

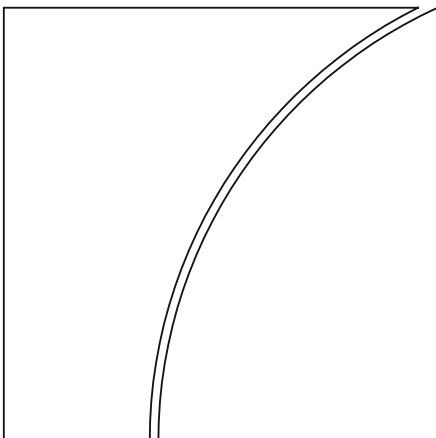
Basel Committee on Banking Supervision

Consultative Document

Standards

Revisions to the Standardised Approach for credit risk

Issued for comment by 27 March 2015



BANK FOR INTERNATIONAL SETTLEMENTS

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Revisions to the standardised approach for credit risk

Executive summary

The Basel framework sets out a range of methods banks use to calculate regulatory capital. One alternative is to measure risk in a standardised manner and the other alternative is based on a bank's use of its internal model and is subject to the explicit approval of the bank's supervisor. This consultative document presents the Committee's proposals for revising the standardised approach for credit risk.¹ It forms part of the Committee's broader work on reducing variability in risk-weighted assets (RWAs).² The Committee is also revising the standardised approaches for operational risk and market risk, and has revised the standardised approach for counterparty credit risk.³ The Committee intends to review and consider the overall calibration resulting from the combined revisions to the standardised approaches prior to finalising these proposals in order to ensure that capital requirements reflect the inherent riskiness of exposures and that the standardised approaches constitute a suitable alternative and complement to internal models.

The Committee seeks to substantially improve the standardised approach for credit risk in a number of ways. These include reducing reliance on external credit ratings; increasing risk sensitivity; reducing national discretions; strengthening the link between the standardised approach and the internal ratings-based (IRB) approach; and enhancing comparability of capital requirements across banks.

The Basel framework's current standardised approach prescribes the use of external credit ratings to determine certain exposures' risk weights. The Committee is investigating the suitability of substituting references to ratings with a limited number of risk drivers that provides a meaningful risk differentiation. These alternative risk drivers have been selected on the basis that they should be simple, intuitive, readily available and capable of explaining risk consistently across jurisdictions. Given the challenges associated with identifying risk drivers that can be applied globally, but that also reflect the local nature of some exposures – such as retail credit and mortgages, the Committee recognises that the proposals are still at an early stage of development. It therefore seeks respondents' views and data to enhance the proposals in this consultative document.

The credit risk standardised approach treatment for sovereigns, central banks and public sector entities are not within the scope of these proposals. The Committee will consider these exposures as part of a broader and holistic review of sovereign-related risks.

For the main exposure classes under consideration, the key aspects of the proposals are:

¹ The current standardised approach for credit risk is set out in *Basel II: International Convergence of Capital Measurement and Capital Standards: A Revised Framework - Comprehensive Version*, June 2006, www.bis.org/publ/bcbs128.htm.

² The Basel Committee's report to G20 Leaders, *Reducing excessive variability in banks' regulatory capital ratios*, is available at www.bis.org/bcbs/publ/d298.pdf.

³ See Basel Committee on Banking Supervision:

- *Operational risk - Revisions to the simpler approaches – consultative document*, October 2014, www.bis.org/publ/bcbs291.htm;
- *Fundamental review of the trading book – second consultative document*, October 2013, www.bis.org/publ/bcbs265.htm. An additional consultative document on the standardised approach for market risk will soon be published; and
- *The standardised approach for measuring counterparty credit risk exposures*, March 2014, www.bis.org/publ/bcbs279.pdf.

- Bank exposures would no longer be risk-weighted by reference to the external credit rating of the bank or of its sovereign of incorporation, but they would instead be based on a look-up table where risk weights range from 30% to 300% on the basis of two risk drivers: a capital adequacy ratio and an asset quality ratio.
- Corporate exposures would no longer be risk-weighted by reference to the external credit rating of the corporate, but they would instead be based on a look-up table where risk weights range from 60% to 300% on the basis of two risk drivers: revenue and leverage. Further, risk sensitivity would be increased by introducing a specific treatment for specialised lending.
- The retail category would be enhanced by tightening the criteria to qualify for the 75% preferential risk weight, and by introducing a fallback subcategory for exposures that do not meet the criteria.
- Exposures secured by residential real estate would no longer receive a 35% risk weight. Instead, risk weights would be determined according to a look-up table where risk weights range from 25% to 100% on the basis of two risk drivers: loan-to-value and debt-service coverage ratios.
- Exposures secured by commercial real estate are subject to further consideration where two options currently envisaged are: (a) treating them as unsecured exposures to the counterparty, with a national discretion for a preferential risk weight under certain conditions; or (b) determining the risk weight according to a look-up table where risk weights range from 75% to 120% on the basis of the loan-to-value ratio.
- The credit risk mitigation framework would be amended by reducing the number of approaches, recalibrating supervisory haircuts, and updating corporate guarantor eligibility criteria.

This consultative paper is structured as follows. Section 1 provides background on objectives, principles and scope of the revisions. Sections 2 and 3 introduce the proposals as developed to date, and draw attention to issues where respondents' views and supporting data are sought. The proposals described in Sections 2 and 3 are set out in detail in Annex 1. Section 4 includes a brief description of the forthcoming Quantitative Impact Study (QIS).

The Committee encourages market participants to engage in a constructive dialogue during the consultation period, and to participate in the QIS on a best-efforts basis. Good data will be crucial to determine final proposals and support an appropriate calibration of the revised standardised approach.

The Committee welcomes comments on all aspects of this consultative document and the proposed standards text, particularly in relation to the design of the framework. All calibrations in this consultative document are preliminary; risk weights included in this document are indicative only and will help to assess the impact of the proposals. Increasing overall capital requirements under the standardised approach for credit risk is not an objective of the Committee; rather, capital requirements should be commensurate with underlying risk. Following the comment period and QIS the Committee intends to review the calibrations of these proposals and consider their implications for the proposed capital floors for banks using internal models to calculate regulatory capital requirements.⁴

Comments on the proposals should be uploaded by Friday 27 March 2015 using the following link: www.bis.org/bcbs/commentupload.htm. All comments will be published on the website of the Bank for International Settlements unless a respondent specifically requests confidential treatment.

Before concluding any final standards, the Committee will evaluate the appropriate implementation arrangements (including the timetable) taking into account the range of other reforms

⁴ See Basel Committee on Banking Supervision, *Capital floors: the design of a framework based on standardised approaches – consultative document*, December 2014, www.bis.org/bcbs/publ/d307.pdf.

that have been, or are due to be, agreed by the Committee. The Committee will provide sufficient time for implementation, including appropriate grandfathering provisions where necessary.

Section 1: Background

(1.1) Objectives of the review

The proposals contained in this consultative document aim to:

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

Prior to finalising the revised standardised approach, the Committee will consider the need to review and update the current simplified standardised approach for credit risk,⁵ which consists of the simplest options for calculating risk-weighted assets. The Committee wants to ensure that a simple methodology remains available for a wide range of jurisdictions and non-internationally active banks where the cost of compliance with more complex standards may not be warranted.

(1.2) Weaknesses of the current standardised approach for credit risk

In seeking to enhance the current standardised approach for credit risk, the Committee has identified a number of weaknesses that the proposals set out in this consultative document aim to address.

Over-reliance on external credit ratings

In October 2010, the Financial Stability Board (FSB) issued a set of principles for reducing reliance on external credit assessments in standards, laws and regulations.⁶ These principles set out broad objectives for standard setters and regulators with the aim of reducing cliff effects and herding behaviour that threaten financial stability and were seen to arise from external credit assessment thresholds being hard-wired into laws, regulations and market practices.

While acknowledging that credit rating agencies play an important role in financial markets and that external credit assessments provide valuable information that may assist in the analysis of credit risk exposures, the hard-wiring of external credit assessments into standards, laws and regulations may often lead to mechanistic reliance on ratings by market participants, resulting in insufficient due diligence and poor risk management on the part of lenders and investors. Moreover, it should also be recognised that

⁵ The current simplified standardised approach is in Annex 11 of the Basel II framework.

⁶ See Financial Stability Board, *Principles for Reducing Reliance on CRA Ratings*, October 2010, www.financialstabilityboard.org/publications/r_101027.pdf.

a large proportion of exposures to corporates are often unrated and therefore risk differentiation requires alternatives to external ratings.

Lack of granularity and risk sensitivity

Certain exposure categories under the standardised approach provide flat risk weights or an insufficient number of risk-weight buckets that fail to differentiate between different risk profiles. This can result from a failure to take into account some relevant risk factors or to clearly delineate exposure categories, or in some cases from an emphasis on simplicity at the expense of risk sensitivity.

Moreover, given the level of variability in risk-weighted assets across banks using the IRB approach (with respect to portfolios with similar risk profiles), the Committee is proposing to impose a standardised approach floor on modelled credit risk capital requirements with the aims of constraining variation in risk-weighted assets and protecting against the risk that modelled parameters result in capital requirements that are too low.⁷ There is some concern that the current standardised approach is not sufficiently risk-sensitive for this purpose.

Out-of-date calibrations

Financial markets have evolved since the current standardised approach was calibrated. The Committee is of the view that some risk weights no longer accurately reflect the risk of certain claims. Likewise, supervisory haircuts for collateral are no longer appropriate to account for the volatility of certain instruments.

Lack of comparability and misalignment of treatment with exposures risk weighted under the IRB approach

In spite of structural differences between the current standardised and IRB approaches that prevent an accurate reconciliation of exposures across the two approaches, the Committee believes that some differences in definitions and scope of exposure classes could be reduced.

Other exposures, such as off-balance sheet items and equity holdings, are clearly identified under both approaches but receive a different flat risk weight.

Excessive complexity and lack of clarity within the standards

Some exposure categories under the current standardised approach are subject to national discretions, or incompletely defined or not defined at all, resulting in a lack of clarity as to the appropriate risk-weight treatment for a given exposure. This may lead to variations in treatment across jurisdictions and pose a particular challenge for banks with cross-border operations. Additionally, certain parts of the current standardised approach are overly complex for banks applying the standardised approach for calculating credit risk capital requirements such as the inclusion of internal estimates and modelled approaches in the credit risk mitigation framework. The Committee recognises that, in order to allay level-playing-field concerns, equal risks should attract the same amount of capital requirements and national discretions, where not necessary, should be removed.

(1.3) Principles and rationale for the review

The review of the standardised approach faces a trade-off between addressing all weaknesses of the current framework and ensuring that the standardised approach remains both simple and practicable. In

⁷ See footnote 4.

reviewing the current standardised approach, a set of high-level principles guided the Committee's development and evaluation of the policy proposals.

- Principle 1: The review should keep the fundamental concept of the current framework, and focus on improving the approach and correcting the identified weaknesses.
- Principle 2: Capital charges from the standardised approach should reflect to a reasonable extent the risk of the exposures and provide the correct incentives for banks considering the overall policy objectives. The standardised approach should provide a meaningful differentiation of risk with the ultimate goal of improving ex post risk sensitivity. Riskier exposures should generally receive capital charges higher than less risky exposures.
- Principle 3: The standardised approach should be simple and suitable for a wider range of jurisdictions and banks, not just the main financial centres and internationally active banks. Banks should be able to implement the standardised approach without undue burden.
- Principle 4: The standardised approach should not rely on internal modelled approaches to set capital charges. The capital charge should be based on easily verifiable and objective variables set by regulators. The process should not require supervisory approval.
- Principle 5: The standardised approach should reduce or remove, where possible, the reliance on external ratings when setting capital charges.
- Principle 6: Definitions used in the standardised approach should, to the extent possible, be harmonised with those used in the IRB framework.
- Principle 7: The policy recommendation should be justified by illustrating either the weaknesses or the potential correction of a misalignment.

