AUTORITÉ DES MARCHÉS FINANCIERS

# CAPITAL ADEQUACY GUIDELINE

## CREDIT UNIONS NOT MEMBERS OF A FEDERATION, TRUST COMPANIES AND SAVINGS COMPANIES

July 2010

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# Abbreviations

| | |
|---|---|
| ABS | Asset-backed securities |
| ABCP | Asset-backed commercial paper |
| AMA | Advanced measurement approach |
| BIS | Bank for international settlements |
| 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 |
| DvP system | Delivery-versus-payment system |
| ECA | Export credit agency |
| ECAI | External credit assessment institution |
| Fitch | Fitch Rating Services |
| FMI | Future margin income |
| GAAP | Generally accepted accounting principles |
| IRB approach | Internal ratings-based approach |
| FSCA | Act respecting financial services cooperatives |
| MDB | Multilateral development bank |
| Moody's | Moody's Investors Service |
| NHA | National Housing Act |
| OECD | Organisation for Economic Co-operation and Development |

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|---|---|
| PSE | Public sector entity |
| RRE | Residential real estate |
| SFTs | Securities financing transactions |
| S&P | Standard & Poor's |
| SM | Standard method |
| SPE | Special purpose entity |
| SPV | Special purpose vehicle |
| UCITS | Undertakings for collective investments in transferable securities |
| VAR | Value at risk |

## Introduction

The *Act to amend the Act respecting the Autorité des marchés financiers and other legislative provisions*,[1] provides for the repeal of sections 198 and 199 of the *Act respecting trust companies and savings companies*[2] ("TCSCA") and sections 7 to 10 of the *Regulation under the Act respecting trust companies and savings companies*.[3] However, these provisions concerning the capital base and the debt ratio are not yet in force,[4] such that it is necessary for the *Autorité des marchés financiers* (the "AMF") to develop an adequacy of capital guideline for trust companies and savings companies.

The TCSCA and the *Act respecting financial services cooperatives* ("FSCA"),[5] empower the AMF to issue guidelines concerning the adequacy of their capital.[6] In addition, the legislative provisions impose capital requirements pursuant to which trust companies and savings companies (companies), as well as credit unions not members of a federation[7] (credit unions), must maintain adequate capital[8] for their operations. They are also required to adhere to sound and prudent management practices, in particular, by complying with this guideline.[9]

The "*Ligne directrice sur les normes relatives à la suffisance du capital de base"* [capital adequacy guideline, available only in French] was provided to credit unions not members of a federation in 2006. That guideline set out, in a manner analogous to the 1988 Basel Accord, the capital measurement requirements established by the international standards contained in the Basel Accord, while adapting the Basel Accord framework to the specific context of financial services cooperatives, particularly as regards the capitalization instruments used by them.

1 S.Q., 2008, c. 7, ss. 113 and 171. This act was assented to on May 28, 2008.

2 R.S.Q., c. S-29.01.

3 1988 (120) G.O. II, 2124.

4 Sections 113 and 171 are expected to come into force on January 1, 2011.

5 R.S.Q., c. C-67.3.

6 Section 565 (1) FSCA and section 314.1 (1) TCSCA.

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

8 Section 451 FSCA and section 195 TCSCA .

9 Section 66 FSCA and section 177.2 TCSCA.

Subsequently, the Bank for International Settlements (BIS) published a document entitled *"International Convergence of Capital Measurement and Capital Standards",* also known as "Basel II"; it was first published in June 2004 and was revised in November 2005 and June 2006. This document 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 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 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 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

This guideline is based on the approach described in Basel II. It 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.

This guideline 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.

This guideline 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 so as to take into consideration the effect of market risk on the risk profile of the institutions.

Any credit union or company that wishes to apply the internal ratings-based (IRB) approach to credit risk and/or the advanced measurement (AMA) approach to operational risk must so inform the AMF who will specify the applicable terms and conditions. To the extent that an institution has obtained the authorization from its regulator to apply such approaches, the AMF may determine[10] if the framework implemented allows the institution to satisfy the capitalization and sound and prudent management requirements under Québec law.

[10] Based on the AMF guideline dealing with the adequacy of the capital base of financial services cooperatives which provides a prudential framework that is consistent with and comparable to the international standards set out in the document entitled *"International Convergence of Capital Measurement and Capital Standards",* also known as "Basel II".

In light of the fact that 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, the manner in which the requirements are to be applied are described in text boxes clearly identified as "AMF Notes".

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 adequacy of capital guideline will come into effect on Month XX, 2011.

# Chapter 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,* R.S.Q., c. C-67.3
- *An Act respecting trust companies and savings companies*, R.S.Q., c. S-29.01

## *1.1 Scope of Application*

This adequacy of capital 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.[11] A savings company borrows funds in the form of deposits for the purposes of loans and investments.[12]

For purposes of computing regulatory capital, a consolidated institution includes all controlled subsidiaries and all joint-ventures where Canadian generally accepted accounting principles (GAAP) require proportional consolidation.

**AMF Notes**

As stated in paragraph 28 of the New Basel Accord (June 2006), the extent of inclusions and exclusions, particularly as regards the thresholds above which minority interests will be deemed significant, is to be determined on the basis of generally accepted accounting principles (GAAP) in effect in Canada.

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

- significant minority investments in similar financial entities where control does not exist;
- investments in insurance subsidiaries and significant minority investments in other insurance entities where control does not exist;
- minority and majority investments in commercial entities which are deemed to be significant, namely, an individual investment exceeding 2% of the institution's capital and aggregate investments exceeding 10% of the institution's capital;

[11] Section 170 TCSCA .

[12] Section 171 TCSCA.

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

### *1.2 The assets to capital multiple*

Each credit union and each company, as defined in section 1.1, must at all times maintain a certain assets to capital multiple. This ratio provides an overall measure of the adequacy of capital in light of the institution's total assets and the growth of such assets.

The assets to capital multiple is calculated by dividing the institution's total assets, including specified off-balance sheet items, by the sum of its adjusted net tier 1 capital (core capital) and adjusted tier 2 capital (supplementary capital), as defined in section 2.5 of this guideline. All items that are deducted from capital are excluded from total assets.

#### *1.2.1 Components of total assets*

Off-balance sheet items are comprised, among other things, of direct credit substitutes (for example, letters of credit and guarantees), transaction-related contingencies, trade-related contingencies and sale and repurchase agreements, as described in chapter 3. These are included at their notional principal amount. In the case of derivative contracts, where institutions have legally binding master netting agreements (meeting the criteria established in section 3.5, Netting of Forwards, Swaps, Purchased Options and Other Similar Derivatives) the resulting on-balance sheet amounts can be netted for the purpose of calculating the assets to capital multiple.

#### *1.2.2 Determination of an institution's assets to capital multiple*

Every institution must ensure that its total assets do not exceed 20 times its capital.

However, this multiple can be exceeded with the prior written approval of the AMF to an amount no greater than 23 times capital. Alternatively, the AMF may prescribe a lower multiple. In setting the assets to capital multiple for individual institutions, the AMF will consider such factors as operating and management experience, strength of parent, earnings, diversification of assets, type of assets, appetite for risk and quality of capital.

The AMF will consider applications for authorized multiples in excess of 20 times from institutions that demonstrate, among other things, that, in substance, they:

- exceed their risk-based capital targets;
- have well-managed operations that focus primarily on very low risk market segments
- have a four-quarter (or two half-year) average ratio of adjusted risk-weighted assets to adjusted net on-and off-balance sheet assets[13] that is less than 60%;

[13] This ratio is calculated as follows: Total risk-weighted assets divided by Net on and off-balance sheet assets + Credit equivalent amount of OTC derivatives contracts (this includes contracts subject to and contracts not subject to permissible netting).

- have adequate capital management processes and procedures;
- have no undue risk concentrations.

The AMF will not authorize any assets to capital multiple exceeding 23 times an institution's total capital.

### *1.3 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.

$$\textbf{Risk Based capital ratio} = \frac{\text{Capital}}{\text{C}redit\ RWA_{Standard} + [12.5 \times \text{O}perational\ Risk]}$$

*where:*

*Capital* = Adjusted net tier 1 capital per section 2 if calculating the tier 1 capital ratio, or total capital per section 2 after applying all deductions and limitations if calculating the total capital ratio..

$Credit\ RWA_{Standard}$ = Risk-weighted assets for credit risk determined using the Standardized approach in chapters 3 and 4.

*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 1 capital ratio of 4% and a total capital ratio of 8%.

### *1.4 Regulatory capital*

The three primary considerations for defining the consolidated capital of an institution for purposes of measuring capital adequacy are:

- its permanence;
- its being free of mandatory fixed charges against earnings or surpluses;
- its subordinated legal position to the rights of depositors and other creditors of the institution.

Based on these three essential criteria, the components of capital fall into two separate tiers.

**AMF Notes**

This guideline does not impose a capital charge in respect of market risk. Thus, the definition of capital does not include tier 3 capital, because it is used solely for purposes of meeting market risk requirements.

Tier 1 capital comprises the highest quality capital elements, namely, elements that satisfy the three essential criteria.

Tier 2 elements fall short in meeting either of the first two capital properties listed above, but contribute nonetheless to the overall strength of a company as a going concern. Tier 2 capital comprises the following two sub-classes: hybrid instruments (tier 2A) and limited life instruments (tier 2B).

The capital elements comprising the two tiers, as well as the various limits, restrictions and deductions to which they are subject, are described in chapter 2.

### *1.5 Total risk weighted assets*

#### *1.5.1 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, and available for sale accounting;
- debt securities valued under available for sale accounting.

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

### *1.5.2 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.

# Chapter 2. Definition of Capital

## *2.1 Tier 1 capital*

Tier 1 capital ("core capital") comprises the highest quality capital elements. It is composed of elements that satisfy the three essential criteria, namely, permanence, being free of mandatory fixed charges against earnings or surpluses and legal subordination to the rights of depositors and other creditors of the institution.

Tier 1 capital includes the following elements:

- eligible[14] reserves[*] and retained surpluses;[15] [**]
- eligible capital[16] shares[*]; [**]
- common shareholders' equity, defined as common shares, contributed surplus[17] and retained earnings;[18] [***]
- qualifying non-cumulative perpetual preferred shares;
- qualifying innovative instruments[*]; (see Annex 2-1)
- qualifying non-controlling interests arising on consolidation from tier 1 capital instruments; (see section 2.3)

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[14] Section 84 FSCA.

[*] Eligibility of a tier 1 capital element refers to an element that satisfies the essential eligibility criteria for tier 1 capital.

[15] Unrealized fair value gains and losses for elements meeting the criteria in the AMF Notice entitled *"Notice relating to the 'fair value option' allowing the designation of a financial instrument as 'held for trading'* upon initial recognition" (AMF Bulletin, 18 December 2009 (Vol. 6, no. 50, section 5.1)) will be included in the determination of tier 1 capital through retained earnings or retained surpluses. The AMF expects institutions to comply with the provisions of this notice, which is based on the Basel Committee on Banking Supervision's guide entitled "Supervisory guidance on the use of the fair value option for financial instruments by banks", and to implement appropriate risk management systems prior to initial application of the Fair Value Option for a particular activity or purpose and on an ongoing basis, in keeping with the Basel Committee document.

[16] Including, in particular, the permanent shares issued under section 716 of the FSCA, which may be converted into capital shares. Issued capital shares are deemed to be permanent for purposes of treatment as tier 1 capital.

[17] Where the repayment requires the prior written approval of the AMF.

[18] See note 15.

[**] For credit unions only.

[***] For companies only.

- accumulated net after-tax foreign currency translation adjustment reported in Other Comprehensive Income;

- accumulated after-tax fair value gains or losses arising from changes to an institution's own credit risk under the Fair Value Option;

- accumulated net after-tax unrealized losses on available-for-sale equity securities reported in other comprehensive income.

Given that tier 1 capital instruments are deemed to be permanent, the redemption or repurchase for cancellation of tier 1 capital elements requires the prior written approval of the AMF.

### *2.1.1 Eligible reserves*

Every "reserve" element must satisfy the three essential criteria mentioned in sections 1.4 and 2.1 in order to be recognized as a tier 1 capital instrument.

### *2.1.2 Eligible capital shares*

Capital shares are eligible as tier 1 capital instruments insofar as they satisfy the three essential criteria mentioned in sections 1.4 and 2.1.

#### *2.1.2.1 Redemption or purchase*

Every written approval request for the redemption of eligible capital shares or their purchase for purposes of cancellation[19] shall indicate, in particular, the type of eligible 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.

### *2.1.3 Preferred shares (tier 1)*

As mentioned in sections 1.4 and 2.1, preferred shares will be judged to qualify as tier 1 instruments if they are permanent, free of mandatory fixed charges and subordinated.

#### *2.1.3.1 Permanence*

To ensure that preferred shares are permanent in nature, the following features are **not** permitted:

- retraction by the holder;

- obligation for the issuer to redeem shares;

[19] 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.

- redemption within the first five years of issuance;

- any step-up[20] representing a pre-set increase at a future date in the dividend (or distribution) rate.

Any conversion other than to common shares of the issuer or redemption is subject to prior written approval of the AMF. Moreover:

- redemption can only be for cash or the equivalent;

- conversion privileges cannot be structured to effectively provide either a redemption of or return on the original investment.

For example, an issue would not be considered non-cumulative if it had a conversion feature that compensates for undeclared dividends or provides a return of capital.

#### *2.1.3.2 Free of mandatory fixed charges*

Preferred shares included in tier 1 capital are **not** permitted to offer the following features:

- cumulative dividends;

- dividends influenced by the credit standing of the institution;

- compensation to preferred shareholders other than a dividend;

- sinking or purchase funds.

In addition, the non-declaration of a dividend shall not trigger restrictions on the issuer other than the need to seek approval of the holders of the preferred shares before paying dividends on other shares or before retiring other shares. Non-declaration of a dividend would not preclude the issuer from making the preferred shares voting or, with the prior written approval of the AMF, making payment in common shares or in eligible capital shares.

To conform to accepted practice, in the event of non-declaration of a dividend, institutions may seek the approval of the holders of preferred shares before:

- paying dividends on any shares ranking junior to the preferred shares (other than stock dividends in any shares ranking junior to the preferred shares);

- redeeming, purchasing, or otherwise retiring any share ranking junior to the preferred shares (except out of the net cash proceeds of a substantially concurrent issue of shares ranking junior to the preferred shares);

[20] An increase over the initial rate after taking into account any swap spread between the original reference index and the new reference index.

- redeeming, purchasing or otherwise retiring less than all such preferred shares;

- except pursuant to any purchase obligation, sinking fund, retraction privilege or mandatory redemption provisions attached to any series of preferred shares, redeeming, purchasing or otherwise retiring any shares ranking on a parity with such preferred shares.

#### *2.1.3.3 Subordination*

Preferred shares must be subordinated to the rights of depositors and unsecured creditors of the institution. If preferred shares are issued by a subsidiary or intermediate holding company for the funding of the institution and are to qualify for capital at the consolidated entity (non-controlling interest), the terms and conditions of the issue, as well as the intercompany transfer, must ensure that investors are placed in the same position as if the instrument was issued by the institution..

#### *2.1.3.4 Examples of acceptable features*

Outlined below are examples of certain preferred share features that may be acceptable in tier 1 capital instruments:

- a simple call feature that allows the issuer to call the instrument, provided the issue cannot be redeemed in the first five years and, after that, only with prior written approval of the AMF;

- a dividend that floats at some fixed relationship to an index or the highest of several indices, as long as the index or indices are linked to general market rates and not to the financial condition of the borrower;

- a dividend rate that is fixed for a period of years and then shifts to a rate that floats over an index, plus an additional amount tied to the increase in common share dividends if the index is not based on the institution's financial condition and the increase is not automatic, not a step-up, nor of an exploding rate nature;

- conversion of preferred shares to common shares where the minimum conversion value or the way it is to be calculated is established at the date of issue. Examples of conversion prices are: a specific dollar price; a ratio of common to preferred share prices; and a value related to the common share price at time of conversion.

#### *2.1.3.5 Examples of unacceptable features*

Examples of preferred share features that will not be acceptable in tier 1 capital are:

- an exploding dividend rate preferred share, where the dividend rate is fixed or floating for a period and then sharply increases to an uneconomically high level;

- an auction rate preferred share or a share subject to another dividend reset mechanism in which the dividend is reset periodically based, in whole or part, on the issuer's credit rating or financial condition;

- a dividend-reset mechanism that does not specify a cap, consistent with the institution's credit quality at the original date of issue.

#### *2.1.3.6 Redemption or purchase*

Where preferred shares provide for redemption by the issuer five years after following their issuance, the AMF would not normally prevent such redemptions by healthy and viable institutions, when the instrument is or has been replaced by equal or higher quality capital, including an increase in retained earnings, or if the institution is downsizing.

### *2.2 Tier 2 capital*

Tier 2 capital ("supplementary capital") comprises elements that do not satisfy the first two essential criteria (permanence or free of mandatory fixed charges), but contribute nonetheless to the overall strength of a company as a going concern.

Tier 2 capital instruments must not contain restrictive covenants or default clauses that would allow the holder to trigger acceleration of repayment in circumstances other than the insolvency, bankruptcy or winding-up of the issuer. Further, the debt agreement must be subject to Canadian and Quebec law. However, the AMF may waive this requirement, in whole or in part, provided the institution can show that an equivalent degree of subordination can be achieved as under Canadian and Quebec law. Tier 2 capital instruments with a purchase for cancellation clause will be deemed to mature on the date this clause becomes effective unless the purchase requires the prior written approval of the AMF.

Tier 2 capital includes hybrid capital instruments (tier 2A) and limited life instruments (tier 2B).

#### *2.2.1 Hybrid capital instruments (Tier 2A)*

Hybrid capital includes instruments that are essentially permanent in nature and that have certain characteristics of both equity and debt.

