that they should address the main concerns raised by respondents.

Finally, the Committee proposes to revise the taxonomy of real estate exposures to clarify respondents' queries on the classification of specialised lending exposures related to real estate. In particular, the Committee proposes to categorise income-producing real estate exposures and land acquisition, development and construction exposures as real estate exposures. The treatments for these exposures are described in Section 1.5.

## 1.3 Subordinated debt, equity and other capital instruments

Investments in equity or regulatory capital instruments issued by banks or securities firms are currently risk-weighted at 100% or 250%, unless deduction applies. Equity and subordinated debt instruments issued by corporates are risk-weighted at 100%.

The 2014 consultative document proposed to enhance the risk sensitivity of the framework by introducing specific treatments for subordinated debt, equity and other capital instruments issued by banks and corporates:

- For equity holdings that are not deducted or risk-weighted at 250%: A 300% risk weight was proposed for publicly traded equity holdings, and a 400% risk weight for all other equity holdings, in accordance with the simple risk weight method under the IRB approach.
- For subordinated debt and capital instruments other than equities below the threshold deductions: A 250% risk weight was proposed, which is in line with the risk-weight treatment for such equities below the threshold deductions as specified in paragraphs 87 to 89 of the Basel III capital framework.

While respondents generally agreed that a different treatment for equity and subordinated debt exposures may be warranted, they raised significant concerns on the alignment of risk weights for equity exposures with the IRB simple risk weight method. They argued that the alignment to the simple risk weight method would be overly punitive; and highlighted that IRB offers other less conservative methods, as well as a materiality threshold (Basel II, paragraphs 357 and 358) that allows supervisors to exclude certain equity exposures from the IRB equity treatment.

Some respondents suggested alternative ways of increasing the risk sensitivity of the treatment for equity exposures. In particular, they argued that a flat risk-weight treatment as proposed would not reflect the credit quality of the issuer and the actual risk ranking of such exposures. Some respondents suggested, as an alternative, add-ons to the risk weights assigned to issuers' senior debt exposures. Under the revised proposals in this document, risk weights for senior debt exposures may be based on external ratings. Applying add-ons to such risk weights would therefore extend the reliance on external ratings to the category of equity and subordinated debt; but doing so would be at odds with the policy objective of reducing reliance on external ratings wherever possible. The Committee therefore proposes to apply flat risk weights to equity and subordinated debt exposures.

In the light of feedback, however, the Committee recognises that the abovementioned risk weights included in the 2014 consultative document might be too conservative. In particular, the Committee agrees that, even though risk weights under the SA are usually more conservative than under the IRB approach, IRB has a range of approaches for equity exposures, and equity exposures below a materiality threshold can be risk-weighted under the current SA. Applying the most conservative risk weights that the IRB approach assigns to significant equity exposures to all exposures under the revised SA would also increase the gap between capital requirements calculated under the SA and IRB.

Based on these considerations, the Committee proposes the following, subject to further analysis during the next QIS:

- For equity holdings that are not deducted: A 250% risk weight. Given that significant equity exposures to financial institutions below the deduction threshold are required to be risk weighted at 250%, it follows that insignificant equity exposures to financial institutions as well as equity exposures to non-financial institutions should not be subject to a higher risk weight.
- For subordinated debt and capital instruments other than equities below the threshold deductions: A 150% risk weight.

## 1.4 Retail portfolio

In the current SA, exposures included in the regulatory retail portfolio are defined on the basis of four criteria. In the 2014 consultative document, the Committee proposed to increase the granularity of the retail exposure class by distinguishing between "regulatory retail" – eligible for a preferential risk weight – and "other retail". Notwithstanding this, no explicit definition of retail exposures was proposed.

The Committee now proposes to use the “orientation” criterion – slightly modified – as an explicit definition for retail exposures. According to the current orientation criterion, the exposure should be to (an) individual person(s) or to a small business. The concept of “small business” is undefined and respondents have raised questions on how this should be implemented.<sup>9</sup> Therefore, the Committee proposes to define the retail portfolio as exposures to individuals and to SMEs.

As in the 2014 consultative proposals, the retail portfolio would be comprised of the following two subcategories.

#### 1.4.1 Regulatory retail exposures

Under the current SA, to be eligible for the preferential risk weight, retail exposures have to fulfil not only the abovementioned orientation criterion, but also the product criterion, granularity criterion and low value of individual exposure. The consultative document did not propose significant changes to these criteria other than enhancing the granularity criterion. The Committee does not propose any further changes to the criteria.<sup>10</sup>

With regard to the specific treatment for retail exposures, the Committee proposed, in the 2014 consultative document, to maintain the flat 75% risk weight. The Committee also sought respondents’ views on four potential risk drivers to enhance the risk sensitivity of this exposure class. The four risk drivers were: (i) the extent to which an exposure is secured by durable goods; (ii) the percentage of the borrower income available to service the loan; (iii) the maturity of the exposure; and (iv) whether there is already an established relationship between the borrower and the bank.

Respondents generally agreed that a 75% risk weight is adequate for retail exposures. There were mixed views on whether increasing risk sensitivity or granularity is necessary for this exposure class. Further, based on QIS results, the only risk driver that had the potential of enhancing the risk sensitivity of the exposure class was the extent to which an exposure is secured by durable goods. Given that incorporating this risk driver would introduce undue complexity, the Committee proposes, in line with feedback received on the 2014 consultative document, to maintain a flat 75% risk weight for retail exposures.

#### 1.4.2 Other retail exposures

Consistent with the 2014 consultative document, exposures to individuals that do not meet all of the criteria for inclusion in the regulatory retail exposure class would be categorised as “other retail” exposures and be risk-weighted at 100%. Exposures to SMEs that do not meet all of the criteria for the regulatory retail exposure would be treated as corporate SME exposures. (See proposed rules text in Annex 1, paragraphs 47 and 48.)

<sup>9</sup> Some respondents suggested that the SA framework should incorporate a definition of SME, whose exposures could be treated under the regulatory retail class.

<sup>10</sup> Since the Committee considers diversification to be one of the primary justifications for the current preferential risk-weight treatment, the Committee intends to enforce the 0.2% numerical limit as a binding regulatory standard (ie no aggregate exposure to one counterpart can exceed 0.2% of the overall regulatory retail portfolio), with national discretion to remove the threshold where appropriate alternative methods are implemented.

While a number of respondents objected to this proposal, arguing that this value is too low and would negatively impact SME lending, the Committee is of the view that the proposed treatment provides sufficient flexibility by allowing other appropriate alternative metrics.

## 1.5 Real estate exposure class

Under the current SA, exposures secured by residential or commercial real estate are the only exposure categories that are risk-weighted based on the collateral securing the relevant exposure,<sup>11</sup> as opposed to the counterparty. Currently, residential real estate exposures receive a risk weight of 35% where the loans are granted in accordance with strict prudential criteria, such as the existence of substantial margin of additional security over the amount of the loan based on strict valuation rules. Commercial real estate exposures receive a 100% risk weight, with national discretion to allow a preferential risk weight under certain strict conditions.

### Revised taxonomy

The 2014 consultative document maintained the distinction between residential and commercial real estate exposures within the real estate exposure class and introduced two specialised lending subcategories related to real estate (alongside other specialised lending sub-categories, under the corporate exposure class): income-producing real estate (IPRE) and land acquisition, development and construction (ADC). Some respondents were of the view that there could be potential gaps in the assignment of exposures to IPRE and ADC, and sought clarification on the distinction between these sub-categories and the real estate exposure class. In this consultative document the Committee proposes to categorise all exposures related to real estate under the same exposure class, including IPRE and ADC (ie IPRE and ADC exposures would be defined and categorised in the real estate exposure class, rather than under the specialised lending category within the corporate exposure class).

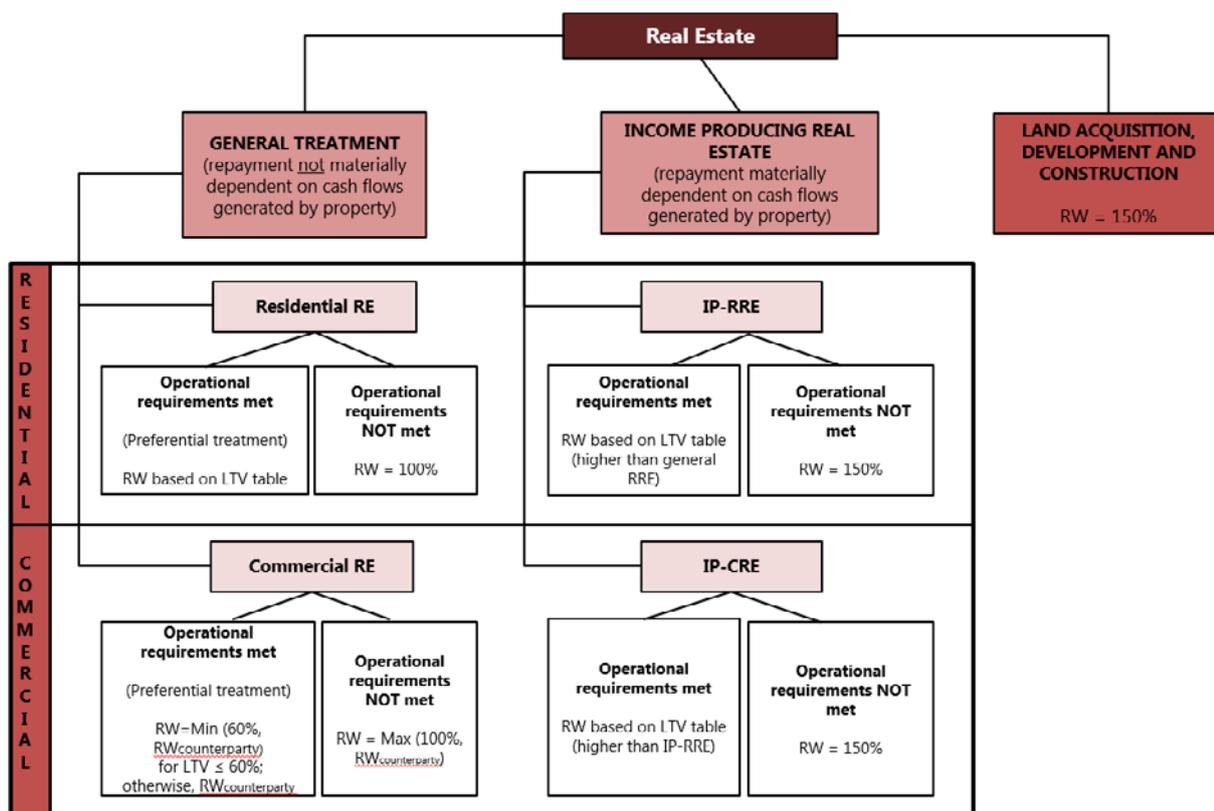
Under this new taxonomy, exposures secured by either residential or commercial real estate would receive differing risk-weight treatments depending on whether repayment of the loan is materially dependent on the cash flows generated by the property. This is the main characteristic used to define specialised lending. Risk weights applied to exposures where there is material dependence would be relatively higher than risk weights applied when there is no material dependence. This is to account for the higher risk due to the stronger positive correlation between the prospects for repayment of the exposure and the prospects for recovery in the event of a default. Specialised lending (corporate) exposures assigned to IPRE under the IRB approach would be classified under this category and be risk-weighted according to LTV ratios.<sup>12</sup> In addition, this category might include some exposures to individuals secured by rental property.

The financing of ADC loans, relating to both residential and commercial real estate, would receive a 150% risk weight in line with the treatment in the 2014 consultative document.

The following chart summarises the revised proposals for the real estate exposure class:

<sup>11</sup> Some respondents asked if additional guarantees or collateral eligible under the CRM could be also taken into account when calculating capital requirements for real estate exposures. Paragraph 52 in Annex 1 has been added to clarify how the calculation of capital requirements should be done.

<sup>12</sup> This is in line with feedback received on the 2014 consultative document; in particular, some respondents pointed out that, in the case of IPRE, the LTV ratio would be more appropriate than a 120% flat risk weight, and a more meaningful risk indicator than the risk weight of the counterparty.



### 1.5.1 Residential real estate exposures

#### *Background: current treatment and previous consultative proposal*

The current SA applies a 35% risk weight to all exposures secured by mortgages on residential property, provided that there is a substantial margin of additional security over the amount of the loan based on strict valuation rules. Such an approach lacks risk sensitivity and comparability across jurisdictions, as it does not specify the margin of additional security required to achieve the 35% risk weight.

In order to increase risk sensitivity and harmonise global standards in this exposure category, the Committee proposed, in its 2014 consultative document, to assign risk weights (ranging from 25% to 100%) based on the following risk drivers: (1) the loan-to-value (LTV) ratio; and (2) the debt servicing coverage (DSC) ratio, as a proxy of the borrower's ability to service the mortgage. The exposure would have to meet specific requirements to apply the risk weight table, and risk weights would have to be applied to the full exposure amount (ie without splitting the exposure across different LTV buckets). The value of the property (denominator of the LTV ratio) and the DSC ratio would be measured at origination and be kept constant throughout the life of the loan.

#### *Feedback received*

While respondents welcomed the Committee's efforts to enhance the risk sensitivity of this exposure class, they claimed that a one-size-fits-all approach has its limitations. Respondents generally supported the use of the LTV ratio as a risk driver, but raised significant concerns on the DSC ratio using a standardised definition and a fixed threshold, given the material differences in underwriting practices, regulations, tax regimes and average incomes across jurisdictions.

### *Revised proposal*

QIS data show that the loss incurred in the event of a default and the likelihood of a borrower's default are lower when the outstanding loan amount relative to the value of the residential real estate collateral is lower. The Committee has therefore decided to retain the LTV ratio as the principal risk driver for this exposure class. When calculating capital requirements, the property should be valued prudently (see revised language in Annex 1, paragraph 50). While the value of the property (ie the denominator of the LTV ratio) would be kept constant at origination, supervisors may require banks to revise the value downwards in case of a general decline in residential market prices.

Given the challenges of defining and calibrating a DSC ratio that can be equitably applied across jurisdictions, the Committee has decided not to use this ratio as a risk driver. However, since evidence (within jurisdictions) still supports a metric such as the DSC ratio as a meaningful predictor of loan performance, the Committee proposes to require the assessment of the borrower's ability to pay (for example, through the DSC ratio) as a key underwriting criterion.

In order to apply the preferential risk weight based on the LTV ratio, banks would need to satisfy other requirements in addition to the assessment of the borrower's ability to pay. These additional requirements would focus on the quality of the collateral (eg adequate valuation, finished property), the collateral's effectiveness (eg legal enforceability, seniority of lien<sup>13</sup>), and other procedural aspects (eg required documentation). A bank would assign a higher risk weight to the exposure, irrespective of the LTV ratio, if the above requirements are not met.

Moreover, the Committee proposes to differentiate risk weights based on whether loan repayment is materially dependent on cash flows generated by the real estate collateral. While risk weights would still vary based on the exposure's LTV ratio, a bank would assign a higher risk weight to the exposure if repayment of the loan is materially dependent on the cash flows generated by the real estate collateral.

Annex 1, paragraphs 49 to 56 of this consultative document present the Committee's proposals for differentiating the risk weight for exposures secured by residential real estate.

### 1.5.2 Commercial real estate exposures

#### *Background: current treatment and previous consultative proposal*

Given that commercial real estate lending is a recurring source of troubled assets in the banking industry, the current standardised approach sets a flat 100% risk weight on most exposures secured by mortgages on commercial real estate.

The 2014 consultative document aimed to increase risk sensitivity in this asset subclass by proposing the following two options: (a) applying the risk weight of the counterparty, as if the exposure were unsecured (allowing for a national discretion to reduce the risk weight under strict conditions similar to the current treatment); or (b) assigning the risk weight according to a look-up table for different ranges of the LTV ratio.

#### *Feedback received*

Industry feedback on the two options was mixed. Some respondents believed that corporate loans that are secured by pledged commercial real estate (owned outright) should refer to the credit quality of the counterparty; while others argued that such exposures should be risk-weighted according to the LTV

<sup>13</sup> Junior liens could be recognised by national supervisors under certain conditions, as described in paragraph 50. They would be treated according to footnote of paragraph 52.

ratio. In general, respondents were of the view that exposures secured by commercial real estate should not receive higher risk weights than the risk weight of an unsecured exposure to the same counterparty.

### *Revised proposal*

To ensure consistency with the treatment for residential real estate exposures, the Committee proposes that commercial real estate exposures be subject to the same requirements as mentioned above (ie assessment of the borrower's ability to repay, quality of collateral, collateral effectiveness and other procedural requirements). A bank would assign a more conservative risk weight to an exposure if these requirements are not met.

Consistent with the treatment for residential real estate exposures, the Committee also proposes to apply differentiated treatments for exposures depending on whether the source of repayment is materially dependent on the cash flows generated by the real estate collateral.

A bank would apply a preferential risk weight if the LTV ratio of its loan is below a standardised threshold, provided that the repayment of the loan is not materially dependent on the cash flows generated by the real estate collateral. This is to reflect that commercial real estate can be an effective risk mitigant if the loan is granted within a conservative LTV range. If the risk weight of the counterparty is lower than the preferential risk weight, a bank would apply the lower of the two risk weights.

When the repayment of the loan depends on the cash flows from lease or rental payments of the commercial property, the Committee proposes to assign higher risk weights based on the LTV ratio of the loan. This is because such loans are riskier and the prospects for repayment, and for recovery in the event of a default, depend on the property rather than on the borrower.

Annex 1, paragraphs 57 to 60 of this consultative document set out the risk-weight treatment in each of the above cases.

### 1.5.3 Land acquisition, development and construction (ADC) exposures

ADC exposures would be risk-weighted at 150%, consistent with the 2014 consultative document. This category would include loans to companies or SPVs financing any of the land acquisition, development and construction of any residential or commercial properties where the source of repayment at origination of the exposure is either the future uncertain sale of the property or cash flows whose source of repayment is substantially uncertain. ADC exposures would also include loans to companies or individuals to finance the acquisition of finished properties where the repayment of the loan depends on the future uncertain sale of the property.