It is important to highlight that the Committee has focused on striking a balance between risk sensitivity and simplicity, building a simple framework that, while using a limited number of risk drivers, still provides meaningful risk differentiation. The risk drivers being proposed have been selected on the basis that they should be simple, intuitive, readily available and capable of explaining risk across jurisdictions. For the moment, the Committee has chosen not to rely on ratings as a risk driver and has opted instead to use simple financial ratios. The Committee will further explore whether it is possible to increase the risk sensitivity of some of the proposed approaches without introducing undue complexity. In doing so, the Committee does not preclude introducing a limited role for external credit ratings (eg distinguishing between investment and non-investment grade) in a way that does not lead to mechanistic reliance on ratings. References to ratings in the Basel framework should never be seen as a signal that ratings can serve as a substitute for credit analysis.

Similarly, the proposed approaches in this consultative document are not risk models and must not be seen as substitutes for due diligence and prudent risk management processes that banks should use to assess the risk of their exposures.

Section 2: Proposed revisions to the standardised approach for credit risk

(2.1) Exposures to banks

The current standardised approach includes two options for applying risk weights to banks. Option 1 links a bank's risk weight to the sovereign rating of the country in which the bank is incorporated, while Option 2 applies the risk weight that corresponds to a bank's credit rating. In revising the treatment of bank exposures, the Committee aims to remove both references to external credit ratings and the link to a sovereign's credit risk. The Committee seeks to develop a single approach based on two risk drivers that are relevant to banks.

(i) Definition

The current standardised approach does not define “bank” or “securities firm”. It states, however, that exposures to securities firms can be classified as banks provided that the securities firms are subject to consolidated regulation and supervision with respect to any downstream affiliates. The Committee proposes to clarify the rules by providing a definition of bank exposure for regulatory capital purposes and introducing a new risk-weight treatment for exposures meeting this definition. (See definition in Annex 1, paragraph 12).

The proposed approach treats exposures to securities firms and other financial institutions as exposures to banks as long as these firms are subject to prudential standards and the level of supervision equivalent to those applied to banks, and the risk drivers described below (or the information to calculate them) are publicly disclosed. Claims on all other securities firms and financial institutions are to be treated as corporate exposures.

(ii) Risk drivers

One possible approach to assign risk weights to bank exposures would be based on measures of a bank’s capital adequacy and asset quality. The Committee is considering instituting such measures because, based on regression analysis of bank failure across various jurisdictions, capital adequacy and asset quality generally prove to be two good predictive risk drivers of bank insolvency. In addition to their increased predictive power, the Committee believes these risk drivers are already generally well understood across banks and jurisdictions.

After examining various measures of a bank’s capital adequacy and asset quality, the Committee is considering assigning risk weights to bank exposures by using the bank’s Common Equity Tier 1 (CET1) risk-based capital ratio as a measure of capital adequacy; and a net non-performing assets (NPA) ratio as a measure of asset quality. Analysis based on a significant bank sample, including rated and unrated banks, suggests that these proposed risk drivers outperform the current credit ratings-based approach for predicting bank failure. These risk drivers are defined as follows:

$$\text{CET1 ratio: } \frac{\text{Common Equity Tier 1 Capital}}{\text{Risk-weighted assets}}$$

$$\text{Net NPA ratio: } \frac{\text{(Non-performing debt securities and other interest-bearing balances – Provisions)} + \text{(Non-performing loans and leases – Provisions)}}{\text{(Total loans and leases + Total debt securities + Interest-bearing balances)}}$$

(1) *Capital adequacy*

The Committee’s analysis indicates that a risk-based regulatory capital ratio is a significant predictor of bank failure. Moreover, regulatory capital measures based on the Basel framework are broadly applied and generally consistently defined across banks and jurisdictions. As such, the Committee believes that a risk-based capital ratio is an appropriate capital adequacy metric for assessing the credit risk of an exposure to a bank.

The Committee proposes to use CET1 as defined in Basel III,⁸ because it is calculated using the most robust and loss-absorbing form of capital, suggesting that greater levels of CET1 tend to decrease the credit risk for bank exposures. For consistency, risk-weighted assets would also be measured according to Basel III.

The Committee will nevertheless continue exploring what is the most suitable measure of capital adequacy. It could be argued that a risk-based capital requirement should not contain a risk driver that is, itself, predicated on a risk-based measure. In addition, while the Committee's analysis confirms that, on an aggregate basis, a risk-based regulatory capital ratio is a meaningful risk driver, the Committee recognises that, on an individual basis, the use of a risk-based capital adequacy measure might lead to some counterintuitive results. For example, exposures to banks subject to higher capital requirements, either because they are global or domestic systemically important banks (G-SIBs and D-SIBs respectively), or because they are required to meet additional Pillar 2 requirements and/or buffers, would receive a lower risk weight.

During the QIS, the Committee intends to further assess the merits of the CET1 ratio against other potential capital adequacy measures such as a bank's leverage ratio, or the Tier-1 risk-based capital ratio.

Q1. What are respondents' views on the selection of the capital adequacy ratio? In particular, is the CET1 ratio superior to the Tier 1 ratio or the Leverage ratio? Do respondents agree that it is necessary to require calculations in accordance with Basel III in order to ensure a consistent implementation?

(2) *Asset quality*

Analysis suggests that the proposed definition of a bank's net NPA is an effective predictor of bank failure. Aiming at a measure that would be neutral vis-à-vis a bank's business model, the Committee has defined the net NPA ratio as a metric of the asset quality of certain banking book exposures, including loans and leases, investment debt securities and other interest-bearing balances.⁹ It is not expected to be unduly burdensome for banks to calculate and provide their net NPA ratio. A brief explanation of some aspects of the proposed net NPA ratio definition is provided below¹⁰ (see Annex 1 paragraph 15 for a detailed description of the components of the net NPA ratio):

- Non-performing loans and leases are defined to capture any loan or lease that is more than 90 days past-due, as well as any loan or lease which, prior to 90 days, suffers from increased credit risk such that the bank has decided not to accrue interest on these loans or has modified the loan to accrue a lower amount of interest.¹¹

⁸ Since Basel III has not yet been fully implemented, the Committee's analysis has been based on a number of assumptions with regard to the implementation of CET1. For the definition of CET1, see paragraphs 52 and 53 of Basel Committee on Banking Supervision, *Basel III: A global regulatory framework for more resilient banks and banking systems*, www.bis.org/publ/bcbs189.pdf.

⁹ The asset quality of trading book exposures is not considered in this ratio but it nevertheless impacts the level of the CET1 ratio. This is because all assets in the trading book are booked at fair value, and therefore impairments in those assets automatically have an impact on the bank's CET1 ratio.

¹⁰ The Committee acknowledges that the net NPA ratio builds on bank credit risk management policies and practices that vary across countries and institutions. Terms such as "non-performing loan", "loss", "write-off" and "forbearance" may be defined or used differently across jurisdictions. Therefore, the Committee intends to reconcile with and/or benefit from the work undertaken by the recently established Task Force on Prudential Treatment of Assets, which is mandated to study the use by banks and supervisors of such terms and practices.

¹¹ In certain jurisdictions, such loans are referred to as being placed onto non-accrual status.

- As regards non-performing investment debt securities and other interest-bearing balances, the Committee proposes a more conservative measure of 30 days past-due (ie the issuer missed an interest payment) as a missed interest payment in the case of debt investment securities implies, in most cases, default.
- Finally, the ratio would be calculated after permitting the deduction of provisions, so long as such provisions are attributable to assets included in the ratio and have therefore reduced common equity.

The Committee acknowledges the difficulty in finding a simple definition of the NPA ratio that incorporates different banking book exposures. This difficulty is, in part, driven by differences in credit risk management techniques and accounting practices. The Committee also notes the lack of a simple metric to measure the asset quality of investment debt securities due to the broad range of securities types in banks' portfolios, the range of techniques for assessing the credit quality of each of them and the difference in accounting practices across jurisdictions. Thus, the Committee welcomes comments on ways to improve this risk driver and ensure a consistent implementation across jurisdictions.

Q2. Do respondents believe the net NPA ratio is an effective measure for distinguishing a bank exposure's credit risk? What alternative asset quality measure, if any, should be considered by the Committee?

(iii) Risk-weight methodology

The proposal for senior debt claims on banks assigns risk weights from a table ranging from 30% to 300%, based upon the obligor bank's CET1 and net NPA ratios (see Annex 1 paragraph 13). The table is designed to reflect the expectation that a bank with a higher CET1 ratio and lower net NPA ratio will have a lower risk of default and should therefore receive a lower risk weight.

The risk weight table for bank exposures is based on statistical analysis as well as expert judgment and policy considerations. As regards the empirical work, the Committee started the calibration work using the IRB formula, assuming a 45% loss-given-default (consistent with foundation IRB) and maturity of 2.5 years. The probability of default (PD) for banks was calculated as the number of bank failures in the sample for a given level of CET1 and net NPA, divided by the total number of bank-year observations in that same category. The IRB formula was then used to translate these PDs into risk weights.¹²

According to the proposal, relevant information pertaining to an obligor bank's net NPA and CET1 ratios is required in order to be assigned any but the highest risk weight under the table. The Committee notes that these proposals would require additional information to be publicly disclosed by banks. The Committee will consider the incorporation of such information, as well as the frequency of such disclosures, in its Pillar 3 review.¹³

¹² The ranges and levels in the risk weight table for each column (CET1) and row (net NPA) were determined using several statistical methodologies, including Type I and Type II error tests. (Type I errors are the proportion of banks that fail in the following year that had a ratio above a given cut-off. Type II errors are "false positives" – ie the proportion of banks that did not fail in the following year that would nonetheless be classified as "risky".) The goodness of fit of the risk-driver thresholds was tested using logistic regression analysis.

¹³ The Committee is currently reviewing disclosure requirements. All necessary items for calculating the capital requirements for bank exposures will be incorporated in the revised Basel III disclosure requirements during the second phase of this project. For further details see the consultative document on the first phase of the project, issued in June 2014 and available at www.bis.org/publ/bcbs286.pdf.

When calculating capital requirements, banks would have to use data disclosed in their obligors' most recent Pillar 3 reports. A bank exposure would be assigned the highest risk weight of 300% if the relevant information is not published within the frequency required by the Pillar 3 disclosure requirements.

The obligor's CET1 and net NPA ratios used should be those of the legal entity against which the exposure is held. If the information is not available on a solo basis, ratios at the consolidated level of the entity against which the exposure is held could be used.

The highest risk weight (300%) would also apply in cases where a bank is aware that one of its obligor banks has breached any binding minimum prudential standard required by their national supervisor.

(iv) Treatment for short-term claims

The Committee proposes to apply a preferential risk weight to short-term interbank claims, so as not to negatively impact market liquidity in interbank markets.

Short-term interbank claims are defined as having an original maturity of three months or less. Claims with an original maturity of three months or less which are expected to be rolled over do not qualify for this preferential treatment. Interbank claims with an original maturity longer than three months would not qualify for the preferential treatment.

The Committee proposes that such short-term interbank claims may receive a risk weight 20 percentage points lower than the risk weight determined in accordance with the abovementioned look-up table for the general treatment, subject to a risk weight floor of 30%. Any bank exposure that receives a risk weight above 100% according to the look-up table would not, however, be eligible to receive this short-term preferential treatment (see Annex 1 paragraph 18).

Q3. Do respondents have views on the proposed treatment for short-term interbank claims?

(v) Further considerations

The Committee acknowledges a number of concerns related to the application of the proposed risk-weight treatment for cross-border bank exposures, and more specifically, exposures to banks that are not subject to the Basel III standards.