Tier 2A capital includes the following elements:

- eligible qualifying shares; (see section 2.2.1.1)*

- cumulative perpetual preferred shares;

- qualifying 99-year debentures; (see section 2.2.1.2)

* For credit unions only

- qualifying non-controlling interests arising on consolidation from tier 2 hybrid capital instruments;

- general allowances; (see section 2.2.1.3);

- accumulated net after-tax unrealized gains on available-for-sale equity securities reported in other comprehensive income.

Hybrid capital instruments must, at a minimum, have the following characteristics:

- unsecured, subordinated to the rights of depositors and other creditors and fully paid up;

- not redeemable at the initiative of the holder;

- may be redeemable by the issuer five years after issuance with the prior written approval of the AMF;

- available to participate in losses without triggering a cessation of ongoing operations or the start of insolvency proceedings;

- allow for the deferral of payment obligations attaching thereto if the issuer's profitability does not allow for such payment.

Where hybrid instruments provide for redemption by the issuer after five years with supervisory approval, the AMF would not normally prevent such redemptions by healthy and viable institutions when the instrument is or has been replaced by equal or higher quality capital, including an increase in retained earnings, or if the institution is downsizing.

Hybrid capital instruments issued in conjunction with a repackaging arrangement that are deemed by the AMF to be an effective amortization are to be treated as limited life instruments subject to their conforming with the criteria for tier 2B instruments. Repackaging arrangements vary, but normally involve above-market coupons and a step-down in interest rates after a specified period. Economically, therefore, they can be regarded as involving disguised capital repayment. To qualify for tier 2A, capital should not have a limited life.

#### *2.2.1.1 Eligible 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.

The qualifying shares issued by credit unions are treated as tier 2A capital instruments and qualify as such provided they satisfy the following criteria:

- legally, they are an integral part of the share capital of the credit union;

- they are essential in order for the issuing credit union to establish and operate its cooperative enterprise;

- they are a relatively stable source of capital;

- they are non-negotiable;

- they are in registered form;

- they may be issued only to members of the credit union;

- they are fully paid up;

- they are subscribed and paid for in cash;

- they must not include an obligation to pay interest;

- they may not entitle their holder, in the event of the winding-up, insolvency or dissolution of the credit union, to be reimbursed before the deposits and the other debts of the credit union have been repaid and the capital shares and the investment shares have been redeemed;

- they may not be redeemed by the credit union except in the event of the death, withdrawal or expulsion of a member or in the event of the winding-up, insolvency or dissolution of the credit union.

The eligible amount which may be included in tier 2A capital is computed by multiplying the number of qualifying shares held by members of the credit union by the price of such a share, based on a single qualifying share per member of the credit union.

#### *2.2.1.2 Eligible debentures*

Perpetual[21] debentures meeting the criteria for hybrid capital instruments mentioned in section 2.2.1 and with the following characteristics will be eligible for tier 2A capital:

- available to participate in losses while the issuer is still a going concern. Therefore, if the retained earnings of the issuer are negative, then the principal amount of the debt and unpaid interest must automatically convert to tier 1 capital instruments;

- must allow the issuer to defer principal and interest payments if the issuer does not report a surplus or a net profit for the most recent combined four quarters (or most recent combined two half-years) and the issuer eliminates interest payments on its capital instruments. Under no circumstances will the deferral of interest be allowed to compound;

[21] Perpetual includes debentures with a 99-year term.

- must not contain provisions for any form of compensation in respect of any unpaid payments, except subject to prior written approval of the AMF;

- free from special restrictive covenants or default clauses that would allow the holder to trigger acceleration of repayment in circumstances other than insolvency.

#### *2.2.1.3 General allowances (Tier 2A)*

By using the standardized approach for credit risk, the institution includes general allowances in tier 2A capital to a limit of 1.25% of credit risk-weighted assets with prior written approval from the AMF.

#### *2.2.1.4 Step-ups in tier 2A capital*

The AMF defines a step-up as a pre-set increase at a specified future date in the dividend or distribution rate to be paid on a capital instrument. It would be acceptable to include in Tier 2A capital preferred shares or perpetual subordinated debentures with moderate step-ups, provided the following conditions are met:

- the step-up cannot result in an increase of more than 100 basis points over the initial rate;

- the step-up must be calculated using the "swap spread" methodology outlined in Appendix 2-1;

- the step-up cannot occur before 10 years from the date on which the capital is issued;

- the terms of the instrument must not provide for more than one step-up over the life of the instrument;

- the step-up cannot be combined with any other feature that causes an economic incentive to redeem;

- the instrument meets all of the other conditions for Tier 2A treatment set out above.

### *2.2.2 Limited life instruments (Tier 2B)*

Limited life instruments are not permanent and include, in particular:

- eligible investment[22] shares; *

- eligible preferred[23] shares; *

[22] Section 54 (2) FSCA.

[23] Section 715 FSCA.

* For credit unions only.

- limited life redeemable preferred shares;
- qualifying capital instruments issued in conjunction with a repackaging arrangement;
- other debentures and subordinated debt;
- qualifying non-controlling interests arising on consolidation from tier 2 limited life instruments. (see section 2.3)

Limited life capital instruments must, at a minimum, have the following characteristics:

- subordination to deposit obligations and other senior creditors;
- an initial minimum term greater than, or equal to, five years.

Redemption at the option of the issuer is permitted in the first five years with the prior written approval of the AMF. Such redemptions by healthy and viable institution would not normally be prevented when the instrument is or has been replaced by equal or higher quality capital.

Term subordinated debt and term preferred shares with imbedded step-ups may be included in tier 2B capital subject to the following requirements:

- the step-up must be calculated using the "swap spread" methodology described In Annex 2-I;
- the step-up cannot be combined with any other feature that causes an economic incentive to redeem;
- the terms of the instrument must not provide for more than one step-up over the life of the instrument;
- the instrument must not have a step-up of any amount in the first five years;
- Capital instruments with step-ups greater than 100 basis points will be treated for amortization purposes as term debt that matures at the date the step-up comes into effect.

In the case of trust or loan companies, limited life debt instruments issued to a parent company, either directly or indirectly, will be included in tier 2B capital only with the prior written approval of the AMF. Before granting approval, the AMF will consider the rationale provided by the parent for not providing equity capital or not raising tier 2B capital from external sources. The AMF will also want to be assured that the interest rate is reasonable and that failure to meet debt servicing obligations on the tier 2B debt provided by the parent would not, either now or in the future, be likely to result in the parent company being unable to meet its own debt servicing obligations,[24] and would not trigger cross-default clauses under the covenants of other borrowing agreements of either the institution or the parent.

[24] Including the principal amount of debt owed.

Subordinated debt issued by a Non-Consolidated Financing Entity on or after December 1, 2008 may be included in the Tier 2B capital of an institution subject to the limitations set out in Section 2.5.3 and in Annex 2-1 and provided that, at a minimum, the following conditions are met at inception and on an ongoing basis:

- The institution must at all times have legal and *de facto* control of the Non-Consolidated Financing Entity.

- The terms and conditions of the instrument issued by the Non-Consolidated Financing Entity to the independent investors must meet the requirements for Tier 2B capital.

- The external financing must achieve, through conversion or other means, a priority after the claims of the policyholders, depositors and other senior creditors of the institution, or of a regulated financial institution subsidiary of the institution, in liquidation. The inter-company securities must have a term to maturity that is at least as long as the term to maturity of the subordinated debt issued to independent investors.

- Any other capital of the Financing Entity must be invested in accordance with paragraph above.

- The institution must provide AMF with an external legal opinion at the time of issuance confirming that in an insolvency, the claims of the external investors will be no more favourable than if the institution or the relevant regulated financial institution subsidiary had issued the instruments directly to the external investors and that the claims of the external investors will be, in all cases, subordinated to the rights of depositors, policyholders and other senior creditors of the institution or of the regulated financial institution subsidiary in which the proceeds are ultimately invested.

- The public disclosure to the external investors in the Financing Entity must clearly indicate that the funds are being used as capital for regulated entities and, that in an insolvency, the claims of the external investors are intended to be no more favourable than if the institution or the relevant regulated financial institution subsidiary had issued the instruments directly to the investors and that the claims of the external investors will be, in all cases, subordinated to the rights of depositors, policyholders and other senior creditors of the institution or the relevant regulated financial institution subsidiary.

- The notes to the consolidated financial statements of the institution must include a description of the Financing Entity, including its material contractual arrangements with third parties as well as relevant affiliates, and a description of the instruments issued by the Financing Entity to independent investors. It must be made clear that the instrument appearing on the balance sheet of the institution, taking into account the overall financing structure, is economically subordinated to the claims of the policyholders, depositors and other senior creditors of the institution, or of a regulated financial institution subsidiary of the institution, in liquidation.

- The subordinated debt issued to the independent investors must not contain mechanisms for acceleration nor cross-default provisions to other instruments, whether issued by the Financing Entity or other affiliated entities.

- The Financing Entity must not provide security to the independent investors of the subordinated debt qualifying as Tier 2B capital (however, the holders of the subordinated debt may have the benefit of a subordinated guarantee from a controlling shareholder which is an institution).

- The Financing Entity or other non-operating subsidiaries involved in the transfer of the funds from the issue to external investors to the operating company must not hold significant assets that would result in the over collateralization or protection of the holders of subordinated debt from loss. These entities will be permitted to maintain liquid assets to facilitate payment of normal expenses including interest in the process of payment.

Subordinated debt and similar instruments issued by Non-Consolidated Financing Entities of institution prior to December 1, 2010 will be counted in the regulatory capital of the institution until July 31, 2011 and will not be subject to the limitations described in Section 2.5.3, provided the instruments meet all the criteria applicable to that regulatory capital category. After July 31, 2011, these instruments will be counted in the regulatory capital of the institution only if the above conditions are met and only within the limits set out in Section 2.5.3.

### *2.3 Qualifying non-controlling interests*

Non-controlling interests, including subordinated debt issued to independent investors, arising on consolidation will be included in tier 1 or tier 2, provided:

- the instruments meet the criteria applicable to either tier;

- they do not effectively rank equally or ahead of the deposits of the institution, due to a guarantee or by any other contractual means.

If a subsidiary issues capital instruments for the funding of the institution or that are substantially in excess of its own requirements, the terms and conditions of the issue, as well as the intercompany transfer, must ensure that investors are placed in the same position as if the instrument was issued by the institution in order for it to qualify as capital on consolidation. This can only be achieved by the subsidiary using the proceeds of the issue to purchase a similar instrument from the parent. Since subsidiaries cannot buy shares in the parent, it is likely that this treatment will only be applicable to subordinated debt. In addition, to qualify as capital of the institution on a consolidated basis, the debt held by third parties cannot be secured by other assets, such as cash, held by the subsidiary.

### *2.4 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, Annex 2-II of this guideline provides a "*Self-Assessment Grid for Eligibility of Instruments in Tier 1 or 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.

### *2.5 Deductions/limitations*

All items that are deducted from capital are excluded from total assets in calculating the assets to capital multiple and are risk-weighted at 0% in the risk-based capital adequacy framework. If changes in the balance sheet value of a deducted item have not been recognized in regulatory capital, the amount deducted for the item should be its amortized cost rather than the value reported on the balance sheet.

#### *2.5.1 Deductions from tier 1 capital*

- Goodwill related to consolidated subsidiaries, subsidiaries deconsolidated for regulatory capital purposes, and the proportional share of goodwill in joint ventures subject to proportional consolidation;

- Identified intangible assets in excess of 5% of gross tier 1 capital. This requirement applies to identified intangible assets purchased directly or acquired in conjunction with or arising from the acquisition of a business. These include, but are not limited to, trademarks, core deposit intangibles, mortgage servicing rights, purchased credit card relationships, and distribution channels. Identified intangible assets include those related to consolidated subsidiaries. subsidiaries deconsolidated for regulatory capital purposes, and the proportional share in joint ventures subject to proportional consolidation.[*]

Net tier 1 capital is defined as gross tier 1 capital less the above two deductions.

- 50% of significant minority investments in similar financial entities where control does not exist;

[*] Computer software that is an integral part of the related hardware (such as the operating system) is to be treated as property, plant and equipment, while software that is not an integral part of the related hardware is to be treated as an intangible asset.

- 50% of investments in insurance subsidiaries deconsolidated for regulatory capital purposes and 50% of significant minority investments in other insurance entities where control does not exist, net of goodwill and identified intangibles that were deducted from tier 1 capital;

**AMF Notes**

**For institutions that do not benefit from a deferred treatment of the deduction of investments in insurance subsidiaries and significant minority investments in other insurance entities where control does not exist**

The application of the 50% deduction from tier 1 capital of investments in insurance subsidiaries and significant minority investments in other insurance entities where control does not exist that were held before 1 January 2009, is deferred to the 2014 fiscal year. Until then, these investments are to be fully deducted from tier 2 capital.

The assessment of investments in insurance subsidiaries attributable to the inclusion in capital of earnings from investments held before 1 January 2009 must be deducted from tier 2 capital in accordance with the aforementioned measures.

The assessment of the value of investments in insurance subsidiaries as of 1 January 2009 must not be deducted from tier 2 capital in accordance with the aforementioned measures, but must be deducted in equal shares from tier 1 capital and tier 2 capital.

Goodwill and other intangible assets related to investments in insurance subsidiaries are to be deducted from gross tier 1 capital. However, only the balance of the investments in these entities held before 1 January 2009 is to be deducted from tier 2 capital. Any increase in the balance of the value of investments in insurance subsidiaries arising from new investments made on or after 1 January 2009 will not benefit from such treatment, in accordance with the foregoing.

If total deductions attributable to tier 2 capital exceed the total tier 2 capital, the excess is to be deducted from tier 1 capital.

- 50% of investments in other regulated financial institutions whose leverage is inappropriate for a deposit institution, net of goodwill and identified intangibles that were deducted from tier 1 capital;

- back-to-back placements of new tier 1 capital, arranged either directly or indirectly, between financial institutions;

- 50% of payments made under non-DvP trades plus replacement costs where contractual payment or delivery is late by five days or more (see Annex 3-1);

- deductions from tier 2 capital in excess of total tier 2 capital available (see section 2.5.2).

#### *2.5.1.1 Deductions related to investments in commercial entities (by way of equity or other similar instruments)*

- 50% of the investment amounts exceeding a threshold of 10% of the institution's capital, when the institution's aggregate investments in commercial entities exceeds the 10% threshold;

- 50% of the investment amount exceeding a threshold of 2% of the institution's capital for any individual investment held by the institution in a commercial entity that exceeds this threshold, if the institution's aggregate investments in commercial entities does not exceed the threshold of 10% of the institution's capital.

#### *2.5.1.2 Securitization-related deductions*

- Increases in equity capital resulting from securitization transactions (e.g., capitalized future margin income, gains on sale);

- 50% of credit-enhancing interest-only strips, net of any increases in equity capital resulting from securitization transactions;

- for third party investors, 50% of investments in securitization exposures with long-term credit ratings B+ and below, and in unrated exposures;

- for third party investors, 50% of investments in securitization exposures with short-term credit ratings below A-3/P-3/R-3 and in unrated exposures;

- for originating entities, 50% of retained securitization exposures that are rated below investment grade (below BBB-), or that are unrated;

- Exceptions to the requirement to deduct unrated securitization exposures are made for the most senior exposure in a securitization, exposures that are in a second loss position or better in asset-backed commercial paper (ABCP) programs, and eligible liquidity facilities. The requirements are set forth in paragraphs 571 to 579 of section 5.4.3 of this guideline.

Adjusted net tier 1 capital is defined as gross tier 1 capital less all tier 1 deductions.

### *2.5.2 Deductions from tier 2 capital*

- 50% of significant minority investments in similar financial entities where control does not exist;

- 50% of investments in insurance subsidiaries deconsolidated for regulatory capital purposes and 50% of significant minority investments in other insurance entities where control does not exist, net of goodwill and identified intangibles that were deducted from tier 1 capital;

**AMF Notes**

**For institutions that do not benefit from a deferred treatment of the deduction of investments in insurance subsidiaries and significant minority investments in other insurance entities where control does not exist**

The application of the 50% deduction from tier 2 capital of investments in insurance subsidiaries and significant minority investments in other insurance entities where control does not exist that were held before 1 January 2009, is deferred to the 2014 fiscal year. Until then, these investments are to be fully deducted from tier 2 capital.

The assessment of investments in insurance subsidiaries attributable to the inclusion in capital of earnings from investments held before 1 January 2009 must be deducted from tier 2 capital in accordance with the aforementioned measures.

The assessment of the value of investments in insurance subsidiaries after 1 January 2009 must not be deducted solely from tier 2 capital in accordance with the aforementioned measures, but must be deducted in equal shares from tier 1 capital and tier 2 capital.

Goodwill and other intangible assets related to investments in insurance subsidiaries are to be deducted from gross tier 1 capital. However, only the balance of the investments in these entities held before 1 January 2009 is to be deducted from tier 2 capital. Any increase in the balance of the value of investments in insurance subsidiaries arising from new investments made on or after 1 January 2009 will not benefit from such treatment, in accordance with the foregoing.

For purposes of the measures mentioned hereinabove, if total deductions attributable to tier 2 capital exceed the total tier 2 capital, the excess is to be deducted from tier 1 capital.

- 50% of investments in other regulated financial institutions whose leverage is inappropriate for a deposit institution, net of goodwill and identified intangibles that were deducted from tier 1 capital;

- back-to-back placements of new tier 2 capital, arranged either directly or indirectly, between financial institutions.

- 50% of payments made under non-DvP trades plus replacement costs where contractual payment or delivery is late by five days or more (see Annex 3-1).