## 1.6 Risk weight add-on for exposures with currency mismatch

The 2014 consultative document proposed to apply an add-on to the risk weight of retail and residential real estate exposures where the currency of the loan is different from that of the borrower's main source of income.

While respondents agreed that exposures with a currency mismatch are subject to higher credit risk and were supportive of this proposal, many questioned whether the proposal should be applied more broadly to other exposures, in addition to retail and (residential) real estate exposures.

In view of this feedback, the Committee intends to extend the application of the risk weight add-on to the corporate portfolio. Specifically, banks would apply a 50% risk weight add-on to "unhedged exposures" with currency mismatch, where "unhedged exposure" is defined as an exposure

to a borrower that has no natural or financial hedge against the foreign exchange risk arising from the currency mismatch (see Annex 1, paragraph 63).<sup>14</sup>

## 1.7 Off-balance sheet exposures

The 2014 consultative document proposed to (i) apply a positive credit conversion factor (CCF) to unconditionally cancellable commitments; (ii) align CCFs with those applied under the Foundation IRB approach for general commitments, note issuance facilities (NIFs) and revolving underwriting facilities (RUFs); and (iii) retain all other CCFs as in the current framework.

As noted in the 2014 consultative document, the proposed CCFs were indicative and subject to further empirical analysis.

### 1.7.1 Unconditionally cancellable commitments (UCC)

In the 2014 consultative document, the Committee noted that all CCFs should be greater than 0%. The preliminary CCF considered for this category was 10%.

Respondents expressed concerns that the proposed calibration would adversely affect lending and economic growth. They asserted that retaining the 0% CCF is more appropriate given that consumer protection laws and other reputational considerations do not prevent banks from cancelling these commitments. Respondents also asserted that the 10% CCF would be particularly unjustified for the corporate segment, where counterparties are closely and continually monitored and banks could reduce such credit lines immediately.

However, supervisors note that consumer protection laws, risk management capabilities, reputational risk or other factors appear to constrain banks' ability to cancel such commitments in practice. Many of the commitments assigned to this category may only be cancelled subject to certain contractual conditions (therefore, they are not really *unconditionally* cancellable). Based on QIS data and other studies performed by the Committee, the Committee notes that the appropriate CCF for this category should be higher than 10%.

The Committee proposes to narrow the scope of this category to commitments that are unconditionally cancellable in practice. Specifically, the Committee proposes to apply a reduced CCF between 10% and 20% only to *retail* commitments (eg credit cards). All other non-retail commitments that are currently categorised as UCC would be treated as general commitments. The Committee intends to conduct further analysis on the appropriate definition of this category and its calibration.

### 1.7.2 Other off-balance sheet items

For commitments that are not unconditionally cancellable, the 2014 consultative document proposed to apply a 75% CCF regardless of their maturity (rather than a 20% for commitments of up to 1 year and a 50% for commitments above 1 year, as in the current approach). Respondents disagreed with such increase in CCFs and with disregarding maturity as a risk factor for commitments.

The Committee notes that empirical evidence from several data collections, including the QIS and the data collection carried out by the Committee in 2014 to examine the variability in the calculation of banking book risk-weighted assets,<sup>15</sup> does not support the application of differing CCFs based on

<sup>14</sup> For example, an exposure may be considered naturally hedged if the counterparty is expected to have adequate annual cash flows in the same currency for the entire duration of the loan. An exposure may be considered financially hedged if an accounting hedge or other similar accounting rules are applied and are properly documented.

<sup>15</sup> The results of this study have not yet been published. The first report of this series was published in 2013 and is available at [www.bis.org/publ/bcbs256.pdf](http://www.bis.org/publ/bcbs256.pdf).

maturity. Moreover, data substantiates an increased CCF for these types of off-balance sheet exposures, consistent with the foundation IRB approach. Preliminary analysis suggests that, for general commitment as well as NIFs and RUFs, the appropriate CCF should be in the range between 50% and 75%. Further analysis will follow in the second QIS.

See Table A below for summary of changes for off-balance sheet exposure categories that receive a CCF of less than 100%.

## Proposal for better reflecting drawdown rates and aligning CCFs under the current Standardised Approach and foundation IRB

(%)

Table A

Off-balance sheet exposure types that receive CCF < 100%	Current SA	Foundation IRB	Proposal for revised SA
Commitments that are unconditionally cancellable at any time without prior notice, or that effectively provide automatic cancellation due to deterioration in borrower's creditworthiness; retail only	0%	0%	[10-20%]
Commitments, except retail unconditionally cancellable	-	75%	[50-75%]
Commitments with maturity $\leq$ 1 year, except retail unconditionally cancellable	20%	-	-
Commitments with maturity > 1 year, except retail unconditionally cancellable	50%	-	-
Note issuance facilities (NIFs) and revolving underwriting facilities (RUFs)	50%	75%	[50-75%]
Certain transaction-related contingent items	50%	50%	50%
Short-term self-liquidating trade letters of credit arising from the movement of goods	20%	20%	20%

Note: CCFs are found in paragraphs 82 to 89 for SA; and in paragraphs 311 to 315 for FIRB of current Basel II framework.

## 1.8 Defaulted exposures

### Background

While the current SA includes a separate asset category for past due loans, the Committee is of the view that the past due concept should apply to all assets and not just loans. Therefore, this section refers to past due (or defaulted, as explained below) exposures.

The 2014 consultative document did not include any specific proposal on the treatment of past due loans, although it was noted that the current treatment might be reviewed.

The current SA treatment of past due loans relies on the accounting concept of "specific provisions". For example, past due loans receive a risk weight of 100% if specific provisions are no less than 20% of the outstanding amount of the loan.<sup>16</sup>

<sup>16</sup> The current treatment cannot be applied uniformly across jurisdictions given differing accounting rules on provisioning. The concept of specific provisions is not used in all accounting regimes, and there are initiatives at an international level that may lead to a change of the relevant accounting concepts.

## Proposed revisions

### *Aligning with IRB: From “past due” to “defaulted” exposures*

One of the weaknesses identified in the current SA is the insufficient alignment with the IRB approach. Under the current treatment, the concept of “past due” is based on the simple trigger of a loan being past due more than 90 days. On the contrary, the IRB approach uses a concept of exposures “in default” which, in addition to the 90 days past due trigger, includes loans where banks are of the view that the obligor is unlikely to pay its credit obligation to the banking group in full (Basel II, paragraph 452).<sup>17</sup>

The Committee proposes that the definition of past due should be as far as possible aligned with the IRB’s “defaulted exposure” definition. Annex 1, paragraph 75 includes a proposed definition for defaulted exposures in SA.

### *Risk weight treatment*

In the current SA the amount of specific provisions lowers both the exposure amount as well as the risk weight, ie leading to a double benefit. Moreover, while provisions are meant to reflect expected losses, capital requirements (risk weights) provide protection against unexpected losses. For these reasons, the Committee proposes that specific provisions and partial write-offs should factor only into the calculation of the exposure amount and should have no bearing on the risk-weighting of past due exposures.

The Committee proposes that the unsecured portion of any defaulted exposure (other than residential real estate), net of specific provisions and partial write-offs, receive a risk weight of 150%. As an exception, defaulted residential real estate exposures where the repayment does not materially depend on the cash flows generated by the property securing the loan would receive a risk weight of 100%.

The secured portions of defaulted exposures can be risk-weighted in accordance with the CRM framework provided that collateral and guarantees meet the eligibility requirements of the CRM framework.

The current treatment allows a lower risk weight of 100% where a past due loan is fully secured by forms of collateral that are not eligible under the CRM framework, provided that provisions reach 15% of the outstanding amount of the loan. Given that the proposed revisions delink the risk weight with the amount of provisions, maintaining this treatment would be inconsistent. The Committee welcomes evidence on the materiality of removing this possibility.

## 1.9 Exposures to multilateral development banks (MDBs)

### 1.9.1 Eligible MDBs for a 0% risk weight

While the 2014 consultative document indicated that the Committee intends to maintain the 0% preferential treatment for the current list of “eligible MDBs”,<sup>18</sup> the Committee is reviewing the treatment of sovereigns, central banks and public sector entities as part of a broader and holistic review of sovereign-related risks. The Committee might, therefore, revise the current 0% treatment for eligible MDBs as part of this review.

<sup>17</sup> The IRB approach also contains additional rules to further specify this assessment and rules for the treatment of overdrafts and re-ageing of loans. In addition, the IRB approach contains a national discretion to extend the 90 days threshold to up to 180 days or retail and PSE obligations.

<sup>18</sup> Basel II, footnote 24; and Basel Committee newsletters n.10 ([www.bis.org/publ/bcbs\\_n10.htm](http://www.bis.org/publ/bcbs_n10.htm)) and n.15 ([www.bis.org/publ/bcbs\\_n15.htm](http://www.bis.org/publ/bcbs_n15.htm)).

In the meantime, the Committee has observed that some of the MDBs that currently receive a 0% risk weight have been downgraded from AAA to AA. This raises the issue of how to ensure that exposures to MDBs that receive a 0% risk weight have very low credit risk.

To avoid constantly changing the list, as an interim solution, the Committee intends to maintain the AAA rating as an “entry criterion”. In other words, if a new MDB applies to be included in the list of 0% MDBs, they should have a long-term issuer rating of AAA. Over time, however, they could be retained in the list provided that their rating was not downgraded below AA(-). Introducing this limited flexibility is intended to avoid potential frequent changes to the list of eligible MDBs subject to a 0% treatment.

### 1.9.2 Other MDBs

Under the current SA, the risk weights applied to exposures to MDBs are based on external ratings as set out under option 2 for exposures to banks (which is based on the external rating of the bank itself). The 2014 consultative document’s proposals to risk-weight banks were considered ill-suited to MDBs, and consequently, the Committee proposed to differentiate the treatments of banks and MDBs, and keep the use of MDBs’ specific external ratings for risk-weighting purposes.

Now that ratings have been reintroduced for risk weighting exposures to banks and corporates, the Committee proposes to allow the use of external ratings also for exposures to MDBs (as in the current approach). For banks incorporated in jurisdictions that do not allow the use of external ratings, exposures to other MDBs (that do not qualify as eligible MDBs) would be risk weighted at 50%.

## 1.10 Other assets

In view of feedback received on the 2014 consultative document, the Committee will maintain “other assets” as a residual category for exposures that might not fit into the above categories, and which are not subject to distinct capital requirement frameworks such as securitisation exposures, equity investments in funds, and OTC derivatives subject to counterparty credit risk.

The Committee intends to apply only minor modifications to the current Basel II approach by:

- Removing the national discretion in Basel II, footnote 32 by explicitly allowing gold bullion held in own vaults and cash items in the process of collection to receive a lower risk weight;
- Removing references to investments in equity or regulatory capital instruments, to reflect the current proposal; and
- Explicitly allowing cash owned and held in vaults to receive a 0% risk weight.

## Section 2: Proposed revisions to the credit risk mitigation framework for exposures risk-weighted under the standardised approach

### Background

The 2014 consultative document identified several weaknesses in the application of the current credit risk mitigation (CRM) framework to exposures risk-weighted under the SA, including the unnecessarily broad range of complex approaches (which allows cherry-picking by banks) and the ability to use internal estimates, which is contrary to one of the Committee’s principles for revising the standardised approach. In particular, the 2014 consultative document:

- Removed the option for banks to use: (i) own-estimates of haircuts under the comprehensive approach; (ii) value-at-risk (VaR) models for certain securities financing transactions (SFTs),<sup>19</sup> and (iii) the internal model method for SFTs and collateralised OTC derivative transactions. As a consequence, for calculating exposure amounts for OTC derivatives, exchange-traded derivatives and long settlement transactions, the only possible approach would be the standardised approach for counterparty credit risk (SA-CCR).<sup>20</sup> For SFTs, banks would use the comprehensive approach with supervisory haircuts.
- Indicated that the Committee would continue to explore a revised definition of financial collateral based on a proposed “investment-grade” concept; and proposed a non-ratings-based supervisory haircut table to accommodate jurisdictions that do not reference external credit ratings.
- Modified the range of eligible guarantors by removing references to external ratings.

In relation to the removal of the modelled approaches, custodian banks raised strong concerns on the treatment of SFTs under the comprehensive approach using supervisory haircuts. These respondents claimed that this approach is highly risk-insensitive and unduly conservative for their business model, and suggested alternative standardised methodologies that could increase risk sensitivity for these types of transactions.

Respondents generally objected to the removal of external ratings in the CRM framework, arguing that this change would introduce complexity and increase regulatory burden without increasing risk sensitivity. Respondents also asserted that the proposed alternative definition of financial collateral was unclear and could reduce comparability across jurisdictions given the increased reliance on qualitative factors.

## 2.1 Revised methodology for repo-style transactions

Consistent with the 2014 consultative document, the Committee maintains the removal of internal models and own estimates of haircuts for calculating capital requirements under the SA. Notwithstanding, given the number of concerns that respondents raised about the lack of risk sensitivity of this approach for repo-style transactions, the Committee proposes to revise the current formula under the comprehensive approach for these transactions (see Basel II, paragraph 176) to better account for diversification and correlation.

The current formula has three main elements: (i) the net exposure,  $\sum(E) - \sum(C)$ ; (ii) an add-on to reflect potential price changes in the values of securities in the netting set,  $\sum(E_s \times H_s)$ ; and (iii) an add-on to reflect currency mismatches,  $\sum(E_{fx} \times H_{fx})$ . The concern of respondents centred on the second element as it does not permit any diversification benefits within the lending and collateral pool and the correlation between the collateral and loans is assumed to be negative in all cases. The Committee proposes to address these concerns by replacing the second element of the current formula with the following:

$$0.4 \cdot \text{net exposure} + 0.6 \cdot \text{gross exposure} / \sqrt{N}$$

Where:

$$\text{gross exposure} = \sum_s E_s |H_s|$$

<sup>19</sup> SFTs are transactions such as repurchase agreements, reverse repurchase agreements, security lending and borrowing, and margin lending transactions where the value of the transactions depends on market valuations and the transactions are often subject to margin agreements.

<sup>20</sup> Available at [www.bis.org/publ/bcbs279.pdf](http://www.bis.org/publ/bcbs279.pdf).

$$net\ exposure = \sum_s E_s H_s$$

In this formula,  $E_s$  is the net current value of each security issuance under the netting set (always a positive value), and  $H_s$  is the haircut appropriate to  $E_s$  as described in the table of haircuts included in the comprehensive approach.  $N$  is the number of security issues contained in the netting set, except that issuances where the value  $E_s$  is less than one tenth of the value of the largest  $E_s$  in the netting set are not included in the count. For the exact specification of this formula see paragraph 164 of Annex 1. The benefit of the new equation is that it reflects the effect of netting longs and shorts in the net exposure by specifying that  $H_s$  will have a negative sign for short exposures and a positive sign for long exposures. The gross exposure term reflects the effect of diversification by dividing the gross exposure by the square root of the number of exposures. The second term prevents exposures from netting down entirely.

## 2.2 Reintroduction of external ratings in the CRM framework

Consistent with the current proposal for risk-weighting exposures to banks and corporates, the Committee proposes to retain external ratings in the CRM framework in its efforts to promote risk sensitivity and reduce complexity.

For jurisdictions that do not reference external ratings in their regulations, the proposal introduces an alternative approach which, without explicitly referencing ratings, aims to limit the eligibility of financial collateral and guarantees to what is usually referred to as "investment grade". As a result, depending on whether external ratings are used in a given jurisdiction, the proposal contains two sets of eligibility criteria for defining financial collateral and eligible guarantors as well as two supervisory haircut tables. (see proposed rules text, paragraphs 149 and 150). The Committee acknowledges that the universe of collateral and eligible guarantors may differ substantively depending on whether a jurisdiction uses external ratings. Feedback is welcome on the proposed eligibility criteria for defining financial collateral and eligible guarantors in jurisdictions that do not allow the use of external ratings for regulatory purposes, and, in particular, on how to narrow potential differences in risk weighted assets between jurisdictions that use different approaches.

## 2.3 Other issues

The Committee is in addition considering the following issues:

- Paragraphs 136 and 137 of the proposed rules text: The Committee is reviewing the core market participants exemption for continued relevance. Under this exemption, it is currently possible for banks to provide each other with short-term wholesale funding with no capital requirements. Such an outcome is inconsistent with other treatments for short-term wholesale funding set out in the liquidity standards. Moreover, given the role short-term wholesale funding played in the transmission of distress among banks during the crisis, allowing such transactions to be conducted without a capital charge does not appear justified on prudential grounds.
- Paragraph 161: The implementation of special resolution regimes in certain jurisdictions could affect banks' recognition of netting with counterparties. The Committee welcomes market participants' views on whether, and how, resolution regimes may affect the eligibility for CRM purposes of bilateral netting agreements covering repo-style transactions.
- Paragraphs 171 and 172: The Committee is reviewing the credit events that a credit derivatives must cover in order to be fully recognised as a credit risk mitigant. Specifically, it is looking at the requirement of restructuring as an event of default. In the current treatment, restructuring is not a mandatory credit event for the (partial) recognition of derivatives as a risk mitigation

technique. The 2014 consultative document proposed to no longer recognise the risk-mitigating effect of credit derivatives that do not specify restructuring as a credit event. Commenters from one jurisdiction raised concerns with this proposal, arguing that this change would have a material impact because restructuring is not included as a credit event in standard contracts within that jurisdiction when hedging exposures. Furthermore, respondents asserted that credit derivatives need not specify restructuring as a credit event in jurisdictions that have a well established bankruptcy code that allows for a company to restructure and provide for an orderly settlement of creditor claims. The Committee seeks respondents' views about the conditions under which restructuring may not be a necessary event for full recognition. Based on feedback, the Committee will reconsider whether and how to modify the current treatment.<sup>21</sup>

Finally, the Committee notes that, as part of the work on reducing variability in risk weighted assets, the CRM framework for exposures risk weighted under the IRB approach is also under review (proposed changes will be consulted upon in due course). As a result of such review, some additional changes might be necessary in the SA's CRM framework for consistency reasons.