While Basel III is primarily designed for internationally active banks, the proposed approach would mean de facto that obligor banks would have to apply Basel III, both for the calculation of capital and the calculation of risk-weighted assets, even if they are not internationally active or the national supervisor has not adopted Basel III. Banks not subject to the Basel III standards would be requested by their creditor banks to calculate and disclose the CET1 and net NPA ratios in accordance with the Basel III requirements, so as not to be subject to the highest risk weight. This could potentially be burdensome for banks not subject to the Basel III standards, and would mean that the CET1 metric in such jurisdictions, even if externally audited, would not be supervised by the relevant authority.

Another concern is that, despite regulatory and institutional developments to address too-big-to-fail and prevent sovereign support to banks, country risk may still be a relevant source of risk for exposures to banks. This is why the current framework takes into account the country of incorporation. In that respect, the Committee is considering the appropriateness of incorporating country risk as an additional risk driver.

Q4. Do respondents have suggestions on how to address these concerns on the treatment of exposures to banks? In particular, do respondents have views on how to treat exposures to banks not subject to Basel III in a consistent and risk-sensitive manner?

(2.2) Exposures to corporates

The current approach risk-weights all corporate exposures by reference to their external credit ratings only. For unrated exposures, a flat risk weight is applied. The Committee notes that, while ratings may be good predictors of corporate defaults, only a small proportion of corporate exposures are rated.

To increase the granularity of the corporate treatment and to enhance consistency and comparability with the IRB approach, the Committee proposes to introduce a different treatment for specialised lending categories. The Committee also proposes to differentiate between senior and subordinated corporate debt exposures. (Equity and subordinated debt exposures are discussed in Section 2.3).

For the purposes of this proposal, “corporates” include incorporated entities, associations, partnerships, proprietorships, trusts, funds and other entities with similar characteristics that do not meet the requirements of any other exposure class. Exposures to individuals will not be classified as corporate but rather as retail exposures.

(2.2.1) Senior corporate debt exposures

To reduce mechanistic reliance on ratings and increase risk sensitivity vis-à-vis exposures to senior corporate debt (eg unsubordinated bonds, loans, receivables), the Committee has assessed possible measures and is currently focusing on two risk drivers, which seem to have a high level of explanatory power while preserving simplicity. These risk drivers are revenue and leverage.

(i) Risk drivers

In identifying these risk drivers, the Committee has observed that revenue is the most common measure of earnings strength used as a risk driver in credit risk models for corporate exposures applied by banks. Using corporate profitability could create misaligned incentives and introduce excessive procyclicality into capital requirements.

Additionally, the Committee has explored the use of several measures of balance sheet strength and identified “leverage” as being consistently among the best explanatory accounting metrics in credit risk models. The Committee is proposing to use leverage (measured as “Total Assets / Total Equity” according to accounting standards of the relevant jurisdiction). Quantitative analysis has indicated that leverage has the strongest explanatory power, particularly when combined with revenue.

(ii) Risk-weight treatment

The proposal assigns risk weights from a table ranging from 60% to 300%, based on a corporate’s revenue and leverage. The table is designed to reflect the expectation that (i) a corporate with higher revenues and lower leverage will have a lower risk of default and therefore should receive a lower risk weight, and (ii) a corporate with negative equity has a higher risk of default.

The risk-weight table for senior corporate debt exposures is based on statistical analysis as well as expert judgment and policy considerations. In calibrating the proposal, the Committee:

1. Collected data¹⁴ on risk weights applied by IRB banks to small and medium-sized entities (SMEs) and other corporates: this data indicated that risk weights on SMEs are, on average, higher than risk weights on other corporates. In particular, according to the data collected, the average IRB risk weight of large internationally active banks on SME corporates is more than double the average IRB risk weight on other corporates;
2. Collected data on risk weights applied by IRB banks on corporate exposures exhibiting specific leverage and revenue characteristics: the outcome of this exercise has been the starting point for the calibration;¹⁵ and
3. Adjusted the calibration to mitigate cliff effects resulting from SMEs migrating from the regulatory retail portfolio to the corporate portfolio. Specifically, given the evidence noted under step (1) above, the Committee has adjusted risk weights downwards for corporates with low revenues (ie revenue < EUR 5 million).

The table is based on probability-of-default estimates and an assumed flat loss-given-default of 45%, consistent with the loss-given-default applied under foundation IRB and observed in the Committee's study.

To calculate revenue and leverage, banks should use the obligor's year-end accounts for the most recent financial year available. Whenever available, the obligor's audited accounts should be used. If the obligor does not have audited accounts, then its stated accounts should be used, subject to appropriate verification and due diligence. A corporate exposure would be assigned a 300% risk weight if the data needed to calculate revenue and leverage are not made available when required.¹⁶ This rule would not apply to start-up companies established in the previous or running financial year that as yet have no year-end revenue data. To avoid unduly penalising such companies, the Committee proposes to apply a more lenient treatment of a 110% risk weight (rather than 300%).

(iii) Further considerations

The proposed simple methodology based on two risk drivers is not a model that estimates the precise risk of a specific exposure, as is the case for the IRB approach. However, based on the Committee's empirical analysis, the proposed approach appears to be more risk-sensitive than the current one, in part because only a small share of corporates are rated, and consequently most corporate exposures currently receive a flat risk weight.

The Committee acknowledges that the proposed risk drivers might raise a number of concerns. For example, normal levels of leverage can differ significantly across industrial sectors and jurisdictions. In addition, the Committee is considering the need to adjust the proposed leverage driver to take account of guarantees extended by corporates or other material off-balance sheet exposures.¹⁷ As regards revenue, the proposed thresholds might not be appropriate for all types of corporates (eg funds or smaller firms) or for all jurisdictions (eg emerging markets, where the economic scale of companies is

¹⁴ This included data on estimates of probabilities of default and loss-given-default. The collection of data was limited and undertaken by some jurisdictions on a best effort basis. The Committee will perform a more comprehensive data collection during the QIS in 2015.

¹⁵ In addition, for smaller obligors, data have been collected on (i) the number of firms in certain size categories, and (ii) the number of insolvencies within these categories over time. This has allowed the Committee to approximate the average default rate for businesses of that size and calculate capital requirements.

¹⁶ To illustrate, if a company has a financial year ending 31 December and publishes its accounts in March, the 2013 accounts would be used for the calculation of capital requirements under the standardised approach from March 2014 through March 2015. If the bank did not have access to the company's accounts during this period, a 300% weighting would apply.

¹⁷ For example, an adjustment could at least be made where an obligor's auditors consider its off-balance sheet commitments to be material. The leverage driver should be adjusted by adding to Total Assets the sum of off-balance sheet exposures.

smaller than in advanced economies). The Committee is very interested in the implications of the proposed risk drivers and the use of fixed bucketing thresholds for all jurisdictions and different types of corporates, including SMEs, and welcomes feedback on possible alternative risk drivers (eg profitability or normalised indicators) or specific ways to improve the proposals.¹⁸ In particular, the Committee is interested in respondents' views on how to address potential cliff effects for exposures to small entities that no longer qualify as regulatory retail exposures and therefore are treated as low-revenue corporate exposures.

The Committee recognises that additional risk drivers (eg industry sector and external credit ratings) could further improve the risk sensitivity of the methodology, although it may also increase its complexity. Based on comments received, the Committee will further consider how to improve the risk sensitivity of the corporates framework. In any case, no standardised approach for regulatory capital requirement calculation purposes should ever be taken as a model for assessing the risk of specific exposures, as this would result in unintended consequences such as inadequate due diligence or risk management.

- Q5. Do respondents have views on the selection of risk drivers and their definition, in particular as regards leverage and the incorporation of off-balance sheet exposures within the ratio? Would other risk drivers better reflect the credit risk of corporate exposures?
- Q6. Do respondents have views on the appropriateness of the proposed treatment, especially with regard to SMEs? And about the more lenient treatment for start-up companies?
- Q7. Do respondents think that the risk sensitivity of the proposal can be further increased without introducing excessive complexity?

(2.2.2) Specialised lending

Empirical evidence shows that specialised lending generally exhibits higher risk and losses than other types of corporate lending. Since the corporate category is extremely heterogeneous, the Committee considers that additional granularity is necessary to more accurately reflect risk. For this reason, the Committee proposes to introduce a specialised lending category in the corporate exposure class, similar to the one applied in IRB.¹⁹

The Committee believes that, for banks applying the standardised approach for the calculation of their credit risk capital requirements, specialised lending constitutes only a small part of their business activity. For simplicity, the Committee therefore proposes to apply the higher of (a) the counterparty risk weight (determined on the basis of the counterparty's revenue and leverage); and (b) 120% to exposures against project finance, object finance, commodities finance and income-producing real estate finance, or 150% against exposures to land acquisition, development and construction finance, as the case may be.

¹⁸ For example, to address concerns on the impact on emerging economies from using revenue, a possible adjustment might be to normalise 'revenue' by purchasing power parity or other measures.

¹⁹ More specifically, it is proposed that this category will, with one minor modification, include the following IRB subcategories: project finance, object finance, commodities finance, income-producing real estate and land acquisition, development and construction. Only the latter subcategory differs from the IRB high volatility *commercial* real estate subcategory, as the proposed land acquisition, development and construction subcategory includes also exposures collateralised by *residential* real estate.

Further considerations

While the proposal improves the risk sensitivity of the standardised approach, the Committee recognises that introducing these categories might result in a significant increase in the capital charge for certain exposures that may currently receive a low risk weight under the corporate treatment or be risk-weighted as exposures secured by residential real estate. The Committee welcomes comments about particular types of specialised lending exposures that should have a distinct treatment.

Q8. Do respondents agree that introducing the specialised lending category enhances the risk sensitivity of the standardised approach and its alignment with IRB?

(2.3) Subordinated debt, equity and other capital instruments

The current approach establishes that investments in equity or regulatory capital instruments issued by banks or securities firms are risk-weighted at either 100% or 250%, unless deduction applies. In contrast, it does not apply a distinct treatment in the case of equity or subordinated debt issued by corporates.

To enhance the risk sensitivity of the framework, the Committee proposes to introduce a specific category for all capital and equity instruments whether issued by banks or corporates. To align the treatment of these exposures with those under IRB, the Committee proposes to apply a 250% risk weight for subordinated debt and capital instruments other than equities; and to use the IRB simple risk-weight method for equity exposures (ie 300% for publicly traded equity holdings, and 400% otherwise), unless these exposures are deducted or risk-weighted at 250% according to paragraphs 87 to 89 of the Basel III capital framework.

(2.4) Retail portfolio

The current standardised approach applies a 75% risk weight to retail exposures that meet the regulatory retail criteria. However, the criteria are in some cases vague and open to interpretation. The Committee proposes to enhance the criteria to qualify for the preferential treatment in the regulatory retail category. Where such criteria are not met, the exposure would not receive a preferential risk weight.

(2.4.1) Regulatory retail exposures

(i) Definition

Currently the regulatory retail portfolio is defined on the basis of the following four criteria, all of which must be met:

1. Orientation criterion;
2. Product criterion;
3. Low value of individual exposure criterion; and
4. Granularity criterion.

The Committee has considered whether the definition should be significantly changed, for example, to align more closely with the IRB. The IRB definition of retail is based on the requirement that retail exposures are managed on a pooled basis. Since IRB banks are subject to stricter management requirements and validation and approval of their models, the pooling criterion is suitable under IRB. However, under the standardised approach, the Committee believes that this pooling concept is not

sufficiently robust to ensure diversification of the regulatory retail portfolio that would be sufficient to justify the preferential risk-weight treatment. Therefore, the Committee proposes to retain the above criteria to define regulatory retail exposures.

Since the Committee considers diversification to be one of the primary justifications for the current preferential risk-weight treatment, the Committee proposes, based on preliminary analysis, 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.

(ii) Treatment

The Committee is considering whether to maintain the 75% risk weight applicable to regulatory retail exposures. The Committee recognises that this treatment may not be sufficiently risk-sensitive and will continue to explore (and will collect data to assess) whether other suitable risk drivers should be used to differentiate the risk of retail exposures.

