

DRAFT



**AUTORITÉ
DES MARCHÉS
FINANCIERS**

CAPITAL ADEQUACY GUIDELINE

**Credit unions not member of a federation, trust
companies and savings companies**

March 31, 2019

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Abbreviations

Abbreviations used	Expressions
ABS	Asset-backed securities
ABCP	Asset-backed commercial paper
AMA	Advanced measurement approach
BCBS	Basel Committee on Banking Supervision
BIS	Bank for international settlements
CC	Central counterparty
CCF	Credit conversion factor
CCR	Counterparty credit risk
CICA	Canadian Institute of Chartered Accountants
CMHC	Canada Mortgage and Housing Corporation
CRE	Commercial real estate
CRM	Credit risk mitigation
CMV	Current market value
D-SIFI	Domestic Systemically Important Financial Institution
DTA	Deferred tax assets
DTL	Deferred tax liabilities
DvP system	Delivery-versus-payment system
ECA	Export credit agency
ECAI	External credit assessment institution
Fitch	Fitch Rating Services
FMI	Future margin income
FSAP	Financial Sector Assessment Program
FSB	Financial Stability Board
FSCA	Act respecting financial services cooperatives

Abbreviations used	Expressions
GAAP	Generally accepted accounting principles
G-SIFI	Global Systemically Important Financial Institution
IAA	Internal assessment approach
IFRS	International Financial Reporting Standards
IMF	International Monetary Fund
IOSCO	International Organization of Securities Commissions
IRB approach	Internal ratings-based approach
KBRA	Kroll Bond Rating Agency, Inc.
MDB	Multilateral development bank
Moody's	Moody's Investors Service
MPOR	Margin Period of Risk
MTA	Minimum Transfer Amount
NHA	National Housing Act
NICA	Net Independent Collateral Amount
OECD	Organisation for Economic Co-operation and Development
PSE	Public sector entity
QCC	Qualifying Central Counterpartie
RC	Replacement cost
RRE	Residential real estate
S&P	Standard & Poor's
SA-CCR	Standardised Approach for counterparty credit risk
SFTs	Securities financing transactions
SM	Standard method
SPV	Special purpose vehicle
TLAC	Total Loss Absorbing Capacity

Abbreviations used	Expressions
UCITS	Undertakings for collective investments in transferable securities
VaR	Value at risk

Introduction

The *Act respecting trust companies and savings companies*¹ (TCSCA) and the *Act respecting financial services cooperatives* (FSCA),² empower³ the AMF to issue guidelines concerning the adequacy of their capital.⁴ In addition, legislative provisions impose capital requirements pursuant to which trust companies and savings companies (companies), as well as credit unions not members of a federation⁵ (credit unions), must maintain adequate capital⁶ for their operations. They are also required to adhere to sound and prudent management practices by complying with this Guideline.⁷

The *Capital Adequacy Guideline* was provided to credit unions not members of a federation, trust companies and savings companies in January 2011. That Guideline sets out with certain adjustments the capital measurement requirements also known as “Basel II”, initially published in June 2006.

This capital standard proposes a comprehensive risk-sensitive approach, encouraging financial institutions to better manage and more accurately assess their risks. This framework is based on three pillars.

Pillar 1 (Chapters 1 to 7) makes it possible to adapt the minimum capital requirements to the risk profile of each establishment by offering establishments a broader range of methods for assessing credit, operational and market risks.

Pillar 2 (Chapter 8) deals with the supervisory review process and is intended not only to ensure that establishments have adequate capital to support all the risks in their business, but also to encourage them to develop and use better risk management and monitoring techniques.

Pillar 3 (Chapter 9) is designed to increase market discipline by ensuring that financial institutions foster and focus on transparency and communication with respect to their risk exposures.

Approach adopted for the Guideline

¹ CQLR, c. S-29.01.

² CQLR, c. C-67.3.

³ After June 13, 2019, the *Deposit Institutions and Deposit Protection Act*(DIDPA) will be the act () that empower the AMF to issue guidelines concerning the adequacy of capital instead of the FSCA.

⁴ Section 565.1 FSCA and Section 314.1 (1) TCSCA. After June 13th, 2019, we will refer to Section 565.1 FSCA, 254 TCSCA and 42.2 DIDPA.

⁵ For purposes of the FSCA, every credit union is, by definition, a financial services cooperative (s. 1 of the FSCA).

⁶ Section 451 FSCA and Section 195 TCSCA. After June 13th, 2019, we will refer to Section 451 FSCA, 46 TCSCA and 28.21 DIDPA.

⁷ Section 66 FSCA and Section 177.2 TCSCA. After June 13th, 2019, we will refer to Section 451 FSCA, 46 TCSCA and 28.21 DIDPA.

This Guideline was developed in light of the characteristics of the target financial institutions and with due regard to optimum harmonization of requirements, given that several of these financial institutions operate in other markets.

Since this Guideline applies to credit unions and companies, the text includes certain specific considerations, particularly in the first two chapters, given that they deal with the scope of application of the Guideline and the definition of capital, both of which are tailored to the specific characteristics of such institutions. In addition, in those areas in which “national discretion” may be exercised or when the AMF wishes to clarify the expected treatment, the way the requirements are to be applied are described in text boxes clearly identified as “AMF Note”.

This Guideline also sets out the capital standards on which the AMF relies to assess whether a credit union or company maintains sufficient capital to ensure sound and prudent management under applicable laws.

It contains the requirements pertaining to the simpler approaches under the Basel II framework, that is, the standardized approach to credit risk and the basic indicator approach and standardized approach to operational risk. It does not include specific requirements for market risk. However, if the AMF considers that trading has become a more significant part of the activities of the target financial institutions, the AMF may revisit the capital adequacy requirements to take into consideration the effect of market risk on the risk profile of these establishments.

For ease of reference, the generic terms “financial institution” and “institution” refer to all credit unions and companies covered by the scope of this Guideline.

Coming into effect

This updated *Capital Adequacy Guideline* is effective on March 31, 2019.

Chapitre 1 Overview

Outlined below is an overview of capital adequacy requirements for credit unions and companies governed by the following statutes:

- *An Act respecting financial services cooperatives*, CQLR., c. C-67.3;
- *An Act respecting trust companies and savings companies*, CQLR, c. S-29.01⁸.

Scope of application

This *Capital Adequacy Guideline* applies, on a consolidated basis, to each credit union and each company, and covers primarily all the operations of the credit union or company and all other financial activities carried out within their subsidiaries.

In the normal course, a credit union carries on financial activities such as receiving deposits, providing credit and offering other financial products and services to its members.

In the normal course, a trust company acts as tutor or curator to property, liquidator, syndic, sequestrator, adviser to a person of full age, trustee or fiduciary. A savings company borrows funds in the form of deposits for the purposes of loans and investments.

For purposes of computing regulatory capital, the Guideline applies on a consolidated basis, including all the subsidiaries controlled by the institution.

The following are excluded from a consolidated institution by way of deconsolidation:

- investments in insurance subsidiaries;
- investments in other regulated financial institutions whose leverage is inappropriate for a deposit institution.

⁸ Note that on June 13, 2019, credit unions and others companies will also be governed by the *Deposit Institutions and Deposit Protection Act*.

1.1 Leverage ratio

AMF Note

This leverage ratio is described briefly below and in greater detail in Annex 1-IV.

However, unlike other countries, Canada already has a leverage ratio which is defined slightly differently from that of the Basel Committee in terms of its composition. This former ratio will be replaced by the Basel III leverage ratio (leverage ratio).

The AMF expects institutions covered by this Guideline to maintain on a continuous basis a minimum leverage ratio greater or equal to 3%.

In order to minimize the number of definitions of capital, the category of capital (capital 1) used to compute the leverage ratio is defined in Chapter 2 of this Guideline.

The paragraphs in this section are drafted from the document entitled *Basel III: Leverage Ratio Framework and Disclosure Requirements*, published in January 2014. Since the provisions of these paragraphs are subject to modifications based on changes in the calibration criteria, the AMF, if necessary, will revise the provisions contained in Annex 1-IV.

The Basel Committee has published, on December 7, 2017, its revised provisions regarding the Leverage Ratio Framework. This framework should come into force on January 1, 2022.

The AMF should integrate these provisions in a future update of this Guideline.

The leverage ratio is defined as the capital measure (the numerator)⁹ divided by the exposure measure (the denominator).

This ratio expressed as a percentage is computed as follows:

$$\text{Leverage ratio} = \frac{\text{Capital measure}}{\text{Exposure measure}}$$

Each financial institution, as defined in Section 1.1, must maintain on a continuous basis a minimum leverage ratio greater or equal to 3%. This ratio provides an overall measure of the adequacy of capital in light of the importance of the institution's total exposure.

The provisions concerning the items included in the calculation of this ratio are in Annex 1-IV.

⁹ Capital to consider is Tier 1A and Tier 1B capital.

1.2 Calculation of minimum capital requirements

Institutions are expected to meet minimum risk-based capital requirements for exposure to credit risk and operational risk. Total risk-weighted assets are determined by multiplying the capital requirements for operational risk by 12.5 (i.e. the reciprocal of the minimum capital ratio of 8%) and adding the resulting figures to risk-weighted assets for credit risk. The risk based capital ratio is calculated by dividing regulatory capital by total risk-weighted assets.

For each asset category comprising the high quality capital base, a minimum ratio must be maintained.

These ratios are calculated as follows:

$$\text{Risk Based capital ratio} = \frac{\text{Capital}}{\text{Credit RWA}_{\text{Standard}} + [12.5 \times \text{Operational Risk}]}$$

Where:

Capital = Tier 1A capital or total capital as set out in Chapter 2¹⁰

Credit RWA_{Standard} = Risk-weighted assets for credit risk determined using the Standardized approach in Chapters 3, 4 and 5

Operational Risk = The operational risk capital charge calculated using one of the approaches in Chapter 6

The minimum capital requirements, which must be maintained on a continuous basis, are a Tier 1A, Tier 1 and total capital ratio of 7% (including a conservation buffer¹¹ of 2.5%), 8.5% and 10.5% respectively.

1.3 Regulatory capital

Certain criteria for inclusion are used to define the consolidated capital of an institution for purposes of measuring capital adequacy. These criteria will be presented in Chapter 2 of the Guideline.

¹⁰ The definition of Tier 1 capital (1A and 1B) is presented in Chapter 2 of the Guideline.

¹¹ See Section 1.3.1 "Capital conservation buffer" and Annex 1-III.

Regulatory capital will consist of the sum of the following elements:

1. Tier 1 capital (going-concern capital). Tier 1 capital is divided into two broad groups, Tier 1A and Tier 1B.
2. Tier 2 capital (gone-concern capital).

For each of the three tiers above (1A, 1B and 2) there is a single set of criteria defined in Chapter 2 of the Guideline that instruments are required to meet before inclusion in the relevant tier.

Tier 1 capital includes the highest quality elements, i.e. they meet the criteria for inclusion.

Tier 2 capital does not meet the Tier 1 criteria for inclusion but must meet other criteria. It contributes to overall solidity by absorbing losses on liquidation.

1.3.1 Capital conservation buffer

Comment

The following paragraphs regarding the capital conservation buffer are drawn from the Basel Committee's *Basel III: A global regulatory framework for more resilient banks and banking system*, published in December 2010 and revised in June 2011.

Although the AMF reproduces (before adjustment) paragraphs 122 to 133 of Section III of this document, the Basel numbering is not maintained to avoid confusion with certain subsequent paragraphs in the Guideline that have the same numbering. Paragraphs with Roman numerals are imported from the Basel document.

- i. The capital conservation buffer is designed to ensure that institutions build up capital buffers outside periods of stress which can be drawn down as losses are incurred. The requirement is based on simple capital conservation rules designed to avoid breaches of minimum capital requirements.
- ii. Outside of periods of stress, institutions should hold buffers of capital above the regulatory minimum.
- iii. When buffers have been drawn down, one way institutions should look to rebuild them is through reducing discretionary distributions of surplus capital / earnings. (e.g. drawbacks / dividends, share and unit buybacks and staff bonus payments). Institutions may also choose to conserve internally generated capital. The balance between these options should be discussed with the AMF as part of the capital planning process.
- iv. It is clear that institutions should make greater efforts to rebuild buffers the more they have been depleted. Therefore, in the absence of raising capital, the share of surplus capital / earnings retained by institutions for the purpose of rebuilding their

capital buffers should increase the nearer their actual capital levels are to the minimum capital requirement.

- v. It is not acceptable for an institution which has depleted its capital buffer to use future predictions of recovery as justification for maintaining generous distributions to members / shareholders, other capital providers and employees. These stakeholders, rather than depositors, must bear the risk that recovery will not be forthcoming.
- vi. It is also not acceptable for an institution which has depleted its capital buffers to try and use the distribution of capital as a way to signal their financial strength. Not only is this irresponsible from the perspective of an individual institution, putting members' / shareholders' interests above depositors, it may also encourage other financial institutions to follow suit. As a consequence, financial institutions in aggregate can end up increasing distributions at the exact point in time when they should be conserving surplus capital / earnings.
- vii. Paragraph not retained – general information about system resilience.
- viii. The capital conservation buffer is established at 2.5% and must be comprised of Tier 1A capital. This buffer is established above the minimum capital requirement.¹² Capital distribution constraints will be imposed on an institution when capital levels fall within this range. Institutions will be able to conduct business as normal when their capital levels fall into the conservation range as they experience losses. The constraints imposed only relate to distributions, not the operation of the institution.
- ix. The distribution constraints imposed on institutions when their capital levels fall into the range increase as the institutions capital levels approach the minimum requirements. By design, the constraints imposed on institutions with capital levels at the top of the range would be minimal.
- x. The table presented in Annex 1-I shows the minimum capital conservation ratios an institution must meet at various levels of the Tier 1A capital ratios. As soon as they take effect, the conservation ratios will remain in place until the required capital ratios are met.

For example, an institution with a Tier 1A capital ratio in the range of 4.5% and 5.125% in 2018 is required to conserve 100% of its surplus capital / earnings in the subsequent financial year (i.e. no payout of its surplus capital / earnings in terms of drawbacks / dividends, share and unit buybacks and discretionary bonus payments).

If the institution wants to make payments in excess of the constraints imposed by the table in Annex 1-II, it would have to raise capital equal to the amount above the constraint which it wishes to distribute. This would be discussed with the AMF as part of the capital planning process.

¹² Tier 1A capital must meet the minimum requirements before contributing to the capital conservation buffer.

- xi. Set out below are a number of other key aspects of the requirements:
- a) *Elements subject to the restriction on distributions:* These items include drawbacks/dividends, share and unit buybacks, discretionary payments on other Tier 1A capital instruments and discretionary bonus payments to staff. Payments that do not result in a depletion of Tier 1A capital are not considered distributions.
 - b) *Definition of surplus capital:* Surplus capital is defined as distributable surplus calculated prior to elements subject to the restriction on distributions. Surplus capital is calculated after the tax which would have been reported had none of the distributable items been paid. As such, any tax impact of making such distributions are reversed out. Where an institution does not have positive surplus capital / earnings and has a Tier 1A capital ratio less than 7%, it would be restricted from making positive net distributions.
 - c) Consolidated application – The framework should be applied to the institution at the consolidated level, i.e. restrictions would be imposed on distributions out of the institution.

1.3.2 Countercyclical capital buffer

AMF Note

The coming provision on countercyclical buffer are drawn from the Basel committee document named: "Basel III: A global regulatory framework for more resilient banks and banking systems" published in December 2010 and revised in June 2011.

The AMF reproduces and adapts the provisions contain in the 137 to 147 (Section IV) of the above document.

The Basel numbering is not maintained to avoid confusion with certain subsequent paragraphs in the Guideline that have the same numbering. Thus, the AMF will use for this section Roman numerals.

- xii. The countercyclical buffer aims to ensure that banking sector capital requirements take account of the macro-financial environment in which institutions operate. It will be deployed by the AMF when excess aggregate credit growth is judged to be associated with a build-up of system-wide risk to ensure the banking system has a buffer of capital to protect it against future potential losses. This buffer is likely to help financial sector to have a reserve of capital to absorb any losses.

- xiii. The countercyclical buffer regime consists, of the following elements:
- a) The AMF will monitor credit growth and other indicators¹³ that may signal a build-up of system-wide risk¹⁴ and make an assessment of whether credit growth is excessive and is leading to the build-up of system-wide risks. Based on this assessment, a countercyclical buffer requirement, ranging from 0% to 2.5% of total risk-weighted assets, will be put in place when circumstances warrant. This requirement will be released when that system-wide risk have dissipated or crystallized.
 - b) Institutions with private sector credit exposures outside Canada¹⁵ will look at the geographic location of those exposures and calculate their consolidated countercyclical capital buffer requirement as a weighted average of the requirements that are being applied in jurisdictions to which they have credit exposures.
 - c) The countercyclical buffer requirement to which the institution is subject will be implemented by way of an extension of the capital conservation buffer. Institutions will be subject to restrictions on distributions of earnings if they do not meet the requirement.

Institutions must meet this buffer with Common Equity Tier 1 or equivalent. The requirement to which an institution is subject is implemented through an extension of the capital conservation buffer described in section 1.3.1. Consistent with the capital conservation buffer, the Common Equity Tier 1 ratio in this context includes amounts used to meet the 4.5% minimum Common Equity Tier 1 requirement, but excludes any additional Common Equity Tier 1 needed to meet the 6% Tier 1 and 8% Total Capital requirements, i.e. CET1 must first be used to meet minimum capital requirements (including the Tier 1 and Total Capital requirements) before the remainder can contribute to the capital buffers.¹⁶

¹³ The document Guidance for national authorities operating the countercyclical capital buffer sets out the principles that national authorities have agreed to follow in making buffer decisions. This document provides information that should help institutions to understand and anticipate the buffer decisions made by national authorities in the jurisdictions to which they have credit exposures. This document is available at www.bis.org/publ/bcbs187.pdf. [BCBS June 2011 par 140]

¹⁴ The Bank of Canada's Financial System Review (FSR) will be the primary source of public information on macro-financial developments and the state of vulnerabilities in Canada with regard to the countercyclical buffer.

¹⁵ The paragraph 143 of the BSBS -Juin 2011 state that all private sector credit exposures that attract a credit risk capital charge or the risk weighted equivalent trading book capital charges for specific risk, IRC and securitisation are included in the credit exposure.

¹⁶ [BCBS June 2011 footnote 53]

- xiv. The decision to activate, increase, decrease or cancel the counter-cyclical reserve will be formally communicated by means of a notice from the AMF.

The scope of application and the rationale would be described in the AMF notice. To give institutions time to adjust to a buffer level, The AMF will pre-announce its decision to activate or raise the level of the countercyclical buffer by up to 12 months but no less than 6 months¹⁷.

Conversely, decisions to release the countercyclical buffer will normally take effect immediately. Institutions with foreign exposures are expected to match host jurisdictions' implementation timelines unless the announcement period is shorter than 6 months in which case compliance will only be required 6 months after the host's announcement.

- xv. Institutions will thus be subject to a consolidated countercyclical buffer that varies between 0%, where no jurisdiction where exposures reside has activated a buffer, and 2.5% of total RWA.
- xvi. The consolidated buffer will be a weighted average of the buffers deployed in Canada and across BCBS member jurisdictions and selected non-member jurisdictions¹⁸ to which the institution has private sector credit exposures.

Institutions will look at the geographic location of their private sector credit exposures and calculate their consolidated countercyclical buffer as a weighted average of the buffers that are being applied in each jurisdiction to which they have such exposures. The buffer that will apply to an institution will thus reflect the geographic composition of its portfolio of private sector credit exposures.

Private sector credit exposures in this context include all private sector credit exposures¹⁹, that attract a credit risk capital charge (RWA), including non-bank financial sector and securitisations but excluding banques.

- xvii. The weighting applied to the buffer in place in each jurisdiction will be the institution's credit risk RWA that relates to private sector credit exposures in that jurisdiction²⁰, divided by the institution's credit risk RWA that relates to private sector credit exposures across all jurisdictions. When considering the jurisdiction to

¹⁷ Institutions outside of this jurisdiction with credit exposures to counterparties in this jurisdiction will also be subject to the increased buffer level after the pre-announcement period in respect of these exposures. However, in cases where the pre-announcement period of a jurisdiction is shorter than 12 months, the home authority of such institutions should seek to match the preannouncement period where practical, or as soon as possible (subject to a maximum preannouncement period of 12 months), before the new buffer level comes into effect.

¹⁸ <https://www.bis.org/bcbs/ccyb/index.htm>

¹⁹ See [Basel Capital Adequacy Return \(BCAR\) instructions](#) for detailed technical instructions

²⁰ When considering the jurisdiction to which a private sector credit exposure relates, institutions should use, where possible, an ultimate risk basis; i.e. it should use the country where the guarantor of the exposure resides, not where the exposure has been booked.

which a private sector credit exposure relates, institutions should use an ultimate risk basis. Ultimate risk refers to the jurisdiction where the final risk lies as opposed to the jurisdiction of the immediate counterparties

1.4 Total risk weighted assets (RWA)

1.4.1 Credit risk approach

This Guideline presents an approach to measuring credit risk, namely, the standardized approach described in Chapter 3.

Under this approach, the institution uses assessments by external credit assessment institutions recognized by the AMF to determine risk weights for:

- Claims on sovereigns and central banks.
- Claims on non-central government public sector entities.
- Claims on multilateral development banks.
- Claims on banks and securities firms.
- Claims on corporates.

On-balance sheet exposures under the standardized approach are measured at book value, with the exception of:

- Loans fair valued under fair value option, fair value hedge
- Own-use property, plant and equipment.

The above instruments should instead be measured at amortized cost. All exposures subject to the standardized approach are risk-weighted net of specific allowances.

Reported exposures for own-use property should be based on book value, adjusted by the following:

- Before-tax amounts reversed by retained surpluses or earnings as required by Section 2.5;
- The balance of any re-evaluation surplus on own-use property included in other comprehensive income.

1.4.2 Operational risk approaches

There are two approaches to operational risk described in this Guideline: the Basic Indicator Approach and the Standardized Approach, both described in Chapter 6.

The Basic Indicator Approach requires institutions to calculate operational risk capital requirements by applying a factor of 15% to a three-year average of positive annual

gross income. Figures for any year in which annual gross income is negative or zero, should be excluded from both the numerator and denominator when calculating the average.

The Standardized Approach divides institutions' activities into eight business lines. The capital requirement is calculated by applying a specific weighting factor to the annual gross income for each business line. The total capital charge is calculated as the three-year average of the simple summation of the regulatory capital charges across each of the business lines in each year. However, where the aggregate capital charge across all business lines within a given year is negative, then the input to the numerator for that year will be zero.

An institution that wishes to use the standard approach for calculating the capital requirement for operational risk must obtain the authorization of the Authority to do so.

Chapter 2 Definition of capital

The provisions of this chapter are based primarily on the document published by the Basel Committee on Banking Supervision in December, 2010 and its revision in June, 2011, entitled *Basel III: A global regulatory framework for more resilient banks and banking systems*.²¹ This document presents a definition of capital according to Basel III which financial institutions must comply with in order to follow the sound practices developed by the Basel Committee.

Remark

The following paragraphs regarding the definition of capital and the related regulatory adjustments are drawn from the *Basel Committee's Basel III: A global regulatory framework for more resilient banks and banking systems* published in December 2010 and revised in June 2011.

The AMF reproduces and adjusted some of paragraphs 52 to 96 of this document. To facilitate a comparison with national and international standards, the Basel numbering is maintained despite the fact that certain subsequent paragraphs in the Guideline (under Basel II) have the same numbering.

2.1 Regulatory capital and criteria for inclusion

Regulatory capital is made up of the following:

- Tier 1 capital, which is divided into two sub-tiers:
 - Tier 1A capital.
 - Tier 1B capital.
- Tier 2 capital.

2.1.1 Définition of capital and eligibility criteria

2.1.1.1 Tier 1A capital

52. An institution's Tier 1A capital includes elements which meet the criteria for inclusion.

Tier 1 capital includes the following elements:

²¹ The Basel Committee also published a complementary document in December 2011, entitled *Basel III: Definition of Capital - Frequently asked questions*.

- Reserves²² and retained surpluses.²³
- Capital shares^{23 24} that meet the criteria for inclusion of paragraph 53 of this section.
- Common shareholders' equity, defined as common shares, contributed surplus²⁵ and retained earnings.²⁶
- Qualifying non-controlling interests arising on consolidation from Tier 1A capital instruments.²⁷
- Other comprehensive income and other published reserves.²⁸

Additional payments other than applicable interest must be deducted from Tier 1A capital in accordance with Canadian generally accepted accounting principles.

Moreover, regulatory adjustments applied to the calculation of capital instruments of Tier 1A, as presented in Section 2.1.1.1, should be taken into account.

53. Instruments comprising Tier 1A must meet the following criteria for inclusion, without exception:
1. The instrument represents the most subordinated claim in liquidation of the institution.
 2. The instrument gives entitlement to a claim on the residual assets that is proportional with its share of issued capital, after all senior claims have been repaid in liquidation.^{29, 30}
 3. The principal is perpetual and never repaid outside of liquidation (setting aside discretionary repurchases that are allowable under relevant law and subject to the prior written approval of the AMF).
 4. The institution must do nothing to create an expectation at issuance that the instrument will be bought back, redeemed or cancelled and the promotional material must not mention any terms which might give rise to such an expectation.

²² Section 84 FSCA.

²³ For credit unions only.

²⁴ Section 54 to 63, 547.6 and 547.7 FSCA.

²⁵ When the repayment requires the prior written approval of the AMF.

²⁶ For societies only.

²⁷ See paragraph 53, Section 2.1.1.1.

²⁸ The Basel Committee continues to review the appropriate treatment of unrealized gains, taking into account the evolution of the accounting framework. The AMF will monitor developments in this chapter on the international scene and adjusts these provisions as needed

²⁹ In accordance with the legislation in force.

³⁰ For shareholders institutions, the instruments confer a right to a claim on the residual assets.

5. Distributions are paid out of distributable surplus capital / retained earnings³¹. The level of distributions is not in any way tied to the amount paid in at issuance in accordance with relevant law.
6. There are no circumstances under which the distributions are obligatory and non-payment is therefore not an event of default.
7. Distributions are paid (where applicable) only after all legal and contractual obligations have been met and payments on more senior capital instruments have been made.
8. Within the highest quality capital, each instrument absorbs losses on a going concern basis proportionately and *pari passu* with all the others.
9. The paid-in amount is recognized as equity capital (i.e. not recognized as a liability) for determining balance sheet insolvency.
10. The paid-in amount is classified as equity under Canadian generally accepted accounting principles.
11. It is directly issued and paid-in and the institution cannot directly or indirectly have funded the purchase.³²
12. The paid-in amount is neither secured nor covered by a guarantee of the issuer or related entity or subject to any other arrangement that legally or economically enhances the seniority of the claim.
13. It is only issued with the approval of the Board of Directors in accordance with applicable law.
14. It is clearly and separately disclosed on the institution's balance sheet³³ and is determined according to Canadian generally accepted accounting principles

³¹ There are no Basel III requirements that prohibit dividend distributions as long as the institution meets the minimum capital ratios to which it is subject and does not exceed any of the distribution constraints of the capital conservation and countercyclical buffers (extended, as applicable, to Higher Loss Absorbency Capital Surcharge). Accordingly, dividends/coupons may be paid out of reserves available for distribution (including those reserves accumulated in prior years) provided that all minimum ratios and buffer constraints are observed. [BCBS, FAQ No.6 – September 2017]

³² Paid-up capital designate, in general, the irrevocable capital received by the institution, whose value has been reliably established, which is under full control of the institution and does not expose directly or indirectly, to credit risk of the investor. The criteria for inclusion in capital do not specify how an instrument must be “paid-in”. Payment of cash to the issuing institution is not always applicable, for example, when an institution issues shares as payment for the take-over of another company the shares would still be considered to be paid-in. However, an institution is required to have prior supervisory approval to include in capital an instrument which has not been paid in with cash. [BCBS, FAQ, No. 5-September 2017].

³³ This requirement is about the nature of the item, ie that it is separately disclosed on the face of a bank's balance sheet, and not about the frequency of the disclosure. In the context of the nature, yes, it is the balance sheet in the audited financial statements as published in the annual report. The Basel requirements are for consolidated group levels, and the treatment at an entity level should follow the domestic requirements. As for the frequency, where a bank publishes results on a half yearly or quarterly basis disclosure should also be made at those times. [BCBS, FAQ No.6 - September 2017]

2.1.1.2 Tier 1B capital

54. Tier 1B capital consists of the sum of the following elements:
1. instruments issued by the institution which do not meet the criteria for inclusion in Tier 1A capital and which meet the fourteen criteria presented in paragraph 55 for inclusion and the criterion relating to non-viability contingent capital (criterion 15);
 2. instruments issued by consolidated subsidiaries of the institution and held by third parties that meet the criteria for inclusion in Tier 1B capital and are not included in Tier 1A capital.

Moreover, regulatory adjustments applied to the calculation of Tier 1B capital, as presented in Section 2.1.1.2, should be taken into account.

55. Criteria for inclusion in Tier 1B capital are the following:
1. issued and paid-in in cash or, with the prior approval of the AMF, by other means of payment;
 2. subordinated to depositors, general creditors and subordinated debt of the institution;
 3. neither secured nor covered by a guarantee of the issuer or related entity or other arrangement that enhances the seniority of the claim vis-à-vis the other elements mentioned in point 2 above³⁴;
 4. perpetual, i.e. there is no maturity date and there are no step-ups^{35,36} or other incentives to redeem³⁷;

³⁴ When the entity uses an ad hoc structure to issue capital for the benefit of investors and, moreover, it supports this structure (for example by providing reserves to it), this support constitutes an enhancement and therefore is contrary to this criterion. [BCBS, P.54-56 FAQ No.1 - September 2017]

³⁵ A step-up is defined as a call option combined with a pre-set increase in the initial credit spread of the instrument at a future date over the initial dividend (or distribution) rate after taking into account any swap spread between the original reference index and the new reference index. Conversion from a fixed rate to a floating rate (or vice versa) in combination with a call option without any increase in credit spread would not constitute a step-up.

³⁶ When, after the first repayment date, the issuer is subject to a withholding tax levy on the basis of the interest payments to which it was not previously subject, even if the instrument was structured on the basis of so on issue, this constitutes a step-up of remuneration under this paragraph. [BCBS, P.54-56 FAQ No.2 - September 2017]

³⁷ The following list provides some examples of what would be considered to be an incentive to redeem:

- A call option combined with an increase in the credit spread of the instrument if the call is not exercised;
- A call option combined with a requirement or an investor option to convert the instrument into shares if the call is not exercised;

5. may be callable at the initiative of the issuer only after a minimum of five years³⁸:
 - to exercise a call option, an institution must receive the prior approval of the AMF;
 - an institution must not do anything which creates an expectation that the call will be exercised³⁹;
 - institutions must not exercise a call unless:
 - they replace the called instrument with capital of the same or better quality, including retained earnings, which are sustainable for the income capacity of the institution on an ongoing basis;⁴⁰ or
 - the institution demonstrates that its capital position is well above the minimum capital requirements after the call option is exercised.
6. Any repayment of principal (e.g. through repurchase or early repayment) must be with AMF's prior approval and institutions should not assume or create market expectations that AMF's approval will be given.
7. Dividend/coupon discretion⁴¹:

-
- A call option combined with a change in reference rate where the credit spread over the second reference rate is greater than the initial payment rate less the swap rate (ie the fixed rate paid to the call date to receive the second reference rate). For example, if the initial reference rate is 0.9%, the credit spread over the initial reference rate is 2% (ie the initial payment rate is 2.9%), and the swap rate to the call date is 1.2%, a credit spread over the second reference rate greater than 1.7% (2.9-1.2%) would be considered an incentive to redeem. [BCBS, FAQ No. 7 - September 2017]

³⁸ The use of tax and regulatory event calls are permitted. The exercise of the call remains subject to the requirements set out in points (a) to (c) of criterion 5. However, the AMF will only permit the institution to exercise the call if in his view, the institution was not in a position to anticipate the event at issuance. [BCBS, FAQ No. 15 - September 2017]

³⁹ If an institution were to call a capital instrument and replace it with an instrument that is more costly (eg has a higher credit spread) this might create an expectation that the institution will exercise calls on its other capital instruments. As a consequence, institutions should not expect the AMF to permit them to call an instrument if the institution intends to replace it with an instrument issued at a higher credit spread. [BCBS, FAQ No. 8 - September 2017]

⁴⁰ Replacement issuances can be concurrent with but not after the instrument is called.

⁴¹ Dividend stopper arrangements that stop dividend payments and other payments on common shares or equivalent are not prohibited by the Basel III rules text. Furthermore, dividend stopper arrangements that stop dividend payments on other Tier 1B instruments are not also prohibited. However, stoppers must not impede the full discretion that institution must have at all times to cancel distributions/payments on the Tier 1B instrument, nor must they act in a way that could hinder the recapitalisation of the institution (see criteria 13). For example, it would not be permitted for a stopper on an Tier 1B instrument to:

- attempt to stop payment on another instrument where the payments on this other instrument were not also fully discretionary;

- The institution must have full discretion at all times to cancel payments.
 - Cancellation of discretionary payments must not be an event of default or credit event.
 - Institutions must have full access to cancelled payments to meet obligations as they fall due.
 - Cancellation of distributions/payments must not impose restrictions on the institution except in relation to distributions to holders of eligible capital units / common shares.
8. Remuneration under the instrument must be paid out of distributable surplus / earnings⁴².
 9. The instrument cannot have a credit sensitive dividend feature, that is a dividend/coupon that is reset periodically based in whole or in part on the institution's credit standing.
 10. The instrument cannot contribute to liabilities exceeding assets if applicable legislation determines that, in such cases, the institution is insolvent.
 11. Instruments designated as liabilities for accounting purposes must have principal loss absorption through:
 - conversion to Tier 1A capital / common shares at an objective pre-specified trigger point of at least 5.125% of Tier 1A capital instruments; or
 - a depreciation mechanism that pays losses out of the instrument at a pre-specified trigger point of at least 5.125% of Tier 1A capital instruments. The depreciation will have the following effects:
 - reduce the claim of the instrument in liquidation;
 - reduce the amount re-paid when a call is exercised;
 - fully or partially reduce remuneration payments on the instrument.

-
- prevent distributions to shareholders for a period that extends beyond the point in time that dividends/coupons on the Additional Tier 1 instrument are resumed;
 - impede the normal operation of the bank or any restructuring activity (including acquisitions/disposals).

A stopper may act to prohibit actions that are equivalent to the payment of a dividend, such as the institution undertaking discretionary instruments/share buybacks. [BCBS, FAQ No. 3 – September 2017]

⁴² See criterion 5 of CET1. [BCBS, FAQ No. 6 - September 2017]

12. Neither the institution nor a related party over which the institution exercises control or significant influence can have purchased the instrument, nor can the institution directly or indirectly have funded the purchase of the instrument.
13. The instrument cannot have any features that hinder recapitalization, such as provisions that require the issuer to compensate investors if a new instrument is issued at a lower price during a specified time frame.
14. If the instrument is not issued out of an operating entity or the holding company of the institution (e.g. a special purpose vehicle), proceeds must be immediately available without limitation to an operating entity or the holding company of the institution in a form which meets or exceeds all of the other criteria for inclusion in Tier 1B capital.

Additional criteria relating to non-viability contingent capital

15. The contractual terms and conditions of the instrument must include a clause requiring the full and permanent conversion into a Tier 1A capital instrument at the point of non-viability as described under the AMF's non-viability contingent capital (NVCC) requirements as specified under Section 2.4. When an instrument is issued by a special purpose vehicle (SPV) according to criterion 14 above, the conversion of instruments issued by the SPV to end investors should mirror the conversion of the capital issued by the institution to the SPV⁴³.

2.1.1.3 Tier 2 capital

57. Tier 2 capital (supplementary capital) comprises elements that do not satisfy the criteria for inclusion to the first two categories (Tier 1A and 1B), but contribute nonetheless to the overall strength of an institution based on its ability to absorb losses in the event of a liquidation.

Tier 2 capital includes elements which are not included in Tier 1, which meet all the criteria below and which meet the conversion principles. This could include a consideration of the following criteria, which should not be viewed as an exhaustive list:

- Qualifying shares.⁴⁴
- 99-year debentures,

⁴³ The AMF expects equity instruments issued for the benefit of the SPV to meet all eligibility criteria, as if the SPV itself were an ultimate investor. This means that the institution cannot issue lower quality capital (for example category 2) if the SPV issues high quality equity instruments to investors so that the quality of these funds is recognized as superior.

⁴⁴ For credit unions only.

- Capital instruments issued by consolidated subsidiaries and held by third parties.⁴⁵
- Authorized general allowances (see Section 2.1.2.6).

Moreover, regulatory adjustments applied to the calculation of Tier 2 capital, as presented in Section 2.1.1.3, should be taken into account.

58. Criteria for inclusion in Tier 2 capital are the following:

1. issued and paid-in in cash or, with the prior approval of the AMF, by other means of payment;
2. subordinated to depositors, general creditors of the institution;
3. is neither secured nor covered by a guarantee of the issuer or related entity or other arrangement that enhances the seniority of the claim vis-à-vis the other elements mentioned in the above point;
4. maturity:
 - a) minimum original maturity of at least five years;
 - b) recognition in capital in the remaining five years before maturity will be amortized on a straight-line basis;
 - c) no step-ups or other incentives to redeem;
5. may be callable at the initiative of the issuer only after a minimum of five years:
 - a) to exercise a call option an institution must receive the prior approval of the AMF;
 - b) an institution must not do anything which creates an expectation that the call will be exercised;
 - c) an institution must not exercise the call unless:
 - i it replaces the called instrument with capital of the same or better quality and the replacement of this capital is done at conditions which are sustainable for the income capacity⁴⁶ of the institution; or
 - ii the institution demonstrates that its capital position is well above the minimum capital requirements after the call option is exercised.

⁴⁵ These instruments are included in Tier 2 category if they meet the qualifying criteria exposed in paragraph 58 of Section 2.1.1.3.

⁴⁶ Replacement issuances can be concurrent with but not after the instrument is called.

6. The investor must have no rights to accelerate the repayment of future scheduled principal or interest payments, except in bankruptcy and liquidation.
7. The instrument cannot have a credit sensitive dividend feature; that is, a dividend or coupon that is reset periodically based in whole or in part on the institution's credit standing.
8. Neither the institution nor a related party over which the institution exercises control or significant influence can have purchased the instrument, nor can the institution directly or indirectly have funded the purchase of the instrument.
9. If the instrument is not issued out of an operating entity⁴⁷ but by an entity with the legal authority to do so (e.g. a special purpose vehicle), proceeds must be immediately available without limitation to an operating entity or the entity with legal authority in a form which meets or exceeds all of the other criteria for inclusion in Tier 2 capital.

Additional criteria regarding non-viability contingent capital

10. The contractual terms and conditions of the instrument must include a clause requiring the full and permanent conversion of the instrument into Tier 1A capital at the point of non-viability as described under the AMF's non-viability contingent capital (NVCC) requirements as specified under Section 2.4. Where an instrument is issued by a special purpose vehicle (SPV) according to criterion 9 above, the conversion of instruments issued by the SPV to end investors should mirror the conversion of the capital issued by the institution to the SPV.

2.1.2 Treatment of minorities interest

2.1.2.1 Tier 1A capital issued by a consolidated subsidiary and held by third parties

62. Treatment of minority interest issued to third parties out of consolidated subsidiaries of the institution.

Tier 1A capital instruments issued by a fully consolidated subsidiary of the institution to a third party may receive limited recognition in Tier 1A capital of the institution if:

⁴⁷ An operating entity is an entity set up to conduct business with clients with the intention of earning a profit in its own right.

- The instrument, if issued by the institution, met all of the criteria described in paragraphs 53 above for classification as Tier 1A capital for regulatory capital purposes.
- The subsidiary that issued the instrument is itself a deposit institution.⁴⁸

The amount meeting the criteria above that will be recognized in Tier 1A capital is calculated as follows:

- a) Paid-in capital plus retained earnings that are attributable to third-party investors, gross of deductions, less the amount of surplus Tier 1A capital of the subsidiary that is attributable to the third-party investors.
- b) The surplus Tier 1A capital of the subsidiary is calculated as the Tier 1A capital of the subsidiary, net of deductions, minus the lower of: (1) the minimum Tier 1A capital requirement of the subsidiary plus the capital conservation buffer and (2) the portion of the subsidiary's consolidated minimum Tier 1A capital requirements⁴⁹ plus the capital conservation buffer⁵⁰ that relates to the subsidiary.
- c) The amount of surplus Tier 1A capital that is attributable to the third-party investors is calculated by multiplying the surplus Tier 1A capital of the subsidiary (calculated in (b) above) by the percentage of Tier 1A capital that is attributable to third-party investors.

Common shares issued to third-party investors by a consolidated subsidiary which is not a deposit institution may not receive recognition in the consolidated Tier 1A capital of the institution. However, they may be included in the consolidated Tier 1 capital and in the total capital requirements of the institution, subject to the conditions indicated in paragraphs 62 (Section 2.1.2.1) and 64 (Section 2.1.2.3).

2.1.2.2 Tier 1 capital issued by a consolidated subsidiary and held by third parties

63. Tier 1 capital instruments issued by a fully consolidated subsidiary of the institution to third-party investors (including amounts under paragraph 62 of Section 2.1.2.1 and 64 of Section 2.1.2.3) may receive recognition in the

⁴⁸ A minority interest in a subsidiary that is a financial institution is strictly excluded from Tier 1A capital of the institution / entity if the institution / entity or affiliate have taken steps to finance directly or indirectly minority interest in the subsidiary through an SPV or other vehicle or arrangement. The treatment given above is strictly available when all minority interests in subsidiary institution / entity represent only genuine contributions of others in the form of Tier 1A capital to the subsidiary.

⁴⁹ This amount must exclude all intercompany exposures (e.g. loans and debentures) of the subsidiary to the institution that inflate RWA of the subsidiary.

⁵⁰ Calculated according to the method of RWA of the local supervisor, i.e., if the requirements of that supervisor are based on the Basel I rules, that calculation method can be used. The calculation must still be based on the minimum plus the capital conservation buffer.

consolidated Tier 1 capital of the institution only if the instrument, if issued by the institution, would meet or exceed all of the criteria for classification as Tier 1B capital.

The amount of capital that will be recognized in Tier 1 is calculated as follows:

- a) paid-in capital plus related reserves/retained earnings that are attributable to third-party investors, gross of deductions, less the amount of surplus Tier 1A capital of the subsidiary that is attributable to the third-party investors;
- b) surplus Tier 1 capital of the subsidiary is calculated as the Tier 1 capital of the subsidiary, net of deductions, minus the lower of: (1) the minimum Tier 1 capital requirement of the subsidiary plus the capital conservation buffer⁵¹ to which conservation standards would apply and (2) the portion of the parent's consolidated minimum Tier 1 capital⁵² requirements plus the capital conservation buffer⁵³ that relates to the subsidiary;
- c) the amount of Tier 1 capital that is attributable to third-party investors is calculated by multiplying the Tier 1 capital of the subsidiary (calculated in (b) above) by the percentage of Tier 1 that is held by third-party investors.

The amount of Tier 1 capital that will be recognized in Tier 1B capital will exclude amounts recognized in Tier 1A capital in accordance with paragraph 62 (Section 2.1.2.1).

2.1.2.3 Tier 2 capital issued by a consolidated subsidiary and held by third parties

64. Minority interest capital issued out of a consolidated subsidiary of the institution.

Total capital instruments (Tier 1 and Tier 2 capital instruments) issued by a fully consolidated subsidiary of the institution to third-party investors (including amounts under paragraphs 62 and 63) may receive recognition in Total Capital only if the instruments would, if issued by the institution, meet all of the criteria for classification as Tier 1 or Tier 2 capital.

⁵¹ Calculated according to the method of RWA of the local supervisor, i.e., if the requirements of that supervisor are based on the Basel I rules, that calculation method can be used. The calculation must still be based on the minimum plus the capital conservation buffer.

⁵² This amount must exclude all intercompany exposures (e.g., loans and debentures) of the subsidiary to entity that would inflate the RWA of the subsidiary.

⁵³ Calculated according to the method of RWA of the entity's regulator, i.e., if the requirements of that supervisor are based on the Basel III rules, that calculation method can be used. If this information is not available, the calculation may then be made according to the method of RWA used to satisfy the local regulator (the calculation must still be based on the minimum plus the capital conservation buffer).

The amount of capital that will be recognized in consolidated Total Capital will be calculated as follows:

- a) Paid-in capital plus related reserves/retained earnings that are attributable to third-party investors, gross of deductions, less the amount of the surplus Total Capital of the subsidiary that is attributable to the third-party investors.
- b) Surplus capital of the subsidiary is calculated as the total capital of the subsidiary, net of deductions, minus the lower of: (1) the minimum Total capital requirement of the subsidiary plus the capital conservation buffer⁵⁴ and (2) the portion of the subsidiary's minimum Total capital requirements⁵⁵ plus the conservation capital buffer⁵⁶ that relates to the subsidiary.
- c) The amount of surplus Total capital that is attributable to the third-party investors is calculated by multiplying the surplus Total capital of the subsidiary (calculated in (b) above) by the percentage of Total capital that is held by third-party investors.

The amount of Total Capital that will be recognized in Tier 2 will exclude amounts recognized in Tier 1A in accordance with paragraph 62 (Section 2.1.2.1) and the amounts recognized in Tier 1B in accordance with paragraph 63 (Section 2.1.2.2).

2.1.2.4 Capital issued by a special purpose vehicle (SPV)

65. Where capital has been issued to third-parties out of an SPV none of this capital can be included in Tier 1A capital. However, such capital can be included in consolidated additional Tier 1 or Tier 2 capital and treated as if the institution itself had issued the capital directly to the third-parties only if:
 - a) it meets all the relevant criteria for inclusion;
 - b) the only asset of the SPV is its investment in the capital of the institution in a form that meets or exceeds all the relevant criteria for inclusion⁵⁷ (as required by criterion 14 for Tier 1B and criterion 9 for Tier 2).

⁵⁴ Calculated according to the method of RWA of the local supervisor, i.e., if the requirements of that supervisor are based on the Basel I rules, that calculation method can be used. The calculation must still be based on the minimum plus the capital conservation buffer.

⁵⁵ This amount must exclude all intercompany exposures (e.g., loans and debentures) of the subsidiary to entity that would inflate the RWA of the subsidiary.

⁵⁶ Calculated according to the method of RWA of the entity's regulator, meaning that, if the requirements of that supervisor are based on the Basel III rules, that calculation method can be used. If this information is not available, the calculation may then be made according to the method of RWA used to satisfy the local regulator (the calculation must still be based on the minimum plus the capital conservation buffer).

⁵⁷ Assets related to the operation of the SPV may be excluded from this assessment if the amount is minimal.

In cases where the capital has been issued to third-parties through an SPV via a fully consolidated subsidiary of the institution, such capital may, subject to the requirements of this paragraph, be treated as if the subsidiary itself had issued it directly to the third-parties and may be included in the institution's consolidated Tier 1B or Tier 2 capital in accordance with the treatment outlined in paragraphs 63 (Section 2.1.2.2) and 64 (Section 2.1.2.3).

2.1.2.5 Qualifying shares

Credit unions are legally and economically unique in that the cooperative cannot operate its business normally without issuing a qualifying share, thereby creating an essential connection between the credit union and its members for the continuity of its business.

2.1.2.6 General allowances (Tier 2)

Institutions using the standardized approach for credit risk:

General allowances that are held against future, presently unidentified losses are freely available to meet losses which subsequently materialize and therefore qualify for inclusion within Tier 2. These allowances are designated as « general allowances » in the present guideline and are defined as stage 1 and 2 allowances in the IFRS 9 standard.

However, specific or grouped allowances should be excluded. These allowances are designated as « specific allowances » in the present guideline and are defined as stage 3 allowances and partial write-offs under the IFRS 9 standard.

General allowances eligible for inclusion in Tier 2 capital will be limited to a maximum of 1.25% of credit risk-weighted assets calculated under the Standardized Approach.

2.2 Redemption or purchase

Every written approval request for the redemption of eligible capital shares or their purchase for purposes of cancellation⁵⁸ must indicate, in particular, the type of qualifying capital, the reason for the redemption or purchase for cancellation, the amount involved and the period during which the transaction will take place in the institution's ordinary course of business.

⁵⁸ The pre-approved amount should be relatively equal to the amount that will actually be redeemed during the period covered by the approval. The redemption or purchase of shares must take place over a maximum period of 12 consecutive months.

2.3 Amortization

Tier 2 capital components are subject to straight-line amortization in the final five years prior to maturity. Hence, as Tier 2 capital instruments approach maturity, redemption or retraction, such outstanding balances are to be amortized based on the following criteria:

Years to maturity	Included in Tier 2 capital
5 years or more	100%
4 years or more but less than 5 years	80%
3 years or more but less than 4 years	60%
2 years or more but less than 3 years	40%
1 years or more but less than 2 years	20%
Less than 1 year	0%

The AMF expects amortization to be computed on a quarterly basis based on the « Years to maturity » column mentioned above.

The calculation of amortization should begin in the first quarter of the fiscal year ending in the fifth calendar year before maturity. For example, if an instrument expires on December 31, 2020, the amount is depreciated by 20% on January 1, 2016, and the amortization is disclosed on the statement of March 31, 2016. Each subsequent statement dated March 31 will report an additional portion of amortization of 20%.

Note:

Where the redemption is not subject to the AMF's approval, amortization should begin after year 5 for a 20-year debenture or share that can be redeemed at the institution's option any time after the first 10 years. This would not apply when redemption requires the prior written approval of the AMF.

Where there is an option for the issuer to redeem an instrument subject to the prior written approval of the AMF, the instrument would be subject to straight-line amortization in the final five years to maturity.

2.4 Non-viability contingent capital requirements (NVCC)

AMF Note

The AMF adopts the provisions introduced by the Basel Committee with respect to the additional criteria for inclusion of capital instruments in capital.⁵⁹

However, given that discussions regarding the application of provisions for contingent capital to cooperative entities are still in progress at the international level, the AMF may make changes to the present, where applicable, to reflect the conclusions of these discussions. Where appropriate, the draft revised Guideline will be consulted as required under FSCA and TCSFA.

Regulatory capital aims to absorb losses in a failed financial institution. Contingent capital aims to ensure that investors in non-Tier 1A capital instruments bear losses before taxpayers where the government and the AMF determine it is in the public interest to rescue a non-viable institution.⁶⁰

To this end, all Tier 1B and Tier 2 capital instruments issued by institutions must comply with the following nine principles issued by the Basel Committee.

2.4.1 Principles governing NVCC

Principle 1: Tier 1B and Tier 2 capital instruments must have specific features and conditions allowing their full conversion into permanent instruments upon a trigger event affecting the institution's solvency. As such, the features of these instruments must not provide for any residual claims that are senior to other capitalization elements following a trigger event.

Principle 2: All NVCC instruments must also meet the initial criteria for eligibility under their respective tiers, as specified in Section 2.1 of the Guideline. For certainty, the classification of an instrument as either Tier 1B or Tier 2 will depend on the terms and conditions of the NVCC instrument in the absence of a trigger event.

Principle 3: The features and conditions required by Principle 1 for Tier 1B and Tier 2 capital instruments must include the following trigger events:

⁵⁹ Basel Committee on Banking Supervision. *Final elements of the reforms to raise the quality of regulatory capital issued by the Basel Committee*, Annex 1 "Minimum requirements to ensure loss absorbency at the point of non-viability", January 13, 2011.

⁶⁰ Other resolution options could be used to resolve a failing institution, either as an alternative to NVCC or in conjunction with or following an NVCC conversion, and could also subject capital providers to losses.

- The AMF publicly announces that the institution has been advised, in writing, that the AMF is of the opinion that the institution has ceased, or is about to cease, to be viable and that, after the conversion of all contingent instruments, its viability could be restored or maintained.
- A federal or provincial government in Canada publicly announces that the institution has accepted or agreed to accept a capital injection, or equivalent support, from the federal government or any provincial government or political subdivision or agent or agency thereof without which the institution would have been determined by the AMF to be non-viable.

The term “equivalent support” in the above second trigger constitutes support for a non-viable institution that enhances the institution’s risk-based capital ratios or is funding that is provided on terms other than normal terms and conditions. For greater certainty, and without limitation, equivalent support does not include:

- i. Emergency Liquidity Assistance provided by the Bank of Canada at or above the Bank Rate;
- ii. open bank liquidity assistance provided by the AMF according to the Deposit Insurance Act⁶¹ at or above its cost of funds; and
- iii. support, including conditional, limited guarantees, provided by the AMF according to the Deposit Insurance Act to facilitate a transaction, including an acquisition or amalgamation.

In addition, shares of an acquiring institution paid as non-cash consideration to CDIC in connection with a purchase of a bridge institution would not constitute equivalent support triggering the NVCC instruments of the acquirer as the acquirer would be a viable financial institution.

Principle 4: The conversion terms of NVCC instruments must reference the nominal value of these instruments upon a trigger event.

Principle 5: The conversion method should take into account the hierarchy of claims in liquidation and result in the significant dilution of Tier 1A capital instruments. This means that the conversion should demonstrate that former old holders of tier 2 instruments receive economic entitlements that are more favourable than old holders of tier 1B instruments and the old holder of tier 1B to receive an economic entitlements that are more favourable than existing tier 1A instruments holders.

Principle 6: The institution issuing the instruments must ensure that, to the extent possible, there are no impediments to the conversion so that conversion will be immediate at the request of the AMF.

61 On June 13th, 2019, this act will be renamed *Deposit Institutions and Deposit Protection Act*.

Principle 7: The conversion of the instruments must not constitute an event of default. The AMF expects institutions to take all commercially reasonable efforts to ensure that investors are well informed that the conversion should not be considered an event of default either directly or indirectly.

Principle 8: The terms of the NVCC instrument should include provisions to address NVCC investors that are prohibited, pursuant to the FSCA or the TCSFA, from acquiring Tier 1A capital upon a trigger event. Such mechanisms should allow such capital providers to comply with legal prohibitions while continuing to receive the economic results of Tier 1A instruments ownership and should allow such persons to transfer their entitlements to a person that is permitted to own shares in the institution.

Principle 9: These principles apply to the institution as a whole, including Canadian and foreign related entities that are subject to the Basel III capital adequacy requirements. To include the NVCC issued by a related entity in an institution's capital, a trigger in addition to those specified in Principle 3 above must be taken into account. The AMF will only activate such triggers in respect of a related entity from another jurisdiction after consultation with the host authority where:

- The decision that cancellation of the consolidation of NVCC in the institution is necessary, as determined by the supervisory authority, where the related entity would otherwise become non-viable.
- The related entity would have become non-viable, as determined by the AMF, if it (the related entity) had not received a capital injection or other support from another institution established in the host jurisdiction (institution's origin).

This treatment is required irrespective of whether the host jurisdiction has implemented the NVCC requirements for regulatory capital instruments.

2.4.2 Criteria to be considered to trigger conversion of NVCC

Where an institution has ceased, or is about to cease, to be viable and, after the conversion of all contingent capital instruments, it is reasonably likely that the viability of the institution will be restored or maintained, the AMF would consider all relevant facts and circumstances to determine the actual viability of the institution. Without limiting the generality of the foregoing, this could include a consideration of the following criteria, which may be mutually exclusive and should not be viewed as an exhaustive list:⁶²

⁶² The AMF reserves the latitude and discretion required to deal with unforeseen events or situations on a case-by-case basis.

- i. Whether the assets of the institution are, in the opinion of the AMF, sufficient to provide adequate protection to the institution's depositors and creditors.
- ii. Whether the institution has lost the confidence of depositors or other creditors and the public. This may be characterized by ongoing increased difficulty in obtaining or rolling over short-term financing.
- iii. Whether the institution's regulatory capital has, in the opinion of the AMF, reached a level, or is eroding in a manner, that may detrimentally affect its depositors and creditors.
- iv. Whether the institution failed to pay any liability that has become due and payable or, in the opinion of the AMF, the institution will not be able to pay its liabilities as they become due and payable.
- v. Whether the institution failed to comply with an order of the AMF to increase its capital.
- vi. Whether, in the opinion of the AMF, any other state of affairs exists in respect of the institution that may be materially prejudicial to the interests of the institution's depositors or creditors or the owners of any assets under the institution's administration, including where proceedings under a law relating to bankruptcy or insolvency have been commenced in Canada or elsewhere in respect of the institution.
- vii. Whether the institution is unable to recapitalize on its own through the issuance of Tier 1A capital instruments or other forms of regulatory capital. For example, no suitable investor or group of investors exist that is willing to invest or capable of investing in sufficient quantity and on terms that will restore the institution's viability, nor is there any reasonable prospect of such an investor emerging in the near-term in the absence of conversion of NVCC instruments.

The relevant authorities will have discretion to choose not to trigger NVCC notwithstanding a determination by the AMF that an institution has ceased, or is about to cease, to be viable. Under such circumstances, the institution's creditors and investors in the Tier 1A capital instruments of the institution could be exposed to losses through the use of other resolution tools or in liquidation.

2.5 Required adjustments to capital and deduction thresholds

66. This section sets out the regulatory adjustments to be applied to regulatory capital. In most cases these adjustments are applied in the calculation of Common Equity Tier 1.

All items that are deducted from capital are automatically excluded from the institution's total assets in calculating the assets to capital multiple and are risk-weighted at 0% in the risk-based capital adequacy framework. The assets deducted from Tier 1 are to be excluded from the leverage ratio.

Except in respect of the hedging reserve cash flow and cumulative gains and losses attributable to changes in own credit risk in respect of financial liabilities at

fair value, the institution under no circumstances should apply adjustments in order to withdraw its Tier 1A, gains or losses on assets or liabilities that are measured at fair value under current accounting principles⁶³.

Cumulative net losses after tax revaluation on goods for own use accounted for using the revaluation model should be removed undistributed surplus left for the calculation of capital adequacy. As for earnings, net after tax reassessment, they must be removed from other comprehensive income included in Tier 1A.

The same applies to goods for own use carried at cost and the fair value was determined at the time of conversion to IFRS, gains and losses on revaluation, net of taxes, surpluses should be reversed for non-distributed for capital.

- 66a. Institutions that invest in TLAC or similar instruments may be required to deduct them in the calculation of their own regulatory capital⁶⁴.
- 66b. For the purposes of this section, holdings of TLAC include the following, hereafter collectively referred to as “other TLAC instruments”:
- (i) All direct, indirect and synthetic investments in the instruments of a G-SIFI/ D-SIFI resolution entity that are eligible to be recognised as external TLAC but that do not otherwise qualify as regulatory capital⁶⁵ for the issuing G-SIFI / D-SIFI, with the exception of instruments excluded by paragraph 66c; and
 - (ii) All holdings of instruments issued by a G-SIFI/ D-SIFI resolution entity that rank pari passu to any instruments included in (i), with the exceptions of:
 - (1) instruments listed as liabilities excluded from TLAC (“Excluded Liabilities”); and
 - (2) instruments ranking pari passu with instruments eligible to be recognised as TLAC;
- 66c. In certain jurisdictions, except Canada, G-SIFIs may be able to recognise instruments ranking pari passu to “Excluded Liabilities” as external TLAC, up to a limit, in accordance with the exemptions to the subordination requirements set

⁶³ The Basel Committee continues to review the treatment of unrealized gains by considering changes in the applicable accounting standards. In the event of changes made by the Basel Committee on these treatments, the AMF may amend this guideline accordingly.

⁶⁴ Principles on Loss-absorbing and Recapitalisation Capacity of G-SIFIs in Resolution, Total Loss absorbing Capacity (TLAC) Term Sheet, Financial Stability Board, November 2015, available at www.fsb.org/wp-content/uploads/TLAC-Principles-and-Term-Sheet-for-publication-final.pdf. The regulatory adjustments for TLAC set out in this section relate to Section 15 of the FSB TLAC Term Sheet.

⁶⁵ Tier 2 instruments that no longer count in full as regulatory capital (as a result of having a residual maturity of less than five years) continue to be recognised in full as a Tier 2 instrument by the investing bank for the regulatory adjustments in this section.

out in the penultimate paragraph of section 11 of the FSB TLAC Term Sheet. An institution's holdings of such instruments will be subject to a proportionate deduction approach.

Under this approach, only a proportion of holdings of instruments that are eligible to be recognised as external TLAC by virtue of the subordination exemptions will be considered a holding of TLAC by the investing institution. The proportion is calculated as:

- (1) the funding issued by the G-SIFI resolution entity that ranks pari passu with Excluded Liabilities and that is recognised as external TLAC by the G-SIFI resolution entity; divided by
- (2) the funding issued by the G-SIFI resolution entity that ranks pari passu with "Excluded Liabilities" and that would be recognised as external TLAC if the subordination requirement was not applied⁶⁶. Institutions must calculate their holdings of other TLAC instruments of the respective issuing GSIFI resolution entities based on the latest available public information provided by the issuing G-SIFIs on the proportion to be used.

66d. The regulatory adjustments relating to TLAC in paragraphs 78 to 85 apply to holdings of TLAC issued by G-SIFIs or D-SIFIs from the date at which the issuing G-SIFI becomes subject to a minimum TLAC requirement.

2.5.1 Regulatory adjustments applicable to Tier 1A capital

67. Goodwill and other intangibles (except mortgage servicing rights)

Goodwill and other intangibles (except mortgage servicing rights) should be deducted in the calculation of Tier 1A capital including goodwill in the evaluation of capital investments of a similar financial institution as well as in the capital of other financial institutions that are outside the scope of consolidation⁶⁷. The full amount is to be deducted net of any associated deferred tax liability which would be extinguished if the goodwill becomes impaired or derecognized under Canadian accounting principles.

⁶⁶ For example, if a G-SIFI resolution entity has funding that ranks pari passu with Excluded Liabilities equal to 5% of RWAs and receives partial recognition of these instruments as external TLAC equivalent to 3.5% of RWAs, then an investing bank holding such instruments must include only 70% (= 3.5 / 5) of such instruments in calculating its TLAC holdings. The same proportion should be applied by the investing bank to any indirect or synthetic investments in instruments ranking pari passu with Excluded Liabilities and eligible to be recognised as TLAC by virtue of the subordination exemptions.

⁶⁷ This paragraph applies to significant investments accounted for using equity method. [CBCB, septembre 2017, QFP N° 1, paragr. 67 et 68]

All other intangible assets⁶⁸ except mortgage servicing rights should be deducted in the calculation of Tier 1A capital. The full amount is to be deducted net of any associated deferred tax liability which would be extinguished if the intangibles assets become impaired or derecognized under Canadian accounting principles. Mortgage servicing rights are deducted through the “threshold deductions” set out in paragraphs 87 to 89 of this section.

69. Deferred tax assets (DTAs)

DTAs with the exception of those treated in the second paragraph of this article and those associated DTAs derecognition of flow hedging reserve, are to be deducted in the calculation of Tier 1A capital. DTAs may be netted with associated deferred tax liabilities (DTLs) only if the DTAs and DTLs relate to taxes levied by the same taxation authority and offsetting is permitted by the relevant taxation authority. Where these DTAs relate to temporary differences (e.g., allowance for credit losses) the amount to be deducted is set out in the “threshold deductions” presented in paragraphs 87 to 89 below. All other such assets, e.g. the carry forward of unused tax losses, or unused tax credits, are to be deducted in full net of deferred tax liabilities as described above. The DTLs netted against DTAs must exclude amounts that have been netted against the deduction of goodwill, intangible, defined benefit pension assets, and be allocated on a pro rata basis between DTAs subject to the threshold deductions and DTAs that are to be deducted in full.

The DTAs from temporary differences that the institution could achieve by reporting operating losses of previous tax years are not subject to the deduction but by receiving against a risk weighting of 100%. The AMF must be notified of any DTAs weighted at 100% and the institution may be subject to increased scrutiny over the DTAs.

70. Current tax assets

When an over instalment of tax, or current year tax losses carried back to prior years result in the recognition for accounting purposes of a claim or receivable from the government or local tax authority, such a claim or receivable would be assigned the relevant sovereign risk weighting. Such amounts are classified as current tax assets for accounting purposes. Current tax assets are not required to be deducted in the calculation of the Tier 1A capital.

71 and 72. Cash flow hedge reserve

The cash flow hedge reserve that relates to the hedging of items that are not fair valued on the balance sheet (including projected cash flows) should be derecognized in the calculation of Tier 1A capital. This means that positive amounts should be deducted and negative amounts should be added back.

⁶⁸ This includes software intangibles.

74. Gain on sale related to securitisation transactions

Derecognize in the calculation of Tier 1A capital any increase in equity capital resulting from a securitisation transaction, such as that associated with expected future margin income resulting in a gain on sale.

75. Cumulative gains and losses due to changes in own credit risk on fair valued financial liabilities⁶⁹

Derecognize in the calculation of Tier 1 capital all unrealized gains and losses that have resulted from changes in the fair value of liabilities that are due to changes in the institution's own credit risk, i.e. any negative value must be added and any positive value deducted.⁷⁰

76 and 77. Defined benefit pension fund assets and liabilities

Defined benefit pension fund liabilities, as included on the balance sheet, must be fully derecognized in the calculation of Tier 1A capital. For each defined benefit pension fund that is an asset on the balance sheet, the asset should be deducted in the calculation of Tier 1A capital net of any associated deferred tax liability which would be extinguished⁷¹ if the asset should become impaired or derecognized under Canadian accounting principles. However, assets in the fund to which the institution has unrestricted and unfettered access can, with AMF approval, offset the deduction. Such offsetting assets should be given the risk weight they would receive if they were owned directly by the institution.

78. Investments in own shares (Tier 1A)

All of an institution's investments in its own Tier 1A capital instruments, whether held directly or indirectly, must be deducted in the calculation of Tier 1A capital, unless already derecognized under the relevant accounting principles. Any Tier 1A element the institution could be contractually obliged to purchase should also be deducted in the calculation of Tier 1A capital. The treatment described will apply irrespective of the location of the exposure in the banking book or the trading book.

⁶⁹ The Basel Committee has published a consultation document regarding the calculation of this regulatory adjustment, entitled *Application of own credit risk adjustments to derivatives*, in December 2011). The AMF could revise these provisions when the BCBS publishes the final version of this document.

⁷⁰ The AMF could revise these points if significant changes are made to the consultation document mentioned above.

⁷¹ The transitional provisions relating to this element are listed at the introduction section of this Guideline.

In addition, gross long positions may be deducted net of short positions in the same underlying exposure only if the short positions involve no counterparty risk.

Institutions should look through holdings of index securities to deduct exposures to own shares. For both investments in own shares and investments in unconsolidated financial entities that result from holdings of index securities, institutions are permitted to net gross long positions against short positions in the same underlying index as long as the maturity of the short position matches the maturity of the long position or has a residual maturity of at least one year.

79. Reciprocal cross holdings in the Tier 1A capital of banks, financial institutions and insurance entities

Reciprocal cross holdings in the Tier 1A capital of a bank, insurance entity or other financial institution must be deducted to prevent artificially inflating the Tier 1A capital position.