### Section 3: Objectives of the SA review in light of current proposals

This section discusses how the Committee considers its revised proposals included in this consultative document have addressed or mitigated the weaknesses of the current SA and met the objectives its review. The objectives of the SA review are:

- (i) reconsider the design of the SA to ensure its continued suitability for calculating the capital requirements for credit risk exposures;
- (ii) ensure the SA is appropriately calibrated to reflect to a reasonable extent the riskiness of exposures;
- (iii) increase comparability of capital requirements between banks using the SA by reducing national discretion, where feasible;
- (iv) increase comparability of capital requirements under the SA and the IRB approach by aligning definitions and taxonomy, where possible; and
- (v) reduce reliance on external ratings by providing alternative measures for risk assessment, where possible.

The Committee acknowledges that credit rating agencies play an important role in financial markets and external ratings provide information that may assist in the analysis of credit risk exposures. However, the hard-wiring of external ratings into standards, laws and regulations may lead to mechanistic reliance on ratings by market participants, resulting in insufficient due diligence and poor

<sup>21</sup> The Committee continues to believe that the restructuring of an obligation is an event of default. However, it notes that in certain jurisdictions, restructurings as a practical matter do not occur separately from bankruptcy, which is another event of default that a credit derivative must cover if it is to be recognised as a credit risk mitigant. In these jurisdictions, restructuring of a corporate obligation requires a 100% vote to amend maturity, principal, coupon, currency or seniority status of the exposure and the bankruptcy code provides for a well-established process that allows a company to reorganise/restructure as a means to achieve orderly settlement of creditor claims. This process is separate from the legal process used in the case of a liquidation bankruptcy. Thus, it could be argued that where such a jurisdiction is the legal domicile of the corporate, for purposes of credit derivative protection, a restructuring default event is covered under the bankruptcy default event. Therefore, in such jurisdictions, a separate provision for restructuring as a credit event would not be necessary for full recognition as a credit risk mitigant. The Committee notes that market practice is for credit derivatives to trade without restructuring in these jurisdictions, but with restructuring in all others.

risk management on the part of lenders and investors. The Committee considered various alternatives to replace external ratings. Nonetheless, these alternatives would result in significant complexity or lack of comparability across banks. Developing a standard risk-weighting methodology that does not refer to external ratings is particularly difficult in the case of corporate exposures, given the material differences in business models, accounting practices, and specific industry factors. Taking a balance of all relevant objectives, the Committee proposes to maintain references to external ratings, where available and/or possible, but complementing its use with banks' due diligence processes. The Committee also proposes to enhance the requirements surrounding the use of external ratings, to ensure that banks undertake their own due diligence and internal risk management and not rely mechanistically on external ratings for risk-weighting purposes.

One of the key weaknesses of the current SA is the lack of granularity and risk sensitivity in a number of exposure classes. Taking into account the characteristics of each exposure class, the Committee proposes to increase the risk sensitivity of the SA in areas where revisions in the risk-weighting methodologies would not result in unwarranted increased complexity and comparability issues. For example:

- enhanced risk sensitivity for bank exposures where ratings are not available or cannot be used for regulatory purposes;
- enhanced granularity to differentiate the riskiness of certain exposures (eg specialised lending and corporate SMEs, subordinated debt and equity holdings);
- enhanced risk sensitivity for real estate exposures by introducing specific treatments depending on whether the repayment of the loan materially depends on the cash flows generated by the property, and by introducing the LTV ratio as a risk driver; and
- enhanced risk sensitivity for exposures with currency mismatches between the lending currency and the currency of the borrower's main source of income.

Another weakness of the current SA is the lack of clarity in the risk-weight treatment of certain exposures, such as retail exposures. The Committee has sought to provide more clarity on the application of the regulatory retail criteria for retail exposures, and the treatment where the criteria have not been met.

To further reduce complexity in the SA, the Committee proposes to revise the credit risk mitigation framework, by removing internal modelling approaches in the calculation of capital charges for certain exposures backed by financial collateral.

To address the variability in the risk-weighted assets across banks using the IRB approach, the Committee intends to impose a standardised approach floor on modelled credit risk capital requirements.<sup>22</sup> In line with this objective, some of the proposals set out in this consultative document (such as the introduction of equity and specialised lending categories, and the replacement of the 90-days past-due concept by the IRB definition of default) also aim to align, to the extent possible, the definitions and scope of exposure classes for the SA and IRB approach.

Some exposure categories under the current SA are subject to national discretions, which may result in significant variations in the treatment across jurisdictions. For this reason, the Committee aims to reduce national discretions to the extent possible, in order to allay level-playing-field concerns and ensure equal risks attract similar capital requirements. Some of the changes reflecting this objective include the removal of the national discretion that allows banks to risk weight exposures to other banks using sovereign ratings (with the benefit of reducing the link between banks and their sovereigns) and

<sup>22</sup> See the Committee's consultative document *Capital floors: the design of a framework based on standardised approaches*, December 2014, [www.bis.org/bcbs/publ/d306.pdf](http://www.bis.org/bcbs/publ/d306.pdf).

the removal of the national discretion that allows banks to apply a preferential risk weight for commercial real estate exposures.

Finally, to ensure that the revised SA is appropriately calibrated to reflect the riskiness of exposures, the Committee will review the preliminary calibration included in this consultative document following its current consultation and the 2016 QIS exercise.

# Annex 1

## Proposals on risk weighting for exposure classes and credit risk mitigation

*The text below would replace current paragraphs 50 to 210 from the Basel II framework available at: [www.bis.org/publ/bcbs128.pdf](http://www.bis.org/publ/bcbs128.pdf).*

*This Annex details the proposals for exposure classes where a specific treatment is being considered. For completeness, it also includes the treatment of exposure classes which are out of scope of this review (ie sovereigns, central banks and public sector entities), even though the Committee might review such treatment in the future as part of a holistic review of sovereign-related risks.*

*NB: References to paragraphs in this consultative paper are shown [in brackets]. References to other parts of the Basel framework are shown without brackets. Risk weights are included for indicative purposes and to help estimate the impact of the proposals under consideration during the QIS.*

## Introduction

1. The Committee permits banks to choose between two broad methodologies for calculating their risk-based capital requirements for credit risk. One alternative, the standardised approach, assigns standardised measures of credit risk as described in paragraphs [4 to 82]. To determine the risk weights in the standardised approach for certain exposure classes, in jurisdictions that allow the use of external ratings for regulatory purposes, banks may, as a starting point, use assessments by external credit assessment institutions that are recognised as eligible for capital purposes by national supervisors, in accordance with paragraphs [83 to 101].<sup>23</sup> Under the standardised approach, exposures should be risk-weighted net of specific provisions.
2. The other risk-based capital alternative for measuring credit risk, the Internal Ratings-Based (IRB) approach, allows banks to use their internal rating systems for credit risk, subject to the explicit approval of the bank's supervisor.
3. Securitisation exposures are addressed in Section IV.<sup>24</sup> Credit equivalent amounts of OTC derivatives that expose a bank to counterparty credit risk<sup>25</sup> are to be calculated under the rules set forth

<sup>23</sup> Where ratings are referenced, the notations follow the methodology used by one institution, Standard & Poor's. The use of Standard & Poor's credit ratings is an example only; those of some other external credit assessment institutions could equally well be used. The ratings used throughout this document, therefore, do not express any preferences or determinations by the Committee on external assessment institutions.

<sup>24</sup> Revised standards are available at [www.bis.org/bcbs/publ/d303.pdf](http://www.bis.org/bcbs/publ/d303.pdf).

<sup>25</sup> The counterparty credit risk is defined as the risk that the counterparty to a transaction could default before the final settlement of the transaction's cash flows. An economic loss would occur if the transactions or portfolio of transactions with the counterparty has a positive economic value at the time of default. Unlike a firm's exposure to credit risk through a loan, where the exposure to credit risk is unilateral and only the lending bank faces the risk of loss, the counterparty credit risk creates a bilateral risk of loss: the market value of the transaction can be positive or negative to either counterparty to the transaction. The market value is uncertain and can vary over time with the movement of underlying market factors.

in Annex 4.<sup>26</sup> Equity investments in funds and exposures to central counterparties must be treated according to their own specific frameworks.<sup>27</sup>

## A. Individual exposures

### 1. Exposures to sovereigns

*(NB: Out of scope of the review. Current text has been kept)*

4. Exposures to sovereigns and their central banks will be risk-weighted as follows:

External rating	AAA to AA-	A+ to A-	BBB+ to BBB-	BB+ to B-	Below B-	Unrated
Risk weight	0%	20%	50%	100%	150%	100%

5. At national discretion, a lower risk weight may be applied to banks' exposures to their sovereign (or central bank) of incorporation denominated in domestic currency and funded<sup>28</sup> in that currency.<sup>29</sup> Where this discretion is exercised, other national supervisory authorities may also permit their banks to apply the same risk weight to domestic currency exposures to this sovereign (or central bank) funded in that currency.

6. For the purpose of risk-weighting exposures to sovereigns, supervisors may recognise the country risk scores assigned by Export Credit Agencies (ECAs). To qualify, an ECA must publish its risk scores and subscribe to the OECD-agreed methodology. Banks may choose to use the risk scores published by individual ECAs that are recognised by their supervisor, or the consensus risk scores of ECAs participating in the "Arrangement on Officially Supported Export Credits".<sup>30</sup> The OECD-agreed methodology establishes eight risk score categories associated with minimum export insurance premiums. These ECA risk scores will correspond to risk weight categories as detailed below.

ECA risk scores	0 to 1	2	3	4 to 6	7
Risk weight	0%	20%	50%	100%	150%

7. Exposures to the Bank for International Settlements, the International Monetary Fund, the European Central Bank, the European Union, the European Stability Mechanism (ESM) and the European Financial Stability Facility (EFSF) may receive a 0% risk weight.

<sup>26</sup> Revised standards are available at [www.bis.org/publ/bcbs279.pdf](http://www.bis.org/publ/bcbs279.pdf).

<sup>27</sup> Final standards on capital requirements for banks' equity investments in funds are available at [www.bis.org/publ/bcbs266.pdf](http://www.bis.org/publ/bcbs266.pdf); and for capital requirements for bank exposures to central counterparties are available at [www.bis.org/publ/bcbs282.pdf](http://www.bis.org/publ/bcbs282.pdf).

<sup>28</sup> This is to say that the bank would also have corresponding liabilities denominated in the domestic currency.

<sup>29</sup> This lower risk weight may be extended to the risk-weighting of collateral and guarantees under the CRM framework.

<sup>30</sup> The consensus country risk classification is available on the OECD's website ([www.oecd.org](http://www.oecd.org)) in the Export Credit Arrangement webpage of the Trade Directorate.

## 2. Exposures to non-central government public sector entities (PSEs)

*(NB: Out of scope of the review. Therefore, current treatment is kept – only minor editorial changes have been made below to remove reference to current options for banks.)*

8. Exposures to domestic PSEs will be risk-weighted at national discretion, according to either of the following two options.

---

### Risk weight table for PSEs

Option 1: Based on external rating of sovereign

Table 3

External rating of the sovereign	AAA to AA–	A+ to A–	BBB+ to BBB–	BB+ to B–	Below B–	Unrated
Risk weight under Option 1	20%	50%	100%	100%	150%	100%

---

### Risk weight table for PSEs

Option 2: Based on external rating of PSE

Table 4

External rating of the PSE	AAA to AA–	A+ to A–	BBB+ to BBB–	BB+ to B–	Below B–	Unrated
Risk weight under Option 2	20%	50%	50%	100%	150%	50%

9. Subject to national discretion, exposures to certain domestic PSEs<sup>31</sup> may also be treated as exposures to the sovereigns in whose jurisdictions the PSEs are established. Where this discretion is exercised, other national supervisors may allow their banks to risk-weight exposures to such PSEs in the same manner.

## 3. Exposures to multilateral development banks (MDBs)

10. For the purposes of calculating capital requirements, a Multilateral Development Bank (MDB) is an institution, created by a group of countries that provides financing and professional advice for economic and social development projects. MDBs have large sovereign memberships and may include both developed countries and/or developing countries. Each MDB has its own independent legal and operational status, but with a similar mandate and a considerable number of joint owners.

<sup>31</sup> The following examples outline how PSEs might be categorised when focusing on one specific feature, namely revenue-raising powers. However, there may be other ways of determining the different treatments applicable to different types of PSEs, for instance by focusing on the extent of guarantees provided by the central government:

- Regional governments and local authorities could qualify for the same treatment as claims on their sovereign or central government if these governments and local authorities have specific revenue-raising powers and have specific institutional arrangements the effect of which is to reduce their risk of default.
- Administrative bodies responsible to central governments, regional governments or to local authorities and other non-commercial undertakings owned by the governments or local authorities may not warrant the same treatment as claims on their sovereign if the entities do not have revenue-raising powers or other arrangements as described above. If strict lending rules apply to these entities and a declaration of bankruptcy is not possible because of their special public status, it may be appropriate to treat these claims according to Option 1 or 2 for PSEs.
- Commercial undertakings owned by central governments, regional governments or by local authorities may be treated as normal commercial enterprises. However, if these entities function as a corporate in competitive markets even though the state, a regional authority or a local authority is the major shareholder of these entities, supervisors should decide to consider them as corporates and therefore attach to them the applicable risk weights.

11. A 0% risk weight will be applied to exposures to MDBs that fulfil to the Committee’s satisfaction the eligibility criteria provided below.<sup>32</sup> The Committee will continue to evaluate eligibility on a case-by-case basis. The eligibility criteria for MDBs risk-weighted at 0% are:

- (i) very high-quality long-term issuer ratings, ie a majority of an MDB’s external ratings must be AAA;<sup>33</sup>
- (ii) either the shareholder structure comprises a significant proportion of sovereigns with long-term issuer external ratings of AA– or better, or the majority of the MDB’s fund-raising is in the form of paid-in equity/capital and there is little or no leverage;
- (iii) strong shareholder support demonstrated by the amount of paid-in capital contributed by the shareholders; the amount of further capital the MDBs have the right to call, if required, to repay their liabilities; and continued capital contributions and new pledges from sovereign shareholders;
- (iv) adequate level of capital and liquidity (a case-by-case approach is necessary in order to assess whether each MDB’s capital and liquidity are adequate); and,
- (v) strict statutory lending requirements and conservative financial policies, which would include among other conditions a structured approval process, internal creditworthiness and risk concentration limits (per country, sector, and individual exposure and credit category), large exposures approval by the board or a committee of the board, fixed repayment schedules, effective monitoring of use of proceeds, status review process, and rigorous assessment of risk and provisioning to loan loss reserve.

12. For exposures to all other MDBs, banks incorporated in jurisdictions that allow the use of external ratings for regulatory purposes will use the table below. Banks incorporated in jurisdictions that do not allow external ratings for regulatory purposes will risk-weight such exposures at 50%.

Risk weight table for MDB exposures

Table 5

External rating of counterparty	AAA to AA–	A+ to A–	BBB+ to BBB–	BB+ to B–	Below B–	Unrated
“Base” risk weight	20%	50%	50%	100%	150%	50%

#### 4. Exposures to banks

13. For the purposes of calculating capital requirements, a bank exposure is defined as a claim (including loans to, and senior debt instruments of, the bank) on any financial institution that is licensed to take deposits from the public, and is subject to the prudential standards and level of supervision in accordance with the international practices relevant for such an institution.<sup>34</sup> The treatment associated with subordinated bank debt and equities is addressed in paragraphs [42 to 44].

<sup>32</sup> MDBs currently eligible for a 0% risk weight are: the World Bank Group comprising the International Bank for Reconstruction and Development (IBRD), the International Finance Corporation (IFC) and the Multilateral Investment Guarantee Agency (MIGA), the Asian Development Bank (ADB), the African Development Bank (AfDB), the European Bank for Reconstruction and Development (EBRD), the Inter-American Development Bank (IADB), the European Investment Bank (EIB), the European Investment Fund (EIF), the Nordic Investment Bank (NIB), the Caribbean Development Bank (CDB), the Islamic Development Bank (IDB), the Council of Europe Development Bank (CEDB), and the International Finance Facility for Immunization (IFFIm).

<sup>33</sup> MDBs that request to be added to the list of MDBs eligible for a 0% risk weight must comply with the AAA rating criterion at the time of the application. Once included in the list of eligible MDBs, the rating may be slightly downgraded, but in no case lower than AA–. Otherwise, exposures to such MDBs will be subject to the treatment set out in paragraph [12].

<sup>34</sup> For internationally active banks, “international practices” means the Basel framework. Subject to the determination of the national supervisor, in addition to risk-based regulatory capital this may include liquidity, and leverage capital requirements.

## Due diligence requirements

14. In line with paragraphs 733 to 735 of the Basel II framework, banks must perform due diligence to ensure that they have an adequate understanding, at origination and thereafter on a regular basis (at least annually), of the risk profile and characteristics of their counterparties. Banks must take reasonable and adequate steps to assess the operating and financial performance levels and trends through internal credit analysis and/or other analytics outsourced to a third party, as appropriate for each counterparty. Banks must be able to access information about their counterparties on a regular basis to complete due diligence analyses.

15. Banks should have in place effective internal policies, processes, systems and controls to ensure that the appropriate risk weights are assigned to counterparties. Banks must be able to demonstrate to their supervisors that their due diligence analyses are appropriate. As part of their supervisory review, supervisors will make sure that banks have appropriately performed their due diligence analysis, and will take supervisory measures where this has not been done.

## Risk weight determination

16. Bank exposures will be risk-weighted based on the following hierarchy:

- (a) External Credit Risk Assessment Approach (ECRA): for rated exposures of banks incorporated in jurisdictions that allow the use of external ratings for regulatory purposes. Banks will consider paragraphs [89 to 101] to determine which rating can be used and for which exposures.
- (b) Standardised Credit Risk Assessment Approach (SCRA): for unrated exposures of banks incorporated in jurisdictions that allow the use of external ratings for regulatory purposes; and for all exposures of banks incorporated in jurisdictions that do not allow the use of external ratings for regulatory purposes.

### (a) *External Credit Risk Assessment Approach (ECRA)*

17. Banks incorporated in jurisdictions that allow the use of external ratings for regulatory purposes will assign to their rated bank exposures the corresponding “base” risk weights determined by the external ratings according to Table [6]. Such ratings must not incorporate assumptions of implicit government support, unless the rating refers to a public bank owned by its government. Banks must perform due diligence to ensure that the external ratings appropriately and conservatively reflect the creditworthiness of the bank counterparties.