Therefore, the Committee invites respondents to provide evidence on specific products that have different risk characteristics and deserve a specific risk weight; and/or to highlight potential risk drivers (or a combination of them) that could be applied across the entire retail portfolio to better differentiate the inherent risk of retail exposures, such as:

- (i) The extent to which a loan is secured by durable goods;
- (ii) The percentage of the borrower income available to service the loan;²⁰
- (iii) The maturity of the exposure;
- (iv) Whether there is already an established relationship between the borrower and the bank.

(2.4.2) Other retail exposures

Exposures to individuals that do not meet all of the criteria for a regulatory retail portfolio would be categorised as “other retail exposures” and would not be eligible for a preferential risk weight. The Committee proposes to apply a 100% risk weight to other retail exposures. Exposures to small businesses that do not meet all of the criteria for a regulatory retail portfolio would be treated as corporate exposures.

Q9. Can respondents suggest, and provide evidence on, how to increase the risk sensitivity of the regulatory retail exposures treatment, either by differentiating certain product subcategories for which a specific risk weight may be appropriate; or by suggesting simple risk drivers that could be used to assess the risk of all retail exposures?

(2.5) Claims secured by real estate

The current standardised approach contains two exposure categories in which the risk-weight treatment is based on the collateral provided to secure the relevant exposure, rather than on the counterparty of that exposure. These are exposures secured by residential real estate and exposures secured by commercial real estate. Currently, these categories receive risk weights of 35% and 100%, respectively,

²⁰ This could be for example measured by a debt service coverage ratio, as described in the section on residential real estate exposures.

with a national discretion to allow a preferential risk weight under certain strict conditions in the case of commercial real estate.

The recent financial crisis has demonstrated that the current treatment is not sufficiently risk-sensitive and that its calibration is not always prudent. In order to increase the risk sensitivity of real estate exposures, the Committee proposes to introduce (i) two specialised lending categories linked to real estate (under the corporate exposure category) and (ii) specific operational requirements for real estate collateral to qualify the exposures for the real estate categories. The proposed operational requirements would require that (a) the property securing the mortgage be fully completed;²¹ (b) the collateral agreement be legally enforceable in all relevant jurisdictions (eg if the real estate property is in a different jurisdiction than that where the mortgage loan is signed), and (c) the property be prudently valued at not more than market prices. (See Annex 1 paragraph 37 for a full description of the operational requirements.)

The Committee proposes that any exposure secured with real estate that exhibits all of the characteristics set out in the specialised lending category (as described in Section 2.2.2) should be treated for regulatory capital purposes as income-producing real estate or as land acquisition, development and construction finance as the case may be, rather than as exposures secured by real estate. Any non-specialised lending exposure that is secured by real estate but does not satisfy the operational requirements should be treated for regulatory capital purposes as an unsecured exposure, either as a corporate exposure or other retail exposure, as appropriate.

(2.5.1) Exposures secured by residential real estate

The current standardised approach applies a 35% risk weight to all exposures secured by mortgage on residential property, regardless of whether the property is owner-occupied, 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: a 35% risk weight may be too high for some exposures and too low for others. Additionally, there is a lack of comparability across jurisdictions as to how great a margin of additional security is required to achieve the 35% risk weight.

In order to increase risk sensitivity and harmonise global standards in this exposure category, the Committee proposes to introduce a table of risk weights ranging from 25% to 100% based on the loan-to-value (LTV) ratio. The Committee proposes that the risk weights derived from the table be applied to the full exposure amount (ie without tranching the exposure across different LTV buckets).²²

The Committee believes that the LTV ratio is the most appropriate risk driver in this exposure category as experience has shown that the lower the outstanding loan amount relative to the value of the residential real estate collateral, the lower the loss incurred in the event of a default. Furthermore, data suggest that the lower the outstanding loan amount relative to the value of the residential real estate collateral, the less likely the borrower is to default. For the purposes of calculating capital requirements, the value of the property (ie the denominator of the LTV ratio) should be measured in a prudent way. Further, to dampen the effect of cyclicalities in housing values, the Committee is considering requiring the value of the property to be kept constant at the value calculated at origination. Thus, the LTV ratio would be updated only as the loan balance (ie the numerator) changes.

²¹ Subject to national discretion, supervisors may apply this risk-weight treatment to loans to individuals that are secured by an unfinished residential property, provided the loan is for a one to four family residential housing unit (see Annex 1 paragraph 37).

²² There are some concerns that the tranching of a loan in different loan-to-value buckets may underestimate the risk of a given exposure. The loan-to-value of the whole mortgage loan is used as a risk driver or indication of the risk inherent in the exposure. Tranching the exposure into different buckets would imply that the risk of default in such mortgage loan is variable. It would also make comparisons of the risk weights of specific loans either less clear or more complex.

Mortgage loans on residential properties granted to individuals account for a material proportion of banks' residential real estate portfolios. To further increase the risk sensitivity of the approach, the Committee is considering taking into account the borrower's ability to service the mortgage, a proxy for which could be the debt service coverage (DSC) ratio. Exposures to individuals could receive preferential risk weights as long as they conform to certain requirement(s), such as a 'low' DSC ratio. This ratio could be defined on the basis of available income 'net' of taxes. The DSC ratio would be used as a binary indicator of the likelihood of loan repayment, ie loans to individuals with a DSC ratio below a certain threshold would qualify for preferential risk weights. The threshold could be set at 35%, in line with observed common practice in several jurisdictions. Given the difficulty in obtaining updated borrower income information once a loan has been funded, and also given concerns about introducing cyclicity in capital requirements, the Committee is considering whether the DSC ratio should be measured only at loan origination (and not updated) for regulatory capital purposes.

Annex 1 paragraph 38 of this consultative document presents the Committee's proposals for differentiating the risk for exposures secured on residential real estate.

Further considerations

The Committee recognises a number of concerns with the proposed risk drivers:

First, differences in real estate markets, as well as different underwriting practices and regulations across jurisdictions make it difficult to define thresholds for the proposed risk drivers that are meaningful in all countries.

Another concern is that the proposal uses risk drivers prudently measured at origination.²³ This is mainly to dampen the effect of cyclicity in housing values (in the case of LTV ratios) and to reduce regulatory burden (in the case of DSC ratios). The downside is that both risk drivers can become less meaningful over time, especially in the case of DSC ratios, which can change dramatically after the loan has been granted.

Moreover, the DSC ratio is defined using net income (ie after taxes) in order to focus on freely disposable income. That said, the Committee recognises that differences in tax regimes and social benefits in different jurisdictions make the concept of 'available income' difficult to define and there are concerns that the proposed definition might not be reflective of the borrower's ability to repay a loan. Further, the level at which the DSC threshold ratio has been set might not be appropriate for all borrowers (eg high income) or types of loans (eg those with short amortisation periods).

The Committee will explore whether using either a different definition of the DSC ratio (eg using gross income, before taxes) or any other indicator, such as a debt-to-income ratio, could better reflect the borrower's ability to service the mortgage. Comments are welcome on this issue.

- | | |
|------|---|
| Q10. | Do respondents agree that LTV and/or DSC ratios (as defined in Annex 1 paragraphs 40 and 41) have sufficient predictive power of loan default and/or loss incurred for exposures secured on residential real estate? |
| Q11. | Do respondents have views about the measurement of the LTV and DSC ratios? (In particular, as regards keeping the value of the property constant as measured at origination in the calculation of the LTV ratio; and not updating the DSC ratio over time.) |
| Q12. | Do respondents have views on whether the use of a fixed threshold for the DSC ratio is an appropriate way for differentiating risks and ensuring comparability across jurisdictions? If not, |

²³ This should not prevent banks from monitoring and assessing value of real estate markets for their internal management processes.

what reasonably simple alternatives or modifications would respondents propose while maintaining consistent outcomes?

Q13. Do respondents propose any alternative/additional risk drivers for the Committee's consideration in order to improve the risk sensitivity in this approach without unduly increasing complexity?

(2.5.2) Exposures secured by commercial real estate

As commercial property lending is a recurring source of troubled assets in the banking industry, the Committee has set a flat risk weight of 100% in the current standardised approach for exposures secured by mortgage on commercial real estate. Subject to national discretion and provided that certain very strict conditions are met, the current standardised approach permits a preferential risk weight of 50% to apply.

The recent financial crisis has reinforced the Committee's view of commercial real estate as a high-risk exposure category. Nevertheless, the Committee recognises the current treatment is not risk-sensitive. Therefore, the Committee is considering introducing one of the following two options:

- A. No recognition of the real estate collateral and treating the exposure as unsecured (ie by assigning the counterparty (retail or corporate) risk weight ranging between 60% and 300% to the exposure) and maintaining a national discretion for a preferential 50% risk weight under strict conditions. This treatment would be based on the expectation that the probability of repayment and the loss incurred in the event of default are most closely tied to the nature of the counterparty.
- B. Assigning a risk weight to the exposure from a table of risk weights ranging between 75% and 120% based on the LTV ratio. This treatment would be based on the expectation that the probability of repayment and the loss incurred in the event of default are most closely tied to the amount by which the value of the collateral exceeds the outstanding amount of the loan.

Annex 1 paragraphs 44 to 48 of this consultative document sets out the two options proposed by the Committee for risk weighting exposures to commercial real estate.

Q14. Which of the two options above is viewed as the most suitable for determining the risk-weight treatment for exposures secured on commercial real estate?

Q15. What other options might prudently increase the risk sensitivity of the commercial real estate treatment without unduly increasing complexity?

(2.6) Risk weight add-on for exposures with currency mismatch

Exposures where the lending currency differs from the currency of the borrower's income are subject to the risk of foreign exchange rate volatility. As observed in different jurisdictions, foreign exchange rate volatility is a factor external to the borrower that affects its debt-servicing capacity. Portfolios denominated in foreign and domestic currencies can exhibit markedly different default patterns. Banks with a significant portion of their loans denominated in foreign currencies to borrowers with income in a different (ie their own domestic) currency may see the credit risk of the borrowers rise as a consequence of rapid changes in foreign exchange rates.

To take account of this higher risk, the Committee proposes to apply an add-on to the risk weight of certain exposures where the currency of the loan is different from that of the borrower's income. To keep the framework simple, it is proposed to apply this risk-weight add-on only to retail

exposures and claims secured by residential real estate, based on the assumption that borrowers assigned to these categories are mostly individuals, or micro-firms, which generally do not manage or hedge their foreign exchange risk.

The Committee will continue to collect data during the QIS and to explore an appropriate approach to capturing this additional risk.

Q16. Do respondents agree that a risk weight add-on should be applied to only retail exposures and exposures secured by residential real estate? What are other options for addressing this risk in a simple manner?

(2.7) Off-balance sheet exposures

The two main weaknesses identified with regard to off-balance sheet exposures under the current standardised approach are (i) the outdated calibration of credit conversion factors (CCF), and (ii) the lack of consistency/comparability with the IRB approach.

While the foundation IRB approach largely relies on the standardised approach to determine its applicable CCFs, the foundation IRB is in some cases more conservative. In particular, it applies higher CCFs for some types of commitments, and contains some additional requirements, notably regarding the use of the current 0% CCF. To promote comparability across banks, the Committee proposes aligning the CCFs under the current standardised approach with those applied under the foundation IRB approach, except in the case of the 0% CCF.

Commitments that a bank may cancel unconditionally and at any time without prior notice, or that effectively provide for automatic cancellation due to the deterioration in a borrower's creditworthiness, currently receive a 0% CCF. However, consumer protection laws, risk management capabilities and reputational risk considerations may constrain banks' ability to cancel such commitments. For this reason, the Committee believes a 0% CCF is inappropriate and proposes a new CCF of 10% for such exposures.

Table 1 below summarises the proposal. The Committee intends to collect data during the QIS, and revise the calibration of CCFs as necessary. Respondents are encouraged to provide data with their comments to support any calibration variations of CCFs.