79a. Decision tree to determine the capital treatment of equity investments

When an equity investment (including an equity investment in a fund) is made, the following decision tree should be used to determine how the capital requirements for that equity investment should be calculated:

- a) The first decision point is to consider whether the entity in which the equity investment is made is a banking, financial or insurance entity. If it is, then either paragraphs 84-89 below (significant investments) or paragraphs 80-83 (non-significant investments) should be used to calculate capital requirements for the equity investment;
- b) If the entity is not a financial entity, then the next question to ask is whether the entity is a fund. If it is, then either Section 3.1.17 of Chapter 3 “Standardized Approach” should be used to calculate capital requirements for the equity investment;
- c) Finally, if the equity investment is made in an entity that is not captured in (a) or (b) above, then either section 2.6 of this chapter (significant investment in a commercial entity) or the de-facto treatment for equity investments (non-significant investments) of either Chapter 3 (Standardized Approach) should be used to calculate capital requirements for the equity investment.

80. Non-significant investments in the capital or other TLAC instruments of banks, other financial institutions⁷² and insurance entities⁷³

The regulatory adjustments described in this section applies to investments in the capital or other TLAC instruments of banks, other financial institutions and insurance entities where the investment is not considered a significant investment⁷⁴. These investments are deducted from regulatory capital, subject to a threshold. For the purpose of this regulatory adjustment:

- Investments include direct, indirect⁷⁵ and synthetic holdings of capital instruments⁷⁶ or other TLAC instruments. Institutions should look through holdings of index securities to determine their underlying holdings in capital or other TLAC instruments. If institutions find it impossible to determine the market value, a conservative estimate may be used with the AMF's prior approval.
- Holdings in both the banking book and trading book are to be included. Capital includes common stock and all other types of cash and synthetic instruments (e.g. subordinated debt). Other TLAC instruments are defined in paragraphs 66b and 66c.
- Only the net long positions of capital instruments are considered (i.e., the gross long position minus short positions in the same underlying exposure, if maturity is identical to the long position or residual maturity is at least one year).⁷⁷ For other TLAC instruments, it is the gross long

⁷² Examples of the types of activities that financial institutions might be involved in include financial leasing, issuing credit cards, portfolio management, investment advisory, custodial and safekeeping services and other similar activities that are ancillary to the financial sector. [BCBS, FAQ, No.7].

⁷³ The scope of this regulatory adjustment should be considered comprehensive. Institutions are encouraged to contact the AMF for further guidance in this area, relating to specific investments, where necessary. Institutions should also note that hedge funds should be considered within the scope of the required regulatory adjustment.

⁷⁴ See paragraph 84 for the definition of "significant investment".

⁷⁵ Indirect holdings are exposures or parts of exposures that, if a direct holding loses its value, will result in a loss to the institution substantially equivalent to the loss in the value of the direct holding.

⁷⁶ Examples of indirect and synthetic holdings include: (i) the institution invests in the capital of a non-financial entity and is aware that the proceeds are used to invest in the capital of a financial institution. (ii) The institution enters into a total return swap on capital instruments of another financial institution. (iii) The institution provides a guarantee or credit protection to a third party in respect of the third party's investments in the capital of another financial institution.

⁷⁷ To determine what corresponds to a net investment in Tier 1A capital in banks, other financial institutions and insurance entities, the institution must consider the synthetic short positions held against long trading positions in cash have a maturity corresponding (by reference to paragraphs 78, 80 and 84 of the wording of Basel III) subject to the following conditions:

- i. The long cash market position is held for hedging purposes, or position (cash or synthetic) is held for the purpose of coverage under employee share.
- ii. The liquidity of the relevant market are sufficient (the common shares included in the major indices satisfy this criterion).

position that is to be included in paragraph 80c and the net long position that is to be included in paragraph 81.

- Underwriting positions held for five working days or less must be excluded. Underwriting positions held for more than five working days must be included.
- If the capital instrument in which the institution has invested does not meet the criteria for inclusion for one of the capital Tiers (1A, 1B and 2), the capital is to be considered Tier 1A capital for the purposes of this capital deduction.^{78 79}

Exposures should be valued according to their valuation on the institution's balance sheet. Subject to prior AMF approval, institutions may temporarily exclude certain investments where these have been made in the context of resolving or providing financial assistance to reorganize a distressed institution.⁸⁰

- Guarantees or other Tier 1A capital provided to another financial institution will be treated as capital invested in other financial institutions based on the maximum amount that the institution could be required to pay out under such arrangements.⁸¹

80c. Institution's holdings of other TLAC liabilities must be deducted from Tier 2 capital resources, unless (1) such holdings are, in aggregate and on a gross long basis, less than 5% of the bank's common equity (after applying all other regulatory adjustments listed in full prior to paragraph 80); or (2) the holding falls within the 10% threshold provided in paragraph 81.

iii. Upon request, the institution shall submit to the AMF, a detailed report on these positions and may be subject to increased scrutiny.

⁷⁸ The investments in a regulated financial institution that are not included in the capital of the latter, then it is not necessary to deduct. However, in the case of other financial institutions and insurance entities not subject to the Basel III capital adequacy requirements, the deduction must be applied using higher quality capital instruments.

⁷⁹ With regard to investments in financial institutions and insurance entities not subject to Basel III eligibility criteria for capital instruments (as mentioned in this Guideline), the deduction must be applied from the corresponding r category of capital using the following tree methods:

- a) Category of capital (if any) to which the instrument is eligible according to the criteria of Basel III
- b) Category of capital to which the instrument is eligible according to most recent version of the Capital Adequacy Requirements Guideline (CARLI - insurance of persons)
- c) Category of capital to which the instrument is eligible according to most recent version of the Capital Adequacy Requirements Guideline (CAR – Property and casualty insurance)

If the capital instrument of the institution in which the institution has invested does not meet the eligibility criteria in capital under either the criteria of Basel III of the Guideline or the CARLI, it is considered equivalent to Tier 1A for deduction.

⁸⁰ [BCBS, FAQ, No 3]

⁸¹ [BCBS, FAQ, No 9]

81. To determine the amount to be deducted from capital:
- a) Institutions should compare the total of all holdings of capital instruments and other TLAC liabilities, as listed in paragraph 80 to 80c, above 10% of the institution's Tier 1A capital after all regulatory adjustments listed paragraphs 67 to 80 above.
 - b) The amount by which the total of all holdings of capital instruments and other TLAC liabilities as listed in paragraph 80 and not covered by the 5% threshold described in the paragraph 80c exceeding the 10% threshold described in (a) should be deducted from capital in the following manner:
 - i. The amount to be deducted from Tier 1A capital is equal to the amount in (a) multiplied by the total holdings in Tier 1A capital of other institutions divided by the total holdings of capital instruments and other TLAC liabilities not covered by the paragraph 80c.
 - ii. The amount to be deducted from Tier 1 capital is equal to the amount in (a) multiplied by the total holdings in Tier 1 capital of other institutions divided by the total holdings of capital instruments and other TLAC liabilities not covered by the paragraph 80c.
 - iii. The amount to be deducted from Tier 2 capital is equal to the amount in (a) multiplied by the total holdings in Tier 2 capital and other TLAC instruments of other institutions divided by the total holdings of capital instruments and other TLAC liabilities not covered by the paragraph 80c.
82. If an institution is required to make a deduction from a particular tier of capital and it does not have sufficient capital to make that deduction, the shortfall will be deducted from the next highest tier of capital (e.g. if an institution does not have sufficient Tier 2 capital to satisfy the deduction, the shortfall will be deducted from Tier 1B capital).
83. The amount that are not deducted from capital will continue to be risk weighted by applicable risks. For the application of risk weighting, the amount of holdings must be allocated on a pro rata basis between those below and those above the threshold.
84. **Significant investments⁸² in the capital or other TLAC instruments of banks, other financial institutions and insurance entities that are outside the scope of regulatory consolidation.⁸³**

⁸² The term "significant investment" as used in this Guideline means ownership of greater than 10% of Tier 1 instruments.

⁸³ Investments in entities that are outside the scope of regulatory consolidation refers to investments in entities that have not been consolidated at all or have not been consolidated in such a way as to result in their assets being included in the calculation of consolidated risk-weighted assets of the group. This

The regulatory adjustment described in this paragraph applies to investments in the capital or other TLAC instruments of banks, other financial institutions and insurance entities that are outside the scope of regulatory consolidation where the institution has a significant investment in the capital of these institutions or when the issuing institution is affiliated.

- Investments include direct, indirect,⁸⁴ and synthetic holdings of capital instruments⁸⁵ or other TLAC instruments. Institutions should look through holdings of index securities to determine their underlying holdings in capital⁸⁶ or other TLAC instruments.
- Holdings in both the banking book and trading book are to be included. Capital includes common stock and all other types of cash and synthetic capital instruments (e.g. subordinated debt). Other TLAC instruments are defined in the paragraphs 66b and 66c. The net long position is to be included.⁸⁷
- Underwriting positions in capital instruments or other TLAC instruments held for five working days or less can be excluded. Underwriting positions held for more than five working days must be included.
- If the capital instrument of the entity in which the institution has invested does not meet the criteria for one of the tiers of capital (1A, 1B and 2), the capital is to be considered Tier 1A instruments for the purposes of this capital deduction.⁸⁸

includes (i) investments in unconsolidated entities, including joint ventures carried on the equity method of accounting, (ii) investments in subsidiaries deconsolidated for regulatory capital purposes (including insurance subsidiaries), (iii) other facilities that are treated as capital by unconsolidated subsidiaries and by unconsolidated entities in which the institution has a significant investment. Further, the treatment for securitization exposures or vehicles that are deconsolidated for risk-based regulatory capital purposes pursuant to Chapter 6 will be as outlined in that chapter.

⁸⁴ Indirect holdings are exposures or parts of exposures that, if a direct holding loses its value, will result in a loss to the institution substantially equivalent to the loss in the value of the direct holding.

⁸⁵ Examples of indirect and synthetic holdings include: (i) The institution invests in the capital of a non-financial entity and is aware that the proceeds are used to invest in the capital of a financial institution. (ii) The institution enters into a total return swap on capital instruments of another financial institution. (iii) The institution provides a guarantee or a credit protection to a third party in respect of the third party's investments in the capital of another financial institution. [BCBS, FAQ, No.15]

⁸⁶ If institutions find it impossible to determine the market value, a conservative estimate may be used with the AMF's prior approval.

⁸⁷ Net long position corresponds to the gross long position net of short positions in the same underlying exposure where the maturity of the short position either matches the maturity of the long position or has a residual maturity of at least one year.

⁸⁸ Investments in a regulated financial institution which are not included in the institution's capital are not required to be deducted. However, in the case of financial institutions and insurance entities not subject to the Basel III capital requirements, the deduction must be applied using higher quality capital (Tier 1A).

a) Category of capital (if any) to which the instrument is eligible according to the criteria of Basel III;

- Exposures should be valued according to their valuation on the institution's balance sheet. Subject to prior AMF approval, institutions may temporarily exclude certain investments where these have been made in the context of resolving or providing financial assistance to reorganize a distressed institution.⁸⁹
 - Guarantees or other Tier 1A capital enhancements provided to another financial institution will be treated as capital invested in other financial institutions based on the maximum amount that the institution could be required to pay out under such arrangements.⁹⁰
 - Goodwill related to significant investments in entities which are unconsolidated under current accounting standards should be deducted as part of the threshold deductions (paragraphs 87 to 89 below).⁹¹
85. All investments in capital instruments included above that are not Tier 1A capital must be fully deducted from the corresponding tier of capital. This means the deduction should be applied to the same tier of capital for which the capital would normally qualify if it was issued by the institution itself. All holdings of other TLAC instruments included above (and as defined in paragraphs 66b and 66c i.e. applying the proportionate deduction approach for holdings of instruments eligible for TLAC must be fully deducted from Tier 2 capital. If the institution is required to make a deduction from a particular tier of capital and it does not have enough of that tier of capital to satisfy that deduction, the shortfall will be deducted from the next higher tier of capital (e.g. if an institution does not have enough Tier 1B capital to satisfy the deduction, the shortfall will be deducted from Tier 1A).
86. Investments included above that are Tier 1A capital will be subject to the threshold deductions as described in paragraphs 87 to 89 below.

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- b) Category of capital to which the instrument is eligible according to most recent version of the Capital Adequacy Requirements Guideline (CARLI - insurance of persons);
- c) Category of capital to which the instrument is eligible according to most recent version of the Capital Adequacy Requirements Guideline (CARLI – Property and casualty insurance).

With regard to investments in financial institutions and insurance entities not subject to Basel III eligibility criteria for capital instruments (as mentioned in this Guideline), the deduction must be applied from the corresponding superior category of capital using the following tree methods: If the capital instrument of the institution in which the institution has invested does not meet the eligibility criteria in capital under either the criteria of Basel III of the Guideline or the CAR, it is considered equivalent to Tier 1A for deduction.

⁸⁹ [BCBS, FAQ, No. 3]

⁹⁰ [BCBS, FAQ, No. 9]

⁹¹ Institutions will not be required to report goodwill related to significant investments in unconsolidated entities on a regular basis, but must be able to produce this information if requested by the AMF.

2.5.2 Threshold deductions for Tier 1A capital

87. Instead of a full deduction, the following items may each receive limited recognition when calculating the institution's Tier 1A capital:
- significant investments in Tier 1A capital of banks, insurance entities and other financial institutions that are outside the scope of regulatory consolidation (as defined in paragraphs 84 to 86 above);
 - mortgage servicing rights;
 - deferred tax assets (DTA) arising from temporary differences.⁹²
88. To determine the amount to be deducted from capital:
- a) Institutions should compare each of the above items to 10% of the institution's Tier 1A capital after all deductions listed in paragraphs 67 to 86.
 - b) The amount by which each of the above items exceeds the 10% threshold described in (a) should be deducted from Tier 1A capital.

Beginning January 1, 2013, the cumulative amount of investments in the above three items exceeding 15% of an institution's Tier 1A capital (not deducted in b) above) before the deduction of these specific items but after of all regulatory adjustments (paragraphs 67 and 86) must be deducted. However, the items included in the 15% must be disclosed.

Beginning January 1, 2018, the manner in which the 15% threshold is calculated will be treated differently. The cumulative amount of three elements which may be considered in part in regulatory capital and which are still recognized after application of the required adjustments should not exceed 15% of the Tier 1A capital calculated after adjustments. See the example in Annex 2-II.

89. The amount of the above three items not deducted from Tier 1A capital will be risk-weighted at 250%.

⁹² See paragraph 69 of Section 2.5.1.

2.5.3 Regulatory adjustments to Tier 1B capital

Remark

For the purpose of adjustments to Tier 1B and Tier 2 capital, the AMF has summarized the relevant paragraphs while keeping the same numbering as that used for the adjustments to Tier 1A capital. For further details regarding the applicable treatments, see Section 2.5.1.

To avoid confusion due to the fact of repeating the paragraph numbers, the latter are in capital roman numbers. The paragraph numbers corresponding to Basel III (when appropriate) appears in brackets at the end of the designated paragraph rather than the beginning.

I. Investments in own Tier 1B capital instruments

Institutions are required to make deductions from Tier 1B capital for investments in their own Tier 1B capital instruments unless derecognition has been made in accordance with applicable accounting principles in effect in Canada. In addition, any Tier 1B capital instrument in which the institution could be contractually obliged to purchase should be deducted in the calculation of Tier 1B capital. [BCBS paragraph 78]

II. Reciprocal cross holdings in Tier 1B capital of banks, other financial institutions and insurance entities

a) Direct or indirect reciprocal cross holdings in Tier 1B capital instruments by institutions must be deducted in calculating Tier 1B capital. All other Tier 1B capital items which an institution may be required to redeem under contractual obligations must be deducted. This adjustment applies to both the banking and trading books.

b) Institutions are required to make deductions from Tier 1B capital for significant investments in the capital of banks, other financial institutions and insurance entities that are outside the scope of regulatory consolidation (paragraphs 80 to 83 of Section 2.5.1). [BCBS paragraph 79]

III. Significant investments in the capital of banks, other financial institutions and insurance entities that are outside the scope of regulatory consolidation

a) Significant investments in Tier 1B capital in the above-mentioned institutions in (b) must also be deducted based on the criteria in paragraphs 84 to 86 of Section 2.5.1, relating to regulatory adjustments to Tier 1A capital. [BCBS paragraphs 84 to 86]

IV. Reverse mortgages

Reverse mortgages that have a current loan-to-value greater than 85% and an exposure amount that exceeds 85% must be fully deducted from Tier 1B capital.

For further details about the treatment of reverse mortgages, see paragraph 3.1.9.1 of the Guideline.

2.5.4 Regulatory adjustments to Tier 2 capital

Tier 2 capital contributes to an institution's solidity by absorbing losses upon liquidation. It is also subject to regulatory adjustments. Adjusted Tier 2 capital may not be lower than zero. If the total of all Tier 2 deductions exceeds available Tier 2 capital, the excess must be deducted from Tier 1B. The deductions are the following:

I. Investments in own Tier 2 capital instruments

Institutions are required to make deductions from Tier 2 capital for investments in its own Tier 2 capital instruments unless already derecognized under relevant accounting principles.

II. Reciprocal crossed holdings in Tier 2 capital or TLAC instruments of banks, other financial institutions and insurance entities

Reciprocal crossed holdings in the Tier 2 capital or TLAC instruments of banks, other financial institutions and insurance entities must be deducted to avoid artificially inflating the Tier 2 capital position (see paragraph 79 of Section 2.5.1).

III. Non-significant investments in Tier 2 capital of banks, other financial institutions and insurance entities or TLAC instruments issued by a D-SIFI or G-SIFI (which are not considered significant investments)

Institutions are required to make deductions from their Tier 2 capital or TLAC instruments for investments in the Tier 2 capital or TLAC instruments of banks, other financial institutions and insurance entities or TLAC instruments issued by a D-SIFI or G-SIFI which are not considered significant investments (see paragraphs 80 to 83 of Section 2.5.1).

IV. Significant investments in Tier 2 or TLAC instruments capital of banks, other financial institutions and insurance entities or TLAC instruments issued by a D-SIFI or G-SIFI that are outside the scope of regulatory consolidation

Significant investments in other Tier 2 capital or TLAC instruments in the above-mentioned institutions must also be deducted based on the criteria in paragraphs 84 to 86 of Section 2.5.1.

2.6 Changes to the treatment of certain assets

The following items will receive a risk weight of 1 250%:

- The securitisation exposures mentioned in Chapter 5.
- Non-payment/delivery on non-DvP and non-PvP transactions.

- Significant investments in certain commercial entities, net of goodwill and intangible assets deducted from capital.

2.7 Capital instrument quality assessment

The AMF expects an institution to carry out a self-assessment of each capital instrument in order to determine whether it qualifies for Tier 1 or Tier 2. To this end, Annexes 2-I (a), 2-I (b) and 2-I (c) of this Guideline provides a Self-Assessment Grid for Inclusion in Tier 1 (1A and 1B) and Tier 2.

The AMF expects an institution to retain the results of such self-assessments for purposes of review, upon demand. The AMF may ask for supplemental documents (such as draft by-laws setting the conditions for the issuance of the proposed security, a copy of the offering memorandum) in order to assess, after consulting the parties concerned, whether the eligibility of the capital instrument is based on accurate and complete information.

Ultimately, the AMF may decide that a capital instrument qualifies for a different tier than that chosen by the institution for purposes of measuring capital adequacy.

2.8 Transitional arrangements for Capital instruments that no longer qualify as Tier 1A, 1B or 2 capital

94(a) to 94(f) Paragraphs removed

- 94(g). Capital instruments that no longer qualify as Tier 1A, 1B or 2 capital but that qualify under the transition arrangements of this Guideline will be phased out beginning January 1, 2013. However, their recognition will be capped at 90% from January 1, 2013, with the cap reducing by 10 percentage points in each subsequent year.⁹³

This cap will apply to Tier 1B and Tier 2 separately and refers to the total amount of instruments outstanding that no longer meet the relevant entry criteria but that qualify under the transition arrangements.⁹⁴

⁹³ The level of the base is calculated on January 1, 2013 and does not change thereafter. [BCBS, FAQ, No.19]

⁹⁴ Where an instrument is derecognized on January 1, 2013, it will not be eligible for grandfathering and does not count towards the base fixed on January 1, 2013. [BCBS, FAQ, No. 2]

Reporting period	Applicable cap
Q1 2013	90%
Q1 2014	80%
Q1 2015	70%
Q1 2016	60%
Q1 2017	50%
Q1 2018	40%
Q1 2019	30%
Q1 2020	20%
Q1 2021	10%

If the instrument is redeemed or that its recognition in capital is amortized after January 1, 2013, the nominal value serving as the base is not reduced. In addition, instruments may only be included under a particular cap to the extent they are recognized under that tier of capital under AMF's former Guideline.⁹⁵

For example, where an innovative Tier 1 instrument is recognized in Tier 2B capital as innovative overflow, the instrument may only be used to contribute to the Tier 2 base and should not contribute to the Tier 1 notional base.

Instruments with an incentive to be redeemed will be treated as follows:

- For an instrument that has a call and a step-up prior to January 1, 2013 (or another incentive to be redeemed), if the instrument is not called at its effective maturity⁹⁶ date and on a forward-looking basis will meet the new criteria for inclusion in Tier 1B or Tier 2, it will continue to be recognized in that tier of capital.
- For an instrument that has a call and a step-up between September 12, 2010 and January 1, 2013 (or another incentive to be redeemed), if the instrument is not called at its effective maturity date and on a forward looking basis does not meet the new criteria for inclusion in Tier 1B or Tier 2, it will be fully derecognized in that tier of regulatory capital from January 1, 2013.
- For an instrument that has a call and a step-up on or after January 1, 2013 (or another incentive to be redeemed), if the instrument is

⁹⁵ Autorité des marchés financiers. *Adequacy of Capital base Guideline*, published prior January 1, 2013.

⁹⁶ Effective maturity date refers to the incentive to redeem date. Instruments without an incentive to redeem would not have an effective maturity date other than their scheduled maturity (if any).

not called at its effective maturity date and on a forward looking basis does not meet the new criteria for inclusion in Tier 1B or Tier 2, it will be derecognized in that tier of regulatory capital from the effective maturity date. Prior to the effective maturity date, the instrument would be considered an “instrument that no longer qualifies as Tier 1B or Tier 2” and will therefore be phased out from January 1, 2013.

- For an instrument that had a call and a step-up on or prior to September 12, 2010 (or another incentive to be redeemed), if the instrument was not called at its effective maturity date and on a forward looking basis does not meet the new criteria for inclusion in Tier 1B or Tier 2, it will be considered an “instrument that no longer qualifies as Tier 1B or Tier 2 and will therefore be phased out from January 1, 2013.

95. Capital instruments that do not meet the criteria for inclusion in Tier 1A capital will be excluded from Tier 1A capital as of January 1, 2013. However, instruments meeting the following three conditions will be phased out over the same horizon described in paragraph 94(g):

- They are issued by a non-joint stock company.
- They are treated as equity under the prevailing accounting standards.
- They receive unlimited recognition as part of Tier 1 capital in accordance with this Guideline.

96. Only those instruments issued before 12 September 2010 qualify for the above transition arrangements.

The capital instruments issued before January 1, 2013 that meet the criteria of Basel III on regulatory capital, excluding NVCC⁹⁷ requirements will be considered as capital instruments not eligible and subject to phasing discussed in this Guideline. [BCBS, Press release, January 2011]

⁹⁷ “Minimum requirements to ensure loss absorbency at the point of non-viability”, Annex 1 of the Press release Basel Committee issues final elements of the reforms to raise the quality of regulatory capital, published by the Basel Committee, January 13, 2011.

Chapter 3 Credit risk – standardized approach

AMF Note

Chapters 3 to 6 of this Guideline, which deal with credit risk and operational risk, essentially restate the provisions of the simpler approaches set out in pillar 1 of Basel II and the new provisions of the Basel Committee's "A global regulatory framework for more resilient banks and banking systems" published in December 2010 and revised in June 2011.

These chapters include instructions drawn for purposes of compatibility and harmonization from the international and Canadian capital standard frameworks applicable to banks. Consequently, these chapters were adjusted for purposes of application in Québec and in order to make them applicable to credit unions and companies.

The Basel Committee has published, on December 2017, a revised document regarding the standardized approach for credit risk⁹⁸. The AMF is following the development of these provisions and will include them in a future revision of the guideline.

Note that all exposures subject to the standardized approach should be risk-weighted net of specific allowances⁹⁹.

3.1 Risk weight categories

The risk weight categories apply to on-balance sheet and off-balance sheet credit equivalent amounts with the exception of items that are deducted from capital as regulatory adjustments pursuant to Chapter 2.

Individual claims

3.1.1 Claims on sovereigns¹⁰⁰

Claims on sovereigns and their central banks are risk weighted as follows.

⁹⁸ Basel Committee on Banking Supervision. Bank for International Settlements Finalising post-crisis reforms, December 2017. <https://www.bis.org/bcbs/publ/d424.htm>

⁹⁹ Specific and general allowances are defined in the section 2.1.2.6 of the present guideline.

¹⁰⁰ Under the Civil Code of Québec, the term "States" is used instead of "sovereigns". However, in this Guideline, we have retained the use of the term "sovereigns" for purposes of comparability.

Credit assessment ¹⁰¹	AAA to AA-	A+ to A-	BBB+ to BBB-	BB+ to B-	Below B-	Unrated
Risk weight	0%	20%	50%	100%	150%	100%

The AMF may allow a lower risk weight to be applied to institutions exposures to their jurisdiction of origin or their sovereign (or central bank) of incorporation denominated in domestic currency and funded¹⁰² in that currency.¹⁰³ Institutions operating in Quebec that have exposures to sovereigns meeting the above criteria may use the preferential risk weight assigned to those sovereigns by their national supervisors.

3.1.2 Claims on unrated sovereigns

For claims on sovereigns that are unrated, institutions may use country risk scores assigned by Export Credit Agencies (ECAs). Consensus risk scores assigned by ECAs participating in the “Arrangement on Officially Supported Export Credits” and available on the OECD Web site,¹⁰⁴ correspond to risk weights as follows:

ECA risk scores	0 or 1	2	3	4, 5 or 6	7
Risk weight	0%	20%	50%	100%	150%

Claims on the Bank for International Settlements, the International Monetary Fund, the European Central Bank and the European Community receive a 0% risk weight.

3.1.3 Claims on non-central government public sector entities (PSEs)

PSEs are defined as:

- Entities directly and wholly-owned by a government.
- School boards, general and vocational colleges (CEGEPS), universities, hospitals and social service programs that receive regular government financial support.
- Municipalities.

¹⁰¹ These ratings are calculated based on the methodology used by Standard & Poor's. Section 3.7.2.1 provides more details on risk weights determined based on methodologies of other external credit assessment agencies.

¹⁰² This is to say that the financial institution would also have corresponding liabilities denominated in the domestic currency.

¹⁰³ This lower risk weight may be extended to the risk weighting of collateral and guarantees. See Sections 4.1.3 and 4.1.5.

¹⁰⁴ The consensus country risk classification is available on the OECD's Web site www.oecd.org in the Export Credit Arrangement web page of the Trade Directorate.

Claims on PSEs receive a risk weight that is one category higher than the sovereign risk weight:

Credit assessment of sovereign	AAA to AA-	A+ to A-	BBB+ to BBB-	BB+ to B-	Below B-	Unrated
Sovereign risk weight	0%	20%	50%	100%	150%	100%
PSE risk weight	20%	50%	100%	100%	150%	100%

There are two exceptions to the above:

- i. Claims on the following entities will receive the same risk weight as the Government of Canada:
 - All provincial and territorial governments and agents of the federal, provincial or territorial government whose debts are, by virtue of their enabling legislation, obligations of the parent government.
- ii. Claims on the following entities will be treated like claims on corporates:
 - Entities that are, in the judgement of the host government, significantly in competition with the private sector. Institutions should look to the host government to confirm whether an entity is a PSE in competition with the private sector.

The PSE risk weight is meant for the financing of the PSE's own municipal and public services. Where PSEs other than Canadian provincial or territorial governments provide guarantees or other support arrangements other than in respect of the financing of their own municipal or public services, the PSE risk weight may not be used.

PSEs in foreign jurisdictions should be given the same capital treatment as that applied by the national supervisor in the jurisdiction of origin.

3.1.4 Claims on multilateral development banks (MDBs)

Claims on MDBs that meet the following criteria receive a risk weight of 0%:

- Very high quality long-term issuer ratings, i.e. a majority of an MDB's external assessments must be AAA.
- Shareholder structure is comprised of 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.

- 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.
- 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).
- 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.

MDBs currently eligible for 0% risk weight are:

- World Bank Group.
- International Bank for Reconstruction and Development (IBRD).
- International Finance Corporation (IFC).
- Asian Development Bank (ADB).
- African Development Bank (AFDB).
- European Bank for Reconstruction and Development (EBRD).
- Inter-American Development Bank (IADB).
- European Investment Bank (EIB).
- European Investment Fund (EIF).
- Nordic Investment Bank (NIB).
- Caribbean Development Bank (CDB).
- Islamic Development Bank (IDB).
- Council of Europe Development Bank (CEDB).

Otherwise, the following risk weights apply:

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

3.1.5 Claims on deposit taking institutions and banks

Deposit taking institutions (DTIs) include federally and provincially regulated institutions that take deposits and lend money. These include financial services cooperatives, trust companies, savings companies, banks, and co-operative credit societies.

The term “bank” refers to those institutions that are regarded as banks in the countries in which they are incorporated and supervised by the appropriate banking supervisory or monetary authority. In general, banks will engage in the business of banking and have the power to accept deposits in the regular course of business.

For banks incorporated in countries other than Canada, the definition of “bank” will be that used in the capital adequacy regulations of the host jurisdiction.

The following risk weights apply to claims on DTIs and banks:

Credit assessment of sovereign	AAA to AA-	A+ to A-	BBB+ to BBB-	BB+ to B-	Below B-	Unrated
DTI / Bank Risk weight	20%	50%	100%	100%	150%	100%

The risk weights for deposit institutions and banks are one category higher than the rating of sovereigns in the country where the deposit institution or bank has its head office.

Claims on parents of DTIs that are non-financial institutions are treated as corporate exposures.

3.1.6 Claims on securities firms

Claims on securities firms may be treated as claims on deposit taking institutions and banks provided these firms are subject to supervisory and regulatory arrangements comparable to those under the Basel II framework (including, in particular, risk-based capital requirements).¹⁰⁵ Otherwise, such claims would follow the rules for claims on corporates.

3.1.7 Claims on corporates

The table provided below illustrates the risk weighting of rated corporate claims, including claims by insurers. The standard risk weight for unrated claims on corporates

¹⁰⁵ That is, capital requirements that are comparable to those applied to banks in the New Basel Accord. Implicit in the meaning of the word “comparable” is that the securities firm (but not necessarily its parent) is subject to consolidated regulation and supervision with respect to any downstream affiliates.

will be 100%. No claim on an unrated corporate may be given a risk weight preferential to that assigned to its sovereign of incorporation.

Credit assessment of corporate	AAA to AA-	A+ to A-	BBB+ to BB-	Below BB-	Unrated
Credit assessment of corporate	20%	50%	100%	150%	100%

Institutions may choose to apply a 100% risk weight to all corporate exposures. However, if an institution chooses to adopt this option, it must use the 100% risk weight for all of its corporate exposures.

3.1.8 Claims included in regulatory retail portfolios

Retail claims are risk-weighted at 75%.

To be included in the regulatory retail portfolio, claims must meet 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 (e.g. instalment loans, auto loans and leases, student and educational loans, personal finance) and small business facilities and commitments. Securities (such as bonds and equities), whether listed or not, are specifically excluded from this category. Mortgage loans are excluded to the extent that they qualify for treatment as claims secured by residential property.
- Granularity criterion — The supervisor must be satisfied that the regulatory retail portfolio is sufficiently diversified to a degree that reduces the risks in the portfolio, warranting the 75% risk weight.
- Low value of individual exposures — The maximum aggregated retail exposure to one counterparty cannot exceed an absolute threshold of CAD \$1.25 million. Small business loans extended through or guaranteed by an individual are subject to the same exposure threshold.

Residential construction loans meeting the above criteria are risk-weighted at 75%. Residential construction loans that do not meet the above criteria must be treated as a corporate exposure subject to the risk weights in Section 3.1.7.

3.1.9 Claims secured by residential property

Mortgages on residential property that is or will be occupied by the borrower, or that is rented, are risk weighted at 35%.

Qualifying residential mortgages include:

- loans secured by first mortgages on individual condominium residences and one-to four-unit residences made to a person(s) or guaranteed by a person(s), provided that such loans are not 90 days or more past due and do not exceed a loan-to-value ratio of 80%;
- collateral mortgages (first and junior) on individual condominium residences or one- to four-unit residential dwellings, provided that such loans are made to a person(s) or guaranteed by a person(s), where no other party holds a senior or intervening lien on the property to which the collateral mortgage applies and such loans are not more than 90 days past due and do not, collectively, exceed a loan-to-value ratio of 80%;

Investments in hotel properties and time-shares are excluded from the definition of qualifying residential property.

Uninsured collateral mortgages that would otherwise qualify as residential mortgages, except that their loan-to-value ratio exceeds 80%, receive a risk weight of 75%.

Residential mortgages insured under the National Housing Act (NHA)¹⁰⁶ or equivalent provincial mortgage insurance programs are risk weighted at 0%. Where a mortgage is comprehensively insured by a private sector mortgage insurer that has a backstop guarantee provided by the Government of Canada (for example, a guarantee provided by the Minister of Finance made pursuant to articles 3, 4, 16 and 43 of the *Protection of Residential Mortgage or Hypothecary Insurance Act*¹⁰⁷) institutions may recognize the risk-mitigating effect of the guarantee by reporting the portion of the exposure that is covered by the Government of Canada backstop as if this portion were directly guaranteed by the Government of Canada. The remainder of the exposure should be treated as a corporate-guaranteed mortgage in accordance with the rules set out in Chapter 4.

3.1.9.1 Reverse mortgage

A reverse mortgage allows borrowers to convert a portion of the equity in their homes to cash. The amount initially advanced under a reverse mortgage depends on the borrower's expected term of occupancy, the appraised value of the property and forecasted interest rates. The source of repayment for the loan is the recoverable value of the underlying property.

Reverse mortgages are non-recourse loans secured by property that have no defined term and no monthly repayment of principal and interest. The amount owing on a reverse mortgage grows with time as interest is accrued and deferred. The loan is

¹⁰⁶ R.S.C, 1985, c. N-11.

¹⁰⁷ S.C. 2011. c. 15, s. 20.

generally repaid from the net proceeds of sale (i.e. net of disposition costs) after the borrower has vacated the property.

Reverse mortgage lenders are repaid the lesser of the fair market value of the home (less disposition costs) at the time it is sold and the amount of the loan. Assuming there is no event of default (for example, failure to pay property taxes and insurance, or failure to keep the home in a good state of repair), reverse mortgage lenders have no recourse to the borrower if the amount realized on the sale of the home is less than the amount owing on the reverse mortgage.

All financial institutions are required to use the standardized approach to credit risk for reverse mortgage exposures.

A reverse mortgage exposure¹⁰⁸ qualifies for a 35% risk weight provided that all of the following conditions are met:

- Its initial loan to value ratio (LTV) is less than or equal to 40%.
- Its current LTV is less than or equal to 60%.
- Disposition costs on the mortgaged property and risk of appraisal error will not exceed 15% - 20% of the current appraised value.
- The criteria for qualifying residential mortgages set out in Section 3.1.9 of the present Guideline are met (except that there is no requirement for recourse to the borrower for a deficiency).

Further, for a reverse mortgage to qualify for a 35% risk weight, the underwriting institution must have, at mortgage inception and at the time such risk weight is being considered, each of the following:

- documented and prudent underwriting standards, including systematic methods for estimating expected occupancy term (which should at minimum refer to standard mortality tables), future real estate appreciation / depreciation, future interest rates on the reverse mortgage and determining appropriate levels for maximum initial LTVs and a maximum dollar amount that may be lent;
- documented procedures for monitoring loan to value ratios on an ongoing basis, based on outstanding loan amounts, including accrued interest, undrawn balances and up to date property values;
- documented procedures for obtaining independent reappraisals of the properties at regular intervals, not less than once every five years, with more frequent appraisals as loan to value ratios approach 80%;

¹⁰⁸ Reverse mortgage exposure means all advances, plus accrued interest and 50% of undrawn amounts, net of specific allowances. Undrawn amounts on reverse mortgages do not include future loan growth due to capitalizing interest. Undrawn amounts are treated as undrawn commitments and are subject to a credit conversion factor of 50% (i.e. commitments with an original maturity exceeding one year).

- a documented process to ensure timely reappraisal of properties in a major urban centre where resale home prices in that urban centre decline by more than 10%;
- documented procedures for ensuring that borrowers remain in compliance with loan conditions;
- a rigorous method for stress testing the reverse mortgage portfolio that addresses expected occupancy, property value and interest rate assumptions;
- ongoing monitoring of reverse mortgage stress testing that is incorporated in the institution's Tier 8 II Internal Capital Adequacy Assessment and capital planning processes.

For purposes of calculating risk weighted assets, current LTV is defined as the reverse mortgage exposure as defined in footnote 108 divided by:

- where the most recent appraisal is greater than the original appraisal, the greater of the original appraised value or 80% of the most recent appraised value of the property; or
- where the most recent appraisal is less than the original appraisal, the most recent appraised value of the property.

The following table sets out the capital treatment of reverse mortgage exposures:

Initial LTV		Current LTV	Risk weight
≤ 40%	and	≤ 60%	35%
> 40%	and	≤ 60%	50%
		> 60% and ≤ 75%	75%
		> 75% and ≤ 85%	100%
		> 85%	Partial deduction

In particular:

- A reverse mortgage exposure that originally qualified for a 35% risk weight but now has a current LTV that is greater than 60%, but less than or equal to 75%, is risk weighted at 75%.
- A reverse mortgage exposure that had an initial LTV greater than 40% (but that otherwise would have qualified for a 35% risk weight) is risk weighted at 50%, provided its current loan to value ratio is less than or equal to 60%.
- All reverse mortgage exposures with current LTVs greater than 60% and less than or equal to 75%, except those that could not (regardless of original LTV) qualify for the 35% or 50% risk weight are risk weighted at 75%.

- All reverse mortgage exposures with current LTVs greater than 75% and less than or equal to 85%, and all reverse mortgages that could not (regardless of the original LTV) qualify for a 35% or 50% risk weight and which have a current LTV less than or equal to 85%, are risk weighted at 100%.
- Where a reverse mortgage exposure has a current LTV greater than 85%, the exposure amount that exceeds 85% LTV is deducted from capital. The remaining amount is risk-weighted at 100%.

3.1.10 Mortgage-backed securities

0% Risk weight

- NHA mortgage-backed securities sent directly to investors that are guaranteed by the Canada Mortgage and Housing Corporation (CMHC), in recognition of the fact that obligations incurred by CMHC are legal obligations of the Government of Canada.

35% Risk weight

- Mortgage-backed securities that are fully and specifically secured against qualifying residential mortgages (see Section 3.1.9).

100% Risk weight

- Amounts receivable resulting from the sale of mortgages under NHA mortgage-backed securities programs.

3.1.11 Pass-through type mortgage-backed securities

Mortgage-backed securities that are of pass-through type and are effectively a direct holding of the underlying assets shall receive the risk-weight of the underlying assets, provided that all the following conditions are met:

- The underlying mortgage pool contains only mortgages that are fully performing when the mortgage-backed security is created.
- The securities must absorb their pro-rata share of any losses incurred.
- A special-purpose vehicle should be established for securitisation and administration of the pooled mortgage loans.
- The underlying mortgages are assigned to an independent third party for the benefit of the investors in the securities who will then own the underlying mortgages.
- The arrangements for the special-purpose vehicle and trustee must provide that the following obligations are observed:

- If a mortgage administrator or a mortgage servicer is employed to carry out administration functions, the vehicle and trustee must monitor the performance of the administrator or servicer.
- The vehicle and/or trustee must provide detailed and regular information on structure and performance of the pooled mortgage loans.
- The vehicle and trustee must be legally separate from the originator of the pooled mortgage loans.
- The vehicle and trustee must be responsible for any damage or loss to investors created by their own or their mortgage servicer's mismanagement of the pooled mortgages.
- The trustee must have a first priority charge on underlying assets on behalf of the holders of the securities.
- The agreement must provide for the trustee to take clearly specified steps in cases when the mortgagor defaults.
- The holder of the security must have a pro-rata share in the underlying mortgage assets or the vehicle that issues the security must have only liabilities related to the issuing of the mortgage-backed security.
- The cash flows of the underlying mortgages must meet the cash flow requirements of the security without undue reliance on any reinvestment income.
- The vehicle or trustee may invest cash flows pending distribution to investors only in short-term money market instruments (without any material reinvestment risk) or in new mortgage loans.

Mortgage-backed securities that do not meet these conditions will receive a risk-weight of 100%. Stripped mortgage-backed securities or different classes of securities (senior/junior debt, residual tranches) that bear more than their pro-rata share of losses will automatically receive a 100% risk weight.

Where the underlying pool of assets is comprised of assets that would attract different risk weights, the risk weight of the securities will be the highest risk weight associated with risk-weighted assets.

For the treatment of mortgage-backed securities issued in tranches, refer to Chapter 5 in the Guideline, Securitisation framework.

3.1.12 Repurchase and reverse repurchase agreements

A securities repurchase (repo) is an agreement whereby a transferor agrees to sell securities at a specified price and repurchase the securities on a specified date and at a specified price. Since the transaction is regarded as a financing for accounting purposes, the securities remain on the balance sheet. Given that these securities are temporarily assigned to another party, the risk weighted assets associated with this exposure should be the higher of risk-weighted assets calculated using:

- the risk weight of the security; or
- the risk weight of the counterparty to the transaction, recognizing any eligible collateral; see Chapter 4.

A reverse repurchase agreement is the opposite of a repurchase agreement, and involves the purchase and subsequent resale of a security. Reverse repos are treated as collateralized loans, reflecting the economic reality of the transaction. The risk is therefore to be measured as an exposure to the counterparty. If the asset temporarily acquired is a security that qualifies as eligible collateral per Chapter 4, the risk-weighted exposure may be reduced accordingly.

3.1.13 Securities lending

In securities lending, institutions can act as principal to the transaction by lending their own securities or as an agent by lending securities on behalf of their clients.

When the institution lends its own securities, the credit risk is based on the higher of:

- the credit risk of the instrument lent, or
- the counterparty credit risk of the borrower of the securities. This risk could be reduced if the institution held eligible collateral (refer to Chapter 4). Where the institution lends securities through an agent and receives an explicit guarantee of the return of the securities, the institution's counterparty is the agent.

When the institution, acting as agent, lends securities on behalf of the client and guarantees that the securities lent will be returned or the institution will reimburse the client for the current market value, the credit risk is based on the counterparty credit risk of the borrower of the securities. This risk could be reduced if the institution held eligible collateral (see Chapter 4).

3.1.14 Claims secured by commercial real estate

Commercial mortgages are risk-weighted at 100%.

3.1.15 Past due loans

The unsecured portion of any loan (other than a qualifying residential mortgage loan) that is past due for more than 90 days, net of specific provisions¹⁰⁹ (including partial write-offs), will be risk-weighted as follows:

- 150% risk weight when specific provisions are less than 20% of the outstanding amount of the loan.

¹⁰⁹ Specific and general allowances are defined in the section 2.1.2.6 of the present guideline.

- 100% risk weight when specific provisions are more than 20% and less than 100% of the outstanding amount of the loan.

For the purpose of defining the secured portion of the past due loan, eligible collateral and guarantees¹¹⁰ will be the same as for credit risk mitigation purposes (see Chapter 4). For the purpose of determining the applicable risk weight, past due retail loans are to be excluded from the overall regulatory retail portfolio when assessing the granularity criterion specified in 3.1.8.

Qualifying residential mortgage loans that are past due for more than 90 days will be risk weighted at 100%, net of specific provisions.

3.1.16 Higher-risk categories

The following claims will be risk weighted at 150% or higher:

- claims on sovereigns, PSEs, deposit institutions, banks and securities firms rated below B-;
- claims on corporates rated below BB-;
- past due loans as set out in Section 3.1.15;
- securization tranches defined in the chapter 5 this Guideline.

3.1.17 Equity investments in funds

Remark

The following paragraphs came from the document named *Capital requirements for bank's equity investments in funds – final standard*, published by the Basel Committee in December 2013.

The AMF adapts the paragraphs 80(i) à 80(xvii) of that document by keeping the Basel Committee paragraph numbers.

- 80(i). Equity investments in funds that are held in the banking book must be treated in a manner consistent with one or more of the following three approaches, which vary in their risk sensitivity and conservatism: the “look-through approach”

¹¹⁰ In this Guideline, the terms “collateral” and “guarantees” have their general meaning. However, in accordance with the provisions of the Civil Code of Québec, the term “guarantee” can also include the notion of surety or suretyship. As regards the term “collateral”, it was used in this Guideline instead of the Civil Code term “security”. The provisions of the Civil Code present security as being either a hypothec on property or property charged with a security. In this document, we have retained the use of the terms “guarantees” and “collateral” for purposes of comparability.

(LTA), the “mandate-based approach” (MBA), and the “fallback approach” (FBA).

(i) The look-through approach

- 80(ii). The LTA requires a bank to risk weight the underlying exposures of a fund as if the exposures were held directly by the bank. This is the most granular and risk-sensitive approach. It must be used when:
- a) there is sufficient and frequent information provided to the bank regarding the underlying exposures of the fund; and
 - b) such information is verified by an independent third party.
- 80(iii). To satisfy condition (a) above, the frequency of financial reporting of the fund must be the same as, or more frequent than, that of the bank’s and the granularity of the financial information must be sufficient to calculate the corresponding risk weights.¹¹¹ To satisfy condition (b) above, there must be verification of the underlying exposures by an independent third party, such as the depository or the custodian bank or, where applicable, the management company.
- 80(iv). Under the LTA banks must risk weight all underlying exposures of the fund as if those exposures were directly held. This includes, for example, any underlying exposure arising from the fund’s derivatives activities (for situations in which the underlying receives a risk weighting treatment under Pillar 1) and the associated counterparty credit risk (CCR) exposure. Instead of determining a credit valuation adjustment (CVA) charge associated with the fund’s derivatives exposures in accordance with paragraphs 97-104 of Basel III, banks must multiply the CCR exposure by a factor of 1.5 before applying the risk weight associated with the counterparty.¹¹² See the annex 4-III for an example of how to calculate riskweighted assets using the LTA.
- 80(v). Banks may rely on third-party calculations for determining the risk weights associated with their equity investments in funds (ie the underlying risk weights of the exposures of the fund) if they do not have adequate data or information to perform the calculations themselves. In such cases, the applicable risk weight shall be 1.2 times higher than the one that would be applicable if the exposure were held directly by the bank.¹¹³

¹¹¹ An external audit is not required.

¹¹² An institution is not required to apply the 1.5 factor for situations in which the CVA capital charge would not otherwise be applicable. This includes: (i) transactions with a central counterparty and (ii) securities financing transactions (SFTs), unless the bank’s national supervisor determines that the bank’s CVA loss exposure arising from SFTs are material.

¹¹³ For instance, any exposure that is subject to a 20% risk weight under the Standardised Approach would be weighted at 24% (1.2 * 20%) when the look through is performed by a third party.

(ii) The mandate-based approach

80(vi). The second approach, the MBA, provides a method for calculating regulatory capital that can be used when the conditions for applying the LTA are not met.

80(vii). Under the MBA banks may use the information contained in a fund's mandate or in the national regulations governing such investment funds.¹¹⁴ To ensure that all underlying risks are taken into account (including CCR) and that the MBA renders capital requirements no less than the LTA, the risk-weighted assets for the fund's exposures are calculated as the sum of the following three items:

- a) Balance sheet exposures (ie the funds' assets) are risk weighted assuming the underlying portfolios are invested to the maximum extent allowed under the fund's mandate in those assets attracting the highest capital requirements, and then progressively in those other assets implying lower capital requirements. If more than one risk weight can be applied to a given exposure, the maximum risk weight applicable must be used.¹¹⁵
- b) Whenever the underlying risk of a derivative exposure or an off-balance-sheet item receives a risk weighting treatment under Pillar 1, the notional amount of the derivative position or of the off-balance sheet exposure is risk weighted accordingly.¹¹⁶
- c) The CCR associated with the fund's derivative exposures is calculated using the standard approach set out in Annex 3-II ; which includes a replacement cost and an add-on component.

See the annex 4-III for an example of how to calculate risk-weighted assets using the MBA.

(iii) The fall-back approach

80(viii). Where neither the LTA nor the MBA is feasible, banks are required to apply the FBA. The FBA applies a 1,250% risk weight to the bank's equity investment in the fund.

¹¹⁴ Information used for this purpose is not strictly limited to a fund's mandate or national regulations governing like funds. It may also be drawn from other disclosures of the fund.

¹¹⁵ For instance, for investments in corporate bonds with no ratings restrictions, a risk weight of 150% must be applied

¹¹⁶ If the notional amount of derivatives mentioned in paragraph 80(vii) is unknown, it will be estimated conservatively using the maximum notional amount of derivatives allowed under the mandate

(iv) Treatment of funds that invest in other funds

80(ix). When a bank has an investment in a fund (eg Fund A) that itself has an investment in another fund (eg Fund B), which the bank identified by using either the LTA or the MBA, the risk weight applied to the investment of the first fund (ie Fund A's investment in Fund B) can be determined by using one of the three approaches set out above. For all subsequent layers (eg Fund B's investments in Fund C and so forth), the risk weights applied to an investment in another fund (Fund C) can be determined by using the LTA under the condition that the LTA was also used for determining the risk weight for the investment in the fund at the previous layer (Fund B). Otherwise, the FBA must be applied.

(v) Partial use of an approach

80(x). A bank may use a combination of the three approaches when determining the capital requirements for an equity investment in an individual fund, provided that the conditions set out in paragraphs 80(i) to 80(xii) are met. (vi) Exclusions to the look-through, mandate-based and the fall-back approaches 80(xi). Equity holdings in entities whose debt obligations qualify for a zero risk weight can be excluded from the LTA, MBA and FBA approaches (including those publicly sponsored entities where a zero risk weight can be applied), at the discretion of the national supervisor. If a national supervisor makes such an exclusion, this will be available to all banks. 80(xii). To promote specified sectors of the economy, supervisors may exclude from the capital charges equity holdings made under legislated programmes that provide significant subsidies or the investment to the bank and involve some form of government oversight and restrictions on the equity investments. Example of restrictions are limitations on the size and types of businesses in which the bank is investing, allowable amounts of ownership interests, geographical location and other pertinent factors that limit the potential risk of the investment to the bank. Equity holdings made under legislated programmes can only be excluded up to an aggregate of 10% of a bank's total regulatory capital.

(vii) Leverage adjustment

80(xiii). Leverage is defined as the ratio of total assets to total equity. National discretion may be applied to choose a more conservative leverage metric, if deemed appropriate. Leverage is taken into account in the MBA by using the maximum financial leverage permitted in the fund's mandate or in the national regulation governing the fund.

80(xiv). When determining the capital requirement related to its equity investment in a fund, a bank must apply a leverage adjustment to the average risk weight of the fund, as set out in paragraph 80(xv), subject to a cap of 1,250%.

80(xv). After calculating the total risk-weighted assets of the fund according to the LTA or the MBA, banks will calculate the average risk weight of the fund (Avg

RWfund) by dividing the total risk-weighted assets by the total assets of the fund. Using Avg RWfund and taking into account the leverage of a fund (Lvg), the risk-weighted assets for a bank's equity investment in a fund can be represented as follows:

$$RWA_{investment} = AvgRW_{funds} \times Leverage \times Equity \text{ investment}$$

80(xvi). The effect of the leverage adjustments depends on the underlying riskiness of the portfolio (ie the average risk weight) as obtained by applying Basel II's Standardised Approach or the IRB approaches for credit risk. The formula can therefore be re-written as:

$$RWA_{investment} = RWA_{funds} \times \text{Percentage of shares}$$

80(xvii). See the annex 4-III for an example of how to calculate the leverage adjustment.

3.1.18 Other assets

0% Risk weight

- Cash and gold bullion held in the institution's own vaults or on an allocated basis to the extent backed by bullion liabilities.
- Unrealized gains and accrued receivables on foreign exchange and interest rate-related off-balance sheet transactions where they have been included in the off-balance sheet calculations.
- All deductions from capital, as specified in Chapter 2.

20% Risk weight

- Cheques and other items in transit.

100% Risk weight

- The amount of non-significant investments in the capital of banks, other financial institutions and insurance entities to which a credit risk standardized approach applies not deducted from capital.
- Premises, plant and equipment and other fixed assets.
- Real estate and other investments (including non-consolidated investment participation in other companies).
- Prepaid expenses such as property taxes and utilities.
- Deferred charges such as mortgage origination costs.

- Assets subject to using right¹¹⁷
- All other assets.

250% Risk weight

- Items described as *threshold deductions* in Chapter 2 which fall below the applicable thresholds.

1 250% Risk weight

- Various items described in Chapter 2 (Items subject to a 1 250% risk weight).

3.2 Categories of off-balance sheet instruments

The definitions in this section apply to off-balance sheet instruments. The term “off-balance sheet instruments”, as used in this Guideline, encompasses guarantees, commitments, derivatives, and similar contractual arrangements whose full notional principal amount may not necessarily be reflected on the balance sheet. Such instruments are subject to a capital charge irrespective of whether they have been recorded on the balance sheet at market value.

Institutions should closely monitor securities, commodities, and foreign exchange transactions that have failed, starting the first day they fail. A capital charge to failed transactions should be calculated in accordance with Annex 3-II. With respect to unsettled securities, commodities, and foreign exchange transactions that are not processed through a delivery-versus-payment (DvP) mechanism, institutions should also calculate a capital charge as set forth in Annex 3-I.

The credit equivalent amount of Securities Financing Transactions (SFT)¹¹⁸ and OTC derivatives that expose an institution to counterparty credit risk¹¹⁹ is to be calculated under the rules set forth in Annex 3-II. This annex applies to all OTC derivatives held in the banking book and the trading book.

¹¹⁷ Reference: IFRS 16 – rent contract

¹¹⁸ Securities Financing Transactions (SFT) are transactions such as repurchase agreements, reverse repurchase agreements, security lending and borrowing, and wholesale margin lending transactions, where the value of the transactions depends on the market valuations and the transactions are often subject to margin agreements.

¹¹⁹ 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 an institution’s exposure to credit risk through a loan, where the exposure to credit risk is unilateral and only the lending institution 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.

3.2.1 Direct credit substitutes

Direct credit substitutes include guarantees or equivalent instruments backing financial claims. With a direct credit substitute, the risk of loss to the institution is directly dependent on the creditworthiness of the counterparty.

Examples of direct credit substitutes include:

- Guarantees given on behalf of customers to stand behind the financial obligations of the customer and to satisfy these obligations should the customer fail to do so; for example, guarantees of:
 - Payment for existing indebtedness for services.
 - Payment with respect to a purchase agreement.
 - Lease, loan or mortgage payments.
 - Payment of uncertified cheques.
 - Remittance of (sales) tax to the government.
 - Payment of existing indebtedness for merchandise purchased.
 - Payment of an unfunded pension liability.
 - Reinsurance of financial obligations.
- Standby letters of credit or other equivalent irrevocable obligations, serving as financial guarantees, such as letters of credit supporting the issue of commercial paper.
- Risk participation in bankers' acceptances and risk participation in financial letters of credit. Risk participation constitutes guarantees by the participating institutions such that, if there is a default by the underlying obligor, they will indemnify the selling institution for the full principal and interest attributable to them.
- Securities lending transactions where the institution is liable to its customer for any failure to recover the securities lent.
- Credit derivatives in the banking book where an institution is selling credit protection.

3.2.2 Transaction-related contingencies

Transaction-related contingencies relate to the ongoing business activities of a counterparty, where the risk of loss to the reporting institution depends on the likelihood of a future event that is independent of the creditworthiness of the counterparty. Essentially, transaction-related contingencies are guarantees that support particular performance of non-financial or commercial contracts or undertakings, rather than supporting customers' general financial obligations. Performance-related guarantees specifically exclude items relating to non-performance of financial obligations.

Performance-related and non-financial guarantees include items such as:

- performance bonds, warranties and indemnities. Performance standby letters of credit represent obligations backing the performance of non-financial or commercial contracts or undertakings. These include arrangements backing:
 - subcontractors' and suppliers' performance;
 - labour and material contracts;
 - delivery of merchandise, bids or tender bonds;
 - guarantees of repayment of deposits or prepayments in cases of non-performance.
- customs and excise bonds. The amount recorded for such bonds should be the reporting institution's maximum liability.

3.2.3 Trade-related contingencies

These include short-term, self-liquidating trade-related items such as commercial and documentary letters of credit issued by the institution that are, or are to be, collateralized by the underlying shipment.

Letters of credit issued on behalf of a counterparty back-to-back with letters of credit of which the counterparty is a beneficiary ("back-to-back" letters) should be reported as documentary letters of credit.

Letters of credit advised by the institution for which the institution is acting as reimbursement agent should not be considered as a risk asset.

3.2.4 Sale and repurchase agreements

A repurchase agreement is a transaction that involves the sale of a security or other asset with the simultaneous commitment by the seller that, after a stated period of time, the seller will repurchase the asset from the original buyer at a pre-determined price. A reverse repurchase agreement consists of the purchase of a security or other asset with the simultaneous commitment by the buyer that, after a stated period of time, the buyer will resell the asset to the original seller at a pre-determined price. In any circumstance where they are not reported on-balance sheet, they should be reported as an off-balance sheet exposure with a 100% credit conversion factor.

3.2.5 Forward asset purchases¹²⁰

A forward asset purchase is a commitment to purchase a loan, security, or other asset at a specified future date, usually on prearranged terms.

¹²⁰ This does not include a spot transaction that is contracted to settle within the normal settlement period.

3.2.6 Forward/forward deposits

An agreement between two parties whereby one will pay and other receive an agreed rate of interest on a deposit to be placed by one party with the other at some pre-determined date in the future. Such deposits are distinct from future forward rate agreements in that, with forward/forwards, the deposit is actually placed.

3.2.7 Partly paid shares and securities

Transactions where only a part of the issue price or notional face value of a security purchased has been subscribed and the issuer may call for the outstanding balance (or a further instalment), either on a date pre-determined at the time of issue or at an unspecified future date.

3.2.8 Note issuance/revolving underwriting facilities

These are arrangements whereby a borrower may issue short-term notes, typically three to six months in maturity, up to a prescribed limit over an extended period of time, commonly by means of repeated offerings to a tender panel. If at any time the notes are not sold by the tender at an acceptable price, an underwriter (or group of underwriters) undertakes to buy them at a prescribed price.

3.2.9 Future/forward rate agreements

These are arrangements between two parties where at some pre-determined future date a cash settlement will be made for the difference between the contracted rate of interest and the current market rate on a pre-determined notional principal amount for a pre-determined period.

3.2.10 Interest rate swaps

In an interest rate swap, two parties contract to exchange interest service payments on the same amount of notional indebtedness. In most cases, fixed interest rate payments are provided by one party in return for variable rate payments from the other and vice versa. However, it is possible that variable interest payments may be provided in return for other variable interest rate payments.

3.2.11 Interest rate options and currency options

An option is an agreement between two parties where the seller of the option for compensation (premium/fee) grants the buyer the future right, but not the obligation, to buy from the seller, or to sell to the seller, either on a specified date or during a specified period, a financial instrument or commodity at a price agreed when the option is arranged. Other forms of interest rate options include interest rate cap agreements and collar (floor/ceiling) agreements.

Options traded on exchanges may be excluded where they are subject to daily margining requirements.

3.2.12 Forward foreign exchange contracts

A forward foreign exchange contract is an agreement between an institution and a counterparty in which the institution agrees to sell to or purchase from the counterparty a fixed amount of foreign currency at a fixed rate of exchange for delivery and settlement on a specified date in the future or within a fixed optional period.

3.2.13 Cross currency swaps

A cross currency swap is a transaction in which two parties exchange currencies and the related interest flows for a period of time. Cross currency swaps are used to swap fixed interest rate indebtedness in different currencies.

3.2.14 Cross currency interest rate swaps

Cross currency interest rate swaps combine the elements of currency and interest rate swaps.

3.2.15 Financial and foreign currency futures

A future is a standardized contractual obligation to make or take delivery of a specified quantity of a commodity (financial instrument, foreign currency, etc.) on a specified future date at a specified future price established in a central regulated marketplace (precious metals contracts and financial contracts on commodities).

3.2.16 Precious metals contracts and financial contracts on commodities

Precious metals contracts and financial contracts on commodities can involve spot, forward, futures and option contracts. Precious metals are mainly gold, silver, and platinum. Commodities are bulk goods such as grains, metals and foods traded on a commodities exchange or on the spot market. For capital purposes, gold contracts are treated the same as foreign exchange contracts.

3.2.17 Non-equity warrants

Non-equity warrants include cash settlement options/contracts whose values are determined by the movements in a given underlying index, product, or foreign exchange over time. Where non-equity warrants or the hedge for such warrants expose the financial institution to counterparty credit risk, the credit equivalent amount should be determined using the current exposure method for exchange rate contracts.

3.3 Credit conversion factors

The face amount (notional principal amount) of off-balance sheet instruments does not always reflect the amount of credit risk in the instrument. To approximate the potential

credit exposure of non-derivative instruments, the notional amount is multiplied by the appropriate credit conversion factor (CCF) to derive a credit equivalent amount.¹²¹ The credit equivalent amount is treated in a manner similar to an on-balance sheet instrument and is assigned the risk weight appropriate to the counterparty or, if relevant, the guarantor or collateral. The categories of credit conversion factors are outlined below:

100% Conversion factor

- Direct credit substitutes (general guarantees of indebtedness and guarantee-type instruments, including standby letters of credit serving as financial guarantees for, or supporting, loans and securities).
- Acquisitions of risk participation in bankers' acceptances and participation in direct credit substitutes (for example, standby letters of credit).
- Sale and repurchase agreements.
- Forward agreements (contractual obligations) to purchase assets, including financing facilities with certain drawdown.
- Written put options on specified assets with the characteristics of a credit enhancement.¹²²

50% Conversion factor

- Transaction-related contingencies (for example, bid bonds, performance bonds, warranties, and standby letters of credit related to a particular transaction).
- Commitments with an original maturity exceeding one year, including underwriting commitments and commercial credit lines.
- Revolving underwriting facilities (RUFs), note issuance facilities (NIFs) and other similar arrangements.

20% Conversion factor

- Short-term, self-liquidating trade-related contingencies, including commercial/documentary letters of credit (Note: a 20% CCF is applied to both issuing and confirming institutions).
- Commitments with an original maturity of one year or less.

0% Conversion factor

- Commitments that are unconditionally cancellable at any time without prior notice.

¹²¹ See Section 3.4.

¹²² Written put options (where premiums are paid upfront) expressed in terms of market rates for currencies or financial instruments bearing no credit or equity risk are excluded from the framework.

3.4 Forwards, swaps, purchased options and other similar derivative contracts

The treatment of forwards, swaps, purchased options and other similar derivatives needs special attention because institutions are not exposed to credit risk for the full face value of their contracts (notional principal amount), but only to the potential cost of replacing the cash flow (on contracts showing a positive value) if the counterparty defaults. The credit equivalent amounts are calculated using the current exposure method and are assigned the risk weight appropriate to the counterparty. See Annex 3-II for details on this method.

The add-on applied in calculating the credit equivalent amount depends on the maturity of the contract and on the volatility of the rates and prices underlying that type of instrument. Instruments traded on exchanges may be excluded where they are subject to daily receipt and payment of cash variation margin. Options purchased over the counter are included with the same conversion factors as other instruments.

Institutions should closely monitor securities, commodities, and foreign exchange transactions that have failed, starting the first day they fail. A capital charge for failed transactions should be calculated in accordance with annex 3-I. With respect to unsettled securities, commodities, and foreign exchange transactions that are not processed through a delivery-versus-payment (DvP) or payment-versus-payment (PvP) mechanism, institutions should calculate a capital charge as set forth in annex 3-I.

3.4.1 Interest rate contracts

These include:

- Single-currency interest rate swaps.
- Basis swaps.
- Forward rate agreements and products with similar characteristics.
- Interest rate futures.
- Interest rate options purchased.

3.4.2 Foreign exchange rate contracts

These include:

- Gold contracts.¹²³
- Cross-currency swaps.
- Cross-currency interest rate swaps.

¹²³ Gold contracts are treated the same as foreign exchange rate contracts for the purpose of calculating credit risk.

-
- Outright forward foreign exchange contracts.
 - Currency futures.
 - Currency options purchased.

3.4.3 Equity contracts

These include:

- Futures.
- Forwards.
- Swaps.
- Similar contracts based on both individual equities as well as on equity indices.

3.4.4 Precious metals (i.e. silver, platinum, and palladium) contracts

These include:

- Futures.
- Forwards.
- Swaps.
- Purchased options.
- Similar contracts based on precious metals.

3.4.5 Contracts on other commodities

These include:

- Futures.
- Forwards.
- Swaps.
- Purchased options.
- Similar derivatives contracts based on energy contracts, agricultural contracts, base metals (e.g., aluminium, copper, and zinc).
- Other non-precious metal commodity contracts.

3.5 Netting of forwards, swaps, purchased options and other similar derivatives

Institutions may net contracts that are subject to novation or any other legally valid form of netting. Novation refers to a written bilateral contract between two counterparties under which any obligation to each other to deliver a given currency on a given date is

automatically amalgamated with all other obligations for the same currency and value date, legally substituting one single amount for the previous gross obligations.

Institutions that wish to net transactions under either novation or another form of bilateral netting will need to satisfy the AMF¹²⁴ that the following conditions are met:

- The institution has executed a written, bilateral netting contract or agreement with each counterparty that creates a single legal obligation, covering all included bilateral transactions subject to netting. The result of such an arrangement would be that the institution only has one obligation for payment or one claim to receive funds based on the net sum of the mark-to-market values of all of the transactions with that counterparty in the event that counterparty fails to perform due to any of the following: default, bankruptcy, liquidation or similar circumstances.
- The institution must have written and reasoned legal opinions that, in the event of any legal challenge, the relevant courts or administrative authorities would find the exposure under the netting agreement to be the net amount under the laws of all relevant jurisdictions. In reaching this conclusion, legal opinions must address the validity and enforceability of the entire netting agreement under its terms.
 - The laws of “all relevant jurisdictions” are: (a) the law of the jurisdictions where the counterparties are chartered and, if the foreign branch of a counterparty is involved, the laws of the jurisdiction in which the branch is located (b) the law governing the individual transactions; and (c) the law governing any contracts or agreements required to effect netting.
 - A legal opinion must be generally recognized as such by the legal community in the firm’s home country or by a memorandum of law that addresses all relevant issues in a reasoned manner.
- The institution has internal procedures to verify that, prior to including a transaction in a netting set, the transaction is covered by legal opinions that meet the above criteria.
- The institution must have procedures in place to update legal opinions as necessary to ensure continuing enforceability of the netting arrangements in light of possible changes in relevant law.
- The institution maintains all required documentation in its files.