If the due diligence analysis reflects higher risk characteristics than that implied by the external rating bucket of the exposure (ie AAA to AA-; A+ to A- etc), the bank must assign a risk weight at least one bucket higher than the “base” risk weight determined by the published external rating. Due diligence analysis must never result in the application of a lower risk weight than that determined by the external rating.

---

## Risk weight table for bank exposures

### External Credit Risk Assessment Approach

Table 6

External rating of counterparty	AAA to AA-	A+ to A-	BBB+ to BBB-	BB+ to B-	Below B-
“Base” risk weight	20%	50%	50%	100%	150%
Risk weight for short-term exposures	20%	20%	20%	50%	150%

18. Exposures to banks with an original maturity of three months or less can be assigned a preferential risk weight based on Table [6]. The preferential treatment is not available for exposures risk-weighted at 150%.

(b) *Standardised Credit Risk Assessment Approach (SCRA)*

19. Banks incorporated in jurisdictions that allow the use of external ratings for regulatory purposes will classify their unrated bank exposures into one of three risk-weight buckets (ie Grades A, B and C). Banks incorporated in jurisdictions that do not allow the use of external ratings for regulatory purposes will apply this approach to all their bank exposures.

---

Risk weight table for bank exposures

Standardised Credit Risk Assessment Approach

Table 7

Credit risk assessment of counterparty	Grade A	Grade B	Grade C
"Base" risk weight	50%	100%	150%
Risk weight for short-term exposures	20%	50%	150%

*Grade A*

20. Grade A includes exposures to bank counterparties that have adequate capacity to meet their financial commitments (including repayments of principal and interest) in a timely manner, for the projected life of the assets or exposures and irrespective of the economic cycles and business conditions. Otherwise, exposures to counterparties that do not meet this definition should be classified into a higher risk grade (B or C).

21. A counterparty bank classified into Grade A must exceed the published minimum regulatory requirements and buffers established by its national supervisor as implemented in the jurisdiction where the borrowing bank is incorporated.

22. If as part of its due diligence, a bank assesses that a counterparty bank does not meet the definition of Grade A in paragraphs [20 and 21], the exposures to such bank must be classified into a riskier grade (B or C).

*Grade B*

23. Grade B includes exposures to bank counterparties that are subject to substantial credit risk, with repayment capacities dependent on stable or favourable economic or business conditions.

24. A counterparty classified into Grade B must meet the published minimum regulatory requirements established by its national supervisor as implemented in the jurisdiction where the borrowing bank is incorporated.

25. Banks will classify all exposures that do not meet the requirements outlined in paragraphs [20 and 21] into Grade B, unless the exposure falls within what is established in paragraphs [26 and 27].

*Grade C*

26. Grade C includes higher credit risk exposures to bank counterparties that have material default risks and limited margins of safety. For these counterparties, adverse business, financial, or economic conditions are very likely to lead, or have led, to an inability to meet their financial commitments.

27. At a minimum, if any of the following triggers is breached, a bank must classify the exposure into Grade C:

- The counterparty bank has breached any of the published and binding<sup>35</sup> minimum regulatory requirements determined by its national supervisor; or
- Where audited financial statements are required, the external auditor has issued an adverse audit opinion or it has expressed substantial doubt about the counterparty bank's ability to continue as a going concern in its financial statements or audited reports within the previous 12 months.

Even if these triggers are not breached, a bank may assess that the counterparty bank meets the definition in paragraph [26]. In that case, the exposure to such bank should be classified into Grade C and be risk-weighted at 150%.

28. Exposures to banks with an original maturity of three months or less can be assigned a preferential risk weight based on Table [7]. The preferential treatment will not be available for exposures risk-weighted at 150%.

[29. To reflect the macro risk profile of exposures assessed under the SCRA, a risk-weight floor based on [[OECD] country ratings as determined in Table [\*\*] / [the risk weight applicable to exposures to the sovereign of the country where the bank counterparty is incorporated] will be applied to the risk weight assigned to bank exposures.<sup>36</sup> The sovereign floor will not apply to short-term (ie with a maturity below one year) self-liquidating, trade-related contingent items that arise from the movement of goods.<sup>37</sup>] *[NB: The options included in this paragraph will be subject to further consideration.]*

## 5. Exposures to securities firms and other financial institutions

30. Exposures to securities firms and other financial institutions will be treated as exposures to banks provided that these firms are subject to prudential standards and a level of supervision equivalent to those applied to banks (including capital and liquidity requirements) and the risk drivers used to ascertain the applicable risk weights (or the information to calculate them) are publicly disclosed. Exposures to all other securities firms and financial institutions will be treated as exposures to corporates.

## 6. Exposures to corporates

31. For the purposes of calculating capital requirements, this category includes exposures (loans, bonds, receivables, etc) to incorporated entities, associations, partnerships, proprietorships, trusts, funds and other entities with similar characteristics, except those which qualify for one of the other exposure classes. The treatment associated with subordinated debt and equities is addressed in paragraphs [42 to 44]. The corporate exposure class includes exposures to insurance companies and other financial corporates that do not meet the definitions of exposures to banks, or securities firms and other financial institutions, as determined in paragraphs [13] and [30] respectively. The corporate exposure class does

<sup>35</sup> National supervisors may allow banks to be below minimum liquidity requirements during a period of financial stress in order to avoid undue negative effects on the bank and other market participants. To this end, liquidity requirements would not be considered binding. See *Basel III: The Liquidity Coverage Ratio and liquidity risk monitoring tools*, January 2013, [www.bis.org/publ/bcbs238.pdf](http://www.bis.org/publ/bcbs238.pdf).

<sup>36</sup> The sovereign risk weight floor in the current SA could serve as a proxy to control for country risk in the case of unrated exposures (see Basel II, paragraph 60, which states that "no claim on an unrated bank may receive a risk weight lower than that applied to claims on its sovereign of incorporation"). The risk weights for sovereign exposures will be determined by the Committee as part of its broader and holistic review of sovereign-related risks.

<sup>37</sup> In accordance with the Committee's, *Treatment of trade finance under the Basel capital framework*, October 2011, [www.bis.org/publ/bcbs205.pdf](http://www.bis.org/publ/bcbs205.pdf).

not include exposures to individuals. The corporate exposure class differentiates the following subcategories:

- (i) General corporate exposures;
- (ii) Specialised lending exposures, as defined in paragraph [38].

## 6.1 General corporate exposures

### *Due diligence requirements*

32. Banks must perform due diligence on their corporate counterparties in accordance with paragraphs [14 and 15].

### *Risk weight determination*

33. For rated corporate exposures of banks incorporated in jurisdictions that allow the use of external ratings for regulatory purposes, banks will assign “base” risk weights determined by the external ratings according to table 8. Banks must perform due diligence to ensure that the external ratings appropriately and conservatively reflect the creditworthiness of the counterparties.

If the due diligence analysis reflects higher risk characteristics than that implied by the external rating bucket of the exposure (ie AAA to AA–; A+ to A– etc), the bank must assign a risk weight at least one bucket higher than the “base” risk weight determined by the published external rating. Due diligence analysis will never result in the application of a lower risk weight than that determined by the external rating.

34. Unrated corporate exposures of banks incorporated in jurisdictions that allow the use of external ratings for regulatory purposes will receive a 100% risk weight, with the exception of unrated exposures to corporate small and medium entities (SMEs) and defaulted corporate exposures, as described in paragraphs [37] and [75], respectively.

---

### Risk weight table for corporate exposures

Jurisdictions that use external ratings for regulatory purposes

Table 8

External rating of counterparty	AAA to AA–	A+ to A–	BBB+ to BBB–	BB+ to BB–	Below BB–	Unrated
“Base” risk weight	20%	50%	100%	100%	150%	100%

35. For corporate exposures of banks incorporated in jurisdictions that do not allow the use of external ratings for regulatory purposes, banks will apply a 100% risk weight to all corporate exposures, with the exception of exposures to corporates identified in paragraph [36], corporate SMEs and defaulted corporate exposures which will be risk-weighted according to paragraphs [37] and [75], respectively.

36. Banks in these jurisdictions may apply a 75% risk weight to “investment grade” corporates as defined in paragraph [173].

37. For unrated exposures to corporate SMEs (defined as corporate exposures where the reported sales for the consolidated group of which the firm is a part is less than €50 million), an 85% risk weight will be applied. Exposures to SMEs that comply with paragraph [46] will be treated as regulatory retail SME exposures.

## 6.2 Specialised lending

38. A corporate exposure will be treated as a specialised lending exposure if such lending possesses all the following characteristics, either in legal form or economic substance:

- The exposure is not related to real estate and is within the definitions of object finance, project finance or commodities finance under paragraph [39] below. If the activity is related to real estate, the treatment would be determined in accordance with paragraphs [49 to 61];
- The exposure is typically to an entity (often a special purpose entity (SPE)) that was created specifically to finance and/or operate physical assets;
- The borrowing entity has few or no other material assets or activities, and therefore little or no independent capacity to repay the obligation, apart from the income that it receives from the asset(s) being financed;
- The terms of the obligation give the lender a substantial degree of control over the asset(s) and the income that it generates; and
- As a result of the preceding factors, the primary source of repayment of the obligation is the income generated by the asset(s), rather than the independent capacity of a broader commercial enterprise.

39. Exposures that comply with all of the requirements in paragraph [38] will be classified in one of the following three subcategories of specialised lending:

- (i) Project finance refers to the method of funding in which the lender looks primarily to the revenues generated by a single project, both as the source of repayment and as security for the loan. This type of financing is usually for large, complex and expensive installations such as power plants, chemical processing plants, mines, transportation infrastructure, environment, media, and telecoms. Project finance may take the form of financing the construction of a new capital installation, or refinancing of an existing installation, with or without improvements.
- (ii) Object finance refers to the method of funding the acquisition of equipment (eg ships, aircraft, satellites, railcars, and fleets) where the repayment of the loan is dependent on the cash flows generated by the specific assets that have been financed and pledged or assigned to the lender.
- (iii) Commodities finance refers to structured short-term lending to finance reserves, inventories, or receivables of exchange-traded commodities (eg crude oil, metals, or crops), where the loan will be repaid from the proceeds of the sale of the commodity and the borrower has no independent capacity to repay the loan.

40. Specialised lending exposures of banks incorporated in jurisdictions that allow the use of external ratings for regulatory purposes will be risk-weighted according to the *issue-specific* external rating. The risk weight will be determined according to Table 8 in paragraph [34]. Issuer ratings must not be used (ie paragraph [92] does not apply in the case of specialised lending exposures).

41. For specialised lending exposures for which an issue-specific external rating is not available, and for all specialised lending exposures of banks incorporated in jurisdictions that do not allow the use of external ratings for regulatory purposes, the following risk weights will apply:

- Object and commodities finance exposures will be risk-weighted at 120%;
- Project finance exposures will be risk-weighted at 150% during the pre-operational phase and 100% during the operational phase. For this purpose, operational phase is defined as the phase in which the entity that was specifically created to finance the project has (i) a positive net cash flow that is sufficient to cover any remaining contractual obligation, and (ii) declining long term debt.

## 7. Subordinated debt, equity and other capital instruments

42. The treatment described in paragraphs [43 and 44] applies to subordinated debt, equity and other regulatory capital instruments issued by either corporates or banks, provided that such instruments are not deducted from regulatory capital or risk-weighted at 250% according to paragraphs 87 to 89 of the Basel III capital framework.

43. Equity holdings will receive a 250% risk weight.

44. Subordinated debt and capital instruments other than equities will receive a risk weight of 150%.

## 8. Retail exposures

45. Retail exposures are exposures to an individual person or persons, or to an SME borrower as defined in paragraph [37].<sup>38</sup> Retail exposures secured by real estate collateral will be treated according to paragraphs [49 to 61]. All other retail exposures will be treated as outlined in paragraphs [46 to 48].

46. "Regulatory retail": retail exposures that meet all of the criteria listed below will be risk-weighted at 75%, unless the exposure is defaulted according to paragraph [75]. Defaulted retail exposures are to be excluded from the overall regulatory retail portfolio when assessing the granularity criterion.

- Product criterion: the exposure takes the form of any of the following: revolving credits and lines of credit (including credit cards and overdrafts), personal term loans and leases (eg instalment loans, auto loans and leases, student and educational loans, personal finance) and small business facilities and commitments. Mortgage loans, derivatives and other securities (such as bonds and equities), whether listed or not, are specifically excluded from this category.
- Low value of individual exposures: the maximum aggregated exposure to one counterparty cannot exceed an absolute threshold of €1 million.
- Granularity criterion: no aggregate exposure to any single counterparty<sup>39</sup> can exceed 0.2%<sup>40</sup> of the overall regulatory retail portfolio, unless national supervisors have determined another method to ensure satisfactory diversification of the regulatory retail portfolio.

47. "Other retail": exposures to an individual person or persons that do not meet all of the criteria in paragraph [46] will be risk-weighted at 100%, unless secured by real estate.

48. Exposures to SMEs that do not meet all of the criteria in paragraph [46] will be treated as corporate SMEs exposures under paragraph [37], unless secured by real estate properties.

<sup>38</sup> In some jurisdictions (eg emerging economies), national supervisors might deem it appropriate to define SMEs in a more conservative manner (ie with a lower level of sales).

<sup>39</sup> Aggregated exposure means gross amount (ie not taking any credit risk mitigation into account) of all forms of retail exposures that are not included in residential real estate exposures. In case of off-balance sheet claims, the gross amount would be calculated after applying credit conversion factors. In addition, "to one counterparty" means one or several entities that may be considered as a single beneficiary (eg in the case of a small business that is affiliated to another small business, the limit would apply to the bank's aggregated exposure on both businesses).

<sup>40</sup> To avoid circular calculations, the granularity criterion will be verified only once. The calculation must be done on the portfolio of retail exposures that meet the product and orientation criteria as well as the low value of the exposure.

## 9. Real estate exposure class

49. The risk weights described in paragraphs [54 and 58] will apply to jurisdictions where structural factors result in sustainably low credit losses associated with the exposures to the real estate market. National supervisory authorities should evaluate whether the risk weights in the corresponding risk weight tables are considered too low for these types of exposures in their jurisdictions based on default experience and other factors such as market price stability. Supervisors, therefore, may require banks in their jurisdictions to increase these risk weights as appropriate.

50. To apply the risk-weights in tables [9, 10, 11 and 12], the loan must meet the following requirements:

- Finished property: the property securing the exposure must be fully completed. Subject to national discretion, supervisors may apply the risk-weight treatment described in paragraph [54] for loans to individuals that are secured by residential property under construction, provided that: (i) the property under construction is a one-to-four family residential housing unit that will be the residence of the borrower (this does not include apartments within a larger construction project); or (ii) where the sovereign or PSEs have the legal powers and ability to ensure that the property under construction will be finished.
- Legal enforceability: any claim on the property taken must be legally enforceable in all relevant jurisdictions. The collateral agreement and the legal process underpinning it must be such that they provide for the bank to realise the value of the property within a reasonable time frame.
- Claims over the property: Claims over the property are restricted to situations where the lender bank holds a first lien over the property, or a single bank holds the first lien and any sequentially lower ranking lien(s) (ie there is no intermediate lien from another bank) over the same property. However, in jurisdictions where there is no doubt that junior liens provide the holder with a claim for collateral that is legally enforceable and constitutes an effective credit risk mitigant, junior liens held by a different bank than the one holding the senior lien may also be recognised.<sup>41</sup> In order to meet the above requirements, the national frameworks governing liens should ensure the following: (i) each bank holding a lien on a property can initiate the sale of the property independently from other entities holding a lien on the property and (ii) where the sale of the property is not carried out by means of a public auction, entities holding a senior lien take reasonable steps to obtain a fair market value or the best price that may be obtained in the circumstances when exercising any power of sale on their own (ie it is not possible for the entity holding the senior lien to sell the property on its own at a discounted value in detriment of the junior lien).
- Ability of the borrower to repay: the borrower must meet the requirements set according to paragraph [51].
- Prudent value of property: the property must be valued according to the criteria in paragraph [52] for determining the value in the loan to value (LTV) ratio. Moreover the value of the property must not depend materially on the performance of the borrower.
- Required documentation: all the information required at loan origination and for monitoring purposes should be properly documented, including information on the ability of the borrower to repay and on the valuation of the property.

51. National supervisors should ensure that banks put in place underwriting policies with respect to the granting of mortgage loans that include the assessment of the ability of the borrower to repay.

<sup>41</sup> Likewise, this would apply to junior liens held by the same bank that holds the senior lien in case there is an intermediate lien from another bank (ie the senior and junior liens held by the bank are not in sequential ranking order).

Underwriting policies must define (a) metric(s) (such as the loan's debt service coverage ratio) and specify its (their) corresponding relevant level(s) to conduct such assessment.<sup>42</sup> Underwriting policies must also be appropriate when the repayment of the mortgage loan depends materially on the cash flows generated by the property, including relevant metrics (such as an occupancy rate of the property). National supervisors may provide guidance on appropriate definitions and levels for these metrics in their jurisdictions.

52. The LTV ratio is the amount of the loan divided by the value of the property. The value of the property will be maintained at the value measured at origination unless national supervisors elect to require banks to revise the property value downward.<sup>43</sup> The value must be adjusted if an extraordinary, idiosyncratic event occurs resulting in a permanent reduction of the property value. Modifications made to the property that unequivocally increase its value could also be considered in the LTV. When calculating the LTV ratio, the loan amount will be reduced as the loan amortises.

The LTV ratio must be prudently calculated in accordance with the following requirements:

- Amount of the loan: includes the outstanding loan amount and any undrawn committed amount of the mortgage loan.<sup>44</sup> The loan amount must be calculated gross of any provisions and other risk mitigants.<sup>45</sup>
- Value of the property: the valuation must be appraised independently<sup>46</sup> using prudently conservative valuation criteria. To ensure that the value of the property is appraised in a prudently conservative manner, this value must exclude expectations on price increases and must be adjusted to take into account the potential for the current market price to be significantly above the value that would be sustainable over the life of the loan. National authorities should provide guidance setting out prudent valuation criteria where such guidance does not already exist under national law. If a market value can be determined, the valuation should not be higher than the market value.<sup>47</sup>

Where guarantees or financial collateral which are eligible according to the SA's credit risk mitigation framework are provided, banks may recognise these risk mitigants in their calculation of the real estate exposure amount. Notwithstanding, such eligible guarantees and financial collateral must not be factored into the LTV ratio calculation that will determine the applicable risk weight.