Proposal to align CCFs under the current standardised approach (SA) and foundation IRB

(%)

Table 1

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	0%	0%	10%
Commitments, except unconditionally cancellable	-	75%	75%
Commitments with maturity ≤ 1 year, except unconditionally cancellable	20%	-	-
Commitments with maturity > 1 year, except unconditionally cancellable	50%	-	-
Note issuance facilities (NIFs) and revolving underwriting facilities (RUFs)	50%	75%	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.

- Q17. Do respondents consider the categories for which a CCF is applied under the standardised approach to be adequately defined?
- Q18. Do respondents agree that instruments allocated to each of the CCF categories share a similar probability of being drawn and that the probabilities implied by the CCFs are accurate? Please provide empirical support for your response.

(2.8) Past-due loans

Past-due loans sustain higher losses than performing ones. Some of these losses are expected, and thus could be dealt with under appropriate provisioning practices. Nevertheless, to the extent that past-due loans become riskier as a consequence of insufficient provisioning or higher unexpected losses, risk weights applied to them should also increase. The current standardised approach already reflects this rationale by means of risk-weighting past-due loans more heavily than performing loans but allowing a reduction in the required capital when the amount of specific provisions is deemed appropriate.

The Committee will continue to consider the best way of incorporating these issues in the new framework and what would be the appropriate calibration of risk weights. Alternatives could be a flat risk weight for all past-due exposures, or an add-on to the applicable risk weight (which may vary as a function of the amount of provisions).

- Q19. What are respondents' views on the alternative treatments currently envisaged for past-due loans?

(2.9) Exposures to multilateral development banks

Currently, risk weights applied to claims on multilateral development banks (MDBs) are generally treated as bank exposures, based on an MDB's external credit rating. In the case of highly rated MDBs which comply with strict eligibility criteria, a 0% risk weight applies.

The Committee intends to maintain the 0% preferential treatment for the current list of "eligible MDBs".

For the remaining population of MDBs, the Committee notes that their business models, corporate governance structure and shareholder composition are very specific, and ill-suited to the proposed risk-weight treatment for bank exposures. Therefore, the Committee proposes that the fallback treatment for claims on MDBs should be as corporate exposures. Recognising that such treatment might be unduly punitive, the Committee proposes to introduce a subcategory of "qualifying MDBs" that retains the current risk weights based on the MDB's external credit rating, provided that certain conditions are met (see Annex 1 paragraph 11).

- Q20. Do respondents agree with the proposed treatment for MDBs?

(2.10) Other assets

For other exposures that might not fit into the above categories and which are not subject to distinct capital requirement frameworks (eg securities financing transactions and OTC derivatives subject to counterparty credit risk, securitisations exposures, and equity investments in funds), the Committee proposes to maintain as a residual category the "other assets" class (similarly to the current category in paragraph 81 of the Basel II framework), with a standard risk weight of 100%.

The Committee welcomes feedback about what specific exposures would be categorised under this residual exposure class. Depending on comments received, the Committee may consider whether a more risk sensitive treatment or a different risk weight is warranted.

Q21. What exposures would be classified under "Other assets"? Is a 100% risk weight appropriate? (Please provide evidence where possible).

Section 3: Proposed revisions to the credit risk mitigation framework for exposures risk-weighted under the standardised approach

The Committee has identified a number of specific weaknesses in the current credit risk mitigation (CRM) framework as it applies to exposures risk-weighted under the standardised approach, the most important being:

- (a) the unnecessarily complex range of available approaches, which allows cherry-picking by banks;
- (b) the ability to use internal estimates, which is contrary to one of the Committee's principles for revising the standardised approach (see principle 4 in Section 1.3).

In order to enhance the clarity and consistency of the CRM framework, as well as to address the abovementioned weaknesses, the Committee is considering a number of changes in the application of CRM techniques for banking book exposures risk-weighted under the standardised approach. The changes considered to date are summarised in Table 3.

Overview of the current CRM framework

Table 2

Eligible CRM under SA (subject to minimum operational and legal requirements)	Means by which RWA is reduced	
Guarantees and credit derivatives		Substitution approach (ie substitute $RW_{counterparty}$ by $RW_{guarantor}$ / $RW_{collateral}$)
Financial collateral	Simple approach	
	Comprehensive approach	Reduce exposure amount through the use of haircuts
On-balance sheet netting of deposits and loans		Reduce exposure amount through the use of haircuts

Proposed changes to the CRM framework applied to exposures risk-weighted under the standardised approach

Table 3

Funded credit protection		Unfunded credit protection	
Financial collateral		On-balance sheet netting	Guarantees
Simple approach	Comprehensive approach		Credit derivatives
No change	<p>3.2: Eligible financial collateral on supervisory haircut basis:</p> <ul style="list-style-type: none"> (i) Haircuts recalibrated; (ii) Look through approach allowed for UCITS/mutual funds that are used as collateral; (iii) Inclusion of qualifying central clearing counterparty (QCCP) definition in supervisory haircut table. <p>3.1: Eligible financial collateral on own-estimate haircut basis: Approach no longer allowed under SA</p> <p>3.1: Internal VAR model use for repos: Approach no longer allowed under SA</p> <p>3.1: Expected positive exposure method: No longer allowed under the SA</p>	No change to the scope of application; supervisory haircuts recalibrated	<p>3.3: Eligible universe of credit protection providers:</p> <ul style="list-style-type: none"> (i) External rating criterion for corporate guarantors replaced by qualitative criteria; (ii) Guarantees of corporate guarantors to securitisations no longer recognised; (iii) Prudentially regulated financial institutions are eligible guarantors. <p>3.4: Eligible credit derivatives: Nth-to-default derivatives no longer recognised.</p> <p>3.4: Materiality thresholds Exposures below materiality threshold risk weighted at 1250% instead of deducted from capital.</p>

Moreover, the Committee is proposing to restructure the framework to more clearly distinguish between overarching and specific issues.

The rest of this section provides more detail on the changes proposed on CRM for exposures risk weighted under the standardised approach.

(3.1) Approaches to be excluded

Banks using the current standardised approach may use internal estimates in the calculation of their capital charges for certain exposures backed by financial collateral. The Committee is of the view that the

standardised approach should not allow internal models to be used to set capital charges. Therefore, it proposes to exclude the following options from the revised framework:

- (i) Own estimates of haircuts.²⁴
- (ii) Value-at-risk models approach for certain secured financial transactions (SFTs).²⁵
- (iii) Internal Model Method²⁶ for SFTs and collateralised OTC derivatives transactions.

As a consequence, when calculating capital requirements using the comprehensive approach, only supervisory haircuts will be available. For calculating exposure amounts for SFTs and OTC derivatives, the standardised approach for counterparty credit risk (SA-CCR) must be used.²⁷

(3.2) Eligible financial collateral

Universe of eligible financial collateral

Some eligible financial collateral (namely, debt securities) in the current CRM framework are generally required to have an external issue rating under both the simple and comprehensive approach (see Annex 1, paragraph 92(d)). The Committee considers that reliance on ratings for the purposes of defining the universe of eligible collateral is a second-order issue because ratings only affect the amount of capital requirements indirectly through the calculation of the exposure amount (using haircuts) and not directly through risk weights.

Nonetheless, to accommodate jurisdictions that cannot use external ratings in their regulations, the Committee will continue exploring alternative criteria to external ratings that do not significantly increase the complexity of the framework, nor significantly reduce its risk sensitivity. One potential alternative on which the Committee welcomes comments is whether senior debt securities could be accepted as eligible financial collateral using the concept of 'investment grade'. This may be defined as a security of which the issuer has an adequate capacity to meet its financial commitments under the security for the projected life of the asset or exposure; meaning that: (i) the risk of default by the obligor is low and (ii) the full and timely repayment of principal and interest is expected.²⁸

Respondents' views are sought on whether the above definition could yield similar results to the current criteria based on ratings.

Q22. What are respondents' views on the above alternative ways to define eligible financial collateral?

²⁴ See paragraphs 154–165 of Basel II.

²⁵ See paragraphs 178–181 of Basel II.

²⁶ See paragraphs 138 and 187(i) of Basel II.

²⁷ This was recently determined by the Committee. See *The standardised approach for measuring counterparty credit risk*, www.bis.org/publ/bcbs279.pdf.

²⁸ A bank should consider a number of factors, to the extent appropriate in making this determination. While a bank may take into account external credit ratings and assessments as a valuable source of information, the bank would be expected to supplement these ratings with a degree of due diligence processes and additional analyses appropriate for the bank's risk profile and for the size and complexity of the instrument.

Supervisory haircuts applicable to eligible financial collateral

The Committee has recalibrated the supervisory haircuts for issuers other than sovereigns (which will be part of the holistic review abovementioned) and securitisations (which were revised by Basel III)²⁹ when using the comprehensive approach. Among other things, it is proposed to increase the number of maturity buckets for “other issuers” and apply higher haircuts to equity instruments.³⁰

Proposed revised supervisory haircut table				Table 4
Issue rating for debt securities	Residual maturity	Sovereigns ^{31, 32}	Other issuers ³³	Securitisation exposures ³⁴
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 ³⁵		0		

Notwithstanding, in order to accommodate jurisdictions that cannot, or have chosen not to, include external ratings in their regulations, the Committee will also continue to explore how to remove ratings from the supervisory haircuts table without materially changing the results. One possibility could

²⁹ See paragraph 111 of *Basel III: A global regulatory framework for more resilient banks and banking systems*, www.bis.org/publ/bcbs189.pdf

³⁰ The supervisory haircuts that are applicable to the eligible collateral have been recalibrated with an expected shortfall model calibrated to the 97.5th percentile.

³¹ Includes PSEs which are treated as sovereigns by the national supervisor.

³² Multilateral development banks receiving a 0% risk weight are treated as sovereigns.

³³ Includes PSEs that are not treated as sovereigns by the national supervisor.

³⁴ Exposures that meet the definition set forth in the Basel securitisation framework.

³⁵ Eligible cash collateral specified in paragraph [92(a)].

be to replace ratings by counterparty risk weights, as shown in Table 5, where counterparty risk weights are only included for illustrative purposes. The Committee welcomes views on this alternative or any other suggestions.

Potential alternative supervisory haircut table

Table 5

Counterparty risk weights are included for illustrative purposes

Haircut (%) assigned based on:						
Residual maturity	Sovereign issuers risk weight			Non-sovereign issuers risk weight		Securitisation exposures
	0%	20% or 50%	100%	PSEs: 20% Banks:30%; Corporates:60%	PSEs: ≤ 100% 30% < Banks ≤ 60%; 60% < Corporates ≤ 80%	
≤ 1 year	0	1	15	1	2	4
>1 year, ≤ 3 years	2	3	15	3	4	12
>3 years, ≤ 5 years				4	6	
>5 years, ≤ 10 years	4	6	15	6	12	24
> 10 years				12	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				0		
Other exposure types				30		

Q23. What are respondents' views on the recalibrated supervisory haircuts shown in Table 4? What are respondents' views on how to eliminate references to ratings from the supervisory haircuts table? What could be the implications of eliminating references to external ratings?

(3.3) Eligible credit protection providers

The current standardised approach identifies corporate eligible guarantors based on external credit ratings. To reduce reliance on ratings, the Committee proposes to introduce certain criteria to limit the

eligibility of corporates other than prudentially regulated financial institutions where there is no established economic relationship between the borrower and the corporate guarantor. See Annex 1 paragraph 130 for the specific changes proposed.

For securitisation exposures, in order to limit regulatory capital arbitrage possibilities, the Committee proposes to recognise guarantees for capital requirement purposes only when the credit protection is given by sovereigns, PSEs, MDBs or prudentially regulated financial institutions.

Q24. What are respondents' views on the proposed corporate guarantor eligibility criteria?