#### *2.5.2.1 Deductions related to investments in commercial entities (by way of equity or other similar instruments)*

- 50% of the investment amounts exceeding a threshold of 10% of the institution's capital, when the institution's aggregate investments in commercial entities exceeds the 10% threshold;

- 50% of the investment amount exceeding a threshold of 2% of the institution's capital for any individual investment held by the institution in a commercial entity that exceeds this threshold, if the institution's aggregate investments in commercial entities does not exceed the threshold of 10% of the institution's capital.

#### *2.5.2.2 Securitization-related deductions*

- 50% of credit-enhancing interest-only strips, net of any increases in equity capital resulting from securitization transactions;

- for third party investors, 50% of investments in securitization exposures with long-term credit ratings B+ and below, and in unrated exposures;

- for third party investors, 50% of investments in securitization exposures with short-term credit ratings below A-3/P-3/R-3 and in unrated exposures;

- for originating entities, 50% of retained securitization exposures that are rated below investment grade (below BBB-), or that are unrated.

Adjusted tier 2 capital is defined as tier 2 capital less all tier 2 deductions, but may not be lower than zero. If the total of all tier 2 deductions exceeds tier 2 capital available, the excess must be deducted from tier 1.

### *2.5.3 Limitations*

The eligible reserves and retained surpluses of a credit union and the common shares and retained earnings of a company must primarily comprise tier 1 capital.

The following limitations will apply to capital elements after the specified deductions and adjustments:

- A strongly capitalized institution should not have innovative instruments and non-cumulative perpetual preferred shares that, in aggregate, exceed 40% of net tier 1 capital. Should the 40% limit be exceeded at any time, the institution must immediately notify the AMF in writing and provide a detailed plan, acceptable to the AMF, to regain compliance with such limit.[25]

- Innovative instruments shall not, at the time of issuance, comprise more than 15% of net tier 1 capital. If at any time this limit is breached, the institution must immediately notify the AMF in writing and provide an acceptable plan showing how the institution proposes to quickly eliminate the excess.[26] An institution will generally be permitted by AMF to continue to include such excess in the respective categories until such time as the excess is eliminated in accordance with its plan.

[25] Tier 1 qualifying preferred shares in excess of the 40% limit may be included in tier 2A capital; such inclusion in tier 2A may be used to comply with the 40% limit.

[26] Innovative instruments that qualify for inclusion in tier 1 capital and exceed the limit of 15% of net tier 1 capital may be included in tier 2B capital up to an amount equal to 5% of tier 1 capital.

- Only those excesses arising after issuance and as a result of operating losses and/or the payment of normal dividends will normally be eligible for continued inclusion in the respective categories. However, an excess resulting from (1) common share repurchases or (2) common share repurchases and losses within the same fiscal quarter would not qualify for continued inclusion in capital.

- An institution fiscal quarter-end will be the relevant date for the purpose of determining the maximum issuing capacity or monitoring the existence of excesses in the innovative or innovative overflow categories.

- The amount of capital, net of amortization, included in tier 2 and used to meet credit and operational risk capital requirements shall not exceed 100% of net tier 1 capital.

- Limited life instruments, net of amortization, included in tier 2B capital shall not exceed a maximum of 50% of net tier 1 capital.

Any capital instruments and limited life instruments issued in excess of these limitations will not be counted as capital for the purpose of these tests; however, they will be taken into account when reviewing the overall strength of the institution.

### *2.6 Early redemption*

Redemption of a tier 1 preferred share or a tier 2A hybrid instrument at the option of the issuer is not permitted within the first five years of issuance.[27] There are, however, certain circumstances under which the AMF would consider redemption during this period. These circumstances are limited to:

- tax laws change, adversely affecting the tax advantage of the preferred shares/hybrid instrument;

- the AMF's capital adequacy requirements change, such that the preferred shares/hybrid instrument could no longer be included in calculating the risk-based capital of the institution on a consolidated basis;

- a restructuring resulting from a major acquisition or merger where the instrument is immediately exchanged for a capital-qualifying instrument of the continuing institution with identical terms and conditions and capital attributes.

The prior written approval of the AMF is required for redemption at any time.

[27] As noted above, redemption of tier 2B instruments at the option of the issuer is permitted in the first five years with the prior written approval of the AMF.

### *2.7 Hedging of subordinated debentures*

When an institution issues subordinated debentures and fully hedges (both in terms of duration and amount) these debentures against movements in another currency and the hedge is subordinate to the interest of the depositors, the institution should report the Canadian dollar value of the instrument, net of the accrued receivable or payable on the hedge. For limited life subordinated debentures (tier 2B), a hedge to within the last three years to maturity will qualify as a full hedge; hedges to a call date or to a period greater than three years before maturity will not.

In addition, the institution should disclose information of the hedging arrangement, the amount of the translation gains/losses and the accounting treatment accorded the translation gains/losses in a note to the capital adequacy return.

Subordinated debentures denominated in a foreign currency that are not fully hedged, or where the hedge is not subordinated, should be translated into Canadian dollars at the value at the time of reporting.

### *2.8 Amortization*

Tier 2 capital components are subject to straight-line amortization in the final five years prior to maturity or the effective dates governing holders' retraction rights.

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 capital* |
|---|---|
| 5 years or more | 100% |
| 4 years and less than 5 years | 80% |
| 3 years and less than 4 years | 60% |
| 2 years and less than 3 years | 40% |
| 1 year and less than 2 years | 20% |
| Less than 1 year | 0% |

Similarly, for capital instruments that have sinking funds, amortization of the amount paid into the sinking fund should begin five years before it is made. This is required because the amount in the sinking fund is not subordinated to the rights of depositors.

**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.

Amortization should be computed at the end of each fiscal quarter based on the “years to maturity” schedule (above). Thus, amortization would begin during the first quarter that ends within five calendar years of maturity.

# Chapter 3. Credit Risk– Standardized Approach

**General comments**

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. 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.

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

## *3.1 Risk Weight Categories*

*On-balance sheet and off-balance sheet credit equivalent amounts*

*Individual claims*

### *3.1.1 Claims on sovereigns*[*]

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

| Credit assessment[28] | **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 funded[29] in that currency.[30] 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.

[*] 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.

[28] This notation refers to the methodology used by Standard and Poor's. Refer to section 3.7.2.1. to determine the applicable risk weight for other rating agency methodologies.

[29] This is to say that the institution would also have corresponding liabilities denominated in the domestic currency.

[30] This lower risk weight may be extended to the risk weighting of collateral and guarantees. See sections 4.1.3. and 4.1.5.

### *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,[31] 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.

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% |

[31] The consensus country risk classification is available on the OECD's Web site (http://www.oecd.org) in the Export Credit Arrangement web page of the Trade Directorate.

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.

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:

- 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).[32] 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 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** |
|---|---|---|---|---|---|
| Risk weight | 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.

[32] That is, capital requirements that are comparable to those applied to banks in this Framework. 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.

### *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 counterpart 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 NHA[33] 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 made pursuant to subsection 193(1) of the Budget Implementation Act of 2006[34]), 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 exposure[35] qualifies for a 35 per cent 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 per cent;
- its current LTV is less than or equal to 60 per cent;
- disposition costs on the mortgaged property and risk of appraisal error are not expected to 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;

33 R.S.C. 1985, c. N-11.

34 S.C. 2006, c. 4.

35 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).

- 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%

- 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 Pillar 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[35] 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;

- 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 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 securitization 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 this guideline, Securitization 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 provisions (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;

- 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 guarantees* 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;

- securitization tranches that are rated between BB+ and BB- will be risk weighted at 350% as set out in paragraph 567 in section 5.4.3 of this guideline.

### *3.1.17 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;

* 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.

- 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*

- premises, plant and equipment and other fixed assets;

- real estate and other investments (including non-consolidated investment participation in other companies);

- investments in equity or regulatory capital instruments issued by deposit institutions, banks or securities firms, unless deducted from capital as set out in chapter 2;

- future income tax assets;

- prepaid expenses such as property taxes and utilities;

- deferred charges such as mortgage origination costs;

- all other assets.

### 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-I. 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)[36] and OTC derivatives that expose an institution to counterparty credit risk[37] is to be calculated under the rules set forth in annex 3-II.[38] This annex applies to all OTC derivatives held in the trading book.

### *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;

[36] 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.

[37] 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.

[38] Annex 3-II is based on the treatment of counterparty credit risk set out in Part 1 of the BCBS paper The Application of Basel II to Trading Activities and the Treatment of Double Default Effects (July 2005).

- 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 purchases*[39]

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

### *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.

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

### *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 contact 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.[40] 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;

[40] See 3.4., "Forwards, Swaps, Purchased Options and Other Similar Derivatives".

- 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.[41]

*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.

### *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.

[41] 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.

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;[42]
- cross-currency swaps;
- cross-currency interest rate swaps;
- outright forward foreign exchange contracts;
- currency futures;
- currency options purchased.

### *3.4.3 Equity contracts*

*These include:*

- futures;

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

- forwards;
- swaps;
- purchased options;
- 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 AMF[43] 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 positive and negative 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.

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

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

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, if positive, 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 gross 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.

The potential future credit exposure for netted transactions ($A_{net}$) equals the sum of 40% of the add-on as presently calculated ($A_{Gross}$)[44] and 60% of the add-on multiplied by the ratio of net current replacement cost to positive current replacement cost (NPR).[45]

*where:*

NPR = level of net replacement cost/level of positive replacement cost for transactions subject to legally enforceable netting agreements.

The calculation of NPR can be made on a counterparty-by-counterparty basis or on an aggregate basis for all transactions, subject to legally enforceable netting agreements. On a counterparty-by-counterparty basis a unique NPR is calculated for each counterparty. On an aggregate basis, one NPR is calculated and applied to all counterparties.

### *3.5.1 Steps for determining the credit equivalent amount of netted contracts*

(1) For each counterparty subject to bilateral netting, determine the add-ons and replacement costs of each transaction. A worksheet similar to that set out below could be used for this purpose.

[44] $A_{gross}$ equals the sum of the potential future credit exposures (i.e., notional principal amount of each transaction times the appropriate add-on factor from annex 3-II) for all transactions subject to legally enforceable netting agreements.

[45] Positive replacement cost is referred to as gross replacement cost in BIS documents; similarly the NPR is referred to as the NGR.

| Counterparty 1 | | | | | |
|---|---|---|---|---|---|
| **Transaction** | **Notional principal amount** (1) | **Add-on factor (ref. 4-3-2)** (2) | **Potential credit exposure** (1) x (2) = (3) | **Positive replacement cost** (4) | **Negative replacement cost** (5) |
| | | | | | |
| | | | | | |
| Etc. | | | | | |
| **Total** | | | $A_{Gross}$ | $R^+$ | $R^-$ |

(2) Calculate the net replacement cost for each counterparty subject to bilateral netting:

- the sum of the positive and negative replacement costs ($R^+ + R^-$) (note: negative replacement costs for one counterparty cannot be used to offset positive replacement costs for another counterparty). If the result is negative, inscribe zero.

(3) Calculate the NPR.

For institutions using the counterparty-by-counterparty basis, the NPR is the net replacement cost (from step 2) divided by the positive replacement cost (amount $R^+$ calculated in step 1).

For institutions using the aggregate basis, the NPR is the sum of the net replacement costs of all counterparties subject to bilateral netting divided by the sum of the positive replacement costs for all counterparties subject to bilateral netting.

A simple example of calculating the NPR ratio is set out below:

| | **Counterparty 1** | | **Counterparty 2** | | **Counterparty 3** | |
|---|---|---|---|---|---|---|
| **Transaction** | **Notional amount** | **Mark to market value** | **Notional amount** | **Mark to market value** | **Notional amount** | **Mark to market value** |
| **Transaction 1** | 100 | 10 | 50 | 8 | 30 | -3 |
| **Transaction 2** | 100 | -5 | 50 | 2 | 30 | 1 |
| **Positive replacement cost ($R^+$)** | | 10 | | 10 | | 1 |
| **Net replacement cost (NR)** | | 5 | | 10 | | 0 |
| **NPR (per counterparty)** | | | | | | |
| **NPR aggregate** | $\sum NR / \sum R^+ = 15/21 = 0.71$ | | | | | |

(4) $A_{net}$ must be calculated for each counterparty subject to bilateral netting; however, the NPR applied will depend on whether the institution is using the counterparty-by-counterparty basis or the aggregate basis. The institution must choose which basis it will use and use it consistently for all netted transactions.

$A_{net}$ is:

For netted contracts where the net replacement cost is > 0

$(0.4*A_{gross}) + (0.6*A_{gross} * RPN)$

For netted contracts where the net replacement cost is = 0

$0.4*A_{gross}$

(5) Calculate the credit equivalent amount for each counterparty by adding the net replacement cost (step 2) and $A_{net}$ (step 4). Aggregate the counterparties by risk weight and enter the total credit equivalent amount in table XX (numéro à determiner) of the disclosure form.

Note: Contracts may be subject to netting among different types of derivative instruments (e.g., interest rate, foreign exchange, equity, etc.). If this is the case, allocate the net replacement cost to the types of derivative instrument by pro-rating the net replacement cost among those instrument types which have a gross positive replacement cost.

## 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, overdrafts, acceptances, letters of credit, guarantees or loan substitutes; or
- purchase loans, securities, or other assets.

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 business* 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 redrawdowns, 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.

### *3.7 External credit assessments and the mapping process*

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.

* 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”.

### *3.7.1 External credit assessments*

#### *3.7.1.1 The recognition process*

90. National supervisors are responsible for determining whether an external credit assessment institution (ECAI) meets the criteria listed in the paragraph below. 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 Notes**

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

- DBRS
- Moody's Investors Service
- Standard & Poor's (S&P)
- Fitch Rating Services

#### *3.7.1.2 Eligibility criteria*

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

***Independence:*** An ECAI should be independent and should not be subject to political or economic pressures that may influence the rating. 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 assessments should be available to both domestic and foreign institutions with legitimate interests and at equivalent terms. In addition, the general methodology used by the ECAI should be publicly available.

***Disclosure:*** An ECAI should disclose the following information: 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** |
| **Long term** | | | | |
| **1 (AAA to AA-)** | AAA to AA (low) | Aaa to Aa3 | AAA to AA- | AAA to AA- |
| **2 (A+ to A-)** | A (high) to A (low) | A1 to A3 | A+ to A- | A+ to A- |
| **3 (BBB+ to BBB-)** | BBB (high) to BBB (low) | Baa1 to Baa3 | BBB+ to BBB- | BBB+ to BBB- |
| **4 (BB+ to B-)** | BB (high) to B (low) | Ba1 to B3 | BB+ to B- | BB+ to B- |
| **5 (Below B-)** | CCC or lower | Below B3 | 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.

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 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 .[46]

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, 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 ratings, if separate, would only be used to risk weight claims denominated in the domestic currency.[47]

#### *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.

[46] 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.

[47] 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.

| Credit assessment | A-1/P-1[48] | A-2/P-2 | A-3/P-3 | Others[49] |
|---|---|---|---|---|
| **Risk weight** | 20% | 50% | 100% | 150% |

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

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. (Inapplicable paragraph)

106. When a short-term assessment is to be used, the organism making the assessment needs to meet all of the eligibility criteria for recognizing ECAIs as presented in paragraph 91 in terms of its short-term assessment.

[48] 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-.

[49] This category includes all non-prime and B or C ratings.

#### *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 ECAIs. The AMF may, however, allow institutions to use unsolicited ratings in the same way as solicited ratings. However, there may be the potential for ECAIs 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 ECAIs as eligible for capital adequacy purposes.

**AMF Notes**

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*

## *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 Notes**

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).

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 Techniques*[50]

(i) 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 counterparty[51] 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.

[50] See Annex 4.1 for an overview of methodologies for the capital treatment of transactions secured by financial collateral under the standardized approach.

[51] 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.

*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.

**AMF Notes**

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 certainty 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.

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 Notes**

Transactions where an institution acts as an agent and provides a guarantee to the customer should be treated as a direct credit substitute 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,[52] 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. 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.

[52] Exposure amounts may vary where, for example, securities are being lent.

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 of section 4.1.3.

138. (Inapplicable paragraph)

(ii) 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.

(iii) 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.

(iv) 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.

(v) 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.[53, 54]

(b) Gold.

(c) 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);

[53] 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.

[54] 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.

(d) 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.[55]

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.

[55] 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:

$$E^* = \max \{0, [E \times (1 + He) - C \times (1 - Hc - Hfx)]\}$$

where:

E* = the exposure value after risk mitigation

E = current value of the exposure

He = haircut appropriate to the exposure

C = the current value of the collateral received

Hc = haircut appropriate to the collateral

Hfx = 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:

$$D = \sum_i a_i H_i$$

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**[56] | **Other issuers**[57] |
| AAA to AA-/A-1 | ≤ 1 year | 0.5 | 1 |
| | >1 year, ≤ 5 years | 2 | 4 |
| | > 5 years | 4 | 8 |
| A+ to BBB-/ A-2/A-3/P-3 and Unrated bank securities per. para. 145(d)) | ≤ 1 year | 1 | 2 |
| | >1 year, ≤ 5 years | 3 | 6 |
| | > 5 years | 6 | 12 |
| BB+ to BB- | All | 15 | |
| 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[58] | | 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.

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

[57] Includes PSEs which are not treated as sovereigns by the AMF.

[58] 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 | five business days | daily remargining |
| Other capital market transactions | ten business days | daily remargining |
| Secured lending | twenty business days | daily revaluation |

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;[59]

[59] 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.

(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;[60]

(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 Notes**

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;

(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; and

(f) Recognized clearing organizations.

[60] 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.

**AMF Notes**

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 Notes**

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; and

(d) be, together with the rights arising from the provisions required in (a) to (c) above, legally enforceable in each relevant jurisdiction upon the occurrence of an event of default and regardless of the counterparty’s insolvency or bankruptcy.