<sup>42</sup> Metrics and levels for measuring the ability to repay should mirror the FSB *Principles for sound residential mortgage underwriting* (available at [www.financialstabilityboard.org/wp-content/uploads/r\\_120418.pdf?page\\_moved=1](http://www.financialstabilityboard.org/wp-content/uploads/r_120418.pdf?page_moved=1)).

<sup>43</sup> If the value has been adjusted downwards, a subsequent upwards adjustment can be made but not to a higher value than the value at origination.

<sup>44</sup> If a bank grants different loans secured by the same property and they are sequential in ranking order (ie there is no intermediate lien from another bank), the different loans should be considered as a single exposure for risk-weighting purposes, and the amount of the loans should be added to calculate the LTV ratio.

<sup>45</sup> In jurisdictions where junior liens held by a different bank than that holding the senior lien are recognised (in accordance with paragraph [50] or where footnote [41] applies), the loan amount of the junior liens must include all other loans secured with liens of equal or higher ranking than the bank's lien securing the loan. If there is insufficient information for ascertaining the ranking of the other liens, the bank should assume that these liens rank *pari passu* with the junior lien held by the bank. The bank will first determine the "base" risk weight based on tables [9], [10], [11] or [12], as applicable and adjust the "base" risk weight by a multiplier of 1.25, for application to the loan amount of the junior lien.

<sup>46</sup> The valuation must be done independently from the bank's mortgage acquisition, loan processing and loan decision process.

<sup>47</sup> In the case where the mortgage loan is financing the purchase of the property, the value of the property for LTV purposes will not be higher than the effective purchase price.

## 9.1 Residential real estate exposures

53. A residential real estate exposure is an exposure secured by an immovable property that has the nature of a dwelling and satisfies all applicable laws and regulations enabling the property to be occupied for housing purposes (ie residential property).

54. Where the requirements in paragraph [50] are met and provided that paragraphs [56] and [61] are not applicable, the risk weight to be assigned to the total exposure amount will be determined based on the exposure's LTV ratio.

---

### Risk weight table for residential real estate exposures

(Repayment is not materially dependent on cash flows generated by property)

Table 9

	LTV ≤ 40%	40% < LTV ≤ 60%	60% < LTV ≤ 80%	80% < LTV ≤ 90%	90% < LTV ≤ 100%	LTV > 100%
Risk weight	25%	30%	35%	45%	55%	RW <sub>counterparty</sub> <sup>48</sup>

55. Where the requirements in paragraph [50] are not met, the risk weight will be the higher of 100% or the risk weight of the counterparty, provided that paragraphs [56] and [61] are not applicable.

56. When the prospects for repayment and recovery on the exposure materially depend on the cash flows generated by the property securing the loan rather than on the underlying capacity of the borrower to repay the debt from other sources, and provided that paragraph [61] is not applicable, the exposure will be risk-weighted as follows:<sup>49, 50</sup>

- if the requirements in paragraph [50] are met, according to the LTV ratio as set out in the risk-weight table [10] below; and
- if the requirements of paragraph [50] are not met, at 150%.

The primary source of these cash flows would generally be lease or rental payments, or the sale, of the residential property. The distinguishing characteristic of these exposures versus other residential real estate exposures is the strong positive correlation between the prospects for repayment of the obligation and the prospects for recovery in the event of default, with both depending materially on the cash flows generated by the property securing the exposure.

---

### Risk weight table for residential real estate exposures

(Repayment is materially dependent on cash flows generated by property)

Table 10

	LTV ≤ 60%	60% < LTV ≤ 80%	LTV > 80%
Risk weight	70%	90%	120%

## 9.2 Commercial real estate exposures

57. A commercial real estate exposure is an exposure secured by any immovable property that is not a residential property as defined in paragraph [53].

<sup>48</sup> For residential real estate exposures to individuals with an LTV ratio higher than 100% the risk weight applied will be 75%. For residential real estate exposures to SMEs (as defined in paragraph [45]) with an LTV ratio higher than 100% the risk weight applied will be 85%.

<sup>49</sup> Exposures secured by properties where the borrower lives in one unit and rents other unit(s) within the same property will be automatically excluded from this penalised treatment as long as the number of units is not higher than 4.

<sup>50</sup> Also excluded from this treatment are loans to associations or cooperatives of individuals that are regulated under national law and exist with the only purpose of granting its members the use of a first residence in the property securing the loan.

58. Where the requirements in paragraph [50] are met and provided that paragraphs [60] and [61] are not applicable, a preferential risk weight may only be applicable where the loan amount does not exceed 60% of the value of the property (or properties) pledged as collateral. In particular, the risk weight to be assigned to the total exposure amount will be determined as set out in Table [11] below:

Risk weight table for commercial real estate exposures

(Repayment is not materially dependent on cash flows generated by property)

Table 11

	LTV ≤ 60%	LTV > 60%
Risk weight	Min (60%, RW of Counterparty)	RW of Counterparty <sup>51</sup>

59. Where the requirements in paragraph [50] are not met, the risk weight will be the higher of 100% or the risk weight of the counterparty, provided that paragraphs [60] and [61] are not applicable.

60. When the prospects for repayment and recovery on the exposure materially depend on the cash flows generated by the property securing the loan rather than on the underlying capacity of the borrower to repay the debt from other sources, and provided that paragraph [61] is not applicable, the exposure will be risk-weighted as follows:

- if the requirements in paragraph [50] are met, according to the LTV ratio as set out in the risk-weight table [12] below; and
- if the requirements of paragraph [50] are not met, at 150%.

The primary source of these cash flows would generally be lease or rental payments, or the sale, of the commercial property. The distinguishing characteristic of these exposures versus other commercial real estate exposures is the strong positive correlation between the prospects for repayment of the obligation and the prospects for recovery in the event of default, with both depending materially on the cash flows generated by the property securing the exposure.

Risk weight table for commercial real estate exposures

(Repayment is materially dependent on cash flows generated by property)

Table 12

	LTV ≤ 60%	60% < LTV ≤ 80%	LTV > 80%
Risk weight	80%	100%	130%

9.3 Land acquisition, development and construction exposures

61. Land acquisition, development and construction (ADC) lending will be risk-weighted at 150%. ADC includes loans to companies or SPVs financing any of the land acquisition, development and construction of any residential or commercial properties where the source of repayment at origination of the exposure is either the future uncertain sale of the property or cash flows whose source of repayment is substantially uncertain. ADC exposures will also include loans to companies or individuals to finance the acquisition of finished property where the repayment of the loan depends on the future uncertain sale of the property.

<sup>51</sup> For commercial real estate loans to individuals with an LTV ratio higher than 100% the risk weight applied will be 75%. For commercial real estate loans to SMEs (as defined in paragraph [45]) with an LTV ratio higher than 100%, the risk weight applied will be 85%.

## 10. Add-on risk weight to certain exposures with currency mismatch

62. For corporate, retail and real estate unhedged exposures where the lending currency differs from the currency of the borrower's main source of income, banks will apply an add-on of 50% to the risk weight applicable according to paragraphs [31 to 60], subject to a maximum risk weight of 150%.

63. For the purposes of paragraph [62], unhedged exposure means an exposure to a borrower that has no natural or financial hedge against the foreign exchange risk resulting from the currency mismatch between the currency of the loan and the currency applied to pay down the loan. A natural hedge exists where the borrower, in its normal operating procedures, receives foreign currency income that matches the currency of a given loan (eg remittances/export receipts). A financial hedge generally includes a legal contract with a financial institution (eg forward contract).

## 11. Off-balance sheet items

64. Off-balance sheet items under the standardised approach will be converted into credit exposures by multiplying the committed but undrawn amount by a credit conversion factor (CCF). For these purposes, commitment means any contractual arrangement accepted by the client<sup>52</sup> whereby the bank is committed to extend credit, purchase assets or issue credit substitutes. Counterparty risk weightings for OTC derivative transactions will not be subject to any specific ceiling.

65. A 100% CCF will be applied to the following items:

- Direct credit substitutes, eg general guarantees of indebtedness (including standby letters of credit serving as financial guarantees for loans and securities) and acceptances (including endorsements with the character of acceptances).
- Sale and repurchase agreements and asset sales with recourse<sup>53</sup> where the credit risk remains with the bank.
- The lending of banks' securities or the posting of securities as collateral by banks, including instances where these arise out of repo-style transactions (ie repurchase/reverse repurchase and securities lending/securities borrowing transactions). See [CRM framework for exposures risk-weighted under SA] for the calculation of risk-weighted assets where the credit converted exposure is secured by eligible collateral. This paragraph does not apply to posted collateral that is treated under the standardised approach for counterparty credit risk (SA-CCR; Annex 4, Section X).
- Forward asset purchases, forward deposits and partly paid shares and securities,<sup>54</sup> which represent commitments with certain drawdown.
- Off-balance sheet items not explicitly included in any other category.

66. A [50-75%] CCF will be applied to:

- Commitments, regardless of the maturity of the underlying facility, unless they qualify for a lower CCF.

<sup>52</sup> Either through a single contract or through the general terms of the instrument.

<sup>53</sup> These items are to be weighted according to the type of asset and not according to the type of counterparty with whom the transaction has been entered into.

<sup>54</sup> These items are to be weighted according to the type of asset and not according to the type of counterparty with whom the transaction has been entered into.

- Note issuance facilities (NIFs) and revolving underwriting facilities (RUFs) regardless of the maturity of the underlying facility.

67. A 50% CCF will be applied to certain transaction-related contingent items (eg performance bonds, bid bonds, warranties and standby letters of credit related to particular transactions).

68. A 20% CCF will be applied to both the issuing and confirming banks of short-term<sup>55</sup> self-liquidating trade letters of credit arising from the movement of goods (eg documentary credits collateralised by the underlying shipment).

69. A [10–20%] CCF will be applied to retail commitments that are unconditionally cancellable at any time by the bank without prior notice, or that effectively provide for automatic cancellation due to deterioration in a borrower's creditworthiness.<sup>56</sup>

70. Where there is an undertaking to provide a commitment on an off-balance sheet item, banks are to apply the lower of the two applicable CCFs.

71. The credit equivalent amount of SFTs that expose a bank to counterparty credit risk is to be calculated under the comprehensive approach in paragraphs [140 to 164]. The credit equivalent amount of OTC derivatives that expose a bank to counterparty credit risk is to be calculated under the standardised approach for counterparty credit risk in paragraph [165].

72. Banks must closely monitor securities, commodities, and foreign exchange transactions that have failed, starting the first day they fail. A capital charge on failed transactions must be calculated in accordance with Annex 3 of this framework.

73. Banks are exposed to the risk associated with unsettled securities, commodities, and foreign exchange transactions from trade date. Irrespective of the booking or the accounting of the transaction, unsettled transactions must be taken into account for regulatory capital requirements purposes. Where they do not appear on the balance sheet (ie settlement date accounting), the unsettled exposure amount will receive a 100% CCF. Banks are encouraged to develop, implement and improve systems for tracking and monitoring the credit risk exposure arising from unsettled transactions as appropriate so that they can produce management information that facilitates timely action. Furthermore, when such transactions are not processed through a delivery-versus-payment (DvP) or payment-versus-payment (PvP) mechanism, banks must calculate a capital charge as set forth in Annex 3 of this framework.

74. A bank providing credit protection through a first-to-default or second-to-default credit derivative is subject to capital requirements on such instruments. For first-to-default credit derivatives, the risk weights of the assets included in the basket must be aggregated up to a maximum of 1250% and multiplied by the nominal amount of the protection provided by the credit derivative to obtain the risk-weighted asset amount. For second-to-default credit derivatives, the treatment is similar; however, in aggregating the risk weights, the asset with the lowest risk-weighted amount can be excluded from the calculation.

## 12. Defaulted exposures

75. For risk-weighting purposes under the standardised approach, a defaulted exposure is past due more than 90 days, or is an exposure to a defaulted borrower. A defaulted borrower is a borrower in respect of whom any of the following events have occurred:

<sup>55</sup> That is, with a maturity below one year. For further details see Basel Committee, *Treatment of trade finance under the Basel capital framework*, October 2011, [www.bis.org/publ/bcbs205.pdf](http://www.bis.org/publ/bcbs205.pdf).

<sup>56</sup> In certain countries, retail commitments are considered unconditionally cancellable if the terms permit the bank to cancel them to the full extent allowable under consumer protection and related legislation.

- Any material credit obligation is past due more than 90 days. Overdrafts will be considered as being past due once the customer has breached an advised limit or been advised of a limit smaller than current outstandings;
- Any material credit obligation is on non-accrued status (eg the lending bank no longer recognises accrued interest as income or, if recognised, makes an equivalent amount of provisions);
- A write-off or account-specific provision is made as a result of a significant perceived decline in credit quality subsequent to the bank taking on any credit exposure to the borrower;
- Any credit obligation is sold at a material credit-related economic loss;
- A distressed restructuring of any credit obligation (ie a restructuring that may result in a diminished financial obligation caused by the material forgiveness, or postponement, of principal, interest or (where relevant) fees) is agreed by the bank;
- The borrower's bankruptcy or a similar order in respect of any of the borrower's credit obligations to the banking group has been filed;
- The borrower has sought or has been placed in bankruptcy or similar protection where this would avoid or delay repayment of any of the credit obligations to the banking group; or
- Any other situation where the bank considers that the borrower is unlikely to pay its credit obligations in full without recourse by the bank to actions such as realising security.

76. For retail exposures, the definition of default can be applied at the level of a particular credit obligation, rather than at the level of the borrower. As such, default by a borrower on one obligation does not require a bank to treat all other obligations to the banking group as defaulted.

77. With the exception of real estate exposures treated under paragraph [78], the unsecured or unguaranteed portion of a defaulted exposure shall be risk-weighted net of specific provisions and partial write-offs at 150%.

78. Defaulted residential real estate exposures where repayments do not materially depend on cash flows generated by the property securing the loan shall be risk-weighted net of specific provisions and partial write-offs at 100%. Other real estate exposures shall be risk-weighted net of specific provisions and partial write-offs at 150%. Guarantees or financial collateral which are eligible according to the credit risk mitigation framework might be taken into account in the calculation of the exposure in accordance with paragraph [52].

79. For the purpose of defining the secured or guaranteed portion of the defaulted exposure, eligible collateral and guarantees will be the same as for credit risk mitigation purposes (see Section CRM for exposures risk-weighted under SA).

### 13. Other assets

80. The standard risk weight for all other assets will be 100%, with the exception of exposures mentioned in paragraphs [81 and 82].

81. A 0% risk weight will apply to (i) cash owned and held at the bank or in transit; and (ii) gold bullion held at the bank or held in another bank on an allocated basis, to the extent the gold bullion assets are backed by gold bullion liabilities.

82. A 20% risk weight will apply to cash items in the process of collection.

## B. Recognition of external ratings by national supervisors

### 1. The recognition process

83. In jurisdictions that allow the use of external ratings for regulatory purposes, only credit assessments from credit rating agencies recognised as external credit assessment institutions (ECAIs) will be allowed. National supervisors are responsible for determining on a continuous basis whether an ECAI meets the criteria listed in paragraph [84]. National supervisors should take into account the criteria and conditions provided in the *IOSCO Code of Conduct Fundamentals for Credit Rating Agencies*<sup>57</sup> when determining ECAI eligibility. Recognition should only be provided in respect of ECAI ratings for types of claim where all criteria and conditions are met. The supervisory process for recognising ECAIs should be made public to avoid unnecessary barriers to entry.

### 2. Eligibility criteria

84. An ECAI must satisfy each of the following eight criteria.

- **Objectivity:** The methodology for assigning external ratings must be rigorous, systematic, and subject to some form of validation based on historical experience. Moreover, external ratings must be subject to ongoing review and responsive to changes in financial condition. Before being recognised by supervisors, a rating methodology for each market segment, including rigorous backtesting, must have been established for at least one year and preferably three years.
- **Independence:** An ECAI should be independent and should not be subject to political or economic pressures that may influence the rating. In particular, a CRA should not delay or refrain from taking a rating action based on its potential effect (economic, political or otherwise). The rating process should be as free as possible from any constraints that could arise in situations where the composition of the board of directors or the shareholder structure of the CRA may be seen as creating a conflict of interest. Furthermore, a CRA should separate operationally, legally and, if practicable, physically its rating business from other businesses and analysts.
- **International access/transparency:** The individual ratings, the key elements underlining the assessments and whether the issuer participated in the rating process should be publicly available on a non-selective basis, unless they are private ratings, which should be at least available to both domestic and foreign institutions with legitimate interest and on equivalent terms. In addition, the ECAI's general procedures, methodologies and assumptions for arriving at ratings should be publicly available.
- **Disclosure:** An ECAI should disclose the following information: its code of conduct; the general nature of its compensation arrangements with assessed entities; any conflict of interest,<sup>58</sup> the

<sup>57</sup> Available at [www.iosco.org/library/pubdocs/pdf/IOSCOPD482.pdf](http://www.iosco.org/library/pubdocs/pdf/IOSCOPD482.pdf).

<sup>58</sup> At a minimum, the following situations and their influence on the ECAI's credit rating methodologies or credit rating actions shall be disclosed:

- The ECAI is being paid to issue a credit rating by the rated entity or by the obligor, originator, underwriter, or arranger of the rated obligation;
- The ECAI is being paid by subscribers with a financial interest that could be affected by a credit rating action of the ECAI;
- The ECAI is being paid by rated entities, obligors, originators, underwriters, arrangers, or subscribers for services other than issuing credit ratings or providing access to the ECAI's credit ratings;

ECAI's compensation arrangements,<sup>59</sup> its assessment methodologies, including the definition of default, the time horizon, and the meaning of each rating; the actual default rates experienced in each assessment category; and the transitions of the ratings, eg the likelihood of AA ratings becoming A over time. A rating should be disclosed as soon as practicably possible after issuance. When disclosing a rating, the information should be provided in plain language, indicating the nature and limitation of credit ratings and the risk of unduly relying on them to make investments.