(3.4) Treatment of credit derivatives

The Committee proposes to simplify the framework through some minor changes to the treatment of derivatives as credit protection mechanisms, including:

- No longer recognising nth-to-default credit derivatives as credit risk mitigants for regulatory capital purposes. Buying credit protection through nth-to-default derivatives³⁶ is too complex since the correlation among the names within the basket is difficult to estimate.³⁷
- No longer recognising credit derivatives that do not specify restructuring as a credit event.

(3.5) Treatment of repo and OTC derivative transactions

The current standardised approach includes exemptions to the 20% risk weight floor for certain repo-style and OTC derivative transactions. In particular, for transactions with 'core market participants', defined at the discretion of national supervisors, a 0% risk weight and a 0% haircut may apply under the simple and comprehensive approaches, respectively. The Committee seeks views on the implications and impact of eliminating this exemption (see Annex 1, paragraphs 95, 96 and 117). The Committee will review during 2015 how to modify existing regulatory requirements for the calculation of collateral haircuts in line with the Financial Stability Board's recommendation issued in October 2014.³⁸

Section 4: Quantitative impact study

The Committee will conduct a comprehensive QIS as part of the Basel III monitoring exercise collecting data as of end-December 2014. This will inform the Committee's consideration of the overall calibration, as well as the design and calibration of the capital floor to IRB models.

The Committee intends to collect information on:

³⁶ The credit protection is triggered by the default of one of the names in the basket, and the derivative contract is terminated afterwards.

³⁷ For banks providing credit protection, a capital charge would still apply. In line with the Committee's proposal included in the second consultative document on revisions to the securitisation framework (www.bis.org/publ/BCBS269.pdf), the specific treatment for *rated* instruments will be removed (see paragraph 208 of Basel II framework).

³⁸ See Financial Stability Board, *Regulatory framework for haircuts on non-centrally cleared securities financing transactions*, available at www.financialstabilityboard.org/wp-content/uploads/r_141013a.pdf.

- Allocation of exposures to risk-weight buckets under the existing and revised standardised approaches.
 - These data will be collected for exposures under either the IRB or the standardised approach at present.
 - For banks using IRB, the Committee will also collect probabilities of default, loss-given-default data, and data on non-performing assets. This will help assess the risk sensitivity of the existing approach and the proposed revisions.
- Impact of the changes in CCFs and the CRM framework.

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.

Annex 1

Proposals on exposure classes and credit risk mitigation

The text below would replace current paragraphs 50 to 89, and 109 to 206 from the Basel II framework available at: 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.

This Annex does not include text for exposure categories where proposals have not yet been developed (eg past-due loans; and risk weight add-on for exposures with currency mismatch).

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 a choice between two broad methodologies for calculating their capital requirements for credit risk. One alternative, the standardised approach, is described in paragraphs [4 to 60] below.³⁹ Under this approach, exposures should be risk-weighted net of specific provisions.
2. The other alternative, the Internal Ratings-based Approach, which is subject to the explicit approval of the bank's supervisor, would allow banks to use their internal rating systems for credit risk.
3. Exposures related to securitisation are dealt with in Section IV. Credit equivalent amounts of Securities Financing Transactions (SFT)⁴⁰ and OTC derivatives that expose a bank to counterparty credit risk⁴¹ are to be calculated under the rules set forth in Annex 4. Equity investments in funds and exposures to central counterparties must be treated according to their own specific frameworks.⁴²

³⁹ 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.

⁴⁰ Securities financing transactions (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 the market valuations and the transactions are often subject to margin agreements.

⁴¹ 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.

⁴² Final standards on capital requirements for banks' equity investments in funds are available at 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.

1. Exposures to sovereigns

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

4. Claims on sovereigns and their central banks will be risk-weighted as follows:

Credit assessment	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 funded⁴³ in that currency.⁴⁴ 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 claims on 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".⁴⁵ 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. Claims on 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.

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

⁴³ This is to say that the bank would also have corresponding liabilities denominated in the domestic currency.

⁴⁴ This lower risk weight may be extended to the risk weighting of collateral and guarantees under the CRM framework.

⁴⁵ The consensus country risk classification is available on the OECD's website (www.oecd.org) in the Export Credit Arrangement webpage of the Trade Directorate.

Option 1

Credit assessment of 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%

Option 2

Credit assessment 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, claims on certain domestic PSEs⁴⁶ may also be treated as claims on the sovereigns in whose jurisdictions the PSEs are established. Where this discretion is exercised, other national supervisors may allow their banks to risk-weight claims on 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.

11. The risk weights assigned to MDBs reflect the characteristics of the MDBs. Based on these characteristics, exposures to MDBs can be risk-weighted as exposures to (a) highly rated MDBs, (b) qualifying MDBs, or (c) other.

(a) Highly rated MDBs: a 0% risk weight is applied to exposures to MDBs that fulfil to the Committee's satisfaction the criteria provided below.⁴⁷ The Committee will continue to evaluate eligibility on a case-by-case basis. The eligibility criteria for MDB's risk-weighted at 0% are:

⁴⁶ 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.

⁴⁷ 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

- (i) very high-quality long-term issuer ratings, ie a majority of an MDB’s external assessments must be AAA;
 - (ii) either the shareholder structure comprises a significant proportion of sovereigns with long-term issuer credit assessments 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.
- (b) Qualifying MDBs: The risk weights applied to exposures to MDBs that fulfil criteria (iii) to (v) above may be based on external credit assessments as set out in the table below:

Credit assessment of the MDB	AAA to AA–	A+ to A–	BBB+ to BBB–	BB+ to B–	Below B–	Unrated
Risk weight	20%	50%	50%	100%	150%	50%

- (c) All exposures to other MDBs must be treated as corporate exposures.

4. Exposures to banks

12. 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.⁴⁸ The treatment associated with subordinated bank debt and equities is addressed in paragraphs [30 to 32].

13. Banks must determine the risk weights for their bank exposures according to the obligor’s Common Equity Tier 1 (CET1) ratio and net non-performing assets (NPA) ratio in accordance with the table below, unless in the cases foreseen in paragraphs [16 and 17]. When calculating capital requirements, banks must use the data disclosed in their obligor’s most recent Pillar 3 reports. The

(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).

⁴⁸ 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.

obligor's CET1 and net NPA ratios used should be those of the legal entity against which the exposure is held. If the information is not available on a solo basis, ratios at the consolidated level of the entity against which the exposure is held can be used.

	CET1 ratio ≥ 12%	12% > CET1 ratio ≥ 9.5%	9.5% > CET1 ratio ≥ 7%	7% > CET1 ratio ≥ 5.5%	5.5% > CET1 ratio ≥ 4.5%	CET1 ratio < 4.5%
Net NPA ratio ≤ 1%	30%	40%	60%	80%	100%	300%
1% < Net NPA ratio ≤ 3%	45%	60%	80%	100%	120%	
3% < Net NPA ratio	60%	80%	100%	120%	140%	

14. The CET1 ratio is calculated as:

$$\frac{\text{Common Equity Tier 1 capital}}{\text{Risk-weighted assets}}$$

where both the numerator and the denominator are calculated in accordance with the Basel III standards.

15. The net NPA ratio is calculated as:

$$\frac{(\text{Non-performing loans and leases} - \text{Provisions}) + (\text{Non-performing debt securities and other interest-bearing balances} - \text{Provisions})}{(\text{Total loans and leases} + \text{Total debt securities} + \text{Interest-bearing balances})}$$

where

- (a) *Total loans and leases* mean all wholesale and retail loan and lease exposures
- (b) *Total debt investment securities* mean any debt investment security held in the banking book. Such debt investment securities are also typically referred to as available-for-sale or held to maturity.
- (c) *Interest-bearing balances* mean any interest-bearing balance held at another financial institution that earns interest and is not included in a bank's trading book. Such interest-bearing balances are typically deposits held at another bank.
- (d) *Non-performing loans and leases* means:
 - (i) any loan or lease that is past-due for more than 90 days, or
 - (ii) any loan or lease for which the bank accrues a lower amount of interest than required in the original contract (or no interest) due to an indication that the borrower has reduced capacity to repay the originally contracted principal and interest. Such loans and leases also include restructured or modified loans. A bank may exclude restructured or modified loans once the borrower:
 - has paid all past-due principal and interest according to the terms of the new contract;
 - has resumed paying the newly contracted principal and interest for a sustained period of at least six months; and

- there is no indication that the borrower has reduced capacity to repay the newly contracted principal and interest.

(e) *Non-performing debt investment securities and other interest-bearing balances* means

- (i) any debt investment security, or
- (ii) other interest-bearing balance held at another financial institution included in the banking book

that is past-due 30 days or more, or otherwise determined to be non-performing or credit-impaired by the bank.

(f) *Provisions* deductible in the calculation of the net NPA ratio must meet all of the following conditions:

- (i) They are directly attributable to assets included in the net NPA ratio; and
- (ii) They result in a reduction in the bank's common equity and are therefore reflected in the bank's CET1 ratio.

16. Banks must apply a 300% risk weight to exposures to banks for which the relevant information is not published within the frequency required by the Pillar 3 disclosure requirements.

17. A 300% risk weight will also apply in cases where a bank is aware that one of its obligor banks has breached any binding minimum prudential standard to which they are subject by their national supervisor.

18. In the case of short-term interbank claims having an original maturity of three months or less that are not expected to be rolled over, banks may apply a 20 percentage point reduction to the risk weight assigned by the table in paragraph [13], provided that such risk weight is no greater than 100%. The risk weight applied to short-term claims will in no case be lower than 30%.

5. Exposures to securities firms and other financial institutions

19. 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 shall be treated as exposures to corporates.

6. Exposures to corporates

20. For the purposes of calculating capital requirements, this category includes senior 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 corporate exposure class includes exposures to insurance companies and other financial corporates that cannot be treated as bank exposures as determined by paragraphs [12 and 13]. Exposures to individuals will not be classified as corporate but must be classified as retail exposures. The corporate exposure class differentiates the following subcategories:

- (i) Senior corporate exposures;
- (ii) Specialised lending exposures, as defined in paragraph [21].

Exposures to equity and other capital instruments must be treated according to paragraphs [30 to 32].

21. 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 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.

Senior corporate exposures

22. Banks must determine the risk weights for their senior corporate exposures according to the obligor's revenue and leverage in accordance with the table below. To calculate leverage and revenue, banks must use the obligor's year-end accounts for the most recent financial year available.

Risk weights for senior debt corporate exposures

	Revenue ≤ €5m	€5m < Revenue ≤ €50m	€50m < Revenue ≤ €1bn	Revenue > €1bn
Leverage: 1x–3x	100%	90%	80%	60%
Leverage: 3x–5x	110%	100%	90%	70%
Leverage > 5x	130%	120%	110%	90%
Negative equity(*)	300%			

(*) Note: Negative equity means that a corporate's liabilities exceed its assets.

23. Revenue includes all income the company received from business activities as determined by the accounting standards of the relevant jurisdiction.

24. Leverage⁴⁹ means Total Assets/Total Equity, where both total assets and total equity are determined by the accounting standards of the relevant jurisdiction.

25. Banks must apply a risk weight of 300% to exposures to an obligor that has not provided its revenue and leverage data to the lending bank.

26. Notwithstanding paragraph [25], for any exposure to a newly incorporated corporate that has not yet provided revenue and leverage data to the lending bank, banks may apply a risk weight of 110% in the first year after its establishment.

Specialised lending

27. Exposures that comply with all of the requirements in paragraph [21] must be classified in one of the following five subcategories of specialised lending:

⁴⁹ The Committee is considering whether for companies that provide guarantees or have other material off-balance sheet liabilities, banks should adjust the leverage driver. For example, an adjustment could at least be made where an obligor's auditors consider its off-balance sheet commitments to be material. The leverage driver should be adjusted by adding to Total Assets the sum of off-balance sheet exposures.