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;[61] 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.

$$E^* = \max \{0, [(\sum(E) - \sum(C)) + \sum( Es \times Hs ) + \sum(Efx \times Hfx)]\}$$[62]

*where:*

E* = the exposure value after risk mitigation

E = current value of the exposure

C = the value of the collateral received

Es = absolute value of the net position in a given security

Hs = haircut appropriate to Es

Efx = absolute value of the net position in a currency different from the settlement currency

Hfx = 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.

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

[62] The starting point for this formula is the formula in paragraph 147 which can also be presented as the following: E* = (E-C) + (E x He) + (C x Hc) + (C x Hfx).

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 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 Current Exposure Method, the calculation of the counterparty credit risk charge for an individual contract will be as follows:

$$\text{counterparty charge} = [(RC + \text{add-on}) - C_A] \times r \times 8\%$$

*where:*

RC = the replacement cost,

add-on = the amount for potential future exposure calculated according to paragraphs 92(i) and 92(ii) of Annex 3-II,

$C_A$ = the volatility adjusted collateral amount under the comprehensive approach prescribed in paragraphs 147 to 172, or zero if no eligible collateral is applied to the transaction, and

r = the risk weight of the counterparty.

187. When effective bilateral netting contracts are in place, RC will be the net replacement cost and the add-on will be $A_{Net}$ as calculated according to paragraphs 96(i) to 96(vi) of Annex 3-II. The haircut for currency risk (Hfx) should be applied when there is a mismatch between the collateral currency and the settlement currency. Even in the case where there are more than two currencies involved in the exposure, collateral and settlement currency, a single haircut assuming a 10-business day holding period scaled up as necessary depending on the frequency of mark-to-market will be applied.

187(i).

Paragraph removed - Intended for institutions that are authorized by the AMF to use the internal model method to calculate the counterparty credit risk charge

### *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; and

(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.[63] 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;

[63] 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.

(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 period that is closely in line with the grace period in the underlying obligation);

- bankruptcy, insolvency or inability of the obligor to pay its debts, or its failure or admission in writing of its inability generally to pay its debts as they become due, and analogous events; and

- restructuring of the underlying obligation involving forgiveness or postponement of principal, interest or fees that results in a credit loss event (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.[64]

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..

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

194. Other types of credit derivatives will not be eligible for recognition at this time.[65]

(ii) *Range of eligible guarantors (counter-guarantors)/protection providers*

195. Credit protection given by the following entities will be recognized:

- sovereign entities,[66] PSEs, financial institutions, banks[67] and securities firms with a lower risk weight than the counterparty;
- other entities rated A- or better. This would include credit protection provided by parent, subsidiary and affiliate companies when they have a lower risk weight than the obligor.

(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 (Structured Credit Products) will apply.

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65 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.

66 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.

67 This includes other MDBs.

(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.

**AMF Notes**

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. As specified in section 3.1.1, 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; and

(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.

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

*where:*

Pa = 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 portions 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. With regard to the institution providing credit protection through such an instrument, if the product has an external credit assessment from an ECAI, the risk weight in paragraph 567 applied to securitization tranches will be applied. 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 – Securitization Framework

## *5.1 Securitization Framework*

*Scope and definitions of transactions covered under the securitization framework*

538. Institutions must apply the securitization framework for determining regulatory capital requirements on exposures arising from traditional and synthetic securitizations or similar structures that contain features common to both. Since securitizations may be structured in many different ways, the capital treatment of a securitization 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 securitization 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 securitization. For example, transactions involving cash flows from real estate (e.g. rents) may be considered specialized lending exposures, if warranted.

539. A *traditional securitization* 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 securitizations differ from ordinary senior/subordinated debt instruments in that junior securitization 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 Notes**

In its simplest form, asset securitization is the transformation of generally illiquid assets into securities that can be traded in the capital markets. The asset securitization 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.

Securitizations 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.

**AMF Notes (Continued)**

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

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

540. A *synthetic securitization* 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 Notes**

Refer to chapter 4 - Credit Risk Mitigation for capital guidance on credit derivatives.

541. Institutions' exposures to a securitization are hereafter referred to as "securitization exposures". Securitization 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 tranched cover 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 securitization exposures.

542. 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*

543. For risk-based capital purposes, an institution is considered to be an originator with regard to a certain securitization if it meets either of the following conditions:

(a) she originates directly or indirectly underlying exposures included in the securitization;

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 an "originating entity" 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 Notes**

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 SPE;
- the institution lends to an SPE in order for that SPE to grant a loan to a borrower as though it were the institution*, or
- the institution enables** an SPE 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 securitization transaction.

* This method of lending is known as remote origination. The institution is regarded as the supplier because the SPE is creating an asset that is branded by the institution. The institution will incur reputational risk through the association with the product.

** For example, by providing credit approvals or administrative support..

### *5.2.2 Asset-backed commercial paper (ABCP) program*

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

### *5.2.3 Clean-up call*

545. A clean-up call is an option that permits the securitization exposures (e.g. asset-backed securities) to be called before all of the underlying exposures or securitization exposures have been repaid. In the case of traditional securitizations, this is generally accomplished by repurchasing the remaining securitization 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*

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

**AMF Notes**

An enhancement is an arrangement provided to an SPE 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 SPE 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

547. A credit-enhancing interest-only strip is an on-balance sheet asset that:

(i) represents a valuation of cash flows related to future margin income; and

(ii) is subordinated.

### *5.2.6 Early amortization*

548. Early amortization provisions are mechanisms that, once triggered, allow investors to be paid out prior to the originally stated maturity of the securities issued. For risk-based capital purposes, an early amortization provision will be considered either controlled or non-controlled. A controlled early amortization provision must meet all of the following conditions.

(a) The institution must have an appropriate capital/liquidity plan in place to ensure that it has sufficient capital and liquidity available in the event of an early amortization;

(b) Throughout the duration of the transaction, including the amortization period, there is the same pro rata sharing of interest, principal, expenses, losses and recoveries based on the institution's and investors' relative shares of the receivables outstanding at the beginning of each month.

(c) The institution must set a period for amortization that would be sufficient for at least 90% of the total debt outstanding at the beginning of the early amortization period to have been repaid or recognized as in default; and

(d) The pace of repayment should not be any more rapid than would be allowed by straight-line amortization over the period set out in criterion (c).

**AMF Notes**

Securitization documentation should clearly state that early amortization cannot be precipitated by regulatory actions affecting the supplier of assets.

549. An early amortization provision that does not satisfy the conditions for a controlled early amortization provision will be treated as a non-controlled early amortization provision.

### *5.2.7 Excess spread*

550. Excess spread is generally defined as gross finance charge collections and other income received by the trust or special purpose entity (SPE, specified in paragraph 552) minus certificate interest, servicing fees, charge-offs, and other senior trust or SPE expenses.

### *5.2.8 Implicit support*

551. Implicit support arises when an institution provides support to a securitization in excess of its predetermined contractual obligation.

### 5.2.9 *Special purpose entity (SPE)*

552. An SPE 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 SPE, and the structure of which is intended to isolate the SPE from the credit risk of an originator or seller of exposures. SPEs 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.

**AMF Notes**

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 SPE 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 SPE 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 SPE, 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 SPE, unless the SPE'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 SPE is a trust, the beneficiary and the indenture trustee and/or the issuer trustee must be third parties independent of the institution;

- the institution does not lend to the SPE on a subordinated basis, except as otherwise provided herein. That is, a loan provided by an institution to an SPE 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 SPE; 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 SPE, or investors in it, or bear any of the recurring expenses of the SPE.

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*

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

#### *5.3.1 Operational requirements for traditional securitizations*

554. 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 securitization exposures they retain.

(a) Significant credit risk associated with the securitized exposures has been transferred to third parties;

(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 provided 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;

(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 SPE 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 557;

f) The securitization 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.

### *5.3.2 Operational requirements for synthetic securitizations*

555. For synthetic securitizations, 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 Framework;

(b) eligible collateral is limited to that specified in paragraphs 145 and 146. Eligible collateral pledged by SPEs may be recognized;

(c) eligible guarantors are defined in paragraph 195. Institutions may not recognize SPEs as eligible guarantors in the securitization 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 557.

556. For synthetic securitizations, the effect of applying CRM techniques for hedging the underlying exposure are treated according to paragraphs 109 to 210. In case there is a maturity mismatch, the capital requirement will be determined in accordance with paragraphs 202 to 205. When the exposures in the underlying pool have different maturities, the longest maturity must be taken as the maturity of the pool. Maturity mismatches may arise in the context of synthetic 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 the tranches of the synthetic securitization may differ from that of the underlying exposures. Originating entities of synthetic securitizations must treat such maturity mismatches in the following manner. A entity using the standardized approach for securitization must deduct all retained positions that are unrated or rated below BBB-.

**AMF Notes**

The following apply to both traditional and synthetic securitizations:

- 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 SPE 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 securitization 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.

### *5.3.3 Operational requirements and treatment of clean-up calls*

557. For securitization 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; and

iii) the clean-up call must only be exercisable when 10% or less of the original underlying portfolio, or securities issued remain, or, for synthetic securitizations, when 10% or less of the original reference portfolio value remains.

**AMF Notes**

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.

558. Securitization transactions that include a clean-up call that does not meet all of the criteria stated in paragraph 557 result in a capital requirement for the originating entity. For a traditional securitization, 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 562. For synthetic securitizations, 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 securitization 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 556 and paragraphs 202 to 205.

559. 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 securitization transactions.

## *5.4 Treatment of securitization exposures*

### *5.4.1 Calculation of capital requirements*

560. Institutions are required to hold regulatory capital against all of their securitization exposures, including those arising from the provision of credit risk mitigants to a securitization 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 securitization exposures must be treated as retained securitization exposures.

*(i) Deduction*

561. When an institution is required to deduct a securitization exposure from regulatory capital, the deduction must be taken 50% from Tier 1 and 50% from Tier 2 with the one exception noted in paragraph 562. Credit enhancing (net of the amount that must be deducted from Tier 1 as in paragraph 562) are deducted 50% from Tier 1 and 50% from Tier 2. Deductions from capital may be calculated net of any specific provisions taken against the relevant securitization exposures.

562. Institutions must deduct from Tier 1 any increase in equity capital resulting from a securitization transaction, such as that associated with expected future margin income (FMI) resulting in a gain-on-sale that is recognized in regulatory capital. Such an increase in capital is referred to as a "gain-on-sale" for the purposes of the securitization framework.

563.

Paragraph removed – intended for institutions that use an internal ratings-based approach.

*(ii) Implicit support*

564. When an institution provides implicit support to a securitization, it must, at a minimum, hold capital against all of the exposures associated with the securitization transaction as if they had not been securitized. Additionally, institutions would not be permitted to recognize in regulatory capital any gain-on-sale, as defined in paragraph 562. Furthermore, the institution is required to disclose publicly that:

a) it has provided non-contractual support;

b) the capital impact of doing so.

### *5.4.2* Operational requirements for use of external credit assessments

565. The following operational criteria concerning the use of external credit assessments apply in the standardized approach of the securitization framework::

(a) to be eligible for risk-weighting purposes, the external credit 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. 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 timely repayment of both principal and interest;

(b) the external credit assessments must be from an eligible ECAI as recognized by the AMF in accordance with paragraphs 90 to 108 with the following exception. In contrast with bullet three of paragraph 91, an eligible credit assessment must be publicly available. In other words, a rating must be published in an accessible form and included in the ECAI's transition matrix. Consequently, ratings that are made available only to the parties to a transaction do not satisfy this requirement;

(c) eligible ECAIs must have a demonstrated expertise in assessing securitizations, which may be evidenced by strong market acceptance;

(d) an institution must apply external credit assessments from eligible ECAIs consistently across a given type of securitization exposure. Furthermore, an institution cannot use the credit assessments issued by one ECAI for one or more tranches and those of another ECAI for other positions (whether retained or purchased) within the same securitization structure that may or may not be rated by the first ECAI. Where two or more eligible ECAIs can be used and these assess the credit risk of the same securitization exposure differently, paragraphs 96 to 98 will apply;

(e) where CRM is provided directly to an SPE by an eligible guarantor defined in paragraph 195 and is reflected in the external credit assessment assigned to a securitization exposure(s), the risk weight associated with that external credit assessment should be used. In order to avoid any double counting, no additional capital recognition is permitted. If the CRM provider is not recognized as an eligible guarantor in paragraph 195, the covered securitization exposures should be treated as unrated;

(f) in the situation where a credit risk mitigant is not obtained by the SPE but rather applied to a specific securitization exposure within a given structure (e.g. ABS tranche), the institution must treat the exposure as if it is unrated and then use the CRM treatment outlined in chapter 4, to recognize the hedge.

### *5.4.3 Standardized approach for securitization exposures*

#### *(i) Scope*

566. Institutions that apply the standardized approach to credit risk for the type of underlying exposure(s) securitized must use the standardized approach under the securitization framework.

### *(ii) Risk weights*

567. The risk-weighted asset amount of a securitization exposure is computed by multiplying the amount of the position by the appropriate risk weight determined in accordance with the following tables. For off-balance sheet exposures, institutions must apply a CCF and then risk weight the resultant credit equivalent amount. If such an exposure is rated, a CCF of 100% must be applied. For positions with long-term ratings of B+ and below and short-term ratings other than A-1/P-1, A-2/P-2, A-3/P-3, deduction from capital as defined in paragraph 561 is required. Deduction is also required for unrated positions with the exception of the circumstances described in paragraphs 571 to 575.

**Long-term rating category**[68]

| **External Credit Assessment** | | **AAA to AA–** | **A+ to A–** | **BBB+ to BBB–** | **BB+ to BB–** | **B+ and below or unrated** |
|---|---|---|---|---|---|---|
| **Risk Weight** | Securitization exposures | 20% | 50% | 100% | 350% | Deduction |

**Short-term rating category**

| **External Credit Assessment** | | **A–1/P–1** | **A–2/P–2** | **A–3/P–3** | **All other ratings or unrated** |
|---|---|---|---|---|---|
| **Risk Weight** | Securitization exposures | 20% | 50% | 100% | Deduction |

**AMF notes**

The correspondence of AMF-recognized rating agency long- and short-term ratings to the rating categories in the Framework, described in sections 3.7.2.1 and 3.7.2.5, applies to this section as well. Note that the risk weights assigned to the rating categories in this section are in some cases different from those assigned to the rating categories in section 3.7.2.

[68] The rating designations used in the following charts are for illustrative purposes only and do not indicate any preference for, or endorsement of, any particular external assessment system.

568. The capital treatment of positions retained by originators, liquidity facilities, credit risk mitigants, and securitizations of revolving exposures are identified separately. The treatment of clean-up calls is provided in paragraphs 557 to 559.

*Investors may recognize ratings on below-investment grade exposures*

569. Only third-party investors, as opposed to institutions that serve as originators, may recognize external credit assessments that are equivalent to BB+ to BB- for risk weighting purposes of securitization exposures.

*Originators to deduct below-investment grade exposures*

570. Originating entities as defined in paragraph 543 must deduct all retained securitization exposures rated below investment grade (i.e. BBB-).

### *(iii) Exceptions to general treatment of unrated securitization exposures*

571. As noted in the tables above, unrated securitization exposures must be deducted with the following exceptions:

a) the most senior exposure in a securitization;

b) exposures that are in a second loss position or better in ABCP programs and meet the requirements outlined in paragraph 574;

c) eligible liquidity facilities.

*Treatment of unrated most senior securitization exposures*

572. If the most senior exposure in a securitization of a traditional or synthetic securitization is unrated, an institution that holds or guarantees such an exposure may determine the risk weight by applying the “look-through” treatment, provided the composition of the underlying pool is known at all times. Institutions are not required to consider interest rate or currency swaps when determining whether an exposure is the most senior in a securitization for the purpose of applying the “look-through” approach.

573. In the look-through treatment, the unrated most senior position receives the average risk weight of the underlying exposures subject to supervisory review. Where the institution is unable to determine the risk weights assigned to the underlying credit risk exposures, the unrated position must be deducted.

*Treatment of exposures in a second loss position or better in ABCP programs*

574. Deduction is not required for those unrated securitization exposures provided by sponsoring institutions to ABCP programs that satisfy the following requirements:

(a) the exposure is economically in a second loss position or better and the first loss position provides significant credit protection to the second loss position;

(b) the associated credit risk is the equivalent of investment grade or better;

(c) the institution holding the unrated securitization exposure does not retain or provide the first loss position.

575. Where these conditions are satisfied, the risk weight is the greater of:

a) 100%; or

b) the highest risk weight assigned to any of the underlying individual exposures covered by the facility.

*Risk weights for eligible liquidity facilities*

576. For eligible liquidity facilities as defined in paragraph 578 and where the conditions for use of external credit assessments in paragraph 565 are not met, the risk weight applied to the exposure's credit equivalent amount is equal to the highest risk weight assigned to any of the underlying individual exposures covered by the facility.

***(iv) Credit conversion factors for off-balance sheet exposures***

577. For risk-based capital purposes, institutions must determine whether, according to the criteria outlined below, an off-balance sheet securitization exposure qualifies as an 'eligible liquidity facility' or an 'eligible servicer cash advance facility'. All other off-balance sheet securitization exposures will receive a 100% CCF.