- **Resources:** An ECAI should have sufficient resources to carry out high-quality credit assessments. These resources should allow for substantial ongoing contact with senior and operational levels within the entities assessed in order to add value to the credit assessments. In particular, ECAIs should assign analysts with appropriate knowledge and experience to assess the creditworthiness of the type of entity or obligation being rated. Such assessments should be based on methodologies combining qualitative and quantitative approaches.
- **Credibility:** To some extent, credibility is derived from the criteria above. In addition, the reliance on an ECAI's external ratings by independent parties (investors, insurers, trading partners) is evidence of the credibility of the ratings of an ECAI. The credibility of an ECAI is also underpinned by the existence of internal procedures to prevent the misuse of confidential information. In order to be eligible for recognition, an ECAI does not have to assess firms in more than one country.
- **No abuse of unsolicited ratings:** ECAIs must not use unsolicited ratings to put pressure on entities to obtain solicited ratings.
- **Cooperation with the supervisor:** ECAIs should notify the supervisor of significant changes to methodologies and provide access to external ratings and other relevant data in order to support initial and continued determination of eligibility.

## C. Implementation considerations in jurisdictions that allow use of external ratings for regulatory purposes

### 1. The mapping process

85. Supervisors will be responsible for assigning eligible ECAIs' ratings to the risk weights available under the standardised risk weighting framework, ie deciding which rating categories correspond to

- The ECAI is providing a preliminary indication or similar indication of credit quality to an entity, obligor, originator, underwriter, or arranger prior to being hired to determine the final credit rating for the entity, obligor, originator, underwriter, or arranger; and
- The ECAI has a direct or indirect ownership interest in a rated entity or obligor, or a rated entity or obligor has a direct or indirect ownership interest in the ECAI.

<sup>59</sup> An ECAI should disclose the general nature of its compensation arrangements with rated entities, obligors, lead underwriters, or arrangers.

When the ECAI receives from a rated entity, obligor, originator, lead underwriter, or arranger compensation unrelated to its credit rating services, the ECAI should disclose such unrelated compensation as a percentage of total annual compensation received from such rated entity, obligor, lead underwriter, or arranger in the relevant credit rating report or elsewhere, as appropriate.

An ECAI should disclose in the relevant credit rating report or elsewhere, as appropriate, if it receives 10% or more of its annual revenue from a single client (eg a rated entity, obligor, originator, lead underwriter, arranger, or subscriber, or any of their affiliates).

which risk weights. The mapping process should be objective and should result in a risk weight assignment consistent with that of the level of credit risk reflected in the tables above. It should cover the full spectrum of risk weights.

86. When conducting such a mapping process, factors that supervisors should assess include, among others, the size and scope of the pool of issuers that each ECAI covers, the range and meaning of the ratings that it assigns, and the definition of default used by the ECAI. In order to promote a more consistent mapping of ratings into the available risk weights and help supervisors in conducting such a process, Annex 2 provides guidance as to how such a mapping process may be conducted.

87. Banks must use the chosen ECAIs and their ratings consistently for all types of claims where they have been recognised by their supervisor as an eligible ECAI, for both risk-weighting and risk management purposes. Banks will not be allowed to “cherry-pick” the ratings provided by different ECAIs and to arbitrarily change the use of ECAIs.

88. Banks must disclose ECAIs that they use for the risk-weighting of their assets by type of exposure, the risk weights associated with the particular rating grades as determined by supervisors through the mapping process as well as the aggregated risk-weighted assets for each risk weight based on the ratings of each eligible ECAI.

## 2. Multiple external ratings

89. If there is only one rating by an ECAI chosen by a bank for a particular claim, that rating should be used to determine the risk weight of the exposure.

90. If there are two ratings by ECAIs chosen by a bank that map into different risk weights, the higher risk weight will be applied.

91. If there are three or more ratings with different risk weights, the two ratings that correspond to the lowest risk weights should be referred to. If these give rise to the same risk weight, that risk weight should be applied. If different, the higher risk weight should be applied.

## 3. Determination of whether an exposure is rated: Issue-specific and issuer ratings

92. Where a bank invests in a particular issue that has an issue-specific rating, the risk weight of the exposure will be based on this rating. Where the bank’s exposure is not an investment in a specific rated issue, the following general principles apply.

- In circumstances where the borrower has a specific rating for an issued debt – but the bank’s exposure is not an investment in this particular debt – a high-quality credit rating (one which maps into a risk weight lower than that which applies to an unrated claim) on that specific debt may only be applied to the bank’s unrated exposure if this claim ranks in all respects *pari passu* or senior to the claim with a rating. If not, the external rating cannot be used and the unassessed claim will receive the risk weight for unrated exposures.
- In circumstances where the borrower has an issuer rating, this rating typically applies to senior unsecured claims on that issuer. Consequently, only senior claims on that issuer will benefit from a high-quality issuer rating. Other unassessed exposures of a highly rated issuer will be treated as unrated. If either the issuer or a single issue has a low-quality rating (mapping into a risk weight equal to or higher than that which applies to unrated exposures), an unassessed exposure to the same counterparty that ranks *pari passu* or is subordinated to either the senior unsecured issuer rating or the exposure with a low-quality rating will be assigned the same risk weight as is applicable to the low-quality assessment.
- In circumstances where the issuer has a specific high-quality rating (one which maps into a lower risk weight) that only applies to a limited class of liabilities (such as a deposit assessment

or a counterparty risk assessment), this may only be used in respect of exposures that fall within that class.

93. Whether the bank intends to rely on an issuer- or an issue-specific rating, the rating must take into account and reflect the entire amount of credit risk exposure the bank has with regard to all payments owed to it.<sup>60</sup>

94. In order to avoid any double-counting of credit enhancement factors, no supervisory recognition of credit risk mitigation techniques will be taken into account if the credit enhancement is already reflected in the issue specific rating (see paragraph [106]).

#### 4. Domestic currency and foreign currency ratings

95. Where exposures are risk-weighted based on the rating of an equivalent exposure to that borrower, the general rule is that foreign currency ratings would be used for exposures in foreign currency. Domestic currency ratings, if separate, would only be used to risk-weight exposures denominated in the domestic currency.<sup>61</sup>

#### 5. Short-term/long-term ratings

96. For risk-weighting purposes, short-term ratings are deemed to be issue-specific. They can only be used to derive risk weights for exposures arising from the rated facility. They cannot be generalised to other short-term exposures, except under the conditions of paragraph [98]. In no event can a short-term rating be used to support a risk weight for an unrated long-term exposure. Short-term ratings may only be used for short-term exposures against banks and corporates. The table below provides a framework for banks' exposures to specific short-term facilities, such as a particular issuance of commercial paper:

Risk weight table for specific short-term ratings

Table 13

External rating	A-1/P-1 <sup>62</sup>	A-2/P-2	A-3/P-3	Others <sup>63</sup>
Risk weight	20%	50%	100%	150%

97. If a short-term rated facility attracts a 50% risk-weight, unrated short-term exposures cannot attract a risk weight lower than 100%. If an issuer has a short-term facility with an external rating that warrants a risk weight of 150%, all unrated exposures, whether long-term or short-term, should also receive a 150% risk weight, unless the bank uses recognised credit risk mitigation techniques for such exposures.

<sup>60</sup> For example, if a bank is owed both principal and interest, the assessment must fully take into account and reflect the credit risk associated with repayment of both principal and interest.

<sup>61</sup> However, when an exposure arises through a bank's participation in a loan that has been extended, or has been guaranteed against convertibility and transfer risk, by certain MDBs, its convertibility and transfer risk can be considered by national supervisory authorities to be effectively mitigated. To qualify, MDBs must have preferred creditor status recognised in the market and be included in footnote [32] (in paragraph [11]). In such cases, for risk-weighting purposes, the borrower's domestic currency rating may be used instead of its foreign currency rating. In the case of a guarantee against convertibility and transfer risk, the local currency rating can be used only for the portion that has been guaranteed. The portion of the loan not benefiting from such a guarantee will be risk-weighted based on the foreign currency rating.

<sup>62</sup> The notations follow the methodology used by Standard & Poor's and by Moody's Investors Service. The A-1 rating of Standard & Poor's includes both A-1+ and A-1-.

<sup>63</sup> This category includes all non-prime and B or C ratings.

98. In cases where short-term ratings are available, the following interaction with the general preferential treatment for short-term exposures to banks as described in paragraph [18] will apply:

- The general preferential treatment for short-term exposures applies to all exposures to banks of up to three months original maturity when there is no specific short-term claim assessment.
- When there is a short-term rating and such a rating maps into a risk weight that is more favourable (ie lower) or identical to that derived from the general preferential treatment, the short-term rating should be used for the specific exposure only. Other short-term exposures would benefit from the general preferential treatment.
- When a specific short-term rating for a short term exposure to a bank maps into a less favourable (higher) risk weight, the general short-term preferential treatment for interbank exposures cannot be used. All unrated short-term exposures should receive the same risk weighting as that implied by the specific short-term rating.

99. When a short-term rating is to be used, the institution making the assessment needs to meet all of the eligibility criteria for recognising ECAIs, as described in paragraph [84], in terms of its short-term ratings.

## 6. Level of application of the rating

100. External ratings for one entity within a corporate group cannot be used to risk-weight other entities within the same group.

## 7. Use of unsolicited ratings

101. National supervisory authorities may allow banks to use *unsolicited* ratings in the same way as solicited ratings if they are satisfied that the credit assessments of unsolicited ratings are not inferior in quality to the general quality of solicited ratings.

# D. Credit risk mitigation techniques for exposures risk-weighted under the standardised approach

## 1. Overarching issues

### (i) Introduction

102. Banks use a number of techniques to mitigate the credit risks to which they are exposed. For example, exposures may be collateralised by first-priority claims, in whole or in part with cash or securities, a loan exposure may be guaranteed by a third party, or a bank may buy a credit derivative to offset various forms of credit risk. Additionally banks may agree to net loans owed to them against deposits from the same counterparty.<sup>64</sup>

103. The framework set out in this section is applicable to banking book exposures that are risk-weighted under the standardised approach.

<sup>64</sup> In this section, "counterparty" is used to denote a party to whom a bank has an on- or off-balance sheet credit exposure. That exposure may, for example, take the form of a loan of cash or securities (where the counterparty would traditionally be called the borrower), of securities posted as collateral, of a commitment or of exposure under an OTC derivatives contract.

(ii) General requirements

104. No transaction in which CRM techniques are used shall receive a higher capital requirement than an otherwise identical transaction where such techniques are not used.

105. The Pillar 3 requirements must be fulfilled for banks to obtain capital relief in respect of any CRM techniques.

106. The effects of CRM must not be double-counted. Therefore, no additional supervisory recognition of CRM for regulatory capital purposes will be granted on exposures for which the risk weight already reflects that CRM. Consistent with paragraph [93], principal-only ratings will also not be allowed within the CRM framework.

107. While the use of CRM techniques reduces or transfers credit risk, it may simultaneously increase other risks (ie residual risks). Residual risks include legal, operational, liquidity and market risks. Therefore, banks must employ robust procedures and processes to control these risks, including strategy; consideration of the underlying credit; valuation; policies and procedures; systems; control of roll-off risks; and management of concentration risk arising from the bank's use of CRM techniques and its interaction with the bank's overall credit risk profile. Where these risks are not adequately controlled, supervisors may impose additional capital charges or take other supervisory actions as outlined in Pillar 2.

108. In order for CRM techniques to provide protection, the credit quality of the counterparty must not have a material positive correlation with the employed CRM technique or with the resulting residual risks (as defined in paragraph [107]). For example, securities issued by the counterparty (or by any counterparty-related entity) provide little protection as collateral and are thus ineligible.

109. In the case where a bank has multiple CRM techniques covering a single exposure (eg a bank has both collateral and a guarantee partially covering an exposure), the bank must subdivide the exposure into portions covered by each type of CRM technique (eg portion covered by collateral, portion covered by guarantee) and the risk-weighted assets of each portion must be calculated separately. When credit protection provided by a single protection provider has differing maturities, they must be subdivided into separate protection as well.

(iii) Legal requirements

110. In order for banks to obtain capital relief for any use of CRM techniques, all documentation used in collateralised transactions, on-balance sheet netting agreements, guarantees and credit derivatives must be binding on all parties and legally enforceable in all relevant jurisdictions. Banks must have conducted sufficient legal review to verify this and have a well founded legal basis to reach this conclusion, and undertake such further review as necessary to ensure continuing enforceability.

(iv) General treatment of maturity mismatches

111. For the purposes of calculating risk-weighted assets, a maturity mismatch occurs when the residual maturity of a credit protection arrangement (eg hedge) is less than that of the underlying exposure.

112. In the case of financial collateral, maturity mismatches are not allowed under the simple approach (see paragraph [132]).

113. Under the other approaches, when there is a maturity mismatch the credit protection arrangement may only be recognised if the original maturity of the arrangement is greater than or equal to one year, and its residual maturity is greater than or equal to three months. In such cases, credit risk mitigation may be partially recognised as detailed below in paragraph [114].

114. When there is a maturity mismatch with recognised credit risk mitigants, the following adjustment applies

$$P_a = P \cdot \frac{t - 0.25}{T - 0.25}$$

where:

- $P_a$  = value of the credit protection adjusted for maturity mismatch
- $P$  = credit protection amount (eg collateral amount, guarantee amount) adjusted for any haircuts
- $t$  = min {T, residual maturity of the credit protection arrangement expressed in years}
- $T$  = min {five years, residual maturity of the exposure expressed in years}

115. The maturity of the underlying exposure and the maturity of the hedge must both be defined conservatively. The effective maturity of the underlying must be gauged as the longest possible remaining time before the counterparty is scheduled to fulfil its obligation, taking into account any applicable grace period. For the hedge, (embedded) options that may reduce the term of the hedge must be taken into account so that the shortest possible effective maturity is used. For example: where, in the case of a credit derivative, the protection seller has a call option, the maturity is the first call date. Likewise, if the protection buyer owns the call option and has a strong incentive to call the transaction at the first call date, for example because of a step-up in cost from this date on, the effective maturity is the remaining time to the first call date.

(v) Currency mismatches

116. Currency mismatches are allowed under all approaches. Under the simple approach there is no specific treatment for currency mismatches, given that a minimum risk weight of 20% (floor) is generally applied. Under the comprehensive approach and in case of guarantees and credit derivatives, a specific adjustment for currency mismatches is prescribed in paragraphs [151] and [200], respectively.

## 2. Overview of credit risk mitigation techniques<sup>65</sup>

(i) Collateralised transactions

117. A collateralised transaction is one in which:

- banks have a credit exposure or a potential credit exposure; and
- that credit exposure or potential credit exposure is hedged in whole or in part by collateral posted by a counterparty or by a third party on behalf of the counterparty.

Where banks take eligible financial collateral, they may reduce their regulatory capital requirements through the application of CRM techniques.

118. Banks may opt for either:

- (i) The simple approach, which substitutes the risk weight of the counterparty for the risk weight of the collateral for the collateralised portion of the exposure (generally subject to a 20% floor); or
- (ii) The comprehensive approach, which allows a more precise offset of collateral against exposures, by effectively reducing the exposure amount by a volatility-adjusted value ascribed to the collateral.

<sup>65</sup> See Annex 10 for an overview of methodologies for the capital treatment of transactions secured by financial collateral under the standardised and IRB approaches.

Detailed operational requirements for both approaches are given in paragraphs [131 to 165]. Banks may operate under either, but not both, approaches in the banking book.

119. For collateralised OTC transactions, banks must use the standardised approach for counterparty credit risk (SA-CCR) to calculate the exposure amount, in accordance with paragraph [165].

(ii) On-balance sheet netting

120. Where banks have legally enforceable netting arrangements for loans and deposits that meet the conditions in paragraph [166] they may calculate capital requirements on the basis of net credit exposures as set out in that paragraph.

(iii) Guarantees and credit derivatives

121. Where guarantees or credit derivatives fulfil the minimum operational conditions set out in paragraphs [168 to 171], banks may take account of the credit protection offered by such credit risk mitigation techniques in calculating capital requirements.

122. A range of guarantors and protection providers are recognised and a substitution approach applies for capital requirement calculations. Only guarantees issued by or protection provided by entities with a lower risk weight than the counterparty lead to reduced capital charges for the guaranteed exposure, since the protected portion of the counterparty exposure is assigned the risk weight of the guarantor or protection provider, whereas the uncovered portion retains the risk weight of the underlying counterparty.

123. Detailed conditions and operational requirements for guarantees and credit derivatives are given in paragraphs [168 to 181].

### 3. Collateralised transactions

(i) General requirements

124. Before capital relief is granted in respect of any form of collateral, the standards set out below in paragraphs [125 to 130] must be met, irrespective of whether the simple or the comprehensive approach is used.

125. The legal mechanism by which collateral is pledged or transferred must ensure that the bank has the right to liquidate or take legal possession of it, in a timely manner, in the event of the default, insolvency or bankruptcy (or one or more otherwise-defined credit events set out in the transaction documentation) of the counterparty (and, where applicable, of the custodian holding the collateral). Additionally, banks must take all steps necessary to fulfil those requirements under the law applicable to the bank's interest in the collateral for obtaining and maintaining an enforceable security interest, eg by registering it with a registrar, or for exercising a right to net or set off in relation to the title transfer of the collateral.

126. Banks must have clear and robust procedures for the timely liquidation of collateral to ensure that any legal conditions required for declaring the default of the counterparty and liquidating the collateral are observed, and that collateral can be liquidated promptly.

127. Banks must ensure that sufficient resources are devoted to the orderly operation of margin agreements with OTC derivative and securities-financing counterparties, as measured by the timeliness and accuracy of its outgoing margin calls and response time to incoming margin calls. Banks must have collateral risk management policies in place to control, monitor and report:

- the risk to which margin agreements expose them (such as the volatility and liquidity of the securities exchanged as collateral);
- the concentration risk to particular types of collateral;

- the reuse of collateral (both cash and non-cash) including the potential liquidity shortfalls resulting from the reuse of collateral received from counterparties; and
- the surrender of rights on collateral posted to counterparties.