Any contract containing a walkaway clause will not be eligible to qualify for netting for the purpose of calculating capital requirements. A walkaway clause is a provision within the contract that permits a non-defaulting counterparty to make only limited payments, or no payments, to the estate of the defaulter, even if the defaulter is a net creditor.

¹²⁴ If the AMF is dissatisfied about enforceability under the laws of its jurisdiction, neither counterparty can net the contracts for capital purposes.

Cross-product netting of repo-style transactions against OTC derivative transactions is not permitted under the current exposure method.

Credit exposure on bilaterally netted forwards, swaps, purchased options and other similar derivatives transactions is calculated as the sum of the net mark-to-market replacement cost plus an add-on for potential future credit exposure based on the notional principal of the individual underlying contracts. However, for purposes of calculating potential future credit exposure of contracts subject to legally enforceable netting agreements in which notional principal is equivalent to cash flows, notional principal is defined as the net receipts falling due on each value date in each currency. The reason that these contracts are treated as a single contract is that offsetting contracts in the same currency maturing on the same date will have lower potential future exposure as well as lower current exposure. For multilateral netting schemes, current exposure (i.e. replacement cost) is a function of the loss allocation rules of the clearing-house.

The calculation of the add-ons should be based on the legal cash flow obligations in all currencies. This is calculated by netting all receivable and payable amounts in the same currency for each value date. The netted cash flow obligations are converted to the reporting currency using the current forward rates for each value date. Once converted, the amounts receivable for the value date are added together and the gross add-on is calculated by multiplying the receivable amount by the appropriate add-on factor (see Section III of Annex 3-II).

3.6 Commitments

Commitments are arrangements that obligate an institution, at a client's request, to:

- extend credit in the form of loans or participations in loans, lease financing receivables, mortgages (including the undrawn portion of HELOCs)), overdrafts, acceptances, letters of credit, guarantees or loan substitutes;
- purchase loans, securities, or other assets; or
- Note that unfunded mortgage commitments are treated as commitments for risk-based capital purposes when the borrower has accepted the commitment extended by the institution and all conditions related to the commitment have been fully satisfied.

Normally, commitments involve a written contract or agreement and some form of consideration, such as a commitment fee

3.6.1 Credit conversion factors

The credit conversion factor applied to a commitment is dependent on its maturity. Longer maturity commitments are considered to be of higher risk because there is a longer period between credit reviews and less opportunity to withdraw the commitment if the credit quality of the drawer deteriorates.

Conversion factors apply to commitments as set out below:

0% Conversion factor

- Commitments that are unconditionally cancellable at any time by the institution without notice or that effectively provide for automatic cancellation due to deterioration in the borrower's creditworthiness. This implies that the institution conducts a formal review of the facility at least annually, thus giving it an opportunity to take note of any perceived deterioration in credit quality. Retail commitments are unconditionally cancellable if the term permits the institution to cancel them to the full extent allowable under consumer protection and related legislation.

20% Conversion factor

- Commitments with an original maturity of one year and under.

50% Conversion factor

- Commitments with an original maturity of over one year.
- Note issuance facilities (NIFs) and revolving underwriting facilities (RUFs).
- The undrawn portion of a commitment to provide a loan that will be drawn down in a number of tranches, some less than and some over one year.
- Forward commitments (where the institution makes a commitment to issue a commitment) if the loan can be drawn down more than one year after the institution's initial undertaking is signed.

3.6.2 Maturity

Institutions should use original maturity (as defined below) to report these instruments.

3.6.2.1 Original maturity

The maturity of a commitment should be measured from the date when the commitment was accepted by the customer, regardless of whether the commitment is revocable or irrevocable, conditional or unconditional, until the earliest date on which:

- the commitment is scheduled to expire;
- the institution can, at its option, unconditionally cancel the commitment.

A material adverse change clause is not considered to give sufficient protection for a commitment to be considered unconditionally cancellable.

Where the institution commits to granting a facility at a future date (a forward commitment), the original maturity of the commitment is to be measured from the date the commitment is accepted until the final date that drawdowns are permitted.

3.6.2.2 Renegotiations of a commitment

If both parties agree, a commitment may be renegotiated before its term expires. If the renegotiation process involves a credit assessment of the customer consistent with the institution's credit standards, and provides the institution with the total discretion to renew or extend the commitment and to change any other terms and conditions of the commitment, then on the date of acceptance by the customer of the revised terms and conditions, the original commitment may be deemed to have matured and a new commitment begun. If new terms are not reached, the original commitment will remain in force until its original maturity date.

This process must be clearly documented.

In syndicated and participated transactions, a participating institution must be able to exercise its renegotiation rights independent of the other syndicate members.

Where these conditions are not met, the original start date of the commitment must be used to determine maturity.

3.6.3 Specific types of commitments

3.6.3.1 Undated/open-ended commitments

A 0% credit conversion factor is applied to undated or open-ended commitments, such as unused credit card lines, personal lines of credit, and overdraft protection for personal chequing accounts that are unconditionally cancellable at any time.

3.6.3.2 Evergreen commitments

Open-ended commitments that are cancellable by the financial institution at any time subject to a notice period do not constitute unconditionally cancellable commitments and are converted at 50%. Long-term commitments must be cancellable without notice to be eligible for the 0% conversion factor.

3.6.3.3 Commitments drawn down in a number of tranches

A 50% credit conversion factor is applied to a commitment to provide a loan (or purchase an asset) to be drawn down in a number of tranches, some one year and under and some over one year. In these cases, the ability to renegotiate the terms of later tranches should be regarded as immaterial. Often these commitments are provided for development projects from which the institution may find it difficult to withdraw without jeopardizing its investment.

Where the facility involves unrelated tranches, and where conversions are permitted between the over- and under-one-year tranches (i.e. where the borrower may make ongoing selections as to how much of the commitment is under one year and how much is over), then the entire commitment should be converted at 50%.

Where the facility involves unrelated tranches with no conversion between the over- and under-one-year tranches, each tranche may be converted separately, depending on its maturity.

3.6.3.4 Commitments for fluctuating amounts

For commitments that vary in amount over the life of the commitment, such as the financing of a business¹²⁵ subject to seasonal variation in cash flow, the conversion factor should apply to the maximum unutilized amount that can be drawn under the remaining period of the facility.

3.6.3.5 Commitment to provide a loan with a maturity of over one year

A commitment to provide a loan that has a maturity of over one year but that must be drawn down within a period of less than one year may be treated as an under-one-year instrument, as long as any undrawn portion of the facility is automatically cancelled at the end of the drawdown period.

However, if through any combination of options or drawdowns, repayments and redraw downs, etc., the client can access a line of credit past one year, with no opportunity for the institution to unconditionally cancel the commitment within one year, the commitment shall be converted at 50%.

3.6.3.6 Commitments for off-balance sheet transactions

Where there is a commitment to provide an off-balance sheet item, institutions are to apply the lower of the two applicable credit conversion factors.

¹²⁵ The term “business” is used with its general meaning, notwithstanding the provisions of the Civil Code of Québec which now refer to the notion of “legal person”.

3.7 External credit assessments and the mapping process

AMF Note

The following passages are essentially drawn from the New Basel Accord, entitled *International Convergence of Capital Measurement and Capital Standards – A Revised Framework*, published in June 2004 and revised in November 2005 and June 2006. They were adapted to make the capital standards applicable to the institutions contemplated in the scope of application of this Guideline. The AMF has annotated certain excerpts, in particular in order to set out its expectations with respect to elements which may call for the exercise of discretion by local regulators.

3.7.1 External credit assessments

3.7.1.1 The recognition process

90. National supervisors are responsible for determining on a continuous basis whether an external credit assessment institution (ECAI) meets the criteria listed in the paragraph below. National supervisors should refer to the IOSCO Code of Conduct Fundamentals for Credit Rating Agencies. The assessments of ECAIs may be recognized on a limited basis, e.g. by type of claims or by jurisdiction. The supervisory process for recognizing ECAIs should be made public to avoid unnecessary barriers to entry.

AMF Note

The AMF will permit institutions to recognize credit ratings from the following rating agencies for capital adequacy purposes:

- DBRS.
- Moody's Investment Services.
- Standard & Poor's (S&P).
- Fitch Rating Services.
- Kroll Bond Rating Agency, Inc.

3.7.1.2 Criteria for inclusion

91. An ECAI must satisfy each of the following six criteria:

Objectivity: The methodology for assigning credit assessments must be rigorous, systematic, and subject to some form of validation based on historical experience. Moreover, assessments must be subject to ongoing review and responsive to changes in financial condition. Before being recognized by the AMF, an assessment methodology for each market segment, including rigorous

back testing, must have been established for at least one year and preferably three years.

Independence: An ECAI should be independent and should not be subject to political or economic pressures that may influence the rating. The assessment process should be as free as possible from any constraints that could arise in situations where the composition of the board of directors or the shareholder structure of the assessment institution may be seen as creating a conflict of interest.

International access/transparency: The individual credit assessments, the key elements underlining the assessments and whether the issuer participated in the assessment process should be publicly available on a non-selective basis, unless they are private assessments. In addition, the general procedures, methodologies and assumptions for arriving at assessments used by the ECAI should be publicly available.

Disclosure: An ECAI should disclose the following information: its code of conduct; the general nature of its compensation arrangements with assessed entities; its assessment methodologies, including the definition of default, the time horizon, and the meaning of each rating; the actual default rates experienced in each assessment category; and the transitions of the assessments, e.g. the likelihood of AA ratings becoming A over time.

Resources: An ECAI should have sufficient resources to carry out high quality credit assessments. These resources should allow for substantial ongoing contact with senior and operational levels within the entities assessed in order to add value to the credit assessments. Such assessments should be based on methodologies combining qualitative and quantitative approaches.

Credibility: To some extent, credibility is derived from the criteria above. In addition, the reliance on an ECAI's external credit assessments by independent parties (investors, insurers, trading partners) is evidence of the credibility of the assessments of an ECAI. The credibility of an ECAI is also underpinned by the existence of internal procedures to prevent the misuse of confidential information. In order to be eligible for recognition, an ECAI does not have to assess firms in more than one country.

3.7.2 Implementation considerations

3.7.2.1 The mapping process

92. The AMF will be responsible for assigning eligible ECAIs' assessments to the risk weights available under the standardized risk weighting framework, i.e. deciding which assessment categories correspond to which risk weights. The mapping process should be objective and should result in a risk weight assignment consistent with that of the level of credit risk reflected in the tables above. It should cover the full spectrum of risk weights.

Long-term rating					
Standardized risk weight category	DBRS	Moody's	S&P	Fitch	KBRA
Long term					
1 (AAA to AA-)	AAA to AA (low)	Aaa to Aa3	AAA to AA-	AAA to AA-	AAA à AA-
2 (A+ to A-)	A (high) to A (low)	A1 to A3	A+ to A-	A+ to A-	A+ à A-
3 (BBB+ to BBB-)	BBB (high) to BBB (low)	Baa1 to Baa3	BBB+ to BBB-	BBB+ to BBB-	BBB+ à BBB-
4 (BB+ to B-)	BB (high) to B (low)	Ba1 to B3	BB+ to B-	BB+ to B-	BB+ à B-
5 (Below B-)	CCC	Below B3	Below B-	Below B-	Below B-

93. When conducting such a mapping process, factors that the AMF should assess include, among others, the size and scope of the pool of issuers that each ECAI covers, the range and meaning of the assessments that it assigns, and the definition of default used by the ECAI.
94. Institutions must use the chosen ECAIs and their ratings consistently for each type of claim, for both risk weighting and risk management purposes. Institutions will not be allowed to “cherry-pick” the assessments provided by different ECAIs and to arbitrarily change the use of ECAIs.
95. Institutions must disclose ECAIs that they use for the risk weighting of their assets by type of claims, the risk weights associated with the particular rating grades as determined by the AMF through the mapping process as well as the aggregated risk-weighted assets for each risk weight based on the assessments of each eligible ECAI.

3.7.2.2 Multiple assessments

96. If there is only one assessment by an ECAI chosen by an institution for a particular claim, that assessment should be used to determine the risk weight of the claim.
97. If there are two assessments by ECAIs chosen by an institution which map into different risk weights, the higher risk weight will be applied.
98. If there are three or more assessments with different risk weights, the assessments corresponding to the two lowest risk weights should be referred to and the higher of those two risk weights will be applied.

3.7.2.3 Issuer versus issues assessment

99. Where an institution invests in a particular issue that has an issue-specific assessment, the risk weight of the claim will be based on this assessment. Where the institution's claim is not an investment in a specific assessed issue, the following general principles apply:
- In circumstances where the borrower has a specific assessment for an issued debt - but the institution's claim is not an investment in this particular debt - a high quality credit assessment (one which maps into a risk weight lower than that which applies to an unrated claim) on that specific debt may only be applied to the institution's unassessed claim if this claim ranks *pari passu* or senior to the claim with an assessment in all respects. If not, the credit assessment cannot be used and the unassessed claim will receive the risk weight for unrated claims.
 - In circumstances where the borrower has an issuer assessment, this assessment typically applies to senior unsecured claims on that issuer. Consequently, only senior claims on that issuer will benefit from a high quality issuer assessment. Other unassessed claims of a highly assessed issuer will be treated as unrated. If either the issuer or a single issue has a low quality assessment (mapping into a risk weight equal to or higher than that which applies to unrated claims), an unassessed claim on the same counterparty that ranks *pari passu* or is subordinated to either the senior unsecured issuer assessment or the exposure assessment will be assigned the same risk weight as is applicable to the low quality assessment.
100. Whether the institution intends to rely on an issuer- or an issue-specific assessment, the assessment must take into account and reflect the entire amount of credit risk exposure the institution has with regard to all payments owed to it.¹²⁶
101. In order to avoid any double counting of credit enhancement factors, no supervisory recognition of credit risk mitigation techniques will be taken into account if the credit enhancement is already reflected in the issue specific rating (see Section 4.1.1, paragraph 114).

3.7.2.4 Domestic currency and foreign currency assessments

102. Where unrated exposures are risk weighted based on the rating of an equivalent exposure to that borrower, the general rule is that foreign currency ratings would be used for exposures in foreign currency. Domestic currency

¹²⁶ For example, if an institution is owed both principal and interest, the assessment must fully take into account and reflect the credit risk associated with repayment of both principal and interest.

ratings, if separate, would only be used to risk weight claims denominated in the domestic currency.¹²⁷

3.7.2.5 Short-term/long-term assessments

103. For risk-weighting purposes, short-term assessments are deemed to be issue-specific. They can only be used to derive risk weights for claims arising from the rated facility. They cannot be generalized to other short-term claims. In no event can a short-term rating be used to support a risk weight for an unrated long-term claim. Short-term assessments may only be used for short-term claims against banks, others financial institutions and corporates. The table below provides a framework for institutions' exposures to specific short-term facilities, such as a particular issuance of commercial paper.

Credit assessment	A-1/P-1 ¹²⁸	A-2/P-2	A-3/P-3	Others ¹²⁹
Risk weight	20%	50%	100%	150%

¹²⁷ However, when an exposure arises through an institution's participation in a loan that has been extended, or has been guaranteed against convertibility and transfer risk, by certain MDBs, its convertibility and transfer risk can be considered by the AMF to be effectively mitigated. To qualify, MDBs must have preferred creditor status recognized in the market and be included in Chapter 3. In such cases, for risk weighting purposes, the borrower's domestic currency rating may be used instead of its foreign currency rating. In the case of a guarantee against convertibility and transfer risk, the local currency rating can be used only for the portion that has been guaranteed. The portion of the loan not benefiting from such a guarantee will be risk-weighted based on the foreign currency rating.

¹²⁸ The notations follow the methodology used by Standard & Poors and by Moody's Investors Service. The A-1 rating of Standard & Poors includes both A-1+ and A-1-.

¹²⁹ This category includes all non-prime and B or C ratings.

Short-term rating					
Standardized risk weight category	DBRS	Moody's	S&P	Fitch	KBRA
Short term					
1 (A-1/P-1)	R-1(high) to R-1(low)	P-1	A-1+, A-1	F1+, F1	K1+, K1
2 (A-2/P-2)	R-2(high) to R-2(low)	P-2	A-2	F2	K2
3 (A-3/P-3)	R-3	P-3	A-3	F3	K3
4 Other	Below R-3	NP	All short-term ratings below A-3	Below F3	Below K3

104. If a short-term rated facility attracts a 50% risk-weight, unrated short-term claims cannot attract a risk weight lower than 100%. If an issuer has a short-term facility with an assessment that warrants a risk weight of 150%, all unrated claims, whether long-term or short-term, should also receive a 150% risk weight, unless the institution uses recognized credit risk mitigation techniques for such claims.
105. Not applicable.
106. When a short-term assessment is to be used, the organism making the assessment needs to meet all of the criteria for inclusion for recognizing ECAls as presented in paragraph 91 in terms of its short-term assessment.

3.7.2.6 Level of application of the assessment

107. External assessments for one entity within a corporate group cannot be used to risk weight other entities within the same group.

3.7.2.7 Unsolicited ratings

108. As a general rule, institutions should use *solicited* ratings from eligible ECAs. The AMF may, however, allow institutions to use unsolicited ratings in the same way as solicited ratings. However, there may be the potential for ECAs to use unsolicited ratings to put pressure on institutions to obtain solicited ratings. Such behaviour, when identified, should cause the AMF to consider whether to continue recognizing such ECAs as eligible for capital adequacy purposes.

AMF Note

Institutions may not rely on any unsolicited rating in determining an asset's risk weight.

Chapter 4 Credit risk mitigation

For institutions relying on the standardized approach.

AMF Note

This chapter is drawn from the Basel Committee on Banking Supervision's (BCBS) Basel II and III frameworks, *International Convergence of Capital Measurement and Capital Standards – June 2006 and Basel III: A global regulatory framework for more resilient banks and banking systems – December 2010 (rev June 2011)*.

4.1 Standardized approach

4.1.1 Overarching issues

i. Introduction

109. Financial institutions use a number of techniques to mitigate the credit risks to which they are exposed. For example, exposures may be collateralized 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 financial institution may buy a credit derivative to offset various forms of credit risk. Additionally institutions may agree to net loans owed to them against deposits from the same counterparty.
110. Where these techniques meet the requirements for legal certainty as described in paragraph 117 and 118 below, the revised approach to CRM allows a wider range of credit risk mitigants to be recognized for regulatory capital purposes than is permitted under the 1988 Accord.

ii. General remarks

111. The framework set out in this chapter is applicable to the banking book exposures in the standardized approach.
112. The comprehensive approach for the treatment of collateral (see paragraphs 130 to 138 and 145 to 177) will also be applied to calculate the counterparty risk charges for OTC derivatives and repo-style transactions booked in the trading book.
113. No transaction in which CRM techniques are used should receive a higher capital requirement than an otherwise identical transaction where such techniques are not used.

AMF Note

This limit on the capital requirement applies to collateralized and guaranteed transactions. It does not apply to repo-style transactions under the comprehensive approach for which both sides of the transaction (collateral received and posted) have been taken into account in calculating the exposure amount.

114. The effects of CRM will not be double counted. Therefore, no additional supervisory recognition of CRM for regulatory capital purposes will be granted on claims for which an issue-specific rating is used that already reflects that CRM. As stated in paragraph 100 of the section on the standardized approach, principal-only ratings will also not be allowed within the framework of CRM.
115. 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, it is imperative that institutions 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 institution's use of CRM techniques and its interaction with the institution's overall credit risk profile. Where these risks are not adequately controlled, the AMF may impose additional capital charges or take other supervisory actions as outlined under the supervisory review process (Chapter 8).
- 115(i). Financial institutions 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 calls and response time to incoming calls. Entities must have collateral management policies in place to control, monitor and report:
- the risk to which margin agreements exposes 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.
116. The market discipline requirements must also be observed for institutions to obtain capital relief in respect of any CRM techniques.

iii. Legal certainty

117. In order for institutions to obtain capital relief for any use of CRM techniques, the following minimum standards for legal documentation must be met.
118. All documentation used in collateralized transactions and for documenting on-balance sheet netting, guarantees and credit derivatives must be binding on all parties and legally enforceable in all relevant jurisdictions. Institutions 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.

4.1.2 Overview of credit risk mitigation techniques¹³⁰

Collateralized transactions

119. A collateralized transaction is one in which:
- institutions have a credit exposure or potential credit exposure;
 - that credit exposure or potential credit exposure is hedged in whole or in part by collateral posted by a counterparty¹³¹ or by a third party on behalf of the counterparty.
120. Where institutions take eligible financial collateral (e.g. cash or securities, more specifically defined in paragraphs 145 and 146 below), they are allowed to reduce their credit exposure to a counterparty when calculating their capital requirements to take account of the risk mitigating effect of the collateral.

Overall framework and minimum conditions

121. Institutions may opt for either the simple approach, which substitutes the risk weighting of the collateral for the risk weighting of the counterparty for the collateralized portion of the exposure (generally subject to a 20% floor), or for the comprehensive approach, which allows fuller offset of collateral against exposures, by effectively reducing the exposure amount by the value ascribed to the collateral. Institutions may operate under either, but not both, approaches in the banking book, but only under the comprehensive approach in the trading book. Partial collateralization is recognized in both approaches. Mismatches in the maturity of the underlying exposure and the collateral will only be allowed under the comprehensive approach.

¹³⁰ See Annex 4-I for an overview of methodologies for the capital treatment of transactions secured by financial collateral under the standardized approach.

¹³¹ In this section “counterparty” is used to denote a party to whom an institution has an on- or off-balance sheet credit exposure or a potential 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.

AMF Note

Institutions using the Standardized Approach may use either the simple approach or the comprehensive approach using supervisory haircuts.

122. However, before capital relief will be granted in respect of any form of collateral, the standards set out below in paragraphs 123 to 126 must be met under either approach.
123. In addition to the general requirements for legal validity set out in paragraphs 117 and 118, the legal mechanism by which collateral is pledged or transferred must ensure that the institution 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). Furthermore, institutions must take all steps necessary to fulfil those requirements under the law applicable to the institution's interest in the collateral for obtaining and maintaining an enforceable security interest, e.g. by registering it with a registrar, or for exercising a right to net or set off in relation to title transfer collateral.

AMF Note

For property taken as collateral, institutions may use title insurance in place of a title search to achieve compliance with paragraph 123. AMF expects institutions that rely on title insurance to reflect the risk of non-performance on these insurance contracts in their estimates of LGD if this risk is material.

124. In order for collateral to provide protection, the credit quality of the counterparty and the value of the collateral must not have a material positive correlation. For example, securities issued by the counterparty - or by any related group entity - would provide little protection and so would be ineligible.
125. Institutions 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.
126. Where the collateral is held by a custodian, institutions must take reasonable steps to ensure that the custodian segregates the collateral from its own assets.
127. A capital requirement will be applied to an institution on either side of the collateralized 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 a derivative exposure or other borrowing.

128. Where an institution, acting as an agent, arranges a repo-style transaction (i.e. 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 institution is the same as if the institution had entered into the transaction as a principal. In such circumstances, an institution will be required to calculate capital requirements as if it were itself the principal.

AMF Note

Transactions where an institution acts as an agent and provides a guarantee to the customer should be treated as a direct credit substitute (i.e. separate netting net) unless the transaction is covered by a master netting arrangement.

The simple approach

129. In the simple approach the risk weighting of the collateral instrument collateralizing or partially collateralizing the exposure is substituted for the risk weighting of the counterparty. Details of this framework are provided in paragraphs 182 to 185.

The comprehensive approach

130. In the comprehensive approach, when taking collateral, institutions will need to calculate their adjusted exposure to a counterparty for capital adequacy purposes in order to take account of the effects of that collateral. Using haircuts, institutions are required 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,¹³² occasioned by market movements. This will produce volatility adjusted amounts for both exposure and collateral. Unless either side of the transaction is cash, the volatility adjusted amount for the exposure will be higher than the exposure and for the collateral it will be lower.
131. Additionally where the exposure and collateral are held in different currencies an additional downwards adjustment must be made to the volatility adjusted collateral amount to take account of possible future fluctuations in exchange rates.

¹³² Exposure amounts may vary where, for example, securities are being lent.

132. Where the volatility-adjusted exposure amount is greater than the volatility-adjusted collateral amount (including any further adjustment for foreign exchange risk), institution shall calculate their risk-weighted assets as the difference between the two multiplied by the risk weight of the counterparty. The framework for performing these calculations is set out in paragraphs 147 to 150.
133. The institutions contemplated in this Guideline may only use one type of haircut: the standard supervisory haircut, using parameters set by the Basel Committee.
134. Paragraph removed – intended for institutions that have the option between standard supervisory haircuts and own-estimate haircuts.
135. The size of the individual haircuts will depend on the type of instrument, type of transaction and the frequency of marking-to-market and remargining. For example, repo-style transactions subject to daily marking-to-market and to daily remargining will receive a haircut based on a 5-business day holding period and secured lending transactions with daily mark-to-market and no remargining clauses will receive a haircut based on a 20-business day holding period. These haircut numbers will be scaled up using the square root of time formula depending on the frequency of remargining or marking-to-market.
136. For certain types of repo-style transactions (broadly speaking government bond repos as defined in paragraphs 170 and 171) the AMF may allow institutions using standard supervisory haircuts not to apply these in calculating the exposure amount after risk mitigation.
137. The effect of master netting agreements covering repo-style transactions can be recognized for the calculation of capital requirements subject to the conditions in paragraph 173, Section 4.1.3.
138. Not applicable.
- i. On-balance sheet netting**
139. Where institutions have legally enforceable netting arrangements for loans and deposits they may calculate capital requirements on the basis of net credit exposures subject to the conditions in paragraph 188.
- ii. Guarantees and credit derivatives**
140. Where guarantees or credit derivatives are direct, explicit, irrevocable and unconditional, and the AMF is satisfied that institutions fulfil certain minimum operational conditions relating to risk management processes they may allow institutions to take account of such credit protection in calculating capital requirements.
141. A range of guarantors and protection providers are recognized. As under the 1988 Accord, a substitution approach will be applied. Thus only guarantees issued by or protection provided by entities with a lower risk weight than the

counterparty will lead to reduced capital charges 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.

142. Detailed operational requirements are given below in paragraphs 189 to 193.

iii. Maturity mismatch

143. Where the residual maturity of the CRM is less than that of the underlying credit exposure a maturity mismatch occurs. Where there is a maturity mismatch and the CRM has an original maturity of less than one year, the CRM is not recognized for capital purposes. In other cases where there is a maturity mismatch, partial recognition is given to the CRM for regulatory capital purposes as detailed below in paragraphs 202 to 205. Under the simple approach for collateral maturity mismatches will not be allowed.

iv. Miscellaneous

144. Treatments for pools of credit risk mitigants and first- and second-to-default credit derivatives are given in paragraphs 206 to 210 below.

4.1.3 Collateral

i. Eligible financial collateral

145. 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 institution) on deposit with the institution which is incurring the counterparty exposure.^{133 134}
- b) Debt securities rated by a recognized external credit assessment institution where these are either:
 - at least BB- when issued by sovereigns or PSEs that are treated as sovereigns by the AMF;
 - at least BBB- when issued by other entities (including institutions and securities firms);

¹³³ Cash funded credit linked notes issued by the institution against exposures in the banking book which fulfil the criteria for credit derivatives will be treated as cash collateralized transactions.

¹³⁴ When cash on deposit, certificates of deposit or comparable instruments issued by the lending institution are held as collateral at a third-party institution in a non-custodial arrangement, if they are openly pledged/assigned to the lending institution and if the pledge/assignment is unconditional and irrevocable, the exposure amount covered by the collateral (after any necessary haircuts for currency risk) will receive the risk weight of the third-party institution.

- at least A-3/P-3 for short-term debt instruments.
- c) Debt securities not rated by a recognized external credit assessment institution where these are:
- issued by an institution;
 - listed on a recognized exchange;
 - classified as senior debt.
 - All rated issues of the same seniority by the issuing institution must be rated at least BBB- or A-3/P-3 by a recognized external credit assessment institution.
 - The institution 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).
 - The AMF 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;
 - the UCITS/mutual fund is limited to investing in the instruments listed in this paragraph.¹³⁵
- 145(i). Re-securitisations (as defined in Chapter 5), irrespective of any credit ratings, are not eligible financial collateral. This prohibition applies whether the financial institution is using the supervisory haircuts method or its own estimates of haircuts method.
146. The following collateral instruments are eligible for recognition in the comprehensive approach:
- a) all of the instruments in paragraph 145;
 - b) equities (including convertible bonds) which are not included in a main index but which are listed on a recognized exchange;
 - c) UCITS/mutual funds which include such equities.

¹³⁵ However, the use or potential use by a UCITS/mutual fund of derivative instruments solely to hedge investments listed in this paragraph and paragraph 146 shall not prevent units in that UCITS/mutual fund from being eligible financial collateral.

ii. The comprehensive approach

Calculation of capital requirement

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

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

where:

E^* = The exposure value after risk mitigation

E = Current value of the exposure

H_e = Haircut appropriate to the exposure

C = The current value of the collateral received

H_c = Haircut appropriate to the collateral

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

148. The exposure amount after risk mitigation will be multiplied by the risk weight of the counterparty to obtain the risk-weighted asset amount for the collateralized transaction.

149. The treatment for transactions where there is a mismatch between the maturity of the counterparty exposure and the collateral is given in paragraphs 202 to 205.

150. Where the collateral is a basket of assets, the haircut on the basket will be:

$$H = \sum_i a_i H_i$$

or:

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.

Standard supervisory haircuts

151. These are the standard supervisory haircuts (assuming daily mark-to-market, daily remargining and a 10-business day holding period), expressed as percentages:

Issue rating for debt securities	Residual maturity	Haircuts		
		Sovereigns ¹³⁶	Other issuers ¹³⁷	Securitisation exposure
AAA to AA- / A-1	≤ 1 year	0.5	1	2
	>1 year, ≤ 5 years	2	4	8
	> 5 years	4	8	16
A+ to BBB-/ A-2/A-3/P-3 and Unrated bank securities per Paragraph 145(d))	≤ 1 year	1	2	4
	>1 year, ≤ 5 years	3	6	12
	> 5 years	6	12	24
BB+ to BB-	All	15	Not eligible	Not eligible
Main index equities (including convertible bonds) and gold		15		
Other equities (including convertible bonds) listed on a recognized exchange		25		
UCITS / Mutual Funds		Highest haircut applicable to any security in which the fund can invest		
Cash in the same currency ¹³⁸		0		

152. The standard supervisory haircut for currency risk 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).
153. For transactions in which the institution lends non-eligible instruments (e.g. non-investment grade corporate debt securities), the haircut to be applied on the exposure should be the same as the one for equity traded on a recognized exchange that is not part of a main index.

¹³⁶ Includes PSEs which are treated as sovereigns by the AMF. Multilateral development banks receiving a 0% risk weight will be treated as sovereigns.

¹³⁷ Includes PSEs which are not treated as sovereigns by the AMF.

¹³⁸ Eligible cash collateral specified in paragraph 145(a).

154. to 165. Paragraphs removed – intended for institutions that want to be authorized to calculate haircuts using their own internal estimates of market price volatility and foreign exchange volatility.

Adjustment for different holding periods and non-daily mark-to-market or remargining

166. For some transactions, depending on the nature and frequency of the revaluation and remargining provisions, different holding periods are appropriate. The framework for collateral haircuts distinguishes between repo-style transactions (i.e. repo/reverse repos and securities lending/borrowing), “other capital-market-driven transactions” (i.e. OTC derivatives transactions and margin lending) and secured lending. In capital-market-driven transactions and repo-style transactions, the documentation contains remargining clauses; in secured lending transactions, it generally does not.
167. The minimum holding period for various products is summarized in the following table:

Transaction type	Minimum holding period	Condition
Repo-style transaction	5 business days	daily remargining
Other capital market transactions	10 business days	daily remargining
Secured lending	20 business days	daily revaluation

When a financial institution has such a transaction or netting set which meets the criteria outlined in paragraph 41(i) or 41 (ii) of Annex 3-II, the minimum holding period should be the margin period of risk that would apply under those paragraphs.

168. When the frequency of remargining or revaluation is longer than the minimum, the minimum haircut numbers will be scaled up depending on the actual number of business days between remargining or revaluation using the square root of time formula below:

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

where:

H = Haircut

- H_M = Haircut under the minimum holding period
- T_M = Minimum holding period for the type of transaction
- N_R = Actual number of business days between remargining for capital market transactions or revaluation for secured transactions

When an institution calculates the volatility on a T_N day holding period which is different from the specified minimum holding period T_M , the H_M will be calculated using the square root of time formula:

$$H_M = H_N \sqrt{\frac{T_M}{T_N}}$$

where:

- T_N = Holding period used by the institution for deriving H_N
- H_N = Haircut based on the holding period T_N

169. For example, for institutions using the standard supervisory haircuts, the 10-business day haircuts provided in paragraph 151 will be the basis and this haircut will be scaled up or down depending on the type of transaction and the frequency of remargining or revaluation using the formula below:

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

where:

- H = Haircut
- H_{10} = 10-business day standard supervisory 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

Conditions for zero H

170. For repo-style transactions where the following conditions are satisfied, and the counterparty is a *core market participant*, supervisors may choose not to apply the haircuts specified in the comprehensive approach and may instead apply a haircut of zero.

- a) Both the exposure and the collateral are cash or a sovereign security or PSE security qualifying for a 0% risk weight in the standardized approach.¹³⁹
- 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.¹⁴⁰
- 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.
- h) Upon any default event, regardless of whether the counterparty is insolvent or bankrupt, the institution has the unfettered, legally enforceable right to immediately seize and liquidate the collateral for its benefit.

AMF Note

The carve-out applies for repos of Government of Canada securities and securities issued by Canadian provinces and territories subject to confirmation that the above criteria are met.

171. Core market participants may include, at the discretion of the AMF, the following entities:
- a) Sovereigns, central banks and PSEs.
 - b) Banks and securities firms.

¹³⁹ Note that where the AMF has designated domestic-currency claims on its jurisdiction to be eligible for a 0% risk weight in the standardized approach, such claims will satisfy this condition.

¹⁴⁰ This does not require the institution to always liquidate the collateral but rather to have the capability to do so within the given time frame.

- c) Other financial companies (including insurers) eligible for a 20% risk weight in the standardized approach.
- d) Regulated mutual funds that are subject to capital or leverage requirements.
- e) Regulated pension funds.
- f) Recognized clearing organizations.

AMF Note

The AMF recognizes the entities listed above as “core market participants” for purposes of the carve-out

172. Where a supervisor applies a specific carve-out to repo-style transactions in securities issued by its domestic government or its local government, then other supervisors may choose to allow institutions incorporated in their jurisdiction to adopt the same approach to the same transactions.

AMF Note

Institutions may apply carve-outs permitted by other G-10 supervisors to repo-style transactions in securities issued by their domestic governments to business in those markets.

Treatment of repo-style transactions covered under master netting agreements

173. The effects of bilateral netting agreements covering repo-style transactions will be recognized 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;
 - 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.

174. Netting across positions in the banking and trading book will only be recognized when the netted transactions fulfil the following conditions:
- a) All transactions are marked to market daily;¹⁴¹ and
 - b) the collateral instruments used in the transactions are recognized as eligible financial collateral in the banking book.
175. The formula in paragraph 147 will be adapted to calculate the capital requirements for transactions with netting agreements.
176. For institutions using the standard supervisory haircuts, the framework below will apply to take into account the impact of master netting agreements.

$$E^* = \max \{0, [(\sum (E) - \sum (C)) + \sum (E_s \times H_s) + \sum (E_{fx} \times H_{fx})]\}^{142}$$

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

H_{fx} = Haircut appropriate for currency mismatch

177. The intention here is to obtain a net exposure amount after netting of the exposures and collateral and have an add-on amount reflecting 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 will be multiplied by the appropriate haircut. All other rules regarding the calculation of haircuts stated in paragraphs 147 to 172 equivalently apply for institutions using bilateral netting agreements for repo-style transactions.

¹⁴¹ The holding period for the haircuts will depend as in other repo-style transactions on the frequency of margining.

¹⁴² The starting point for this formula is the formula in paragraph 147 which can also be presented as the following: $E^* = (E-C) + (E \times H_e) + (C \times H_c) + (C \times H_{fx})$.

178. to 181(i). Paragraphs removed – intended for institutions authorized to use a VaR models approach as an alternative to the use of standard haircuts.

iii. The simple approach

Minimum conditions

182. For collateral to be recognized in the simple approach, the collateral 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 collateralized by the market value of recognized collateral receive the risk weight applicable to the collateral instrument. The risk weight on the collateralized portion will be subject to a floor of 20% except under the conditions specified in paragraphs 183 to 185. The remainder of the claim should be assigned to the risk weight appropriate to the counterparty. A capital requirement will be applied to institutions on either side of the collateralized transaction: for example, both repos and reverse repos will be subject to capital requirements.

Exceptions to the risk weight floor

183. Transactions which fulfil the criteria outlined in paragraph 170 and are with a core market participant, as defined in paragraph 171, receive a risk weight of 0%. If the counterparty to the transactions is not a core market participant the transaction should receive a risk weight of 10%.
184. OTC derivative transactions subject to daily mark-to-market, collateralized by cash and where there is no currency mismatch should receive a 0% risk weight. Such transactions collateralized by sovereign or PSE securities qualifying for a 0% risk weight in the standardized approach can receive a 10% risk weight.
185. The 20% floor for the risk weight on a collateralized transaction will not be applied and a 0% risk weight can 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 145 (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%.

iv. Collateralized OTC derivatives transactions

186. Under the SA-CCR, the calculation of exposure amount will be as follows:

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

where:

- alpha = 1.4,
- RC = the replacement cost calculated according to paragraphs 130-145 of Annex 3-II, and
- PFE = the amount for potential future exposure calculated according to paragraphs 146-187 of Annex 3-II

Paragraphs 187 and 187(i) have been deleted

4.1.4 On-balance sheet netting

188. Where an institution:

- a) 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;
- b) is able at any time to determine those assets and liabilities with the same counterparty that are subject to the netting agreement;
- c) monitors and controls its roll-off risks;
- d) 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 147. Assets (loans) are treated as exposure and liabilities (deposits) as collateral. The haircuts will be zero except when a currency mismatch exists. A 10-business day holding period will apply when daily mark-to-market is conducted and all the requirements contained in paragraphs 151, 169, and 202 to 205 will apply.

4.1.5 Guarantees and credit derivatives

i. Operational requirements

Operational requirements common to guarantees and credit derivatives

189. A guarantee (counter-guarantee) or credit derivative must represent a direct claim on the protection provider and must be 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 must be irrevocable; there must be 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.¹⁴³ It must also be unconditional; there should be no clause in the protection contract outside the direct control of the institution that could prevent the protection provider from being obliged to pay out in a timely manner in the event that the original counterparty fails to make the payment(s) due.

Additional operational requirements for guarantees

190. In addition to the legal certainty requirements in paragraphs 117 and 118 above, in order for a guarantee to be recognized, the following conditions must be satisfied:
- a) on the qualifying default/non-payment of the counterparty, the institution 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 institution, or the guarantor may assume the future payment obligations of the counterparty covered by the guarantee. The institution must have the right to receive any such payments from the guarantor without first having to take legal actions 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 obligor 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 should be treated as an unsecured amount in accordance with paragraph 198.

Additional operational requirements for credit derivatives

191. In order for a credit derivative contract to be recognized, the following conditions 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

¹⁴³ Note that the irrevocability condition does not require that the credit protection and the exposure be maturity matched; rather that the maturity agreed *ex ante* may not be reduced *ex post* by the protection provider. Paragraph 203 sets forth the treatment of call options in determining remaining maturity for credit protection.

- 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;
 - restructuring of the underlying obligation involving forgiveness or postponement of principal, interest or fees that results in a credit loss event (i.e. charge-off, specific provision or other similar debit to the profit and loss account). When restructuring is not specified as a credit event, refer to paragraph 192.
- b) If the credit derivative covers obligations that do not include the underlying obligation, Section (g) below governs whether the asset mismatch is permissible.
- c) The credit derivative shall not terminate prior to expiration of any grace period required for a default on the underlying obligation to occur as a result of a failure to pay, subject to the provisions of paragraph 203.
- d) Credit derivatives allowing for cash settlement are recognized 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 than 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 (i.e. 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 (i.e. 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 (i.e. the same legal entity) and legally enforceable cross-default or cross-acceleration clauses are in place.

192. When the restructuring of the underlying obligation is not covered by the credit derivative, but the other requirements in paragraph 191 are met, partial recognition of the credit derivative will be allowed. If the amount of the credit derivative is less than or equal to the amount of the underlying obligation, 60% of the amount of the hedge can be recognized as covered. If the amount of the credit derivative is larger than that of the underlying obligation, then the amount of eligible hedge is capped at 60% of the amount of the underlying obligation.¹⁴⁴
193. Only credit default swaps and total return swaps that provide credit protection equivalent to guarantees will be eligible for recognition. The following exception applies. Where an institution 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 recognized. The treatment of first-to-default and second-to-default products is covered separately in paragraphs 207 to 210 of Section 4.1.7.
194. Other types of credit derivatives will not be eligible for recognition at this time.¹⁴⁵
- ii. Range of eligible guarantors (counter-guarantors)/protection providers**
195. Credit protection given by the following entities will be recognized:
- sovereign entities,¹⁴⁶ PSEs, financial institutions, banks¹⁴⁷ and securities firms with a lower risk weight than the counterparty;
 - other entities rated A- or better. This would include credit protection provided by the borrower's parent, subsidiary and affiliate companies when they have a lower risk weight than the obligor;
 - other entities currently rated BBB- or better that were rated at least A- when they were given protection (in the case of securitisation exposures). This covers the borrower's parent, subsidiary and affiliate companies when they have a lower risk weight than the obligor.

¹⁴⁴ The 60% recognition factor is provided as an interim treatment, which the Basel Committee intends to refine prior to implementation after considering additional data.

¹⁴⁵ Cash funded credit linked notes issued by the institution against exposures in the banking book which fulfil the criteria for credit derivatives will be treated as cash collateralized transactions.

¹⁴⁶ This includes the Bank for International Settlements, the International Monetary Fund, the European Central Bank and the European Community, as well as those MDBs referred to in Chapter 3.

¹⁴⁷ This includes other MDBs.

iii. Risk weights

196. 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.
197. Materiality thresholds on payments below which no payment is made in the event of loss are equivalent to retained first loss positions and must be deducted in full from the capital of the institution purchasing the credit protection.

Proportional cover

198. Where the amount guaranteed, or against which credit protection is held, is less than the amount of the exposure, and the secured and unsecured portions are of equal seniority, i.e. the institution and the guarantor share losses on a pro-rata basis capital relief will be afforded on a proportional basis: i.e. the protected portion of the exposure will receive the treatment applicable to eligible guarantees/credit derivatives, with the remainder treated as unsecured.

Tranched cover

199. Where the institution 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 risk of the loan and the risk transferred and the risk retained are of different seniority, institutions may obtain credit protection for either the senior tranches (e.g. second loss portion) or the junior tranche (e.g. first loss portion). In this case, the rules as set out in Chapter 5 (Securitisation Framework) will apply.

iv. Currency mismatches

200. Where the credit protection is denominated in a currency different from that in which the exposure is denominated – i.e. there is a currency mismatch – the amount of the exposure deemed to be protected will be reduced by the application of a haircut H_{FX} , i.e.:

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

where:

G = Nominal amount of the credit protection

H_{FX} = Haircut appropriate for currency mismatch between the credit protection and underlying obligation

The appropriate haircut based on a 10-business day holding period (assuming daily marking-to-market) will be applied. If an institution uses the supervisory haircuts it will be 8%. The haircuts 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 168 of Section 4.1.3.

AMF Note

A currency mismatch occurs when the currency an institution receives differs from the currency of the collateral held. A currency mismatch always occurs when an institution receives payments in more than one currency under a single contract.

v. Sovereign guarantees and counter-guarantees

201. A lower risk weight may be applied at the AMF's discretion to an institution's exposures to the sovereign (or central bank) where the institution is incorporated and where the exposure is denominated in domestic currency and funded in that currency. The AMF may extend this treatment to portions of claims guaranteed by the jurisdiction, 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;
 - c) the AMF 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.

4.1.6 Maturity mismatches

202. For the purposes of calculating risk-weighted assets, a maturity mismatch occurs when the residual maturity of a hedge is less than that of the underlying exposure.

i. Definition of maturity

203. The maturity of the underlying exposure and the maturity of the hedge should both be defined conservatively. The effective maturity of the underlying should 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 which may reduce the term of the hedge should be taken into account so that the shortest possible effective maturity is used. Where a call is at the discretion of the protection seller, the maturity will always be at the first call date. If the call is at the discretion of the protection buying institution but the terms of the arrangement at origination of the hedge contain a positive incentive for the institution to call the transaction before contractual maturity, the remaining time to the first call date will be deemed to be the effective maturity. For example, where there is a step-up in cost in conjunction with a call feature or where the effective cost of cover increases over time even if credit quality remains the same or increases, the effective maturity will be the remaining time to the first call.

ii. Risk weights for maturity mismatches

204. As outlined in paragraph 143, hedges with maturity mismatches are only recognized when their original maturities are greater than or equal to one year. As a result, the maturity of hedges for exposures with original maturities of less than one year must be matched to be recognized. In all cases, hedges with maturity mismatches will no longer be recognized when they have a residual maturity of three months or less.

205. When there is a maturity mismatch with recognized credit risk mitigants (collateral, on-balance sheet netting, guarantees and credit derivatives) the following adjustment will be applied.

$$P_a = P \times (t - 0.25) / (T - 0.25)$$

where:

P_a = Value of the credit protection adjusted for maturity mismatch

P = Credit protection (e.g. collateral amount, guarantee amount) adjusted for any haircuts

t = Min (T, residual maturity of the credit protection arrangement) expressed in years

T = Min (5, residual maturity of the exposure) expressed in years

4.1.7 Other items related to the treatment of CRM techniques

i. Treatment of pools of CRM techniques

206. In the case where an institution has multiple CRM techniques covering a single exposure (e.g. an institution has both collateral and guarantee partially covering an exposure), the institution will be required to subdivide the exposure into portion covered by each type of CRM technique (e.g. 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.

ii. First-to-default credit derivatives

207. There are cases where an institution obtains credit protection for a basket of reference names and where the first default among the reference names triggers the credit protection and the credit event also terminates the contract. In this case, the institution may recognize regulatory capital relief for the asset within the basket with the lowest risk-weighted amount, but only if the notional amount is less than or equal to the notional amount of the credit derivative.

208. If the product is not rated by an ECAI, the risk weights of the assets included in the basket will 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.

iii. Second-to-default credit derivatives

209. In the case where the second default among the assets within the basket triggers the credit protection, the institution obtaining credit protection through such a product will only be able to recognize any capital relief if first-default-protection has also be obtained or when one of the assets within the basket has already defaulted.

210. For institutions providing credit protection through such a product, the capital treatment is the same as in paragraph 208 above with one exception. The exception is that, in aggregating the risk weights, the asset with the lowest risk weighted amount can be excluded from the calculation.

211. to 537. Paragraphs removed – intended for institutions authorized to use an internal-ratings based approach for credit risk.

Chapter 5 Credit risk – securitisation framework

The Securitisation framework is to be applied in determining the risk-weighted capital treatment applicable to all securitisation exposures that meet the definitions and operational requirements below regardless of accounting treatment.

For greater clarity, and to ensure consistency with paragraph 2 below, all exposures to mortgage-backed securities that do not involve the tranching of credit risk (e.g. NHA MBS) will not be considered securitisation exposures for risk-based capital purposes under the Securitisation Framework.

AMF Note

The Basel Committee has published on December 11, 2014 (and revised in July 2016) his new framework for securitisation in the document entitled *Revisions to the securitisation framework*.¹⁴⁸ This new framework comes to replacement of the Basel II¹⁴⁹ framework on securitisation and the amendment of Basel 2.5.¹⁵⁰

The following paragraphs regarding the the securitisation framework are drawn from the *Basel Committee's Basel III: Revision to the securitisation framework* published in December 2014 and revised in July 2016. The AMF reproduces and adapts the provisions contain in this document in the present guideline. To facilitate a comparison with national and international standards, the Basel numbering is maintained.

As such, the AMF expects that institution to respect theses new provisions introduced in this guideline on January 1, 2019.

5.1 Scope and definitions of transactions covered under the securitisation framework

1. Institutions must apply the securitisation framework for determining regulatory capital requirements on exposures arising from traditional and synthetic securitisations or similar structures that contain features common to both. Since securitisations may be structured in many different ways, the capital treatment of a securitisation exposure must be determined on the basis of its economic substance rather than its legal form. Similarly, the AMF will look to the economic substance of a transaction to determine whether it should be subject to the securitisation framework for purposes of determining regulatory capital. Institutions are encouraged to consult with the AMF when there is uncertainty about whether a given transaction should be considered a securitisation. For example, transactions involving cash flows from real estate (e.g. rents) may be considered specialized lending exposures, if warranted.

¹⁴⁸ <https://www.bis.org/bcbs/publ/d374.pdf>

¹⁴⁹ www.bis.org/publ/bcbs128.htm.

¹⁵⁰ www.bis.org/publ/bcbs157.pdf.

2. A traditional securitisation is a structure where the cash flow from an underlying pool of exposures is used to service at least two different stratified risk positions or tranches reflecting different degrees of credit risk. Payments to the investors depend upon the performance of the specified underlying exposures, as opposed to being derived from an obligation of the entity originating those exposures. The stratified/tranched structures that characterize securitisations differ from ordinary senior/subordinated debt instruments in that junior securitisation tranches can absorb losses without interrupting contractual payments to more senior tranches, whereas subordination in a senior/subordinated debt structure is a matter of priority of rights to the proceeds of liquidation.

AMF Note

In its simplest form, asset securitisation is the transformation of generally illiquid assets into securities that can be traded in the capital markets. The asset securitisation process generally begins with the segregation of financial assets into pools that are relatively homogeneous with respect to their cash flow characteristics and risk profiles, including both credit and market risks. These pools of assets are then sold to a bankruptcy-remote entity, generally referred to as a special-purpose entity (SPE), which issues asset-backed securities (ABS) to investors to finance the purchase. ABS are financial instruments that may take a variety of forms, including commercial paper, term debt and certificates of beneficial ownership. The cash flow from the underlying assets supports repayment of the ABS. Various forms of enhancement are used to provide credit protection for investors in the ABS.

Securitisations typically split the risk of credit losses from the underlying assets into tranches that are distributed to different parties. Each loss position functions as an enhancement if it protects the more senior positions in the structure from loss.

An institution may perform one or more functions in an asset securitisation transaction. It may:

- invest in a debt instrument issued by a SPE;
- provide enhancements;
- provide liquidity support;
- set up, or cause to be set up a SPE;
- collect principal and interest payments on the assets and transmit those funds to an SPE, investors in theSPVsecurities or a trustee representing them;
- provide clean-up calls.

3. A synthetic securitisation is a structure with at least two different stratified risk positions or tranches that reflect different degrees of credit risk where credit risk of an underlying pool of exposures is transferred, in whole or in part, through the use of funded (e.g. credit-linked notes) or unfunded (e.g. credit default swaps) credit derivatives or guarantees that serve to hedge the credit risk of the portfolio. Accordingly, the investors' potential risk is dependent upon the performance of the underlying pool.

AMF Note

Refer to Chapter 4 - Credit risk mitigation for capital guidance on credit derivatives.

4. Institutions' exposures to a securitisation are hereafter referred to as "securitisation exposures". Securitisation exposures can include but are not restricted to the following: asset-backed or mortgage-backed securities, credit enhancements, liquidity facilities, interest rate or currency swaps, credit derivatives and tranching as described in paragraph 199. Reserve accounts, such as cash collateral accounts, recorded as an asset by the originating entity must also be treated as securitisation exposures.
5. A resecuritisation exposure is a securitisation exposure in which the risk associated with an underlying pool of exposures is tranching and at least one of the underlying exposures is a securitisation exposure. In addition, an exposure to one or more resecuritisation exposures is a resecuritisation exposure. An exposure resulting from re-tranching of a securitisation exposure is not a resecuritisation exposure if the institution is able to demonstrate that the cash flows to and from the institution could be replicated in all circumstances and conditions by an exposure to the securitisation of a pool of assets that contains no securitisation exposures.

AMF Note

Institutions are encouraged to consult with AMF when there is uncertainty about whether a particular exposure should be considered a resecuritisation exposure.

6. Underlying instruments in the pool being securitized may include but are not restricted to the following: loans, commitments, asset-backed or mortgage-backed securities, corporate bonds, equity securities, and private equity investments. The underlying pool may include one or more exposures.

5.2 Definitions and general terminology

5.2.1 Originating entity

7. For risk-based capital purposes, an institution is considered to be an originator with regard to a certain securitisation if it meets either of the following conditions:
 - a) She originates directly or indirectly underlying exposures included in the securitisation.

- b) She serves as a sponsor of an asset-backed commercial paper (ABCP) conduit or similar program that acquires exposures from third-party entities. In the context of such programs, she would generally be considered a sponsor and, in turn, an originator if it, in fact or in substance, manages or advises the program, places securities into the market, or provides liquidity and/or credit enhancements.

AMF Note

An institution is considered the supplier of the assets in any of the following circumstances:

- The assets are held on the balance sheet of the institution at any time prior to being transferred to an SPV.
- The institution lends to an SPV in order for that SPV to grant a loan to a borrower as though it were the institution;¹⁵¹ or
- The institution enables¹⁵² an SPV to directly originate assets that are financed with ABS.

The AMF reserves the right to adopt a look-through approach to determine the originating entity. The look-through approach may also be used to ensure appropriate capital is maintained by an institution in a securitisation transaction.

An institution may be contractually obligated to provide funds to an SPV to ensure an uninterrupted flow of payments to investors in the SPV's securities, solely under the unusual circumstance that payments from the underlying assets have not been received due to temporary timing differences. An institution that provides such support is typically referred to as a servicing agent and the funds provided are typically referred to as servicer advances.

Servicer cash advances or facilities must meet the following requirements:

- a) The servicers are entitled to full reimbursement and this right is senior to other claims on cash flows from the underlying pool of exposures;
- b) Servicer advances may not be made to offset shortfalls in cash flows that arise from defaulted assets;
- c) the total value of cash advances is limited to the total amount transferable for that collection period;
- d) the servicing agent must perform an assessment of the likelihood of repayment of the servicer advances based on prudent lending standards.

¹⁵¹ The institution is regarded as the supplier because the SPV is creating an asset that is branded by the institution. The institution will incur reputational risk through the association with the product.

¹⁵² For example, by providing credit approvals or administrative support

5.2.2 Asset-backed commercial paper (ABCP) program

8. An asset-backed commercial paper (ABCP) program predominately issues commercial paper to third-party investors with an original maturity of one year or less that is backed by assets or other exposures held in a bankruptcy-remote, special purpose vehicle.

5.2.3 Clean-up call

9. A clean-up call is an option that permits the securitisation exposures (e.g. asset-backed securities) to be called before all of the underlying exposures or securitisation exposures have been repaid. In the case of traditional securitisations, this is generally accomplished by repurchasing the remaining securitisation exposures once the pool balance or outstanding securities have fallen below some specified level. In the case of a synthetic transaction, the clean-up call may take the form of a clause that extinguishes the credit protection.

5.2.4 Credit enhancement

10. A credit enhancement is a contractual arrangement in which the institution retains or assumes a securitisation exposure and, in substance, provides some degree of added protection to other parties to the transaction.

AMF Note

An enhancement is an arrangement provided to an SPV to cover the losses associated with the pool of assets. Enhancement is a method of protecting investors in the event that cash flows from the underlying assets are insufficient to pay the interest and principal due for the ABS in a timely manner. Enhancement is used to improve or support the credit rating on more senior tranches, and therefore the pricing and marketability of the ABS.

Common examples of these facilities include: recourse provisions; senior/subordinated security structures; subordinated standby lines of credit; subordinated loans; third party equity; swaps that are structured to provide an element of enhancement; and any amount of liquidity facilities in excess of 103% of the face value of outstanding paper. In addition, these facilities include any temporary financing facility, other than qualifying servicer advances, provided by an institution to an enhancer or to an SPV to bridge the gap between the date a claim is made against a third party enhancer and when payment is received.

5.2.5 Credit-enhancing interest-only strip

11. A credit-enhancing interest-only strip is an on-balance sheet asset that:
- represents a valuation of cash flows related to future margin income;
 - is subordinated.

5.2.6 Early amortization

12. Early amortization provisions are mechanisms, that, once triggered, accelerates the reduction of the investor's interest in underlying exposures of a securitisation of revolving credit facilities and allows investors to be paid out prior to the originally stated maturity of the securities issued. A securitisation of revolving credit facilities is a securitisation in which one or more underlying exposures represent, directly or indirectly, current or future draws on a revolving credit facility. Examples of revolving credit facilities include but are not limited to credit card exposures, home equity lines of credit, commercial lines of credit, and other lines of credit.

5.2.7 Excess spread

13. Excess spread is generally defined as gross finance charge collections and other income received by the trust or special purpose vehicle (SPV, specified in paragraph 21) minus certificate interest, servicing fees, charge-offs, and other senior trust or SPV expenses.

5.2.8 Implicit support

14. Implicit support arises when an institution provides support to a securitisation in excess of its predetermined contractual obligation.
15. Paragraph removed
16. Paragraph removed
17. Paragraph removed

5.2.9 Senior securitisation exposure (tranche)

18. A securitisation exposure (tranche) is considered to be a senior exposure (tranche) if it is effectively backed or secured by a first claim on the entire amount of the assets in the underlying securitised pool. While this generally includes only the most senior position within a securitisation transaction, in some instances there may be other claims that, in a technical sense, may be more senior in the waterfall (eg a swap claim) but may be disregarded for the purpose of determining which positions are treated as senior. Different maturities of several senior tranches that share pro rata loss allocation shall have no effect on the seniority of these tranches, since they benefit from the same level of credit enhancement. The material effects of differing tranche maturities are captured by maturity adjustments on the risk weights to be assigned to the securitisation exposures.

Examples:

- a) In a typical synthetic securitisation, an unrated tranche would be treated as a senior tranche, provided that all of the conditions for inferring a rating from a lower tranche that meets the definition of a senior tranche are fulfilled.
- b) In a traditional securitisation where all tranches above the first-loss piece are rated, the most highly rated position would be treated as a senior tranche. When there are several tranches that share the same rating, only the most senior tranche in the cash flow waterfall would be treated as senior (unless the only difference among them is the effective maturity). Also, when the different ratings of several senior tranches only result from a difference in maturity, all of these tranches should be treated as a senior tranche.
- c) Usually, a liquidity facility supporting an ABCP programme would not be the most senior position within the programme; the commercial paper, which benefits from the liquidity support, typically would be the most senior position.

However, a liquidity facility may be viewed as covering all losses on the underlying receivables pool that exceed the amount of overcollateralization /reserves provided by the seller and as being most senior if it is sized to cover all of the outstanding commercial paper and other senior debt supported by the pool, so that no cash flows from the underlying pool could be transferred to the other creditors until any liquidity draws were repaid in full. In such a case, the liquidity facility can be treated as a senior exposure.

Otherwise, if these conditions are not satisfied, or if for other reasons the liquidity facility constitutes a mezzanine position in economic substance rather than a senior position in the underlying pool, the liquidity facility should be treated as a non-senior exposure.

5.2.10 Securitisation exposure amount

19. For risk-based capital purposes, the exposure amount of a securitisation exposure is the sum of the on-balance sheet amount of the exposure, or carrying value – which takes into account purchase discounts and writedowns /specific provisions the institution took on this securitisation exposure – and the off-balance sheet exposure amount, where applicable.
20. An institution must measure the exposure amount of its off-balance sheet securitisation exposures as follows:
 - a) for credit risk mitigants sold or purchased by the institution, use the treatment set out in paragraphs 99 to 105;

- b) for facilities that are not credit risk mitigants, use a credit conversion factor (CCF) of 100%. If contractually provided for, servicers may advance cash to ensure an uninterrupted flow of payments to investors so long as the servicer is entitled to full reimbursement and this right is senior to other claims on cash flows from the underlying pool of exposures.
- c) the undrawn portion of servicer cash advances or facilities that are unconditionally cancellable without prior notice may receive the CCF of 0% under the standardised approach for credit risk; and
- d) for derivatives contracts other than credit risk derivatives contracts, such as interest rate or currency swaps sold or purchased by the institution, use the measurement approach that the institution would use under the counterparty credit risk framework.

5.2.11 Special purpose vehicle (SPV)

21. An SPV is a corporation, trust, or other entity organized for a specific purpose, the activities of which are limited to those appropriate to accomplish the purpose of the SPV, and the structure of which is intended to isolate the SPV from the credit risk of an originator or seller of exposures. SPVs are commonly used as financing vehicles in which exposures are sold to a trust or similar entity in exchange for cash or other assets funded by debt issued by the trust.

5.2.12 Tranche maturity

22. For risk-based capital purposes, tranche maturity (M_T) is the tranche's remaining effective maturity in years and can be measured at the institution's discretion in either of the following manners:

- a) As the weighted-average maturity of the contractual cash flows of the tranche:

$$M_T = \sum_t t \times CF_t / \sum_t CF_t$$

where CF_t denotes the cash flows (principal, interest payments and fees) contractually payable by the borrower in period t .

The contractual payments must be unconditional and must not be dependent on the actual performance of the securitised assets. If such unconditional contractual payment dates are not available, the final legal maturity shall be used.

- b) On the basis of final legal maturity of the tranche, as:

$$M_T = 1 + (M_L - 1) \times 80\%$$

where M_L is the final legal maturity of the tranche.

In all cases, M_T will have a floor of one year and a cap of five years. The legal final maturity does not include any time periods defined by law solely for purpose of instituting legal action by an investor or against an obligor in the asset pool.

23. When determining the maturity of a securitisation exposure, institutions should take into account the maximum period of time they are exposed to potential losses from the securitised assets. In cases where an institution provides a commitment, the institution should calculate the maturity of the securitisation exposure resulting from this commitment as the sum of the contractual maturity of the commitment and the longest maturity of the asset(s) to which the institution would be exposed after a draw has occurred. If those assets are revolving, the longest contractually possible remaining maturity of the asset that might be added during the revolving period would apply, rather than the (longest) maturity of the assets currently in the pool.

The same treatment applies to all other instruments where the risk of the commitment/protection provider is not limited to losses realised until the maturity of that instrument (eg total return swaps).

For credit protection instruments that are only exposed to losses that occur up to the maturity of that instrument, an institution would be allowed to apply the contractual maturity of the instrument and would not have to look through to the protected position.

AMF Note

The AMF expects an institution to minimize its exposure to risk arising from its relationship with an SPE. An institution that sets up, or causes to be set up, an SPV will not have to hold capital as a result of this activity if the following conditions are met:

- The institution does not own any share capital in a company, nor is it the beneficiary of a trust, used as an SPV for purchasing and securitizing financial assets. For this purpose, share capital includes all classes of common and preferred share capital.
- The institution's name is not included in the name of a company or trust used as an SPV, nor is any connection implied with the institution by, for example, using a symbol closely associated with the institution. If, however, the institution is performing a specific function for a particular transaction or transactions (e.g., collecting and transmitting payments or providing enhancement), this may be indicated in the offering circular.
- The institution does not have any of its directors, officers or employees on the board of a company used as an SPV, unless the SPV's board has at least three members. Where the board consists of three or more members, the institution may not have more than one director. Where the SPV is a trust, the beneficiary and the indenture trustee and/or the issuer trustee must be third party independent of the institution.
- The institution does not lend to the SPV on a subordinated basis, except as otherwise provided herein. That is, a loan provided by an institution to an SPV to cover initial transaction or set-up costs is a deduction from capital as long as the loan is capped at its original amount; amortized over the life of the securities issued by the SPV; and the loan is not available as a form of enhancement to the assets or securities issued.
- The institution does not support, except as provided elsewhere in this Guideline, any losses suffered by the SPV, or investors in it, or bear any of the recurring expenses of the SPV.

Where an institution does not meet all of these conditions, it is required to hold capital against all debt instruments issued to third parties by the SPE.

5.3 Operational requirements for the recognition of risk transference

The following operational requirements are applicable to the standardized approach of the securitisation framework.

5.3.1 Operational requirements for traditional securitisations

24. An originating entity may exclude securitized exposures from the calculation of risk-weighted assets only if all of the following conditions have been met. Institutions meeting these conditions must still hold regulatory capital against any securitisation exposures they retain.
- a) Significant credit risk associated with the securitized exposures has been transferred to third parties. An originating institution is required to establish policies and procedures to ensure that significant credit risk is being assessed and all operational requirements met for all securitized

assets if the originating institution intends to exclude the securitized assets from the calculation of risk-weighted assets. These policies must include how the risk transfer will be assessed on an ongoing basis and should be available for review by the AMF upon request.

In addition to the policies and procedures noted above, originating institutions must meet the following quantitative test in order to determine that significant credit risk has been transferred to third parties;

- The capital required for exposures retained by the originating institution in the securitization structure following issuance must be no more than 30% of the capital required for the pool of assets supporting all tranches of the securitization structure, that is, a reduction in risk-weighted assets of at least 70%. The risk-weighted assets for the exposures retained should be calculated in accordance with this chapter, including the application of any relevant risk weight caps and floors.
 - For purposes of this test, the pool of assets supporting all tranches is defined as the assets associated with one or more series of notes issued by the SPE. For clarity, the pool of assets generally excludes the retained interest or seller's interest in a pool of assets including the undrawn balances of revolving facilities where only drawn balances have been securitized.
 - Under this test, the risk-weighted asset amounts for the retained positions and for the pool of assets must be calculated by using consistent risk-based approaches. In particular, if the standardized credit risk approach is utilized by the originating institution for the assetpool, the institution must calculate capital required for the retained positions under the SEC-SA.
- b) The transferor does not maintain effective or indirect control over the transferred exposures. The assets are legally isolated from the transferor in such a way (e.g. through the sale of assets or through subparticipation) that the exposures are put beyond the reach of the originator and its creditors, even in bankruptcy or receivership. These conditions must be supported by an opinion provided¹⁵³ by a qualified legal counsel.

The transferor is deemed to have maintained effective control over the transferred credit risk exposures if it: (i) is able to repurchase from the transferee the previously transferred exposures in order to realize their benefits; or (ii) is obligated to retain the risk of the transferred exposures. The transferor's retention of servicing rights to the exposures will not necessarily constitute indirect control of the exposures.

¹⁵³ Legal opinion is not limited to legal advice from qualified legal counsel, but allows written advice from in-house lawyers.

- c) The securities issued are not obligations of the transferor. Thus, investors who purchase the securities only have claim to the underlying pool of exposures.
- d) The transferee is an SPV and the holders of the beneficial interests in that entity have the right to pledge or exchange them without restriction;
- e) Clean-up calls must satisfy the conditions set out in paragraph 28 of Section 5.3.4.
- f) The securitisation does not contain clauses that:
 - i. require the originating entity to alter systematically the underlying exposures such that the pool's weighted average credit quality is improved unless this is achieved by selling assets to independent and unaffiliated third parties at market prices;
 - ii. allow for increases in a retained first loss position or credit enhancement provided by the originating entity after the transaction's inception; or
 - iii. increase the yield payable to parties other than the originating entity, such as investors and third-party providers of credit enhancements, in response to a deterioration in the credit quality of the underlying pool.
- g) There must be no termination options/triggers except eligible clean-up calls, termination for specific changes in tax and regulation or early amortisation provisions which according to paragraph 26 result in the securitisation transaction failing the operational requirements set out in paragraph 24 or 25.