*Eligible liquidity facilities*

578. Institutions are permitted to treat off-balance sheet securitization exposures as eligible liquidity facilities if the following minimum requirements are satisfied:

(a) The facility documentation must clearly identify and limit the circumstances under which it may be drawn. Draws under the facility must be limited to the amount that is likely to be repaid fully from the liquidation of the underlying exposures and any seller-provided credit enhancements. In addition, the facility must not cover any losses incurred in the underlying pool of exposures prior to a draw, or be structured such that draw-down is certain (as indicated by regular or continuous draws);

(b) if the exposures that a liquidity facility is required to fund are externally rated securities, the facility can only be used to fund securities that are externally rated investment grade at the time of funding;

(c) the facility cannot be drawn after all applicable (e.g. transaction-specific and program-wide) credit enhancements from which the liquidity would benefit have been exhausted;

(d) repayment of draws on the facility (i.e. assets acquired under a purchase agreement or loans made under a lending agreement) must not be subordinated to any interests of any note holder in the program (e.g. ABCP program) or subject to deferral or waiver.

579. Where these conditions are met, the institution may apply a 20% CCF to the amount of eligible liquidity facilities with an original maturity of one year or less, or a 50 % if the facility has an original maturity of more than one year. However, if an external rating of the facility itself is used for risk-weighting the facility, a 100% CCF must be applied.

580. (Removed).

*Treatment of overlapping exposures*

581. An institution may provide several types of facilities that can be drawn under various conditions. The same institution may be providing two or more of these facilities. Given the different triggers found in these facilities, it may be the case that an institution provides duplicative coverage to the underlying exposures. In other words, the facilities provided by an institution may overlap since a draw on one facility may preclude (in part) a draw under the other facility. In the case of overlapping facilities provided by the same institution, the institution does not need to hold additional capital for the overlap. Rather, it is only required to hold capital once for the position covered by the overlapping facilities (whether they are liquidity facilities or credit enhancements). Where the overlapping facilities are subject to different conversion factors, the institution must attribute the overlapping part to the facility with the highest conversion factor. However, if overlapping facilities are provided by different institutions, each institution must hold capital for the maximum amount of the facility.

*Eligible servicer cash advance facilities*

582. Subject to AMF discretion, 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. At the AMF's discretion, such undrawn servicer cash advances or facilities that are unconditionally cancellable without prior notice may be eligible for a 0% CCF.

**AMF Notes**

*(i) Collecting and transmitting payments*

An institution whose only involvement with a particular asset securitization transaction is to collect interest and principal payments on the underlying assets and transmit these funds to the SPE or investors in the SPE securities (or a trustee representing them) should be under no obligation to remit funds to the SPE or the investors unless and until the funds are received from the obligors. Where this condition is met, this activity does not attract any capital.

An institution that is collecting interest and principal payments on the underlying assets and transmitting these funds to the SPE or investors in the SPE securities (or a trustee representing them) may also:

- structure transactions;
- analyze the underlying assets;
- perform due diligence and credit reviews;
- monitor the credit quality of the portfolio of underlying assets;
- provide servicer advances (see conditions outlined in (ii) below).

In this role, an institution should:

- comply with the conditions specified for an institution setting up an SPE;
- have evidence available in its records that its legal advisers are satisfied that the terms of the asset securitization protect it from any liability to investors in the SPE (except normal contractual obligations relating to its role in collecting and transmitting payments);
- ensure that any offering circular contains a highly visible, unequivocal statement that the institution, serving in this capacity, does not stand behind the issue or the SPE and will not make good on any losses in the portfolio.

Where an institution that is not making servicer advances meets all these conditions, this activity does not attract any capital..

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

**AMF Notes (Continued)**

*(ii) Making servicer advances*

An institution may be contractually obligated to provide funds to an SPE to ensure an uninterrupted flow of payments to investors in the SPE'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. Where an institution acts as a servicing agent, the AMF expects the following conditions to be met:

- servicer advances are not made to offset shortfalls in cash flow that arise from assets in default.;
- the credit facility under which servicer advances are funded is unconditionally cancellable by the servicing agent;
- the total value of cash advances is limited to the total amount transferable for that collection period;
- servicer advances rank ahead of all claims by investors in SPE securities, expenses and other cash allocations;
- the repayment of servicer advances comes from subsequent collections or the available enhancement facilities;
- servicer advances are repaid within thirty-one business days from the day the cash is advanced;
- the servicing agent performs an assessment of the likelihood of repayment of servicer advances prior to each advance and such advances should only be made if prudent lending standards are met.

Where these conditions and the conditions in section (i) are all met, institutions should treat undrawn facilities as off-balance sheet commitments. Drawn facilities will be treated as on-balance sheet loans.

In all other circumstances, the facilities will be treated as first loss enhancements.

### *(v) Treatment of credit risk mitigation for securitization exposures*

583. The treatment below applies to an institution that has obtained a credit risk mitigant on a securitization exposure. Credit risk mitigants include guarantees, credit derivatives, collateral and on-balance sheet netting. Collateral in this context refers to that used to hedge the credit risk of a securitization exposure rather than the underlying exposures of the securitization transaction.

584. When an institution other than the originator provides credit protection to a securitization exposure, it must calculate a capital requirement on the covered exposure as if it were an investor in that securitization. If an institution provides protection to an unrated credit enhancement, it must treat the credit protection provided as if it were directly holding the unrated credit enhancement.

*Collateral*

585. Eligible collateral is limited to that recognized under the standardized approach for CRM (paragraphs 145 and 146). Collateral pledged by SPEs may be recognized.

*Guarantees and credit derivatives*

586. Credit protection provided by the entities listed in paragraph 195 may be recognized. SPEs cannot be recognized as eligible guarantors.

587. Where guarantees or credit derivatives fulfil the minimum operational conditions as specified in paragraphs 189 to 194, institutions can take account of such credit protection in calculating capital requirements for securitization exposures.

588. Capital requirements for the guaranteed/protected portion will be calculated according to CRM for the standardized approach as specified in paragraphs 196 to 201.

*Maturity mismatches*

589. For the purpose of setting regulatory capital against a maturity mismatch, the capital requirement will be determined in accordance with paragraphs 202 to 205. When the exposures being hedged have different maturities, the longest maturity must be used.

***(vi) Capital requirement for early amortization provisions***

*Scope*

590. As described below, an originating entity is required to hold capital against all or a portion of the investors' interest (i.e. against both the drawn and undrawn balances related to the securitized exposures) when:

(a) It sells exposures into a structure that contains an early amortization feature; and

(b) the exposures sold are of a revolving nature. These involve exposures where the borrower is permitted to vary the drawn amount and repayments within an agreed limit under a line of credit (e.g. credit card receivables and corporate loan commitments).

591. The capital requirement should reflect the type of mechanism through which an early amortization is triggered.

592. For securitization structures wherein the underlying pool comprises revolving and term exposures, an institution must apply the relevant early amortization treatment (outlined below in paragraphs 594 to 605) to that portion of the underlying pool containing revolving exposures.

593. Institutions are not required to calculate a capital requirement for early amortization's in the following situations:

(a) Replenishment structures where the underlying exposures do not revolve and the early amortization ends the ability of the institution to add new exposures;

(b) Transactions of revolving assets containing early amortization features that mimic term structures (i.e. where the risk on the underlying facilities does not return to the originating entity);

(c) Structures where an institution securitizes one or more credit line(s) and where investors remain fully exposed to future draws by borrowers even after an early amortization event has occurred;

(d) The early amortization clause is solely triggered by events not related to the performance of the securitized assets or the selling institution, such as material changes in tax laws or regulations.

*Maximum capital requirement*

594. For an institution subjects to the early amortization treatment, the total capital charge for all of its positions will be subject to a maximum capital requirement (i.e. a 'cap') equal to the greater of (i) that required for retained securitization exposures, or (ii) the capital requirement that would apply had the exposures not been securitized. In addition, institutions must deduct the entire amount of any gain-on-sale and credit enhancing I/Os arising from the securitization transaction in accordance with paragraphs 561 to 563.

*Mechanics*

595. The originator's capital charge for the investors' interest is determined as the product of:

(a) the investors' interest;

(b) the appropriate CCF (as discussed below);

(c) the risk weight appropriate to the underlying exposure type, as if the exposures had not been securitized.

As described below, the CCFs depend upon whether the early amortization repays investors through a controlled or non-controlled mechanism. They also differ according to whether the securitized exposures are uncommitted retail credit lines (e.g. credit card receivables) or other credit lines (e.g. revolving corporate facilities). A line is considered uncommitted if it is unconditionally cancellable without prior notice.

### *(vii) Determination of CCFs for controlled early amortization features*

596. An early amortization feature is considered controlled when the definition as specified in paragraph 548 is satisfied.

*Uncommitted retail exposures*

597. For uncommitted retail credit lines (e.g. credit card receivables) in securitizations containing controlled early amortization features, institutions must compare the three-month average excess spread defined in paragraph 550 to the point at which the institution is required to trap excess spread as economically required by the structure (i.e. excess spread trapping point).

598. In cases where such a transaction does not require excess spread to be trapped, the trapping point is deemed to be 4.5 percentage points.

599. The institution must divide the excess spread level by the transaction's excess spread trapping point to determine the appropriate segments and apply the corresponding conversion factors, as outlined in the following table:

**Controlled early amortization features**

<table>
<tr><th></th><th colspan="2">Uncommitted</th><th>Committed</th></tr>
<tr><td rowspan="7">Retail credit lines</td><td colspan="2">3-month average excess spread<br>Credit Conversion Factor (CCF)</td><td rowspan="7">90% CCF</td></tr>
<tr><td>133.33% of trapping or more</td><td>0% CCF</td></tr>
<tr><td>less than 133.33% to 100% of trapping point</td><td>1% CCF</td></tr>
<tr><td>less than 100% to 75% of trapping point</td><td>2% CCF</td></tr>
<tr><td>less than 75% to 50% of trapping point</td><td>10% CCF</td></tr>
<tr><td>less than 50% to 25% of trapping point</td><td>20% CCF</td></tr>
<tr><td>less than 25% of trapping point</td><td>40% CCF</td></tr>
<tr><td>Non-retail credit</td><td colspan="2">90% CCF</td><td>90% CCF</td></tr>
</table>

600. Institutions are required to apply the conversion factors set out above for controlled mechanisms to the investors' interest referred to in paragraph 595.

*Other exposures*

601. All other securitized revolving exposures (i.e. those that are committed and all non-retail exposures) with controlled early amortization features will be subject to a CCF of 90% against the off-balance sheet exposures.

### *(viii) Determination of CCFs for non-controlled early amortization features*

602. Early amortization features that do not satisfy the definition of a controlled early amortization as specified in paragraph 548 will be considered non-controlled and treated as follows.

*Uncommitted retail exposures*

603. For uncommitted retail credit lines (e.g. credit card receivables) in securitizations containing non-controlled early amortization features, institutions must make the comparison described in paragraphs 597 and 598.

604. The institution must divide the excess spread level by the transaction's excess spread trapping point to determine the appropriate segments and apply the corresponding conversion factors, as outlined in the following table:

**Non-controlled early amortization features**

<table>
<tr><th></th><th colspan="2">Uncommitted</th><th>Committed</th></tr>
<tr><td rowspan="6">Retail credit lines</td><td colspan="2">3-month average excess spread<br>Credit Conversion Factor (CCF)</td><td rowspan="6">100% CCF</td></tr>
<tr><td>133.33% or more of trapping point</td><td>0% CCF</td></tr>
<tr><td>less than 133.33% to 100% of trapping point</td><td>5% CCF</td></tr>
<tr><td>less than 100% to 75% of trapping point</td><td>15% CCF</td></tr>
<tr><td>less than 75% to 50% of trapping point</td><td>50% CCF</td></tr>
<tr><td>less than 50% of trapping point</td><td>100% CCF</td></tr>
<tr><td>Non-retail credit lines</td><td colspan="2">100% CCF</td><td>100% CCF</td></tr>
</table>

*Other exposures*

605. All other securitized revolving exposures (i.e. those that are committed and all non-retail exposures) with non-controlled early amortization features will be subject to a CCF of 100% against the off-balance sheet exposures.

606. to 643.

Paragraphs removed – intended for institutions authorized to use an internal ratings-based approach for securitization exposures.

# 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,[69] 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:

i) Basic Indicator Approach;

ii) 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. Internationally active institutions and 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.[70] 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 Notes, 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.

[69] Legal risk includes, but is not limited to, exposure to fines, penalties, or punitive damages resulting from supervisory actions, as well as private settlements.

[70] 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.[71] The charge may be expressed as follows:

$$K_{BIA} = [\sum(GI_{1...n} \times \alpha)]/n$$

*where:*

$K_{BIA}$ = the capital charge under the Basic Indicator Approach

$GI_{1...n}$ = 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 Committee, relating the industry wide level of required capital to the industry wide level of the indicator.

**AMF Notes**

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 income.[72] It is intended that this measure should:

i) be gross of any provisions (e.g. for unpaid interest);

ii) be gross of operating expenses, including fees paid to outsourcing service providers;[73]

[71] 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.

[72] As defined by national supervisors and/or national accounting standards.

[73] 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.

iii) exclude realized profits/losses from the sale of securities in the banking book;[74]

iv) exclude extraordinary or irregular items as well as income derived from insurance.

**AMF Notes**

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.

The gross income definition excludes net after-tax extraordinary items. Extraordinary items should be reported on the basis of Canadian generally accepted accounting principles (GAAP).

**AMF Notes**

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 Notes**

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.

[74] 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 Committee's guidance on *Sound Practices for the Management and Supervision of Operational Risk*, February 2003.

### *6.2.2. Standardized Approach*[75, 76]

652. In the Standardized Approach, institutions' activities are divided into eight business lines: corporate finance, trading & sales, retail banking, commercial banking, payment & settlement, agency services, asset management, and retail brokerage. The business lines are defined in detail in Annex 6-I.

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[75] The 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.

[76] **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' – replaces 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

$\beta_{RB}$ 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 drawn amounts in the following credit portfolios: retail, SMEs treated as retail, and purchased retail receivables. For commercial banking, total loans and advances consists of the drawn amounts in 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.[77] 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.[78] 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:*

$K_{TSA}$ = the 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

$\beta_{1-8}$ = a fixed percentage, set by the Committee, relating the level of required capital to the level of the gross income for each of the eight business lines. The values of the betas are detailed below:

[77] At national discretion, supervisors may adopt a more conservative treatment of negative gross income.

[78] 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.

| Business Lines | Beta Factors |
|---|---|
| Corporate finance ($\beta_1$) | 18% |
| Trading and sales ($\beta_2$) | 18% |
| Retail banking ($\beta_3$) | 12% |
| Commercial banking ($\beta_4$) | 15% |
| Payment and settlement ($\beta_5$) | 18% |
| Agency services ($\beta_6$) | 15% |
| Asset management ($\beta_7$) | 12% |
| Retail brokerage ($\beta_8$) | 12% |

**AMF Notes**

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-I. 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 reporting instructions for the AMF's capital adequacy return for further guidance.

**AMF Notes**

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 Basel 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 Basel 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 Notes**

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 Approach[79]*

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;
- 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-I.

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:[80]

**AMF Notes**

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.

[79] 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.

[80] For other institutions, these criteria are recommended, with national discretion to impose them as requirements.

(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.

**AMF Notes**

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 polices 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 Notes**

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 Notes**

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 Notes**

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 Notes**

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 Notes**

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 Notes**

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(xcix) inclusively.

Paragraphs removed – intended for institutions that have specific capital charge requirements for market risk.

**AMF Notes**

*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 8 of this guideline, must nevertheless be taken into account by the target institutions, when applicable.

# Chapter 8. Supervisory Review Process

## Key principles

**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 support its ability 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 Notes**

*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*.[81]

*Minimum capital requirements*

The minimum requirements of this guideline doesn'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 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

[81] *Stress Testing by Large Financial Institutions: Current Practice and Aggregation Issues*, Committee on the Global Financial System, Bank for International Settlements, April 2000.

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 rigorous process are as follows:

- 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 oversight*[82]

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 securitization and off-balance sheet activities – and the associated risks. The board and senior management should remain informed on an on-going basis about 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.

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[82] 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.

[*] See the AMF's *Integrated Risk Management Guideline*, April 2009, section entitled "Risk appetite and risk tolerance levels".

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 bank 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.*

8.1.1 Sound compensation practices

730.iv) An institution's board of directors must actively oversee the compensation system's design and operation, which should not be controlled primarily by the chief executive officer and management team. Relevant board members and employees must have independence and expertise in risk management and compensation.

## *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, earnings or, where adequate measures exist, its overall risk level.

* See the AMF's *Integrated Risk Management Guideline*, April 2009, section 2.3 entitled "Role of the chief risk officer".

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, securitization, off balance sheet, fiduciary and other significant activities at the business line and firm wide levels;

- ensure that the economic substance of a 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 accountability and lines of authority across the institution's various business activities, and ensure there is a clear separation between business lines and the risk function;

- escalate and address breaches of internal position limits;

- provide for the review of new businesses 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 it being initiated;

- include a schedule and process for reviewing the policies, procedures and limits and for updating them as appropriate.

### *8.2.2 Management information system*

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 customized identification of concentrations and emerging risks[*].

  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 incorporate hedging and other risk mitigation actions to be carried out on a firm-wide basis while taking into account the various related basis risks.

731.v) To enable proactive management of risk, the board and senior management need to ensure that MIS is 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. In addition, it should 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 (programmer 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 there should be procedures in place 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 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.

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.

[*] See, in particular, section 8.6.3 of this guideline on risk concentrations.

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 securitization 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 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:** 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:*** 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 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 establish new, business relationships and continued access to sources of funding (programmer through the interbank or securitization markets). Reputational risk is multidimensional and reflects the perception of other market participants. Furthermore, it exists throughout the organization and exposure to reputational 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. These include the institution's business lines, liabilities, affiliated operations, off-balance sheet vehicles and the markets in which it operates. 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) An institution should incorporate the exposures that could give rise to reputational risk into its assessments of whether the requirements under the securitization 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 securitization structures such as ABCP conduits and SIVs, as well as from the sale of credit exposures to securitization trusts. It may also arise from an institution's involvement 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 priced or the main risk drivers not adequately disclosed, 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 funds, 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 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, an institution's capital position is likely to suffer.