- (i) Project finance (PF) is a 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 exposure. See paragraphs 221 and 222 of the IRB approach for further details.
 - (ii) Object finance (OF) refers to a method of funding the acquisition of physical assets (eg ships, aircraft, satellites, railcars and fleets) where the repayment of the exposure is dependent on the cash flows generated by the specific assets that have been financed and pledged or assigned to the lender. See paragraph 223 of the IRB approach for further details.
 - (iii) Commodities finance (CF) refers to structured short-term lending to finance reserves, inventories, or receivables of exchange-traded commodities (eg crude oil, metals or crops), where the exposure will be repaid from the proceeds of the sale of the commodity and the borrower has no independent capacity to repay the exposure. See paragraphs 224 and 225 of the IRB approach for further details.
 - (iv) Income-producing real estate (IPRE) refers to a method of providing funding to real estate (eg office buildings to let, retail space, multi-family residential buildings, industrial or warehouse space or hotels) where the prospects for repayment and recovery on the exposure depend primarily on the cash flows generated by the asset. The primary source of these cash flows would generally be lease or rental payments or the sale of the asset. The borrower⁵⁰ may be, but is not required to be, an SPE, an operating company focused on real estate construction or holdings, or an operating company with sources of revenue other than real estate. The distinguishing characteristic of IPRE versus other corporate exposures that are collateralised by real estate is the strong positive correlation between the prospects for repayment of the exposure and the prospects for recovery in the event of default, with both depending primarily on the cash flows generated by a property. See paragraph 226 of the IRB approach for further details.
 - (v) Land Acquisition, Development and Construction (ADC) lending includes loans financing any of the land acquisition, development or construction of any 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 is substantially uncertain (eg the property has not yet been leased to the occupancy rate prevailing in that geographic market for that type of real estate).
28. Corporate exposures classified as project finance, object finance, commodities finance, and income-producing real estate exposures will be risk-weighted at the higher of (i) the risk weight applicable to the counterparty, and (ii) 120%.
29. Corporate exposures classified as land acquisition, development and construction exposures will be risk-weighted at the higher of (i) the risk weight applicable to the counterparty, and (ii) 150%.

7. Subordinated debt, equity and other capital instruments

30. The treatment described in paragraphs [31 and 32] 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.

31. Equity holdings that are publicly traded on a recognised security exchange shall receive a 300% risk weight. All other equity holdings shall receive a 400% risk weight.

⁵⁰ Supervisors may exempt associations or cooperatives of individuals that are regulated in national law and exist with the purpose of granting its members the use of a first residence in the property in question.

32. Subordinated debt and capital instruments other than equities will receive a risk weight of 250%.

8. Retail exposures

33. Exposures that meet the criteria listed in paragraph [34] may be included in the “regulatory retail” portfolio, unless the exposure is a past-due loan.⁵¹ Regulatory retail exposures will be risk-weighted at 75%. Other retail exposure not meeting the criteria listed in paragraph [34] will be risk-weighted at 100%.

34. To be included in the regulatory retail portfolio and be eligible for the preferential treatment, claims must meet all of the following four criteria:

- Orientation criterion: the exposure is to an individual person or persons or to a small business;
- 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 and 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 counterparty⁵² can exceed 0.2%⁵³ of the overall regulatory retail portfolio, unless national supervisors have determined another method to ensure satisfactory diversification of the regulatory retail portfolio.

35. Exposures to individuals that do not meet all of the criteria in paragraph [34] will be categorised as “other retail” exposures and risk-weighted at 100%. Exposures to small businesses that do not meet all of the criteria in paragraph [34] must be treated as corporates.

9. Exposures secured by real estate

(9.1) Residential real estate collateral

36. A residential real estate exposure is defined as an exposure secured by a mortgage on a residential property, provided that it does not meet the criteria to be considered specialised lending as defined in paragraph [21]. Moreover, the risk of loan repayment must not be materially dependent upon the performance of, or income generated by, the property securing the mortgage, but rather on the underlying capacity of the borrower to repay the debt from other sources.

37. In order to qualify for the risk-weight treatment of a residential real estate exposure, the property securing the mortgage must meet the following operational requirements:

⁵¹ NB: The standards text in this consultative document does not include yet specific proposal to treat loans that are past-due for more than 90 days.

⁵² 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, including mortgages on unfinished properties. 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).

⁵³ 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.

- Finished property: the property securing a mortgage must be fully completed. Subject to national discretion, supervisors may apply the risk-weight treatment described in paragraph [38] for loans to individuals that are secured by an unfinished property, provided the loan is for a one to four family residential housing unit.
- Legal enforceability: any claim (including the mortgage, charge or other security interest) on the property taken must be legally enforceable in all relevant jurisdictions. The collateral agreement and the legal process underpinning the collateral must be such that they provide for the bank to realise the value of the collateral within a reasonable time frame.
- Prudent value of property: the property must be valued according to the criteria set in paragraph [40] for determining the value in the LTV ratio. Moreover, the value of the property must not be materially dependent on the performance of the borrower.

38. Where paragraphs [36 and 37] are met, the risk weight applicable to the full exposure amount will be assigned, as determined by the table below, according to the exposure's loan-to-value (LTV) ratio, and in the case of exposures to individuals, also taking into account the debt service coverage (DSC) ratio. Banks should not tranche their exposures across different LTV buckets; the applicable risk weight will apply to the full exposure amount. A bank that does not have the necessary LTV information for a given residential real estate exposures must apply a 100% risk weight to such an exposure.

	LTV < 40%	40% ≤ LTV < 60%	60% ≤ LTV < 80%	80% ≤ LTV < 90%	90% ≤ LTV < 100%	LTV ≥ 100%
Loans to individuals with [DSC ≤ 35%]	25%	30%	40%	50%	60%	80%
Other loans	30%	40%	50%	70%	80%	100%

39. Where the requirements in paragraph [37] are not met, the exposure will be considered unsecured and treated according to the counterparty, ie as "corporate" exposure or as "other retail".

40. The LTV ratio is defined as the total amount of the loan divided by the value of the property. For regulatory capital purposes, when calculating the LTV ratio, the value of the property will be kept constant at the value measured at origination, unless 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.

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

- Total amount of the loan: includes the outstanding loan amount and any undrawn committed amount of the mortgage loan. The loan amount must be calculated gross of any provisions and other risk mitigants, and it 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 lien securing the loan.⁵⁴
- Value of the property: the valuation must be appraised independently⁵⁵ using prudently conservative valuation criteria⁵⁶ and supported by adequate appraisal documentation.

⁵⁴ If additional loans secured by the same property are granted by the bank, the risk weight of the previous loan should be adjusted in order to take into account the increase in LTV.

⁵⁵ The valuation must be done independently from the bank's credit underwriting process; it does not need to be carried out by third-party appraisers.

⁵⁶ To ensure that the value of the property is appraised in a prudently conservative manner, expectations of future price appreciation should not be considered. In addition, when the current property price is above a level that is sustainable over

41. The DSC ratio is defined as the ratio of debt service payments (including principal and interest) relative to the borrower's total income over a given period (eg on a monthly or yearly basis). The DSC ratio must be prudently calculated in accordance with the following requirements:

- Debt service amount: the calculation must take into account all of the borrower's financial obligations that are known to the bank.⁵⁷ At loan origination, all known financial obligations must be ascertained, documented and taken into account in calculating the borrower's debt service amount.⁵⁸ In addition to requiring borrowers to declare all such obligations, banks should perform adequate checks and enquiries, including information available from credit bureaus and credit reference agencies.
- Total income: income should be ascertained and well documented at loan origination. Total income must be net of taxes and prudently calculated, including a conservative assessment of the borrower's stable income and without providing any recognition to rental income derived from the property collateral.

42. Notwithstanding the definitions of the DSC and LTV ratios in paragraphs [40 and 41], banks must, on an ongoing basis, have a comprehensive understanding of the risk characteristics of their residential real estate portfolio.

(9.2) Commercial real estate

43. A commercial real estate exposure is defined as an exposure secured by a mortgage on a commercial property, provided that it does not meet the criteria to be considered specialised lending as defined in paragraph [21]. *[If Option B:* Moreover, the risk of loan repayment must not be materially dependent upon the performance of, or income generated by, the property securing the mortgage, but rather on the underlying capacity of the borrower to repay the debt from other sources.]

Option A: paragraph [44]

44. In view of the experience in numerous countries that commercial property lending has been a recurring cause of troubled assets in the banking industry over the past few decades, the Committee holds the view that commercial real estate collateral should not be considered a risk mitigant for regulatory purposes. As such, exposures secured by commercial real estate will be risk-weighted as unsecured exposures to the counterparty.⁵⁹

the life of the loan (eg due to a property price bubble), the valuation should be adjusted. National authorities should provide guidance setting out prudent valuation criteria. If a market value can be determined, the valuation should not be higher than the market value.

⁵⁷ This should also include commitments and guarantees granted by the borrower.

⁵⁸ To ensure the debt service is prudently calculated, the bank should take into account any probable upward adjustment in the debt service payment. For instance, the loan's interest rate should (for this purpose) be increased by a prudent margin to anticipate future interest rate rises where its current level is significantly below the loan's long-term level. In addition, any temporary relief on repayment must not be taken into account for purposes of the debt service amount calculation.

⁵⁹ However, in exceptional circumstances for well developed and long established markets, exposures secured by mortgages on office and/or multipurpose commercial premises and/or multi-tenanted commercial premises may be risk-weighted at [50%] for the tranche of the loan that does not exceed 60% of the loan to value ratio (as defined in paragraph [40]). This exceptional treatment will be subject to very strict conditions, in particular:

- the exposure does not meet the criteria to be considered specialised lending as defined in paragraph [21];
- the risk of loan repayment must not be materially dependent upon the performance of, or income generated by, the property securing the mortgage, but rather on the underlying capacity of the borrower to repay the debt from other sources;
- the property securing the mortgage must meet the same operational requirements as for residential real estate, as prescribed by paragraph [37]; and

Option B: paragraphs [45 to 48]

45. In order to qualify as a commercial real estate exposure, the property securing the mortgage must meet the same operational requirements as for residential real estate, as prescribed by paragraph [37].

46. Where paragraphs [43 and 45] are met, the risk weight applicable to the full exposure amount will be assigned according to the exposure's loan-to-value (LTV) ratio, as determined in the table below. The LTV ratio will be calculated as defined in paragraph [40]. Banks should not tranche their exposures across different LTV buckets; the applicable risk weight will apply to the full exposure amount. A bank that does not have the necessary LTV information for a given commercial real estate exposure must apply a 120% risk weight.

	LTV < 60% ⁶⁰	60% ≤ LTV < 75%	LTV ≥ 75%
Exposures secured by commercial real estate	75%	100%	120%

47. Where the requirements in paragraph [45] are not met, the exposure will be considered unsecured and treated according to the counterparty, ie as "corporate" exposure or as "other retail".

48. Notwithstanding the definition of the LTV ratio in paragraph [40], banks must, on an ongoing basis, have a comprehensive understanding of the risk characteristics of their commercial real estate portfolio.

10. Off-balance sheet items

49. 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). Counterparty risk weightings for OTC derivative transactions will not be subject to any specific ceiling.

50. 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 recourse⁶¹ 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 Section II.D.3 for the calculation

- two tests must be fulfilled, namely that (i) losses stemming from commercial real estate lending up to the lower of 50% of the market value or 60% of loan-to value (LTV) based on mortgage-lending-value (MLV) must not exceed 0.3% of the outstanding loans in any given year; and that (ii) overall losses stemming from commercial real estate lending must not exceed 0.5% of the outstanding loans in any given year. This is, if either of these tests is not satisfied in a given year, the eligibility to use this treatment will cease and the original eligibility criteria would need to be satisfied again before it could be applied in the future. Countries applying such a treatment must publicly disclose that these and other additional conditions (that are available from the Basel Committee Secretariat) are met. When claims benefiting from such exceptional treatment have fallen past-due, they will be risk-weighted at [100%].