5.3.2 Operational requirements for synthetic securitisations

25. For synthetic securitisations, the use of CRM techniques (i.e. collateral, guarantees and credit derivatives) for hedging the underlying exposure may be recognized for risk-based capital purposes only if the conditions outlined below are satisfied:
- a) Credit risk mitigants must comply with the requirements as set out in Chapter 4 of this Guideline.
 - b) Eligible collateral is limited to that specified in paragraphs 145 and 146 of Section 4.1.3. Eligible collateral pledged by SPEs may be recognized.
 - c) Eligible guarantors are defined in paragraph 195 of Chapter 4. Institutions may not recognize SPEs as eligible guarantors in the securitisation framework.
 - d) Institutions must transfer significant credit risk associated with the underlying exposure to third parties.

- e) The instruments used to transfer credit risk may not contain terms or conditions that limit the amount of credit risk transferred, such as those provided below:
- Clauses that materially limit the credit protection or credit risk transference (e.g. significant materiality thresholds below which credit protection is deemed not to be triggered even if a credit event occurs or those that allow for the termination of the protection due to deterioration in the credit quality of the underlying exposures).
 - Clauses that require the originating entity to alter the underlying exposures to improve the pool's weighted average credit quality.
 - Clauses that increase the institutions' cost of credit protection in response to deterioration in the pool's quality.
 - Clauses that increase the yield payable to parties other than the originating entity, such as investors and third-party providers of credit enhancements, in response to a deterioration in the credit quality of the reference pool.
 - Clauses that provide for increases in a retained first loss position or credit enhancement provided by the originating entity after the transaction's inception.
- f) An opinion must be obtained from a qualified legal counsel that confirms the enforceability of the contracts in all relevant jurisdictions.
- g) Clean-up calls must satisfy the conditions set out in paragraph 28 of Section 5.3.4.

5.3.3 Operational requirements for securitisations containing early amortisation provisions

26. A securitisation transaction is deemed to fail the operational requirements set out in paragraphs 24 or 25 if the institution (i) originates/sponsors a securitisation transaction that includes one or more revolving credit facilities, and (ii) the securitisation transaction incorporates an early amortisation or similar provision that, if triggered, would (a) subordinate the institution's senior or pari passu interest in the underlying revolving credit facilities to the interest of other investors; (b) subordinate the institution's subordinated interest to an even greater degree relative to the interests of other parties; or (c) in other ways increases the institution's exposure to losses associated with the underlying revolving credit facilities.
27. If a securitisation transaction contains one of the following examples of an early amortisation provision and meets the operational requirements set forth in paragraphs 24 and 25, an originating institution may exclude the underlying exposures associated with such a transaction from the calculation of risk-

weighted assets, but must still hold regulatory capital against any securitisation exposures they retain in connection with the transaction:

- a) replenishment structures where the underlying exposures do not revolve and the early amortisation ends the ability of the institution to add new exposures;
- b) transactions of revolving credit facilities containing early amortisation features that mimic term structures (ie where the risk on the underlying revolving credit facilities does not return to the originating institution) and where the early amortisation provision in a securitisation of revolving credit facilities does not effectively result in subordination of the originator's interest;
- c) structures where an institution securitises one or more revolving credit facilities and where investors remain fully exposed to future drawdowns by borrowers even after an early amortisation event has occurred; or
- d) the early amortisation provision is solely triggered by events not related to the performance of the underlying assets or the selling institution, such as material changes in tax laws or regulations.

AMF Note

The following apply to both traditional and synthetic securitisations:

- Institution should understand the inherent risks of the activity, be competent in structuring and managing such transactions, and have adequate staffing of the functions involved in the transactions.
- The terms and conditions of all transactions between the institution and the SPV should be at least at market terms and conditions (and any fees are paid in a timely manner) and meet the institution's normal credit standards. The Credit Committee or an equally independent committee should approve individual transactions.
- Institution's capital and liquidity plans should take into account the potential need to finance an increase in assets on its balance sheet as a result of early amortization or maturity events. If the AMF finds the planning inadequate, it may increase the institution's capital requirements.
- The capital requirements for asset securitisation transactions will be limited to those set out in this Guideline if the institution provides only the level of support (enhancement or liquidity) committed to in the various agreements that define and limit the levels of losses to be borne by the institution.

5.3.4 Operational requirements and treatment of clean-up calls

28. For securitisation transactions that include a clean-up call, no capital will be required due to the presence of a clean-up call if the following conditions are met:

- i. The exercise of the clean-up call must not be mandatory, in form or in substance, but rather must be at the discretion of the originating entity;
- ii. The clean-up call must not be structured to avoid allocating losses to credit enhancements or positions held by investors or otherwise structured to provide credit enhancement.
- iii. The clean-up call must only be exercisable when 10% or less of the original underlying portfolio or securities issued remains or for synthetic securitisations, when 10% or less of the original reference portfolio value remains.

AMF Note

An agreement that permits an institution to purchase the remaining assets in a pool when the balance of those assets is equal to or less than 10% of the original pool balance is considered a clean-up call and no capital is required. However, a clean-up call that permits the remaining loans to be repurchased when their balance is greater than 10% of the original pool balance or permits the purchase of non-performing loans is considered a first loss enhancement.

29. Securitisation transactions that include a clean-up call that does not meet all of the criteria stated in paragraph 28 result in a capital requirement for the originating entity. For a traditional securitisation, the underlying exposures must be treated as if they were not securitized. Additionally, institutions must not recognize in regulatory capital any gain on sale, as defined in paragraph 36.

For synthetic securitisations, the institution purchasing protection must hold capital against the entire amount of the securitized exposures as if they did not benefit from any credit protection. If a synthetic securitisation incorporates a call (other than a clean-up call) that effectively terminates the transaction and the purchased credit protection on a specific date, the institution must treat the transaction in accordance with paragraph 108.

30. If a clean-up call, when exercised, is found to serve as a credit enhancement, the exercise of the clean-up call must be considered a form of implicit support provided by the institution and must be treated in accordance with the supervisory guidance pertaining to securitisation transactions.

5.4 Due diligence requirements

31. For an institution to use the risk weight approaches of the securitisation framework, it must have the information specified in paragraphs [32 to 34]. Otherwise, the institution must assign a 1,250% risk weight to any securitisation exposure for which it cannot perform the required level of due diligence.

32. As a general rule, an institution must, on an ongoing basis, have a comprehensive understanding of the risk characteristics of its individual securitisation exposures, whether on- or off-balance sheet, as well as the risk characteristics of the pools underlying its securitisation exposures.
33. Institutions must be able to access performance information on the underlying pools on an ongoing basis in a timely manner. Such information may include, as appropriate: exposure type; percentage of loans 30, 60 and 90 days past due; default rates; prepayment rates; loans in foreclosure; property type; occupancy; average credit score or other measures of creditworthiness; average loan-to-value ratio; and industry and geographical diversification. For resecuritisations, institutions should have information not only on the underlying securitisation tranches, such as the issuer name and credit quality, but also on the characteristics and performance of the pools underlying the securitisation tranches.
34. An institution must have a thorough understanding of all structural features of a securitisation transaction that would materially impact the performance of the institution's exposures to the transaction, such as the contractual waterfall and waterfall-related triggers, credit enhancements, liquidity enhancements, market value triggers, and deal-specific definitions of default.

5.5 Treatment of securitisation exposures

5.5.1 Calculation of capital requirements

35. Institutions are required to hold regulatory capital against all of their securitisation exposures, including those arising from the provision of credit risk mitigants to a securitisation transaction, investments in asset-backed securities, retention of a subordinated tranche, and extension of a liquidity facility or credit enhancement, as set forth in the following sections. Repurchased securitisation exposures must be treated as retained securitisation exposures. Institutions whose only involvement in securitization transactions is the collection of interest and principal and is under no obligation to remit funds unless received to the SPV or trustees, is not required to hold capital for performing this role.
36. Institutions must deduct from Tier 1 any increase in equity capital resulting from a securitisation transaction, such as that associated with expected future margin income (FMI) resulting in a gain on sale that is recognized in regulatory capital.
37. Paragraph removed – intended for institutions that use an internal ratings-based approach.
38. Paragraph removed – intended for institutions that use an internal ratings-based approach.

5.5.2 Treatment of overlapping exposures

39. For the purposes of calculating capital requirements, an institution's exposure A overlaps another exposure B if in all circumstances the institution will preclude any loss for the institution on exposure B by fulfilling its obligations with respect to exposure A. For example, if an institution provides full credit support to some notes and holds a portion of these notes, its full credit support obligation precludes any loss from its exposure to the notes. If an institution can verify that fulfilling its obligations with respect to exposure A will preclude a loss from its exposure to B under any circumstance, the institution does not need to calculate risk-weighted assets for its exposure B.
40. To arrive at an overlap, an institution may, for the purposes of calculating capital requirements, split or expand¹⁵⁴ its exposures. For example, a liquidity facility may not be contractually required to cover defaulted assets or may not fund an ABCP programme in certain circumstances. For capital purposes, such a situation would not be regarded as an overlap to the notes issued by that ABCP conduit. However, the institution may calculate risk-weighted assets for the liquidity facility as if it were expanded (either in order to cover defaulted assets or in terms of trigger events) to preclude all losses on the notes. In such a case, the institution would only need to calculate capital requirements on the liquidity facility.
41. Paragraph removed – intended for institutions that has a market portfolio.

5.5.3 Hierarchy of approaches

42. Securitisation exposures will be treated differently depending on the type of underlying exposures and/or on the type of information available to the institution, as described below. Securitisation exposures to which none of the approaches laid out in paragraphs [44 to 46] can be applied must be assigned a 1,250% risk weight.
- 43 to 52. Paragraphs removed.

Definition of attachment point (A) and detachment point (D)

53. The input A represents the threshold at which losses within the underlying pool would first be allocated to the securitisation exposure. This input, which is a decimal value between zero and one, equals the greater of (a) zero and (b) the

¹⁵⁴ That is, *splitting* exposures into portions that overlap with another exposure held by the bank and other portions that do not overlap; and *expanding* exposures by assuming for capital purposes that obligations with respect to one of the overlapping exposures are larger than those established contractually. The latter could be done, for instance, by expanding either the trigger events to exercise the facility and/or the extent of the obligation.

ratio of (i) the outstanding balance of all underlying assets in the securitisation minus the outstanding balance of all tranches that rank senior or pari passu to the tranche that contains the securitisation exposure of the institution (including the exposure itself) to (ii) the outstanding balance of all underlying assets in the securitisation.

54. The input D represents the threshold at which losses within the underlying pool result in a total loss of principal for the tranche in which a securitisation exposure resides. This input, which is a decimal value between zero and one, equals the greater of (a) zero and (b) the ratio of (i) the outstanding balance of all underlying assets in the securitisation minus the outstanding balance of all tranches that rank senior to the tranche that contains the securitisation exposure of the institution to (ii) the outstanding balance of all underlying assets in the securitisation.

55 to 77. Paragraphs removed.

Standardised Approach (SEC-SA)

78. To calculate capital requirements for a securitisation exposure to an SA pool using the SEC-SA, an institution would use a supervisory formula and the following institution-supplied inputs : the SA capital charge had the underlying exposures not been securitised (K_{SA}); the ratio of delinquent underlying exposures to total underlying exposures in the securitisation pool (W); the tranche attachment point (A); and the tranche detachment point (D). The inputs A and D are defined above in paragraphs 53 and 54, respectively. Where the only difference between exposures to a transaction is related to maturity, A and D will be the same. K_{SA} and W are defined below in paragraphs 79 and 81.

79. K_{SA} is defined as the weighted-average capital charge of the entire portfolio of underlying exposures, calculated using the risk-weighted asset amounts in the SA in Section II of the Basel framework in relation to the sum of the exposure amounts of underlying exposures, multiplied by 8%. This calculation should reflect the effects of any credit risk mitigant that is applied to the underlying exposures (either individually or to the entire pool), and hence benefits all the securitisation exposures. K_{SA} is expressed as a decimal between zero and one (that is, a weighted-average risk weight of 100% means that K_{SA} would equal 0.08).

For structures involving an SPE, all the SPE's exposures related to the securitisation are to be treated as exposures in the pool. Exposures related to the securitisation that should be treated as exposures in the pool include assets in which the SPV may have invested, comprising reserve accounts, cash collateral accounts and claims against counterparties resulting from interest

swaps or currency swaps¹⁵⁵. Notwithstanding, the institution can exclude the SPE's exposures from the pool for capital calculation purposes if the institution can demonstrate to the AMF that the risk does not affect its securitisation exposure or that the risk is immaterial – for example, because it has been mitigated.

In the case of funded synthetic securitisations, any proceeds of the issuances of credit-linked notes or other funded obligations of the SPV that serve as collateral for the repayment of the securitisation exposure in question, and for which the institution cannot demonstrate to the AMF that they are immaterial, have to be included in the calculation of K_{SA} if the default risk of the collateral is subject to the tranching loss allocation.

80. In cases where an institution has set aside a specific provision or has a non-refundable purchase price discount on an exposure in the pool, K_{SA} must be calculated using the gross amount of the exposure without the specific provision and/or non-refundable purchase price discount.
81. The variable W equals the ratio of the sum of the nominal amount of delinquent underlying exposures (as defined in paragraph 82) to the nominal amount of underlying exposures.
82. Delinquent underlying exposures are underlying exposures that are 90 days or more past due, subject to bankruptcy or insolvency proceedings, in the process of foreclosure, held as real estate owned, or in default, where default is defined within the securitisation deal documents.
83. The inputs K_{SA} and W are used as inputs to calculate K_A , as follows:

$$K_A = (1 - W) \times K_{SA} + 0.5 \times W$$

In case an institution does not know the delinquency status, as defined above, for no more than 5% of underlying exposures in the pool, it may still use the SEC-SA by adjusting its calculation of K_A as follows:

$$K_A = \left(\frac{EAD_{\text{Subpool 1 where W known}}}{EAD_{\text{Total}}} \times K_A^{\text{Subpool 1 where W known}} \right) + \frac{EAD_{\text{Subpool 2 where W unknown}}}{EAD_{\text{Total}}}$$

¹⁵⁵ That is, splitting exposures into portions that overlap with another exposure held by the institution and other portions that do not overlap; and expanding exposures by assuming for capital purposes that obligations with respect to one of the overlapping exposures are larger than those established contractually. The latter could be done, for instance, by expanding either the trigger events to exercise the facility and/or the extent of the obligation.

If the institution does not know the delinquency status for more than 5%, the securitisation exposure must be risk weighted at 1,250%.

84. Capital requirements are calculated under the SEC-SA as follows

$$K_{SSFA(A)} = \frac{e^{a \times u} - e^{a \times l}}{a \times (u - l)}$$

where $K_{SSFA(KA)}$ is the capital requirement per unit of the securitisation exposure and the variables a , u , and l are defined as follows:

$$a = -(1 / (p * K_A))$$

$$u = D - K_A$$

$$l = \max (A - K_A; 0)$$

85. The supervisory parameter p in the context of the SEC-SA is set equal to 1 for a securitisation exposure that is not a resecuritisation exposure.
86. The risk weight assigned to a securitisation exposure when applying the SEC-SA would be calculated as follows:

- When D for a securitisation exposure is less than or equal to K_A , the exposure must be assigned a risk weight of 1,250%
- When A for a securitisation exposure is greater than or equal to K_A , the risk weight of the exposure, expressed as a percentage, would equal $K_{SSFA(KA)}$ times 12.5;
- When A is less than K_A and D is greater than K_A , the applicable risk weight is a weighted average of 1,250% and 12.5 times $K_{SSFA(KA)}$ according to the following formula:

$$RW = \left[\left(\frac{K_A - A}{D - A} \right) \times 12,5 \right] + \left[\left(\frac{D - K_A}{D - A} \right) \times 12,5 \times K_{SSFA(KA)} \right]$$

87. The resulting risk weight is subject to a floor risk weight of 15%. Moreover, when an institution applies the SEC-SA to an unrated junior exposure in a transaction where the more senior tranches (exposures) are rated and therefore no rating can be inferred for the junior exposure, the resulting risk weight under SEC-SA for the junior unrated exposure shall not be lower than the risk weight for the next more senior rated exposure.

5.5.4 Caps for securitisation exposures

i. Maximum risk weight for senior exposures

88. Institutions may apply a “look-through” approach to senior securitisation exposures, whereby the senior securitisation exposure could receive a maximum risk weight equal to the exposure weighted-average risk weight applicable to the underlying exposures, provided that the institution has knowledge of the composition of the underlying exposures at all times.

In the case of pools where the institutions use exclusively the SA approach, the risk weight cap for senior exposures would equal the exposure weighted-average risk weight that would apply to the underlying exposures under the SA framework.

89. Where the risk weight cap results in a lower risk weight than the floor risk weight of 15%, the risk weight resulting from the cap should be used.

ii. Maximum capital requirements

90. Paragraph removed

91. An originating or sponsor institution using the SEC-SA for a securitisation exposure may apply a maximum capital requirement for the securitisation exposures it holds equal to the capital requirement that would have been assessed against the underlying exposures had they not been securitised.

92. In order to apply a maximum capital charge to a institution’s securitisation exposure, an institution will need the following inputs:
The largest proportion of interest that the institution holds for each tranche of a given pool (P). In particular:

- For an institution that has one or more securitisation exposure(s) that reside in a single tranche of a given pool, P equals the proportion (expressed as a percentage) of securitisation exposure(s) that the institution holds in that given tranche (calculated as the total nominal amount of the institution’s securitisation exposure(s) in the tranche) divided by the nominal amount of the tranche.
- For an institution that has securitisation exposures that reside in different tranches of a given securitisation, P equals the maximum proportion of interest across tranches, where the proportion of interest for each of the different tranches should be calculated as described above.

Capital charge for underlying pool (K_P):

- For an SA pool, K_P equals K_{SA} as defined in paragraph 79 and 80.

The maximum aggregated capital requirement for an institution's securitisation exposures in the same transaction will be equal to $K_P * P$.

93. In applying the capital charge cap, the entire amount of any gain on sale and credit-enhancing interest-only strips arising from the securitisation transaction must be deducted in accordance with paragraph 36.

5.6 Treatment of resecuritisation exposures

94. For resecuritisation exposures, institutions must apply the SEC-SA specified in paragraphs 78 to 87, with the following adjustments:

- the capital requirement of the underlying securitisation exposures is calculated using the securitisation framework;
- delinquencies (W) are set to zero for any exposure to a securitisation tranche in the underlying pool; and
- the supervisory parameter p is set equal to 1.5, rather than 1 as for securitisation exposures.

95. If the underlying portfolio of a resecuritisation consists in a pool of exposures to securitisation tranches and to other assets, one should separate the exposures to securitisation tranches from exposures to assets that are not securitisations. The K_A parameter should be calculated for each subset individually, applying separate W parameters; these calculated in accordance with paragraphs 81 to 82 in the subsets where the exposures are to assets that are not securitisation tranches, and set to zero where the exposures are to securitisation tranches. The K_A for the resecuritisation exposure is then obtained as the nominal exposure weighted-average of the K_A 's for each subset considered.

96. The resulting risk weight is subject to a floor risk weight of 100%.

97. The caps described in paragraphs 88 to 93 cannot be applied to resecuritisation exposures.

5.7 Implicit support

AMF Note

The provision of implicit or non-contractual support by an institution can include the following:

- the purchase of deteriorating credit exposures;
- purchasing assets from the underlying pool at above market prices;
- increasing the originator-provided first loss position; or
- an institution indirectly through other lending arrangements achieving the same result.

Such support signals to the market that there is no clean break for the securitized assets and therefore the exclusion of these assets from the originator's calculation of regulatory capital is not justified.

When an originating institution believes that the future actions it takes with respect to a securitization structure may meet the definition of implicit support, the institution must advise the AMF and seek a determination of the ensuing regulatory capital impact.

In determining the capital impact, the AMF will consider factors, including but not limited to:

- a) the notice provided to the AMF or other method of discovery,
- b) the rationale for any structural change to the securitization,
- c) any change in credit quality of the asset pool or
- d) if any additional enhancements or non-contractual support is provided by third parties at market terms and conditions.

If it is determined that implicit support has or will be provided, the AMF will advise the institution of the time period of the capital penalty, which will equal the later of 2 years or the maturity of all notes issued benefiting from the implicit support. If an institution is found to have provided implicit support on more than one occasion, it can expect to be prevented from gaining favourable capital treatment on all securitized assets for a minimum of five years and will be subject to the disclosure requirements noted above.

98. When an institution provides implicit support to a securitisation, it must, at a minimum, hold capital against all of the underlying exposures associated with the securitisation transaction as if they had not been securitised. Additionally, institutions would not be permitted to recognise in regulatory capital any gain on sale, in accordance with paragraph 36. Furthermore, the institution is required to disclose publicly that (a) it has provided non-contractual support and (b) the capital impact of doing so.

5.8 Information on the underlying collateral supporting securitisation exposures

Eligible credit risk mitigation techniques for protection buyers

99. An institution may recognise credit protection purchased on a securitisation exposure when calculating capital requirements subject to the following:
- collateral recognition is limited to that permitted under the credit risk mitigation framework – in particular, paragraphs 145 and 146 of the

chapter 4 when the institution applies the SEC-SA. Collateral pledged by SPEs may be recognised;

- credit protection provided by the entities listed in paragraph 195 of the chapter 4 may be recognised. SPEs cannot be recognised as eligible guarantors; and
- where guarantees or credit derivatives fulfil the minimum operational conditions as specified in paragraphs 189 to 194 of the chapter 4, institutions can take account of such credit protection in calculating capital requirements for securitisation exposures.

Full or proportional cover

100. When an institution provides full (or pro rata) credit protection to a securitisation exposure, it must calculate its capital requirements as if it directly holds the portion of the securitisation exposure on which it has provided credit protection (in accordance with the definition of tranche maturity given in paragraphs 22 and 23).
101. Provided that the conditions set out in paragraph 99 are met, the institution buying full (or pro rata) credit protection may recognise the credit risk mitigation on the securitisation exposure in accordance with the CRM framework.

Tranched protection

102. In the case of tranched credit protection, the original securitisation tranche will be decomposed into protected and unprotected sub-tranches¹⁵⁶:
- The protection provider must calculate its capital requirement as if directly exposed to the particular sub-tranche of the securitisation exposure on which it is providing protection, and as determined by the hierarchy of approaches for securitisation exposures and according to paragraphs 103 to 105
 - Provided that the conditions set out in paragraph 99 are met, the protection buyer may recognise tranched protection on the securitisation exposure. In doing so, it must calculate capital requirements for each sub-tranche separately and as follows:
 - i. For the resulting unprotected exposure(s), capital requirements will be calculated as determined by the hierarchy of approaches for securitisation exposures and according to paragraphs 103 to 105.

¹⁵⁶ The envisioned decomposition is theoretical and it should not be viewed as a new securitisation transaction. The resulting sub-tranches should not be considered resecuritisations solely due to the presence of the credit protection.

- ii. For the guaranteed/protected portion, capital requirements will be calculated according to the applicable CRM framework (in accordance with the definition of tranche maturity given in paragraphs 22 and 23).
103. When the institution use the SEC-SA, the parameters A and D should be calculated separately for each of the sub-tranches as if the latter would have been directly issued as separate tranches at the inception of the transaction. The value for K_{SA} will be computed on the underlying portfolio of the original transaction.
104. Paragraph removed.
105. A lower-priority sub-tranche must be treated as a non-senior securitisation exposure even if the original securitisation exposure prior to protection qualifies as senior as defined in paragraph 18.

Maturity mismatches

106. A maturity mismatch exists when the residual maturity of a hedge is less than that of the underlying exposure.
107. When protection is bought on a securitisation exposure(s), for the purpose of setting regulatory capital against a maturity mismatch, the capital requirement will be determined in accordance with paragraphs 202 to 205 of the chapter 4. When the exposures being hedged have different maturities, the longest maturity must be used.
108. When protection is bought on the securitised assets, maturity mismatches may arise in the context of synthetic securitisations (when, for example, an institution uses credit derivatives to transfer part or all of the credit risk of a specific pool of assets to third parties). When the credit derivatives unwind, the transaction will terminate. This implies that the effective maturity of all the tranches of the synthetic securitisation may differ from that of the underlying exposures. Institutions that synthetically securitise exposures held on their balance sheet by purchasing tranching credit protection must treat such maturity mismatches in the following manner:
- For securitisation exposures that are assigned a risk weight of 1,250%, maturity mismatches are not taken into account.
 - For all other securitisation exposures, the institution must apply the maturity mismatch treatment set forth in paragraphs 202 to 205 of the chapter 4. When the exposures being hedged have different maturities, the longest maturity must be used.

5.9 Capital treatment for ‘simple, transparent and comparable’ (STC) securitisations

5.9.1 Scope and identification of STC securitisations for the purposes of alternative capital treatment

109. Only non-ABCP, traditional securitisations are within the scope of the STC framework. Non-ABCP, true sale securitisations that are STC-compliant will be subject to capital requirements as determined by paragraphs [115 to 118].
110. For regulatory capital purposes, a securitisation transaction falling within the scope of this section will be considered STC-compliant provided only that it meets all the criteria in the securitisation risk management guideline.

5.9.2 Compliance with the STC criteria and the additional criteria for capital purpose and oversight

111. The originator/sponsor must disclose to investors all necessary information at the transaction level to allow investors to determine whether the securitisation is STC-compliant. Based on the information provided by the originator/sponsor, the investor must make its own assessment of the securitisation’s STC compliance status as defined in paragraph 110 before applying the alternative treatment in paragraph 113 to 118.

For retained positions where the originator has achieved significant risk transfer in accordance with paragraphs 25 or 26, the determination shall be made only by the originator retaining the position.

112. STC criteria need to be met at all times. Checking the compliance with some of the criteria might only be necessary at origination (or at the time of initiating the exposure, in case of guarantees or liquidity facilities) to an STC securitisation. Notwithstanding, investors and holders of the securitisation positions are expected to take into account developments that may invalidate the previous compliance assessment, for example deficiencies in the frequency and content of the investor reports, in the alignment of interest, or changes in the transaction documentation at variance with relevant STC criteria.

In cases where the criteria refer to underlying assets – including, but not limited to Criteria D15 and D16 - and the pool is dynamic, the compliance with the criteria will be subject to dynamic checks every time that assets are added to the pool.

5.9.3 Alternative capital treatment for STC securitisations meeting the additional criteria for capital purposes

113. Securitisation transactions that are assessed as STC-compliant for capital purposes as defined in paragraph 110 shall be subject to capital requirements under the securitisation framework, taking into account that:

- When the SEC-SA is used, paragraphs 114 and 118 are applicable instead of paragraphs 85 and 87 respectively.

114. The resulting risk weight is subject to a floor risk weight of 10% for senior tranches, and 15% for non-senior tranches.

115 to 117. Paragraphs removed

Standardised Approach (SEC-SA)

118. The supervisory parameter p in the context of the SEC-SA is set equal to 0.5 for an exposure to an STC securitisation.

5.10 Transitional arrangements

All securitization transactions completed by December 31, 2018 will be subject to the transitional arrangements set out in paragraphs below until the earlier of the next transaction renewal date or maturity of the transaction, subject to a maximum of two years. As of Q1 2021, no transactions may continue to benefit from these transitional arrangements.

Originator transactions will be exempt from the 30% quantitative significant risk transfer test described in paragraph 24.

The AMF recognizes that it may be operationally difficult for existing transactions to meet all of the audit, disclosure and eligibility requirements of the STC criteria. Therefore, institutions are permitted to apply the STC capital treatment to those existing transactions that they believe would meet the STC criteria once given sufficient time to make the necessary modifications

Chapter 6 Operational risk

6.1 Definition of operational risk

644. Operational risk is defined as the risk of loss resulting from inadequate or failed internal processes, people and systems or from external events. This definition includes legal risk,¹⁵⁷ but excludes strategic and reputational risk.

6.2 The measurement methodologies

645. The framework outlined below presents two methods for calculating operational risk capital charges in a continuum of increasing sophistication and risk sensitivity:

- Basic Indicator Approach
- Standardized Approach

646. Institutions are encouraged to move along the spectrum of available approaches as they develop more sophisticated operational risk measurement systems and practices. Qualifying criteria for the Standardized Approach are presented below.

647. Institutions with significant operational risk exposures (for example, specialized processing entities) are expected to use an approach that is more sophisticated than the Basic Indicator Approach and that is appropriate for the risk profile of the institution.¹⁵⁸ An institution will be permitted to use the Basic Indicator for some parts of its operations and Standardized Approach for others provided certain minimum criteria are met (see AMF Note, Section 6.4).

648. An institution will not be allowed to choose to revert to a simpler approach once it has been approved for a more advanced approach without the prior written approval of the AMF. However, if the AMF determines that an institution using a more advanced approach no longer meets the qualifying criteria for this approach, it may require the institution to revert to a simpler approach for some or all of its operations, until it meets the conditions specified by the AMF for returning to a more advanced approach.

¹⁵⁷ Legal risk includes, but is not limited to, exposure to fines, penalties, or punitive damages resulting from supervisory actions, as well as private settlements.

¹⁵⁸ The AMF will review the capital requirement produced by the operational risk approach used by an institution (whether basic indicator approach or standardized approach) for general credibility, especially in relation to a firm's peers. In the event that credibility is lacking, appropriate AMF action within the scope of its supervisory review process will be considered.

6.2.1 The basic indicator approach

649. Institutions using the basic indicator approach must hold capital for operational risk equal to the average over the previous three years of a fixed percentage (denoted alpha) of positive annual gross income. Figures for any year in which annual gross income is negative or zero should be excluded from both the numerator and denominator when calculating the average.¹⁵⁹ The charge may be expressed as follows:

$$K_{\text{BIA}} = [\sum(GI_{1\dots n} \times \alpha)]/n$$

where:

K_{BIA} = Capital charge under the Basic Indicator Approach

$GI_{1\dots n}$ = Annual gross income, where positive, over the previous three years

n = Number of the previous three years for which gross income is positive

α = 15%, which is set by the Basel Committee, relating the industry wide level of required capital to the industry wide level of the indicator

AMF Note

Newly incorporated institutions using the Basic Indicator Approach having fewer than 12 quarters of gross income data should calculate the operational risk capital charge using available gross income data to develop proxies for the missing portions of the required three years' data. Institutions should refer to the reporting instructions for the AMF's capital adequacy return for further guidance.

650. Gross income is defined as net interest income plus net non-interest income¹⁶⁰. It is intended that this measure should:

- be gross of any provisions (e.g. for unpaid interest);
- be gross of operating expenses, including fees paid to outsourcing service providers;¹⁶¹

¹⁵⁹ If negative gross income distorts an institution's Pillar 1 capital charge provided for in this chapter, the AMF will consider appropriate supervisory action under its supervisory review process.

¹⁶⁰ As defined by national supervisors and/or national accounting standards.

- exclude realized profits/losses from the sale of securities in the banking book;¹⁶²
- exclude extraordinary or irregular items as well as income derived from insurance.

AMF Note

Institutions should refer to the reporting instructions for the capital adequacy return for the definition of gross income to be used when calculating operational risk capital under the basic indicator approach or the standardized approach.

AMF Note

The AMF expects institutions to perform a reconciliation between the gross income amount reported on the capital adequacy return and amounts reported on the audited financial statements. This information should be available to the AMF upon request.

These reconciliations should identify any items that are excluded from the operational risk calculation as per the definition of gross income but are included in the audited financial statements.

AMF Note

When an institution makes a material acquisition, the operational risk capital calculation should be adjusted to reflect those activities. Since the gross income calculation is based on a rolling 12-quarter average, the most recent four quarters of gross income for the acquired business should be based on actual gross income amounts reported by the acquired business. Estimates may be used for the previous eight quarters when actual amounts are not available.

For institutions using the Basic Indicator Approach, actual gross income amounts must be used for the most recent four quarters. Estimates may be used for the previous eight quarters when actual amounts are not available.

When an institution makes a divestiture, the gross income calculation may be adjusted, with the prior written approval of the AMF, to reflect this divestiture.

¹⁶¹ In contrast to fees paid for services that are outsourced, fees received by institutions that provide outsourcing services shall be included in the definition of gross income.

¹⁶² Realized profits/losses from securities classified as “held to maturity” and “available for sale”, which typically constitute items of the banking book (e.g. under certain accounting standards), are also excluded from the definition of gross income.

651. As a point of entry for capital calculation, no specific criteria for use of the Basic Indicator Approach are set out in this framework. Nevertheless, institutions using this approach are encouraged to comply with the Basel Committee's guidance on *Principles for the Sound Management of Operational Risk*, June 2011.

6.2.2 Standardized approach^{163 164}

652. In the Standardized Approach, institutions' activities are divided into eight business lines: corporate finance, trading and sales, retail banking, commercial banking, payment and settlement, agency services, asset management, and retail brokerage. The business lines are defined in detail in Annex 6.

¹⁶³ The Basel Committee intends to reconsider the calibration of the Basic Indicator and Standardized Approaches when more risk-sensitive data are available to carry out this recalibration. Any such recalibration would not be intended to affect significantly the overall calibration of the operational risk component of the Pillar 1 capital charge provided for in this chapter.

¹⁶⁴ The Alternative Standardized Approach

At its discretion, the AMF can choose to allow a financial institution to use the Alternative Standardized Approach (ASA) provided the institution is able to satisfy its supervisor that this alternative approach provides an improved basis by, for example, avoiding double counting of risks. Once an institution has been allowed to use the ASA, it will not be allowed to revert to use of the Standardized Approach without the permission of the AMF. It is not envisaged that large diversified financial institutions in major markets would use the ASA.

Under the ASA, the operational risk capital charge/methodology is the same as for the Standardized Approach except for two business lines – retail banking and commercial banking. For these business lines, loans and advances – multiplied by a fixed factor 'm' – replace gross income as the exposure indicator. The betas for retail and commercial banking are unchanged from the Standardized Approach. The ASA operational risk capital charge for retail banking (with the same basic formula for commercial banking) can be expressed as:

$$K_{RB} = \beta_{RB} \times m \times LA_{RB}$$

Where:

K_{RB} is the capital charge for the retail banking business line

β_{RB} is the beta for the retail banking business line

LA_{RB} is total outstanding retail loans and advances (non-risk weighted and gross of provisions), averaged over the past three years

m is 0.035

For the purposes of the ASA, total loans and advances in the retail banking business line consists of the total amounts drawn from the following credit portfolios: retail, SMEs treated as retail, and purchased retail receivables. For commercial banking, total loans and advances consists of the amounts drawn from the following credit portfolios: corporate, sovereign, bank, specialized lending, SMEs treated as corporate and purchased corporate receivables. The book value of securities held in the banking book should also be included.

Under the ASA, institutions may aggregate retail and commercial banking (if they wish to) using a beta of 15%. Similarly, those financial institutions that are unable to disaggregate their gross income into the other six business lines can aggregate the total gross income for these six business lines using a beta of 18%, with negative gross income treated as described in paragraph 654.

As under the Standardized Approach, the total capital charge for the ASA is calculated as the simple summation of the regulatory capital charges across each of the eight business lines.

653. Within each business line, gross income is a broad indicator that serves as a proxy for the scale of business operations and thus the likely scale of operational risk exposure within each of these business lines. The capital charge for each business line is calculated by multiplying gross income by a factor (denoted beta) assigned to that business line. Beta serves as a proxy for the industry-wide relationship between the operational risk loss experience for a given business line and the aggregate level of gross income for that business line. It should be noted that in the Standardized Approach gross income is measured for each business line, not the whole institution, i.e. in corporate finance, the indicator is the gross income generated in the corporate finance business line.
654. The total capital charge is calculated as the three-year average of the simple summation of the regulatory capital charges across each of the business lines in each year. In any given year, negative capital charges (resulting from negative gross income) in any business line may offset positive capital charges in other business lines without limit.¹⁶⁵ However, where the aggregate capital charge across all business lines within a given year is negative, then the input to the numerator for that year will be zero.¹⁶⁶ The total capital charge may be expressed as:

$$K_{TSA} = \{ \sum_{\text{years } 1-3} \max [\sum (GI_{1-8} \times \beta_{1-8}), 0] \} / 3$$

where:

K_{TSA} = Capital charge under the Standardized Approach

GI_{1-8} = Annual gross income in a given year, as defined above in the Basic Indicator Approach, for each of the eight business lines

β_{1-8} = A fixed percentage, set by the Basel Committee, relating the level of required capital to the level of the gross income for each of the eight business lines.

¹⁶⁵ At national discretion, supervisors may adopt a more conservative treatment of negative gross income.

¹⁶⁶ As under the Basic Indicator Approach, if negative gross income distorts an institution's Pillar 1 capital charge provided for in this chapter under the Standardized Approach, supervisors will consider appropriate supervisory action under their supervisory review process.

The values of the betas are detailed below:

Business lines	Beta Factors
Corporate finance (β_1)	18%
Trading and sales (β_2)	18%
Retail banking (β_3)	12%
Commercial banking (β_4)	15%
Payment and settlement (β_5)	18%
Agency services (β_6)	15%
Asset management (β_7)	12%
Retail brokerage (β_8)	12%

AMF Note

Newly incorporated institutions intending to use the Standardized Approach having fewer than 12 quarters of gross income data will be expected to meet all of the qualifying criteria for the Standardized Approach, including the business line mapping requirements outlined in Annex 6. These institutions should use available gross income data to develop proxies for the missing portions of the required three years' data. Institutions should refer to the AMF's reporting instructions for the capital adequacy return for further guidance.

AMF Note

When an institution makes a material acquisition, the operational risk capital calculation should be adjusted to reflect those activities. Since the gross income calculation is based on a rolling 12-quarter average, the most recent four quarters of gross income for the acquired business should be based on actual gross income amounts reported by the acquired business. Estimates may be used for the previous eight quarters when actual amounts are not available.

For institutions using the Standardized Approach, the gross income from the most recent four quarters for the acquired business must be mapped into the eight Basel business lines. Once an institution has obtained the percentage allocation of the gross income from the acquired entity across the eight business lines for the most recent four quarters, it may apply this allocation to the previous eight quarters of gross income. Thus, the mapping exercise for the acquired business need only be performed for the most recent four quarters. The mapping results can be applied to the total gross income of the acquired business for the previous eight quarters to determine the percentage assigned to the eight business lines.

When an institution makes a divestiture, the gross income calculation may be adjusted, with the prior written approval of the AMF, to reflect this divestiture.

AMF Note

For domestic institutions implementing the Standardized Approach, the AMF will allow subsidiaries of these institutions to use either the Basic Indicator Approach or the Standardized Approach to determine operational risk regulatory capital for the subsidiary.

655. to 659. Paragraphs removed – intended for institutions authorized to use advanced measurement approaches

6.3 Qualifying criteria**6.3.1 The standardized approach¹⁶⁷**

660. In order to qualify for use of the Standardized Approach, an institution must satisfy the AMF that, at a minimum:

- Its board of directors and senior management, as appropriate, are actively involved in the oversight of the operational risk management framework.
- It has an operational risk management system that is conceptually sound and is implemented with integrity.

¹⁶⁷ Supervisors allowing institutions to use the Alternative Standardized Approach must decide on the appropriate qualifying criteria for that approach, as the criteria set forth in paragraphs 662 and 663 of this section may not be appropriate.

- It has sufficient resources in the use of the approach in the major business lines as well as the control and audit areas.
661. The AMF will have the right to insist on a period of initial monitoring of an institution's Standardized Approach before it is used for regulatory capital purposes.
662. An institution must develop specific policies and have documented criteria for mapping gross income for current business lines and activities into the standardized framework. The criteria must be reviewed and adjusted for new or changing business activities as appropriate. The principles for business line mapping are set out in Annex 6.
663. As some internationally active institutions will wish to use the Standardized Approach, it is important that such institutions have adequate operational risk management systems. Consequently, an internationally active institution using the Standardized Approach must meet the following additional criteria:¹⁶⁸

AMF Note

All institutions implementing the Standardized Approach should meet the criteria set out in paragraph 663. The AMF will consider the institution's risk profile and complexity when reviewing the institution's self-assessment of compliance with these criteria.

- a) The institution must have an operational risk management system with clear responsibilities assigned to an operational risk management function. The operational risk management function is responsible for developing strategies to identify, assess, monitor and control/mitigate operational risk; for codifying firm-level policies and procedures concerning operational risk management and controls; for the design and implementation of the firm's operational risk assessment methodology; and for the design and implementation of a risk-reporting system for operational risk.

¹⁶⁸ For other institutions, these criteria are recommended, with AMF discretion to impose them as requirements.

AMF Note

The size and complexity of an institution may not warrant the existence of a specific organizational unit dedicated to operational risk management. Where this is the case, an institution should be able to demonstrate to the AMF how its operational risk management framework is appropriate to the size and complexity of the institution's operations. Where an independent unit does not exist, the above responsibilities should be assigned to individuals within the institution, who are independent from the relevant business line.

The term operational risk management system does not necessarily refer to a technology application for implementing operational risk management across the institution, although this may be a part of an institution's approach to managing operational risk. Rather, the term system refers to the collective policies and processes in place for identifying, assessing, monitoring and controlling operational risk across the institution.

- b) As part of the institution's internal operational risk assessment system, the institution must systematically track relevant operational risk data including material losses by business line. Its operational risk assessment system must be closely integrated into the risk management processes of the institution. Its output must be an integral part of the process of monitoring and controlling the institution's operational risk profile. For instance, this information must play a prominent role in risk reporting, management reporting, and risk analysis. The institution must have techniques for creating incentives to improve the management of operational risk throughout the institution.

AMF Note

All institutions implementing the Standardized Approach should be able to track and report relevant operational risk data including material operational risk losses by significant business line. The sophistication of this tracking and reporting mechanism should be appropriate for the size of the institution, taking into account its reporting structure as well as the operational risk exposure of the institution.

- c) There must be regular reporting of operational risk exposures, including material operational losses, to business unit management, senior management, and to the board of directors. The institution must have procedures for taking appropriate action according to the information within the management reports.

AMF Note

All institutions implementing the Standardized Approach should develop regular reporting of operational risk exposures within the institution and to the board of directors. The frequency and content of this reporting should be appropriate for the reporting structure as well as the nature, complexity and risk profile of the institution. The need to formalize this reporting should also reflect the internal structure of the institution (e.g., the number of employees, the reporting hierarchy). All institutions should develop procedures for taking appropriate action based on the information contained in the operational risk reports.

- d) The institution's operational risk management system must be well documented. The institution must have a routine in place for ensuring compliance with a documented set of internal policies, controls and procedures concerning the operational risk management system, which must include policies for the treatment of non-compliance issues.

AMF Note

All institutions should develop processes for ensuring compliance with a documented set of internal policies, controls and procedures concerning the management of operational risk.

- e) The institution's operational risk management processes and assessment system must be subject to validation and regular independent review. These reviews must include both the activities of the business units and of the operational risk management function.

AMF Note

Where the size and complexity of the institution may not warrant the existence of a specific organizational unit dedicated to operational risk management, independent review should focus on the operational risk management processes and may be integrated with the review of the respective business activities.

- f) The institution's operational risk assessment system (including the internal validation processes) must be subject to regular review by external auditors and/or the AMF.

AMF Note

External audit reviews of an institution's operational risk assessment system are not mandated by the AMF.

664. to 679. Paragraphs removed – intended for institutions authorized to use advanced measurement approaches.

6.4 Partial use

AMF Note

The AMF will allow partial use for an institution adopting the Standardized Approach on a transitional basis only. An institution will be permitted to use the Basic Indicator Approach for part of its operations for a period not exceeding three years after implementation of the Standardized Approach. The AMF will permit partial use only where the institution can demonstrate that it is not being implemented for capital arbitrage purposes. The AMF expects partial use to be used only under specific circumstances where the institution can develop a clear rationale for why it is needed.

680. to 683. Paragraphs removed – intended for institutions authorized to use an AMA for some parts of their operations.

Chapter 7 Market risk

683(i). to 718(cxii). inclusively.

Paragraphs removed – intended for institutions that have specific capital charge requirements for market risk.

AMF Note

Definitions

Market risk is the risk of losses in on- and off-balance sheet positions arising from movements in market prices. The risks pertaining to this requirement are:

- For instruments in the trading book:
- Interest rate position risk.
- Equity position risk.
- Throughout the institution:
- Foreign exchange risk.
- Commodities risk.

A trading book consists of positions in financial instruments and commodities held either with trading intent or in order to hedge other elements of the trading book.

Positions held with trading intent are those held intentionally for short-term resale and/or with the intent of benefiting from actual or expected short-term price movements or to lock in arbitrage profits. They may include, for example, proprietary positions, positions arising from client servicing (e.g. matched principal brokering) and market making.

Capital adequacy requirements

In light of the nature of the activities of the institutions contemplated in this Guideline, for the time being the AMF is not setting out specific capital adequacy requirements for market risk. However, if the AMF considers that trading has become a more significant part of the activities of the target financial institutions, the AMF may revisit the capital adequacy requirements so as to take into consideration the effect of market risk on the risk profile of the institutions.

While the provisions dealing specifically with market risk are not included in this Guideline, the AMF nonetheless wishes to draw to the attention of institutions the fact that certain provisions relating to the management and supervisory review of interest rate risk in the banking book, in particular paragraphs 739, 740, and 762 to 764, which can be found in Chapter 10 of this Guideline, must nevertheless be taken into account by the target institutions, when applicable.

Chapter 8 Supervisory review process

Key principle

Principle 1: Institutions should have a process for assessing their overall capital adequacy in relation to their risk profile and a strategy for maintaining their capital levels.

719. to 725. Paragraphs removed because they are intended for regulators.

726. Institutions must be able to demonstrate that chosen internal capital targets are well founded and that these targets are consistent with their overall risk profile and current operating environment. In assessing capital adequacy, senior management must have an integrated firm-wide perspective of the institution's risk exposure, in order to identify and react to emerging and growing risks in a timely and effective manner. Senior management needs to be mindful of the particular stage of the business cycle in which the institution is operating. Rigorous, forward-looking stress testing that identifies possible events or changes in market conditions that could adversely impact the institution should be performed. Institution management clearly bears primary responsibility for ensuring that the institution has adequate capital to support its risks.

AMF Note

Stress testing

Stress testing can be defined as “the examination of the potential effects on a firm’s financial condition of a set of specified changes in risk factors, corresponding to exceptional but plausible events.”¹⁶⁹

Minimum capital requirements

The minimum requirements of this Guideline don't require institutions to consider stress testing in the development of inputs to the minimum regulatory capital formula.

Internal capital assessment

In addition to satisfying minimum capital requirements, institutions are expected to conduct internal assessments of the adequacy of the capital they hold. Institutions should have a process for assessing their overall capital adequacy in relation to their risk profile and a strategy for maintaining their capital levels.

The extent and sophistication of institutions' efforts to assess capital adequacy should be commensurate with the importance and sophistication of various activities. Extensive and sophisticated stress testing may be necessary for certain activities that are complex and

¹⁶⁹ Bank for International Settlements. Committee on the Global Financial System Stress Testing by Large Financial Institutions, Current Practice and Aggregation Issues, April 2000.

important at one institution; rather less may be sufficient for the same general type of activities at an institution where they are less complex or important.

Stress testing should be rigorous and comprehensive. Stress scenarios should be plausible and relevant to the composition of an institution's portfolio. They should identify vulnerabilities, and the potential for large losses from relationships between risk factors in a stressed environment

Scenario analysis typically refers to a range of individual stresses or variation in parameters occurring at the same time. Scenario analyses often examine the impact of catastrophic events on a firm's financial position, for example simultaneous movements in a number of risk categories affecting all of an institution's business operations - such as volumes, investment values and interest rate movements. Scenarios can be derived in a variety of ways including stochastic models, analysis of historic experience or a repetition of a historical event. Scenarios can be developed with varying degrees of precision and depth.

To improve the value of the stress testing exercises, institutions should consider the following:

- Identifying a range of scenarios that could produce losses for portfolios or businesses.
- Ranking the scenarios by level of potential adverse impact.
- Assessing relative probabilities for the scenarios.

Stress tests should be integrated with internal controls, both those that manage risk in an institution's activities, as well as those that govern the assessment and management of its capital. They should also be integrated with the institution's reporting process, so that Senior Management and the Board can compare potential loss estimates resulting from stress tests, with approved risk tolerance limits. Stress tests complement statistical capital models, and mitigate institutions' reliance on one measure of risk. They may work better than some capital models in reflecting changed relations among risk factors.

Accordingly, stress test results should:

- inform management about potential risks and their impact.
- Management should consider these risks in their capital planning and risk management practices.

727. The five main features of a sound risk management process are as follows:

- Active board and senior management oversight.
- Appropriate policies, procedures and limits.
- Comprehensive and timely identification, measurement, mitigation, controlling, monitoring and reporting of risks.
- Appropriate management information systems (MIS) at the business and firm-wide level.
- Comprehensive internal controls.

8.1 Board and senior oversight¹⁷⁰

728. A sound risk management process is the foundation for an effective assessment of the adequacy of an institution's capital position. The decision-making bodies of the financial institution are responsible for understanding the nature and level of risk being taken by the institution and how this risk relates to adequate capital levels. They are also responsible for ensuring that the formality and sophistication of the risk management processes are appropriate in light of the risk profile and business plan.
729. The analysis of an institution's current and future capital requirements in relation to its strategic objectives is a vital element of the strategic planning process. The strategic plan should clearly outline the institution's capital needs, anticipated capital expenditures, desirable capital level, and external capital sources. Senior management and the board should view capital planning as a crucial element in being able to achieve its desired strategic objectives.
730. The institution's board of directors has responsibility to define the institution's risk appetite and risk tolerance levels. It should also ensure that senior management establishes a framework for assessing the various risks, develops a system to relate risk to the institution's capital level, and establishes a method for monitoring compliance with internal policies. It is likewise important that the board of directors adopts and supports strong internal controls and written policies and procedures and ensures that senior management effectively communicates these throughout the organization.
- 730(i). The board of directors and senior management should possess sufficient knowledge of all major business lines to ensure that appropriate policies, controls and risk monitoring systems are effective. They should have the necessary expertise to understand the capital markets activities in which the institution is involved – such as securitisation and off-balance sheet activities – and the associated risks. The board and senior management should remain informed on an on-going basis about the evolution of these risks as financial markets, risk management practices and the institution's activities evolve. In addition, the board and senior management should ensure that accountability and lines of authority are clearly delineated. With respect to new or complex products and activities, senior management should understand the underlying assumptions regarding business models, valuation and risk management practices. In addition, senior management should evaluate the potential risk exposure if those assumptions fail.

¹⁷⁰ This section of the Guideline refers to a management structure composed of a board of directors and senior management. The notions of the board of directors and senior management are used in this section not to identify legal constructs, but rather to label two decision-making functions within a financial institution.

- 730(ii). Before embarking on new activities or introducing products new to the institution, the board and senior management should identify and review the changes in firm-wide risks arising from these potential new products or activities and ensure that the infrastructure and internal controls necessary to manage the related risks are in place. In this review, a institution should also consider the possible difficulty in valuing the new products and how they might perform in a stressed economic environment.
- 730(iii). An institution's risk function and its chief risk officer (CRO) or equivalent position should be independent of the individual business lines and report directly to the chief executive officer (CEO) and the institution's board of directors. In addition, the risk function should highlight to senior management and the board risk management concerns, such as risk concentrations and violations of risk appetite limits.¹⁷¹

8.1.1 Sound compensation practices

- 730(iv). Risk management must be embedded in the culture of an institution. It should be a critical focus of the CEO, CRO, senior management, trading desk and other business line heads and employees in making strategic and day-to-day decisions. For a broad and deep risk management culture to develop and be maintained over time, compensation policies must not be unduly linked to short-term accounting profit generation. Compensation policies should be linked to longer-term capital preservation and the financial strength of the firm, and should consider risk-adjusted performance measures. In addition, an institution should provide adequate disclosure regarding its compensation policies to stakeholders. Each institution's board of directors and senior management have the responsibility to mitigate the risks arising from remuneration policies in order to ensure effective firm-wide risk management.
- 730(v). An institution's board of directors must actively oversee the compensation system's design and operation, which should not be controlled primarily by the CEO and management team. Relevant board members and employees must have independence and expertise in risk management and compensation.
- 730(vi). In addition, the board of directors must monitor and review the compensation system to ensure the system includes adequate controls and operates as intended. The practical operation of the system should be regularly reviewed to ensure compliance with policies and procedures. Compensation outcomes, risk measurements, and risk outcomes should be regularly reviewed for consistency with intentions.
- 730(vii). Staff that are engaged in the financial and risk control areas must be independent, have appropriate authority, and be compensated in a manner that

¹⁷¹ Autorité des marchés financiers. *Integrated Risk Management Guideline*, April 2009, Section 2.3 "Role of the chief risk officer".

is independent of the business areas they oversee and commensurate with their key role in the firm. Effective independence and appropriate authority of such staff is necessary to preserve the integrity of financial and risk management's influence on incentive compensation.

- 730(viii). Compensation must be adjusted for all types of risk so that remuneration is balanced between the profit earned and the degree of risk assumed in generating the profit. In general, both quantitative measures and human judgment should play a role in determining the appropriate risk adjustments, including those that are difficult to measure such as liquidity risk and reputation risk.
- 730(ix). Compensation outcomes must be symmetric with risk outcomes and compensation systems should link the size of the bonus pool to the overall performance of the firm. Employees' incentive payments should be linked to the contribution of the individual and business to the firm's overall performance.
- 730(x). Compensation payout schedules must be sensitive to the time horizon of risks. Profits and losses of different activities of a financial firm are realized over different periods of time. Variable compensation payments should be deferred accordingly. Payments should not be finalised over short periods where risks are realised over long periods. Management should question payouts for income that cannot be realised or whose likelihood of realisation remains uncertain at the time of payout.
- 730(xi). The mix of cash, equity and other forms of compensation must be consistent with risk alignment. The mix will vary depending on the employee's position and role. The firm should be able to explain the rationale for its mix.
- 730(xii). Firms must disclose clear, comprehensive and timely information about their compensation practices to facilitate constructive engagement by all stakeholders, including in particular shareholders. Stakeholders need to be able to evaluate the quality of support for the firm's strategy and risk posture. Appropriate disclosure related to risk management and other control systems will enable a firm's counterparties to make informed decisions about their business relations with the firm. Supervisors should have access to all necessary information in order to evaluate institutions' compensation practices.

8.2 Sound capital assessment

731. Fundamental elements of sound capital assessment include:
- policies and procedures designed to ensure that the institution identifies, measures, and reports all material risks;
 - a process that relates capital to the level of risk;
 - a process that states capital adequacy goals with respect to risk, taking account of the institution's strategic focus and business plan;

- a process of internal controls, reviews and audit to ensure the integrity of the overall management process.

8.2.1 Policies, procedures and limits

731(i). Firm-wide risk management programmes should include detailed policies that set specific firm-wide prudential limits on the principal risks relevant to an institution's activities. An institution's policies and procedures should provide specific guidance for the implementation of broad business strategies and should establish, where appropriate, internal limits for the various types of risk to which the institution may be exposed. These limits should consider the institution's role in the financial system and be defined in relation to the institution's capital, total assets, profits and losses or, where adequate measures are in place, its overall risk level.

731(ii). An institution's policies, procedures and limits should:

- provide for adequate and timely identification, measurement, monitoring, control and mitigation of the risks posed by its lending, investing, trading, securitisation, off-balance sheet, fiduciary and other significant activities at the business line and firm wide levels;
- ensure that the economic substance of an institution's risk exposures, including reputational risk and valuation uncertainty, are fully recognized and incorporated into the institution's risk management processes;
- be consistent with the institution's stated goals and objectives, as well as its overall financial strength;
- clearly delineate roles and accountability across the institution's various business lines, and ensure there is a clear separation between business lines and the risk management function;
- refer to line supervisors and address breaches of internal position limits;
- provide for the analysis of new activities and products by bringing together all relevant risk management, control and business lines to ensure that the institution is able to manage and control the activity prior to acting on it;
- include a schedule and process for reviewing and updating them as appropriate.

8.2.2 Management information systems

731(iii). An institution's MIS should provide the board and senior management in a clear and concise manner with timely and relevant information concerning their institutions' risk profile. This information should include all risk exposures, including those that are off-balance sheet. Management should understand the assumptions behind and limitations inherent in specific risk measures.

- 731(iv). The key elements necessary for the aggregation of risks are an appropriate infrastructure and MIS that:
- allow for the aggregation of exposures and risk measures across business lines;
 - support identification of concentrations and emerging risks customized for the institution (see Section 8.6.3)
- MIS should support the ability to evaluate the impact of various types of economic and financial shocks that affect the whole of the financial institution. Further, an institution's systems should be flexible enough to consider hedging and other risk mitigation actions to be carried out.
- 731(v). To enable proactive management of risk, the board and senior management need to ensure that MIS are capable of providing regular, accurate and timely information on the institution's aggregate risk profile, as well as the main assumptions used for risk aggregation. MIS should be adaptable and responsive to changes in the institution's underlying risk assumptions and should incorporate multiple perspectives of risk exposure to account for uncertainties in risk measurement. They should also be sufficiently flexible so that the institution can generate forward-looking institution-wide scenario analyses that capture management's interpretation of evolving market conditions and stressed conditions. Third-party inputs or other tools used within MIS (programme credit ratings, risk measures, models) should be subject to initial and ongoing validation.
- 731(vi). An institution's MIS should be capable of capturing limit breaches and procedures should be set up to promptly report such breaches to senior management, as well as to ensure that appropriate follow-up actions are taken. For instance, similar exposures should be aggregated across business platforms (including the banking and trading books) to determine whether there is a concentration or a breach of an internal position limit.

8.3 Comprehensive assessment of risks

732. All material risks faced by the institution should be addressed in the capital assessment process. While the Basel Committee recognizes that not all risks can be measured precisely, a process should be developed to estimate risks. Therefore, the following risk exposures, which by no means constitute a comprehensive list of *all* risks, should be considered.
733. **Credit risk** – Institutions should have methodologies that enable them to assess the credit risk involved in exposures to individual borrowers or counterparties as well as at the portfolio level. Institutions should assess exposures, regardless of whether they are rated or unrated, and determine whether the risk weights applied to such exposures, under the Standardised

Approach, are appropriate for their inherent risk. In those instances where an institution determines that the inherent risk of such an exposure, particularly if it is unrated, is significantly higher than that implied by the risk weight to which it is assigned, the institution should consider the higher degree of credit risk in the evaluation of its overall capital adequacy. For more sophisticated institutions, the credit review assessment of capital adequacy, at a minimum, should cover four areas: risk rating systems, portfolio analysis/aggregation, securitisation/complex credit derivatives, and large exposures and risk concentrations.

734. Internal risk ratings are an important tool in monitoring credit risk. Internal risk ratings should be adequate to support the identification and measurement of risk from all credit exposures, and should be integrated into an institution's overall analysis of credit risk and capital adequacy. The ratings system should provide detailed ratings for all assets, not only for criticized or problem assets. Loan loss reserves should be included in the credit risk assessment for capital adequacy.
735. The analysis of credit risk should adequately identify any weaknesses at the portfolio level, including any concentrations of risk. It should also adequately take into consideration the risks involved in managing credit concentrations and other portfolio issues through such mechanisms as securitisation programs and complex credit derivatives.
736. **Operational risk** – It is felt that similar rigour should be applied to the management of operational risk, as is done for the management of the other significant risks faced by financial institutions. The failure to properly manage operational risk can result in a misstatement of an institution's risk/return profile and expose the institution to significant losses.
737. An institution should develop a framework for managing operational risk and evaluate the adequacy of capital given this framework. The framework should cover the institution's appetite and tolerance for operational risk, as specified through the policies for managing this risk, including the extent and manner in which operational risk is transferred outside of the institution. It should also include policies outlining the institution's approach to identifying, assessing, monitoring and controlling/mitigating the risk.
738. **Market risk** – Institutions should have methodologies that enable them to assess and actively manage all material market risks, wherever they arise, at position, desk, business line and firm-wide level.
- 738(i). to 738(v). Paragraphs removed – intended for institutions that use more advanced technologies to assess capital adequacy requirements for market risk and satisfy minimum capital requirements.

739. **Interest rate risk in the banking book:**¹⁷² The measurement process should include all material interest rate positions of the institution and consider all relevant repricing and maturity data. Such information will generally include current balance and contractual rate of interest associated with the instruments and portfolios, principal payments, interest reset dates, maturities, the rate index used for repricing, and contractual interest rate ceilings or floors for adjustable-rate items. The system should also have well-documented assumptions and techniques.
740. Regardless of the type and level of complexity of the measurement system used, the decision-making bodies of the financial institution should ensure the adequacy and completeness of the system. Because the quality and reliability of the measurement system is largely dependent on the quality of the data and various assumptions used in the model, the decision-making bodies should give particular attention to these items.
741. **Liquidity risk**¹⁷³ – Liquidity is crucial to the ongoing viability of any institution organization. Institutions' capital positions can have an effect on their ability to obtain liquidity, especially in a crisis. Each Institution must have adequate systems for measuring, monitoring and controlling liquidity risk. Institutions should evaluate the adequacy of capital given their own liquidity profile and the liquidity of the markets in which they operate.
742. **Other risks** – Although the Basel Committee recognizes that 'other' risks, such as reputational and strategic risk, are not easily measurable, the AMF expects financial institutions to further develop techniques for managing all aspects of these risks.
- 742(i). **Reputational risk** – Reputational risk can be defined as the risk arising from negative perception on the part of customers, counterparties, shareholders, investors, debt-holders, market analysts, other relevant parties or regulators that can adversely affect an institution's ability to maintain existing or future activities, its business relationships and continued access to sources of funding (programmer through the interbank or securitisation markets). Reputational risk is multidimensional and reflects the perception of other market participants. In addition, exposure to this risk is essentially a function of the adequacy of the institution's internal risk management processes, as well as the manner and efficiency with which management responds to external influences on institution-related transactions.
- 742(ii). Reputational risk can lead to the provision of implicit support, which may give rise to credit, liquidity, market and legal risk – all of which can have a negative impact on an institution's earnings, liquidity and capital position. An institution should identify potential sources of reputational risk to which it is exposed.

¹⁷² Autorité des marchés financiers. *Securitization Risk Management Guideline*, April 2009.

¹⁷³ Autorité des marchés financiers. *Liquidity Risk Management Guideline*, April 2009.

These include the institution's business lines, liabilities, affiliated operations, off-balance sheet vehicles and the markets in which it carries on business. The risks that arise should be incorporated into the institution's risk management processes and appropriately addressed in its ICAAP and liquidity contingency plans.

- 742(iii). The reputational risk associated with off-balance sheet instruments may be significant during times of stress. An institution may thereby be compelled to go beyond its contractual obligations by providing implicit support to promoters of securitisation and off-balance sheet instruments. An institution should incorporate the exposures that could give rise to reputational risk into its assessments of whether the requirements under the securitisation framework have been met and the potential adverse impact of providing implicit support.
- 742(iv). Reputational risk may arise, for example, from an institution's sponsorship of securitisation structures such as ABCP conduits and SIVs, as well as from the sale of credit exposures to securitisation trusts. It may also arise from an institution's participation in asset or funds management, particularly when financial instruments are issued by owned or sponsored entities and are distributed to the customers of the sponsoring institution. In the event that the instruments were not correctly evaluated or the risk drivers not adequately communicated, a sponsor may feel some responsibility to its customers, or be economically compelled, to cover any losses. Reputational risk also arises when an institution sponsors activities such as money market mutual fund management, in-house hedge funds and real estate investment trusts (REITs). In these cases, an institution may decide to support the value of shares/units held by investors even though it is not contractually required to provide the support.
- 742(v). Reputational risk also may affect an institution's liabilities, since market confidence and an institution's ability to fund its business are closely related to its reputation. For instance, to avoid damaging its reputation, an institution may call its liabilities even though this might negatively affect its liquidity profile. This is particularly true for liabilities that are components of regulatory capital, such as hybrid/subordinated debt. In such cases, the capital level is likely to be affected.
- 742(vi). Institution management should have appropriate policies in place to identify sources of reputational risk when the institution enters new markets, products or business lines. In addition, an institution's stress testing procedures should take account of reputational risk so management has a firm understanding of the consequences and second round effects of reputational risk.
- 742(vii). Once an institution identifies potential exposures arising from reputational concerns, it may have to measure the amount of support to be provided (including implicit support for securitisation) or losses it might experience under adverse market conditions. In particular, in order to avoid reputational damages and to maintain market confidence, an institution should develop methodologies

to efficiently measure the effect of reputational risk in terms of other risk types (programmer credit, liquidity, market or operational risk) to which it may be exposed. This could be accomplished by including reputational risk scenarios in existing stress tests. For instance, non-contractual off-balance sheet exposures could be included in the stress tests to determine the effect on an institution's credit, market and liquidity risk profiles. Methodologies also could include comparing the actual amount of exposure carried on the balance sheet versus the maximum exposure amount held off-balance sheet, that is, the potential amount to which the institution could be exposed.

- 742(viii). By providing implicit support, an institution signals to the market that all of the risks inherent in the securitized assets are still held by it and have not been transferred. Since the risks related to implicit support are not captured by the provisions of Chapters 3 to 7, they must be considered within the scope of this chapter. In addition, the processes for approving new products or strategic initiatives should consider the potential provision of implicit support and should be incorporated in an institution's ICAAP.

8.4 Monitoring and reporting

743. The institution should establish an adequate system for monitoring and reporting risk exposures and assessing how the institution's changing risk profile affects the need for capital. The institution's senior management or board of directors should, on a regular basis, receive reports on the institution's risk profile and capital needs. These reports should allow them to:
- evaluate the level and trend of material risks and their effect on capital levels,
 - evaluate the sensitivity and reasonableness of key assumptions used in the capital assessment measurement system,
 - determine that the institution holds sufficient capital against the various risks and is in compliance with established capital adequacy goals,
 - assess its future capital requirements based on the institution's reported risk profile and make necessary adjustments to the institution's strategic plan accordingly.

8.5 Internal control review¹⁷⁴

744. The institution's internal control structure is essential to the capital assessment process. Effective control of the capital assessment process includes an independent review and, where appropriate, the involvement of internal or external audits. The institution's board of directors has a responsibility to ensure that senior management establishes a system for assessing the various risks,

¹⁷⁴ Autorité des marchés financiers, *Governance Guideline*, September 2016, Section 4 "Internal control".

develops a system to relate risk to the institution's capital level, and establishes a method for monitoring compliance with internal policies. The board should regularly verify whether its system of internal controls is adequate to ensure well-ordered and prudent conduct of business.