128. Where the collateral is held by a custodian, banks must take reasonable steps to ensure that the custodian segregates the collateral from its own assets.

129. A capital requirement must be applied on both sides of a transaction. For example, both repos and reverse repos will be subject to capital requirements. Likewise, both sides of a securities lending and borrowing transaction will be subject to explicit capital charges, as will the posting of securities in connection with derivatives exposures or with any other borrowing transaction.

130. Where a bank, acting as an agent, arranges a repo-style transaction (ie repurchase/reverse repurchase and securities lending/borrowing transactions) between a customer and a third party and provides a guarantee to the customer that the third party will perform on its obligations, then the risk to the bank is the same as if the bank had entered into the transaction as a principal. In such circumstances, a bank must calculate capital requirements as if it were itself the principal.

## (ii) The simple approach

### *General requirements for the simple approach*

131. Under the simple approach, the risk weight of the counterparty is substituted for the risk weight of the collateral instrument collateralising or partially collateralising the exposure.

132. For collateral to be recognised in the simple approach, it must be pledged for at least the life of the exposure and it must be marked to market and revalued with a minimum frequency of six months. Those portions of exposures collateralised by the market value of recognised collateral receive the risk weight applicable to the collateral instrument. The risk weight on the collateralised portion is subject to a floor of 20% except under the conditions specified in paragraphs [135 to 139]. The remainder of the exposure must be assigned the risk weight appropriate to the counterparty. Maturity mismatches are not allowed under the simple approach (see paragraphs [111 and 112]).

### *Eligible financial collateral under the simple approach*

133. The following collateral instruments are eligible for recognition in the simple approach:

- (a) Cash (as well as certificates of deposit or comparable instruments issued by the lending bank) on deposit with the bank that is incurring the counterparty exposure.<sup>66, 67</sup>
- (b) Gold.
- (c) In jurisdictions that allow the use of external ratings for regulatory purposes:
  - (i) Debt securities rated by a recognised ECAI where these are either:
    - at least BB– when issued by sovereigns or PSEs that are treated as sovereigns by the national supervisor; or

<sup>66</sup> Cash-funded credit-linked notes issued by the bank against exposures in the banking book that fulfil the criteria for credit derivatives are treated as cash-collateralised transactions.

<sup>67</sup> When cash on deposit, certificates of deposit or comparable instruments issued by the lending bank are held as collateral at a third-party bank in a non-custodial arrangement, if they are openly pledged/assigned to the lending bank and if the pledge/assignment is unconditional and irrevocable, the exposure amount covered by the collateral (after any necessary haircuts for currency risk) receives the risk weight of the third-party bank.

- at least BBB– when issued by other entities (including banks and other prudentially regulated financial institutions); or
  - at least A-3/P-3 for short-term debt instruments.
- (ii) Debt securities not rated by a recognised ECAI where these are:
- issued by a bank; and
  - listed on a recognised exchange; and
  - classified as senior debt; and
  - all rated issues of the same seniority by the issuing bank are rated at least BBB– or A-3/P-3 by a recognised ECAI; and
  - the bank holding the securities as collateral has no information to suggest that the issue justifies a rating below BBB– or A-3/P-3 (as applicable); and
  - the supervisor is sufficiently confident that the market liquidity of the security is adequate.
- (d) In jurisdictions that do not allow the use of external ratings for regulatory purposes, the following securities will be eligible provided that the supervisor is sufficiently confident that the market liquidity of the security is adequate:
- (i) Debt securities issued by sovereigns or PSEs that are treated as sovereigns by the national supervisor;
  - (ii) Debt securities issued by banks assigned to Grade A under the SCRA, as established in paragraphs [20 to 22];
  - (iii) Other debt securities issued by “investment grade” entities as defined in paragraph [173], and
  - (iv) Securitisation exposures with a risk weight of less than 100%.
- (e) Equities (including convertible bonds) that are included in a main index.
- (f) Undertakings for Collective Investments in Transferable Securities (UCITS) and mutual funds where:
- a price for the units is publicly quoted daily; and
  - the UCITS/mutual fund is limited to investing in the instruments listed in this paragraph.<sup>68</sup>
134. Resecuritisations as defined in the securitisation framework are not eligible financial collateral.

#### *Exemptions under the simple approach to the risk-weight floor*

135. Repo-style transactions that fulfil all of the following conditions are exempted from the risk-weight floor under the simple approach:
- (a) Both the exposure and the collateral are cash or a sovereign security or PSE security qualifying for a 0% risk weight under the standardised approach;
  - (b) Both the exposure and the collateral are denominated in the same currency;
  - (c) Either the transaction is overnight or both the exposure and the collateral are marked to market daily and are subject to daily remargining;

<sup>68</sup> However, the use or potential use by a UCITS/mutual fund of derivative instruments solely to hedge investments listed in this paragraph and paragraph [145] shall not prevent units in that UCITS/mutual fund from being eligible financial collateral.

- (d) Following a counterparty's failure to remargin, the time that is required between the last mark-to-market before the failure to remargin and the liquidation of the collateral is considered to be no more than four business days;
- (e) The transaction is settled across a settlement system proven for that type of transaction;
- (f) The documentation covering the agreement is standard market documentation for repo-style transactions in the securities concerned;
- (g) The transaction is governed by documentation specifying that if the counterparty fails to satisfy an obligation to deliver cash or securities or to deliver margin or otherwise defaults, then the transaction is immediately terminable; and
- (h) Upon any default event, regardless of whether the counterparty is insolvent or bankrupt, the bank has the unfettered, legally enforceable right to immediately seize and liquidate the collateral for its benefit.

136. *Core market participants* may include, at the discretion of the national supervisor, the following entities:

- (a) Sovereigns, central banks and PSEs;
- (b) Banks and securities firms;
- (c) Other financial companies (including insurance companies) eligible for a 20% risk weight in the standardised approach;
- (d) Regulated mutual funds that are subject to capital or leverage requirements;
- (e) Regulated pension funds; and
- (f) Qualifying central counterparties (QCCPs).

137. Repo transactions that fulfil the requirement in paragraph [135] receive a 10% risk weight, as an exemption to the risk weight floor described in paragraph [132]. If the counterparty to the transaction is a core market participant, banks may apply a risk weight of 0% to the transaction.

138. OTC derivative transactions subject to daily mark-to-market, collateralised by cash and where there is no currency mismatch may receive a 0% risk weight. Such transactions collateralised by sovereign or PSE securities qualifying for a 0% risk weight in the standardised approach may receive a 10% risk weight.

139. The 20% floor for the risk weight on a collateralised transaction does not apply and a 0% risk weight may be applied where the exposure and the collateral are denominated in the same currency, and either:

- the collateral is cash on deposit as defined in paragraph [135(a)]; or
- the collateral is in the form of sovereign/PSE securities eligible for a 0% risk weight, and its market value has been discounted by 20%.

(iii) The comprehensive approach

(a) *General requirements for the comprehensive approach*

140. In the comprehensive approach, when taking collateral, banks must calculate their adjusted exposure to a counterparty in order to take account of the risk mitigating effect of that collateral. Banks must use the applicable supervisory haircuts to adjust both the amount of the exposure to the counterparty and the value of any collateral received in support of that counterparty to take account of

possible future fluctuations in the value of either,<sup>69</sup> as occasioned by market movements. Unless either side of the transaction is cash or a zero haircut is applied, the volatility-adjusted exposure amount is higher than the nominal exposure and the volatility-adjusted collateral value is lower than the nominal collateral value.

141. The size of the individual haircuts depends on the type of instrument, type of transaction, residual maturity and the frequency of marking to market and remargining as provided in paragraph [108]. Haircuts must be scaled up using the square root of time formula depending on the frequency of remargining or marking to market. This formula is included in paragraph [158].

142. Additionally, where the exposure and collateral are held in different currencies, banks must apply an additional haircut to the volatility-adjusted collateral amount in accordance with paragraph [180] to take account of possible future fluctuations in exchange rates.

143. The effect of master netting agreements covering repo-style transactions can be recognised for the calculation of capital requirements subject to the conditions and requirements in paragraphs [161 to 164].

144. The comprehensive approach for the treatment of collateral also applies to calculating the counterparty risk charges for OTC derivatives and repo-style transactions booked in the trading book.

*(b) Eligible financial collateral under the comprehensive approach*

145. The following collateral instruments are eligible for recognition in the comprehensive approach:

- (a) All of the instruments listed in paragraph [133];
- (b) Equities and convertible bonds that are not included in a main index but which are listed on a recognised security exchange;
- (c) UCITS/mutual funds which include the instruments in point (b).

*(c) Calculation of capital requirement for transactions secured by financial collateral*

146. For a collateralised transaction, the exposure amount after risk mitigation is calculated as follows:

$$E^* = \max\{0, E \cdot (1 + H_e) - C \cdot (1 - H_c - H_{fx})\}$$

where:

- $E^*$  = the exposure value after risk mitigation
- $E$  = current value of the exposure
- $H_e$  = haircut appropriate to the exposure
- $C$  = the current value of the collateral received
- $H_c$  = haircut appropriate to the collateral
- $H_{fx}$  = haircut appropriate for currency mismatch between the collateral and exposure

147. In the case of maturity mismatches, the value of the collateral received (collateral amount) must be adjusted in accordance with paragraphs [111 to 115].

148. The exposure amount after risk mitigation ( $E^*$ ) must be multiplied by the risk weight of the counterparty to obtain the risk-weighted asset amount for the collateralised transaction.

<sup>69</sup> Exposure amounts may vary where, for example, securities are being lent.

149. In jurisdictions that allow the use of external ratings for regulatory purposes, the following supervisory haircuts (assuming daily mark-to-market, daily remargining and a 10-business day holding period), expressed as percentages, must be used to determine the haircuts appropriate to the collateral (Hc) and to the exposure (He):

### Supervisory haircuts for comprehensive approach

Jurisdictions that allow the use of external ratings for regulatory purposes

Table 14

Issue rating for debt securities	Residual maturity	Sovereigns <sup>70</sup>	Other issuers <sup>71</sup>	Securitisation exposures <sup>72</sup>
AAA to AA-/A-1	≤ 1 year	0.5	1	2
	> 1 year, ≤ 3 years	2	3	8
	> 3 years, ≤ 5 years		4	
	> 5 years, ≤ 10 years	4	6	16
	> 10 years		12	
A+ to BBB-/A-2/A-3/P-3 and unrated bank securities per para. 140(d)	≤ 1 year	1	2	4
	> 1 year, ≤ 3 years	3	4	12
	> 3 years, ≤ 5 years		6	
	> 5 years, ≤ 10 years	6	12	24
	> 10 years		20	
BB+ to BB-	All	15	Not eligible	Not eligible
Main index equities (including convertible bonds) and gold		20		
Other equities and convertible bonds listed on a recognised exchange		30		
UCITS/mutual funds		Highest haircut applicable to any security in which the fund can invest, unless the bank can apply the look-through approach (LTA) for equity investments in funds, in which case the bank may use a weighted average of haircuts applicable to instruments held by the fund.		
Cash in the same currency <sup>73</sup>		0		

150. In jurisdictions that do not allow the use of external ratings for regulatory purposes, the following supervisory haircuts (assuming daily mark-to-market, daily remargining and a 10-business day holding period), expressed as percentages, must be used to determine the haircuts appropriate to the collateral (Hc) and to the exposure (He):

<sup>70</sup> Includes: PSEs that are treated as sovereigns by the national supervisor, as well as multilateral development banks receiving a 0% risk weight.

<sup>71</sup> Includes PSEs that are not treated as sovereigns by the national supervisor.

<sup>72</sup> Those exposures that meet the definition set forth in the securitisation framework.

<sup>73</sup> Eligible cash collateral specified in paragraph [133(a)].

## Supervisory haircuts for comprehensive approach

Jurisdictions that do not allow the use of external ratings for regulatory purposes

Table 15

	Residual maturity	Issuer's risk weight (only for securities issued by sovereigns <sup>74</sup> )			Other investment-grade securities, consistent with paragraphs 133(d)(iii) <sup>75</sup>	
		0%	20% or 50%	100%	Non-securitisation exposures	Senior securitisation exposures with risk weight < 100%
Debt securities	Less than or equal to one year	0.5	1	15	2	4
	Greater than one year and less than or equal to three years	2	3	15	4	12
	Greater than three years and less than or equal to five years				6	
	Greater than five years	4	6	15	12	24
	Greater than 10 years				20	
Main index equities (including convertible bonds) and gold	20					
Other equities and convertible bonds listed on a recognised exchange	30					
UCITS/mutual funds	Highest haircut applicable to any security in which the fund can invest, unless the bank can apply the look-through approach (LTA) for equity investments in funds, in which case the bank may use a weighted average of haircuts applicable to instruments held by the fund.					
Cash in the same currency <sup>76</sup>	0					
Other exposure types	30					

151. The haircut for currency risk (H<sub>fx</sub>) where exposure and collateral are denominated in different currencies is 8% (also based on a 10-business day holding period and daily mark-to-market).

152. For repo style transactions, a haircut adjustment may need to be applied in accordance with paragraphs [155 to 158].

153. For transactions in which the bank lends non-eligible instruments, the haircut to be applied on the exposure must be 30%. For transactions in which the bank borrows non-eligible instruments, credit risk mitigation may not be applied.

154. Where the collateral is a basket of assets, the haircut on the basket must be  $H = \sum_i a_i H_i$ , where  $a_i$  is the weight of the asset (as measured by units of currency) in the basket and  $H_i$  the haircut applicable to that asset.

<sup>74</sup> Includes: PSEs that are treated as sovereigns by the national supervisor, as well as multilateral development banks receiving a 0% risk weight.

<sup>75</sup> Includes PSEs that are not treated as sovereigns by the national supervisor.

<sup>76</sup> Eligible cash collateral specified in paragraph [133(a)].

(d) *Adjustment for different holding periods and non-daily mark-to-market or remargining*

155. For some transactions, depending on the nature and frequency of the revaluation and remargining provisions, different holding periods and thus different haircuts must be applied. The framework for collateral haircuts distinguishes between repo-style transactions (ie repo/reverse repos and securities lending/borrowing), "other capital markets-driven transactions" (ie OTC derivatives transactions and margin lending) and secured lending. In capital-market-driven transactions and repo-style transactions, the documentation contains remargining clauses; in secured lending transactions, it generally does not.

156. The minimum holding period for various products is summarised in the following table:

Adjustment to supervisory haircuts		
For different holding periods and non-daily mark-to-market or remargining		Table 16
Transaction type	Minimum holding period	Condition
Repo-style transaction	five business days	daily remargining
Other capital market transactions	10 business days	daily remargining
Secured lending	20 business days	daily revaluation

157. Where a bank has a transaction or netting set that meets the criteria outlined in paragraphs 41(i) or 41(ii) of Annex 4, the minimum holding period must be the margin period of risk that would apply under those paragraphs.

158. When the frequency of remargining or revaluation is longer than the minimum, the minimum haircut numbers must be scaled up depending on the actual number of business days between remargining or revaluation. The 10-business day haircuts provided in paragraph [149] are the default haircuts and these haircuts must be scaled up or down using the formula below:

$$H = H_{10} \sqrt{\frac{N_R + (T_M - 1)}{10}}$$

where:

- $H$  = haircut
- $H_{10}$  = 10-business day haircut for instrument
- $N_R$  = actual number of business days between remargining for capital market transactions or revaluation for secured transactions
- $T_M$  = minimum holding period for the type of transaction.

(e) *Exemptions under the comprehensive approach for qualifying repo-style transactions involving core market participants*

159. For repo-style transactions with core market participants as defined in paragraph [136] and that satisfy the conditions in paragraph [135] supervisors may apply a haircut of zero.

160. Where, under the comprehensive approach, a supervisor applies a specific carve-out to repo-style transactions in securities issued by its domestic government, other supervisors may choose to allow banks incorporated in their jurisdiction to adopt the same approach to the same transactions.

(f) *Treatment under the comprehensive approach of repo-style transactions covered by master netting agreements*

161. The effects of bilateral netting agreements covering repo-style transactions may be recognised on a counterparty-by-counterparty basis if the agreements are legally enforceable in each relevant jurisdiction upon the occurrence of an event of default and regardless of whether the counterparty is insolvent or bankrupt. In addition, netting agreements must:

- (a) provide the non-defaulting party the right to terminate and close out in a timely manner all transactions under the agreement upon an event of default, including in the event of insolvency or bankruptcy of the counterparty;
- (b) provide for the netting of gains and losses on transactions (including the value of any collateral) terminated and closed out under it so that a single net amount is owed by one party to the other;
- (c) allow for the prompt liquidation or set-off of collateral upon the event of default; and
- (d) be, together with the rights arising from the provisions required in (a) to (c) above, legally enforceable in each relevant jurisdiction upon the occurrence of an event of default and regardless of the counterparty's insolvency or bankruptcy.

162. Netting across positions in the banking and trading book may only be recognised when the netted transactions fulfil the following conditions:

- All transactions are marked to market daily;<sup>77</sup> and
- The collateral instruments used in the transactions are recognised as eligible financial collateral in the banking book.

163. The formula in paragraph [164] will be used to calculate the capital requirements for transactions with netting agreements. This formula includes the current exposure, an amount for systematic exposure of the securities based on the net exposure, an amount for the idiosyncratic exposure of the securities based on the gross exposure, and an amount for currency mismatch. All other rules regarding the calculation of haircuts under the comprehensive approach stated in paragraphs [140 to 160] equivalently apply for banks using bilateral netting agreements for repo-style transactions.

164. Banks using standard supervisory haircuts for repo-style transactions conducted under a master netting agreement must use the following formula to calculate their exposure amount:

$$E^* = \max \left\{ 0; \sum_i E_i - \sum_i C_j + 0.4 \times \text{net exposure} + 0.6 \times \frac{\text{gross exposure}}{\sqrt{N}} + \sum_{fx} (E_{fx} \times H_{fx}) \right\}$$

where:

- $E^*$  = exposure value of the netting set after risk mitigation
- $E_i$  = current value of all cash and securities lent, sold with an agreement to repurchase or otherwise posted to the counterparty under the netting agreement
- $C_j$  = current value of all cash and securities borrowed, purchased with an agreement to resell or otherwise held by the bank under the netting agreement
- $\text{net exposure} = |\sum_s E_s H_s|$
- $\text{gross exposure} = \sum_s E_s |H_s|$

<sup>77</sup> The holding period for the haircuts depends, as in other repo-style transactions, on the frequency of margining.