742.vi) Institution should have appropriate policies in place to identify sources of reputational risk when entering new markets, products or lines of activities. 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 should measure the amount of support it might have to provide (including implicit support of securitizations) 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 measure as precisely as possible 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 regular stress tests. 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. 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.

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 the organization and, in effect, had not been transferred. Since the risk arising from the potential provision of implicit support is not captured by the provisions of chapters 3 to 7, it 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 a institution's ICAAP.

### *8.4 Monitoring and reporting*

739 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 review**

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, 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 reporting.

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.

* See the AMF's *Governance Guideline*, April 2009, section 4 entitled "Internal control".

### *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 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*[*].

### *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);

[*] *Principles for the Management and Supervision of Interest Rate Risk*, Basel Committee on banking supervision, July 2004. Readers should also refer to the "*Interest rate risk management guideline*" intended for financial services cooperatives, published by the AMF in April 2009.

- 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.

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 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. A risk concentration is any single exposure or group of similar exposures (programmer to the same borrower or counterparty, including protection providers, geographic area, industry or other risk factors) with the potential to produce (i) losses large enough (relative to an institution's earnings, 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 can 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. Credit risk concentrations, by their nature, are based on common or correlated risk factors, which, in times of stress, have an adverse effect on the creditworthiness of each of the individual counterparties making up the concentration. 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 for credit risk provided for in chapters 3 to 5 of this guideline.

773. Institutions should have in place effective internal policies, systems and controls to identify, measure, monitor, and control their credit risk concentrations. Institutions should explicitly consider the extent of their credit risk concentrations in their assessment of capital adequacy within the scope of this chapter. These policies should cover the different forms of credit risk concentrations to which an institution may be exposed. Such concentrations include:

- significant exposures to an individual counterparty or group of related counterparties;
- credit exposures to counterparties in the same industry or economic sector, including exposures to both regulated and nonregulated 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 a single collateral type or to credit protection provided by a single counterparty);
- trading exposures/market risk;
- 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. 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 often arise due to direct exposures to borrowers and obligors, an institution may also incur a concentration to a particular asset type indirectly through investments backed by such assets (programmer collateralized debt obligations – CDOs), as well as exposure to protection providers guaranteeing the performance of the specific asset type (programmer monoline insurers). An institution should have in place adequate, systematic procedures for identifying high correlation between the creditworthiness of a protection provider and the obligors 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 credit 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. These techniques include 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 versus 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 credit 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. An institution should ensure that, in respect of credit risk concentrations, it complies with the Committee document *Principles for the Management of Credit Risk* (September 2000) and the more detailed guidance in the Appendix to that paper.

777. In the course of its activities, the AMF should assess the extent of an institution's credit 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 business 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 credit risk concentrations are not adequately addressed by the institution.

#### *8.6.2.3 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;
- the organization of the CCR control unit;
- the integration of CCR measures into daily risk management;
- the approval process for risk pricing models and valuation systems used by front and back-office personnel;
- the validation of any significant change in the CCR measurement process;
- the scope of counterparty credit risks captured by the risk measurement model;
- the integrity of the management information system;
- the accuracy and completeness of CCR data;
- the verification of the consistency, timeliness and reliability of data sources used to run internal models, including the independence of such data sources;
- the accuracy and appropriateness of volatility and correlation assumptions;
- the accuracy of valuation and risk transformation calculations;
- the 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.

### *8.7 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)

Paragraphs removed – intended for institutions that have minimum capital requirements in respect of market risk and use internal model approaches.

779 to 783

Paragraphs removed – intended for regulators.

### *8.8 Supervisory review process for securitization*

784. In addition to the principle set out in chapters 3 to 5 of this guideline pursuant whereto 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 securitization 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 securitization, 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;
- 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 securitization 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) Securitization exposures should be included in the institution's MIS to help ensure that senior management and board of directors understand the implications of such exposures for liquidity, earnings, risk concentration and capital. More specifically, an institution should have the necessary processes in place to capture in a timely manner updated information on securitization transactions including market data, if available, and updated performance data from the securitization trustee or servicer.

784.ii) 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 consider whether it would provide support to the securitization structures in stressed scenarios due to the reliance on securitization 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 securitization exposures acquired.

### *8.8.1 Significance of risk transfer*

786. Securitization 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 securitization 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 securitizations. 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 securitization.

787. Retaining or repurchasing significant securitization exposures, depending on the proportion of risk held by the originator, might undermine the intent of a securitization 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 securitization may not be able to address all potential issues, the AMF is expected to consider new features of securitization 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 securitization 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 securitization 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 securitization, 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 securitization 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 securitizations, 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 securitization 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 securitization 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 securitization transaction.

### *8.8.6 Early amortization*

801. The AMF should review how institutions internally measure, monitor, and manage risks associated with securitizations 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 securitizations 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. In addition, the capital contingency plan should address the possibility that the institution will face higher levels of required capital under the early amortization requirements within the scope of chapters 3 to 6 of this guideline.

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 or raising the early amortization credit conversion factor, thus, increasing the institution's capital requirements.

805. While the early amortization capital charge described in chapters 3 to 6 of this guideline is meant to address potential AMF concerns associated with an early amortization event, such as the inability of excess spread to cover potential losses, the policies and monitoring described in this section recognize that a given level of excess spread is not, by itself, a perfect proxy for credit performance of the underlying pool of exposures. In some circumstances, for example, excess spread levels may decline so rapidly as to not provide a timely indicator of underlying credit deterioration. Further, excess spread levels may reside far above trigger levels, but still exhibit a high degree of volatility which could warrant AMF attention. In addition, excess spread levels can fluctuate for reasons unrelated to underlying credit risk, such as a mismatch in the rate at which finance charges reprice relative to investor certificate rates. Routine fluctuations of excess spread might not generate AMF concerns, even when they result in different capital requirements. This is particularly the case as an institution moves in or out of the first step of the early amortization credit conversion factors. On the other hand, existing excess spread levels may be maintained by adding (or designating) an increasing number of new accounts to the master trust, an action that would tend to mask potential deterioration in a portfolio. For all of these reasons, the AMF will place particular emphasis on internal management, controls, and risk monitoring activities with respect to securitizations with early amortization features.

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 securitization activities that involve early amortization provisions.

807. For controlled amortization's specifically, the AMF may also review the process by which an institution determines the minimum amortization period required to pay down 90% of the outstanding balance at the point of early amortization. Where the AMF does not consider this adequate the AMF will take appropriate action, such as increasing the conversion factor associated with a particular transaction or class of transactions.

### *8.9 Fair value valuation practices**

The following principles applies to all positions that are measured at fair value and at all times, not only during times of stress.

807.i) The characteristics of complex structured products, including securitization 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 links 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.ii) Therefore, an institution is expected to have adequate 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 bank, 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 all significant changes to valuation policies.

807.iii) An institution should also have clear and robust governance structures for the production, assignment and verification of financial instrument valuations. Policies should ensure that the approvals of all valuation methodologies are well documented. In addition, policies and procedures should set forth the range of acceptable practices for the initial pricing, marking-to-market/model, valuation adjustments and periodic independent revaluation. New product approval processes should include all internal stakeholders relevant to risk measurement, risk control, and the assignment and verification of valuations of financial instruments.

807.iv) An institution’s control processes for measuring and reporting valuations 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 valuation/new product approval process should be supported by a transparent, well-documented inventory of acceptable valuation methodologies that are specific to products and businesses.

* See, in particular, the AMF Notice entitled, *"Notice relating to the 'fair value option' allowing the designation of a financial instrument as 'held for trading' upon initial recognition"* (AMF Bulletin, 18 December 2009 (Vol. 6, no.50, section 5.1)) as well as the Basel Committee's guide entitled "*Supervisory guidance on the use of the fair value option for financial instruments by banks*".

807.v) 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 importance, riskiness and size of these 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 under stress conditions.

807.vi) 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 a valuation technique. However, where a market is deemed inactive, observable inputs or transactions may not be relevant. 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:

- 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 participants in the market
- 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.vii) An institution's external reporting should provide 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 instruments to which they are applied; the sensitivity of fair values to modelling inputs and assumptions; and the impact of stress scenarios on valuations. An institution should regularly review its disclosure policies to ensure that the information disclosed continues to be relevant to its business model and products and to current market conditions.

# Chapter 9. Market discipline

## *9.1 Disclosure framework*

### *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 New Basel 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.

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.[83] 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 not 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.

**Comments**

The AMF encourages each institution to make the quantitative disclosures provided for in this chapter as of the first filing of financial information applicable to it in 2011. Moreover, the AMF will require all required disclosures to be made within a reasonable period after the end of the institution's financial year that follows the first filing in 2011, 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 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.

[83] These components include Tier 1 capital, total capital and total required capital.

### *9.2 The disclosure requirements*[84]

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.

The portion applicable to section 822 has been moved to section 9.2.4 for purposes of continuity in the presentation of the tables.

#### *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 securitization, 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.

#### *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.

[84] In this section, disclosures marked with an asterisk are conditions for use of a particular approach or methodology for the calculation of regulatory capital.

### *9.2.4 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<br>**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:<br><br>a) consolidated components;[85]<br>b) proportionally consolidated components;[86]<br>c) components excluded by way of deduction;[87]<br>d) neither consolidated nor 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[88] in all subsidiaries not included in the consolidation i.e. that are deducted and the name(s) of such subsidiaries. |

[85] In accordance with Canadian generally accepted accounting principles.

[86] In accordance with Canadian generally accepted accounting principles.

[87] 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 generally accepted accounting principles.

[88] 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<br>**Capital structure** | | |
|---|---|---|
| **Qualitative Disclosures** | (a) | Summary information on the terms and conditions of the main features of all capital instruments, especially in the case of innovative, complex or hybrid capital instruments. |
| **Quantitative Disclosures** | (b) | The amount of Tier 1 capital, with separate disclosure of:<br>• eligible reserves;<br>• retained surpluses;<br>• eligible capital shares;<br>• ordinary share capital, namely, common shares, contributed surplus and retained earnings;<br>• qualifying non-cumulative perpetual preferred shares;<br>• qualifying innovative instruments;<br>• other capital instruments;<br>• qualifying non-controlling interests arising on consolidation from tier 1 capital instruments;<br>• accumulated net after-tax foreign currency translation adjustment reported in other comprehensive income;<br>• accumulated after-tax fair value gains or losses arising from changes to an institution's own credit risk under the fair value option;<br>• accumulated net after-tax unrealized losses on available-for-sale equity securities reported in other comprehensive income;<br>• amounts to be deducted from tier 1 capital as described in section 2.5 of this guideline. |
| | (c) | The total amount of tier 2 capital. |
| | (d) | Amounts to be deducted from tier 2 capital. |
| | (e) | Total eligible capital. |

| Table 3<br><br>**Capital adequacy** | | |
|---|---|---|
| **Qualitative 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) | Capital requirements for credit risk:<br>• portfolios subject to standardized approach, disclosed separately for each portfolio;<br>• Securitization exposures. |
| | (c) | Capital requirements for operational risk:[89]<br>• basic indicator approach;<br>• standardized approach. |
| | (d) | Total and Tier 1[90] capital ratio:<br>• on a consolidated basis for the institution, as defined in section 1.1. |

[89] Capital requirements are to be disclosed only for the approaches used.

[90] Including proportion of innovative capital instruments.

### *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.

Table 4[91]

**Credit risk:**
**General disclosures**

| | | |
|---|---|---|
| **Qualitative Disclosures** | (a) | The general qualitative disclosure requirement (paragraph 824 of section 9.2.3) with respect to credit risk, including:<br><br>• definitions of past due and/or doubtful loans (for accounting purposes);<br>• description of approaches followed for specific and general allowances and statistical methods;<br>• discussion of the institution's credit risk management policy. |

[91] Table 4 does not include equities.

| | | |
|---|---|---|
| **Quantitative Disclosures** | (b) | Total gross credit risk exposures,[92] plus average gross exposure[93] over the period,[94] broken down by major types of credit exposure.[95] |
| | (c) | Geographic distribution[96] of exposures, broken down in significant areas by major types of credit exposure. |
| | (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:<br>• amount of doubtful loans and if available, past due loans, provided separately;[97]<br>• specific and general allowances;<br>• 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.[98] |
| | (h) | Reconciliation of changes in the allowances for doubtful loans.[99] |
| | (i) | For each portfolio, the amount of exposures subject to the standardized approach. |

[92] 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 generally accepted accounting principles and without taking into account the effects of credit risk mitigation techniques, e.g. collateral and netting.

[93] Where the period end position is representative of the risk positions of the institution during the period, average gross exposures need not be disclosed.

[94] 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.

[95] 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.

[96] 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.

[97] Institution is encouraged also to provide an analysis of the ageing of past due loans.

[98] The portion of general allowance that is not allocated to a geographical area should be disclosed separately.

[99] This reconciliation involves pieces of information already covered by Canadian generally accepted accounting principles, 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**

| | | |
|---|---|---|
| **Qualitative Disclosures** | (a) | For portfolios under the standardized approach:<br><br>• names of ECAIs and ECAs used, plus reasons for any changes; [84]<br>• types of exposure for which each agency is used;<br>• description of the process used to transfer public issue ratings onto comparable assets in the banking book;<br>• alignment of the alphanumerical scale of each agency used with risk buckets. |
| **Quantitative Disclosures** | (b) | 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. |

Paragraph 826 and table 6 removed – disclosures for portfolios subject to IRB approaches with respect to credit risk.

Table 7 [84]

**Credit risk mitigation: disclosures for standardized approach[100], [101]**

| | | |
|---|---|---|
| **Qualitative Disclosures** | (a) | The general qualitative disclosure requirement (paragraph 824) with respect to credit risk mitigation including:<br>• policies and processes for, and an indication of the extent to which the institution makes use of, on- and off-balance sheet netting;<br>• policies and processes for collateral valuation and management;<br>• a description of the main types of collateral taken by the institution;<br>• the main types of guarantor/credit derivative counterparty and their creditworthiness;<br>• information about (market or credit) risk concentrations within the mitigation taken. |
| **Quantitative Disclosures** | (b) | 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.[102] |
| | (c) | 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. |

[100] 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.

[101] 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).

[102] 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 6 of this guideline.

| Table 8<br><br>**Counterparty credit risk: general disclosure for exposures** | | |
|---|---|---|
| **Qualitative Disclosures** | (a) | The general qualitative disclosure requirement (paragraphs 824 and 825) with respect to derivatives and CCR, including:<br>• discussion of methodology used to assign economic capital and credit limits for counterparty credit exposures;<br>• discussion of policies for securing collateral and establishing credit reserves;<br>• discussion of policies with respect to wrong-way risk exposures;<br>• 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.[103] 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 .[104] |
| | (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,[105] broken down further by protection bought and sold within each product group. |

[103] 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.

[104] This might be interest rate contracts, FX contracts, equity contracts, credit derivatives, and commodity/other contracts.

[105] This might be Credit Default Swaps, Total Return Swaps, Credit options, and other.

| Table 9<br><br>**Securitisation: disclosure for standardised approach**[101] | | |
|---|---|---|
| **Qualitative Disclosures**[84] | (a) | The general qualitative disclosure requirement (paragraph 824) with respect to securitization (including synthetics), including a discussion of:<br>• the institution's objectives in relation to securitization activity, including the extent to which these activities transfer credit risk of the underlying securitized exposures away from the institution to other entities;<br>• the various roles played by the institution in the securitization process[106] and an indication of the extent of the institution's involvement in each of them;<br>• the regulatory capital approaches (e.g. Standardized Approach (SA); Ratings Based Approach (RBA); Supervisory Formula Approach (SFA)) that the institution uses for its securitization activities. |
| | (b) | Summary of the institution's accounting policies for securitization activities, including:<br>• whether the transactions are treated as sales or financings;<br>• recognition of gain on sale;<br>• key assumptions for valuing retained interests, including any significant changes since the last reporting period and the impact of such changes;<br>• treatment of synthetic securitizations if this is not covered by other accounting policies (e.g. on derivatives); |
| | (c) | Names of ECAIs used for securitizations and the types of securitization exposure for which each agency is used. |

[106] For example: originator, investor, servicer, provider of credit enhancement, sponsor of asset backed commercial paper facility, liquidity provider, swap provider, protection provider.

| | | |
|---|---|---|
| **Quantitative Disclosures**[84] | (d) | The total outstanding exposures securitized by the institution and subject to the securitization framework (broken down into traditional/synthetic) by exposure type[107,108 109] |
| | (e) | For exposures securitized by the institution and subject to the securitization framework[109]:<br>• amount of impaired/past due assets securitized, and<br>• losses recognized by the institution during the current period by exposure type. [110] |
| | f) | Aggregate amount of securitisation exposures retained and purchased[111] intended to be securitized broken down by exposure type.[107]<br>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 type of underlying asset. |
| | h) | For securitisations subject to the early amortisation treatment, the ollowing item by underlying asset type for securitised facilities:<br>• the aggregate drawn exposures attributed to the seller's and investors' interest. |
| | (l) | Summary of current period's securitization activity, including the total amount of exposures securitized (by exposure type), and recognized gain or loss on sale by exposure type. |

Tables 10 and 11

Tables removed – disclosure – market risks – the institutions contemplated in this guideline do not have specific market risk capital requirements

[107] For example, credit cards, home equity, auto, and securitization exposures detailed by underlying exposure type and security type.

[108] Securitisation transactions in which the originating institution does not retain any securitisation exposure should be shown separately but need only be reported for the year of inception

[109] Where relevant, institutions are encouraged to differentiate between exposures resulting from activities in which they act only as sponsors, and exposures that result from all other institution securitisation activities they are subject to the securitisation framework.

[110] 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.