745. The institution should conduct periodic reviews of its risk management process to ensure its integrity, accuracy, and reasonableness. Areas that should be reviewed include:

- Appropriateness of the institution's capital assessment process given the nature, scope and complexity of its activities
- Identification of large exposures and risk concentrations
- Accuracy and completeness of data inputs into the institution's assessment process
- Reasonableness and validity of scenarios used in the assessment process
- Stress testing and analysis of assumptions and inputs
- Effectiveness of over-limit reporting and other exceptional reporting¹⁷⁵

746. to 760. Paragraphs removed - intended for regulators

8.6 Specific issues to be addressed under the supervisory review process

761. A number of important issues that institutions and the AMF should particularly focus on when carrying out the supervisory review process have been identified. These issues include some key risks which are not directly addressed within the scope of Chapters 3 to 6 of this Guideline and important assessments that the AMF should make to ensure the proper functioning of certain aspects covered by these chapters.

8.6.1 Interest rate risk in the banking book

762. It is recognized that interest rate risk in the banking book is a potentially significant risk which merits support from capital. In light of the strong heterogeneity among financial institutions as regards the nature of that risk, it was agreed to deal with interest rate risk within the scope of this chapter. Nevertheless, the AMF could establish a mandatory minimum capital requirement.

763. It is recognized that institutions' internal systems constitute the principal tool for the measurement of interest rate risk in the banking book and for the supervisory response. To facilitate supervisors' monitoring of interest rate risk

¹⁷⁵ Autorité des marchés financiers. *Governance Guideline*, September 2016 Section 4 "Internal Control".

exposures across institutions, institutions would have to provide to the AMF the results of their internal measurement systems, expressed in terms of economic value relative to capital, using a standardized interest rate shock

764. If the AMF determines that institution is not holding capital commensurate with the level of interest rate risk, she must require the institution to reduce its risk, to hold a specific additional amount of capital or some combination of the two. The AMF should be particularly attentive to the sufficiency of capital of institutions where economic value declines by more than 20% of the sum of Tier 1 and Tier 2 capital as a result of a standardized interest rate shock (200 basis points) or its equivalent, as described in the supporting document *Principles for the Management and Supervision of Interest Rate Risk*.¹⁷⁶

8.6.2 Credit risk

765. and 766. Paragraphs removed – intended for institutions that use the IRB approach.

8.6.2.1 Residual risk

767. This Guideline allows institutions to offset credit or counterparty risk with collateral, guarantees or credit derivatives, leading to reduced capital charges. While institutions use credit risk mitigation (CRM) techniques to reduce their credit risk, these techniques give rise to risks that may render the overall risk reduction less effective. Accordingly, these risks (e.g. legal risk, documentation risk, or liquidity risk) to which institutions are exposed are of AMF concern. Where such risks arise, and irrespective of fulfilling the minimum requirements set out in Pillar 1 in this Guideline, an institution could find itself with greater credit risk exposure to the underlying counterparty than it had expected.

Examples of these risks include:

- inability to seize, or realize in a timely manner, collateral pledged (on default of the counterparty);
 - refusal or delay by a guarantor to pay;
 - Ineffectiveness of untested documentation.
768. Therefore, the AMF will require institutions to have in place appropriate written CRM policies and procedures in order to control these residual risks. An institution may be required to submit these policies and procedures to the AMF and must regularly review their appropriateness, effectiveness and operation.

¹⁷⁶ Basel Committee on Banking Supervision. Principles for the Management and Supervision of Interest Rate Risk, July 2004. Autorité des marchés financiers. Interest Rate Risk Management Guideline, April 2009.

769. In its CRM policies and procedures, an institution must consider whether, when calculating capital requirements, it is appropriate to give the full recognition of the value of the credit risk mitigant as authorized by Chapters 3 to 6 of this Guideline and must demonstrate that its CRM management policies and procedures are appropriate to the level of capital benefit that it is recognizing. Where the AMF is not satisfied as to the robustness, suitability or application of these policies and procedures, the AMF may direct the institution to take immediate remedial action or hold additional capital against residual risk until such time as the deficiencies in the CRM procedures are rectified to the satisfaction of the AMF. For example, the AMF may direct an institution to:
- Give less than full recognition of credit risk mitigants (on the whole credit portfolio or by specific product line).
 - Hold a specific additional amount of capital.

8.6.2.2 Counterparty credit risk

- 777(i). As counterparty credit risk (CCR) represents a form of credit risk, this would include meeting the standards set out in this Guideline regarding their approaches to stress testing, “residual risks” associated with credit risk mitigation techniques, and credit concentrations, as specified in the paragraphs above.
- 777(ii). The institution must have counterparty credit risk management policies, processes and systems that are conceptually sound and implemented with integrity relative to the sophistication and complexity of a firm’s holdings of exposures that give rise to CCR. A sound counterparty credit risk management framework shall include the identification, measurement, management, approval and internal reporting of CCR.
- 777(iii). The institution’s risk management policies must take account of the market, liquidity, legal and operational risks that can be associated with CCR and, to the extent practicable, interrelationships among those risks. The institution must not undertake business with a counterparty without assessing its creditworthiness and must take due account of both settlement and pre-settlement credit risk. These risks must be managed as comprehensively as practicable at the counterparty level (aggregating counterparty exposures with other credit exposures) and at the firm-wide level.
- 777(iv). The board of directors and senior management must be actively involved in the CCR control process and must regard this as an essential aspect of the business to which significant resources need to be devoted.
- 777(v). The daily reports prepared on a firm’s exposures to CCR must be reviewed by a level of management with sufficient seniority and authority to enforce both reductions of positions taken by individual credit managers or traders and reductions in the firm’s overall CCR exposure.

- 777(vi). The institution's CCR management system must be used in conjunction with internal credit and trading limits. In this regard, credit and trading limits must be related to the firm's risk measurement model in a manner that is consistent over time and that is well understood by credit managers, traders and senior management.
- 777(vii). The measurement of CCR must include monitoring daily and intra-day usage of credit lines. The institution must measure current exposure gross and net of collateral held where such measures are appropriate and meaningful (e.g. OTC derivatives, margin lending, etc.). Measuring and monitoring peak exposure or potential future exposure (PFE) at a confidence level chosen by the institution at both the portfolio and counterparty levels is one element of a robust limit monitoring system. Institutions must take account of large or concentrated positions, including concentrations by groups of related counterparties, by industry, by market, customer investment strategies, etc.
- 777(viii). Paragraph removed – intended for institutions that use an internal model approach for the treatment of counterparty risk.
- 777(ix). The institution must have a routine in place for ensuring compliance with a documented set of internal policies, controls and procedures concerning the operation of the CCR management system. The firm's CCR management system must be well documented, for example, through a risk management manual that describes the basic principles of the risk management system and that provides an explanation of the empirical techniques used to measure CCR.
- 777(x). The institution must conduct an independent review of the CCR management system regularly through its own internal auditing process. This review must include both the activities of the business credit and trading units and of the independent CCR control unit. A review of the overall CCR management process must take place at regular intervals (ideally not less than once a year) and must specifically address, at a minimum, the:
- adequacy of the documentation of the CCR management system and process;
 - organization of the security management unit;
 - organization of the CCR control unit;
 - integration of CCR measures into daily risk management;
 - approval process for risk pricing models and valuation systems used by front and back-office personnel;
 - validation of any significant change in the CCR measurement process;
 - scope of counterparty credit risks captured by the risk measurement model;

- integrity of the management information system;
- accuracy and completeness of CCR data;
- accurate reflection of legal terms in collateral and netting agreements into exposure measurements;
- verification of the consistency, timeliness and reliability of data sources used to run internal models, including the independence of such data sources;
- accuracy and appropriateness of volatility and correlation assumptions;
- accuracy of valuation and risk transformation calculations;
- verification of the model's accuracy through frequent backtesting.

777(xi). to 777(xiv). Paragraphs removed – intended for institutions authorized to use an internal model approach or the standardized approach to estimate their counterparty risk exposure amount.

8.6.3 Credit risk concentrations

770. Unmanaged risk concentrations are an important cause of major problems in institutions. An institution should aggregate all similar direct and indirect exposures regardless of where the exposures have been booked (banking book vs trading book). A risk concentration is any single exposure or group of similar exposures (programmer to the same borrower or counterparty, including protection providers, geographic area, sector or other risk factors) with the potential to produce (i) losses large enough (relative to an institution's profitability, capital, total assets or overall risk level) to threaten an institution's creditworthiness or ability to maintain its core operations or (ii) a material change in an institution's risk profile. Risk concentrations should be analyzed on both an institution legal entity and consolidated basis, as an unmanaged concentration at a subsidiary institution may appear immaterial at the consolidated level, but could nonetheless threaten the viability of the subsidiary organization.
771. Risk concentrations can arise in an institution's assets, liabilities, or off-balance sheet items, through the execution or processing of transactions (either product or service), or through a combination of exposures across these broad categories. Because lending is the primary activity of most institutions, credit risk concentrations are often the most material risk concentrations within an institution.
772. Risk concentrations are apparent in direct exposures to debtors and, eventually, in exposure toward protection providers/guarantors. These concentrations should be integrated when assessing an institution's overall risk exposure. An institution should consider concentrations that are based on common or correlated risk factors that reflect more subtle or more situation-specific factors than traditional concentrations, such as correlations between market, credit

risks and liquidity risk. Such concentrations are not addressed in the capital charge provided for in Chapters 3 to 7 of this Guideline.

773. Institutions should have in place effective internal policies, systems and controls to identify, measure, monitor, and control their risk concentrations. Institutions should explicitly consider the extent of their risk concentrations in their assessment of capital adequacy within the scope of this chapter. These policies should cover the different forms of risk concentrations to which an institution may be exposed. Such concentrations include:

- significant exposures to an individual counterparty/borrower or group of related counterparties/borrowers;
- exposures to the same economic sector, including exposures to both regulated and non-regulated financial institutions such as hedge funds and private equity firms;
- geographical regions;
- indirect credit exposures arising from an institution's CRM activities (e.g. exposure to similar collateral types or to a single or closely related credit protection provider);
- market risk related to trading exposures;
- exposures to counterparties (programmer hedge funds and hedge counterparties) through the execution or processing of transactions (either product or service);
- funding sources;
- assets that are held in the banking book or trading book, such as loans, derivatives and structured products;
- off-balance sheet exposures, including guarantees, liquidity lines and other commitments;
- credit exposures to counterparties whose financial performance is dependent on the same activity or commodity.

Institutions can establish an aggregate limit for the management and control of all of their major exposures.

773(i). Risk concentrations can also arise through a combination of exposures across these broad categories (presented above). The institution should have an understanding of its firm-wide risk concentrations resulting from similar exposures across its different business lines. Examples of such business lines include subprime exposure in lending books; counterparty exposures; conduit exposures and SIVs; contractual and non-contractual exposures; trading activities; and underwriting pipelines.

- 773(ii). While risk concentrations arise due to direct exposures to borrowers and issuers, an institution may also incur a concentration to a particular asset type indirectly through investments backed by such assets (programmer collateralized debt), as well as exposure to protection providers guaranteeing the performance of the specific asset type (specialized insurers). The institution should have in place adequate, systematic procedures for identifying high correlation between the creditworthiness of a protection provider and the issuers of the underlying exposures due to their performance being dependent on common factors beyond systematic risk (mono line “wrong way risk”).
774. An institution’s framework for managing credit risk concentrations should be clearly documented and should include a definition of the risk concentrations relevant to the institution and how these concentrations and their corresponding limits are calculated. Limits should be defined in relation to an institution’s capital, total assets or, where adequate measures exist, its overall risk level.
- 774(i). Procedures should be in place to communicate risk concentrations to the board of directors and senior management in a manner that clearly indicates where in the organization each segment of a risk concentration resides. An institution should have credible risk mitigation strategies in place that have senior management approval. This may include altering business strategies, reducing limits or increasing capital buffers in line with the desired risk profile. While it implements risk mitigation strategies, the institution should be aware of possible concentrations that might arise as a result of employing risk mitigation techniques.
775. An institution should employ a number of techniques, as appropriate, to measure risk concentrations, including shocks to various risk factors; use of business level and firm-wide scenarios; and the use of integrated stress testing and economic capital models. Identified concentrations should be measured in a number of ways, including for example consideration of gross and net exposures, use of notional amounts, and analysis of exposures with and without counterparty hedges. An institution should conduct periodic stress tests of its major risk concentrations and review the results of those tests to identify and respond to potential changes in market conditions that could adversely impact the institution’s performance and capital adequacy. The results of these tests should be communicated to senior management and to the board of directors.
- 775(i). The policies, strategies and procedures established for managing risk concentrations should take into account not only normal market conditions, but also the potential build-up of concentrations under stressed market conditions, economic downturns and periods of general market illiquidity. In addition, the institution should assess scenarios that consider possible concentrations arising from contractual and non-contractual contingent claims. The scenarios should also combine the potential build-up of pipeline exposures together with the loss of market liquidity and a significant decline in asset values.
776. Not applicable.

777. In the course of its activities, the AMF should assess the extent of an institution's risk concentrations, how they are managed, and the extent to which the institution considers them in its internal assessment of capital adequacy within the scope of this chapter. The AMF should also ensure that management of risk concentrations is not a mechanical process, but one in which each institution determines, depending on its management model, its own specific vulnerabilities. Such assessments should also include reviews of the results of an institution's stress tests. The AMF should take appropriate actions where the risks arising from an institution's risk concentrations are not adequately addressed by the institution.

8.7 Operational risk

778. Gross income, used in the Basic Indicator and Standardized Approaches for operational risk, is only a proxy for the scale of operational risk exposure of an institution and can in some cases (e.g. for institutions with low margins or profitability) underestimate the need for capital for operational risk. The AMF will consider whether the capital requirement generated by means of the calculation in Chapters 3 to 6 of this Guideline gives a consistent picture of the individual institution's operational risk exposure, for example in comparison with other institutions of similar size and with similar operations.

778(i). to 778(iv). Not applicable – intended for institutions that have minimum capital requirements in respect of market risk and use internal model approaches.

779. to 783. Not applicable.

8.8 Supervisory review process for securitisation¹⁷⁷

784. In addition to the principle set out in Chapters 3 to 5 of this Guideline pursuant wherein institutions should take account of the economic substance of transactions in their determination of capital adequacy, the AMF will monitor, as appropriate, whether institutions have done so adequately. As a result, regulatory capital treatments for specific securitisation exposures might differ from those specified in Chapters 3 to 5 of this Guideline, particularly in instances where the general capital requirement would not adequately and sufficiently reflect the risks to which an individual institution is exposed. All risks arising from securitisation, particularly those that are not fully captured by the provisions of Chapters 3 to 5, should be addressed in the internal assessment of the institution's capital adequacy.

These risks include:

- Credit, market, liquidity and reputational risk of each exposure

¹⁷⁷ Autorité des marchés financiers. *Securitization Risk Management Guideline*, April 2009.

- Potential delinquencies and losses on the underlying securitized exposures
- Exposures from credit lines or liquidity facilities to special purpose entities
- Exposures from guarantees provided by monolines and other third parties

Management of securitisation risks, either on- or off-balance sheet, should be incorporated in the institution's risk management process (e.g.: approval of products and risk concentration limits).

- 784(i). Securitisation exposures should be included in the institution's MIS to help ensure that senior management and the board of directors understand the implications of such exposures for liquidity,¹⁷⁸ earnings, risk concentration and capital. More specifically, an institution should have the necessary processes in place to quickly transmit information on securitisation transactions including market data, where available, and updated performance data provided by the securitisation trustee or servicer.
- 784(ii). An institution should conduct analyses of the underlying risks when investing in the structured products and must not solely rely on the external credit ratings assigned to securitisation exposures by the CRAs. An institution should be aware that external ratings are a useful starting point for credit analysis, but are no substitute for full and proper understanding of the underlying risk, especially where ratings for certain asset classes have a short history or have been shown to be volatile. Moreover, an institution also should conduct credit analysis of the securitisation exposure at acquisition and on an ongoing basis. It should also have in place the necessary quantitative tools, valuation models and stress tests of sufficient sophistication to reliably assess all relevant risks.
- 784(iii). When assessing securitisation exposures, an institution should ensure that it fully understands the credit quality and risk characteristics of the underlying exposures in structured credit transactions, including any risk concentrations. In addition, an institution should review the maturity of the exposures underlying structured credit transactions relative to the issued liabilities in order to assess potential maturity mismatches.
- 784(iv). An institution should track credit risk in securitisation exposures at the transaction level and across securitisations exposures within each business line and across business lines. It should produce reliable measures of aggregate risk. An institution also should track all meaningful concentrations in securitisation exposures, such as name, product or sector concentrations, and feed this information to firm-wide risk aggregation systems that track, for example, credit exposure to a particular obligor.

¹⁷⁸ Autorité des marchés financiers. *Liquidity Risk Management Guideline*, April 2009.

- 784(v). An institution's own assessment of risk needs to be based on a comprehensive understanding of the structure of the securitisation transaction. It should identify the various types of triggers, credit events and other legal provisions that may affect the performance of its on- and off-balance sheet exposures and integrate these triggers and provisions into its funding/liquidity, credit and balance sheet management. The impact of the events or triggers on a institution's liquidity and capital position should also be considered.
- 784(vi). As part of its risk management processes, an institution should consider and, where appropriate, mark-to-market warehoused positions, as well as those in the pipeline, regardless of the probability of securitising the exposures. It should consider scenarios which may prevent it from securitising its assets as part of its stress testing and identify the potential effect of such exposures on its liquidity, earnings and capital adequacy.
- 784(vii). An institution should develop prudent contingency plans specifying how it would respond to funding, capital and other pressures that arise when access to securitisation markets is reduced. The contingency plans should also address how the institution would address valuation challenges for potentially illiquid positions held for sale or for trading. The risk measures, stress testing results and contingency plans should be incorporated into the institution's risk management processes and its ICAAP, and should result in an appropriate level of capital under Pillar 2 in excess of the minimum requirements.
- 784(viii). An institution that employs risk mitigation techniques should fully understand the risks to be mitigated, the potential effects of that mitigation and whether or not the mitigation is fully effective. In particular, it should determine whether it would provide support to the securitisation structures in stressed scenarios due to the reliance on securitisation as a funding tool.
785. Amongst other things, the AMF may review where relevant an institution's own assessment of its capital needs and how that has been reflected in the capital calculation as well as the documentation of certain transactions to determine whether the capital requirements accord with the risk profile (e.g. substitution clauses). The AMF will also review the manner in which institution has addressed the issue of maturity mismatch in relation to retained positions in their economic capital calculations. In particular, she will be vigilant in monitoring for the structuring of maturity mismatches in transactions to artificially reduce capital requirements. Additionally, the AMF may review the institution's economic capital assessment of actual correlation between assets in the pool and how the institution has reflected that in the calculation. Where the AMF consider that an institution's approach is not adequate, the AMF will take appropriate action. Such action might include denying or reducing capital relief in the case of originated assets, or increasing the capital required against securitisation exposures acquired.

8.8.1 Significance of risk transfer

786. Securitisation transactions may be carried out for purposes other than credit risk transfer (e.g. funding). Where this is the case, there might still be a limited transfer of credit risk. However, for an originating entity to achieve reductions in capital requirements, the risk transfer arising from a securitisation has to be deemed significant by the AMF. If the risk transfer is considered to be insufficient or non-existent, the AMF can require the application of a higher capital requirement than prescribed in Chapters 3 to 6 of this Guideline or, alternatively, may deny an institution from obtaining any capital relief from the securitisations. Therefore, the capital relief that can be achieved will correspond to the amount of credit risk that is effectively transferred. The following includes a set of examples where the AMF may have concerns about the degree of risk transfer, such as retaining or repurchasing significant amounts of risk or “cherry picking” the exposures to be transferred via a securitisation.
787. Retaining or repurchasing significant securitisation exposures, depending on the proportion of risk held by the originator, might undermine the intent of a securitisation to transfer credit risk. Specifically, the AMF might expect that a significant portion of the credit risk and of the nominal value of the pool be transferred to at least one independent third party at inception and on an ongoing basis. Where institutions repurchase risk for market making purposes, the AMF could find it appropriate for an originator to buy part of a transaction but not, for example, to repurchase a whole tranche. The AMF would expect that where positions have been bought for market making purposes, these positions should be resold within an appropriate period, thereby remaining true to the initial intention to transfer risk.
788. Another implication of realizing only a non-significant risk transfer, especially if related to good quality unrated exposures, is that both the poorer quality unrated assets and most of the credit risk embedded in the exposures underlying the securitized transaction are likely to remain with the originator. Accordingly, and depending on the outcome of the supervisory review process, the AMF may increase the capital requirement for particular exposures or even increase the overall level of capital the institution is required to hold.

8.8.2 Market innovations

789. As the minimum capital requirements for securitisation may not be able to address all potential issues, the AMF is expected to consider new features of securitisation transactions as they arise. Such assessments would include reviewing the impact new features may have on credit risk transfer and, where appropriate, the AMF will be expected to take appropriate action within the scope of this chapter. A response may be formulated under Chapter 5, to take account of market innovations; they may take the form of a set of operational requirements and/or a specific capital treatment.

8.8.3 Provision of implicit support

790. Support to a transaction, whether contractual (i.e. credit enhancements provided at the inception of a securitized transaction) or non-contractual (implicit support) can take numerous forms. For instance, contractual support can include over collateralization, credit derivatives, spread accounts, contractual recourse obligations, subordinated notes, credit risk mitigants provided to a specific tranche, the subordination of fee or interest income or the deferral of margin income, and clean-up calls that exceed 10 percent of the initial issuance. Examples of implicit support include the purchase of deteriorating credit risk exposures from the underlying pool, the sale of discounted credit risk exposures into the pool of securitized credit risk exposures, the purchase of underlying exposures at above market price or an increase in the first loss position according to the deterioration of the underlying exposures.
791. The provision of implicit (or non-contractual) support, as opposed to contractual credit support (i.e. credit enhancements), raises significant supervisory concerns. For traditional securitisation structures the provision of implicit support undermines the clean break criteria, which when satisfied would allow institutions to exclude the securitized assets from regulatory capital calculations. For synthetic securitisation structures, it negates the significance of risk transference. By providing implicit support, institutions signal to the market that the risk is still with the institution and has not in effect been transferred. The institution's capital calculation therefore understates the true risk. Accordingly, the AMF will take appropriate action when an institution provides implicit support.
792. When an institution has been found to provide implicit support to a securitisation, it will be required to hold capital against all of the underlying exposures associated with the structure as if they had not been securitized. It will also be required to disclose publicly that it was found to have provided non-contractual support, as well as the resulting increase in the capital charge (as noted above). The aim is to require institutions to hold capital against exposures for which they assume the credit risk, and to discourage them from providing non-contractual support.
793. If an institution is found to have provided implicit support on more than one occasion, the institution is required to disclose its transgression publicly and the AMF will take appropriate action that may include, but is not limited to, one or more of the following:
- The institution may be prevented from gaining favourable capital treatment on securitized assets for a period of time to be determined by the AMF.
 - The institution may be required to hold capital against all securitized assets as though the institution had created a commitment to them, by applying a conversion factor to the risk weight of the underlying assets.

- For purposes of capital calculations, the institution may be required to treat all securitized assets as if they remained on the balance sheet.
- The institution may be required to hold regulatory capital in excess of the minimum risk-based capital ratios.

794. The AMF will be vigilant in determining implicit support and will take appropriate supervisory action to mitigate the effects. Pending any investigation, the institution may be prohibited from any capital relief for planned securitisation transactions (moratorium). The AMF response will be aimed at changing the institution's behaviour with regard to the provision of implicit support, and to correct market perception as to the willingness of the institution to provide future recourse beyond contractual obligations.

8.8.4 Residual risks

795. As with credit risk mitigation techniques more generally, the AMF will review the appropriateness of institutions' approaches to the recognition of credit protection. In particular, with regard to securitisations, the AMF will review the appropriateness of protection recognized against first loss credit enhancements.

On these positions, expected loss is less likely to be a significant element of the risk and is likely to be retained by the protection buyer through the pricing. Therefore, the AMF will expect institutions' policies to take account of this in determining their economic capital. Where the AMF does not consider the approach to protection recognized is adequate, the AMF will take appropriate action. Such action may include increasing the capital requirement against a particular transaction or class of transactions.

8.8.5 Call provisions

796. The AMF expects an institution not to make use of clauses that entitles it to call the securitisation transaction or the coverage of credit protection prematurely if this would increase the institution's exposure to losses or deterioration in the credit quality of the underlying exposures.

797. Besides the general principle stated above, the AMF expects institutions to only execute clean-up calls for economic business purposes, such as when the cost of servicing the outstanding credit exposures exceeds the benefits of servicing the underlying credit exposures.

798. Subject to her discretion, the AMF may require a review prior to the institution exercising a call which can be expected to include consideration of:

- the rationale for the institution's decision to exercise the call,
- the impact of the exercise of the call on the institution's regulatory capital ratio.

799. The AMF may also require the institution to enter into a follow-up transaction, if necessary, depending on the institution's overall risk profile, and existing market conditions.
800. Date related calls should be set at a date no earlier than the duration or the weighted average life of the underlying securitisation exposures. Accordingly, the AMF may require a minimum period to elapse before the first possible call date can be set, given, for instance, the existence of up-front sunk costs of a capital market securitisation transaction.

8.8.6 Early amortization

801. The AMF should review how institutions internally measure, monitor, and manage risks associated with securitisations of revolving credit facilities, including an assessment of the risk and likelihood of early amortization of such transactions. At a minimum, the AMF should ensure that institutions have implemented reasonable methods for allocating economic capital against the economic substance of the credit risk arising from revolving securitisations and should expect institutions to have adequate capital and liquidity contingency plans that evaluate the probability of an early amortization occurring and address the implications of both scheduled and early amortization.
802. Because most early amortization triggers are tied to excess spread levels, the factors affecting these levels should be well understood, monitored, and managed, to the extent possible (see paragraphs 790 to 794 on implicit support), by the originating entity. For example, the following factors affecting excess spread should generally be considered:
- Interest payments made by borrowers on the underlying receivable balances
 - Other fees and charges to be paid by the underlying obligors (e.g. late-payment fees, cash advance fees, over-limit fees)
 - Write-offs
 - Principal payments
 - Recoveries on written off loans
 - Interchange income
 - Interest paid on investors' certificates
 - Macroeconomic factors such as bankruptcy rates, interest rate movements, unemployment rates, etc.
803. Institution should consider the effects that changes in portfolio management or business strategies may have on the levels of excess spread and on the likelihood of an early amortization event. For example, marketing strategies or underwriting changes that result in lower finance charges or higher write-offs,

might also lower excess spread levels and increase the likelihood of an early amortization event.

804. The institution should use techniques such as static pool cash collections analyses and stress tests to better understand pool performance. These techniques can highlight adverse trends or potential adverse impacts. Institution should have policies in place to respond promptly to adverse or unanticipated changes. The AMF will take appropriate action where the AMF does not consider these policies adequate. Such action may include, but is not limited to, directing an institution to obtain a dedicated liquidity line, thus, increasing the institution's capital requirements.
805. Paragraph removed
806. The AMF expects that the sophistication of an institution's system in monitoring the likelihood and risks of an early amortization event will be commensurate with the size and complexity of the institution's securitisation activities that involve early amortization provisions.
807. Paragraph removed

8.9 Fair value valuation practices

- 807(i). The following principles apply to all positions that are measured at fair value and at all times, not only during times of stress.
- 807(ii). The characteristics of complex structured products, including securitisation transactions, make their valuation inherently difficult due, in part, to the absence of active and liquid markets, the complexity and uniqueness of the cash waterfalls, and the link between valuations and underlying risk factors. The absence of a transparent price from a liquid market means that the valuation must rely on models or proxy-pricing methodologies, as well as on expert judgment. The outputs of such models and processes are highly sensitive to the inputs and parameter assumptions adopted, which may themselves be subject to estimation error and uncertainty. Moreover, calibration of the valuation methodologies is often complicated by the lack of readily available benchmarks.
- 807(iii). Therefore, an institution is expected to have reliable governance structures and control processes for fair valuing exposures for risk management and financial reporting purposes. The valuation governance structures and related processes should be embedded in the overall governance structure of the institution, and consistent for both risk management and reporting purposes. The governance structures and processes are expected to explicitly cover the role of the board and senior management. In addition, the board should receive reports from senior management on the valuation oversight and valuation model performance issues that are brought to senior management for resolution, as well as significant changes to valuation policies.

- 807(iv). An institution should also have clear and robust governance structures for the production, assignment and verification of financial instrument valuations. Policies should provide that the approvals of all valuation methodologies are well documented. In addition, policies and procedures should set forth the range of acceptable practices for pricing, marking-to-market/model, valuation adjustments and periodic independent revaluation. New product approval processes should include all internal stakeholders with risk management, risk control, and the assignment and verification of valuations of financial instruments.
- 807(v). An institution's control processes for measuring and reporting the valuation should be consistently applied across the firm and integrated with risk measurement and management processes. In particular, valuation controls should be applied consistently across similar instruments (risks) and consistent across business lines (books). These controls should be subject to internal audit. Regardless of the booking location of a new product, reviews and approval of valuation methodologies must be guided by a minimum set of considerations. Furthermore, the new product valuation approval process should be supported by acceptable inventory valuation methodologies that are specific to products and activities.
- 807(vi). In order to establish and verify valuations for instruments and transactions in which it engages, an institution must have adequate capacity, including during periods of stress. This capacity should be commensurate with the risk level and size of exposures in the context of the business profile of the institution. In addition, for those exposures that represent material risk, an institution is expected to have the capacity to produce valuations using alternative methods in the event that primary inputs and approaches become unreliable, unavailable or not relevant due to market discontinuities or illiquidity. An institution must test and review the performance of its models under stress conditions so that it understands the limitations of the models.
- 807(vii). The relevance and reliability of valuations is directly related to the quality and reliability of the inputs. An institution is expected to apply the accounting guidance provided to determine the relevant market information and other factors likely to have a material effect on an instrument's fair value when selecting the appropriate inputs to use in the valuation process. Where values are determined to be in an active market, an institution should maximize the use of relevant observable inputs and minimize the use of unobservable inputs when estimating fair value using valuation techniques. However, where a market is deemed inactive, observable inputs or transactions may not be relevant such as in an immediate liquidation or a fire sale, or the operations may not be observable, such as when the markets are inactive.

In such cases, accounting fair value guidance provides assistance on what should be considered, but may not be determinative. In assessing whether a source is reliable and relevant, an institution should consider, among other things:

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- the frequency and availability of the prices/quotes
 - whether those prices represent actual regularly occurring transactions on an arm's length basis
 - the breadth of the distribution of the data and whether it is generally available to the relevant market participants
 - the timeliness of the information relative to the frequency of valuations
 - the number of independent sources that produce the quotes/prices
 - whether the quotes/prices are supported by actual transactions
 - the maturity of the market
 - the similarity between the financial instrument sold in a transaction and the instrument held by the institution
- 807(viii). An institution's external reporting should be timely, relevant, reliable and decision useful information that promotes transparency. Senior management should consider whether disclosures around valuation uncertainty can be made more meaningful. For instance, the institution may describe the modelling techniques and the applicable instruments; the sensitivity of fair values to modelling inputs and assumptions; and the impact of stress scenarios on valuations. An institution should regularly review its communication policies to ensure that the information continues to be relevant to its management model and products and to current market conditions.

Chapter 9 Market discipline

9.1 Disclosure framework

AMF Note

The AMF is expecting financial institutions, subsidiary of a federal chartered bank group, to disclose their financial information according to the Federal Regulator requirements or the requirements of the present Guideline.

9.1.1 Requirements and scope of application

An institution must satisfy the disclosure requirements set out in this chapter so that the various financial market participants can assess its risk profile. These requirements are in keeping with the simpler approaches under the Basel II framework, that is, the standardized approach to credit risk and the basic indicator approach and standardized approach to operational risk.

The institution should disclose only the information related to its business and the approaches adopted within the scope of Chapters 3 to 6. Some of these disclosures will be qualifying criteria for the use of particular methodologies or the recognition of particular instruments and transactions.

The AMF has considered the need for convergence between the disclosure requirements in this chapter and those set out in Canadian generally accepted accounting principles.

The provisions of this chapter are drawn essentially from Part 4 of the Basel II Accord. Certain provisions have been amended or adapted to reflect certain cooperative characteristics contemplated in the scope of application of the Guideline.

808. Paragraph removed – intended for regulators.

9.1.2 Guiding principles

809. The purpose of this chapter on market discipline is to complement the minimum capital requirements (Chapters 3 to 6) and the supervisory review process (Chapter 8). The provisions of this chapter are intended to encourage market discipline by developing a set of disclosure requirements which will allow market participants to assess key pieces of information on the scope of application, capital, risk exposures, risk assessment processes, and hence the capital adequacy of the institution. Beyond disclosure requirements as set forth in this part, institutions are responsible for conveying their actual risk profile to market participants. The information institutions disclose must be adequate to fulfill this objective.

810. In principle, institution' disclosures should be consistent with how senior management and the board of directors assess and manage the risks of the institution. Within the scope of Chapters 3 to 6, the institution uses specified approaches/methodologies for measuring the various risks it faces and the resulting capital requirements. From this perspective, disclosure is an effective means of informing the market about an institution's exposure to those risks and provides a consistent and understandable disclosure framework that enhances comparability.
811. Paragraph removed – intended for regulators
812. Paragraph removed – intended for institutions that rely on internal methodologies
813. Paragraph removed – inapplicable provisions

9.1.3 Location of the disclosure

814. Senior management should use its discretion in determining the appropriate medium and location of the disclosure. In situations where the disclosures are made under accounting requirements or are made to satisfy listing requirements promulgated by securities regulators, the institution may rely on them to fulfil the requirements under this chapter. In these situations, institution should explain material differences between the accounting or other disclosure and the supervisory basis of disclosure. This explanation does not have to take the form of a line by line reconciliation.
815. For those disclosures that are not mandatory under accounting or other requirements, senior management may choose to provide information related to this chapter through other means (such as on a publicly accessible Internet Web site or in public regulatory reports filed with the AMF). However, institution is encouraged to provide all related information in one location to the degree feasible. In addition, if information is not provided with the accounting disclosure, institution should indicate where the additional information can be found.

9.1.4 Requirements for validation of disclosures

816. The recognition of accounting or other mandated disclosure in this manner is also expected to help clarify the requirements for validation of disclosures. For example, information in the annual financial statements would generally be audited and additional material published with such statements must be consistent with the audited statements. In addition, supplementary material (such as Management's Discussion and Analysis) that is published to satisfy other disclosure regimes (e.g. listing requirements promulgated by securities regulators) is generally subject to sufficient scrutiny (e.g. internal control assessments, etc.) to satisfy the validation issue.

If material is not published under a validation regime, for instance in a stand-alone report or as a section on a Web site, then senior management should ensure that appropriate verification of the information takes place, in accordance with the general disclosure principle set out below. Accordingly, disclosure made under this chapter will not be required to be audited by an external auditor, unless otherwise required by the AMF.

9.1.5 Materiality

817. An institution should decide which disclosures are relevant for it based on the materiality concept. Information would be regarded as material if its omission or misstatement could change or influence the assessment or decision of a user relying on that information for the purpose of making economic decisions. This definition is consistent with Canadian generally accepted accounting principles. The AMF recognizes the need for a qualitative judgement of whether, in light of the particular circumstances, a user of financial information would consider the item to be material (user test). The AMF is not setting specific thresholds for disclosure as these can be open to manipulation and are difficult to determine, and it believes that the user test is a useful benchmark for achieving sufficient disclosure.

9.1.6 Frequency

818. The quantitative disclosures set out in this chapter should be made in accordance with the usual disclosure filing dates. The institution must disclose its capital ratios and total capital ratios as well as the components of such ratios.¹⁷⁹ Furthermore, if information on risk exposure or other items is prone to rapid change, then the institution should also disclose information on a more frequent basis. In all cases, the institution should publish material information as soon as practicable and no later than deadlines set by the AMF. However, qualitative disclosures that provide a general summary of an institution's risk management objectives and policies, reporting system and definitions may be published on an annual basis.

Remark

The AMF requires that all required disclosures provided for in this chapter be made within a reasonable period after the end of the institution's financial year, in accordance with the usual disclosure filing dates.

9.1.7 Proprietary and confidential information

819. Proprietary information encompasses information (for example on products or systems), that if shared with competitors would render an institution's

¹⁷⁹ These components include Tier 1 capital, total capital and total required capital.

investment in these products/systems less valuable, and hence would undermine its competitive position. Information about customers is often confidential, in that it is provided under the terms of a legal agreement or counterparty relationship. This has an impact on what institution should reveal in terms of information about her customer base, as well as details on her internal arrangements, for instance methodologies used, parameter estimates, data, etc. The requirements set out below strike an appropriate balance between the need for meaningful disclosure and the protection of proprietary and confidential information. In exceptional cases, disclosure of certain items of information required in virtue of this chapter may prejudice seriously the position of the institution by making public information that is either proprietary or confidential in nature. In such cases, an institution need not disclose those specific items, but must disclose more general information about the subject matter of the requirement, together with the fact that, and the reason why, the specific items of information have not been disclosed. This limited exemption is not intended to conflict with the disclosure requirements under the accounting principles.

9.2 Disclosure requirements¹⁸⁰

820. The following sections set out in tabular form the disclosure requirements under this chapter. Additional definitions and explanations are provided in a series of footnotes.

9.2.1 General disclosure principle

821. Institutions should have a formal disclosure policy approved by the board of directors that addresses the institution's approach for determining what disclosures it will make and the internal controls over the disclosure process. In addition, institution should implement a process for assessing the appropriateness of her disclosure, including validation and frequency of them.

9.2.2 Risk exposure and assessment

823. The risks to which institution is exposed and the techniques that institution uses to identify, measure, monitor and control those risks are important factors market participants consider in their assessment of an institution. In this section, several key institution risks are considered: credit risk, interest rate risk and equity risk in the banking book and operational risk. Also included in this section are disclosures relating to credit risk mitigation and asset securitisation, both of which alter the risk profile of the institution. Where applicable, separate disclosures are set out for institution using different approaches to the assessment of regulatory capital.

¹⁸⁰ In this section, disclosures marked with an asterisk are conditions for use of a particular approach or methodology for the calculation of regulatory capital.

9.2.3 General qualitative disclosure requirement

824. For each separate risk area (e.g. credit, operational, banking book interest rate risk, equity) institution must describe her risk management objectives and policies, including:

- Strategies and processes
- The structure and organization of the relevant risk management function
- The scope and nature of risk reporting and/or measurement systems
- Policies for hedging and/or mitigating risk and strategies and processes for monitoring the continuing effectiveness of hedges/mitigants

9.2.4 Scope of application

This chapter applies, on a consolidated basis, to every credit union and every company, and covers primarily all the operations of the credit union or company and all other financial activities carried out within their subsidiaries (as indicated in Chapter 1 - Scope of Application). Disclosures related to individual entities within the groups would not generally be required to fulfill the disclosure requirements set out below.

TABLE 1

Scope of application		
Qualitative disclosures	a)	Firm name of the institution to which this Guideline applies
	b)	An outline of differences in the basis of consolidation for accounting and regulatory purposes, with a brief description of the components the institution includes on a consolidated basis: <ul style="list-style-type: none"> a) Consolidated components¹⁸¹ b) Components excluded by way of deduction¹⁸² c) Neither consolidated or deducted (e.g. where the investment is risk-weighted)
	c)	Any restrictions, or other major impediments, on transfer of funds or regulatory capital within the consolidated institution
Quantitative disclosures	d)	The aggregate amount of surplus capital deficiencies ¹⁸³ in all subsidiaries not included in the consolidation i.e. that are deducted and the name(s) of such subsidiaries

¹⁸¹ In accordance with Canadian applicable accounting principles in effect.

¹⁸² May be provided as an extension (extension of institutions and/or extension of information on institutions) to the listing of significant subsidiaries in the consolidated financial statements, in accordance with Canadian applicable accounting principles in effect.

¹⁸³ A capital deficiency is the amount by which actual capital is less than the regulatory capital requirement. Any deficiencies which have been deducted on a group level in addition to the investment in such subsidiaries are not to be included in the aggregate capital deficiency.

9.2.5 Capital

TABLE 2

Capital structure		
Qualitative disclosures	a)	Summary information on the terms and conditions of the main features of all capital instruments
Quantitative disclosures	b)	<p>The amount of Tier 1 capital, with separate disclosure of:</p> <ul style="list-style-type: none"> • Eligible reserves • Retained surpluses • Eligible capital units • Ordinary share capital, namely, common shares, contributed surplus and retained earnings • Other capital instruments • Qualifying non-controlling interests arising on consolidation from Tier 1 capital instruments • Accumulated net after-tax foreign currency translation adjustment reported in other comprehensive income • Accumulated net after-tax loss on available-for-sale equity securities reported in other comprehensive income • Accumulated net after-tax unrealized fair value gain on investment property • Accumulated net after-tax unrealized gains (losses) arising from changes to an institution's own credit risk under the fair value option for its liabilities • Net after-tax unrealized gains or losses on own-use property revaluated at the fair value on conversion to IFRS where the cost model is used • Accumulated net after-tax revaluation loss on own-use property where the revaluation model is used • Instruments issued by the institution not forming part of Tier 1A elements but which qualify for Tier 1B • Instruments issued by consolidated subsidiaries held by third parties which qualify for Tier 1B
	c)	The total amount of Tier 2 capital
	d)	Amounts to be deducted from Tier 1 and Tier 2 capital
	e)	Total eligible capital

TABLE 3

Capital adequacy		
Quantitative disclosures	a)	A summary discussion of the institution's approach to assessing the adequacy of its capital to support current and future activities
Quantitative disclosures	b)	<p>Capital requirements for credit risk:</p> <ul style="list-style-type: none"> • Portfolios subject to standardized approach, disclosed separately for each portfolio • Portfolios subject to the IRB approaches, disclosed separately for each portfolio under the foundation IRB approach and for each portfolio under the advances IRB approach: <ul style="list-style-type: none"> i) Corporate (including SL not subject to supervisory slotting criteria), sovereign and banks ii) Residential mortgage iii) Qualifying revolving retail¹⁸⁴ iv) Other retail • Securitisation exposures
	c)	<ul style="list-style-type: none"> • Equity portfolios subject to the market-based approaches; <ul style="list-style-type: none"> ➢ Equity portfolios subject to simple risk weight method ➢ Equities in the banking book under the internal models approach (for institutions using IMA for banking book equity exposures) • Equity portfolios subject to PD/LGD approaches
	d)	<p>Capital requirements for market risk:¹⁸⁵</p> <ul style="list-style-type: none"> • Standardized approach • Internal models approach – Trading book

¹⁸⁴ Capital requirements are to be disclosed only for the approaches used.

¹⁸⁵ Financial institutions should distinguish between the separate non-mortgage retail portfolios used for Chapters 3 to 8 capital calculation (i.e. qualifying revolving retail exposures and other retail exposures) unless these portfolios are insignificant in size (relative to overall credit exposures) and the risk profile of each portfolio is sufficiently similar such that separate disclosure would not help users' understanding of the risk profile of the financial institution's retail business.

Capital adequacy		
	e)	Capital requirements for operational risk: ¹⁸⁶ <ul style="list-style-type: none"> • Basic indicator approach • Standardized approach • Advanced measurement approach (AMA)
	f)	Total and Tier 1 capital ratio: <ul style="list-style-type: none"> • For the top consolidated group • For significant institution subsidiaries (stand alone or sub-consolidated depending on how the Framework is applied)

9.2.6 Credit risk

825. General disclosures of credit risk provide market participants with a range of information about overall credit exposure and need not necessarily be based on information prepared for regulatory purposes. Disclosures on the capital assessment techniques give information on the specific nature of the exposures, the means of capital assessment and data to assess the reliability of the information disclosed.

¹⁸⁶ See Footnote 184.

TABLE 4¹⁸⁷

Credit risk: General disclosures		
Qualitative disclosures	a)	<p>The general qualitative disclosure requirement (paragraph 824 of Section 9.2.3) with respect to credit risk, including:</p> <ul style="list-style-type: none"> • Definitions of past due and/or doubtful loans (for accounting purposes) • Description of approaches followed for specific and general allowances and statistical methods • Discussion of the institution's credit risk management policy • For financial institutions that have partly, but not fully adopted either the foundation IRB or the advanced IRB approach, a description of the nature of exposures within each portfolio that are subject to the: <ol style="list-style-type: none"> 1) Standardised approach 2) Foundation IRB approach, and 3) Advanced IRB approach <p>and of management's plans and timing for migrating exposures to full implementation of the applicable approach.</p>
Quantitative disclosures	b)	Total gross credit risk exposures, ¹⁸⁸ plus average gross exposure ¹⁸⁹ over the period, ¹⁹⁰ broken down by major types of credit exposure ¹⁹¹
	c)	Geographic distribution ¹⁹² of exposures, broken down in significant areas by major types of credit exposure

¹⁸⁷ Table 4 does not include equities.

¹⁸⁸ That is, after adjustments to the current value (for exposures recorded at fair value as well as for exposures recorded at their amortized cost) in accordance with Canadian applicable accounting principles in effect and without taking into account the effects of credit risk mitigation techniques, e.g. collateral and netting.

¹⁸⁹ Where the period end position is representative of the risk positions of the institution during the period, average gross exposures need not be disclosed.

¹⁹⁰ Where average amounts are disclosed in accordance with an accounting standard or other requirement which specifies the calculation method to be used, that method should be followed. Otherwise, the average exposures should be calculated using the most frequent interval that an institution's systems generate for management, regulatory or other reasons, provided that the resulting averages are representative of the institution's operations. The basis used for calculating averages need be stated only if not on a daily average basis.

¹⁹¹ This breakdown could be that applied under accounting rules, and might, for instance, be (a) loans, commitments and other non-derivative off-balance sheet exposures, (b) debt securities, and (c) OTC derivatives.

¹⁹² Geographical areas may comprise individual countries, groups of countries or regions within countries. Institution might choose to define the geographical areas based on the way the institution's portfolio is geographically managed. The criteria used to allocate the loans to geographical areas should be specified.

TABLE 4¹⁸⁷

Credit risk: General disclosures	
	d) Industry or counterparty type distribution of exposures, broken down by major types of credit exposure
	e) Residual contractual maturity breakdown of the whole portfolio, broken down by major types of credit exposure
	f) By major industry or counterparty type: <ul style="list-style-type: none"> • Amount of doubtful loans and if available, past due loans, provided separately¹⁹³ • Specific and general allowances • Charges for specific allowances and charge-offs during the period
	g) Amount of doubtful loans and, if available, past due loans, provided separately broken down by significant geographic areas including, if practical, the amounts of specific and general allowances related to each geographical area ¹⁹⁴
	h) Reconciliation of changes in the allowances for doubtful loans ¹⁹⁵
	i) For each portfolio, the amount of exposures subject to the standardized approach <ol style="list-style-type: none"> 1) Standardised approach 2) Foundation IRB approach 3) Advanced IRB approach

¹⁹³ Institution is encouraged also to provide an analysis of the ageing of past due loans.

¹⁹⁴ The portion of general allowance that is not allocated to a geographical area should be disclosed separately.

¹⁹⁵ This reconciliation involves pieces of information already covered by Canadian applicable accounting principles in effect, but the reconciliation must separate specific and general allowances and indicate the opening and closing balances of the allowances.

TABLE 5

Credit risk: disclosures for portfolios subject to the standardized approach ¹⁹⁶		
Qualitative disclosures	a)	<p>For portfolios under the standardized approach:</p> <ul style="list-style-type: none"> • Names of ECAs and ECAs used, plus reasons for any changes[*]. • Types of exposure for which each agency is used. • Description of the process used to transfer public issue ratings onto comparable assets in the banking book. • Alignment of the alphanumeric scale of each agency used with risk buckets.
Quantitative disclosures	b)	<ul style="list-style-type: none"> • For exposure amounts after risk mitigation subject to the standardized approach, amount of an institution's outstandings (rated and unrated) in each risk bucket as well as those that are deducted • For exposures subject to the supervisory risk weights in IRB (HVCRE, any SL products subject to supervisory slotting criteria and equities under the simple risk weight method) the aggregate amount of a financial institution's outstandings in each risk bucket

Paragraph 826 and Table 6 removed – disclosures for portfolios subject to IRB approaches with respect to credit risk.

¹⁹⁶ A *de minimis* exception would apply where ratings are used for less than 1% of the total loan portfolio.

TABLE 7

Credit risk mitigation: disclosures for standardized approach^{197 198}		
Qualitative disclosures	a)	<p>The general qualitative disclosure requirement (paragraph 824 of Section 9.2.3) with respect to credit risk mitigation including:</p> <ul style="list-style-type: none"> • Policies and processes for, and an indication of the extent to which the institution makes use of, on- and off-balance sheet netting. • Policies and processes for collateral valuation and management. • A description of the main types of collateral taken by the institution. • The main types of guarantor/credit derivative counterparty and their creditworthiness. • Information about (market or credit) risk concentrations within the mitigation taken.
Quantitative disclosures	b)	<p>For each separately disclosed credit risk portfolio under the standardized approach, the total exposure (after, where applicable, on or off-balance sheet netting) that is covered by eligible financial collateral after the application of haircuts.</p> <ul style="list-style-type: none"> • Eligible financial collateral. • Other eligible IRB collateral. <p>after the application of haircuts¹⁹⁹</p>
	c)	<p>For each separately disclosed portfolio under the standardized approach, the total exposure (after, where applicable, on- or off-balance sheet netting) that is covered by guarantees/credit derivatives.</p>

¹⁹⁷ At a minimum, the institution must give the disclosures below in relation to credit risk mitigation that has been recognized for the purposes of reducing capital requirements within the framework of the Guideline. Where relevant, the institution is encouraged to give further information about mitigants that have not been recognized for that purpose.

¹⁹⁸ Credit derivatives that are treated, for the purposes of the Guideline, as part of synthetic securitization structures should be excluded from the disclosures and included within those relating to securitization (see table 9).

¹⁹⁹ If the comprehensive approach is applied, where applicable, the total exposure covered by collateral after haircuts should be reduced further to remove any positive adjustments that were applied to the exposure, as permitted under Chapters 3 to 8 of this Guideline.

TABLE 8

Counterparty credit risk: general disclosure for exposures		
Qualitative disclosures	a)	<p>The general qualitative disclosure requirement (paragraphs 824 and 825) with respect to derivatives and CCR, including:</p> <ul style="list-style-type: none"> • Discussion of methodology used to assign economic capital and credit limits for counterparty credit exposures. • Discussion of policies for securing collateral and establishing credit reserves. • Discussion of policies with respect to wrong-way risk exposures. • Discussion of the impact of the amount of collateral the institution would have to provide given a credit rating downgrade.
Quantitative disclosures	b)	Gross positive fair value of contracts, netting benefits, netted current credit exposure, collateral held (including type, e.g. cash, government securities, etc.), and net derivatives credit exposure. ²⁰⁰ Also report measures for exposure at default, or exposure amount under the standardized approach, whichever is applicable. The notional value of credit derivative hedges, and the distribution of current credit exposure by types of credit exposure. ²⁰¹
	c)	Credit derivative transactions that create exposures to CCR (notional value), segregated between use for the institution's own credit portfolio, as well as in its intermediation activities, including the distribution of the credit derivatives products used, ²⁰² broken down further by protection bought and sold within each product group.
	d)	The estimate of alpha if the institution has received supervisory approval to estimate alpha.

²⁰⁰ Net credit exposure is the credit exposure on derivatives transactions after considering both the benefits from legally enforceable netting agreements and collateral arrangements. The notional amount of credit derivative hedges alerts market participants to an additional source of credit risk mitigation.

²⁰¹ This might be interest rate contracts, FX contracts, equity contracts, credit derivatives, and commodity/other contracts.

²⁰² This might be Credit Default Swaps, Total Return Swaps, Credit options, and other.

TABLE 9

Securitisation exposures	
Qualitative disclosures²⁰³	<p>The general qualitative disclosure requirement (paragraph 824 of Section 9.2.3) with respect to securitisation (including synthetics), including a discussion of:</p> <ul style="list-style-type: none"> • The institution's objectives in relation to securitisation activity, including the extent to which these activities transfer credit risk of the underlying securitized exposures away from the institution to other entities and including the type of risks assumed and retained with resecuritisation activity.²⁰⁴ • The nature of other risks (e.g. liquidity risk) inherent in securitised assets. a) • The various roles played by the institution in the securitisation process²⁰⁵ and an indication of the extent of the institution's involvement in each of them. • A description of the processes in place to monitor changes in the credit and market risk of securitisation exposures²⁰⁶ (for example, how the behaviour of the underlying assets impacts securitisation exposures) including how those processes differ for resecuritisation exposures. • A description of the institution's policy governing the use of credit risk mitigation to mitigate the risks retained through securitisation and resecuritisation exposures to which each approach applies.

²⁰³ Where relevant, institutions should provide separate qualitative disclosures for banking book and trading book exposures.

²⁰⁴ For example, if an institution is particularly active in the market of senior tranche of resecuritizations of mezzanine tranches related to securitizations of residential mortgages, it should describe the structure of resecuritizations (e.g. senior tranche of mezzanine tranche of residential mortgage); this description should be provided for the main categories of resecuritizations products in which the institution is active.

²⁰⁵ For example: originator, investor, servicer, provider of credit enhancement, sponsor, liquidity provider, swap provider, protection provider.

²⁰⁶ Securitization exposures, as noted in Chapter 6, include, but are not restricted to, securities, liquidity facilities, protection provided to securitization positions, other commitments and credit enhancements such as I/O strips, cash collateral accounts and other subordinated assets.

TABLE 9

Securitisation exposures		
	b)	<p>A list of:</p> <ul style="list-style-type: none"> • The types of SPEs that the institution, as sponsor,²⁰⁷ uses to securitise third-party exposures. Indicate whether the institution has exposure to these SPEs, either on or off-balance sheet. • Affiliated entities i) that the institution manages or advises and ii) that invest either in the securitisation exposures that the institution has securitised or in SPEs that the institution sponsors.²⁰⁸
	c)	<p>Summary of the institution's accounting policies for securitisation activities, including:</p> <ul style="list-style-type: none"> • Whether the transactions are treated as sales or financings • Recognition of gain on sale • Methods and key assumptions (including inputs) applied in valuing positions retained or purchased²⁰⁹ • Changes in methods and key assumptions from the previous period and impact of the changes • Treatment of synthetic securitisations if this is not covered by other accounting policies (e.g. on derivatives) • How exposures intended to be securitised (e.g. in the pipeline or warehouse) are valued and whether they are recorded in the banking book or the trading book • Policies for recognising liabilities on the balance sheet for arrangements that could require the institution to provide financial support for securitised assets
	d)	<p>In the banking book, the names of ECAs used for securitisations and the types of securitisation exposure[*] for which each agency is used</p>

²⁰⁷ An institution would generally be considered a "sponsor" if it, in fact or in substance, manages or advises the programme, places securities into the market, or provides liquidity and/or credit enhancements. The programme may include, for example, ABCP conduit programmes and structured investment vehicles

²⁰⁸ For example, money market mutual funds, to be listed individually, and personal and private trusts, to be noted collectively.

²⁰⁹ Where relevant, institutions are encouraged to differentiate between valuation of securitization exposures and resecuritization exposures.

TABLE 9

Securitisation exposures		
	e)	<p>Description of the IAA process. The description should include:</p> <ul style="list-style-type: none"> • Structure of the internal assessment process and relation between internal assessment and external ratings, including information on ECAIs as referenced in 9 (d) • Use of internal assessment other than for IAA capital purposes • Control mechanisms for the internal assessment process including discussion of independence, accountability, and internal assessment process review • The exposure type²¹⁰ to which the internal assessment process is applied • Stress factors used for determining credit enhancement levels, by exposure type
	f)	An explanation of significant changes to any of the quantitative information (e.g. amounts of assets intended to be securitised, movement of assets between banking book and trading book) since the last reporting period
Quantitative disclosures⁹³ Banking book	g)	The total amount of outstanding exposures securitized ²¹¹ by the institution and defined under the securitisation framework (broken down into traditional/synthetic) by exposure type, separately for securitisations of third-party exposures for which the institution acts only as sponsor
	h)	<p>For exposures securitized by the institution and defined under the securitisation framework</p> <ul style="list-style-type: none"> • Amount of impaired/past due assets securitized • Losses recognized by the institution during the current period²¹²
	i)	The total amount of outstanding exposures intended to be securitised broken down by exposure type
	j)	Summary of current period's securitisation activity, including the total amount of exposures securitised (by exposure type), and recognized gain or loss on sale by exposure type

²¹⁰ For example, credit cards, home equity, auto, and securitization exposures detailed by underlying exposure type and security type (e.g. RMBS, CMBS, ABS, CDOs) etc.

²¹¹ "Exposures securitised" include underlying exposures originated by the institution, whether generated by them or purchased into the balance sheet from third parties, and third-party exposures included in sponsored schemes. Securitization transactions (including underlying exposures originally on the institution's balance sheet and underlying exposures acquired by the institution from third-party entities) in which the originating institution does not retain any securitization exposure should be shown separately but need only be reported for the year of inception.

²¹² For example, charge-offs/allowances (if the assets remain on the institution's balance sheet) or write-downs of I/O strips and other residual interests, as well as recognition of liabilities for probable future financial support required of the institution with respect to securitised assets

TABLE 9

Securitisation exposures		
	k)	Aggregate amount of: <ul style="list-style-type: none"> On-balance sheet securitisation exposures retained or purchased broken down by exposure type Off-balance sheet securitisation exposures broken down by exposure type
	l)	<ul style="list-style-type: none"> Aggregate amount of securitisation exposures retained or purchased and the associated capital charges, broken down between securitisation and resecuritisation exposures and further broken down into a meaningful number of risk weight bands for each regulatory capital approach (e.g. SA, IAA and SFA) used Exposures that have been deducted entirely from Tier 1 capital, credit enhancing I/Os deducted from total capital, and other exposures deducted from total capital should be disclosed separately by exposure type
	m)	For securitisations subject to the early amortisation treatment, the following items by exposure type for securitised facilities: <ul style="list-style-type: none"> The aggregate drawn exposures attributed to the seller's and investors' interest The aggregate capital charges incurred by the institution against its retained (i.e. the seller's) shares of the drawn balances and undrawn lines The aggregate capital charges incurred by the institution against the investor's shares of drawn balances and undrawn lines.
	n)	Aggregate amount of re-securitisation exposures retained or purchased broken down according to: <ul style="list-style-type: none"> Exposures to which credit risk mitigation is applied and those not applied Exposures to guarantors broken down according to guarantor credit worthiness categories or guarantor name
Quantitative disclosures⁹³ Trading book	o)	The total amount of outstanding exposures securitised by the institution and defined under the securitisation framework (broken down into traditional/synthetic) by exposure type, ²¹³ separately for securitisations of third-party exposures for which the institution acts only as sponsor
	p)	The total amount of outstanding exposures intended to be securitised broken down by exposure type
	q)	Summary of current period's securitisation activity, including the total amount of exposures securitized (by exposure type), and recognized gain or loss on sale by exposure type
	r)	Aggregate amount of exposures securitised by the institution for which the institution has retained some exposures and which is subject to the market risk approach (broken down into traditional/synthetic), by exposure type

²¹³ Banks are required to disclose exposures regardless of whether there is a capital charge under Chapters 3 to 8.

TABLE 9

Securitisation exposures		
	s)	Aggregate amount of: <ul style="list-style-type: none"> On-balance sheet securitisation exposures retained or purchased broken down by exposure type Off-balance sheet securitisation exposures broken down by exposure type
	t)	Aggregate amount of securitisation exposures retained or purchased separately for: <ul style="list-style-type: none"> Securitisation exposures retained or purchased subject to Comprehensive Risk Measure for specific risk Securitisation exposures subject to the securitisation framework for specific risk broken down into a meaningful number of risk weight bands for each regulatory capital approach (e.g. SA, SFA and concentration ratio approach)
	u)	Aggregate amount of: <ul style="list-style-type: none"> The capital requirements for the securitisation exposures subject to Comprehensive Risk Measure, broken down into appropriate risk classifications (e.g. default risk, migration risk and correlation risk) The capital requirements for the securitisation exposures (resecuritisation or securitisation), subject to the securitisation framework broken down into a meaningful number of risk weight bands for each regulatory capital approach (e.g. SA, SFA and concentration ratio approach) Securitisation exposures that are deducted entirely from Tier 1 capital, credit enhancing I/Os deducted from total capital, and other exposures deducted from total capital should be disclosed separately by exposure type
	v)	For securitisations subject to the early amortisation treatment, the following items by exposure type for securitised facilities: <ul style="list-style-type: none"> The aggregate drawn exposures attributed to the seller's and investors' interests The aggregate capital charges incurred by the institution against its retained (i.e. the seller's) shares of the drawn balances and undrawn lines The aggregate capital charges incurred by the institution against the investor's shares of drawn balances and undrawn lines
	w)	Aggregate amount of resecuritisation exposures retained or purchased broken down according to: <ul style="list-style-type: none"> Exposures to which credit risk mitigation is applied and those not applied Exposures to guarantors broken down according to guarantor credit worthiness categories or guarantor name

Tables 10 and 11 removed – disclosure – market risks – the institutions contemplated in this Guideline do not have specific market risk capital requirements

9.2.7 Operational risk

TABLE 12

Operational risk		
Qualitative disclosures	a)	In addition to the general qualitative disclosure requirement (paragraph 824 of Section 9.2.3), the approach for operational risk capital assessment for which the institution qualifies
	b)	In the case of partial use, the scope and coverage of the different approaches used
	c)	For institutions using the AMA, a description of the use of insurance for the purpose of mitigating operational risk

9.2.8 Equities

TABLE 13

Equities: disclosures for banking book positions		
Qualitative Disclosures	a)	<p>The general qualitative disclosure requirement (paragraph 824) with respect to equity risk, including:</p> <ul style="list-style-type: none"> • Differentiation between holdings on which capital gains are expected and those taken under other objectives including for relationship and strategic reasons • Discussion of important policies covering the valuation and accounting of equity holdings in the banking book. This includes the accounting techniques and valuation methodologies used, including key assumptions and practices affecting valuation as well as significant changes in these practices
	b)	Value disclosed in the balance sheet of investments, as well as the fair value of those investments; for quoted securities, a comparison to publicly quoted share values where the share price is materially different from fair value
Quantitative Disclosures	c)	<p>The types and nature of investments, including the amount that can be classified as:</p> <ul style="list-style-type: none"> • Publicly traded • Privately held
	d)	The cumulative realized gains (losses) arising from sales and liquidations in the reporting period
	e)	<ul style="list-style-type: none"> • Total unrealized gains (losses)²¹⁴ • Total latent revaluation gains (losses)²¹⁵ • Any amounts of the above included in Tier 1 and/or Tier 2 capital
	f)	Capital requirements broken down by appropriate equity groupings, consistent with the institution's methodology, as well as the aggregate amounts and the type of equity investments subject to any supervisory transition or grandfathering provisions regarding regulatory capital requirements

²¹⁴ Unrealized gains (losses) recognized in the balance sheet but not through the profit and loss account.

²¹⁵ Unrealized gains (losses) not recognized either in the balance sheet or through the profit and loss account.

9.2.9 Interest rate risk in the banking book

TABLE 14

Interest rate risk in the banking book (IRRBB)		
Qualitative Disclosures	a)	The general qualitative disclosure requirement (paragraph 824), including the nature of IRRBB and key assumptions, including assumptions regarding loan prepayments and behaviour of non-maturity deposits, and frequency of IRRBB measurement
Quantitative Disclosures	b)	The increase (decline) in earnings or economic value (or relevant measure used by management) for upward and downward rate shocks according to management's method for measuring IRRBB, broken down by currency (as relevant)

9.3 Remuneration disclosure requirements

9.3.1 Scope of application

It is recognized that there is a broad spectrum of institutions that are subject to Basel and that the proposed disclosures may not be relevant for all such institutions or for all their business lines. Therefore, it is possible that an institution may not be of sufficient size to have a separate Remuneration Committee, or may not have resources to implement a fully functional deferral and performance adjustment scheme.

Remuneration disclosure requirements therefore may include thresholds of materiality or proportionality, based on those already applying to existing disclosures.

This may have two aspects:

- Whether the institution as a whole is exempt fully or partly from disclosure, depending on the risk profile of the institution, and
- Whether certain types of disclosure may be exempted on grounds that the information is not material or is confidential.

9.3.2 Disclosure method and frequency

Institutions will be expected to publish the disclosures on an annual basis at a minimum. Institutions should aim to publish as soon as practicable after the information is available.

Institutions will be expected as far as possible to disclose the requested information on remuneration on one site or in one document. Institutions may however refer to a different site or document:

-
- if an equivalent disclosure has already been made under an accounting or listing requirement relating to the same time period (in such cases, the AMF will have discretion to recognize the existing disclosures that are acceptable); or
 - to indicate where additional information (not explicitly required under Chapter 9) may be found.

In such cases, the institution must ensure that access to the site or document is readily available and public.

9.3.3 Main disclosures on remuneration

The following (Table 15) are the main disclosures on remuneration that institutions should include in their Chapter 9 document. Institutions are strongly encouraged not only to disclose the required information, but to articulate as far as possible how these factors complement and support their overall risk management framework.

The requested quantitative disclosures detailed below should only cover senior management and other material risk takers and be broken down between these two categories.

TABLE 15

Remuneration		
Qualitative disclosures	a)	<p>Information relating to the bodies that oversee remuneration. Disclosures should include:</p> <ul style="list-style-type: none"> • Name, composition and mandate of the main body overseeing remuneration • External consultants whose advice has been sought, the body by which they were commissioned, and in what areas of the remuneration process • A description of the scope of the institution's remuneration policy (e.g. by regions, business lines), including the extent to which it is applicable to foreign subsidiaries and branches • A description of the types of employees considered as material risk takers and as senior managers, including the number of employees in each group
	b)	<p>Information relating to the design and structure of remuneration processes.</p> <p>Disclosures should include:</p> <ul style="list-style-type: none"> • An overview of the key features and objectives of remuneration policy • Whether the remuneration committee reviewed the firm's remuneration policy during the past year, and if so, an overview of any changes that were made • A description of how the institution ensures that risk and compliance employees are remunerated independently of the businesses they oversee
	c)	<p>Description of the ways in which current and future risks are taken into account in the remuneration processes. Disclosures should include:</p> <ul style="list-style-type: none"> • An overview of the key risks that the institution takes into account when implementing remuneration measures • An overview of the nature and type of the key measures used to take account of these risks; including risks difficult to measure (values need not be disclosed) • A description of the ways in which these measures affect remuneration • A description of how the nature and type of these measures has changed over the past year and reasons for the change, as well as the impact of changes on remuneration
	d)	<p>Description of the ways in which the institution seeks to link performance during a performance measurement period (i.e. annual basis) with levels of remuneration. Disclosures should include:</p> <ul style="list-style-type: none"> • An overview of main performance metrics for institution, top-level business lines and individuals • A description of how amounts of individual remuneration are linked to institution-wide and individual performance • A description of the measures the institution will in general implement to adjust remuneration in the event that performance metrics are weak²¹⁶

²¹⁶ This should include the institution's criteria for determining "weak" performance metrics.