- $E_s$  = The net current value of each security issuance under the netting set (always a positive value)
- $H_s$  = haircut appropriate to  $E_s$  as described in tables of paragraphs [149] or [150], as applicable,
  - $H_s$  has a positive sign if the security is lent, sold with an agreement to repurchased, or transacted in manner similar to either securities lending or a repurchase agreement
  - $H_s$  has a negative sign if the security is borrowed, purchased with an agreement to resell, or transacted in a manner similar to either a securities borrowing or reverse repurchase agreement
- $N$  is the number of security issues contained in the netting set (except that issuances where the value  $E_s$  is less than one tenth of the value of the largest  $E_s$  in the netting set are not included the count)
- $E_{fx}$  = absolute value of the net position in each currency  $fx$  different from the settlement currency
- $H_{fx}$  = haircut appropriate for currency mismatch of currency  $fx$ .

(g) *Minimum haircut floors for SFTs*

[Note: Placeholder for final standards text following the consultation on "*Haircut floors for non-centrally cleared securities financing transactions*", published in November 2015 and available at [www.bis.org/bcbs/publ/d340.pdf](http://www.bis.org/bcbs/publ/d340.pdf)].

(h) *Collateralised OTC derivatives transactions*

165. For collateralised OTC derivatives transactions, the standardised approach for counterparty credit risk (SA-CCR) must be used to calculate the exposure amount, which will be calculated as follows:

$$\text{Exposure amount} = \alpha \cdot (RC + PFE)$$

where:

- $\alpha$  = 1.4,
- $RC$  = the replacement cost calculated according to paragraphs 130 to 145 of Annex 4, and
- $PFE$  = the amount for potential future exposure calculated according to paragraphs 146 to 187 of Annex 4.

## 4. On-balance sheet netting

166. Where a bank:

- has a well founded legal basis for concluding that the netting or offsetting agreement is enforceable in each relevant jurisdiction regardless of whether the counterparty is insolvent or bankrupt;
- is able at any time to determine those assets and liabilities with the same counterparty that are subject to the netting agreement;
- monitors and controls its roll-off risks; and
- monitors and controls the relevant exposures on a net basis,

it may use the net exposure of loans and deposits as the basis for its capital adequacy calculation in accordance with the formula in paragraph [146]. Assets (loans) are treated as exposure and liabilities (deposits) as collateral. The haircuts are zero except when a currency mismatch exists. A 10-business day

holding period applies when daily mark-to-market is conducted. For on-balance sheet netting, the requirements in paragraphs [149 and 158] and [111 to 115] must be applied.

## 5. Guarantees and credit derivatives

### (i) Operational requirements for guarantees and credit derivatives

167. If conditions set below are met, banks can substitute the risk weight of the counterparty with the risk weight of the guarantor.

168. A guarantee (counter-guarantee) or credit derivative must satisfy the following requirements:

- (a) it represents a direct claim on the protection provider;
- (b) it is explicitly referenced to specific exposures or a pool of exposures, so that the extent of the cover is clearly defined and incontrovertible;
- (c) other than non-payment by a protection purchaser of money due in respect of the credit protection contract it is irrevocable;
- (d) there is no clause in the contract that would allow the protection provider unilaterally to cancel the credit cover or that would increase the effective cost of cover as a result of deteriorating credit quality in the hedged exposure;<sup>78</sup>
- (e) it is unconditional;
- (f) there is no clause in the protection contract outside the direct control of the bank that could prevent the protection provider from being obliged to pay out in a timely manner in the event that the underlying counterparty fails to make the payment(s) due.

169. In the case of maturity mismatches, the amount of credit protection that is provided must be adjusted in accordance with paragraphs [111 to 115].

### (ii) Specific operational requirements for guarantees

170. In addition to the legal certainty requirements in paragraph [110], in order for a guarantee to be recognised, the following requirements must be satisfied:

- (a) On the qualifying default/non-payment of the counterparty, the bank may in a timely manner pursue the guarantor for any monies outstanding under the documentation governing the transaction. The guarantor may make one lump sum payment of all monies under such documentation to the bank, or the guarantor may assume the future payment obligations of the counterparty covered by the guarantee. The bank must have the right to receive any such payments from the guarantor without first having to take legal action in order to pursue the counterparty for payment.
- (b) The guarantee is an explicitly documented obligation assumed by the guarantor.
- (c) Except as noted in the following sentence, the guarantee covers all types of payments the underlying counterparty is expected to make under the documentation governing the transaction, for example notional amount, margin payments, etc. Where a guarantee covers payment of principal only, interests and other uncovered payments must be treated as an unsecured amount in accordance with the rules for proportional cover described in paragraph [135].

<sup>78</sup> There must be no possibility for the protection to change the maturity agreed *ex post*.

(iii) Specific operational requirements for credit derivatives

171. In addition to the legal certainty requirements in paragraph [110], in order for a credit derivative contract to be recognised, the following requirements must be satisfied:

- (a) The credit events specified by the contracting parties must at a minimum cover:
- failure to pay the amounts due under terms of the underlying obligation that are in effect at the time of such failure (with a grace period that is closely in line with the grace period in the underlying obligation);
  - bankruptcy, insolvency or inability of the obligor to pay its debts, or its failure or admission in writing of its inability generally to pay its debts as they become due, and analogous events; and
  - restructuring of the underlying obligation involving forgiveness or postponement of principal, interest or fees that results in a credit loss event (ie write-off, specific provision or other similar debit to the profit and loss account).
- (b) If the credit derivative covers obligations that do not include the underlying obligation, section (g) below governs whether the asset mismatch is permissible.
- (c) The credit derivative shall not terminate prior to expiration of any grace period required for a default on the underlying obligation to occur as a result of a failure to pay. In the case of a maturity mismatch, the provisions of paragraphs [111 to 115] must be applied.
- (d) Credit derivatives allowing for cash settlement are recognised for capital purposes insofar as a robust valuation process is in place in order to estimate loss reliably. There must be a clearly specified period for obtaining post-credit-event valuations of the underlying obligation. If the reference obligation specified in the credit derivative for purposes of cash settlement is different from the underlying obligation, section (g) below governs whether the asset mismatch is permissible.
- (e) If the protection purchaser's right/ability to transfer the underlying obligation to the protection provider is required for settlement, the terms of the underlying obligation must provide that any required consent to such transfer may not be unreasonably withheld.
- (f) The identity of the parties responsible for determining whether a credit event has occurred must be clearly defined. This determination must not be the sole responsibility of the protection seller. The protection buyer must have the right/ability to inform the protection provider of the occurrence of a credit event.
- (g) A mismatch between the underlying obligation and the reference obligation under the credit derivative (ie the obligation used for purposes of determining cash settlement value or the deliverable obligation) is permissible if (1) the reference obligation ranks *pari passu* with or is junior to the underlying obligation, and (2) the underlying obligation and reference obligation share the same obligor (ie the same legal entity) and legally enforceable cross-default or cross-acceleration clauses are in place.
- (h) A mismatch between the underlying obligation and the obligation used for purposes of determining whether a credit event has occurred is permissible if (1) the latter obligation ranks *pari passu* with or is junior to the underlying obligation, and (2) the underlying obligation and reference obligation share the same obligor (ie the same legal entity) and legally enforceable cross-default or cross-acceleration clauses are in place.

172. When the restructuring of the underlying obligation is not covered by the credit derivative, but the other requirements in paragraph [171] are met, partial recognition of the credit derivative will be allowed. If the amount of the credit derivative is less than or equal to the amount of the underlying obligation, 60% of the amount of the hedge can be recognised as covered. If the amount of the credit

derivative is larger than that of the underlying obligation, then the amount of eligible hedge is capped at 60% of the amount of the underlying obligation.<sup>79</sup>

(iv) Range of eligible guarantors (counter-guarantors)/protection providers and credit derivatives

173. Credit protection given by the following entities can be recognised when they have a lower risk weight than the counterparty:

- Sovereign entities,<sup>80</sup> PSEs, MDBs, banks, securities firms and other prudentially regulated financial institutions with a lower risk weight than the counterparty;<sup>81</sup>
- In jurisdictions that allow the use of external ratings for regulatory purposes:
  - other entities that are externally rated except when credit protection is provided to a securitisation exposure. This would include credit protection provided by a parent, subsidiary and affiliate companies when they have a lower risk weight than the obligor;
  - when credit protection is provided to a securitisation exposure, other entities that currently are externally rated BBB– or better and that were externally rated A– or better at the time the credit protection was provided. This would include credit protection provided by parent, subsidiary and affiliate companies when they have a lower risk weight than the obligor.
- In jurisdictions that do not allow the use of external ratings for regulatory purposes:
  - Other entities, defined as “investment grade” meaning they have adequate capacity to meet their financial commitments (including repayments of principal and interest) in a timely manner, irrespective of the economic cycle and business conditions.

When making this determination, the bank should assess the entity against the investment grade definition taking into account the complexity of its business model, performance against industry and peers, and risks posed by the entity’s operating environment.

Moreover, the following conditions will have to be met:

- For corporate entities (or the entity’s parent company), they must have securities outstanding on a recognised securities exchange;
- The creditworthiness of these “investment grade entities” is not positively correlated with the credit risk of the exposures for which they provided guarantees.
- Parent, subsidiary and affiliate companies of the obligor where their creditworthiness is not positively correlated with the credit risk of the exposures for which they provided

<sup>79</sup> The 60% recognition factor is provided as an interim treatment, which the Committee intends to refine prior to implementation after considering additional data.

<sup>80</sup> This includes the Bank for International Settlements, the International Monetary Fund, the European Central Bank, the European Union, the European Stability Mechanism (ESM) and the European Financial Stability Facility (EFSF), as well as MDBs eligible for a 0% risk weight as defined in paragraph [11] and referred to in footnote [32].

<sup>81</sup> A prudentially regulated financial institution is defined as: a legal entity supervised by a regulator that imposes prudential requirements consistent with international norms or a legal entity (parent company or subsidiary) included in a consolidated group where any substantial legal entity in the consolidated group is supervised by a regulator that imposes prudential requirements consistent with international norms. These include, but are not limited to, prudentially regulated insurance companies, broker/dealers, thrifts and futures commission merchants, and qualifying central counterparties as defined in Basel Committee, *Regulatory capital requirements framework for bank exposures to central counterparties*, [www.bis.org/publ/bcbs227.pdf](http://www.bis.org/publ/bcbs227.pdf).

guarantees. For an intra-group company to be recognised as eligible guarantor, the credit risk of the whole group should be taken into account.

174. Only credit default swaps and total return swaps that provide credit protection equivalent to guarantees are eligible for recognition.<sup>82</sup> The following exception applies: where a bank buys credit protection through a total return swap and records the net payments received on the swap as net income, but does not record offsetting deterioration in the value of the asset that is protected (either through reductions in fair value or by an addition to reserves), the credit protection will not be recognised.

175. First-to-default and all other nth-to-default credit derivatives (ie by which a bank obtains credit protection for a basket of reference names and where the first- or nth-to-default among the reference names triggers the credit protection and terminates the contract) are not eligible as a credit risk mitigation technique and therefore cannot provide any regulatory capital relief. In transactions in which a bank provided credit protection through such instruments, it shall apply the treatment described in paragraph [60]].

(v) Risk-weight treatment of transactions in which eligible credit protection is provided

*General risk-weight treatment*

176. The protected portion is assigned the risk weight of the protection provider. The uncovered portion of the exposure is assigned the risk weight of the underlying counterparty.

177. Materiality thresholds on payments below which the protection provider is exempt from payment in the event of loss are equivalent to retained first-loss positions. The portion of the exposure that is below a materiality threshold must be assigned a risk weight of 1,250% by the bank purchasing the credit protection.

*Proportional cover*

178. Where losses are shared *pari passu* on a pro rata basis between the bank and the guarantor, capital relief is afforded on a proportional basis, ie the protected portion of the exposure receives the treatment applicable to eligible guarantees/credit derivatives, with the remainder treated as unsecured.

*Tranched cover*

179. Where the bank transfers a portion of the risk of an exposure in one or more tranches to a protection seller or sellers and retains some level of the risk of the loan, and the risk transferred and the risk retained are of different seniority, banks may obtain credit protection for either the senior tranches (eg the second-loss portion) or the junior tranche (eg the first-loss portion). In this case the rules as set out in Section IV (Credit risk – securitisation framework) apply.

(vi) Currency mismatches

180. Where the credit protection is denominated in a currency different from that in which the exposure is denominated — ie there is a currency mismatch — the amount of the exposure deemed to be protected must be reduced by the application of a haircut  $H_{FX}$ , ie

$$G_A = G \cdot (1 - H_{FX})$$

where:

<sup>82</sup> Cash-funded credit-linked notes issued by the bank against exposures in the banking book that fulfil the criteria for credit derivatives are treated as cash-collateralised transactions.

- $G$  = nominal amount of the credit protection
- $H_{FX}$  = haircut appropriate for currency mismatch between the credit protection and underlying obligation.

The currency mismatch haircut for a 10-business day holding period (assuming daily marking to market) is 8%. This haircut must be scaled up using the square root of time formula, depending on the frequency of revaluation of the credit protection as described in paragraph [158].

(vii) Sovereign guarantees and counter-guarantees

181. As specified in paragraph [5], a lower risk weight may be applied at national discretion to a bank's exposures to the sovereign (or central bank) where the bank is incorporated and where the exposure is denominated in domestic currency and funded in that currency. National authorities may extend this treatment to portions of exposures guaranteed by the sovereign (or central bank), where the guarantee is denominated in the domestic currency and the exposure is funded in that currency. An exposure may be covered by a guarantee that is indirectly counter-guaranteed by a sovereign. Such an exposure may be treated as covered by a sovereign guarantee provided that:

- (a) the sovereign counter-guarantee covers all credit risk elements of the exposure;
- (b) both the original guarantee and the counter-guarantee meet all operational requirements for guarantees, except that the counter-guarantee need not be direct and explicit to the original exposure; and
- (c) the supervisor is satisfied that the cover is robust and that no historical evidence suggests that the coverage of the counter-guarantee is less than effectively equivalent to that of a direct sovereign guarantee.

## Annex 2

### Summary of results from first QIS on 2014 consultative document

The Basel Committee undertook a QIS on the 2014 consultative proposals to revise the SA ("SA QIS") as part of its Basel III Monitoring QIS. Some 241 banks from 27 countries participated in the SA QIS, of which 92 were Group 1 banks (including 30 global systemically important banks) and 119 were Group 2 banks. Of the 300 QIS templates that were submitted for the 2015 Basel data collection exercise, 242 provided at least some data for the analysis and 153 were from Europe. This suggests that the data collected might be weighted towards European jurisdictions. Most reporting banks also reported data as of the reporting date of 31 December 2014.

According to the 2014 QIS results, capital requirements under the *indicative* risk weights presented in the consultation paper would increase substantially relative to the current SA and IRB. Although the proposed revisions were directionally consistent with today's capital frameworks (ie applying higher risk weights to the same exposures), average risk weights increased for many exposure classes. Increases in average risk weights were mostly concentrated in certain exposure classes. The classes that showed the highest increases in terms of average risk weights were "specialised lending", "sub-debt, equity and other capital instruments", "banks" and "corporate"; while "commercial real estate" and "residential real estate" showed modest increases. Average risk weights for "retail", "sovereigns" and "MDBs" were largely unchanged, as the Basel II SA treatment for these exposure classes was largely maintained.

One of the key objectives of this first QIS was to assess the appropriateness of the proposed risk drivers in the 2014 consultative document. The main observations included:

- For bank exposures, CET1 as a risk driver behaved consistently with external ratings and PDs. However, the NPA ratio produced mixed results. This can be explained mainly due to the different accounting framework applied by banks throughout jurisdictions.
- Corporate exposures data showed that unrated corporate exposures are prevalent, both for SMEs and non-SMEs. The QIS evaluated both leverage and revenues as potential risk drivers. The QIS results indicated that, in general, leverage behaved reasonably well compared to PDs for most revenue bands, but is not consistently monotonic across the spectrum. On the other hand, revenue is less closely related to PDs than leverage is.
- The QIS tested four potential risk drivers to increase the granularity of the regulatory retail class: (a) debt-service coverage ratio; (b) split between secured vs unsecured exposures; (c) maturity of the exposure; and (d) length of the relationship with the customer. The analysis revealed that options (b) and (d) were clearly superior to options (a) and (c). Overall, option (b) (secured vs unsecured) was the best performing driver on the basis of the evidence observed. However, as the definition of "secured" vs "unsecured" was not specifically defined for QIS purposes, the submissions might not be entirely comparable.
- For the residential real estate category, the QIS evaluated the performance of LTV and debt-service coverage (DSC) ratios as risk drivers. Except for the lowest and highest LTV bands, the PD and LGD tended to correlate closely to the LTV ratio. The DSC ratio was found to be a relatively good discriminator of risk for the exposures, but there were concerns about the consistency of its definition and the appropriateness of the proposed threshold across jurisdictions. Overall, the results demonstrated that, on average, residential real estate received a higher average risk weight, driven by large concentrations of mortgages recorded in the 60–80% LTV bucket.

- Commercial real estate IRB parameters collected in the QIS differed significantly across countries. These disparities may reflect jurisdiction-specific differences in real estate market experiences or it may be that some countries have had different “downturn” experiences in their real estate markets. The QIS evaluated the usage of loan-to-value (LTV) as a supportable risk driver. Although the empirical evidence from the QIS is not conclusive as to the credit risk mitigation benefits of commercial real estate as collateral, results suggested that LTV ratios – within a conservative range – may be appropriate for risk weighting methodology for commercial real estate.
- Finally, the data collected showed that the average CCF estimated under Advanced IRB for unconditionally cancellable commitments is higher than the proposed (10%) CCF, although there were large variations between countries. For all other types of facilities (except trade finance exposures and other similar transactions) the proposed CCFs were significantly higher than the CCFs quantified by IRB banks.