[111] Securitization exposures, as noted in chapter 5 of this guideline, include, but are not restricted to, securities, liquidity facilities, other commitments and credit enhancements such as I/O strips, cash collateral accounts and other subordinated assets.

### *9.2.7 Operational risk*

| Table 12<br><br>**Operational risk** | | |
|---|---|---|
| **Qualitative Disclosures** | (a) | In addition to the general qualitative disclosure requirement (paragraph 824), the approach(es) 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. |

### *9.2.8 Equities*

| Table 13<br><br>**Equities: disclosures for banking book positions** | | |
|---|---|---|
| **Qualitative Disclosures** | (a) | The general qualitative disclosure requirement (paragraph 824) with respect to equity risk, including:<br>• differentiation between holdings on which capital gains are expected and those taken under other objectives including for relationship and strategic reasons;<br>• 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. |
| **Quantitative Disclosures**[84] | (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 |
| | (c) | The types and nature of investments, including the amount that can be classified as:<br>• publicly traded;<br>• privately held. |
| | (d) | The cumulative realized gains (losses) arising from sales and liquidations in the reporting period. |
| | (e) | • Total unrealized gains (losses);[112]<br>• total latent revaluation gains (losses);[113]<br>• 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. |

[112] Unrealized gains (losses) recognized in the balance sheet but not through the profit and loss account.

[113] 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<br><br>**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). |

# ANNEXES

# Annex 1 NON-EXISTENT

# Annex 2-I Principles Governing Inclusion of Innovative Instruments in Tier 1 Capital

## A. Application

### Purpose and content of this annex

The purpose of this annex is to provide a guide for credit unions and companies on the principles that, in the opinion of the AMF, should be applied with respect to the inclusion of innovative instruments in tier 1 capital.

Within the scope of this annex, the AMF intends to revisit the principles in light of any issues raised as regards their application to specific transactions; the AMF will update this annex in light of its experience in applying it. Any subsequent amendment of the principles will not cancel previously granted authorizations.

For the purposes of this Appendix, “innovative instrument” means an instrument issued by a Special Purpose Vehicle (SPV), which is a consolidated non-operating entity whose primary purpose is to raise capital. A non-operating entity cannot have depositors. The institution must, at all times, have clear ownership and control (both legal and *de facto*) of the SPV. The institution must directly hold, at all times, all of the voting securities of the SPV in the case of Canadian-style innovative Tier 1 instruments.

For “loan-based” innovative Tier 1 instruments, the SPV will no longer be required to be consolidated as a precondition for the public issue to be treated as innovative Tier 1 capital of the institution.

This Appendix applies to indirect issues done through an SPV. To qualify as capital, direct issues must meet the conditions set out in chapter 2 of this guideline. Note that step-ups are not permitted in directly issued Tier 1 instruments.

The content of this annex was derived in particular from the principles set out in October 1998 by the Bank for International Settlements in a press release entitled “*Instruments eligible for inclusion in Tier 1 capital*” and it has been adapted in light of Québec’s legal framework applicable to companies and credit unions.

In this Appendix, an Asset-Based Structure is one where the assets of the SPV do not include an instrument issued by the institution. A Loan-Based Structure is one where the SPV’s primary asset is an instrument issued by the institution.

**Prior requirements**

When an institution intends to rely on an innovative instrument for purposes of capitalization, it must first send the following information and documents to the AMF for the latter's initial review of the proposed offering:

- the timetable for the proposed transaction;
- a letter clearly indicating to the AMF that the proposed offering complies with each of the principles set forth in this annex as well as with the "*Adequacy of Capital Guideline "*;
- legal opinions, including independent "unqualified" opinions, stating that the transaction complies with applicable laws and regulations and that the proposed structure is subject to applicable tax laws and complies therewith. It must be clear that the AMF can rely on such opinions;
- a presentation describing the proposed offering in full, whether it is an "asset-based structure" or a "loan-based structure";
- "term sheets" providing details of the terms and conditions of each instrument included in the proposed transaction (for example, the rates applicable to the innovative instrument at the time of the offering);
- the trust deed and the administration agreement;
- the preliminary prospectus, if it must be published.

Other information may be required, depending on the complexity of the transaction and the concerns it raises regarding AMF oversight.

Finally, the institution will be required to obtain written confirmation from the AMF authorizing the inclusion of the innovative instruments in tier 1 capital.

**B. Limits on innovative instruments in tier 1 capital**

| | |
|---|---|
| **Principle 1:** | **The AMF expects financial institutions to meet capital requirements without undue reliance on innovative instruments.**<br>**Reserves, retained surpluses and the capital shares of a credit union or the share capital of a company (common shares, contributed surplus and retained earnings) should be the predominant form of a financial institution's Tier 1 capital.** |

1(a) The AMF will authorize an institution to have outstanding innovative instruments that do not exceed 20% of its net tier 1 capital. Eligible innovative instruments may comprise up to 15% of net tier 1 capital and any excess, up to 5% of net tier 1 capital, may be included in limited life instruments (2B) as part of tier 2 capital. Tier 1 innovative instruments that can be included in tier 2 capital may subsequently be transferred to tier 1 eligible innovative instruments, as and when limits permit.

In addition, and without limiting the application of the preceding paragraph, subordinated debt issued by Non-Consolidated Financing Entities will be eligible for inclusion in Tier 2B capital provided the conditions set out in Section 2.2.2 are met. The sum of this subordinated debt and innovative Tier 1 instruments included in Tier 2B capital of the institution must not exceed the greater of 5% of net Tier 1 capital of the institution or the dollar amount obtained when the 5% limit is calculated across the entire institution (the "innovative overflow"). Any portion of the "innovative overflow" composed of subordinated debt issued by Non-Consolidated Financing Entities permissible within Tier 2B cannot, at any time, be transferred to the innovative Tier 1 category.

If these limits are exceeded and the institution wishes to have the excess recognized, it must immediately notify the AMF in writing and submit to the AMF, for the latter's authorization, a plan showing how the institution proposes to eliminate the excess quickly. Following its analysis of the plan, the AMF may authorize the institution to include all or part of the excess in its tier 1 capital or tier 2 capital, until such time as the excess is eliminated in accordance with the plan.

1(b) A strongly capitalized institution should not have innovative instruments and perpetual non-cumulative preferred shares that, in aggregate, exceed 40% of its net Tier 1 capital. Tier 1-qualifying preferred shares issued in excess of this limit can be included in Tier 2 capital.

When computing the 40% limit of net tier 1 capital that, in the aggregate, its innovative instruments and perpetual non-cumulative preferred shares must satisfy, an institution will not be required to take into account innovative instruments included in tier 2 capital.

1(c) For the purposes of this principle, "net Tier 1 capital" means Tier 1 capital available after deductions in accordance with the provisions of this guideline.

### C. General principles for innovative instruments

Innovative instruments may be included in Tier 1 capital, subject to the limits set out in principle #1, provided they meet certain requirements. The following principles will govern their inclusion:

**Principle 2: The nature of inter-company instruments issued by the financial institution in connection with the raising of Tier 1 capital by way of innovative instruments must not compromise the Tier 1 qualities of the innovative instrument.**

2 (a) An SPV should not, at any time, hold assets that materially exceed the amount of the innovative instrument. For Asset-Based Structures, the AMF will consider the excess to be material if it exceeds 25% of the innovative instrument(s) and, for Loan-Based Structures, the excess will be considered to be material if it exceeds 3% of the innovative instrument(s). Amounts in excess of these thresholds are subject to the prior written authorization of the AMF.

2(b) The following minimum standards apply to inter-company instruments issued by the institution when raising Tier 1 capital by way of an innovative instrument:

(1) Inter-company instruments must be permanent and may contain a maturity date, provided the term to maturity is at least 99 years. If, at maturity, the proceeds are not used to repay the innovative instrument, the SPV must reinvest the proceeds in assets acquired from the institution;

(2) Failure to make payments or to meet covenants must not cause acceleration of repayment of the inter-company instrument;

(3) The inter-company instrument must not be secured or covered by a guarantee or other arrangement that legally or economically results in a priority that contravenes the provisions of legislation applicable to the institution.

**Principle 3: Innovative instruments must allow financial institution to absorb her losses.**

3(a) Innovative instruments must enable the institution to absorb losses without triggering the cessation of ongoing operations or the start of insolvency proceedings. The ability to absorb losses must be present well before there is any serious deterioration in the institution's financial position.

3(b) The method used to achieve loss absorption within the institution must be transparent and must not raise any uncertainty about the availability of capital for this purpose. Any of the following mechanisms would be acceptable, provided the AMF receives a high degree of assurance that they will function appropriately:

(1) Mandatory write-down of the innovative instrument.

(2) Automatic conversion into Tier 1-qualifying preferred shares of the institution. Automatic conversion must occur, at a minimum, upon the occurrence of any of the following events (Loss Absorption Events):

(a) A court issues a winding-up order in respect of the institution pursuant to the *Winding-up and Restructuring Act* (R.S.C., 1985, c. W-11); or

b) the Superior Court orders the appointment of a receiver in accordance with the provisions of the *Act respecting the Autorité des marchés financiers* (R.S.Q., c. A-33.2, s. 19.1.); or

c) the AMF advises the institution in writing that the AMF is of the opinion that, in the case of an institution, it has a Tier 1 capital ratio of less than 4.0% or a Total Capital ratio of less than 8.0%; or

d) the institution's Board of Directors advises the AMF in writing that, in the case of an institution, it has a Tier 1 capital ratio of less than 4.0% or a Total Capital ratio of less than 8.0%; or

e) the AMF asks the institution, under the *Act respecting financial services cooperatives* or the *Act respecting trust companies and savings companies*, to increase its capital or provide additional liquidity and the institution elects to cause the exchange as a consequence of the issuance of such direction or the institution does not comply with such direction to the satisfaction of the AMF within the time specified.

If the Tier 1-qualifying preferred shares issued pursuant to an automatic conversion contain a feature allowing the holder to convert into common shares at future market values, such a feature must be structured to ensure that the investors would absorb losses. Accordingly, the right to convert must be structured to ensure that the holder cannot exercise the conversion right while a Loss Absorption Event is continuing.

The dividend rate on the Tier 1-qualifying preferred shares issued pursuant to an automatic conversion must be established at the time the innovative instrument is issued and must not exceed the market rate for such shares as at that date. The risk premium (over the risk-free rate) reflected in the dividend rate on the Tier 1-qualifying preferred shares issued pursuant to the automatic conversion must be established at the time the innovative instrument is issued and must not exceed the risk premium (over the risk-free rate) reflected in the dividend rate of comparable shares as at that date (i.e. upon original issuance of the innovative instrument).

(3) Any other method that is consistent with Principle #4 hereinbelow and with respect to which the AMF has given its prior written authorization.

**Principle 4: Innovative instruments must absorb losses in liquidation.**

4(a) Innovative instruments must achieve, through conversion or other means (for example, a mechanism that ensures investors will receive distributions consistent with preferred shareholders of the institution), a priority after the claims of depositors, other creditors and subordinated debt holders of the institution in a liquidation;

4(b) Innovative instruments must not be secured or covered by a guarantee or other arrangement that legally or economically results in a claim ranking equal to or prior to the claims of depositors, other creditors and subordinated debt holders of the institution in a liquidation.

**Principle 5: Innovative instruments must not contain any feature that may impair the permanence of the instrument.**

5(a) For the purposes of this principle, a step-up[114] is defined as a pre-set increase at a future date in the dividend (or distribution) rate to be paid on an innovative instrument. Moderate step-ups in innovative instruments are permitted only if the moderate step-up occurs at least 10 years after the issue date and if it results in an increase over the initial rate not exceeding the greater of:

(i) 100 basis points, less the swap spread between the initial index basis and the stepped-up index basis;

(ii) 50 per cent of the initial credit spread, less the swap spread between the initial index basis and the stepped-up basis.

The terms of the innovative instrument should provide for no more than one rate step-up over the life of the instrument. The swap spread should be fixed as of the pricing date and should reflect the differential in pricing on that date between the initial reference security or rate and the stepped-up reference security or rate.

5(b) A step-up feature cannot be combined with any other feature that creates an economic incentive to redeem.

5(c) A redemption feature after an initial five-year period is acceptable in an innovative instrument on the condition that the redemption requires both the prior written approval of the AMF and the replacement of the innovative instrument with capital of the same or better quality, unless the AMF determines that the institution has capital that is more than adequate to cover its risks.

An innovative instrument may be redeemed during the initial five-year period, with the prior written approval of the AMF, upon the occurrence of tax or regulatory (including legislative) changes affecting one or more components of the transaction. It is highly unlikely that the AMF would approve redemption of an innovative instrument in the initial five-year period due to a tax reassessment.

The purchase for cancellation of an innovative instrument requires the prior written approval of the AMF.

5(d) An innovative instrument may include securities with 99-year terms. However, for purposes of regulatory capital, such instruments will be subject to straight-line amortization in the final ten years to maturity.

[114] Note that step-ups are not permitted in directly issued Tier 1 instruments.

5(e) An innovative instrument must not contain a feature allowing the holder to convert the innovative instrument directly into common shares of the institution. Conversion into common shares is permitted only if the conversion occurs first into Tier 1-qualifying preferred shares of the institution which are then convertible into common shares of the institution, and provided the AMF is satisfied that the innovative instrument is issued in a market where the conversion feature is widely accepted.

5(f) It is not permit, in the innovative Tier 1 category, new issues of "soft-retractable" securities (i.e., securities which, at the option of the holder, convert at a later date, directly or indirectly via intermediate securities, into other securities the number of which is based wholly or partially on the then prevailing credit-worthiness of the institution).

**Principle 6: Innovative instruments must be free from mandatory fixed charges.**

6(a) The institution, through the SPV, must have discretion over the amount and timing of distributions. Rights to receive distributions must clearly be non-cumulative and must not provide for compensation in lieu of undeclared distributions. The institution must have full access to undeclared payments.

6(b) Distributions may be paid only in cash.

6(c) Distributions may not be reset based on the future credit standing of the institution.

6(d) An innovative instrument is permitted to be “share cumulative” where under specified circumstances to maintain cash resources in the institution, and as a result of contractual obligations between the investors, the SPV and the institution, deferred cash coupons on the innovative instrument become payable in Tier 1-qualifying perpetual preferred shares of the institution,[115] subject to the following requirements:

- Cash coupons on the innovative instrument can be deferred at any time, at the institution senior management’s complete discretion, with no limit on the duration of the deferral, apart from the maturity of the instrument.

- The preferred shares issued by the institution will initially be held in trust and will only be distributed to the holders of the innovative instrument to pay for deferred coupons once the cash coupons on the innovative instrument are resumed or when the innovative instruments are no longer outstanding (e.g. maturity of the innovative instrument, conversion of innovative instrument into preferred shares of the institution, etc.).

[115] In the situation where preferred shares are issued during a cash coupon deferral period, leaving aside any tax consequences related thereto, such issuance reallocates capital between retained earnings and preferred share capital and does not result in a net increase in the overall level of Tier 1 capital.

- The number of preferred shares to be distributed by the institution to effect payment in lieu of deferred cash coupons must be calculated by dividing the deferred cash coupon amount by the face amount of the preferred shares.

- The risk premium (over the risk-free rate) reflected in the dividend rate of such preferred shares must be established at the time the innovative instrument is issued and must not exceed the risk premium (over the risk-free rate) reflected in the dividend rate of comparable shares as at that date (i.e. upon original issuance of the innovative instrument).

| **Principle 7:** | **Innovative instruments must be issued and fully paid-for in money, or, with the prior written approval of the AMF, in property.** |
|---|---|

| **Principle 8:** | **Innovative instruments, even if not issued as shares, may be included in Tier 1 capital, if they satisfy the principles set forth herein.** |
|---|---|

| **Principle 9:** | **The main features of an innovative instrument must be easily understood and publicly disclosed.** |
|---|---|

9(a) For the purposes of this principle, the AMF will consider the main features of an innovative instrument to be easily understood where:

(1) the legal (including tax) and regulatory risks arising out of the innovative instrument have been minimized to the satisfaction of the AMF. The likelihood of failing this test increases as the number of entities placed between the investors and the ultimate recipient of the proceeds increases, as the number of jurisdictions involved increases, and/or if the assets of the institution are transferred to an entity outside Canada;

(2) the manner by which the innovative instrument meets the Tier 1 capital requirements and the main features of the instrument are, in the opinion of the AMF, transparent to a reasonably sophisticated investor.

9(b) The main features of innovative instruments, including those features designed to achieve Tier 1 capital status (for example, the triggers and mechanisms used to achieve loss absorption), must be publicly disclosed in the institution's annual report to shareholders. The prior written approval of the AMF for the issuance of loan-based innovative Tier 1 instruments will be conditional on acceptable plans for adequate disclosure of the main regulatory capital features of these instruments in the annual report to shareholders.

9(c) In addition, the AMF expects that the institution will, for innovative instruments issued after July 1, 2008, provide prospectus-level disclosure at issuance to ensure the main features of the innovative instruments and the structure of the issue are transparent and easily understood by investors, including all relevant risk factors. Further, in the case of material changes, the AMF expects the institution will provide additional disclosure on a timely basis.

In particular, the following information should be disclosed to investors in innovative instruments and to the shareholders of the institution issuing, directly or indirectly, the innovative instruments:

- *Tier 1 treatment*: It should be explicitly stated that innovative instruments are structured with the intent of achieving Tier 1 regulatory capital treatment and, as such, have features of equity capital. It should be clearly stated that dividends on the innovative instruments will not be paid if dividends are not paid by the institution on its common and preferred shares. In addition, it should be disclosed that the innovative instruments contain certain features that will convert these instruments into preferred shares of the institution and thus, in the event of liquidation of the institution, holders of the innovative instruments issued by the SPV will rank as preferred shareholders of the institution.