TABLE 15

Remuneration		
	e)	<p>Description of the ways in which the institution seek to adjust remuneration to take account of longer-term performance. Disclosures should include:</p> <ul style="list-style-type: none"> • A description of the institution's policy on deferral and vesting of variable remuneration and, if the fraction of variable remuneration that is deferred differs across employees or groups of employees, a description of the factors that determine the fraction and their relative importance. • A description of the institution's policy and criteria for adjusting deferred remuneration before vesting and after vesting through clawback arrangements
	f)	<p>Description of the different forms of variable remuneration that the institution utilises and the rationale for using these different forms. Disclosures should include:</p> <ul style="list-style-type: none"> • An overview of the forms of variable remuneration offered (i.e. cash, shares and share-linked instruments and other forms;²¹⁷) • a description of the use of the different forms of variable remuneration and, if the mix of different forms of variable remuneration differs across employees or groups of employees), a description the factors that determine the mix and their relative importance
Quantitative information	g)	Number of meetings held by the main body overseeing remuneration during the financial year and remuneration paid to its member
	h)	<ul style="list-style-type: none"> • Number of employees having received a variable remuneration award during the financial year • Number and total amount of guaranteed bonuses awarded during the financial year • Number and total amount of sign-on awards made during the financial year • Number and total amount of severance payments made during the financial year
	i)	<ul style="list-style-type: none"> • Total amount of outstanding deferred remuneration, split into cash, shares and share-linked instruments and other forms • Total amount of deferred remuneration paid out in the financial year
	j)	<ul style="list-style-type: none"> • Breakdown of amount of remuneration awards for the financial year to show: <ul style="list-style-type: none"> ➢ Fixed and variable ➢ Deferred and non-deferred ➢ Different forms used (cash, shares and share-linked instruments, other forms) • Example for reporting in Table A

²¹⁷ A description of the elements corresponding to other forms of variable remuneration (if any) should be provided.

TABLE 15

Remuneration		
	k)	<p>Quantitative information about employees' exposure to implicit (e.g. fluctuations in the value of shares or performance units) and explicit adjustments (e.g. malus, clawbacks or similar reversals or downward revaluations of awards) of deferred remuneration and retained remuneration</p> <ul style="list-style-type: none"> • Total amount of outstanding deferred remuneration and retained remuneration exposed to <i>ex post</i> explicit and/or implicit adjustments • Total amount of reductions during the financial year due to <i>ex post</i> explicit adjustments • Total amount of reductions during the financial year due to <i>ex post</i> implicit adjustments

Annex 1-I Minimum capital conservation ratios at various levels of Tier 1A capital

Tier 1A capital ratio ²¹⁸	Leverage ratio	Capital Conservation Ratio
From 4.5% to $(5.125 + \text{CCB}/4)\%$	From 2.5% to 2.625%	100%
More than $(5.125 + \text{CCB}/4)\%$ to $(5.75 + 2 \times \text{CCB}/4)\%$	More than 2.625% to 2.75%	80%
More than $(5.75 + 2 \times \text{CCB}/4)\%$ to $(6.375 + 3 \times \text{CCB}/4)\%$	More than 2.75% to 2.875%	60%
More than $(6.375 + 3 \times \text{CCB}/4)\%$ to $(7.0 + \text{CCB})\%$	More than 2.875% to 3.0%	40%
More than $(7.0 + \text{CCB})\%$	More than 3.0%	0%

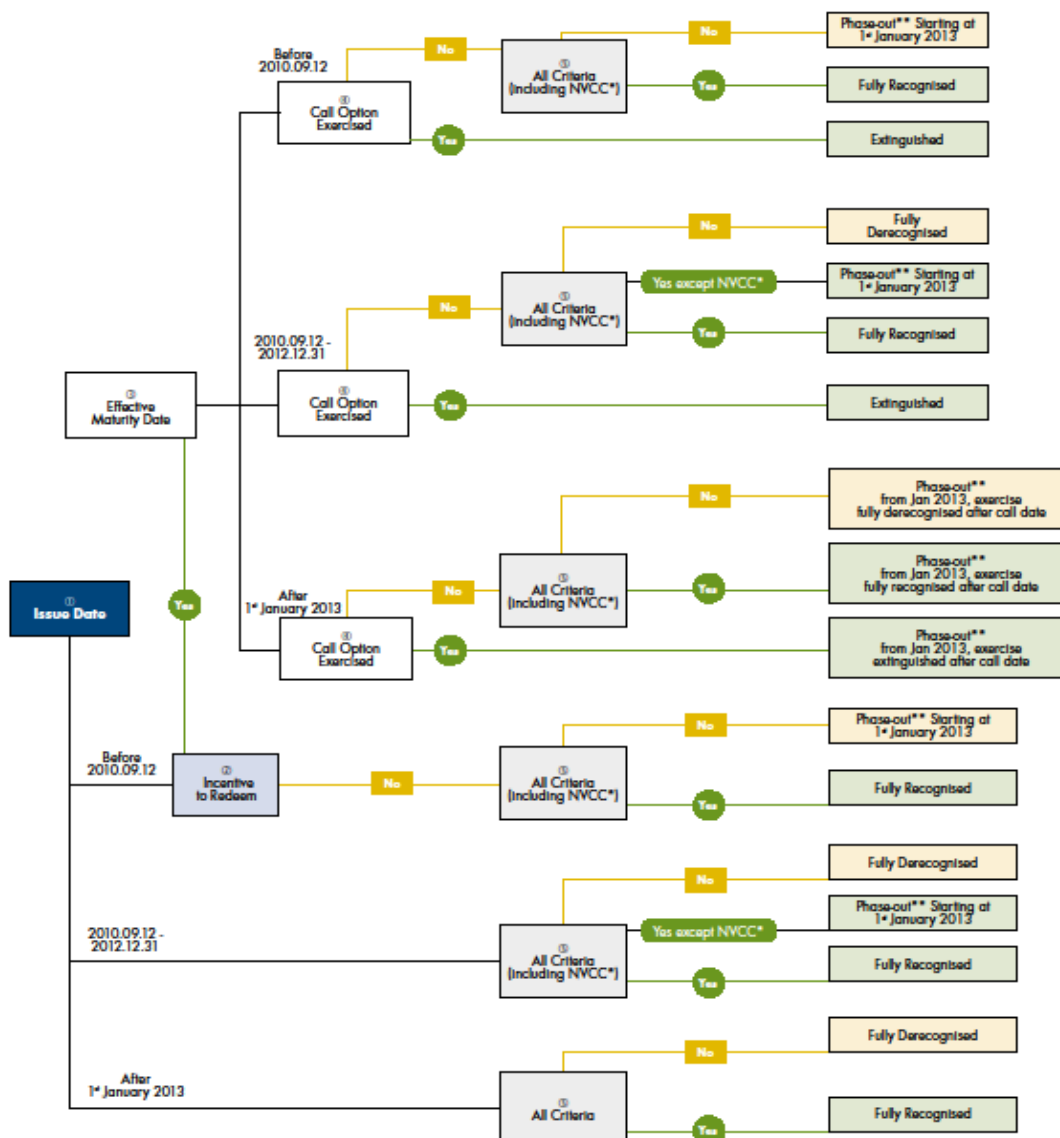
CCB here has the meaning of the consolidated countercyclical buffer defined on paragraph xvi of the section 1.3.2.

²¹⁸ Similar requirements apply to additional Tier 1 capital and total capital buffers. Institutions must use the most conservative conservation ratio when they do not comply to one or the other requirement.

Annex 1-II Annex removed

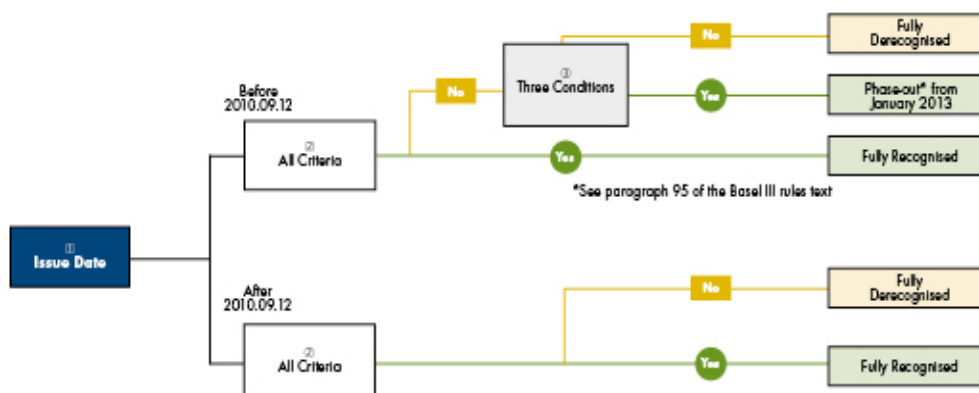
Annex 1-III Transitional arrangements

TRANSITIONNAL ARRANGEMENT FOR NON-QUALIFYING CAPITAL INSTRUMENTS (Paragraph 94 (g))



* « NVCC » refers to the press release published by the Basel Committee on January 13th 2011, relating to non-viability criteria.
 ** « Phase-out » refers to the transitional arrangements described in paragraphs 94 to 96 of the Guideline.

**ANNEX 2 - TRANSITIONNAL ARRANGEMENTS
FOR NON-QUALIFYING CAPITAL INSTRUMENTS (paragraph 95)**



* The "Three Conditions" and "Phase-out" arrangements are set out in paragraph 95 of the Basel III rules text

Annex 1-IV Leverage ratio – calculation and definition of components

Comment

The following paragraphs regarding the financial leverage ratio are drawn from the Basel Committee's *Basel III: Leverage ratio framework and disclosure requirements* and *Frequently asked questions on Basel III leverage ratio framework*, respectively published in January 2014, in July 2015 and in April 2016.

The AMF reproduces and adapts Basel Committee's paragraphs in this annex to facilitate comparison with paragraphs imported from the Basel document.

The AMF expects institutions to calculate and report the leverage ratio quarterly from January 1st, 2015.

The Basel Committee has published, on April 6, 2016, a consultation document regarding the Leverage Ratio Framework.¹⁹⁹ This framework should come into force on January 1, 2018. The AMF could revise these provisions when the BCBS publishes the final version of this document.

Scope of application

6. The Basel III leverage ratio is defined as the capital measure (the numerator) divided by the exposure measure (the denominator), with this ratio expressed as a percentage:

$$\text{Leverage ratio} = \frac{\text{Capital measure}}{\text{Exposure measure}}$$

Minimum requirement

7. The AMF expects institutions to maintain a minimum leverage ratio that meets or exceeds 3% at all times. However, if necessary, the AMF may require the financial institution to maintain a different level of 3% floor currently prescribed. When setting authorized leverage ratios and when assessing whether an increase or a decrease in the institution's authorized leverage ratio is appropriate, the AMF will take into account the following factors:
- The potential impact of the change in the leverage ratio on the institution's risk-based capital ratios compared to internal targets and AMF targets
 - The effectiveness of operational management and oversight functions.

¹⁹⁹ Bank for International Settlements. Basel Committee on Banking Supervision. Revisions to the Basel III leverage ratio framework - consultative document, April 2016.

- The adequacy of capital and liquidity management processes and procedures.
- The intervention history of the institution.
- The institution's risk profile and business lines (including diversification of exposures), and.
- The institution's strategic and business plans.

Requests for decreases in authorized leverage ratios should be addressed to the prudential supervision of depository institutions direction, and should also include a business case that, at a minimum, sets out:

- The reason why a decrease is requested.
 - Financial projections including growth by business line.
 - The expected impact of the projected growth on the profitability, liquidity and risk-based capital ratios.
8. These leverage requirements apply on a consolidated basis and apply to all institutions as defined in Chapter 1 of the present Guideline.
 9. Treatment of investments in the capital of financial institutions, insurance and commercial entities that are outside the regulatory scope of consolidation

Where an financial institution, insurance or commercial entity is outside the scope of regulatory consolidation, only the investment in the capital of such entities (i.e., only the carrying value of the investment, as opposed to the underlying assets and other exposures of the investee) is to be included in the leverage ratio exposure measure. However, investments in the capital of such entities that are deducted from Tier 1 capital as set out in paragraph 16 may be excluded from the leverage ratio exposure measure.

Capital measure

10. The capital measure for the leverage ratio is the Tier 1 capital of the risk-based capital framework as defined in Chapter 2 of the present Guideline taking account of the transitional arrangements. In other words, the capital measure used for the leverage ratio at any particular point in time is the Tier 1 capital measure applying at that time under the risk-based framework.
11. The requirements in this section are subject to change and modifications according to changes in international and national practices.

Exposure measure

12. The exposure measure for the leverage ratio should generally follow the accounting value²¹⁹, subject to the following:
- On-balance sheet, non-derivative exposures are included in the exposure measure net of specific provisions or accounting valuation adjustments (e.g. accounting credit valuation adjustments).
 - Netting of loans and deposits is not allowed.
13. Unless specified differently below, institutions must not take account of physical or financial collateral, guarantees or other credit risk mitigation techniques to reduce the exposure measure.

AMF Note

Securitisation exposures that are not derecognized or excluded from consolidation under accounting standards (IFRS for example) should be included in the measurement of the exposure.²²⁰ Furthermore, regardless of what is in the balance sheet under the accounting standard, the measure of exposure should reflect the exposure of the issuer following the securitisation. While securitisation has not significantly reduced exposure in the balance sheet of the issuer, it may be included in the measurement of exposure, regardless of the accounting treatment.

14. An institution's total exposure measure is the sum of the following exposures:
- a) On-balance sheet exposures.
 - b) Derivative exposures.
 - c) Securities financing transaction (SFT) exposures.
 - d) Off-balance sheet (OBS) items.

²¹⁹ The Basel III leverage ratio exposure measure must not be reduced through recognition of collateralisation, guarantees or risk mitigation purchased. Also, possible effects arising from netting of loans and deposits must be reversed, leading to an un-netted (gross) recognition of these exposures in the Basel III leverage ratio exposure measure. [BCBS, April 2016, FAQ No. 1.1, Q1]

²²⁰ The grandfathering treatment of mortgages sold through Canada Mortgage Housing Corporation (CMHC) programs (which includes National Housing Act Mortgage-Backed Securities (NHA MBS) and Canada Mortgage Bond (CMB) Programs, as well as Insured Mortgage Purchase Program (IMPP)) permitted under OSFI's March 2010 Advisory Conversion to International *Financial Reporting Standards (IFRSs) by Federally Regulated Entities* where such assets were excluded from the ACM is permitted under the leverage ratio.

The specific treatments for these four main exposure types are defined below.

a) On balance sheet exposures

15. Institutions must include all balance sheet assets in their exposure measure, including on-balance sheet derivatives collateral and collateral for SFTs, with the exception of on-balance sheet derivative and SFT assets that are covered in paragraphs 18 to 37 below.²²¹
16. However, to ensure consistency, balance *sheet assets* deducted from Tier 1 capital (as set out in paragraphs 66 to 89 of the present Guideline) may be deducted from the exposure measure.

Two examples follow:

- Where a financial institution or insurance entity is not included in the regulatory scope of consolidation (as set out in paragraph 8 above), the amount of any investment in the capital of that entity that is totally or partially deducted from Tier 1A capital or from Tier 1B capital of the institution (following the corresponding deduction approach in paragraphs 84 to 89 of Chapter 2 of this Guideline) may also be deducted from the exposure measure.
 - For institutions using the internal ratings-based (IRB) approach to determining capital requirements for credit risk, paragraph 73 of Chapter 2 of this Guideline requires any shortfall in the stock of eligible provisions relative to expected losses to be deducted from Tier 1A capital. The same amount may be deducted from the exposure measure.
17. Liability items must not be deducted from the measure of exposure. For example, gains/losses on fair valued liabilities or accounting value adjustments on derivative liabilities due to changes in the institution's own credit risk as described in paragraph 75 of Chapter 2 must not be deducted from the exposure measure.

²²¹ Where an institution according to its operative accounting framework recognises fiduciary assets on the balance sheet, these assets can be excluded from the leverage ratio exposure measure provided that the assets meet the IAS 39 criteria for derecognition and, where applicable, IFRS 10 for deconsolidation. When disclosing the leverage ratio, institutions must also disclose the extent of such de-recognised fiduciary items as set out in paragraph 52.

AMF Note

In the case of mortgage whole loan sale transactions having the following characteristics, the balance sheet exposure will be considered to be substantially reduced and the institution will not be required to include sold loans in the exposure measure:

- a) The mortgages are insured by CMHC or a private insurer recognized by the Protection of Residential Mortgage or Hypothecary Insurance Act;
- b) The institution has retained the option, not the obligation to repurchase the mortgages at par from the investor at the end of their contractual term.;
- c) The institution may continue to administer and service mortgages for the investor following the sale but the institution is not obligated to advance uncollected mortgage payments on account of delinquent or defaulted mortgages; and l'entité conserve, sans être tenue de l'exercer, le droit de racheter au pair les hypothèques à l'investisseur à leur échéance contractuelle;
- d) The investor has the right to sell the mortgages to a third party at any time.

Mortgages insured as per paragraph (a) above for their whole life, that have been pooled and sold as National Housing Act Mortgage Backed Securities (NHA MBS or NHA MBS Program) and derecognized under IFRS following a transaction with a third party with respect to the institution's retained interest in any excess spread, can be excluded from the exposure measure. Such exclusion is subject to the institution obtaining written confirmation from CMHC that CMHC does not object to the institution proceeding with such a transaction or similar transactions. However, recognizing the potential liquidity constraints imposed by the NHA MBS Program on institutions in a stressed environment, institutions must be able to demonstrate alignment with AMF's Liquidity Risk Management Guideline, Liquidity Adequacy Requirements Guideline, and other liquidity requirements as necessary and/or specified by AMF. This includes institutions having in place appropriate liquidity plans that demonstrate the management of liquidity risks, including an appropriate laddering of the scheduled maturities for all outstanding NHA MBS and on-going tracking of cash flows against those plans.

b) Derivative exposures**i. Treatment of derivatives**

18. Derivatives create two types of exposure:

- a) An exposure arising from the underlying of the derivative contract.
- b) A counterparty credit risk (CCR) exposure. The leverage ratio framework uses the method set out below to capture both of these exposure types.

This Guideline uses the method set out below to capture both of these exposure types²²².

²²² As written options create an exposure, they must be included in the Basel III leverage ratio exposure measure. [BCBS, April 2016, FAQ No. 2.8, Q9]

19. Institutions must calculate their derivative exposures,²²³ including where an institution sells protection using a credit derivative, as the replacement cost (RC)²²⁴ for the current exposure plus an add-on for potential future exposure (PFE), as described in paragraph 20. If the derivative exposure is covered by an eligible bilateral netting contract as specified in paragraphs 21.1 to 21.2, an alternative treatment may be applied.²²⁵ Written credit derivatives are subject to an additional treatment, as set out in paragraphs 29 to 31 below.
20. For a single derivative exposure not covered by an eligible bilateral netting contract as specified in paragraphs 21.1 to 21.2, the amount to be included in the exposure measure is determined as follows:

$$\text{Exposure measure} = \text{replacement cost (RC)} + \text{add-on}$$

Where:

RC = The replacement cost of the contract (obtained by marking to market), where the contract has a positive value

Add-on = An amount for PFE over the remaining life of the contract calculate by applying an add-on factor to the notional principal amount of the derivative

- 20.1. The following add-on factors apply to financial derivative, based on the residual maturity:²²⁶

²²³ This approach makes reference to the SA-CCR which is used under the Basel II framework to calculate CCR exposure amounts associated with derivative exposures. The Committee is considering alternatives to the SA-CCR. If an alternative approach is adopted as a replacement for the SA-CCR, the Committee will consider whether that alternative approach is appropriate in the context of the need to capture both types of exposures created by derivatives as described in paragraph 18.

²²⁴ If, under an institution's national accounting standards, there is no accounting measure of exposure for certain derivative instruments because they are held (completely) off-balance sheet, the institution must use the sum of positive fair values of these derivatives as the replacement cost.

²²⁵ These are netting rules of the Basel II framework excepting the rules for cross-product netting in Annex 3-II, Section III (i.e. cross-product netting is not permitted in determining the leverage ratio exposure measure). However, where a bank has a cross-product netting agreement in place that meets the eligibility criteria of paragraphs 21.1 c) and 21.2, it may choose to perform netting separately in each product category provided that all other conditions for netting in this product category that are applicable to the Basel III leverage ratio are met. [BCBS, April 2016. FAQ No. 5, Q1]

²²⁶ [BCBS, January 2014, Annex, par. 1]

	Interest rates	FX and gold	Equities	Precious metal except gold	Other commodities
One year or less	0%	1.0%	6.0%	7.0%	10.0%
Over one year to five years	0.5%	5.0%	8.0%	7.0%	12.0%
Over five years	1.5%	7.5%	10.0%	8.0%	15.0%

Notes:
1. For contracts with multiple exchanges of principal, the factors are to be multiplied by the number of remaining payments in the contract.
2. For contracts that are structured to settle outstanding exposures following specified payment dates and where the terms are reset such that the market value of the contract is zero on these specified dates, the residual maturity would be set equal to the time until the next reset date. In the case of interest rate contracts with remaining maturities of more than one year that meet the above criteria, the add-on is subject to a floor of 0.5%.
3. Forwards, swaps, purchased options and similar derivative contracts not covered by any of the columns in this matrix are to be treated as "other commodities".
4. No potential future credit exposure would be calculated for single currency floating / floating interest rate swaps; the credit exposure on these contracts would be evaluated solely on the basis of their mark-to-market value.

20.2. The AMF will ensure that add-ons are based on effective rather than apparent notional amounts. In the event that the stated notional amount is leveraged or enhanced by the structure of the transaction, institutions must use the effective notional amount when determining potential future exposure.²²⁷

20.3. The following add-on factors apply to single-name credit derivatives:²²⁸

	Protection buyer	Protection seller
Total return swap		
Qualifying reference obligation	5%	5%
Non qualifying reference obligation	10%	10%

²²⁷ [BCBS, January 2014, Annex, par. 2]

²²⁸ [BCBS, January 2014, Annex, par. 3]

Credit default swaps ²²⁹		
Qualifying reference obligation	5%	5% ²³⁰
Non qualifying reference obligation	10%	10% ²³¹

There will be no difference depending on residual maturity.

20.4. Where the credit derivative is a first-to-default transaction, the add-on will be determined by the lowest credit quality underlying the basket, i.e. if there are any non-qualifying items in the basket, the non-qualifying reference obligation add-on should be used. For second and subsequent nth-to-default transactions, underlying assets should continue to be allocated according to the credit quality, i.e. the second or, respectively, nth lowest credit quality will determine the add-on for a second-to-default or an nth-to-default transaction, respectively.²³²

20.5 and 6. The “qualifying” category includes securities issued by public sector entities and multilateral development banks, plus other securities that are:

- a) A public sector institution.
- b) A multilateral development bank.²³³
- c) A financial institution if the instrument is not part of the own funds of the issuing institution.²³⁴
- d) A regulated securities firm in a BCBS-member country or country that has implemented the BCBS-equivalent standards.

The AMF expects the institution to conduct its own internal self-assessment as to whether a non-BCBS member country has implemented BCBS equivalent standards.²³⁵

²²⁹ For index CDS, banks must use the same PFE add-on factors specified under the CEM as they would use for single-name CDS under the risk-based capital framework. [BCBS, April 2016, FAQ No. 2.9, Q10]

²³⁰ The protection seller of a credit default swap shall only be subject to the add-on factor where it is subject to closeout upon the insolvency of the protection buyer while the underlying is still solvent. The add-on should then be capped to the amount of unpaid premiums.

²³¹ See Footnote 230.

²³² [BCBS, January 2014, Annex, par. 4]

²³³ Multilateral development banks are defined in Chapter 3 of this Guideline.

²³⁴ Instruments issued by institutions should meet the ratings criteria listed in paragraph 21 of this Guideline and should originate from a BCBS-member country or country that has implemented BCBS-equivalent standards

²³⁵ [BCBS, January 2014, Annex, par. 5 and 6]

20.7. Furthermore, the “qualifying” category also includes any other debt securities issued by a non-government obligor that has been rated investment-grade²³⁶ by at least two nationally recognized credit rating services or rated investment-grade by one nationally recognized credit rating agency and not less than investment-grade by any other credit rating agency.²³⁷

ii. Bilateral netting

21. When an eligible bilateral netting contract is in place as specified in paragraphs 21.1 and 21.2 of this Guideline, the replacement cost for the set of derivative exposures covered by the contract will be the net replacement cost and the add-on will be A_{Net} as calculated in paragraph 21.3 of this Guideline.

21.1. For the purposes of the leverage ratio, the following will apply:

- a) Institutions may net transactions subject to novation under which any obligation between an institution and its counterparty to deliver a given currency on a given value date is automatically amalgamated with all other obligations for the same currency and value date, legally substituting one single amount for the previous gross obligations.
- b) Institutions may also net transactions subject to any legally valid form of bilateral netting not covered in (a), including other forms of novation.
- c) In both cases (a) and (b), an institution will need to satisfy the AMF that it has:
 - a netting contract or agreement with the counterparty that creates a single legal obligation, covering all included transactions, such that the institution would have either a claim to receive or obligation to pay only the net sum of the positive and negative mark-to-market values of included individual transactions in the event a counterparty fails to perform due to any of the following: default, bankruptcy, liquidation or similar circumstances;
 - written and reasoned legal opinions that, in the event of a legal challenge, the relevant courts and administrative authorities would find the institution’s exposure to be such a net amount under:
 - the law of the jurisdiction in which the counterparty is chartered and, if the foreign branch of a counterparty is involved, then also under the law of jurisdiction in which the branch is located.
 - the law that governs the individual transactions;

²³⁶ For example, rated Baa or higher by Moody’s and BBB of higher by Standard and Poor’s.

²³⁷ [BCBS, January 2014, Annex, par. 7]

- the law that governs any contract or agreement necessary to effect the netting.

The AMF, after consultation when necessary with other relevant supervisors, must be satisfied that the netting is enforceable under the laws of each of the relevant jurisdictions:²³⁸

- procedures in place to ensure that the legal characteristics of netting arrangements are kept under review in the light of possible changes in relevant law.²³⁹

21.2. Contracts containing walkaway clauses will not be eligible for netting for the purpose of calculating the leverage ratio requirements pursuant to this framework. A walkaway clause is a provision that permits a non-defaulting counterparty to make only limited payments or no payment at all, to the estate of a defaulter, even if the defaulter is a net creditor.²⁴⁰

21.3. Credit exposure on bilaterally netted forward transactions will be calculated as the sum of the net mark-to-market replacement cost, if positive, plus an add-on based on the notional underlying principal. The add-on for netted transactions (A_{Net}) will equal the weighted average of the gross add-on (A_{Gross}) and the gross add-on adjusted by the ratio of net current replacement cost to gross current replacement cost (NGR).

This is expressed through the following formula:

$$A_{Net} = 0.4 \cdot A_{Gross} + 0.6 \cdot NGR \cdot A_{Gross}$$

where:

NGR = Level of net replacement cost / level of gross replacement cost for transactions subject to legally enforceable netting agreements.²⁴¹

²³⁸ Thus, if any of these supervisors is dissatisfied about enforceability under its laws, the netting contract or agreement will not meet the condition and neither of counterparty could obtain supervisory benefit.

²³⁹ [BCBS, January 2014, Annex, par. 8]

²⁴⁰ [BCBS, January 2014, Annex, par. 9]

²⁴¹ The AMF will permit a choice of calculating the NGR on a counterparty by counterparty or on an aggregate basis for all transactions that are subject to legally enforceable netting agreements. However, the method chosen by the institution is to be used consistently. Under the aggregate approach, net negative current exposures to individual counterparties cannot be used to offset net positive current exposures to others, i.e., for each counterparty the net current exposure used in calculating the NGR is the maximum of the net replacement cost or zero. Note that under the aggregate approach, the NGR is to be applied individually to each legally enforceable netting agreement.

A_{Gross} = Sum of individual add-on amounts (calculated by multiplying the notional principal amount by the appropriate add-on factors set out in paragraphs 20.1 to 20.7 above) of all transactions subject to legally enforceable netting agreements with one counterparty.²⁴²

21.4. For the purposes of calculating potential future credit exposure to a netting counterparty for forward foreign exchange contracts and other similar contracts in which the notional principal amount is equivalent to cash flows, the notional principal is defined as the net receipts falling due on each value date in each currency. The reason for this is that offsetting contracts in the same currency maturing on the same date will have lower potential future exposure as well as lower current exposure.²⁴³

iii. Securities financing transaction exposures

22. Collateral received in connection with derivative contracts has two countervailing effects on leverage:

- It reduces counterparty exposure; but
- It can also increase the economic resources at the disposal of the institution, as the institution can use the collateral to leverage itself.

23. Collateral received in connection with derivative contracts does not necessarily reduce the leverage inherent in an institution's derivatives position, which is generally the case if the settlement exposure arising from the underlying derivative contract is not reduced. As a general rule, collateral received may not be netted against derivative exposures whether or not netting is permitted under the institution's operative accounting or risk-based framework. Hence, when calculating the exposure amount by applying paragraphs 19 to 21 above, an institution must not reduce the exposure amount by any collateral received from the counterparty.

24. Similarly, with regard to collateral provided, institutions must gross up their exposure measure by the amount of any derivatives collateral provided where the provision of that collateral has reduced the value of their balance sheet assets under their operative accounting framework.

²⁴² [BCBS, January 2014, Annex, par. 10]

²⁴³ [BCBS, January 2014, Annex, par. 11]

iv. Treatment of cash variation margin

25. In the treatment of derivative exposures for the purpose of the leverage ratio, the cash portion of variation margin exchanged between counterparties may be viewed as a form of pre-settlement payment, if the following conditions are met:
- For trades not cleared through a qualifying central counterparty (QCC)²⁴⁴ the cash received by the recipient counterparty is not segregated.²⁴⁵
 - Variation margin is calculated and exchanged on a daily basis based on mark-to-market valuation of derivatives positions.²⁴⁶
 - The cash variation margin is received in the same currency as the currency of settlement of the derivative contract.²⁴⁷
 - Variation margin exchanged is the full amount that would be necessary to fully extinguish the mark-to-market exposure of the derivative subject to the threshold and minimum transfer amounts applicable to the counterparty.²⁴⁸
 - Derivatives transactions and variation margins are covered by a single master netting agreement (MNA)^{249 250} between the legal entities that are the counterparties in the derivatives transaction. The MNA must explicitly stipulate that the counterparties agree to settle net any payment obligations covered by such a netting agreement, taking into account any variation margin received or provided if a credit event occurs involving either counterparty. The MNA must be legally enforceable and effective in all relevant jurisdictions, including in the event of default and bankruptcy or insolvency.

²⁴⁴ A qualifying central counterparty (QCC) is an entity that is licensed to operate as a CC (including a license granted by way of confirming an exemption), and is permitted by the appropriate regulator/overseer to operate as such with respect to products offered. This is subject to the provision that the CC is based and prudentially supervised in a jurisdiction where the relevant regulator/overseer has established, and publicly indicated that it applies to the CC on an ongoing basis, domestic rules and regulations that are consistent with CPSS-IOSCO Principles for Financial Market Infrastructures.

²⁴⁵ [BCBS, July, 2015, FAQ No. 1.5, Q5 and Q6]

²⁴⁶ [BCBS, July, 2015, FAQ No. 1.3, Q3]

²⁴⁷ [BCBS, July, 2015, FAQ No. 1.1, Q1]

²⁴⁸ Cash variation margin exchanges on the morning of the subsequent trading day based on the previous end-of-day market values would meet this criterion, provided that the variation margin exchanged is the full amount that would be necessary to fully extinguish the mark-to-market exposure to derivative subject to applicable threshold and minimum transfer amounts. [BCBS, July 2015, FAQ, No. 1.4, Q4]

²⁴⁹ A Master netting agreement (MNA) is deemed to meet the criterion if it satisfies the conditions in paragraphs 21.1 c) and 21.2. [BCBS, July 2015, FAQ, No. 1.2, Q2]

²⁵⁰ To the extent that the criteria in this paragraph include the term “master netting agreement”, this term should be read as including any “netting agreement” that provides legally enforceable rights of offsets. This is to take account of the fact that for netting agreements employed by CCs, no standardisation has currently emerged that would be comparable with respect to OTC netting agreements for bilateral trading.

26. If the conditions in paragraph 25 are met, the cash portion of variation margin received may be used to reduce the replacement cost portion of the leverage ratio exposure measure, and the receivables assets from cash variation margin provided may be deducted from the leverage ratio exposure measure as follows:
- In the case of cash variation margin received, the receiving institution may reduce the replacement cost (but not the add-on portion) of the exposure amount of the derivative asset by the amount of cash received if the positive mark-to-market value of the derivative contract(s) has not already been reduced by the same amount of cash variation margin received under the institution's operative accounting standard (e.g. IFRS).
 - In the case of cash variation margin provided to counterparty, the posting institution may deduct the resulting receivable from its leverage ratio exposure measure, where the cash variation margin has been recognised as an asset under the institution's operative accounting framework.

Cash variation margin may not be used to reduce the PFE amount (including the calculation of the net-to-gross ratio (NGR) as defined in paragraph 21.3 above).²⁵¹

v. Treatment of clearing services

27. Where an institution acting as clearing member (CM)²⁵² offers clearing services to clients, the clearing member's trade exposures²⁵³ to the central counterparty (CC)²⁵⁴ that arise when the clearing member is obligated to reimburse the client for any losses suffered due to changes in the value of its transactions in the event that the CC defaults, must be captured by applying the same treatment that applies to any other type of derivatives transactions. However, if the clearing member, based on the contractual arrangements with the client, is not obligated to reimburse the client for any losses suffered due to changes in the value of its transactions in the event that a QCC defaults, the clearing member

²⁵¹ [BCBS, July 2015, FAQ, No. 1.6, Q7]

²⁵² A clearing member is a member of, or a direct participant in, a CC that is entitled to enter into a transaction with the CP, regardless of whether it enters into trades with the CC for its own hedging, investment, or speculative purposes or whether it also enters into trades as a financial intermediary between the CC and the other market participants

²⁵³ For the purposes of paragraphs 27 and 28, "trade exposures" includes initial margin irrespective of whether or not it is posted in a manner that makes it remote from the insolvency of the CC.

²⁵⁴ A central counterparty (CC) is a clearing house that interposes itself between counterparties to contracts traded in one or more financial markets, becoming the buyer to every seller and the seller to every buyer and thereby ensuring the future performance of open contracts. A CC becomes counterparty to trades with market participants through novation, an open system, or another legally binding arrangement.

need not recognise the resulting trade exposures to the QCC in the leverage ratio exposure measure.²⁵⁵

28. Where a client enters directly into a derivatives transaction with the CC and the CM guarantees the performance of its clients' derivative trade exposures to the CC, the institution acting as the clearing member for the client to the CC must calculate its related leverage ratio exposure resulting from the guarantee as a derivative exposure as set out in paragraphs 19 to 26, as if it had entered directly into the transaction with the client, including with regard to the receipt or provision of cash variation margin.

vi. Additional treatment for written credit derivatives

29. In addition to the CCR exposure arising from the fair value of the contracts, written credit derivatives create a notional credit exposure arising from the creditworthiness of the reference institution. The Basel Committee therefore believes that it is appropriate to treat written credit derivatives consistently with cash instruments (e.g. loans, bonds) for the purposes of the exposure measure.
30. In order to capture the credit exposure to the underlying reference entity, in addition to the above CCR treatment for derivatives and related collateral, the effective notional amount²⁵⁶ referenced by a written credit derivative is to be included in the exposure measure. The effective notional amount of a written credit derivative²⁵⁷ may be reduced by any negative change in fair value amount²⁵⁸ that has been incorporated into the calculation of Tier 1 capital with respect to the written credit derivative. The resulting amount may be further

²⁵⁵ An affiliated entity to the bank acting as a clearing member (CM) may be considered a *client* for the purpose of paragraph 27 of the Basel III leverage ratio framework if it is outside the relevant scope of regulatory consolidation at the level at which the Basel III leverage ratio is applied. In contrast, if an affiliate entity falls within the regulatory scope of consolidation, the trade between the affiliate entity and the CM is eliminated in the course of consolidation, but the CM still has a trade exposure to the qualifying central counterparty (QCC), which will be considered *proprietary* and the exemption in the said paragraph 27 no longer applies. [BCBS, July 2015, FAQ, No. 2, Q1]

²⁵⁶ The effective notional amount is obtained by adjusting the notional amount to reflect the true exposure of contracts that are leveraged or otherwise enhanced by the structure of the transaction. [BCBS, April 2016, FAQ No. 3.4, Q4]

²⁵⁷ For the purposes of paragraph 30 of the Basel III leverage ratio, the term "written credit derivative" refers to a broad range of credit derivatives through which a bank effectively provides credit protection and is not limited solely to CDS and total return swaps. [BCBS, April 2016, FAQ No. 3.2, Q2]

²⁵⁸ A negative change in fair value is meant to refer to a negative fair value of a credit derivative that is recognised in Tier 1 capital. This treatment is consistent with the Committee's communicated rationale that the effective notional amounts included in the exposure measure may be capped at the level of the maximum potential loss, which means the maximum potential loss at the reporting date is the notional amount of the credit derivative minus any negative fair value that has already reduced Tier 1 capital.

For example, if a written credit derivative had a positive fair value of 20 on one date and has a negative fair value of 10 on a subsequent reporting date, the effective notional amount of the credit derivative may be reduced by 10. The effective notional amount cannot be reduced by 30. However, if at the subsequent reporting date the credit derivative has a positive fair value of 5, the effective notional amount cannot be reduced at all. [BCBS, July 2015, FAQ, No. 5, Q1]

reduced by the effective notional amount of a purchased credit derivative on the same reference name,^{259 260} provided that:

- The credit protection purchased through credit derivatives is otherwise subject to the same or more conservative material terms as those in the corresponding written credit derivative. This ensures that if an institution provides written protection via some type of credit derivative, the institution may only recognise offsetting from another purchased credit derivative to the extent that the purchased protection is certain to deliver a payment in all potential future states. Material terms include the level of subordination, optionality, credit events, reference and any other characteristics relevant to the valuation of the derivative;²⁶¹
 - The remaining maturity of the credit protection purchased is equal to or greater than the remaining maturity of the written credit derivative.
31. Since written credit derivatives are included in the exposure measure at their effective notional amounts, and are also subject to add-on amounts for PFE, the exposure measure for written credit derivatives may be overstated. Institutions may therefore choose to deduct the individual PFE add-on amount relating to a written credit derivative (which is not offset according to paragraph 30²⁶² and

²⁵⁹ Two reference names are considered identical only if they refer to the same legal entity. For single-name credit derivatives, protection purchased that references a subordinated position may offset protection sold on a more senior position of the same reference entity as long as a credit event on the senior reference asset would result in a credit event on the subordinated reference asset. Protection purchased on a pool of reference entities may offset protection sold on individual reference names if the protection purchased is economically equivalent to buying protection separately on each of the individual names in the pool (this would, for example, be the case if an institution were to purchase protection on an entire securitisation structure). If an institution purchases protection on a pool of reference names, but the credit protection does not cover the entire pool (i.e. the protection covers only a subset of the pool, as in the case of an nth-to-default credit derivative or a securitisation tranche), then offsetting is not permitted for the protection sold on individual reference names. However, such purchased protections may offset sold protections on a pool provided the purchased protection covers the entirety of the subset of the pool on which protection has been sold. In other words, offsetting may only be recognised when the pool of reference entities and the level of subordination in both transactions are identical. [BCBS, April 2016, FAQ No. 3.5, Q5]

²⁶⁰ The effective notional amount of a written credit derivative may be reduced by any negative change in fair value reflected in the institution's Tier 1 capital provided the effective notional amount of the offsetting purchased credit protection is also reduced by any resulting positive change in fair value reflected in Tier 1 capital. Where an institution buys credit protection through a total return swap (TRS) and records the net payments received as net income, but does not record offsetting deterioration in the value of the written credit derivative (either through reductions in fair value or by an addition to reserves) reflected in Tier 1 capital, the credit protection will not be recognised for the purpose of offsetting the effective notional amounts related to written credit derivatives.

²⁶¹ For tranching products, the purchased protection must be on a reference obligation with the same level of seniority.

²⁶² This condition regarding the removal of a PFE add-on associated with a written credit derivative from the Basel III leverage ratio exposure measure refers only to the offset by credit protection purchased through a credit derivative according to paragraph 30 of the Basel III leverage ratio framework and not to the reduction of the effective notional amount as a result of the negative change in fair value that has reduced Tier 1 capital. [BCBS, April 2016, FAQ No. 3.6, Q6]

whose effective notional amount is included in the exposure measure) from their gross add-on in paragraphs 19 to 21.²⁶³

Securities financing transaction (SFT) exposures

32. SFTs²⁶⁴ are included in the exposure measure according to the treatment described below. The treatment recognises that secured lending and borrowing in the form of SFTs is an important source of leverage, and ensures consistent international implementation by providing a common measure for dealing with the main differences in the operative accounting frameworks.

1. General treatment (institution acting as principal)

33. The sum of the amounts in subparagraphs (i) and (ii) below are to be included in the leverage ratio exposure measure:

- i. Gross SFT assets²⁶⁵ recognised for accounting purposes (ie with no recognition of accounting netting)²⁶⁶ adjusted as follows:
 - excluding from the exposure measure the value of any securities received under an SFT, where the institution has recognised the securities as an asset on its balance sheet;
 - cash payables and cash receivables in SFTs with the same counterparty may be measured net if all the following criteria are met:
 - a) Transactions have the same explicit final settlement date.²⁶⁷
 - b) The right to set off the amount owed to the counterparty with the amount owed by the counterparty is legally enforceable

In these cases, where effective bilateral netting contracts are in place, and when calculating $A_{Net} = x \cdot 0.4 A_{Gross} + 0.6 \times NGR \times A_{Gross}$ as per paragraphs 19 to 21, A_{Gross} may be reduced by the individual add-on amounts (i.e. notional multiplied by the appropriate add-on factors) which relate to written credit derivatives whose notional amounts are included in the leverage ratio exposure measure. However, no adjustments must be made to NGR. Where effective bilateral netting contracts are not in place, the PFE add-on may be set to zero in order to avoid the double-counting described in this paragraph.

²⁶⁴ SFTs are transactions such as repurchase agreements, reverse repurchase agreements, security lending and borrowing, and margin lending transactions, where the value of the transactions depends on market valuations and the transactions are often subject to margin agreements.

²⁶⁵ For SFT assets subject to novation and cleared through QCCs, “gross SFT assets recognised for accounting purposes” are replaced by the final contractual exposure, given that pre-existing contracts have been replaced by new legal obligations through the novation process.

²⁶⁶ Gross SFT assets recognised for accounting purposes must not recognise any accounting netting of cash payables against cash receivables (e.g. as currently permitted under the IFRS accounting frameworks). This regulatory treatment has the benefit of avoiding inconsistencies from netting which may arise across different accounting regimes.

²⁶⁷ [BCBS, July 2015, FAQ, No. 3, Q2]

- both currently in the normal course of business and in the event of: (i) default; (ii) insolvency; (iii) bankruptcy²⁶⁸.
- c) The counterparties intend to settle net, settle simultaneously, or the transactions are subject to a settlement mechanism that results in the functional equivalent of net settlement²⁶⁹, that is, the cash flows of the transactions are equivalent, in effect, to a single net amount on the settlement date. To achieve such equivalence, both transactions are settled through the same settlement system and the settlement arrangements are supported by cash and/or intraday credit facilities intended to ensure that settlement of both transactions will occur by the end of the business day and the linkages to collateral flows do not result in the unwinding of net cash settlement.²⁷⁰ The failure of any single securities transaction in the settlement mechanism should delay settlement of only the matching cash leg or create an obligation to the settlement mechanism, supported by an associated credit facility. If there is a failure of the securities leg of a transaction in such a mechanism at the end of the window for settlement in the settlement mechanism, then this transaction and its matching cash leg must be split out from the netting set and treated gross for purposes of total exposures.

²⁶⁸ [BCBS, April 2016, FAQ, No. 4.1, Q4]

²⁶⁹ This latter condition ensures that any issues arising from the securities leg do not interfere with the completion of the net settlement of the cash receivables and payables. This criterion is not intended to preclude a Delivery versus-Payment (DvP) settlement mechanism or other type of settlement mechanism, provided that the settlement mechanism meets the functional requirements as set out in this paragraph. For example, a settlement mechanism may meet these functional requirements if any failed transactions (that is, the securities that failed to transfer and the related cash receivable or payable) can be re-entered in the settlement mechanism until they are settled. [BCBS FAQ No. 3, Q1]

²⁷⁰ This latter condition ensures that any issues arising from the securities leg of the SFTs do not interfere with the completion of the net settlement of the cash receivables and payables.

ii. A measure of CCR²⁷¹ calculated as the current exposure without an add-on for PFE,²⁷² calculated as follows:

- Where a qualifying MNA is in place, the current exposure (E^*) is the greater of zero and the total fair value of securities and cash lent to a counterparty for all transactions included in the qualifying MNA ($\sum E_i$), less the total fair value of cash and securities received from the counterparty for those transactions ($\sum C_i$). This is illustrated in the following formula:

$$E^* = \text{Max} \{0; [\sum E_i - \sum C_i]\}$$

- Where no qualifying MNA is in place, the current exposure for transactions with counterparty must be calculated on a transaction by transaction basis: that is, each transaction i is treated as its own netting set, as shown in the following formula:

$$E_i^* = \text{Max} \{0; [E_i - C_i]\}$$

2. Qualifying master netting agreement

33.1 The effects of bilateral netting agreements for covering SFTs will 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:

- provide the non-defaulting party with 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;
- 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;

²⁷¹ The term “counterparty” includes not only the counterparty of bilateral repo transactions but also triparty repo agents that receive collateral in deposit and manage the collateral in the case of triparty repo transactions. Therefore, securities deposited at triparty repo agents are included in “total value of securities and cash lent to a counterparty” (E) under paragraph 33 (ii), up to the amount effectively lent to the counterparty in a repo transaction. However, excess collateral that has been deposited at triparty repo agents but has not yet been lent out in specific repo transactions should be excluded. [BCBS, April 2016, FAQ, No. 4.2, Q5]

²⁷² The determination of PFE for SFTs under paragraph 176 of Chapter 5 of the CAR Guideline (applicable to those executed under MNAs) requires the institution to apply haircuts to the value of securities and for foreign exchange risk. Since counterparty risk for SFTs for leverage ratio purposes is determined solely by the current exposure portion of the formulas in those paragraphs, no haircuts are needed in the calculation.

- c) allow for the prompt liquidation or setoff of collateral upon the event of default;
- d) be, together with the rights arising from provisions required in (a) and (c) above, legally enforceable in each relevant jurisdiction upon the occurrence of an event of default regardless of the counterparty's insolvency or bankruptcy.²⁷³

33.2 Netting across positions held in the banking book and trading book will only be recognised when the netted transactions fulfil the following conditions:

- a) All transactions are marked to market daily.
- b) The collateral instruments used in the transactions are recognised as eligible financial collateral in the banking book.²⁷⁴

3. Sale accounting transactions

34. Leverage may remain with the lender of the security in an SFT whether or not sale accounting is achieved under the operative accounting framework. As such, where sale accounting is achieved for an SFT under the institution's operative accounting framework, the institution must reverse all sales-related accounting entries, and then calculate its exposure as if the SFT had been treated as a financing transaction under the operative accounting framework (i.e. the institution must include the sum of amounts in subparagraphs (i) and (ii) of paragraph 33 for such an SFT) for the purposes of determining its exposure measure. Forward purchase agreements or forward sale agreements treated as derivative contracts that are part of SFTs that qualify for sale accounting treatment under IFRS may be excluded from the exposure measure.

4. Institution acting as agent

35. An institution acting as agent in an SFT generally provides an indemnity or guarantee to only one of the two parties involved, and only for the difference between the value of the security or cash its customer has lent and the value of collateral the borrower has provided. In this situation, the institution is exposed to the counterparty of its customer for the difference in values rather than to the full exposure to the underlying security or cash of the transaction (as is the case where the institution is one of the principals in the transaction). Where the institution does not own/control the underlying cash or security resource, that resource cannot be leveraged by the institution.

If an agent bank provides an indemnity or guarantee to both parties involved in an SFT (ie securities lender and securities borrower), it must calculate its Basel

²⁷³ [BCBS, January 2014, Annex, par. 12]

²⁷⁴ [BCBS, January 2014, Annex, par. 13]

III leverage ratio exposure measure in accordance with paragraphs 35 to 37 separately for each party involved in that transaction.²⁷⁵

36. Where an institution acting as agent in an SFT provides an indemnity or guarantee to a customer or counterparty for any difference between the value of the security or cash the customer has lent and the value of collateral the borrower has provided, then the institution will be required to calculate its exposure measure by applying only subparagraph (ii) of paragraph 33.²⁷⁶
37. An institution acting as agent in an SFT and providing an indemnity or guarantee to a customer or counterparty will be considered eligible for the exceptional treatment set out in paragraph 36 only if the institution's exposure to the transaction is limited to the guaranteed difference between the value of the security or cash its customer has lent and the value of the collateral the borrower has provided. In situations where the institution is further economically exposed (ie beyond the guarantee for the difference) to the underlying security or cash in the transaction,²⁷⁷ a further exposure equal to the full amount of the security or cash must be included in the exposure measure.

Off-balance sheet items (OBS)

38. This section explains the incorporation of OBS items as defined in the Chapter 3 of this Guideline into the leverage ratio exposure measure. OBS items include commitments (including liquidity facilities), whether or not unconditionally cancellable, direct credit substitutes, acceptances, standby letters of credit and trade letters of credit²⁷⁸.
39. In the risk-based capital framework, OBS items are converted under the standardized approach into credit exposure equivalents through the use of credit conversion factors (CCFs). For the purpose of determining the exposure

²⁷⁵ [BCBS, April 2016, FAQ, No. 4.3, Q6]

²⁷⁶ Where, in addition to the conditions in paragraphs 35 to 37, an institution acting as an agent in an SFT does not provide an indemnity or guarantee to any of the involved parties, the institution is not exposed to the SFT and therefore need not recognise those SFTs in its exposure measure.

Under the condition that the bank calculates the exposure on a client by client basis, for the purposes of the Basel III leverage ratio exposure measure it does not matter how the bank elects to categorise its client collateral provided that client collateral is segregated from the bank's proprietary assets and other relevant criteria, as described in paragraphs 36 and 37 of the framework, are met. Under those circumstances, footnote 25 of the Basel III leverage ratio framework does not apply to omnibus accounts that are used by agent lenders to hold and manage client collateral segregated from the agent bank's own assets. [BCBS, April 2016, FAQ, No. 4.3, Q7]

²⁷⁷ For example, due to the institution managing collateral received in the institution's name or on its own account rather than on the customer's or borrower's account (e.g. by on-lending or managing unsegregated collateral, cash or securities).

²⁷⁸ The commitment to place or accept forward deposits under the Basel III leverage ratio framework must be treated consistently with the treatment for these commitments under the risk-based capital framework. [BCBS, April 2016, FAQ, No. 7.1, Q1]

amount of OBS items for the leverage ratio, the CCFs set out in paragraphs 39.1 to 39.9 must be applied to the notional amount.

- 39.1 For the purpose of the leverage ratio, OBS items²⁷⁹ will be converted into credit exposure equivalents through the use of credit conversion factors (CCFs). The amount after applying the applicable CCF will be included in the exposure measure.²⁸⁰
- 39.2 Commitments other than securitisation liquidity facilities with an original maturity up to one year and commitments with an original maturity over one year will receive a CCF of 20% and 50%, respectively. However, any commitments that are unconditionally cancellable at any time by the institution without prior notice, or that effectively provide for automatic cancellation due to deterioration in a borrower's creditworthiness, will receive a 10% CCF.^{281 282}
- 39.3 Direct credit substitutes, e.g. 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) will receive a CCF of 100%.²⁸³
- 39.4 Forward asset purchases, forward deposits and partly paid shares and securities, which represent commitments with certain drawdown, will receive a CCF of 100%.²⁸⁴
- 39.5 Certain transaction-related contingent items (e.g. performance bonds, bid bonds, warranties and standby letters of credit related to particular transactions) will receive a CCF of 50%.²⁸⁵
- 39.6 Note issuance facilities (NIFs) and revolving underwriting facilities (RUFs) will receive a CCF of 50%.²⁸⁶
- 39.7 For short-term self-liquidating trade letters of credit arising from the movement of goods (eg documentary credits collateralised by the underlying shipment), a 20% CCF will be applied to both issuing and confirming institutions.²⁸⁷

²⁷⁹ For a detailed description of OBS items, see Section 3.2.

²⁸⁰ [BCBS, January 2014, Annex, par. 14]

²⁸¹ Retail commitments are considered unconditionally cancellable if the terms permit the institution to cancel them to the full extent allowable under consumer protection and related legislation.

²⁸² [BCBS, January 2014, Annex, par. 15]

²⁸³ [BCBS, January 2014, Annex, par. 16]

²⁸⁴ [BCBS, January 2014, Annex, par. 17]

²⁸⁵ [BCBS, January 2014, Annex, par. 18]

²⁸⁶ [BCBS, January 2014, Annex, par. 19]

²⁸⁷ [BCBS, January 2014, Annex, par. 20]

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- 39.8 Where there is an undertaking to provide a commitment on an OBS item, institutions are to apply the lower of the two applicable CCFs.²⁸⁸
- 39.9 All off-balance sheet securitisation exposures, except an eligible liquidity facility or an eligible servicer cash advance facility as set out in paragraph 20 of the Chapter 5 of this Guideline, will receive a CCF of 100% conversion factor. All eligible liquidity facilities will receive a CCF of 50%. The undrawn servicer cash advances or facilities those are unconditionally cancellable without prior notice may be eligible for a 10% CCF.²⁸⁹

²⁸⁸ [BCBS, January 2014, Annex, par. 21]

²⁸⁹ [BCBS, January 2014, Annex, par. 22]

Annex 2-I (a) Self-assessment grid for inclusion in Tier 1A

Criteria for inclusion	Characteristics attached to the instrument	Justification	Supporting documents / references
1. The instrument represents the most subordinated claim in liquidation of the institution.			
2. The instrument gives entitlement to a claim on the residual assets that is proportional with its share of issued capital, after all senior claims have been repaid in liquidation. ²⁹⁰			
3. The principal is perpetual and never repaid outside of liquidation (setting aside discretionary repurchases that are allowable under relevant law and subject to the prior written approval of the AMF).			
4. The institution must do nothing to create an expectation at issuance that the instrument will be bought back, redeemed or cancelled and the promotional material must not mention any terms which might give rise to such an expectation.			
5. Distributions are paid out of distributable surplus capital / retained earnings and are not in any way tied to the amount paid in at issuance in accordance with relevant law.			
6. There are no circumstances under which the distributions are obligatory and non-payment is therefore not an event of default.			
7. Distributions are paid (where applicable) only after all legal and contractual obligations have been met and payments on more senior capital instruments have been made.			
8. Within the highest quality capital, each instrument absorbs losses on a going concern basis proportionately and <i>pari passu</i> with all the others.			
9. The paid-in amount is recognized as equity capital (i.e. not recognized as a liability) for determining balance sheet insolvency.			
10. The paid-in amount is classified as equity under Canadian applicable accounting principles.			

²⁹⁰ In accordance with the legislation in force.

Criteria for inclusion	Characteristics attached to the instrument	Justification	Supporting documents / references
11. It is directly issued and paid-in ²⁹¹ and the institution cannot directly or indirectly have funded the purchase.			
12. The paid-in amount is neither secured nor covered by a guarantee of the issuer or related entity or subject to any other arrangement that legally or economically enhances the seniority of the claim.			
13. It is only issued with the approval of the Board of Directors in accordance with applicable law.			
14. It is clearly and separately disclosed on the institution's balance sheet and is determined according to Canadian generally accepted accounting principles.			

²⁹¹ Paid-in capital generally refers to capital that has been received with finality by the bank, is reliably valued, fully under the bank's control and does not directly or indirectly expose the bank to the credit risk of the investor. [CBCB, FAQ, No 5]

Annex 2-I (b) Self-assessment grid for inclusion in Tier 1B

Criteria for inclusion	Characteristics attached to the Instrument	Justification	Supporting documents / references
1. The instrument is issued and paid-in in cash or, with the prior approval of the AMF, by other means of payment.			
2. The instrument is subordinated to depositors, general creditors and subordinated debt of the institution.			
3. The instrument is neither secured nor covered by a guarantee of the issuer or related entity or other arrangement that enhances the seniority of the claim vis-à-vis the other elements mentioned in point 2 above.			
4. The instrument is perpetual, i.e. there is no maturity date and there are no step-ups ²⁹² or other incentives to redeem.			

²⁹² A step-up is defined as a call option combined with a pre-set increase in the initial credit spread of the instrument at a future date over the initial dividend (or distribution) rate after taking into account any swap spread between the original reference index and the new reference index. Conversion from a fixed rate to a floating rate (or vice versa) in combination with a call option without any increase in credit spread would not constitute a step-up.

Criteria for inclusion	Characteristics attached to the Instrument	Justification	Supporting documents / references
<p>5. The instrument may be callable at the initiative of the issuer only after a minimum of five years:</p> <ul style="list-style-type: none"> a) To exercise a call option an institution must receive prior AMF approval b) An institution must not do anything which creates an expectation that the call will be exercised c) Institutions must not exercise a call unless: <ul style="list-style-type: none"> i. They replace the called instrument with capital of the same or better quality which is sustainable for the income capacity of the institution.²⁹³ ii. The institution demonstrates that its capital position is well above the minimum capital requirements after the call option is exercised. 			
<p>6. Any repayment of principal (e.g. through repurchase or early repayment) must be with prior AMF approval and institutions should not assume or create market expectations that AMF approval will be given.</p>			
<p>7. Dividend/coupon discretion</p> <ul style="list-style-type: none"> a) The institution must have full discretion at all times to cancel distributions/payment b) Cancellation of discretionary payments must not be an event of default or credit event c) Institutions must have full access to cancelled payments to meet obligations as they fall due d) Cancellation of distributions/ payments must not impose restrictions on the institution except in relation to distributions to holders of eligible capital units / common shares. 			

²⁹³ Replacement issuances can be concurrent with but not after the instrument is called.

Criteria for inclusion	Characteristics attached to the Instrument	Justification	Supporting documents / references
8. Remuneration under the instrument must be paid out of distributable surplus capital / earnings.			
9. The instrument cannot have a credit sensitive dividend feature, that is a dividend/coupon that is reset periodically based in whole or in part on the institution's credit standing.			
10. The instrument cannot contribute to liabilities exceeding assets if such a balance sheet test forms part of national insolvency law.			
<p>11. Instruments designated as liabilities for accounting purposes must have principal loss absorption through:</p> <ul style="list-style-type: none"> a) conversion to Tier 1A capital / common shares at an objective pre-specified trigger point; or b) a depreciation mechanism that pays losses out of the instrument at a pre-specified trigger point. The depreciation will have the following effects: <ul style="list-style-type: none"> (i) reduce the claim of the instrument in liquidation (ii) reduce the amount re-paid when a call is exercised (iii) fully or partially reduce remuneration payments on the instrument. 			
12. Neither the institution nor a related party over which the institution exercises control or significant influence can have purchased the instrument, nor can the institution directly or indirectly have funded the purchase of the instrument.			
13. The instrument cannot have any features that hinder recapitalization, such as provisions that require the issuer to compensate investors if a new instrument is issued at a lower price during a specified time frame.			

Criteria for inclusion	Characteristics attached to the Instrument	Justification	Supporting documents / references
<p>14. If the instrument is not issued out of an operating entity or the holding company of the institution (e.g. a special purpose vehicle), proceeds must be immediately available without limitation to an operating entity or the holding company of the institution in a form which meets or exceeds all of the other criteria for inclusion in Tier 1B capital.</p>			
<p>Additional criteria relating to non-viability contingent capital</p> <p>15. The contractual terms and conditions of the instrument must include a clause requiring the full and permanent conversion into a Tier 1A capital instrument at the point of non-viability as described under the AMF's non-viability contingent capital (NVCC) requirements as specified under Section 2.4. When an instrument is issued by a special purpose vehicle (SPV) according to criterion No. 14 above, the conversion of instruments issued by the SPV to end investors should mirror the conversion of the capital issued by the institution to the SPV.</p>			

Annex 2-I (c) Self-assessment grid for inclusion in Tier 2

Criteria for inclusion	Characteristics attached to the instrument	Justification	Supporting documents / references
1. The instrument is issued and paid-in in cash or, with the prior approval of the AMF, by other means of payment.			
2. The instrument is subordinated to depositors, general creditors of the institution.			
3. The instrument is neither secured nor covered by a guarantee of the issuer or related entity or other arrangement that enhances the seniority of the claim vis-à-vis the other elements mentioned in the above point.			
4. Maturity <ul style="list-style-type: none"> a) Minimum original maturity of at least five years. b) Recognition in capital in the remaining five years before maturity will be amortized on a straight-line basis. c) There are no step-ups or other incentives to redeem. 			
5. The instrument may be callable at the initiative of the issuer only after a minimum of five years <ul style="list-style-type: none"> a) To exercise a call option an institution must receive the prior approval of the AMF b) An institution must not do anything which creates an expectation that the call will be exercised c) An institution must not exercise the call unless: <ul style="list-style-type: none"> (i) It replaces the called instrument with capital of the same or better quality and the replacement of this capital is done at conditions which are sustainable for the income capacity of the institution;²⁹⁴ or (ii) The institution demonstrates that its capital position is well above the minimum capital requirements after the call option is exercised. 			

²⁹⁴ Replacement issuances can be concurrent with but not after the instrument is called.

Criteria for inclusion	Characteristics attached to the instrument	Justification	Supporting documents / references
6. The investor must have no rights to accelerate the repayment of future scheduled principal or interest payments, except in bankruptcy and liquidation.			
7. The instrument cannot have a credit sensitive dividend feature; that is, a dividend or coupon that is reset periodically based in whole or in part on the institution's credit standing.			
8. Neither the institution nor a related party over which the institution exercises control or significant influence can have purchased the instrument, nor can the institution directly or indirectly have funded the purchase of the instrument.			
9. If the instrument is not issued out of an operating entity ²⁹⁵ but by an entity with the legal authority to do so (e.g. a special purpose vehicle), proceeds must be immediately available without limitation to an operating entity or the entity with legal authority in a form which meets or exceeds all of the other criteria for inclusion in Tier 2 capital.			
<p>Additional criteria regarding non-viability contingent capital</p> <p>10. The contractual terms and conditions of the instrument must include a clause requiring the full and permanent conversion of the instrument into Tier 1A capital at the point of non-viability as described under the AMF's non-viability contingent capital (NVCC) requirements as specified under Section 2.4. Where an instrument is issued by a special purpose vehicle (SPV) according to criterion No.14 above,²⁹⁶ the conversion of instruments issued by the SPV to end investors should mirror the conversion of the capital issued by the institution to the SPV.</p>			

²⁹⁵ An operating entity is an entity set up to conduct business with clients with the intention of earning a profit in its own right.

²⁹⁶ Criteria for Inclusion in Tier 1B (Annex 2-I (b)).

Annex 2-II Example of the 15% of Tier 1A limit on specified items

1. This Annex is meant to clarify the calculation of the 15% limit on significant investments in Tier 1A capital of unconsolidated financial institutions (institutions, insurance entities and other financial institutions), mortgage servicing rights, and deferred tax assets arising from temporary differences.
2. The recognition of these specified items will be limited to 15% of Tier 1A capital, after the application of all deductions. To determine the maximum amount of the items that can be recognized,²⁹⁷ the institution should multiply the amount of Tier 1A capital (after all deductions, including after the deduction of the specified items in full) by 17.65% (i.e. $15\%/85\% = 17.65\%$).

As an example, take a financial institution with \$85 of Tier 1A capital (calculated net of all deductions, including after the deduction of the specified items in full). The maximum amount of specified items that can be recognized by this financial institution in its calculation of Tier 1A capital is $\$85 \times 17.65\% = \15 . Any excess above \$15 must be deducted from Tier 1A capital.

If the financial institution has specified items (excluding amounts deducted after applying the individual 10% limits) that in aggregate sum up to the 15% limit, Tier 1A capital after inclusion of the specified items, will amount to $\$85 + \$15 = \$100$. The percentage of specified items to total Tier 1A capital would equal 15%.

²⁹⁷ The actual amount that will be recognized may be lower than this maximum, either because the sum of the three specified items are below the 15% limit set out in this annex, or due to the application of the 10% limit applied to each item.

Annex 3-I Capital treatment for failed trades and non-DvP transactions

The capital treatment for failed trades and non-DvP transactions outlined in this Annex applies in addition to (i.e. it does not replace) the requirements for the transactions themselves under this Guideline.

I. Overarching principles

1. Institutions should continue to develop, implement and improve systems for tracking and monitoring the credit risk exposures arising from unsettled and failed transactions as appropriate for producing management information that facilitates action on a timely basis, pursuant to the paragraphs of Section 3.2 of the Guideline.
2. Transactions settled through a delivery-versus-payment system (DvP),²⁹⁸ providing simultaneous exchanges of securities for cash, expose institutions to a risk of loss on the difference between the transaction valued at the agreed settlement price and the transaction valued at current market price (i.e. positive current exposure). Transactions where cash is paid without receipt of the corresponding receivable (securities, foreign currencies, gold, or commodities) or, conversely, deliverables were delivered without receipt of the corresponding cash payment (non-DvP, or free-delivery) expose institutions to a risk of loss on the full amount of cash paid or deliverables delivered. The current rules set out specific capital charges that address these two kinds of exposures.
3. The following capital treatment is applicable to all transactions on securities, foreign exchange instruments, and commodities that give rise to a risk of delayed settlement or delivery. This includes transactions through recognized clearing houses and central counterparties that are subject to daily mark-to-market and payment of daily variation margins and that involve a mismatched trade.²⁹⁹ Repurchase and reverse-repurchase agreements as well as securities lending and borrowing that have failed to settle are excluded from this capital treatment.³⁰⁰
4. In cases of a system wide failure of a settlement or clearing system or a central counterparty, the AMF may use its discretion to waive capital charges until the situation is rectified.

²⁹⁸ For the purpose of the Guideline, DvP transactions include payment-versus-payment (PvP) transactions.

²⁹⁹ An exposure value of zero can be attributed to payment transactions (e.g. funds transfer transactions) and other spot transactions that are outstanding with a central counterparty (CC) (e.g. a clearing house), when the CC's counterparty credit risk exposures with all participants in its arrangements are fully collateralised on a daily basis.

³⁰⁰ All repurchase and reverse-repurchase agreements as well as securities lending and borrowing, including those that have failed to settle, are treated in accordance with Annex 3-II or the sections on credit risk mitigation (Chapter 4 of this Guideline).

5. Failure of counterparty to settle a trade in itself will not be deemed a default for purposes of credit risk under this Guideline.
6. Paragraph removed – intended for institutions that rely on the IRB approach for purposes of credit risk

II. Capital requirements

7. For DvP transactions, if the payments have not yet taken place five business days after the settlement date, institutions must calculate a capital charge by multiplying the positive current exposure of the transaction by the appropriate factor, according to the Table 1 below.

TABLE 1

Number of working days after the agreed settlement date	Corresponding risk multiplier
From 5 to 15	8%
From 16 to 30	50%
From 31 to 45	75%
46 or more	100%

A reasonable transition period may be allowed for institutions to upgrade their information system to be able to track the number of days after the agreed settlement date and calculate the corresponding capital charge.