⁶⁰ If this LTV refers to market value, the threshold should be set at a lower level: eg 50%.

⁶¹ 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.

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 either the SA-CCR (Annex 4, Section X) or IMM (Annex 4, Section V) calculation methods in the counterparty credit risk framework.

- Forward asset purchases, forward deposits and partly paid shares and securities,⁶² which represent commitments with certain drawdown.
- Off-balance sheet items not explicitly included in any other category.

51. A 75% CCF will be applied to:

- Commitments, regardless of the maturity of the underlying facility, unless they qualify for a lower CCF.
- Note issuance facilities (NIFs) and revolving underwriting facilities (RUFs) regardless of the maturity of the underlying facility.

52. 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).

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

54. A 10% CCF will be applied to 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.⁶³

55. 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.

56. The credit equivalent amount of OTC derivatives and SFTs that expose a bank to counterparty credit risk is to be calculated under the rules set forth in Annex 4 of this Framework.

57. 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.

58. With regard to unsettled securities, commodities, and foreign exchange transactions, the Committee is of the opinion that banks are exposed to counterparty credit risk from the trade date, regardless of how the transaction is booked or accounted for. Therefore, 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.

59. 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,

⁶² 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.

⁶³ 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.

in aggregating the risk weights, the asset with the lowest risk-weighted amount can be excluded from the calculation.

11. Other assets

60. The standard risk weight for all other assets will be 100%.

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

1. Overarching issues

(i) Introduction

61. 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.⁶⁴

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

(ii) General requirements

63. 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.

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

65. The effects of CRM must not be double-counted. Therefore, no additional supervisory recognition of CRM for regulatory capital purposes will be granted on claims for which the risk weight already reflects that CRM.

66. While the use of CRM techniques reduces or transfers credit risk, it simultaneously may increase other risks (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.

67. 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 66). For example, securities issued by the counterparty — or by any counterparty-related entity — provide little protection as collateral and are thus ineligible.

68. 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.

⁶⁴ 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.

(iii) Legal requirements

69. 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

70. 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.

71. In the case of financial collateral, maturity mismatches are not allowed under the simple approach (see paragraphs [91]).

72. When there is a maturity mismatch in the application of other credit risk mitigation approaches, the credit protection arrangement may only be recognised when the original maturity of a credit protection 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.

73. 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 expressed in years, residual maturity of the credit protection arrangement expressed in years}
- T = min {five years, residual maturity of the exposure expressed in years}

74. 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

75. 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 the treatment of guarantees, credit derivatives and OTC derivative transactions a specific adjustment for currency mismatches is prescribed.

2. Overview of credit risk mitigation techniques⁶⁵

(i) Collateralised transactions

76. 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.

77. 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.

Detailed operational requirements for both approaches are given in paragraphs [90 to 123]. Banks may operate under either, but not both, approaches in the banking book.

78. For collateralised OTC transactions banks must, for counterparty credit risk, use the standardised approach for counterparty credit risk (SA-CCR). Detailed operational requirements for this approach are given in paragraph [123].

(ii) On-balance sheet netting

79. Where banks have legally enforceable netting arrangements for loans and deposits that meet the conditions in paragraph [124] they may calculate capital requirements on the basis of net credit exposures as set out in that paragraph.

(iii) Guarantees and credit derivatives

80. Where guarantees or credit derivatives fulfil the minimum operational conditions set out in paragraphs [126 to 129], banks may take account of the credit protection offered by such credit risk mitigation techniques in calculating capital requirements.

81. 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.

82. Detailed conditions and operational requirements for guarantees and credit derivatives are given in paragraphs [126 to 138].

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

3. Collateralised transactions

(i) General requirements

83. Before capital relief is granted in respect of any form of collateral, the standards set out below in paragraphs [84 to 89] must be met, whether the simple or the comprehensive approach is used.

84. 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.

85. 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.

86. 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.

87. 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.

88. 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.

89. 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

90. 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.

91. 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 claims 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 [94 to 98]. The remainder of the claim must be assigned the risk weight appropriate to the counterparty. Maturity mismatches are not allowed under the simple approach (see paragraphs [70 and 71]).

Eligible financial collateral under the simple approach

92. 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.^{66, 67}
 - (b) Gold.
 - (c) Debt securities rated by a recognised external credit assessment institution where these are either:
 - at least BB– when issued by sovereigns or PSEs that are treated as sovereigns by the national supervisor; or
 - 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.
 - (d) Debt securities not rated by a recognised external credit assessment institution where the following conditions are met:
 - the securities are issued by a bank; and
 - the securities are listed on a recognised security exchange; and
 - the securities are 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 external credit assessment institution; 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 about the market liquidity of the security.
 - (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.⁶⁸
93. Resecuritisations as defined in the securitisation framework are not eligible financial collateral.

⁶⁶ 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.

⁶⁷ 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.

⁶⁸ However, the use or potential use by a UCITS/mutual fund of derivative instruments solely to hedge investments listed [in this paragraph] and paragraph [104] shall not prevent units in that UCITS/mutual fund from being eligible financial collateral.

Exemptions under the simple approach to the risk-weight floor

94. Repo-style transactions that fulfil 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;
- (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.

[95. *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 30% 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).

96. Repo transactions with core market participants that fulfil the requirement in paragraph [94] are fully exempted from the risk floor and receive a 0% risk weight. If the counterparty to the transaction is not a core market participant, banks must apply a risk weight of 10% to the transaction.]

97. 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.

98. 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 [94(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*

99. In the comprehensive approach, when taking collateral, banks 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,⁶⁹ 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 amount is lower than the nominal collateral amount.

100. The size of the individual haircuts depends on the type of instrument, type of transaction 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 [116].

101. 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 [137] to take account of possible future fluctuations in exchange rates.

102. 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 [119 to 122].

103. The comprehensive approach for the treatment of collateral also applies in 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*

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

- (a) All of the instruments listed in paragraph [92];
- (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*

105. 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

⁶⁹ Exposure amounts may vary where, for example, securities are being lent.

- H_{fx} = haircut appropriate for currency mismatch between the collateral and exposure

106. In the case of maturity mismatches, the value of the collateral received (collateral amount) must be adjusted in accordance with paragraphs [70 to 74].

107. 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.

108. 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 (H_c) and to the exposure (H_e):

Issue rating for debt securities	Residual maturity	Sovereigns ^{70, 71}	Other issuers ⁷²	Securitisation exposures ⁷³
AAA to AA-/A-1	≤ 1 year	0.5	1	2
	> 1 year, ≤ 3 years	2	3	8
	> 3 years, ≤ 5 years	4	4	16
	> 5 years, ≤ 10 years		6	
	> 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	6	24
	> 5 years, ≤ 10 years		12	
	> 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 ⁷⁴		0		

109. The haircut for currency risk (H_{fx}) 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).

110. For repo style transactions, a haircut adjustment may need to be applied in accordance with paragraphs [113 to 116].

⁷⁰ Includes PSEs that are treated as sovereigns by the national supervisor.

⁷¹ Multilateral development banks receiving a 0% risk weight are treated as sovereigns.

⁷² Includes PSEs that are not treated as sovereigns by the national supervisor.

⁷³ Those exposures that meet the definition set forth in the securitisation framework.

⁷⁴ Eligible cash collateral specified in paragraph [92(a)].

111. 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.

112. 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.

(d) Calculation of capital requirement for repo-style transactions, other capital market transactions and secured lending

113. 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 repo and securities lending/borrowing), "other capital market-driven transactions" (ie OTC derivatives transactions and margin lending) and secured lending.

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

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

115. 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.

116. 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 [108] 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

[117. For repo-style transactions with core market participants as defined in paragraph [95] and that satisfy the conditions in paragraph [94] supervisors may apply a haircut of zero.]

118. 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*

119. 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 setoff 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.

120. 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;⁷⁵ and
- The collateral instruments used in the transactions are recognised as eligible financial collateral in the banking book.

121. The formula in paragraph [122] may be used to calculate the capital requirements for transactions with netting agreements. This formula obtains a net exposure amount after netting of the exposures and collateral and adding an amount to cover possible price changes for the securities involved in the transactions and for foreign exchange risk if any. The net long or short position of each security included in the netting agreement must be multiplied by the appropriate haircut. All other rules regarding the calculation of haircuts under the comprehensive approach stated in paragraphs [99 to 118] equivalently apply for banks using bilateral netting agreements for repo-style transactions.

122. The formula below may be applied for transactions under master netting agreements:⁷⁶

$$E^* = \max\left\{0, \left(\sum E - \sum C\right) + \sum (E_s \cdot H_s) + \sum (E_{fx} \cdot H_{fx})\right\}$$

where:

- E^* = the exposure value after risk mitigation
- E = current value of the exposure
- C = the value of the collateral received
- E_s = absolute value of the net position in a given security
- H_s = haircut appropriate to E_s
- E_{fx} = absolute value of the net position in a currency different from the settlement currency

⁷⁵ The holding period for the haircuts depends, as in other repo-style transactions, on the frequency of margining.

⁷⁶ The starting point for this formula is the formula in paragraph [105], which can also be presented as the following:

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

- H_{fx} = haircut appropriate for currency mismatch

(g) *Collateralised OTC derivatives transactions*

123. Collateralised OTC derivatives transactions must be risk-weighted on the basis of the exposure amount calculated according to the standardised approach for counterparty credit risk (SA-CCR). In particular, the exposure amount under this approach must be calculated as follows:

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

where:

- α = 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

124. 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 [105]. 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 [108 and 116] and [70 to 74] must be applied.

5. Guarantees and credit derivatives

(i) Operational requirements for guarantees and credit derivatives

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

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

- it represents a direct claim on the protection provider;
- it is explicitly referenced to specific exposures or a pool of exposures, so that the extent of the cover is clearly defined and incontrovertible;
- 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;⁷⁷
- (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.

127. In the case of maturity mismatches, the amount of credit protection that is provided must be adjusted in accordance with paragraphs [70 to 74].

(ii) Specific operational requirements for guarantees

128. In addition to the legal certainty requirements in paragraph [69], 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].

(iii) Specific operational requirements to credit derivatives

129. In addition to the legal certainty requirements in paragraph [69], 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 charge-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.

⁷⁷ There must be no possibility for the protection to change the maturity agreed *ex post*.

- (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 paragraph [70 to 74] 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.
- (iv) Range of eligible guarantors (counter-guarantors)/protection providers and credit derivatives

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

- Sovereign entities,⁷⁸ PSEs, MDBs, banks, and prudentially regulated financial institutions;⁷⁹
- Parent companies, subsidiaries, and affiliate companies of the counterparty;
- Provided that the credit protection is not provided to a securitisation, other entities that meet all of the following conditions:

⁷⁸ 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(a)] and referred to in footnote [47].

⁷⁹ 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 the *Regulatory capital requirements framework for bank exposures to central counterparties*, available at www.bis.org/publ/bcbs227.pdf.

- (a) The entity is externally audited or its common shares are publicly traded on a recognised security exchange;
- (b) The entity has an established economic relationship with the counterparty to the guarantee under legally enforceable contract(s) to sell or purchase goods and/or services;
- (c) The entity provides credit protection to an extent that is commensurate with its economic relationship with the counterparty to the guarantee.

131. Only credit default swaps and total return swaps that provide credit protection equivalent to guarantees are eligible for recognition.⁸⁰ 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.

132. 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

133. 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.

134. 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

135. 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

136. 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.

⁸⁰ 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.

(vi) Currency mismatches

137. 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:

- 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 [116].

(vii) Sovereign guarantees and counter-guarantees

138. 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 claims guaranteed by the sovereign (or central bank), where the guarantee is denominated in the domestic currency and the exposure is funded in that currency. A claim may be covered by a guarantee that is indirectly counter-guaranteed by a sovereign. Such a claim may be treated as covered by a sovereign guarantee provided that:

- (a) the sovereign counter-guarantee covers all credit risk elements of the claim;
- (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 claim; 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.