- *Trust assets (asset-based only)*: Institutions should, at issuance and on at least a quarterly basis thereafter, provide prospectus-level disclosure of any material information that will assist investors in understanding the risks of the underlying trust assets, including, to the extent relevant: a breakdown of the assets by type (i.e., residential mortgage, mortgage backed security, etc.), the geographic distribution of the assets, information on the creditworthiness of obligors and guarantors, a description of collateral and a description of the average maturities of the assets.

## Annex 2-II Self-Assessment Grid for Eligibility of Instruments in Tier 1 or Tier 2

| | Features of the instrument | Classification and justification[116] | Reference used[117] |
|---|---|---|---|
| **Remuneration**<br>(Include all mechanisms related to remuneration and their effects on the permanent nature of the instrument, and show that these mechanisms do not constitute a redemption incentive.) | | | |
| **Redemption, purchase, repayment (issuer and holder)**<br>(State the terms and conditions pursuant to which a redemption could occur.) | | | |
| **Purchase for cancellation** | | | |
| **Conversion**<br>(State the conditions under which a conversion could occur, provide details about the underlying class and the conversion price.) | | | |
| **Subordination** | | | |
| **Other**<br>(State all other features or combinations of features likely to affect the permanent, subordinated and free of mandatory fixed charges nature of the instrument.) | | | |

[116] Explain how the instrument satisfies each of the tier 1 capital or tier 2 capital criteria.

[117] For example, refer to the prospectus.

# Annex 3-I Capital Treatment for Failed Trades and Non-DvP Transactions

The capital requirement 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 this guideline.

2. Transactions settled through a delivery-versus-payment system (DvP),[118] 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 that are subject to daily mark-to-market and payment of daily variation margins and that involve a mismatched trade. Repurchase and reverse-repurchase agreements as well as securities lending and borrowing that have failed to settle are excluded from this capital treatment.[119]

4. In cases of a system wide failure of a settlement or clearing system, the AMF may use its discretion to waive capital charges until the situation is rectified.

5. Failure of a counterparty to settle a trade in itself will not be deemed a default for purposes of credit risk under this guideline.

[118] For the purpose of this guideline, DvP transactions include payment-versus-payment (PvP) transactions.

[119] 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).

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.[120] This means that an institution under the standardized approach will use the standardized risk weights set forth in this 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 amount of the value transferred plus replacement cost, if any. This treatment will apply until the second payment/delivery leg is effectively made.

[120] 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.

# Annex 3-II Treatment of Counterparty Credit Risk and Cross-Product Netting

1. This annex identifies the permissible method for estimating the exposure amount for instruments with counterparty credit risk (CCR),[121] namely, the current exposure method.

## 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.

### 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 transaction 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.

[121] 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.

## 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 the provisions of 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 group of risk positions from the transactions within a single netting set for which only their balance is relevant for determining the exposure amount under the CCR standardized method..

- **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 counterpart until that counterpart 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.

**F. CCR-related risks**

- **Rollover Risk** is the amount by which expected positive exposure is understated when future transactions with a counterpart 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 counterpart 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.[122]

[122] Transactions for which the probability of default is defined on a pooled basis are not included in this treatment of CCR.

5. Other common characteristics of the transactions to be covered may include the following:

   - 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. An exposure value of zero for counterparty credit risk can be attributed to derivative contracts or SFTs that are outstanding with a central counterparty (e.g. a clearing house). This does not apply to counterparty credit risk exposures from derivative transactions and SFTs that have been rejected by the central counterparty. Furthermore, an exposure value of zero can be attributed to institutions' credit risk exposures to central counterparties that result from the derivative transactions, SFTs or spot transactions that the institution has outstanding with the central counterparty. This exemption extends in particular to credit exposures from clearing deposits and from collateral posted with the central counterparty. A central counterparty is an entity that interposes itself between counterparties to contracts traded within one or more financial markets, becoming the legal counterparty such that it is the buyer to every seller and the seller to every buyer. In order to qualify for the above exemptions, the central counterparty CCR exposures with all participants in its arrangements must be fully collateralized on a daily basis, thereby providing protection for the central counterparty's CCR exposures. Assets held by a central counterparty as a custodian on the institution's behalf would not be subject to a capital requirement for counterparty credit risk exposure.

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.

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 – intended for institutions authorized to use the standardized method to measure exposure for regulatory capital purposes.

**III. Current Exposure Method**

91. Institutions that do not have approval to apply the internal models method may use the current exposure method as identified in paragraphs 186 and 187. The current exposure method is to be applied to OTC derivatives only; SFTs are subject to the treatments set out under chapter 4 (paragraphs 109 to 210).

92. (Deleted)

92(i). Under the Current Exposure Method, institutions must calculate the current replacement cost by marking contracts to market, thus capturing the current exposure without any need for estimation, and then adding a factor (the "add-on") to reflect the potential future exposure over the remaining life of the contract. It has been agreed that, in order to calculate the credit equivalent amount of these instruments under this current exposure method, an institution would sum:

- The total replacement cost (obtained by "marking to market") of all its contracts with positive value; and

- An amount for potential future credit exposure calculated on the basis of the total notional principal amount of its book, split by residual maturity as follows:

| Table 1 | | | | | |
|---|---|---|---|---|---|
| **Residual maturity** | **Interest Rates** | **FX and gold** | **Equities** | **Precious Metals (except gold)** | **Other commodities** |
| One year or less | 0.0% | 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 exposure 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 factor is subject to a floor of 0.5%.

3. Forwards, swaps, purchased options and similar derivative contracts not covered by any of the columns of 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.

92(ii). The AMF will take care to ensure that the 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.

93. Institutions can obtain capital relief for collateral as defined in paragraphs 146 of this guideline. The methodology for the recognition of eligible collateral follows that of the applicable approach for credit risk.

94. (deleted)

(Provision dealing with market risk)

95. To determine capital requirements for hedged banking book exposures, the treatment for credit derivatives in this guideline applies to qualifying credit derivative instruments.

96. (deleted)

(Provision dealing with market risk)

*Bilateral netting*

96(i). Careful consideration has been given to the issue of **bilateral netting**, i.e. weighting the net rather than the gross claims with the same counterparties arising out of the full range of forwards, swaps, options and similar derivative contracts.[123] The Committee is concerned that if a liquidator of a failed counterparty has (or may have) the right to unbundle netted contracts, demanding performance on those contracts favourable to the failed counterparty and defaulting on unfavourable contracts, there is no reduction in counterparty risk.

96(ii). Accordingly, it has been agreed for capital adequacy purposes that:

(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:[124]

(i) A netting contract or agreement with the counterparty which 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;

(ii) 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:

[123] Payments netting, which is designed to reduce the operational costs of daily settlements, will not be recognized in this guideline since the counterparty's gross obligations are not in any way affected.

[124] In cases where an agreement as described in 96(ii) (a) has been recognized prior to July 1994, the AMF will determine whether any additional steps are necessary to satisfy itself that the agreement meets the requirements set out below.

- 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.[125]

(iii) 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.

96(iii). Contracts containing walkaway clauses will not be eligible for netting for the purpose of calculating capital requirements pursuant to this guideline. A walkaway clause is a provision which 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.

96(iv). 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 ($A_{Gross}$)[126] 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:

$$A_{Net}=0.4*A_{Gross}+0.6*NGR*A_{Gross}$$

*Where:*

NGR = level of net replacement cost/level of gross replacement cost for transactions subject to legally enforceable netting agreements.[127]

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125 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.

126 $A_{Gross}$ equals the sum of individual add-on amounts (calculated by multiplying the notional principal amount by the appropriate add-on factors set out in paragraph 92(i) of this Annex) of all transactions subject to legally enforceable netting agreements with one counterparty.

127 The AMF may permit a choice of calculating the NGR on a counterparty by counterparty or on an aggregate basis for all transactions subject to legally enforceable netting agreements. If supervisors permit a choice of methods, the method chosen by an 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 so that the credit equivalent amount will be assigned to the appropriate counterparty risk weight category.

96(v). The scale of the gross add-ons to apply in this formula will be the same as those for non-netted transactions as set out in paragraphs 91 to 95 of this Annex. The Committee will continue to review the scale of add-ons to make sure they are appropriate. For purposes of calculating potential future credit exposure to a netting counterparty for forward foreign exchange contracts and other similar contracts 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 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.

*Risk weighting*

96(vi). Once the institution has calculated the credit equivalent amounts they are to be weighted according to the category of counterparty in the same way as in the guideline, including concessionary weighting in respect of exposures backed by eligible guarantees and collateral. The Basel Committee will keep a close eye on the credit quality of participants in these markets and reserves the right to raise the weights if average credit quality deteriorates or if loss experience increases.

# 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

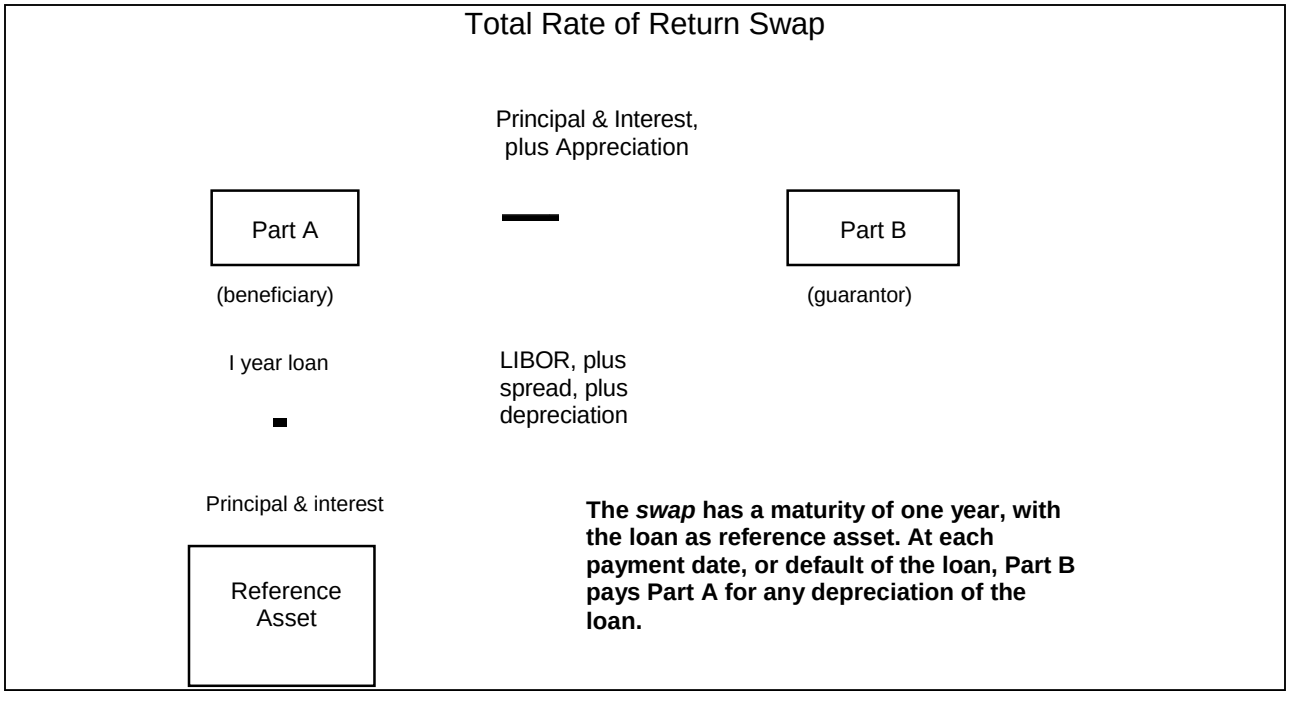
### *Description of Credit Derivatives*

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.



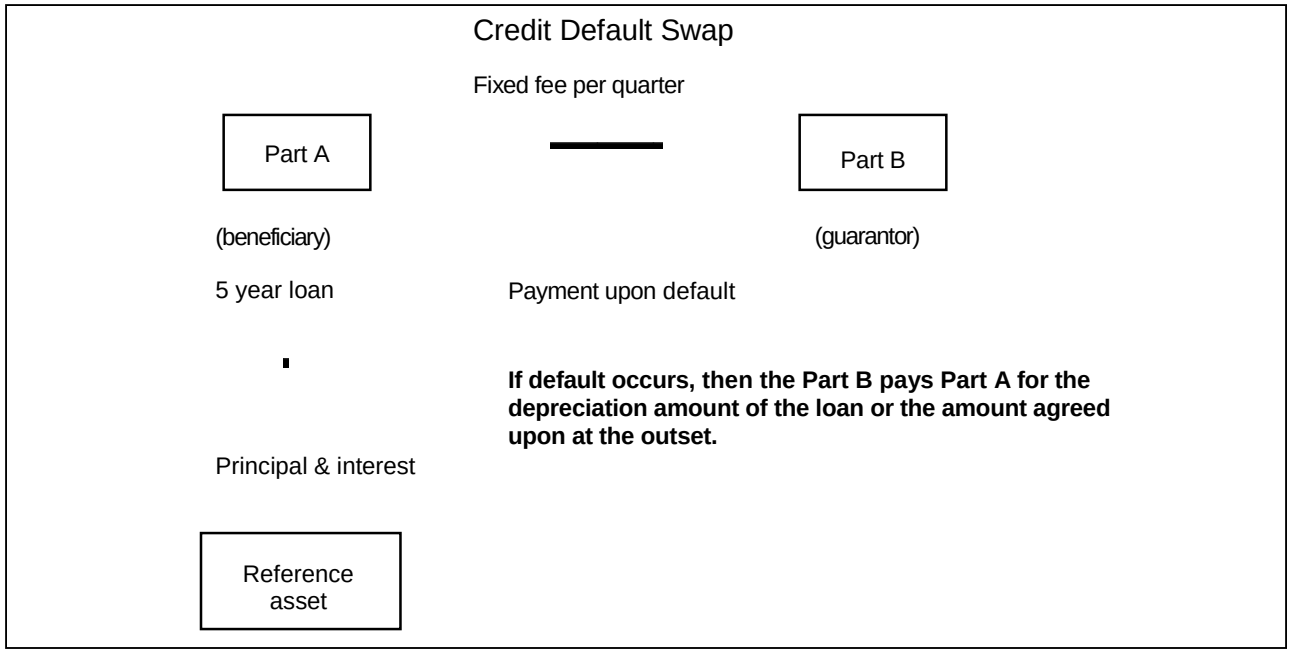
At each payment exchange date (including when the swap matures) -- or upon default, at which point the swap may terminate -- any depreciation or appreciation in the amortized value of the reference asset is calculated as the difference between the notional principal balance of the reference asset and 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.

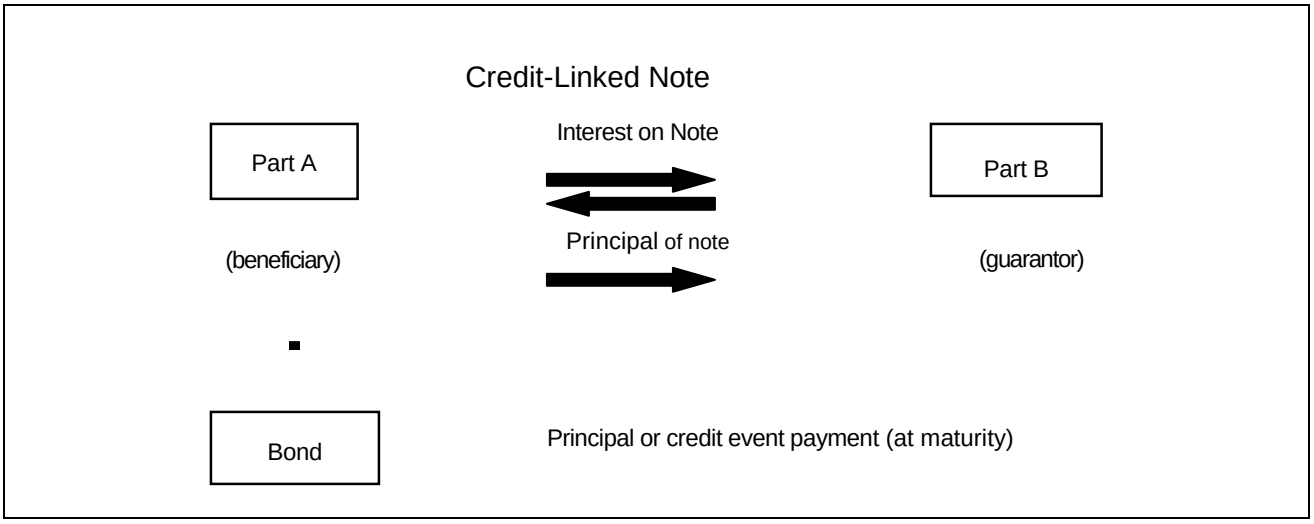


In a credit default swap, the beneficiary (Part A) agrees to pay to the guarantor (Part B) a fee typically amounting to a certain number of basis points on the par value of the reference asset, either quarterly or annually.

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 per cent 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.



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-I Mapping of Business Lines

| Level 1 | Level 2 | Activity Groups |
|---|---|---|
| Corporate finance | Corporate finance | Mergers and acquisitions, underwriting agreement, privatizations, securitization, research, debt (government, high yield), equity, syndications, initial public offering, secondary private placements |
| | Financing of government entities/PSEs* | |
| | 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[128] | 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 |

***** Non-central government public sector entities (PSEs), as defined in section 3.1.3 of this guideline.

[128] Payment and settlement losses related to an institution's own activities would be incorporated in the loss experience of the affected business line.

# Annex 6-I (continued)

**Principles for business line mapping**[129]

(a) All activities 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 an activity 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.

[129] **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.

(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 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 line 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 Notes**

Institutions should develop a business line 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 line 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.