8. For non-DvP transactions (i.e. free deliveries), after the first contractual payment/delivery leg, the institution that has made the payment will treat its exposure as a loan if the second leg has not been received by the end of the business day.³⁰¹ This means that an institution under the standardized approach will use the standardized risk weights set forth in the Guideline. However, when exposures are not material, institution may choose to apply a uniform 100% risk-weight to these exposures, in order to avoid the burden of a full credit assessment. If five business days after the second contractual payment/delivery date the second leg has not yet effectively taken place, the institution that has made the first payment leg will deduct from capital the full

³⁰¹ If the dates when two payment legs are made are the same according to the time zones where each payment is made, it is deemed that they are settled on the same day. For example, if an institution in Tokyo transfers Yen on day X (Japan Standard Time) and receives corresponding US Dollar via CHIPS on day X (US Eastern Standard Time), the settlement is deemed to take place on the same value date.

amount of the value transferred plus replacement cost, if any. This treatment will apply until the second payment/delivery leg is effectively made.

Annex 3-II Treatment of counterparty credit risk and cross-product netting

AMF Note

These paragraphs are drawn from the Basel Committee on Banking Supervision (BCBS) Basel II and Basel III frameworks, entitled: “International Convergence of Capital Measurement and Capital Standards – June 2006”, “Basel III: Revisions to the securitisation framework” – December 2014 (rev July 2016)”

1. This annex identifies the permissible method for estimating the exposure amount for instruments with counterparty credit risk (CCR),³⁰² namely, the Standardised Approach for Counterparty Credit Risk (SA-CCR).

I. Definitions and general terminology

2. This annex defines terms that will be used throughout this text.

A. General terms

- **Counterparty credit risk (CCR)** is 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 institution faces the risk of loss, CCR 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.
- **A central counterparty (CC)** is a clearing house that interposes itself between counterparties to contracts traded in one or more financial markets, becoming the buyer to every seller and the seller to every buyer and thereby ensuring the future performance of open contracts. A CC becomes counterparty to trades with market participants through novation, an open offer system, or another legally binding arrangement. For the purposes of the capital framework, a CC is a financial institution.

³⁰² In the present document, the term “exposure amount” is used in order to identify the measure of exposure under a standardized approach for credit risk.

- **A qualifying central counterparty (QCC)** is an entity that is licensed to operate as a CC (including a license granted by way of confirming an exemption), and is permitted by the appropriate regulator/overseer to operate as such with respect to the products offered. This is subject to the provision that the CC is based and prudentially supervised in a jurisdiction where the relevant regulator/overseer has established, and publicly indicated that it applies to the CC on an ongoing basis, domestic rules and regulations that are consistent with the CPSS-IOSCO Principles for Financial Market Infrastructures.

As is the case more generally, the AMF still reserves the right to require institutions in its jurisdiction to hold additional capital against their exposures to such CCs via Pillar 2. This might be appropriate where, for example, an external assessment such as an FSAP has found material shortcomings in the CC or the regulation of CCs, and the CC and/or the CC regulator have not since publicly addressed the issues identified.

Where the CC is in a jurisdiction that does not have a CC regulator applying the Principles to the CC, then the AMF may make the determination of whether the CC meets this definition.

In addition, for a CC to be considered a QCC, the terms defined in paragraphs 206 and 207 of this Annex for the purposes of calculating the capital requirements for default fund exposures must be made available or calculated in accordance with paragraph 208 of this Annex.

- **A clearing member** is a member of, or a direct participant in, a CC that is entitled to enter into a transaction with the CC, regardless of whether it enters into trades with a CC for its own hedging, investment or speculative purposes or whether it also enters into trades as a financial intermediary between the CC and other market participants.³⁰³
- **A client** is a party to a transaction with a CC through either a clearing member acting as a financial intermediary, or a clearing member guaranteeing the performance of the client to the CC.
- **Initial margin** means a clearing member's or client's funded collateral posted to the CC to mitigate the potential future exposure of the CC to the clearing member arising from the possible future

³⁰³ For the purposes of this Annex, where a CC has a link to a second CC, that second CC is to be treated as a clearing member of the first CC. Whether the second CC's collateral contribution to the first CC is treated as initial margin or a default fund contribution will depend upon the legal arrangement between the CCs. National supervisors should be consulted to determine the treatment of this initial margin and default fund contributions and such supervisors should consult and communicate with other supervisors via the "frequently asked questions" process to ensure consistency.

change in the value of their transactions. For the purposes of this Annex, initial margin does not include contributions to a CC for mutualised loss sharing arrangements (i.e. in case a CC uses initial margin to mutualise losses among the clearing members, it will be treated as a default fund exposure). Initial margin includes collateral deposited by a clearing member or client in excess of the minimum amount required, provided the CC or clearing member may, in appropriate cases, prevent the clearing member or client from withdrawing such excess collateral.

- **Variation margin** means a clearing member's or client's funded collateral posted on a daily or intraday basis to a CC based upon price movements of their transactions.
- **Trade exposures** (in Section IX) include the current³⁰⁴ and potential future exposure³⁰⁵ of a clearing member or a client to a CC arising from OTC derivatives, exchange traded derivatives transactions or SFTs, as well as initial margin.
- **Default funds**, also known as clearing deposits or guaranty fund contributions (or any other names), are clearing members funded or unfunded contributions towards, or underwriting of, a CC's mutualised loss sharing arrangements. The description given by a CC to its mutualised loss sharing arrangements is not determinative of their status as a default fund; rather, the substance of such arrangements will govern their status.
- **Offsetting transaction** means the transaction leg between the clearing member and the CC when the clearing member acts on behalf of a client (e.g. when a clearing member clears or novates a client's trade).
- A **multi-level client structure** is one in which financial institutions can centrally clear as indirect clients; that is, when clearing services are provided to the financial institution by an institution which is not a direct clearing member but is itself a client of a clearing member or another clearing client. For exposures between clients and clients of clients, we use the term "higher level client" for the institution providing clearing services; and the term "lower level client" for the institution clearing through that client.

³⁰⁴ Current and potential future exposures from the banking and the trading book.

³⁰⁵ For the purposes of this definition, the current exposure of a clearing member includes the variation margin due to the clearing member but not yet received.

B. Transaction types

- **Long settlement transactions** are transactions where a counterparty undertakes to deliver a security, a commodity, or a foreign exchange amount against cash, other financial instruments, or commodities, or vice versa, at a settlement or delivery date that is contractually specified as more than the lower of the market standard for this particular instrument and five business days after the date on which the institution enters into the transaction.
- **Securities financing transaction (SFT)** is a transaction such as repurchase agreements, reverse repurchase agreements, security lending and borrowing, and margin lending transactions, where the value of the transaction depends on market valuations and the transaction is often subject to margin agreement.
- **Margin lending transaction** is a transaction in which an institution extends credit in connection with the purchase, sale, carrying or trading of securities. Margin lending transactions do not include other loans that happen to be secured by securities collateral. Generally, in margin lending transactions, the loan amount is collateralized by securities whose value is greater than the amount of the loan.

C. Netting sets, hedging sets, and related terms

- **Netting set** is a group of transactions with a single counterparty that are subject to a legally enforceable bilateral netting arrangement and for which netting is recognized for regulatory capital purposes under paragraphs 96 (i) to 96 (v) of this Annex, this Guideline text on credit risk mitigation techniques, or the Cross-Product Netting Rules set forth in this Annex. Each transaction that is not subject to a legally enforceable bilateral netting arrangement that is recognized for regulatory capital purposes should be interpreted as its own netting set for the purpose of these rules.
- **Risk position** is a risk number that is assigned to a transaction under the CCR standardized method (set out in this Annex) using a regulatory algorithm.
- **Hedging set** is a set of transactions within a single netting set within which full or partial offsetting is recognized for the purpose of calculating the PFE add-on of the Standardised Approach for Counterparty Credit Risk.
- **Margin agreement** is a contractual agreement under which one counterparty must supply collateral to a second counterparty when an exposure of that second counterparty to the first counterparty exceeds a specified level.

- **Margin threshold** is the largest amount of an exposure that remains outstanding until one party has the right to call for collateral.
- **Margin period of risk** is the time period from the last exchange of collateral covering a netting set of transactions with a defaulting counterparty until that counterparty is closed out and the resulting market risk is re-hedged.
- **Cross-product netting** refers to the inclusion of transactions of different product categories within the same netting set pursuant to the Cross-Product Netting Rules set out in this Annex.
- **Current market value (CMV)** refers to the net market value of the portfolio of transactions within the netting set with the counterparty. Both positive and negative market values are used in computing CMV.

D. Distributions

- **Distribution of market values** is the forecast of the probability distribution of net market values of transactions within a netting set for some future date (the forecasting horizon) given the realized market value of those transactions up to the present time.
- **Distribution of exposures** is the forecast of the probability distribution of market values that is generated by setting forecast instances of negative net market values equal to zero (this takes account of the fact that, when the institution owes the counterparty money, the institution does not have an exposure to the counterparty).
- **Risk-neutral distribution** is a distribution of market values or exposures at a future time period where the distribution is calculated using market implied values such as implied volatilities.
- **Actual distribution** is a distribution of market values or exposures at a future time period where the distribution is calculated using historic or realized values such as volatilities calculated using past price or rate changes.

E. Exposure measures and adjustments

- **Current exposure** is the larger of zero, or the market value of a transaction or portfolio of transactions within a netting set with a counterparty that would be lost upon the default of the counterparty, assuming no recovery on the value of those transactions in

bankruptcy. Current exposure is often also called Replacement Cost.

- **Peak exposure** is a high percentile (typically 95% or 99%) of the distribution of exposures at any particular future date before the maturity date of the longest transaction in the netting set. A peak exposure value is typically generated for many future dates up until the longest maturity date of transactions in the netting set.
- **Expected exposure** is the mean (average) of the distribution of exposures at any particular future date before the longest-maturity transaction in the netting set matures. An expected exposure value is typically generated for many future dates up until the longest maturity date of transactions in the netting set.
- **Effective expected exposure** at a specific date is the maximum expected exposure that occurs at that date or any prior date. Alternatively, it may be defined for a specific date as the greater of the expected exposure at that date, or the effective exposure at the previous date. In effect, the Effective Expected Exposure is the Expected Exposure that is constrained to be non-decreasing over time.
- **Expected positive exposure** is the weighted average over time of expected exposures where the weights are the proportion that an individual expected exposure represents of the entire time interval. When calculating the minimum capital requirement, the average is taken over the first year or if all the contracts in the netting set mature before one year, over the time period of the longest-maturity contract in the netting set.
- **Effective expected positive exposure** is the weighted average over time of effective expected exposure over the first year, or, if all the contracts in the netting set mature before one year, over the time period of the longest-maturity contract in the netting set where the weights are the proportion that an individual expected exposure represents of the entire time interval.
- **Credit valuation adjustment** is an adjustment to the mid-market valuation of the portfolio of trades with a counterparty. This adjustment reflects the market value of the credit risk due to any failure to perform on contractual agreements with a counterparty. This adjustment may reflect the market value of the credit risk of the counterparty or the market value of the credit risk of both the institution and the counterparty.
- **One-sided credit valuation adjustment** is a credit valuation adjustment that reflects the market value of the credit risk of the counterparty to the institution, but does not reflect the market value of the credit risk of the institution to the counterparty.

- **Debit valuation adjustment** is a valuation adjustment that reflects the market value of the credit risk of the financial institution to the counterparty (i.e., changes in the reporting financial institution's own credit risk), but does not reflect the market value of the credit risk of the counterparty to the financial institution.

F. CCR-related risks

- **Rollover risk** is the amount by which expected positive exposure is understated when future transactions with a counterparty are expected to be conducted on an ongoing basis, but the additional exposure generated by those future transactions is not included in calculation of expected positive exposure.
- **General wrong-way risk** arises when the probability of default of counterparties is positively correlated with general market risk factors.
- **Specific wrong-way risk** arises when the exposure to a particular counterparty is positively correlated with the probability of default of the counterparty due to the nature of the transactions with the counterparty.

II. Scope of application

3. The method for computing the exposure amount under the standardized approach for credit risk described in this Annex is applicable to SFTs and OTC derivatives.
4. Such instruments generally exhibit the following abstract characteristics:
 - The transactions generate a current exposure or market value.
 - The transactions have an associated random future market value based on market variables.
 - The transactions generate an exchange of payments or an exchange of a financial instrument (including commodities) against payment.
 - The transactions are undertaken with an identified counterparty against which a unique probability of default can be determined.³⁰⁶
5. Other common characteristics of the transactions to be covered may include the following:

³⁰⁶ Transactions for which the probability of default is defined on a pooled basis are not included in this treatment of CCR.

- Collateral may be used to mitigate risk exposure and is inherent in the nature of some transactions.
 - Short-term financing may be a primary objective in that the transactions mostly consist of an exchange of one asset for another (cash or securities) for a relatively short period of time, usually for the business purpose of financing. The two sides of the transactions are not the result of separate decisions but form an indivisible whole to accomplish a defined objective.
 - Netting may be used to mitigate the risk.
 - Positions are frequently valued (most commonly on a daily basis), according to market variables.
 - Remargining may be employed.
6. Not applicable.
- 6i. Exposures to central counterparties arising from OTC derivatives, exchange-traded derivatives transactions, SFTs and long settlement transactions will be subject to the counterparty credit risk treatment laid out in paragraphs 188 to 211 of this Annex. Exposures arising from the settlement of cash transactions (equities, fixed income, spot FX and spot commodities) are not subject to this treatment.³⁰⁷ The settlement of cash transactions remains subject to the treatment described in Annex 3-I.
- 6ii. When the clearing member-to-client leg of an exchange-traded derivatives transaction is conducted under a bilateral agreement, both the client financial institution and the clearing member are to capitalise that transaction as an OTC derivative.³⁰⁸ This treatment also applies to transactions between lower level clients and higher level clients in a multi-level client structure.
7. Under the method identified in this Annex, when an institution purchases credit derivative protection against a banking book exposure, or against a counterparty credit risk exposure, it will determine its capital requirement for the hedged exposure subject to the criteria and general rules for the recognition of credit derivatives, i.e. substitution or double default rules as appropriate. Where these rules apply, the exposure amount for counterparty credit risk from such instruments is zero.
8. The exposure amount for counterparty credit risk is zero for sold credit default swaps in the banking book where they are treated in the Guideline as a guarantee provided by the institution and subject to a credit risk charge for the full notional amount.

³⁰⁷ For contributions to prepaid default funds covering settlement-risk-only products, the applicable risk weight is 0%.

³⁰⁸ For this purpose, the treatment in paragraph 195 would also apply.

9. Under the method identified in this Annex, the exposure amount for a given counterparty is equal to the sum of the exposure amounts calculated for each netting set with that counterparty.
10. to 19. Paragraphs removed – cross-product netting rules intended for institutions authorized by the AMF to estimate their exposures to CCR using the internal model method.
20. to 68. Paragraphs removed – intended for institutions authorized to use the internal model method to measure exposure for regulatory capital purposes.
69. to 90. Paragraphs removed – historically intended for institutions authorized to use the standardized method to measure exposure for regulatory capital purposes.
91. to 96. Paragraphs removed – historically intended for institutions authorized to use the current exposure method for regulatory capital purposes.
97. to 105. Paragraphs removed – applicable to market risk
105. to 127. Paragraphs removed – See paragraphs 192 to 211 for the latest central counterparties framework.

III. Standardised approach for counterparty credit risk

AMF Note

The following paragraphs are drawn from the Basel Committee document named The standardised approach for measuring counterparty credit risk exposure, published in March 2014.

The AMF adapts these paragraphs in this section. To avoid confusion and to make easier comparison with the imported paragraphs, the same number as Basel document is maintained.

128. Financial institutions that do not have approval to apply the Internal Model Method (IMM) for the relevant OTC transactions must use the Standardised Approach for counterparty credit risk (SA-CCR). The SA-CCR can be used only for OTC derivatives, exchange-traded derivatives and long settlement transactions;³⁰⁹ SFTs are subject to the treatments set out under the IMM of this Annex. EAD is to be calculated separately for each netting set. It is determined as follows:

$$EAD = \alpha \times (RC + PFE)$$

³⁰⁹ The EAD can be set to zero only for sold options that are outside netting and margin agreement. [BCBS FAQ No 9]

where:

alpha = 1.4

RC = the replacement cost calculated according to paragraphs 130-145 of this Annex, and

PFE = the amount for potential future exposure calculated according to paragraphs 146-187 of this Annex.

129. The replacement cost (RC) and the potential future exposure (PFE) components are calculated differently for margined and unmargined netting sets. The EAD for a margined netting set is capped at the EAD of the same netting set calculated on an unmargined basis.³¹⁰

RC and NICA

130. For unmargined transactions, the RC intends to capture the loss that would occur if a counterparty were to default and were closed out of its transactions immediately. The PFE add-on represents a potential conservative increase in exposure over a one-year time horizon from the present date (ie the calculation date).
131. For margined trades, the RC intends to capture the loss that would occur if a counterparty were to default at the present or at a future time, assuming that the closeout and replacement of transactions occur instantaneously. However, there may be a period (the margin period of risk) between the last exchange of collateral before default and replacement of the trades in the market. The PFE add-on represents the potential change in value of the trades during this time period.
132. In both cases, the haircut applicable to noncash collateral in the replacement cost formulation represents the potential change in value of the collateral during the appropriate time period (one year for unmargined trades and the margin period of risk for margined trades).
133. Replacement cost is calculated at the netting set level, whereas PFE add-ons are calculated for each asset class within a given netting set and then aggregated (see paragraphs 150-187 below).

³¹⁰ A potential anomaly relating to this capping does exist, namely in the case of margins netting sets comprising short-term transactions with a residual maturity of 10 business days or less. In this situation, the maturity factor (MF) weighting will be greater for a margined set than for a non-margined set, because of the 1.5 multiplier. That multiplier will however, be negated by the capping. The anomaly would be magnified if there were some disputes under the margin agreement, i.e. where the margin period or risk (MPOR) would be doubled to 20 days but, again, negated by the capping of an unmargined calculation. Nonetheless, this anomaly is generally expected to have no significant impact on banks' capital requirements. [BCBS FAQ No 1]

134. For capital adequacy purposes, financial institutions may net transactions (e.g. when determining the RC component of a netting set) subject to novation under which any obligation between a financial institution and its counterparty to deliver a given currency on a given value date is automatically amalgamated with all other obligations for the same currency and value date, legally substituting one single amount for the previous gross obligations. Financial institutions may also net transactions subject to any legally valid form of bilateral netting not covered in the preceding sentence, including other forms of novation. In every such case where netting is applied, a financial institution must satisfy its national supervisor that it has:

- (i) A netting contract with the counterparty or other agreement which creates a single legal obligation, covering all included transactions, such that the financial institution would have either a claim to receive or obligation to pay only the net sum of the positive and negative mark-to-market values of included individual transactions in the event a counterparty fails to perform due to any of the following: default, bankruptcy, liquidation or similar circumstances.³¹¹
- (ii) (Written and reasoned legal reviews that, in the event of a legal challenge, the relevant courts and administrative authorities would find the financial institution's exposure to be such a net amount under:
 - The law of the jurisdiction in which the counterparty is chartered and, if the foreign branch of a counterparty is involved, then also under the law of the jurisdiction in which the branch is located;
 - The law that governs the individual transactions; and
 - The law that governs any contract or agreement necessary to effect the netting.

The AMF, after consultation when necessary with other relevant supervisors, must be satisfied that the netting is enforceable under the laws of each of the relevant jurisdictions.³¹²

- (iii) Procedures in place to ensure that the legal characteristics of netting arrangements are kept under review in light of the possible changes in relevant law.

135. There are two formulations of replacement cost depending on whether the trades with a counterparty are subject to a margin agreement. Where a margin agreement exists, the formulation could apply both to bilateral transactions and

³¹¹ The netting contract must not contain any clause which, in the event of default of a counterparty, permits a non-defaulting counterparty to make limited payments only, or no payments at all, to the estate of the defaulting party, even if the defaulting party is a net creditor.

³¹² Thus, if any of these supervisors is dissatisfied about enforceability under its laws, the netting contract or agreement will not meet this condition and neither counterparty could obtain supervisory benefit.

central clearing relationships. The formulation also addresses the various arrangements that a financial institution may have to post and/or receive collateral that may be referred to as initial margin.

Formulation for unmargined transactions

136. For unmargined transactions (that is, where variation margin (VM) is not exchanged, but collateral other than VM may be present), RC is defined as the greater of: (i) the current market value of the derivative contracts less net haircut collateral held by the financial institution (if any), and (ii) zero. This is consistent with the use of replacement cost as the measure of current exposure, meaning that when the financial institution owes the counterparty money it has no exposure to the counterparty if it can instantly replace its trades and sell collateral at current market prices. Mathematically:

$$RC = \max \{V - C; 0\}$$

where:

V is the value of the derivative transactions in the netting set and C is the haircut value of net collateral held, which is calculated in accordance with the NICA methodology defined in paragraph 143 below. For this purpose, the value of non-cash collateral posted by the financial institution to its counterparty is increased and the value of the non-cash collateral received by the financial institution from its counterparty is decreased using haircuts (which are the same as those that apply to repo-style transactions) for the time periods described in paragraph 132 above.

137. In the above formulation, it is assumed that the replacement cost representing today's exposure to the counterparty cannot go less than zero. However, financial institutions sometimes hold excess collateral (even in the absence of a margin agreement) or have out-of-the-money trades which can further protect the financial institution from the increase of the exposure. As discussed in paragraphs 147-149 below, the SA-CCR would allow such over-collateralisation and negative mark-to market value to reduce PFE, but would not affect replacement cost.
138. Bilateral transactions with a one-way margining agreement in favour of the financial institution's counterparty (that is, where a financial institution posts, but does not collect, collateral) must be treated as unmargined transactions.

Formulation for margined transactions

139. The RC formula for margined transactions builds on the RC formula for unmargined transactions. It also employs concepts used in standard margining agreements, as discussed more fully below.

140. The RC for margined transactions in the SA-CCR is defined as the greatest exposure that would not trigger a call for VM, taking into account the mechanics of collateral exchanges in margining agreements.³¹³ Such mechanics include, for example, “Threshold”, “Minimum Transfer Amount” and “Independent Amount” in the standard industry documentation,³¹⁴ which are factored into a call for VM.³¹⁵ A defined, generic formulation has been created to reflect the variety of margining approaches used and those being considered by supervisors internationally.

Incorporating NICA into replacement cost

141. One objective of the SA-CCR is to more fully reflect the effect of margining agreements and the associated exchange of collateral in the calculation of CCR exposures. The following paragraphs address how the exchange of collateral is incorporated into the SA-CCR.
142. To avoid confusion surrounding the use of terms initial margin and independent amount which are used in various contexts and sometimes interchangeably, the term independent collateral amount (ICA) is introduced. ICA represents (i) collateral (other than VM) posted by the counterparty that the financial institution may seize upon default of the counterparty, the amount of which does not change in response to the value of the transactions it secures and/or (ii) the Independent Amount (IA) parameter as defined in standard industry documentation. ICA can change in response to factors such as the value of the collateral or a change in the number of transactions in the netting set.
143. Because both a financial institution and its counterparty may be required to post ICA, it is necessary to introduce a companion term, net independent collateral amount (NICA), to describe the amount of collateral that a financial institution may use to offset its exposure on the default of the counterparty. NICA does not include collateral that a financial institution has posted to a segregated, bankruptcy remote account, which presumably would be returned upon the bankruptcy of the counterparty. That is, NICA represents any collateral (segregated or unsegregated) posted by the counterparty less the unsegregated collateral posted by the financial institution. With respect to IA, NICA takes into account the differential of IA required for the financial institution minus IA required for the counterparty.

³¹³ See Annex 3-IIIb for illustrative examples of the effect of standard margin agreements on the SA-CCR formulation.

³¹⁴ For example, the 1992 (Multicurrency-Cross Border) Master Agreement and the 2002 Master Agreement published by the International Swaps & Derivatives Association, Inc. (ISDA Master Agreement). The ISDA Master Agreement includes the ISDA CSA: the 1994 Credit Support Annex (Security Interest – New York Law), or, as applicable, the 1995 Credit Support Annex (Transfer – English Law) and the 1995 Credit Support Deed (Security Interest – English Law).

³¹⁵ For example, in the ISDA Master Agreement, the term “Credit Support Amount”, or the overall amount of collateral that must be delivered between the parties, is defined as the greater of the Secured Party’s Exposure plus the aggregate of all Independent Amounts applicable to the Pledgor minus all Independent Amounts applicable to the Secured Party, minus the Pledgor’s Threshold and zero.

144. For margined trades, the replacement cost is:

$$RC = \max \{V - C; TH + MTA - NICA; 0\}$$

where V and C are defined as in the unmargined formulation, TH is the positive threshold before the counterparty must send the financial institution collateral, and MTA is the minimum transfer amount applicable to the counterparty.

145. $TH + MTA - NICA$ represents the largest exposure that would not trigger a VM call and it contains levels of collateral that need always to be maintained. For example, without initial margin or IA, the greatest exposure that would not trigger a variation margin call is the threshold plus any minimum transfer amount. In the adapted formulation, $NICA$ is subtracted from $TH + MTA$. This makes the calculation more accurate by fully reflecting both the actual level of exposure that would not trigger a margin call and the effect of collateral held and/or posted by a financial institution. The calculation is floored at zero, recognising that the financial institution may hold $NICA$ in excess of $TH + MTA$, which could otherwise result in a negative replacement cost.

PFE add-ons

146. The PFE add-on consists of (i) an aggregate add-on component, which consists of add-ons calculated for each asset class and (ii) a multiplier that allows for the recognition of excess collateral or negative mark-to-market value for the transactions. Mathematically:

$$PFE = multiplier \times AddOn^{aggregate}$$

where:

$AddOn^{aggregate}$ is the aggregate add-on component and multiplier is defined as a function of three inputs: V , C and $AddOn^{aggregate}$.

The paragraphs below describe the inputs that enter into the calculation of the add-on formulas in more detail, and set out the formula for each asset class.

Recognition of excess collateral and negative mark-to-market

147. As a general principle, over-collateralisation should reduce capital requirements for counterparty credit risk. In fact, many financial institutions hold excess collateral (i.e. collateral greater than the net market value of the derivatives contracts) precisely to offset potential increases in exposure represented by the add-on. As discussed in paragraphs 136 and 144, collateral may reduce the replacement cost component of the exposure under the SA-CCR. The PFE component also reflects the risk-reducing property of excess collateral.

148. For prudential reasons, the Basel Committee decided to apply a multiplier to the PFE component that decreases as excess collateral increases, without reaching zero (the multiplier is floored at 5% of the PFE add-on). When the collateral held is less than the net market value of the derivative contracts (“under-collateralisation”), the current replacement cost is positive and the multiplier is equal to one (i.e. the PFE component is equal to the full value of the aggregate add-on). Where the collateral held is greater than the net market value of the derivative contracts (“over-collateralisation”), the current replacement cost is zero and the multiplier is less than one (i.e. the PFE component is less than the full value of the aggregate add-on).
149. This multiplier will also be activated when the current value of the derivative transactions is negative. This is because out-of-the-money transactions do not currently represent an exposure and have less chance to go in-the-money. Mathematically:

$$multiplier = \min \left\{ 1; Floor + (1 - Floor) \times \exp \left(\frac{V - C}{2 \times (1 - Floor) \times AddOn^{aggregate}} \right) \right\}$$

Where:

exp(...) equals to the exponential function, Floor is 5%, V is the value of the derivative transactions in the netting set, and C is the haircut value of net collateral held.

Aggregation across asset classes

150. Diversification benefits across asset classes are not recognised. Instead, the respective add-ons for each asset class are simply aggregated. Mathematically:

$$AddOn^{aggregate} = \sum_a AddOn^{(a)}$$

where the sum of each asset class add-on is taken.

Allocation of derivative transactions to one or more asset classes

151. The designation of a derivative transaction to an asset class is made on the basis of its primary risk driver. Most derivative transactions have one primary risk driver, defined by its reference underlying instrument (e.g. an interest rate curve for an interest rate swap, a reference entity for a credit default swap, a foreign exchange rate for a FX call option, etc.). When this primary risk driver is clearly identifiable, the transaction will fall into one of the asset classes described above.
152. For more complex trades that may have more than one risk driver (e.g. multi-asset or hybrid derivatives), financial institutions must take sensitivities and

volatility of the underlying into account for determining the primary risk driver. The AMF may also require more complex trades to be allocated to more than one asset class, resulting in the same position being included in multiple classes. In this case, for each asset class to which the position is allocated, financial institutions must determine appropriately the sign and delta adjustment of the relevant risk driver.

General steps for calculating the add-on

153. For each transaction, the primary risk factor or factors need to be determined and attributed to one or more of the five asset classes: interest rate, foreign exchange, credit, equity or commodity. The add-on for each asset class is calculated using asset-class-specific formulas that represent a stylised Effective EPE calculation under the assumption that all trades in the asset class have zero current mark-to-market value (i.e. they are at-the-money).
154. Although the add-on formulas are asset class-specific, they have a number of features in common. To determine the add-on, transactions in each asset class are subject to adjustment in the following general steps:
- An adjusted notional amount based on actual notional or price is calculated at the trade level. For interest rate and credit derivatives, this adjusted notional amount also incorporates a supervisory measure of duration.
 - A maturity factor $MF_i^{(type)}$ reflecting the time horizon appropriate for the type of transaction is calculated at the trade level (see paragraph 164 below for details) and is applied to the adjusted notional. Two types of maturity factor are defined, one for margined transactions ($MF_i^{(margined)}$) and one for unmargined transactions ($MF_i^{(unmargined)}$).
 - A supervisory delta adjustment is made to this trade-level adjusted notional amount based on the position (long or short) and whether the trade is an option, CDO tranche or neither, resulting in an effective notional amount.
 - A supervisory factor is applied to each effective notional amount to reflect volatility.
 - The trades within each asset class are separated into hedging sets and an aggregation method is applied to aggregate all the trade-level inputs at the hedging set level and finally at the asset-class level. For credit, equity and commodity derivatives, this involves the application of a supervisory correlation parameter to capture important basis risks and diversification. Each input is described, generally and by asset class, in more detail below.

Period or date parameters: M_i , E_i , S_i and T_i

155. There are four dates³¹⁶ that appear in the SA-CCR:

- For all asset classes, the maturity M_i of a contract is the latest date when the contract may still be active. This date appears in the maturity factor defined in paragraph 164 that scales down adjusted notional for unmargined trades for all asset classes. If a derivative contract has another derivative contract as its underlying (for example, a swaption) and may be physically exercised into the underlying contract (i.e. a financial institution would assume a position in the underlying contract in the event of exercise), then maturity of the contract is the final settlement date of the underlying derivative contract.
- For interest rate and credit derivatives, the start date S_i of the time period referenced by an interest rate or credit contract. If the derivative references the value of another interest rate or credit instrument (eg swaption or bond option), the time period must be determined on the basis of the underlying instrument. This date appears in the definition of supervisory duration defined in paragraph 157.
- For interest rate and credit derivatives, the end date E_i of the time period referenced by an interest rate or credit contract. If the derivative references the value of another interest rate or credit instrument (e.g. swaption or bond option), the time period must be determined on the basis of the underlying instrument. This date appears in the definition of supervisory duration defined in paragraph 157. In addition, this date specifies the maturity category for an interest rate contract in paragraph 166.
- For options in all asset classes, the latest contractual exercise date T_i as referenced by the contract. This period shall be used for the determination of the option delta in paragraph 159.

³¹⁶ The term “dates” should be interpreted as the time period from today to the date in question and should be measured in years. [BCBS, FAQ No 2]

156. Table 1 includes example transactions and provides each transaction's related maturity M_i , start date S_i and end date E_i . In addition, the option delta in paragraph 159 depends on the latest contractual exercise date T_i (not separately shown in the table).

Instrument	M_i	S_i	E_i
Interest rate or credit default swap maturing in 10 years	10 years	0	10 years
10-year interest rate swap, forward starting in 5 years	15 years	5 years	15 years
Forward rate agreement for time period starting in 6 months and ending in 12 months	1 year ³¹⁷	0.5 years	1 year
Cash-settled European swaption referencing 5-year interest rate swap with exercise date in 6 months	0.5 year	0.5 years	5.5 years
Physically-settled European swaption referencing 5-year interest rate swap with exercise date in 6 months	5.5 years	0.5 year	5.5 years
10-year Bermudan swaption with annual exercise dates	10 years	1 year	10 years
Interest rate cap or floor specified for semi-annual interest rate with maturity 5 years	5 years	0	5 years
Option on a bond maturing in 5 years with the latest exercise date in 1 year	1 year	1 year	5 years
3-month Eurodollar futures that matures in 1 year	1 year	1 year	1.25 years
Futures on 20-year treasury bond that matures in 2 years	2 years	2 years	22 years
6-month option on 2-year futures on 20-year treasury bond	2 years	2 years	22 years

Trade-level adjusted notional (for trade i of asset class a): $d_i^{(a)}$

157. These parameters are defined at the trade level and take into account both the size of a position and its maturity dependency, if any. Specifically, the adjusted notional amounts are calculated as follows:

- For interest rate and credit derivatives, the trade-level adjusted notional is the product of the trade notional amount, converted to the domestic currency, and the supervisory duration SD_i which is given by the following formula:

$$SD_i = \frac{\exp(-0.05 \times S_i) - \exp(-0.05 \times E_i)}{0.05}$$

³¹⁷ If the payment is made at the beginning of the period, M_i should indeed be 0.5 years. [BCBS FAQ No 10]

where S_i and E_i are the start and end dates, respectively, of the time period referenced by the interest rate or credit derivative (or, where such a derivative references the value of another interest rate or credit instrument, the time period determined on the basis of the underlying instrument), floored by ten business days.³¹⁸ If the start date has occurred (e.g. an ongoing interest rate swap), S_i must be set to zero.

- For foreign exchange derivatives, the adjusted notional is defined as the notional of the foreign currency leg of the contract, converted to the domestic currency. If both legs of a foreign 10 Note there is a distinction between the time period of the underlying transaction and the remaining maturity of the derivative contract. For example, a European interest rate swaption with expiry of 1 year and the term of the underlying swap of 5 years has $S_i = 1$ year and $E_i = 6$ years. The standardised approach for measuring counterparty credit risk exposures 11 exchange derivative are denominated in currencies other than the domestic currency, the notional amount of each leg is converted to the domestic currency and the leg with the larger domestic currency value is the adjusted notional amount.
- For equity and commodity derivatives, the adjusted notional is defined as the product of the current price of one unit of the stock or commodity (e.g. a share of equity or barrel of oil) and the number of units referenced by the trade.³¹⁹

158. In many cases the trade notional amount is stated clearly and fixed until maturity. When this is not the case, financial institutions must use the following rules to determine the trade notional amount.

- For transactions with multiple payoffs that are state contingent such as digital options³²⁰ or target redemption forwards, a financial institution must calculate the trade notional amount for each state and use the largest resulting calculation.

³¹⁸ Note there is a distinction between the time period of the underlying transaction and the remaining maturity of the derivative contract. For example, a European interest rate swaption with expiry of 1 year and the term of the underlying swap of 5 years has $S_i = 1$ year and $E_i = 6$ years.

³¹⁹ For equity and commodity volatility transactions, the underlying volatility or variance referenced by the transaction should replace the unit price and contractual notional should replace the number of units. [BCBS FAQ No 6]

³²⁰ For digital options, the payoff effectively represents the maximum potential exposure on the trade, ie the fixed amount that is owed to the buyer of the option upon exercise (if the current price exceeds the strike price in the case of a digital call option). In that case, the notional amount would be the “gross up” of the payoff amount to a regulatory notional amount using the applicable supervisory weighting factor (weighted by MF and delta), resulting in a PFE equal to the Payoff Amount. For example, an FX digital option with a payoff of \$3 million, a delta of 0.6 and a residual maturity of 0.25 years would have a Notional Amount of $3m / \sqrt{(0.25) / 0.6 / 0.04} = \$250m$. [BCBS FAQ No 11]

- Where the notional is a formula of market values, the financial institution must enter the current market values to determine the trade notional amount.
- For all interest rate and credit derivatives with variable notional amounts specified by the contract, such as amortising and accreting swaps, financial institutions must use the “time weighted” average notional over the remaining life of the swap as the trade notional amount.³²¹
- Leveraged swaps must be converted to the notional of the equivalent unleveraged swap, that is, where all rates in a swap are multiplied by a factor, the stated notional must be multiplied by the factor on the interest rates to determine the trade notional amount.
- For a derivative contract with multiple exchanges of principal, the notional is multiplied by the number of exchanges of principal in the derivative contract to determine the trade notional amount.
- For a derivative contract that is structured such that on specified dates any outstanding exposure is settled and the terms are reset so that the fair value of the contract is zero, the remaining maturity equals the time until the next reset date.

Supervisory delta adjustments: δ_i

159. These parameters are also defined at the trade level and are applied to the adjusted notional amounts to reflect the direction of the transaction and its non-linearity. More specifically, the delta adjustments for all derivatives are defined as follows:

δ_i	Long in the primary risk factor ³²²	Short in the primary risk factor ³²³
Instruments that are not options or CDO tranches	+1	-1

³²¹ [BCBS FAQ No 12]

³²² “Long in the primary risk factor” means that the market value of the instrument increases when the value of the primary risk factor increases.

³²³ “Short in the primary risk factor” means that the market value of the instrument decreases when the value of the primary risk factor increases.

δ_i	Purchased	Sold
Call options ³²⁴	$+\Phi\left(\frac{\ln(P_i/K_i)+0.5 \times \sigma_i^2 \times T_i}{\sigma_i \times \sqrt{T_i}}\right)$	$-\Phi\left(\frac{\ln(P_i/K_i)+0.5 \times \sigma_i^2 \times T_i}{\sigma_i \times \sqrt{T_i}}\right)$
Put options	$-\Phi\left(-\frac{\ln(P_i/K_i)+0.5 \times \sigma_i^2 \times T_i}{\sigma_i \times \sqrt{T_i}}\right)$	$+\Phi\left(-\frac{\ln(P_i/K_i)+0.5 \times \sigma_i^2 \times T_i}{\sigma_i \times \sqrt{T_i}}\right)$

With the following parameters that financial institutions must determine approximately:

P_i : Underlying price (spot, forward, average, etc.)

K_i : Strike price

T_i : Latest contractual exercise date of the option

The supervisory volatility σ_i of an option is specified on the basis of supervisory factor applicable to the trade (see Table 2 in paragraph 183).

δ_i	Purchased (long protection)	Sold (short protection)
CDO tranches	$+\frac{15}{(1+14 \times A_i) \times (1+14 \times D_i)}$	$-\frac{15}{(1+14 \times A_i) \times (1+14 \times D_i)}$

With the following parameters that financial institutions must determine approximately:

A_i : Attachment point of the CDO tranche

D_i : Detachment point of the CDO tranche

Whenever appropriate, the forward (rather than spot) value of the underlying in the supervisory delta adjustments formula should be used in order to account for the risk-free rate as well as for possible cash flows prior to the option expiry (such as dividends).

For cases where the term P/K is either zero or negatives such that the term $\ln(P/K)$ cannot be computed, the following adjustments should be made:

- institutions must incorporate a shift in the price value and strike value by adding λ , where λ represents the presumed lowest possible extent to which interest rates in the respective currency can become negative³²⁵. Therefore, the Delta δ_i for a transaction i in such cases is calculated as:

³²⁴ The symbol Φ in these equations represents the standard normal cumulative distribution function.

³²⁵ This assumes for the strike price that $K_i + \lambda_j$ is also greater than zero, otherwise a greater value needs to be chosen for λ_j . λ adjustment values which are unique to each currency.

Call Options	$+\Phi\left(\frac{\ln\left(\frac{(P_i+\lambda_j)}{(K_i+\lambda_j)}\right)+0.5*\sigma_i^2*T_i}{\sigma_i*\sqrt{T_i}}\right)$	$-\Phi\left(\frac{\ln\left(\frac{(P_i+\lambda_j)}{(K_i+\lambda_j)}\right)+0.5*\sigma_i^2*T_i}{\sigma_i*\sqrt{T_i}}\right)$
Put Options	$-\Phi\left(\frac{-\ln\left(\frac{(P_i+\lambda_j)}{(K_i+\lambda_j)}\right)-0.5*\sigma_i^2*T_i}{\sigma_i*\sqrt{T_i}}\right)$	$+\Phi\left(\frac{-\ln\left(\frac{(P_i+\lambda_j)}{(K_i+\lambda_j)}\right)-0.5*\sigma_i^2*T_i}{\sigma_i*\sqrt{T_i}}\right)$

The same parameter must be used consistently for all interest rate options in the same currency. Institutions should select a value of λ_j , which is low but still gives a positive $K_i+\lambda_j$ value.

Supervisory factors: $SF_i^{(a)}$

160. A factor or factors specific to each asset class is used to convert the effective notional amount into Effective EPE based on the measured volatility of the asset class. Each factor has been calibrated to reflect the Effective EPE of a single at-the-money linear trade of unit notional and one-year maturity. This includes the estimate of realised volatilities assumed by supervisors for each underlying asset class.

Hedging sets

161. The hedging sets in the different asset classes are defined as follows, except for those described in paragraphs 162 and 163.
- Interest rate derivatives consist of a separate hedging set for each currency
 - FX derivatives consist of a separate hedging set for each currency pair
 - Credit derivatives consist of a single hedging set
 - Equity derivatives consist of a single hedging set
 - Commodity derivatives consist of four hedging sets defined for broad categories of commodity derivatives: energy, metals, agricultural and other commodities.
162. Derivatives that reference the basis between two risk factors and are denominated in a single currency³²⁶ (basis transactions) must be treated within separate hedging sets within the corresponding asset class. There is a separate hedging set³²⁷ for each pair of risk factors (i.e. for each specific basis).

³²⁶ Derivatives with two floating legs that are denominated in different currencies (such as cross-currency swaps) are not subject to this treatment; rather, they should be treated as non-basis foreign exchange contracts.

³²⁷ Within this hedging set, long and short positions are determined with respect to the basis.

Examples of specific bases include three-month Libor versus six-month Libor, three-month Libor versus three-month T-Bill, one-month Libor versus OIS rate, Brent Crude oil versus Henry Hub gas. For hedging sets consisting of basis transactions, the supervisory factor applicable to a given asset class must be multiplied by one-half (0.5). Basket equity derivatives comprised of ten (10) or less effective constituents³²⁸ may be decomposed into their underlying constituents. Baskets comprised of more than ten (10) effective constituents should be treated as indices.

163. Derivatives that reference the volatility of a risk factor (volatility transactions) must be treated within separate hedging sets within the corresponding asset class. Volatility hedging sets must follow the same hedging set construction outlined in paragraph 161 (for example, all equity volatility transactions form a single hedging set). Examples of volatility transactions include variance and volatility swaps, options on realised or implied volatility. For hedging sets consisting of volatility transactions, the supervisory factor applicable to a given asset class must be multiplied by a factor of five.

For equity and commodity volatility transactions, the underlying volatility or variance referenced by the transaction should replace the unit price and contractual notional should replace the number of units.

Time Risk Horizons

164. The minimum time risk horizons for the SA-CCR include:
- The lesser of one year and remaining maturity of the derivative contract for unmargined transactions, floored at ten business days.³²⁹ Therefore, the adjusted notional at the trade level of an unmargined transaction must be multiplied by:

$$MF_i^{(\text{unmargined})} = \sqrt{\frac{\min\{M_i; 1 \text{ year}\}}{1 \text{ year}}}$$

Where:

M_i is the transaction i remaining maturity floored by 10 business days.³³⁰

³²⁸ Number of effective constituents = $(\sum (\text{share price}_i \times \text{number of shares}_i))^2 / \sum (\text{share price}_i \times \text{number of shares}_i)^2$

³²⁹ For example, remaining maturity for a one-month option on a 10-year Treasury bond is the one-month to expiration date of the derivative contract. However, the end date of the transaction is the 10-year remaining maturity on the Treasury bond.

³³⁰ The units of the numerator and denominator of the calculation must be consistent. For example, if MPOR and “M” are measured in business days, then the denominator must also be expressed in business days. If MPOR and “M” are measures in years, then “1 year” is literally 1. [BCBS FAQ No 4]

- For margined transactions, the minimum margin period of risk is determined as follows:³³¹
 - at least ten business days for non-centrally-cleared derivative transactions subject to daily margin agreements;
 - five business days for centrally cleared derivative transactions subject to daily margin agreements that clearing members have with their clients;
 - twenty business days for netting sets consisting of 5,000 transactions that are not with a central counterparty;
 - Doubling the margin period of risk for netting sets with outstanding disputes consistent with paragraph 41(ii) of this Annex.³³²

Therefore, the adjusted notional at the trade level of a margined transaction should be multiplied by:

$$MF_i^{(\text{unmargined})} = \frac{3}{2} \sqrt{\frac{MPOR_i}{1 \text{ year}}}$$

where $MPOR_i$ is the margin period of risk appropriate for the margin agreement containing the transaction i.

Supervisory correlation parameters: $\rho_i^{(a)}$

165. These parameters only apply to the PFE add-on calculation for equity, credit and commodity derivatives. For these asset classes, the supervisory correlation parameters are derived from a single factor model and specify the weight between systematic and idiosyncratic components. This weight determines the degree of offset between individual trades, recognising that imperfect hedges provide some, but not perfect, offset. Supervisory correlation parameters do not apply to interest rate and foreign exchange derivatives.

Add-on for interest rate derivatives

166. The add-on for interest rate derivatives captures the risk of interest rate derivatives of different maturities being imperfectly correlated. To address this risk, the SA-CCR divides interest rate derivatives into maturity categories (also referred to as “buckets”) based on the end date (as described in

³³¹ The standard extends to SA-CCR the minimum MPOR rules specified for the IMM. Thus, the criteria relating to illiquid collateral or illiquid transactions also apply to the SA-CCR. [BCBS FAQ No 3]

³³² See paragraphs 41(i), 41(ii) and 111, which were introduced via Basel III and the capital requirements for bank exposures to central counterparties, for circumstances requiring an extended margin period of risk.

paragraphs 155 and 157) of the transactions. The three relevant maturity categories are: less than one year, between one and five years and more than five years. The SA-CCR allows full recognition of offsetting positions within a maturity category. Across maturity categories, the SA-CCR recognises partial offset.

167. The add-on for interest rate derivatives is the sum of the add-ons for each hedging set of interest rates derivatives transacted with a counterparty in a netting set. The add-on for a hedging set of interest rate derivatives is calculated in two steps.
168. In the first step, the effective notional $D_{jk}^{(IR)}$ is calculated for time bucket k of hedging set (i.e. currency) j according to:

$$D_{jk}^{(IR)} = \sum_{i \in \{Ccy_j, MB_k\}} \delta_i \times d_i^{(IR)} \times MF_i^{(type)}$$

where notation $i \in \{Ccy_j, MB_k\}$ refers to trades of currency j that belong to maturity bucket k.

That is, the effective notional for each time bucket and currency is the sum of the trade-level adjusted notional amounts (paragraphs 157-158) multiplied by the supervisory delta adjustments (paragraph 159) and the maturity factor (paragraph 164).

169. In the second step, aggregation across maturity buckets for each hedging set is calculated according to the following formula:³³³

$$EffectiveNotional_j^{(IR)} = \left[\left(D_{j1}^{(IR)} \right)^2 + \left(D_{j2}^{(IR)} \right)^2 + \left(D_{j3}^{(IR)} \right)^2 + 1.4 \times D_{j1}^{(IR)} \times D_{j2}^{(IR)} + 1.4 \times D_{j2}^{(IR)} \times D_{j3}^{(IR)} + 0.6 \times D_{j1}^{(IR)} \times D_{j3}^{(IR)} \right]^{\frac{1}{2}}$$

The hedging set level add-on is calculated as the product of the effective notional and the interest rate supervisory factor:

$$AddOn_j^{(IR)} = SF_j^{(IR)} \times EffectiveNotional_j^{(IR)}$$

Aggregation across hedging sets is performed via simple summation:

$$AddOn^{(IR)} = \sum_j AddOn_j^{(IR)}$$

³³³ Banks may choose not to recognise offset across maturity buckets. In this case, the relevant formula is:

$$EffectiveNotional_j^{(IR)} = |D_{j1}^{(IR)}| + |D_{j2}^{(IR)}| + |D_{j3}^{(IR)}|.$$

Add-on for foreign exchange derivatives

170. The add-on formula for foreign exchange derivatives shares many similarities with the add-on formula for interest rates. Similar to interest rate derivatives, the effective notional of a hedging set is defined as the sum of all the trade-level adjusted notional amounts multiplied by their supervisory delta. The add-on for a hedging set is the product of:

- The absolute value of its effective notional amount; and
- The supervisory factor (same for all FX hedging sets).

171. In the case of foreign exchange derivatives, the adjusted notional amount is maturity-independent and given by the notional of the foreign currency leg of the contract, converted to the domestic currency. Mathematically:

$$AddOn^{(FX)} = \sum_j AddOn_{HS_j}^{(FX)}$$

where the sum is taken over all the hedging sets HS_j included in the netting set. The add-on and the effective notional of the hedging set HS_j are respectively given by:

$$AddOn_{HS_j}^{(FX)} = SF_j^{(FX)} \times \left| EffectiveNotional_j^{(FX)} \right|$$

$$EffectiveNotional_j^{(FX)} = \sum_{i \in HS_j} \delta_i \times d_i^{(FX)} \times MF_i^{(type)}$$

where $i \in HS_j$ refers to trades of hedging set HS_j . That is, the effective notional for each currency pair is the sum of the trade-level adjusted notional amounts (paragraphs 157-158) multiplied by the supervisory delta adjustments (paragraph 159) and the maturity factor (paragraph 164).

Add-on for credit derivatives

172. There are two levels of offsetting benefits for credit derivatives. First, all credit derivatives referencing the same entity (either a single entity or an index) are allowed to offset each other fully to form an entity-level effective notional amount:

$$EffectiveNotional_k^{(Credit)} = \sum_{i \in Entity_k} \delta_i \times d_i^{(Credit)} \times MF_i^{(type)}$$

where $i \in Entity_k$ refers to trades of entity k. That is, the effective notional for each entity is the sum of the trade-level adjusted notional amounts (cf. paragraphs 157-158) multiplied by the supervisory delta adjustments (cf. paragraph 159) and the maturity factor (cf. paragraph 164).

The add-on for all the positions referencing this entity is defined as the product of its effective notional amount and the supervisory factor $SF_k^{(Credit)}$, i.e.:

$$AddOn(Entropy_k) = SF_k^{(Credit)} \times EffectiveNotional_k^{(Credit)}$$

For single name entities, $SF_k^{(Credit)}$ is determined by the reference name's credit rating. For index entities, $SF_k^{(Credit)}$ is determined by whether the index is investment grade or speculative grade.

Second, all the entity-level add-ons are grouped within a single hedging set (except for basis and volatility transactions) in which full offsetting between two different entity-level add-ons is not permitted. Instead, a single-factor model has been used to allow partial offsetting between the entity-level add-ons by dividing the risk of the credit derivatives asset class into a systematic component and an idiosyncratic component.

173. The entity-level add-ons are allowed to offset each other fully in the systematic component; whereas, there is no offsetting benefit in the idiosyncratic component. These two components are weighted by a correlation factor which determines the degree of offsetting/hedging benefit within the credit derivatives asset class. The higher the correlation factor, the higher the importance of the systemic component, hence the higher the degree of offsetting benefits. Derivatives referencing credit indices are treated as though they were referencing single names, but with a higher correlation factor applied. Mathematically:

$$AddOn^{(Credit)} = \left[\left(\sum_k \rho_k^{(Credit)} \times AddOn(Entropy_k) \right)^2 + \sum_k \left(1 - (\rho_k^{(Credit)})^2 \right) \times (AddOn(Entropy_k))^2 \right]^{\frac{1}{2}}$$

where $\rho_k^{(Credit)}$ is the appropriate correlation factor corresponding to the Entity k.

174. It should be noted that a higher or lower correlation does not necessarily mean a higher or lower capital charge. For portfolios consisting of long and short credit positions, a high correlation factor would reduce the charge. For portfolios consisting exclusively of long positions (or short positions), a higher correlation factor would increase the charge. If most of the risk consists of systematic risk, then individual reference entities would be highly correlated and long and short positions should offset each other. If, however, most of the risk is idiosyncratic to a reference entity, then individual long and short positions would not be effective hedges for each other.
175. The use of a single hedging set for credit derivatives implies that credit derivatives from different industries and regions are equally able to offset the systematic component of an exposure, although they would not be able to offset

the idiosyncratic portion. This approach recognises that meaningful distinctions between industries and/or regions are complex and difficult to analyse for global conglomerates.

Add-on for equity derivatives

176. The add-on formula for equity derivatives shares many similarities with the add-on formula for credit derivatives. The approach also uses a single factor model to divide the risk into a systematic component and an idiosyncratic component for each reference entity (a single entity or an index). Derivatives referencing equity indices are treated as though they were referencing single entities, but with a higher correlation factor used for the systematic component. Offsetting is allowed only for the systematic components of the entity-level add-ons, while full offsetting of transactions within the same reference entity is permitted. The entity-level add-ons are proportional to the product of two items: the effective notional amount of the entity (similar to credit derivatives) and the supervisory factor appropriate to the entity.
177. The calibration of the supervisory factors for equity derivatives rely on estimates of the market volatility of equity indices, with the application of a conservative beta factor³³⁴ to translate this estimate into an estimate of individual volatilities. Financial institutions are not permitted to make any modelling assumptions in the calculation of the PFE add-ons, including estimating individual volatilities or taking publicly available estimates of beta. This is a pragmatic approach to ensure a consistent implementation across jurisdictions but also to keep the add-on calculation relatively simple and prudent. Therefore, only two values of supervisory factors have been defined for equity derivatives, one for single entities and one for indices. In summary, the formula is as follows:

$$AddOn^{(Equity)} = \left[\left(\sum_k \rho_k^{(Equity)} \times AddOn(Entropy_k) \right)^2 + \sum_k \left(1 - (\rho_k^{(Equity)})^2 \right) \times (AddOn(Entropy_k))^2 \right]^{\frac{1}{2}}$$

where $\rho_k^{(Equity)}$ is the appropriate correlation factor corresponding to the entity k. The add-on for all the positions referencing entity k and its effective notional are given by:

$$AddOn(Entropy_k) = SF_k^{(Equity)} \times EffectiveNotional_k^{(Equity)}$$

And

³³⁴ The beta of an individual equity measures the volatility of the stock relative to a broad market index. A value of beta greater than one means the individual equity is more volatile than the index. The greater the beta is, the more volatile the stock. The beta is calculated by running a linear regression of the stock on the broad index.

$$EffectiveNotional_k^{(Equity)} = \sum_{i \in Entity_k} \delta_i \times d_i^{(Equity)} \times MF_i^{(type)}$$

where $i \in Entity_k$ refers to trades of entity k. That is, the effective notional for each entity is the sum of the trade-level adjusted notional amounts (cf. paragraphs 157-158) multiplied by the supervisory delta adjustments (cf. paragraph 159) and the maturity factor (cf. paragraph 164).

Add-on for commodity derivatives

178. The add-on for the asset class is given by:

$$AddOn^{(Com)} = \sum_j AddOn_{HS_j}^{(Com)}$$

where the sum is taken over all hedging sets.

179. Within each hedging set, a single factor model is used to divide the risk of the same type of commodities into a systematic component and an idiosyncratic component, consistent with the approach taken for credit and equity derivatives. Full offsetting/hedging benefits is allowed between all derivative transactions referencing the same type of commodity, forming a commodity type-level effective notional. Partial offsetting/hedging benefits is allowed within each hedging set between the same type of commodities (supervisory correlation factors are defined for each) while no offsetting/hedging benefits is permitted between hedging sets. In summary, we have:

$$AddOn_{HS_j}^{(Com)} = \left[\left(\rho_j^{(Com)} \times \sum_k AddOn(Type_k^j) \right)^2 + \left(1 - (\rho_j^{(Com)})^2 \right) \times \sum_k \left(AddOn(Type_k^j) \right)^2 \right]^{\frac{1}{2}}$$

where $\rho_j^{(Com)}$ is the appropriate correlation factor corresponding to the hedging set j. The add-on and the effective notional of the commodity type k are respectively given by:

$$AddOn(Type_k^j) = SF_{Type_k^j}^{(Com)} \times EffectiveNotional_k^{(Com)}$$

and

$$EffectiveNotional_k^{(Com)} = \sum_{i \in Type_k^j} \delta_i \times d_i^{(Com)} \times MF_k^{(type)}$$

where $i \in Type_k^j$ refers to trades of commodity type k in hedging set j. That is, the effective notional for each commodity type is the sum of the trade-level adjusted notional amounts (paragraph 157-158) multiplied by the supervisory delta adjustments (paragraph 159) and the maturity factor (paragraph 164).

180. This approach assumes that the four broad categories of commodity derivatives cannot be used to hedge one another (eg a forward contract on crude oil cannot hedge a forward contract on corn). However, within each category, the different commodity types are more likely to demonstrate some stable, meaningful joint dynamics.
181. Defining individual commodity types is operationally difficult. In fact, it is impossible to fully specify all relevant distinctions between commodity types so that all basis risk is captured. For example crude oil could be a commodity type within the energy hedging set, but in certain cases this definition could omit a substantial basis risk between different types of crude oil (West Texas Intermediate, Brent, Saudi Light, etc).
182. Commodity type hedging sets have been defined without regard to characteristics such as location and quality. For example, the energy hedging set contains commodity types such as crude oil, electricity, natural gas and coal. However, national supervisors may require financial institutions to use more refined definitions of commodities when they are significantly exposed to the basis risk of different products within those commodity types.
183. Table 2 includes the supervisory factors, correlations and supervisory option volatility add-ons for each asset class and subclass.

TABLE 2
Summary table of supervisory parameters

Asset class	Subclass	Supervisory factor	Correlation	Supervisory option volatility
Interest rate		0.50%	N/A	50%
Foreign exchange		4.0%	N/A	15%
Credit, single name	AAA	0.38%	50%	100%
	AA	0.38%	50%	100%
	A	0.42%	50%	100%
	BBB	0.54%	50%	100%
	BB	1.06%	50%	100%
	B	1.6%	50%	100%

Asset class	Subclass	Supervisory factor	Correlation	Supervisory option volatility
	CCC	6.0%	50%	100%
Credit, index	IG	0.38%	80%	80%
	SG	1.06%	80%	80%
Equity, single name		32%	50%	120%
Equity, index		20%	50%	75%
Commodity	Electricity	40%	40%	150%
	Oil/gas	18%	40%	70%
	Metals	18%	40%	70%
	Agricultural	18%	40%	70%
	Other	18%	40%	70%

For credit derivatives where the institution is the protection seller and that are outside netting and margin agreements, the EAD may be capped to the amount of unpaid premiums. Institutions have the option to remove such credit derivatives from their legal netting sets and treat them as individual un-margined transactions in order to apply the cap. For add-on factors, refer to Table 2 above.

First-to-default, second-to-default and subsequent-to-default transactions should be treated as CDO tranches under SA-CCR. For a n th-to-default transaction on a pool of m reference names, institutions must use an attachment point of $A=(n-1)/m$ and a detachment point of $D=n/m$ in order to calculate the supervisory delta formula set out in paragraph 159 of this chapter³³⁵.

184. For a basis transaction hedging set, the supervisory factor applicable to its relevant asset class must be multiplied by one-half. For a volatility transaction hedging set, the supervisory factor applicable to its relevant asset class must be multiplied by a factor of five.

Treatment of multiple margin agreements and multiple netting sets

185. If multiple margin agreements apply to a single netting set, the netting set must be divided into sub-netting sets that align with their respective margin agreement. This treatment applies to both RC and PFE components.

If multiple Credit Support Annex (CSAs) apply to an individual netting set (for example: one [CSA] for VM and one for Initial Margin [IM]), all collateral collected against the netting set in question can be used to offset exposures as

³³⁵ CBCB, QFP, mars 2018, section 3.2.

if it were collected in a single netting set, provided the institution has performed sufficient legal review to ensure the requirements of paragraph 134 are satisfied.

186. If a single margin agreement applies to several netting sets, special treatment is necessary because it is problematic to allocate the common collateral to individual netting sets. The replacement cost at any given time is determined by the sum of two terms. The first term is equal to the unmargined current exposure of the financial institution to the counterparty aggregated across all netting sets within the margin agreement reduced by the positive current net collateral (ie collateral is subtracted only when the financial institution is a net holder of collateral). The second term is non-zero only when the financial institution is a net poster of collateral: it is equal to the current net posted collateral (if there is any) reduced by the unmargined current exposure of the counterparty to the financial institution aggregated across all netting sets within the margin agreement. Net collateral available to the financial institution should include both VM and NICA. Mathematically, RC for the entire margin agreement is:

$$RC_{MA} = \max \left\{ \sum_{NS \in MA} \max \{V_{NS}; 0\} - \max \{C_{MA}; 0\}; 0 \right\} + \max \left\{ \sum_{NS \in MA} \min \{V_{NS}; 0\} - \min \{C_{MA}; 0\}; 0 \right\}$$

where the summation $NS \in MA$ is across the netting sets covered by the margin agreement (hence the notation), V_{NS} is the current mark-to-market value of the netting set NS and C_{MA} is the cash equivalent value of all currently available collateral under the margin agreement.³³⁶

Eligible collateral taken outside a netting set, which is available to a institution to offset losses due to counterparty default on more than one netting set, should be treated as collateral taken under a margin agreement applicable to multiple netting sets. If eligible collateral is available to offset losses on non-derivative exposures as well as exposures determined using the SA-CCR, only that portion of the collateral assigned to the derivatives may be used to reduce the derivatives exposure.

187. Where a single margin agreement applies to several netting sets as described in paragraph 186, collateral will be exchanged based on mark-to-market values that are netted across all transactions covered under the margin agreement, irrespective of netting sets. That is, collateral exchanged on a net basis may not be sufficient to cover PFE.

In this situation, therefore, the PFE add-on must be calculated according to the unmargined methodology. Netting set-level PFEs are then aggregated. Mathematically:

³³⁶ Paragraph 186 has been amended by BCBS FAQ p. 5.

$$PFE_{MA} = \sum_{NS \in MA} PFE_{NS}^{(\text{unmargined})}$$

where $PFE_{NS}^{(\text{unmargined})}$ is the PFE add-on for the netting set NS calculated according to the unmargined requirements.

IV. Central Counterparties

AMF Note

The following paragraphs are drawn from the Basel Committee document named Capital requirements for institution exposures to central counterparties published in April 2014.

The AMF adapts these paragraphs in this section. To avoid confusion and to make easier comparison with the imported paragraphs, the same number as Basel document is maintained.

188. Regardless of whether a CC is classified as a QCC, a financial institution retains the responsibility to ensure that it maintains adequate capital for its exposures. Under Pillar 2 of Basel II, a financial institution should consider whether it might need to hold capital in excess of the minimum capital requirements if, for example, (i) its dealings with a CC give rise to more risky exposures or (ii) where, given the context of that financial institution's dealings, it is unclear that the CC meets the definition of a QCC.
189. Where the financial institution is acting as a clearing member, the financial institution should assess through appropriate scenario analysis and stress testing whether the level of capital held against exposures to a CC adequately addresses the inherent risks of those transactions. This assessment will include potential future or contingent exposures resulting from future drawings on default fund commitments, and/or from secondary commitments to take over or replace offsetting transactions from clients of another clearing member in case of this clearing member defaulting or becoming insolvent.
190. A financial institution must monitor and report to senior management and the appropriate committee of the Board on a regular basis all of its exposures to CCs, including exposures arising from trading through a CC and exposures arising from CC membership obligations such as default fund contributions.
191. Where a financial institution is clearing derivative, SFT and/or long settlement transactions through a Qualifying CC (QCC) as defined in this Annex, Section I, A. General Terms, then paragraphs 192 to 209 of this Annex will apply. In the case of non-qualifying CCs, paragraphs 210 and 211 of this Annex will apply. Within three months of a central counterparty ceasing to qualify as a QCC, unless a financial institution's national supervisor requires otherwise, the trades with a former QCC may continue to be capitalised as though they are with a QCC. After that time, the financial institution's exposures with such a central

counterparty must be capitalised according to paragraphs 210 and 211 of this Annex.

Exposures to Qualifying CCs

A. Trade exposures

(i) Clearing member exposures to CCs

192. Where a financial institution acts as a clearing member of a CC for its own purposes, a risk weight of 2% must be applied to the financial institution's trade exposure to the CC in respect of OTC derivatives, exchange-traded derivative transactions, SFTs and long-settlement transactions. Where the clearing member offers clearing services to clients, the 2% risk weight also applies to the clearing member's trade exposure to the CC that arises when the clearing member is obligated to reimburse the client for any losses suffered due to changes in the value of its transactions in the event that the CC defaults. The risk weight applied to collateral posted to the CC by the financial institution must be determined in accordance with paragraphs 200-202.
193. The exposure amount for such trade exposure is to be calculated in accordance with this Annex using the IMM³³⁷, or the Standardised Approach for counterparty credit risk (SA-CCR), as consistently applied by such financial institution to such an exposure in the ordinary course of its business³³⁸, or Chapter 4 together with credit risk mitigation techniques set forth in Basel II for collateralised transactions.³³⁹

The 20-day floor for the margin period of risk (MPOR) as established in the first bullet point of paragraph 41(i) dealing with the number of transactions will not apply, provided that the netting set does not contain illiquid collateral or exotic trades and provided there are no disputed trades. This refers to exposure calculations under the IMM and the SA-CCR as well as for the holding periods entering the exposure calculation of repo-style transactions in paragraphs 147 and 181 of Chapter 4.

In all cases, a minimum MPOR of 10 days must be used for the calculation of trade exposures to CCs for OTC derivatives.

³³⁷ Changes to IMM introduced in Basel III also apply for these purposes.

³³⁸ Where the firm's internal model permission does not specifically cover centrally cleared products, the IMM scope would have to be extended to cover these products (even where the non-centrally cleared versions are included in the permission). Usually, national supervisors have a well-defined model approval/change process by which IMM firms can extend the products covered within their IMM scope. The introduction of a centrally cleared version of a product within the existing IMM scope must be considered as part of such a model change process, as opposed to a natural extension.

³³⁹ In particular, see Sections 4.1.3 and 4.2.1 of the Guidelines for OTC derivatives and standard supervisory haircuts or own estimates for haircuts, respectively; and for SFTs, see paragraph 178 of Section 4.2.4 for simple VaR model.

Where CCs retain variation margin against certain trades (eg where CCs collect and hold variation margin against positions in exchange-traded or OTC forwards), and the member collateral is not protected against the insolvency of the CC, the minimum time risk horizon applied to financial institutions' trade exposures on those trades must be the lesser of one year and the remaining maturity of the transaction, with a floor of 10 business days.

194. Where settlement is legally enforceable on a net basis in an event of default and regardless of whether the counterparty is insolvent or bankrupt, the total replacement cost of all contracts relevant to the trade exposure determination can be calculated as a net replacement cost if the applicable close-out netting sets meet the requirements set out in:
- Paragraphs 173 and, where applicable, also 174 of Section 4.1.3 of the Guideline in the case of repo-style transactions,
 - Paragraph 134 of this Annex in the case of derivative transactions, and
 - Paragraphs 10 to 19 of this Annex in the case of cross-product netting.

To the extent that the rules referenced above include the term “master agreement” or the phrase “a netting contract with a counterparty or other agreement”, this terminology must be read as including any enforceable arrangement that provides legally enforceable rights of set-off³⁴⁰. If the financial institution cannot demonstrate that netting agreements meet these requirements, each single transaction will be regarded as a netting set of its own for the calculation of trade exposure.

(ii) Clearing member exposures to clients

195. The clearing member will always capitalise its exposure (including potential CVA risk exposure) to clients as bilateral trades, irrespective of whether the clearing member guarantees the trade or acts as an intermediary between the client and the CC. However, to recognise the shorter close-out period for cleared client transactions, clearing members can capitalise the exposure to their clients applying a margin period of risk of at least five days in IMM or SA-CCR³⁴¹.
196. If a clearing member collects collateral from a client for client cleared trades and this collateral is passed on to the CC, the clearing member may recognise this collateral for both the CC-clearing member leg and the clearing member-client leg of the client cleared trade. Therefore, initial margin posted by clients to their

³⁴⁰ This is to take account of the fact that netting arrangements for CCs are not as standardised as those for OTC netting agreements in the context of bilateral trading; however, netting is generally provided for in CC rules.

³⁴¹ The reduced EAD should also be used for the calculation of both the Advanced and Standardised CVA capital charge.

clearing member mitigates the exposure the clearing member has against these clients. The same treatment applies, in an analogous fashion, to multi-level client structures (between a higher level client and a lower level client).

(iii) Client exposures

197. Where a financial institution is a client of a clearing member, and enters into a transaction with the clearing member acting as a financial intermediary (ie the clearing member completes an offsetting transaction with a CC), the client's exposures to the clearing member may receive the treatment in paragraphs 192 to 194 of this Annex if the two conditions below are met. Likewise, where a client enters into a transaction with the CC, with a clearing member guaranteeing its performance, the client's exposures to the CC may receive the treatment in paragraph 192 to 194 if the conditions in (a) and (b) below are met.

The treatment in paragraph 192 to 194 may also apply to exposures of lower level clients to higher level clients in a multi-level client structure, provided that for all client levels in-between the conditions in (a) and (b) below are met.

- a) The offsetting transactions are identified by the CC as client transactions and collateral to support them is held by the CC and/or the clearing member, as applicable, under arrangements that prevent any losses to the client due to: (i) the default or insolvency of the clearing member, (ii) the default or insolvency of the clearing member's other clients, and (iii) the joint default or insolvency of the clearing member and any of its other clients³⁴².

The client must have conducted a sufficient legal review (and undertake such further review as necessary to ensure continuing enforceability) and have a well-founded basis to conclude that, in the event of legal challenge, the relevant courts and administrative authorities would find that such arrangements mentioned above would be legal, valid, binding and enforceable under the relevant laws of the relevant jurisdiction(s).

- b) Relevant laws, regulation, rules, contractual, or administrative arrangements provide that the offsetting transactions with the defaulted or insolvent clearing member are highly likely to continue to be indirectly transacted through the CC, or by the CC, if the clearing member defaults or becomes insolvent³⁴³. In such circumstances, the client positions and

³⁴² That is, upon the insolvency of the clearing member, there is no legal impediment (other than the need to obtain a court order to which the client is entitled) to the transfer of the collateral belonging to clients of a defaulting clearing member to the CC, to one or more other surviving clearing members or to the client or the client's nominee. National supervisors should be consulted to determine whether this is achieved based on particular facts and such supervisors should consult and communicate with other supervisors via the "frequently asked questions" process to ensure consistency.

³⁴³ If there is a clear precedent for transactions being ported at a CC and industry intent for this practice to continue, then these factors must be considered when assessing if trades are highly likely to be ported. The fact that CC documentation does not prohibit client trades from being ported is not sufficient to say they are highly likely to be ported.

collateral with the CC will be transferred at market value unless the client requests to close out the position at market value.

198. Where a client is not protected from losses in the case that the clearing member and another client of the clearing member jointly default or become jointly insolvent, but all other conditions in the preceding paragraph are met, a risk weight of 4% will apply to the client's exposure to the clearing member, or to the higher level client, respectively.
199. Where the financial institution is a client of the clearing member and the requirements in paragraphs 197 or 198 above are not met, the financial institution will capitalise its exposure (including potential CVA risk exposure) to the clearing member as a bilateral trade.

(iv) Treatment of posted collateral

200. In all cases, any assets or collateral posted must, from the perspective of the financial institution posting such collateral, receive the risk weights that otherwise applies to such assets or collateral under the capital adequacy framework, regardless of the fact that such assets have been posted as collateral³⁴⁴. Where assets or collateral of a clearing member or client are posted with a CC or a clearing member and are not held in a bankruptcy remote manner, the financial institution posting such assets or collateral must also recognise credit risk based upon the assets or collateral being exposed to risk of loss based on the creditworthiness of the entity holding such assets or collateral.
201. Where the entity holding such assets or collateral is the CC, a risk-weight of 2% applies to collateral included in the definition of trade exposures. The relevant risk-weight of the CC will apply to assets or collateral posted for other purposes. Where financial institutions use the SA-CCR to calculate exposures, collateral posted which is not held in a bankruptcy remote manner must be accounted for in the NICA term in accordance with paragraphs 141-145 of this Annex. For financial institutions using IMM models, the alpha multiplier must be applied to the exposure on posted collateral.
202. All collateral posted by the clearing member (including cash, securities, other pledged assets, and excess initial or variation margin, also called overcollateralisation), that is held by a custodian³⁴⁵, and is bankruptcy remote

³⁴⁴ Collateral posted must receive the banking book or trading book treatment it would receive if it had not been posted to the CC. In addition, this collateral is subject to the CCR framework of the Basel rules, regardless of whether it is in the banking or trading book. This includes the increase due to haircuts under either the standardised supervisory haircuts or the own estimates.

³⁴⁵ In this paragraph, the word "custodian" may include a trustee, agent, pledgee, secured creditor or any other person that holds property in a way that does not give such person a beneficial interest in such property and will not result in such property being subject to legally-enforceable claims by such persons creditors, or to a court-ordered stay of the return of such property, if such person becomes insolvent or bankrupt.

from the CC, is not subject to a capital requirement for counterparty credit risk exposure to such bankruptcy remote custodian (ie the related risk weight or EAD is equal to zero).

203. Collateral posted by a client, that is held by a custodian, and is bankruptcy remote from the CC, the clearing member and other clients, is not subject to a capital requirement for counterparty credit risk. If the collateral is held at the CC on a client's behalf and is not held on a bankruptcy remote basis, a 2% risk-weight must be applied to the collateral if the conditions established in paragraph 197 of this Annex are met; or 4% if the conditions in paragraph 198 of this Annex are met.

B. Default fund exposures

204. Where a default fund is shared between products or types of business with settlement risk only (eg equities and bonds) and products or types of business which give rise to counterparty credit risk ie OTC derivatives, exchange-traded derivatives, SFTs or long settlement transactions, all of the default fund contributions will receive the risk weight determined according to the formula and methodology set forth below, without apportioning to different classes or types of business or products. However, where the default fund contributions from clearing members are segregated by product types and only accessible for specific product types, the capital requirements for those default fund exposures determined according to the formulae and methodology set forth below must be calculated for each specific product giving rise to counterparty credit risk. In case the CC's prefunded own resources are shared among product types, the CC will have to allocate those funds to each of the calculations, in proportion to the respective product specific EAD.
205. Whenever a financial institution is required to capitalise for exposures arising from default fund contributions to a qualifying CC, clearing member financial institutions will apply the following approach.
206. Clearing member financial institutions will apply a risk weight to their default fund contributions determined according to a risk sensitive formula that considers (i) the size and quality of a qualifying CC's financial resources, (ii) the counterparty credit risk exposures of such CC, and (iii) the application of such financial resources via the CC's loss bearing waterfall, in the case of one or more clearing member defaults. The clearing member financial institution's risk sensitive capital requirement for its default fund contribution (K_{CM_i}) must be calculated using the formulae and methodology set forth below. This calculation may be performed by a CC, financial institution, supervisor or other body with access to the required data, as long as the conditions in paragraph 208 of this Annex are met.

207. The steps for calculation will be the following:

- (1) First, calculate the hypothetical capital requirement of the CC due to its counterparty credit risk exposures to all of its clearing members and their clients³⁴⁶.
- (2) This is calculated using the formula for K_{CC} :

$$K_{CC} = \sum_{CM\ i} EAD_i \times RW \times \text{capital ratio}$$

where RW is a risk weight of 20%³⁴⁷.

Capital ratio means 8%.

EAD_i is the exposure amount of the CC to CM 'i', including both the CM's own transactions and client transactions guaranteed by the CM, and all values of collateral held by the CC (including the CM's prefunded default fund contribution) against these transactions, relating to the valuation at the end of the regulatory reporting date before the margin called on the final margin call of that day is exchanged.

The sum is over all clearing member accounts.

Where clearing members provide client clearing services, and client transactions and collateral are held in separate (individual or omnibus) sub-accounts to the clearing member's proprietary business, each such client sub-account should enter the sum separately, ie the member EAD in the formula above is then the sum of the client sub-account EADs and any house sub-account EAD. This will ensure that client collateral cannot be used to offset the CC's exposures to clearing members' proprietary activity in the calculation of K_{CC} . If any of these sub-accounts contains both derivatives and SFTs, the EAD of that sub-account is the sum of the derivative EAD and the SFT EAD.

In the case that collateral is held against an account containing both SFTs and derivatives, the prefunded initial margin provided by the member or client must be allocated to the SFT and derivatives exposures in proportion to the

³⁴⁶ K_{CCP} is a hypothetical capital requirement for a CC, calculated on a consistent basis for the sole purpose of determining the capitalisation of clearing member default fund contributions; it does not represent the actual capital requirements for a CC which may be determined by a CC and its supervisor.

³⁴⁷ The 20% risk weight is a minimum requirement. As with other parts of the capital adequacy framework, the national supervisor of a bank may increase the risk weight. An increase in such risk weight would be appropriate if, for example, the clearing members in a CC are not highly rated. Any such increase in risk weight is to be communicated by the affected banks to the person completing this calculation.

respective product specific EADs, calculated according to paragraphs 173 to 177 in Section 4.1.3 for SFTs and the SA-CCR (without including the effects of collateral) for derivatives.

If the default fund contributions of the member (DF_i) are not split with regard to client and house sub-accounts, they must be allocated per sub-account according to the respective fraction the initial margin of that sub-account has in relation to the total initial margin posted by or for the account of the clearing member.

- For derivatives, EAD_i is calculated as the bilateral trade exposure the CC has against the clearing member using the SA-CCR³⁴⁸. All collateral held by a CC to which that CC has a legal claim in the event of the default of the member or client, including default fund contributions of that member (DF_i), is used to offset the CC's exposure to that member or client, through inclusion in the PFE multiplier in accordance with paragraphs 148-149 of this Annex.
- For SFTs, EAD is equal to $\max(EBRM_i - IM_i - DF_i; 0)$, where
 - $EBRM_i$ denotes the exposure value to clearing member 'i' before risk mitigation under paragraphs 173 to 177 of Section 4.1.3; where, for the purposes of this calculation, variation margin that has been exchanged (before the margin called on the final margin call of that day) enters into the mark-to-market value of the transactions;
 - IM_i is the initial margin collateral posted by the clearing member with the CC;
 - DF_i is the prefunded default fund contribution by the clearing member that will be applied upon such clearing member's default, either along with or immediately following such member's initial margin, to reduce the CC loss.

Any haircuts to be applied for SFTs must be the paragraph 151 of Section 4.1.3 standard supervisory haircuts in the main text. As regards the calculation in this first step:

- (i) The holding periods for SFT calculations in paragraphs 167 to 169 of Section 4.1.3 and those for derivatives in paragraph 41(i) of this Annex remain even if more than 5000 trades are within one netting set, ie the

³⁴⁸ A MPOR of 10 days must be used to calculate the CC's potential future exposure to its clearing members on derivatives transactions.

first bullet point of paragraph 41(i) of this Annex, included in the Basel III framework, will not apply in this context.

- (ii) (ii) The netting sets that are applicable to regulated clearing members are the same as those referred to in paragraph 194 of this Annex. For all other clearing members, they need to follow the netting rules as laid out by the CC based upon notification of each of its clearing members. The national supervisor can demand more granular netting sets than laid out by the CC.

(3) Second, calculate the capital requirement for each clearing member:

$$K_{CM_i} = \max \left(K_{CC} \times \left(\frac{DF_i^{pref}}{DF_{CC} + DF_{CM}^{pref}} \right); 8\% \times 2\% \times DF_i^{pref} \right)$$

Where

- K_{CM_i} – is the capital requirement on the default fund contribution of member i;
- DF_{CM}^{pref} – the total prefunded default fund contributions from clearing members;
- DF_{CC} – the CC's prefunded own resources (eg contributed capital, retained earnings, etc), which are contributed to the default waterfall, where these are junior or pari passu to prefunded member contributions; and
- DF_i^{pref} – the prefunded default fund contributions provided by clearing member i.

This approach puts a floor on the default fund exposure risk weight of 2%.

208. The CC, financial institution, supervisor or other body with access to the required data, must make a calculation of K_{CC} , DF_{CM}^{pref} , and DF_{CC} in such a way to permit the supervisor of the CC to oversee those calculations, and it must share sufficient information of the calculation results to permit each clearing member to calculate their capital requirement for the default fund and for the financial institution supervisor of such clearing member to review and confirm such calculations.

KCC must be calculated on a quarterly basis at a minimum; although national supervisors may require more frequent calculations in case of material changes (such as the CC clearing a new product). The CC, financial institution, supervisor or other body that did the calculations must make available to the home supervisor of any financial institution clearing member sufficient aggregate information about the composition of the CC's exposures to clearing

members and information provided to the clearing member for the purposes of the calculation of K_{CC} , DF_{CM}^{pref} , and DF_{CC} .

Such information must be provided no less frequently than the home financial institution supervisor would require for monitoring the risk of the clearing member that it supervises. K_{CC} and K_{CM_i} must be recalculated at least quarterly, and should also be recalculated when there are material changes to the number or exposure of cleared transactions or material changes to the financial resources of the CC. C. Cap with regard to QCCs

209. Where the sum of a financial institution's capital charges for exposures to a qualifying CC due to its trade exposure and default fund contribution is higher than the total capital charge that would be applied to those same exposures if the CC were for a non-qualifying CC, as outlined in paragraphs 210 and 211 of this Annex, the latter total capital charge shall be applied.
210. Financial institutions must apply the Standardised Approach for credit risk in the main framework, according to the category of the counterparty, to their trade exposure to a non-qualifying CC.
211. Financial institutions must apply a risk weight of 1250% to their default fund contributions to a non-qualifying CC. For the purposes of this paragraph, the default fund contributions of such financial institutions will include both the funded and the unfunded contributions which are liable to be paid if the CC so requires. Where there is a liability for unfunded contributions (ie unlimited binding commitments), the national supervisor should determine in its Pillar 2 assessments the amount of unfunded commitments to which a 1250% risk weight applies.

Section VII deleted.

Paragraphs 91-96(vi) deleted.

Annex 3-III Application of the SA-CCR to sample portfolios³⁴⁹

Example 1

Netting set 1 consists of three interest rates derivatives: two fixed versus floating interest rate swaps and one purchased physically-settled European swaption. The table below summarises the relevant contractual terms of the three derivatives.

Trade	Nature	Residual Maturity	Base currency	Notional (thousands)	Pay leg ³⁵⁰	Receive leg ³⁵⁰	Market value (thousands)
1	Interest rate swap	10 years	USD	10,000	Fixed	Floating	30
2	Interest rate swap	4 years	USD	10,000	Floating	Fixed	-20
3	European swap	1 into 10 years	EUR	5,000	Floating	Fixed	50

All notional amounts and market values in the table are given in USD. The netting set is not subject to a margin agreement and there is no exchange of collateral (independent amount/initial margin) at inception. According to the SA-CCR formula, the EAD for unmargined netting sets is given by:

$$EAD = \alpha \times (RC + multiplier \times AddOn^{aggregate})$$

The replacement cost is calculated at the netting set level as a simple algebraic sum (floored at zero) of the derivatives' market values at the reference date. Thus, using the market values indicated in the table (expressed in thousands):

$$RC = \max \{V - C; 0\} = \max \{30 - 20 + 50; 0\} = 60$$

Since V-C is positive (equal to V, i.e. 60,000), the value of the multiplier is 1, as explained in the paragraphs 148-149 of Annex 3-II.

All the transactions in the netting set belong to the interest rate asset class. For the calculation of the interest rate add-on, the three trades must be assigned to a hedging set (based on the currency) and to a maturity bucket (based on the end date of the transaction). In this example, the netting set is comprised of two hedging sets, since the trades refer to interest rates denominated in two different currencies (USD and EUR). Within hedging set "USD", trade 1 falls into the third maturity bucket (>5 years) and

³⁴⁹ The calculations for the sample portfolios assume that intermediate values are not rounded (ie the actual results are carried through in sequential order). However, for ease of presentation, these intermediate values as well as the final EAD are rounded.

³⁵⁰ For the swaption, the legs are those of the underlying swap.

trade 2 falls into the second maturity bucket (1-5 years). Trade 3 falls into the third maturity bucket (>5 years) of hedging set “EUR”.

For each IR trade i , the adjusted notional is calculated according to:

$$d_i^{(IR)} = \text{Trade Notional} \times \frac{\exp(-0.05 \times S_i) - \exp(-0.05 \times E_i)}{0.05}$$

Where:

the second factor in the product is the supervisory duration (SD). S_i and E_i represent the start date and end date, respectively, of the time period referenced by the interest rate transactions, as defined in accordance with paragraphs 155 and 157 of Annex 3-II.

Trade	Hedging set	Time bucket	Notional (thousands)	S_i	E_i	SD_i	Adjusted notional (thousands)	Supervisory delta
1	USD	3	10,000	0	10	7.87	78,694	1
2	USD	2	10,000	0	4	3.63	36,254	-1
3	EUR	3	5,000	1	11	7.49	37,428	-0.27

A supervisory delta is assigned to each trade in accordance with paragraph 159 of Annex 3-II. In particular, trade 1 is long in the primary risk factor (the reference floating rate) and is not an option so the supervisory delta is equal to 1. Trade 2 is short in the primary risk factor and is not an option; thus, the supervisory delta is equal to -1. Trade 3 is an option to enter into an interest rate swap that is short in the primary risk factor and therefore is treated as a bought put option. As such, the supervisory delta is determined by applying the relevant formula in paragraph 159, using 50% as the supervisory option volatility and 1 (year) as the option exercise date. In particular, assuming that the underlying price (the appropriate forward swap rate) is 6% and the strike price (the swaption’s fixed rate) is 5%, the supervisory delta is:

$$\delta_i = -\Phi\left(-\frac{\ln(0.06/0.05) + 0.5 \times (0.5)^2 \times 1}{0.5 \times \sqrt{1}}\right) = -0.27$$

The effective notional of each maturity bucket of each hedging set is calculated according to:

$$D_{jk}^{(IR)} = \sum_{i \in \{Ccy_j, MB_k\}} \delta_i \times d_i^{(IR)} \times MF_i^{(type)}$$

MF_i is 1 for all the trades (since they are unmargined and have remaining maturities in excess of one year) in the example and δ_i is the supervisory delta. In particular:

Hedging set USD, time bucket 2: $D_{USD,2}^{(IR)} = -1 \times 36,254 = -36,254$

Hedging set USD, time bucket 3: $D_{USD,3}^{(IR)} = 1 \times 78,694 = 78,694$

Hedging set EUR, time bucket 3: $D_{EUR,3}^{(IR)} = -0.27 \times 37,428 = -10,083$

Then, aggregation of effective notionals across time buckets inside the same hedging set is performed on the basis of the following formula:

$$EffectiveNotional_j^{(IR)} = \left[\left(D_{j1}^{(IR)} \right)^2 + \left(D_{j2}^{(IR)} \right)^2 + \left(D_{j3}^{(IR)} \right)^2 + 1.4 \times D_{j1}^{(IR)} D_{j2}^{(IR)} + 1.4 \times D_{j2}^{(IR)} D_{j3}^{(IR)} + 0.6 \times D_{j1}^{(IR)} D_{j3}^{(IR)} \right]^{\frac{1}{2}}$$

Thus, the effective notional amount for hedging set “USD” is given by:

$$EffectiveNotional_{USD}^{(IR)} = \left[(-36,254)^2 + 78,694^2 + 1.4 \times (-36,254) \times 78,694 \right]^{\frac{1}{2}} = 59,270$$

Since hedging set “EUR” is made of only one maturity bucket, its effective notional is:

$$EffectiveNotional_{EUR}^{(IR)} = \left[(-10,083)^2 \right]^{\frac{1}{2}} = 10,083$$

The effective notional amounts should be multiplied by the SF (that for interest rates is equal to 0.5%) and summed up across hedging sets:

$$AddOn^{IR} = 0.5\% \times 59,270 + 0.5\% \times 10,083 = 347$$

For this netting set the interest rate add-on is also the aggregate add-on because there are no derivatives belonging to other asset classes. Finally, the SA-CCR exposure is calculated by adding up the RC component and PFE component and multiplying the result by 1.4:

$$EAD = 1.4 \times (60 + 1 \times 347) = 569$$

where a value of 1 is used for the multiplier.

Example 2

Netting set 2 consists of three credit derivatives: one long single-name CDS written on Firm A (rated AA), one short single-name CDS written on Firm B (rated BBB), and one long CDS index (investment grade). The table below summarises the relevant contractual terms of the three derivatives.

Trade	Nature	Reference entity / index name	Rating reference entity	Residual maturity	Base currency	Notional (thousands)	Position	Market value (thousands)
1	Single-name CDS	Firm A	AA	3 years	USD	10,000	Protection buyer	20
2	Single-name CDS	Firm B	BBB	6 years	EUR	10,000	Protection buyer	-40
3	CDS index	CDX.IG 5y	Investment grade	5 years	USD	10,000	Protection buyer	0

All notional amounts and market values in the table are in USD. As in the previous example, the netting set is not subject to a margin agreement and there is no exchange of collateral (independent amount/initial margin) at inception. The EAD formulation for unmarginated netting sets is:

$$EAD = \alpha \times (RC + multiplier \times AddOn^{aggregate})$$

The replacement cost is:

$$RC = \max \{V - C; 0\} = \max \{20 - 40 + 0; 0\} = 0$$

Since in this example $V - C$ is negative (equal to V , i.e. -20), the multiplier will be activated (i.e. it will be less than 1). Before calculating its value, the aggregate add-on needs to be determined.

In order to calculate the aggregate add-on, first, the adjusted notional of each trade must be calculated by multiplying the notional amount with the supervisory duration, where the latter is determined based on the start date S_i and the end date E_i in accordance with the formula in paragraph 157 of Annex 3-II. The results are shown in the table below.

Trade	Notional (thousands)	S_i	E_i	SD_i	Adjusted notional (thousands)	Supervisory delta
1	10,000	0	3	2.79	27,858	1
2	10,000	0	6	5.18	51,836	-1
3	10,000	0	5	4.42	44,240	1

The appropriate supervisory delta must be assigned to each trade: in particular, since trade 1 and trade 3 are long in the primary risk factor (CDS spread), their delta is 1; on the contrary, the supervisory delta for trade 2 is -1.

Since all derivatives refer to different entities (single names/indices), it is not necessary to aggregate the trades at the entity level. Thus, the entity-level effective notional is

equal to the adjusted notional times the supervisory delta (the maturity factor is 1 for all three derivatives). A supervisory factor is assigned to each single-name entity based on the rating of the reference entity (0.38% for AA-rated firms and 0.54% for BBB-rated firms). For CDS indices, the SF is assigned according to whether the index is investment or speculative grade; in this example, its value is 0.38% since the index is investment grade. Thus, the entity level add-ons are the following:

$$\begin{aligned} \text{AddOn}(\text{FirmA}) &= 0.38\% \times 27,858 = 106 \\ \text{AddOn}(\text{FirmB}) &= 0.54\% \times (-51,836) = -280 \\ \text{AddOn}(\text{CDX.IG}) &= 0.38\% \times 44,240 = 168 \end{aligned}$$

Once the entity-level add-ons are calculated, the following formula can be applied:

$$\text{AddOn}^{(\text{Credit})} = \left[\underbrace{\left(\sum_k \rho_k^{(\text{Credit})} \times \text{AddOn}(\text{Entity}_k) \right)^2}_{\text{systematic component}} + \underbrace{\sum_k \left(1 - \left(\rho_k^{(\text{Credit})} \right)^2 \right) \times \left(\text{AddOn}(\text{Entity}_k) \right)^2}_{\text{idiosyncratic component}} \right]^{\frac{1}{2}}$$

Where the correlation parameter $\rho_k^{(\text{Credit})}$ is equal to 0.5 for the single-name entities (Firm A and Firm B) and 0.8 for the index (CDX.IG). The following table shows a simple way to calculate of the systematic and idiosyncratic components in the formula

Reference entity	Entity-level add-on	Correlation parameter (r)	Entity-level add-on times r	(Entity –level add-on)2	1-r2	(Entity-level add-on)2 times (1-r2)
Firm A	106	0.5	52.9	11,207	0.75	8,405
Firm B	-280	0.5	-140	78,353	0.75	58,765
CDX.IG	168	0.8	134.5	28,261	0.36	10,174
Sum =			47.5			77,344
(sum)² =			2,253			

According to the calculations in the table, the systematic component is 2,253, while the idiosyncratic component is 77,344.

Thus,

$$\text{AddOn}^{(\text{Credit})} = \left[2,253 + 77,344 \right]^{\frac{1}{2}} = 282$$

The value of the multiplier can now be calculated as:

$$multiplier = \min \left\{ 1; 0.05 + 0.95 \times \exp \left(\frac{-20}{2 \times 0.95 \times 282} \right) \right\} = 0.965$$

Finally, aggregating the replacement cost and the PFE component and multiplying the result by the alpha factor of 1.4, the exposure is:

$$EAD = 1.4 \times (0 + 0.965 \times 282) = 381$$

Example 3

Netting set 3 consists of three commodity forward contracts:

Trade	Nature	Underlying	Direction	Residual maturity	Notional	Market value
1	Forward	(WTI) Crude Oil	Long	9 months	10,000	-50
2	Forward	(Brent) Crude Oil	Short	2 years	20,000	-30
3	Forward	Silver	Long	5 years	10,000	100

There is no margin agreement and no collateral. The replacement cost is given by:

$$RC = \max \{V - C; 0\} = \max \{100 - 30 - 50; 0\} = 20$$

Because the replacement cost is positive and there is no exchange of collateral (so the financial institution has not received excess collateral), the multiplier is equal to 1.

To calculate the add-on, the trades need to be classified into hedging sets (energy, metals, agricultural and other) and, within each hedging set, into commodity types. In this case:

Hedging set	Commodity type	Trades
Energy	Crude oil	1 and 2
	Natural gas	None
	Coal	None
	Electricity	None
Metals	Silver	3
	Gold	None

Agricultural

Other		

For purposes of this calculation, the financial institution can ignore the basis difference between the WTI and Brent forward contracts since they belong to the same commodity type, “Crude Oil” (unless the national supervisor requires the financial institution to use a more refined definition of commodity types).

Therefore, these contracts can be aggregated into a single effective notional, taking into account each trade’s supervisory delta and maturity factor. In particular, the supervisory delta is 1 for trade 1 (long position) and -1 for trade 2 (short position). Since the remaining maturity of trade 1 is nine months (thus, shorter than 1 year) and the trade is unmargined, its maturity factor is:

$$MF_{trade1} = \sqrt{9/12}$$

The maturity factor is 1 for trade 2 (remaining maturity greater than 1 year and unmargined trade). Thus, the effective notional for commodity type “Crude Oil” is

$$EffectiveNotional_{CrudeOil} = 1 \times 10,000 \times \sqrt{9/12} + (-1) \times 20,000 \times 1 = -11,340$$

where the supervisory delta has been assigned to each trade (+1 for long and -1 for short). The effective notional amount must be multiplied by the supervisory factor for Oil/Gas (18%) to obtain the add-on for the Crude Oil commodity type:

$$AddOn(Type_{CrudeOil}^{Energy}) = 18\% \times (-11,340) = -2,041$$

The next step, in theory, is to calculate the add-on for the hedging set “Energy” according to the formula:

$$AddOn_{Energy}^{(Com)} = \left[\underbrace{\left(\rho_{Energy}^{(Com)} \times \sum_k AddOn(Type_k^{Energy}) \right)^2}_{\text{systematic component}} + \underbrace{\left(1 - \left(\rho_{Energy}^{(Com)} \right)^2 \right) \times \sum_k \left(AddOn(Type_k^{Energy}) \right)^2}_{\text{idiosyncratic component}} \right]^{\frac{1}{2}}$$

However, in our example, only one commodity type within the “Energy” hedging set is populated (i.e. all other commodity types have a zero add-on). Therefore,

$$AddOn_{Energy}^{(Com)} = \left[\left(0.4 \times (-2,041) \right)^2 + \left(1 - (0.4)^2 \right) \times (-2,041)^2 \right]^{\frac{1}{2}} = 2,041$$

This calculation shows that, when there is only one commodity type within a hedging set, the hedging-set add-on is equal (in absolute value) to the commodity-type add-on. Similarly, for commodity type “Silver” in the “Metals” hedging set, we have:

$$EffectiveNotional_{Silver} = 1 \times 10,000 \times 1 = 10,000$$

since the supervisory delta and maturity factor for trade 3 are both equal to 1. Furthermore, since the “Metals” hedging set includes only the “Silver” commodity type in this example:

$$AddOn_{Metals}^{(Com)} = AddOn(Type_{Silver}^{Metals}) = 18\% \times 10,000 = 1,800$$

The aggregate add-on for the commodity derivative asset class is:

$$AddOn^{(Com)} = AddOn_{Energy}^{(Com)} + AddOn_{Metals}^{(Com)} = 2,041 + 1,800 = 3,841$$

Finally, the exposure is:

$$EAD = 1.4 \times (20 + 1 \times 3,841) = 5,406$$

Example 4

Netting set 4 consists of the combined trades of Examples 1 and 2. There is no margin agreement and no collateral.

The replacement cost of the combined netting set is:

$$RC = \max \{V - C; 0\} = \max \{30 - 20 + 50 + 20 - 40 + 0; 0\} = 40$$

The add-on for the combined netting set is the sum of add-ons for each asset class. In this case, there are two asset classes, interest rates and credit:

$$AddOn^{aggregate} = AddOn^{(IR)} + AddOn^{(Credit)} = 347 + 282 = 629$$

where the add-ons for interest rate and credit derivatives have been copied from Examples 1 and 2. Because the netting set has a positive replacement cost and there is no exchange of collateral (so the financial institution has not received excess collateral), the multiplier is equal to 1. Finally, the exposure is:

$$EAD = 1.4 \times (40 + 1 \times 629) = 936$$

Example 5

Netting set 5 consists of the combined trades of Examples 1 and 3. However, instead of being unmarginated (as assumed in those examples), the trades are subject to a margin agreement with the following specifications:

Margin frequency	Threshold	Minimum transfer amount (thousands)	Independent amount (thousands)	Net collateral currently held by the financial institution (thousands)
Weekly	0	5	150	200

The above table depicts a situation in which the financial institution received from the counterparty a net independent amount of 150 (taking into account the net amount of initial margin posted by the counterparty and any unsegregated initial margin posted by the financial institution). The total net collateral currently held by the financial institution is 200, which includes 50 for variation margin received and 150 for the net independent amount.

First, we determine the replacement cost. The net collateral currently held is 200 and the NICA is equal to the independent amount (that is, 150). The current market value of the netting set is:

$$V = 30 - 20 + 50 - 50 - 30 + 100 = 80$$

Therefore:

$$RC = \max \{V - C; TH + MTA - NICA; 0\} = \max (80 - 200; 0 + 5 - 150; 0) = 0$$

Second, it is necessary to recalculate the interest rate and commodity add-ons, based on the value of the maturity factor for margined transactions, which depends on the margin period of risk. For daily re-margining, the margin period of risk (MPOR) would be 10 days. In accordance with paragraph 41(iii) of Annex 3-II, for re-margining with a periodicity of N days, the MPOR is equal to ten days plus N days minus one day. Thus,

for weekly re-margining (every five business days), $MPOR = 10 + 5 - 1 = 14$. Hence, the re-scaled maturity factor for the trades in the netting set is:³⁵¹

$$MF_l^{(\text{Margined})} = \frac{3}{2} \sqrt{\frac{MPOR}{1 \text{ year}}} = 1.5 \times \sqrt{14 / 250}$$

Repeating the calculation of Example 1 with the new value of the maturity factor, we get:

$$\text{Hedging set USD, time bucket 2: } D_{USD,2} = (-1) \times 36,254 \left(1.5 \times \sqrt{14 / 250}\right) = -12,869$$

$$\text{Hedging set USD, time bucket 3: } D_{USD,3} = 1 \times 78,694 \left(1.5 \times \sqrt{14 / 250}\right) = 27,934$$

$$\text{Hedging set EUR, time bucket 3: } D_{EUR,3} = (-0.27) \times 37,428 \left(1.5 \times \sqrt{14 / 250}\right) = -3,579$$

The effective notional amount for hedging sets “USD” and “EUR” are given by:

$$EffectiveNotional_{USD}^{(IR)} = \left[(-12,869)^2 + (27,934)^2 + 1.4 \times (-12,869) \times 27,934 \right]^{\frac{1}{2}} = 21,039$$

$$EffectiveNotional_{EUR}^{(IR)} = \left[(-3,579)^2 \right]^{\frac{1}{2}} = 3,579$$

The effective notional amounts can be multiplied by the SF (that for interest rates is equal to 0.5%) and summed up across hedging sets:

$$AddOn^{(IR)} = 0.5\% \times 21,039 + 0.5\% \times 3,579 = 123$$

Repeating the calculation of Example 3 with the new value of the maturity factor, we get for hedging set “Energy”:

$$EffectiveNotional_{CrudeOil}^{Energy} = 1 \times 10,000 \times \left(1.5 \times \sqrt{14 / 250}\right) + (-1) \times 20,000 \times \left(1.5 \times \sqrt{14 / 250}\right) = -3,550$$

$$AddOn(Type_{CrudeOil}^{Energy}) = 18\% \times (-3,550) = -639$$

$$AddOn_{Energy}^{(Com)} = \left[(0.4 \times (-639))^2 + (1 - (0.4)^2) \times (-639)^2 \right]^{\frac{1}{2}} = 639$$

Similarly, for hedging set “Metals”, we have:

³⁵¹ This example assumes that there are 250 business days in the financial year. In practice, the number of business days used for the purpose of determining the maturity factor must be calculated appropriately for each transaction, taking into account the market conventions of the relevant jurisdiction.

$$EffectiveNotional_{Silver}^{Metals} = 1 \times 10,000 \times (1.5 \times \sqrt{14 / 250}) = 3,550$$

$$AddOn_{Metals}^{(Com)} = AddOn_{Type_{Silver}^{Metals}} = 18\% \times 3,550 = 639$$

The overall add-on for the commodity derivative asset class is:

$$AddOn^{(Com)} = AddOn_{Energy}^{(Com)} + AddOn_{Metals}^{(Com)} = 639 + 639 = 1,278$$

Since there are two asset classes (interest rate and commodity), the aggregate add-in is given by:

$$AddOn^{aggregate} = AddOn^{(IR)} + AddOn^{(Com)} = 123 + 1,278 = 1,401$$

Third, we calculate the multiplier as a function of over-collateralisation and the new add-on:

$$multiplier = \min \left(1; 0.05 + 0.95 \times \exp \left(\frac{80 - 200}{2 \times 0.95 \times 1,401} \right) \right) = 0.958$$

Finally, the exposure is:

$$EAD = 1.4 \times (0 + 0.958 \times 1,401) = 1,879$$

Annex 3-IV Effect of standard margin agreements on the SA-CCR formulation

The following examples illustrate the operation of the SA-CCR in the context of standard margin agreements. In particular, they relate to the formulation of replacement cost for margined trades, as depicted in paragraph 144 of Annex 3-II.

$$RC = \max \{V - C; TH + MTA - NICA; 0\}$$

Example 1

1. The financial institution currently has met all past variation margin (VM) calls so that the value of trades with its counterparty (€80 million) is offset by cumulative VM in the form of cash collateral received. There is a small “Minimum Transfer Amount” (MTA) of €1 million and a €0 “Threshold” (TH). Furthermore, an “Independent Amount” (IA) of €10 million is agreed in favour of the financial institution and none in favour of its counterparty. This leads to a credit support amount of €90 million, which is assumed to have been fully received as of the reporting date.
2. In this example, the first term in the replacement cost (RC) formula (V-C) is zero, since the value of the trades is offset by collateral received; €80 million – €90 million = negative €10. The second term (TH + MTA - NICA) of the replacement cost formula is negative €9 million (€0 TH + €1 million MTA - €10 million of net independent collateral amount held). The last term in the RC formula is always zero, which ensures that replacement cost is not negative. The greatest of the three terms (-€10 million, -€9 million, 0) is zero, so the replacement cost is zero. This is due to the large amount of collateral posted by the financial institution’s counterparty.

Example 2³⁵²

3. The counterparty has met all VM calls but the financial institution has some residual exposure due to the MTA of €1 million in its master agreement, and has a €0 TH. The value of the financial institution’s trades with the counterparty is €80 million and the financial institution holds €79.5 million in VM in the form of cash collateral. The financial institution holds in addition €10 million in independent collateral (here being an initial margin independent of VM, the latter of which is driven by mark-to-market (MtM) changes) from the counterparty and the counterparty holds €10 million in independent collateral from the financial institution (which is held by the counterparty in a non-segregated manner).

³⁵² While the facts in this example may not be common in current market practice, it is a scenario that is contemplated in the future regulation of margin requirements for non-cleared OTC derivatives. See the second consultative document, “Margin requirements for non-centrally cleared derivatives” (February 2013), available at <http://www.bis.org/publ/bcbs242.pdf>.

4. In this case, the first term of the replacement cost (V-C) is €0.5 million (€80 million - €79.5 million - €10 million + €10 million), the second term (TH+MTA-NICA) is €1 million (€0 TH + €1 million MTA - €10 million ICA held + €10 million ICA posted). The third term is zero. The greatest of these three terms (€0.5 million, €1 million, 0) is €1 million, which represents the largest exposure before collateral must be exchanged.

Financial institution as a clearing member

5. The case of central clearing can be viewed from a number of perspectives. One example in which the replacement cost formula for margined trades can be applied is when the financial institution is a clearing member and is calculating replacement cost for its own trades with a central counterparty (CC). In this case, the MTA and TH are generally zero. VM is usually exchanged at least daily and ICA in the form of a performance bond or initial margin is held by the CC.

Example 3

6. The financial institution, in its capacity as clearing member of a CC, has posted VM to the CC in an amount equal to the value of the trades it has with the CC. The financial institution has posted cash as initial margin and the CC holds the initial margin in a bankruptcy remote fashion. Assume that the value of trades with the CC are negative €50 million, the financial institution has posted €50 million in VM and €10 million in IM to the CC.
7. In this case, the first term (V-C) is €0 ([-€50 million - (-€50 million)] - €0), ie the already posted VM reduces the V to zero. The second term (TH+MTA-NICA) is €0 (€0+€0-€0) since MTA and TH equal €0, and the IM held by the CC is bankruptcy remote and does not affect NICA. Therefore, the replacement cost is €0.

Example 4

8. Example 4 is the same as the Example 3, except that the IM posted to the CC is not bankruptcy remote. In this case, the first term (V-C) of the replacement cost is €10 million ([-€50 million - (-€50 million)] - [-€10 million]), the value of the second term (TH+MTA-NICA) is €10 million (€0+€0 - [-€10 million]), and the third term is zero. The greatest of these three terms (€10 million, €10 million, €0) is €10 million, representing the IM posted to the CC which would be lost upon default of the CC, including bankruptcy.

Example 5

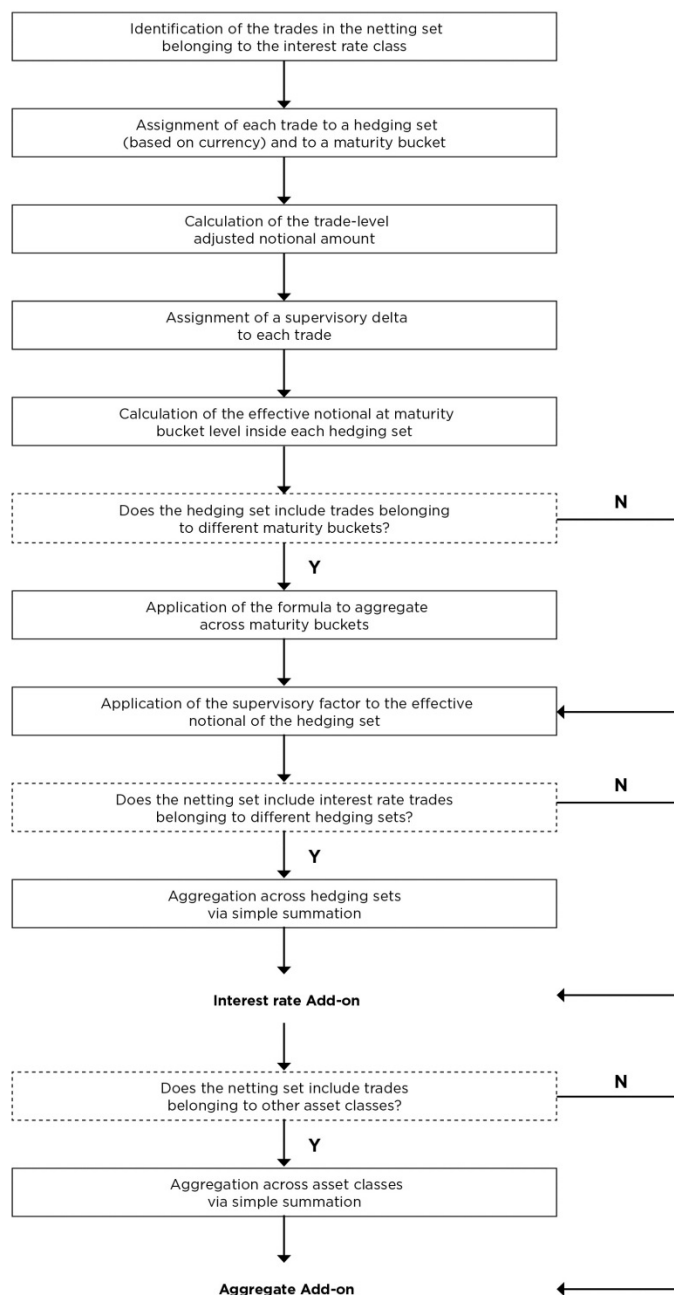
Maintenance Margin Agreement

9. Some margin agreements specify that a counterparty (in this case, a financial institution) must maintain a level of collateral that is a fixed percentage of the MtM of the transactions in a netting set. For this type of margining agreement, ICA is the percentage of MtM that the counterparty must maintain above the net MtM of the transactions. For example, suppose the agreement states that a counterparty

must maintain a collateral balance of at least 140% of the MtM of its transactions. Furthermore, suppose there is no TH and no MTA. ICA is the amount of collateral that is required to be posted to the financial institution by the counterparty. The MTM of the derivative transactions is €50. The counterparty posts €80 in cash collateral. ICA in this case is the amount that the counterparty is required to post above the MTM ($140\% * €50 - €50 = €20$). Replacement cost is determined by the greater of the MtM minus the collateral ($€50 - €80 = -€30$), MTA+TH-NICA ($€0+€0-€20 = -€20$), and zero, thus the replacement cost is zero.

Annex 3-V Effect of standard margin agreements on the SA-CCR formulation

Flow chart of steps to calculate [interest rate] add-on



Annex 3-VI Calculation of Equity investments in funds risk-weighted assets

Calculation of risk-weighted assets using the LTA

Consider a fund that replicates an equity index. Moreover, assume the following:

- Financial institution uses the Standardized Approach for credit risk when calculating its capital requirements;
- Financial institution owns 20% of the shares of the fund;
- The fund holds short term (less than one year) forward contracts that are cleared through a qualifying central counterparty (with a notional amount of \$100); and

The fund presents the following balance sheet:

Assets

Cash	\$20
Government bonds (AAA rated)	\$30
Variation margin receivable – forward contracts	\$50

Liabilities

Notes payable	\$5
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Equity

Shares	\$95
--------	------

Balance sheet exposures of \$100 will be risk weighted according to the risk weights applied for cash (RW=0%), government bonds (RW=0%), and centrally-cleared equity forward positions (RW=2%). The underlying risk weight for equity exposures (RW=100%) is applied to the notional amount of the forward contracts and there is a charge for counterparty credit risk. There is no CVA charge assessed since the forward contracts are cleared through a central counterparty.

The leverage of the fund is $100/95 \approx 1.05$.

Therefore, the risk-weighted assets for the institution's equity investment in the fund are calculated as follows:

$$\begin{aligned} \text{Avg RW}_{\text{fund}} * \text{Leverage} * \text{Equity investment} &= (\text{RW}_{\text{Acash}} + \text{RW}_{\text{Abonds}} + \\ &\text{RW}_{\text{Aunderlying}} + \text{RW}_{\text{Aforward}} + \text{RW}_{\text{ACCR}}) \text{ Total Assets}_{\text{fund}} * \text{Leverage} * \text{Equity} \\ &\text{investment} = ((\$20*0\% + \$30*0\% + \$100*100\% + \$50*2\% + \$100*6\%*2\%)/100) * 1.05 \\ &* (20\%*95) = \$20.17 \end{aligned}$$

Calculation of risk-weighted assets using the MBA

Consider a fund with assets of \$100, where it is stated in the mandate that the fund replicates an equity index. In addition to being permitted to invest its assets in either cash or equities, the mandate allows the fund to take long positions in equity index futures up to a maximum nominal amount equivalent to the size of the fund's balance sheet (\$100). This means that the total on balance sheet and off balance sheet exposures of the fund can reach \$200. Consider also that a maximum financial leverage of 1.1 applies according to the mandate. The institution holds 20% of the shares of the fund, which represents an investment of \$18.18.

First, the on-balance sheet exposures of \$100 will be risk weighted according to the risk weights applied for equity exposures (RW=100%), ie $RWA_{on-balance} = \$100 * 100\% = \100 .

Second, we assume that the fund has exhausted its limit on derivative positions, ie \$100 notional amount, which would be weighted with the risk weight associated with the underlying of the derivative position, which in this example is 100% for publicly-traded equity holdings. The total risk-weighted assets related to the maximum notional amount underlying the derivative positions are hence $RWA_{underlying} = \$100 * 100\% = \100 .

Third, we would calculate the counterparty credit risk associated with the derivative contract. If we do not know the replacement cost related to the futures contract, we would approximate it by the maximum notional amount, i.e. \$100 and also calculate the add-on by applying a 20%³⁵³ conversion factor, resulting in an exposure amount of \$120. Assuming the futures contract is cleared through a qualifying CCP, a risk weight of 2% applies, so that $RW_{ACCR} = \$120 * 2\% = \2.4 . There is no CVA charge assessed since the futures contract is cleared through a central counterparty. The RWA of the fund is hence obtained by adding $RWA_{on-balance}$, $RWA_{underlying}$ and RW_{ACCR} , i.e. \$202.4.

Leverage adjustment

The RWA (\$202.4) will be divided by the total assets of the fund (\$100) resulting in an average riskweight of 202.4%. The average risk-weight is then scaled up by a factor of 1.1 to reflect financial leverage = $202.4\% * 1.1 = 222.64\%$. Finally, as the institution invested \$18.18 in the equity of the fund, its total RWAs associated with its equity investment amount to $\$18.18 * 222.64\% = \40.48 .

³⁵³ As defined in SA-CCR.

Annex 4-I Overview of methodologies for the capital treatment of transactions secured by financial collateral under the standardized approach

1. The rules set forth in the standardized approach – Credit Risk Mitigation (CRM), for collateralized transactions generally determine the treatment under the standardized approach for claims in the banking book that are secured by financial collateral of sufficient quality.
2. Collateralized exposures that take the form of repo-style transactions (i.e. repo/reverse repos and securities lending/borrowing) are subject to special considerations. Such transactions that are held in the trading book are subject to a counterparty risk capital charge as described below. Further, all institutions must follow the methodology in the CRM Section, which is outlined below, for repo-style transactions booked in either the banking book or trading book that are subject to master netting agreements if they wish to recognize the effects of netting for capital purposes.

Standardized approach

3. Institutions under the standardized approach may use either the simple approach or the comprehensive approach for determining the appropriate risk weight for a transaction secured by eligible financial collateral. Under the simple approach, the risk weight of the collateral substitutes for that of the counterparty. Apart from a few types of very low risk transactions, the risk weight floor is 20%.
4. Under the comprehensive approach, eligible financial collateral reduces the amount of the exposure to the counterparty. The amount of the collateral is decreased and, where appropriate, the amount of the exposure is increased through the use of haircuts established by the Basel Committee, to account for potential changes in the market prices of securities and foreign exchange rates over the holding period. This results in an adjusted exposure amount, E^* . Where the supervisory holding period for calculating the haircut amounts differs from the holding period set down in the rules for that type of collateralized transaction, the haircuts are to be scaled up or down as appropriate. Once E^* is calculated, the standardized institution will assign that amount a risk weight appropriate to the counterparty.

Special considerations for repo-style transactions

5. Repo-style transactions booked in the trading book, will, like OTC derivatives held in the trading book, be subject to a counterparty credit risk charge. In calculating this charge, an institution under the standardized approach must use the comprehensive approach to collateral; the simple approach will not be available.

6. The capital treatment for repo-style transactions that are not subject to master netting agreements is the same as that for other collateralized transactions. However, for institutions using the comprehensive approach, the AMF has the discretion to determine that a haircut of zero may be used where the transaction is with a core market participant and meets certain other criteria (so-called carve-out treatment). Where repo-style transactions are subject to a master netting agreement whether they are held in the banking book or trading book, an institution may choose not to recognize the netting effects in calculating capital. In that case, each transaction will be subject to a capital charge as if there were no master netting agreement.
7. If an institution wishes to recognize the effects of master netting agreements on repo-style transactions for capital purposes, it must apply the treatment the CRM Section sets forth in that regard on a counterparty-by-counterparty basis. This treatment would apply to all repo-style transactions subject to master netting agreements regardless of whether the transactions are held in the banking or trading book. Under this treatment, the institution would calculate E^* as the sum of the net current exposure on the contract plus an add-on for potential changes in security prices and foreign exchange rates.
8. The calculated E^* is in effect an unsecured loan equivalent amount that would be used for the exposure amount under the standardized approach.

Annex 4-II Credit derivatives - Product types

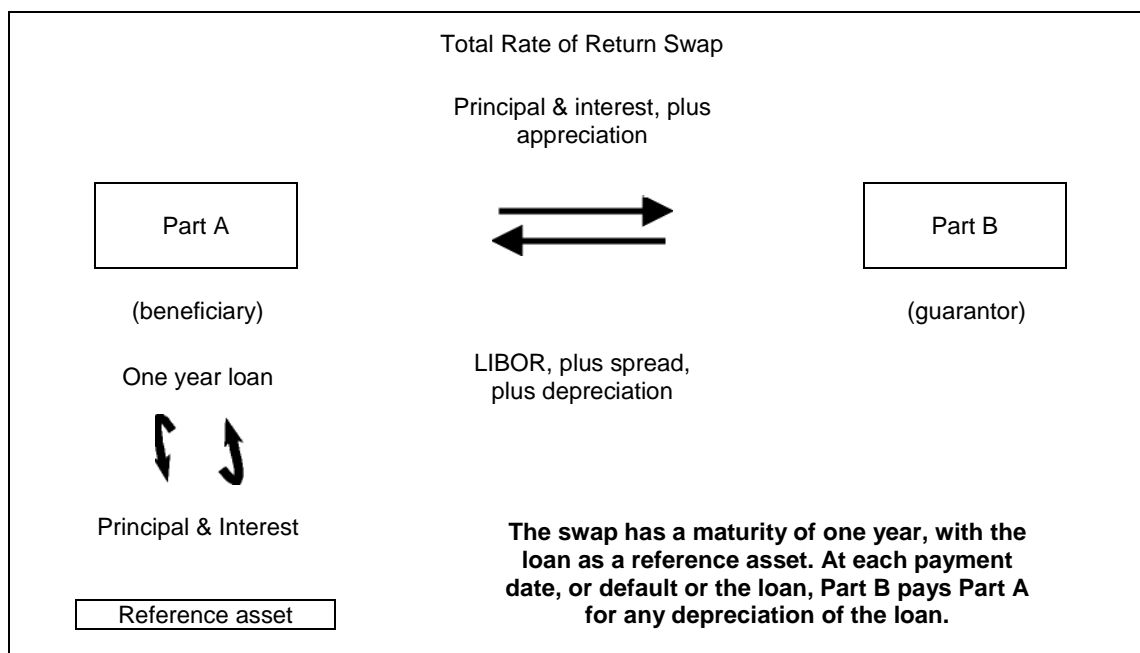
Description of credit derivatives

The most widely used types of credit derivatives are credit default products and total rate-of-return (TROR) swaps. While the timing and structure of the cash flows associated with credit default and TROR swaps differ, the economic substance of both arrangements seek to transfer the credit risk of the asset(s) referenced in the transaction.

Another less common form of credit derivative is the credit-linked note, which is an obligation that is based on a reference asset. Credit-linked notes are similar to structured notes with embedded credit derivatives. Credit indicators on the reference asset rather than market price factors influence the payment of interest and principal. If there is a credit event, the repayment of the note's principal is based on the price of the reference asset.

Total rate-of-return swap

In a total rate-of-return (TROR) swap, illustrated below, the beneficiary (Part A) agrees to pay the guarantor (Part B) the total return on the reference asset, which consists of all contractual payments, as well as any appreciation in the market value of the reference asset. To complete the swap arrangement, the guarantor (Part B) agrees to pay LIBOR plus a spread and any depreciation to the beneficiary (Part A). The guarantor (Part B) in a TROR swap could be viewed as having synthetic ownership of the reference asset since it bears the risks and rewards of ownership over the term of the swap.



At each payment exchange date (including when the swap matures) -- or upon default, at which point the swap may terminate -- any depreciation or appreciation in the

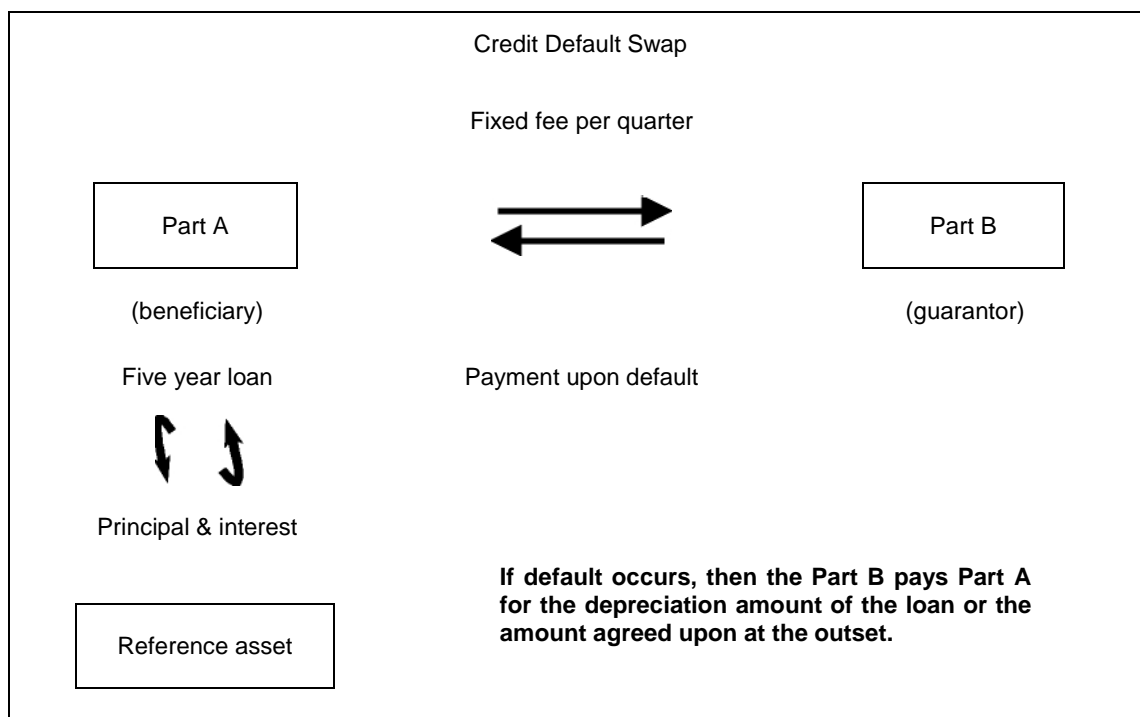
amortized value of the reference asset is calculated as the difference between the notional principal balance of the reference asset and the “dealer price”.

The dealer price is generally determined either by referring to a market quotation source or by polling a group of dealers and reflects changes in the credit profile of the reference obligor and reference asset.

If the dealer price is less than the notional amount (i.e., the hypothetical original price of the reference asset) of the contract, then the guarantor (Part B) must pay the difference to the beneficiary (Part A), absorbing any loss caused by a decline in the credit quality of the reference asset. Thus, a TROR swap differs from a standard direct credit substitute in that the guarantor (Part B) is guaranteeing not only against default of the reference obligor, but also against a deterioration in that obligor’s credit quality, which can occur even if there is no default.

Credit default swaps/products

The purpose of a credit default swap, as its name suggests, is to provide protection against credit losses associated with a default on a specified reference asset. The swap purchaser (beneficiary) swaps the credit risk with the provider of the swap (guarantor). While the transaction is called a swap, it is very similar to a guarantee.



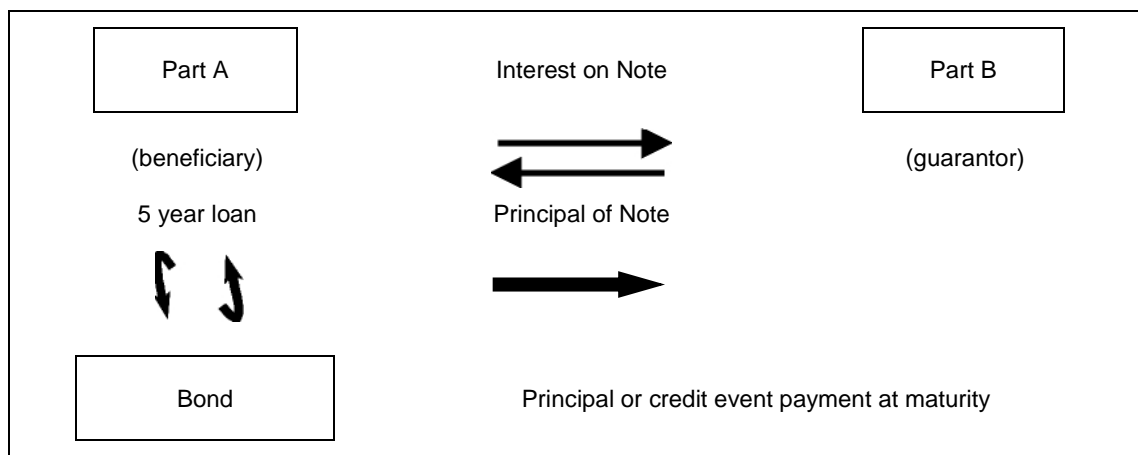
In a credit default swap, the beneficiary (Part A) agrees to pay to the guarantor (Part B) a fee typically amounting to a certain number of basis points on the par value of the reference asset, either quarterly or annually.

In return, the guarantor (Part B) agrees to pay the beneficiary (Part A) an agreed upon, market-based, post-default amount or a predetermined fixed percentage of the value of the reference asset if there is a default. The guarantor (Part B) makes no payment until there is a default. A default is strictly defined in the contract to include, for example, bankruptcy, insolvency, or payment default, and the default event must be publicly verifiable. In some instances, the guarantor (Part B) need not make payments to the beneficiary (Part A) until a pre-established amount of loss has been exceeded in conjunction with a default event. This event is often referred to as the maturity of the swap. The amount owed by the guarantor is the difference between the reference asset's initial principal (or notional) amount and the actual market value of the defaulted, reference asset. The method for establishing the post-default market value of the reference asset should be set out in the contract. Often, the market value of the defaulted reference asset may be determined by sampling dealer quotes. The guarantor (Part B) may have the option to purchase the defaulted underlying asset and pursue a workout with the borrower directly. Alternatively, the swap may call for a fixed payment in the event of default, for example, 15% of the notional value of the reference asset. The treatment of credit default swaps could differ from a guarantee depending upon the definition of default, the term, and the extent of coverage.

Credit-linked notes

In a credit-linked note, the beneficiary (Part A) agrees to pay the guarantor (Part B) the interest on an issued note referenced to a bond. The guarantor (Part B) has in this case paid the principal on the note to the issuing part. If there is no default on the reference bond, the note simply matures at the end of the period. If a credit event occurs on the bond, the note is redeemed, based on the default recovery.

Credit-linked note



A credit-linked note is a securitized version of a credit default swap. The difference between a credit default swap and a credit-linked note is that the beneficiary institution receives the principal payment from the guarantor (Part B) when the contract is originated.

Through the purchase of the credit-linked note, the guarantor (Part B) assumes the risk of the bond and funds this exposure through the purchase of the note. The guarantor part takes on the exposure to the beneficiary (Part A) to the full amount of the funding it has provided. The beneficiary part hedges its risk on the bond without acquiring any additional credit exposure. Many variations of this product are available.

Credit spread products

Credit derivative products can also go beyond the credit transfer products described above to include various forms of credit spread products or index related products. These types of instruments tend not to be credit risk management vehicles but rather options that are traded on the credit quality or credit migration of the underlying assets. In these cases, the institution is not transferring or hedging its risk but rather attempting to profit from changes in spreads. These products should be treated identically to other option products under market risk.

Annex 6 Mapping of business lines

Level 1	Level 2	Activity Groups
Corporate Finance	Corporate finance	Mergers and acquisitions, underwriting agreement, privatizations, securitisation, research, debt (government, high yield), equity, syndications, initial public offering, secondary private placements
	Financing of government entities/PSEs ³⁵⁴	
	Merchant banking	
	Advisory services	
Trading and sales	Sales	Fixed income, equity, foreign exchanges, commodities, credit, funding, own position securities, lending and repos, brokerage, debt, prime brokerage
	Market making	
	Proprietary positions	
	Treasury	
Retail Banking	Retail banking	Retail lending and deposits, banking services, trust and estates
	Private banking	Private lending and deposits, banking services, trust and estates, investment advice
	Card services	Merchant/commercial/corporate cards, private labels and retail
Commercial banking	Commercial banking	Project finance, real estate, export finance, trade finance, factoring, leasing, lending, guarantees, bills of exchange
Payment and settlement ³⁵⁵	External clients	Payments and collections, funds transfer, clearing and settlement
Agency Services	Custody	Escrow, depository receipts, securities lending (customers), corporate actions
	Corporate agency	Issuer and paying agents
	Corporate trust	
Asset Management	Discretionary fund management	Pooled, segregated, retail, institutional, closed, open, private equity
	Non-Discretionary fund management	Pooled, segregated, retail, institutional, closed, open
Retail brokerage	Retail brokerage	Execution and full service

³⁵⁴ Non-central government PSEs, as defined in Section 3.1.3 of this Guideline.

³⁵⁵ Payment and settlement losses related to an institution's own activities would be incorporated in the loss experience of the affected business line.

Principles for business line mapping³⁵⁶

- a) All business lines must be mapped into the eight level 1 business lines in a mutually exclusive and jointly exhaustive manner.
- b) Any banking or non-banking activity which cannot be readily mapped into the business line framework, but which represents an ancillary function to a business line included in the framework, must be allocated to the business line it supports. If more than one business line is supported through the ancillary activity, an objective mapping criteria must be used.
- c) When mapping gross income, if an activity cannot be mapped into a particular business line then the business line yielding the highest charge must be used. The same business line equally applies to any associated ancillary activity.
- d) An institution may use an internal pricing method to allocate gross income between business lines provided that total gross income for the institution (as would be recorded under the Basic Indicator Approach) still equals the sum of gross income for the eight business lines.
- e) The mapping of activities into business lines for operational risk capital purposes must be consistent with the definitions of business lines used for regulatory capital calculations in other risk categories, i.e. credit and market

³⁵⁶ Supplementary business line mapping guidance

There are a variety of valid approaches that institutions can use to map their activities to the eight business lines, provided the approach used meets the business line mapping principles. Nevertheless, the Basle Committee is aware that some institutions would welcome further guidance. The following is therefore an example of one possible approach that could be used by an institution to map its gross income:

Gross income for retail banking consists of net interest income on loans and advances to retail customers and SMEs treated as retail, plus fees related to traditional retail activities, net income from swaps and derivatives held to hedge the retail banking book, and income on purchased retail receivables. To calculate net interest income for retail banking, an institution takes the interest earned on its loans and advances to retail customers less the weighted average cost of funding of the loans (from whatever source – retail or other deposits).

Similarly, gross income for commercial banking consists of the net interest income on loans and advances to corporate (plus SMEs treated as corporate), interbank and sovereign customers and income on purchased corporate receivables, plus fees related to traditional commercial banking activities including commitments, guarantees, bills of exchange, net income (e.g. from coupons and dividends) on securities held in the banking book, and profits/losses on swaps and derivatives held to hedge the commercial banking book. Again, the calculation of net interest income is based on interest earned on loans and advances to corporate, interbank and sovereign customers less the weighted average cost of funding for these loans (from whatever source).

For trading and sales, gross income consists of profits/losses on instruments held for trading purposes (i.e. in the mark-to-market book), net of funding cost, plus fees from wholesale broking.

For the other five business lines, gross income consists primarily of the net fees/commissions earned in each of these businesses. Payment and settlement consists of fees to cover provision of payment/settlement facilities for wholesale counterparties. Asset management is management of assets on behalf of others.

risk. Any deviations *from* this principle must be clearly motivated and documented.

- f) The mapping process used must be clearly documented. In particular, written business lines definitions must be clear and detailed enough to allow third parties to replicate the business line mapping. Documentation must, among other things, clearly motivate any exceptions or overrides and be kept on record.
- g) Processes must be in place to define the mapping of any new activities or products.
- h) Senior management is responsible for the mapping policy (which is subject to the approval by the board of directors).
- i) The mapping process to business lines must be subject to independent review.

AMF Note

Institutions should develop a business lines mapping process consistent with these principles. The mapping process should be objective, verifiable and repeatable such that the overall operational risk capital would not change by a material amount based on misclassification of business lines mapping.

When an institution undergoes internal management restructuring, the regulatory mapping would not have to be restated for prior periods if the institution can demonstrate that this type of restructuring would not result in material differences in the operational risk capital charge. When management restructuring occurs, this assessment should be documented by the institution and be made available to the AMF upon request.