Office of the Superintendent of Financial Institutions Canada
Bureau du surintendant des institutions financières Canada

Guideline

Subject: Capital Adequacy Requirements (CAR)

Chapter 4 – Credit Risk – Standardized Approach

Effective Date: November 2026 / January 2027

For institutions with a fiscal year ending October 31 or December 31, respectively.

The Capital Adequacy Requirements (CAR) for banks (including federal credit unions), bank holding companies, federally regulated trust companies, and federally regulated loan companies are set out in nine chapters, each of which has been issued as a separate document. This chapter should be read in conjunction with the other CAR chapters. The complete list of CAR chapters is as follows:

Chapter 1	Overview of Risk-based Capital Requirements
Chapter 2	Definition of Capital
Chapter 3	Operational Risk
Chapter 4	Credit Risk – Standardized Approach
Chapter 5	Credit Risk – Internal Ratings-Based Approach
Chapter 6	Securitization
Chapter 7	Settlement and Counterparty Risk
Chapter 8	Credit Valuation Adjustment (CVA) Risk
Chapter 9	Market Risk

Please refer to OSFI's *Corporate Governance Guideline* for OSFI's expectations of institution Boards of Directors in regard to the management of capital and liquidity.

Table of Contents

4.1 Individual exposures 4

4.1.1 Exposures to sovereigns and central banks 6
4.1.2 Exposures to non-central government public sector entities (PSEs) 7
4.1.3 Exposures to multilateral development banks 8
4.1.4 Exposures to banks 9
4.1.5 Exposures to covered bonds 13
4.1.6 Exposures to securities firms and other financial institutions 16
4.1.7 Exposures to corporates 16
4.1.8 Subordinated debt, equity and other capital instruments 21
4.1.9 Retail exposures 23
4.1.10 Real estate exposures 26
4.1.11 Exposures secured by residential real estate 29
4.1.12 Exposures secured by commercial real estate 31
4.1.13 Land acquisition, development and construction exposures 33
4.1.14 Reverse mortgages 35
4.1.15 Mortgage-backed securities 38
4.1.16 Risk weight multiplier to certain exposures with currency mismatch 39
4.1.17 Commitments 40
4.1.18 Off-balance sheet items 40
4.1.19 Exposures that give rise to counterparty credit risk 43
4.1.20 Credit derivatives 43
4.1.21 Defaulted exposures 44
4.1.22 Equity Investments in Funds 45
4.1.23 Other assets 51
4.1.24 Treatment of purchased receivables 52

4.2 External credit assessments and the mapping process 53

4.2.1 The recognition process 53
4.2.2 Eligibility criteria 54
4.2.3 Implementation considerations 56

4.3 Credit Risk Mitigation – Standardized Approach 61

4.3.1 Overarching Issues 61

4.3.2 Overview of Credit Risk Mitigation Techniques 63

4.3.3 Collateralized transactions 65

4.3.4 On-balance sheet netting 78

4.3.5 Guarantees and credit derivatives 78

Appendix I – Summary of the simplified treatment under the standardized approach 86

Appendix II –Use of the Simplified Treatment for Credit Risk for Category I and II SMSBs 87

Appendix III – List of risk weight tables 89

Chapter 4 - Credit Risk – Standardized Approach

1. This chapter is drawn from the Basel Committee on Banking Supervision's (BCBS) Basel framework published on the Bank for International Settlements (BIS) website.[1] For reference, the Basel paragraph numbers that are associated with the text appearing in this chapter are indicated in square brackets at the end of each paragraph.[2]

2. Small and medium-sized deposit-taking institutions (SMSBs[3]) which fall into Categories I or II, as defined in OSFI's SMSB Capital and Liquidity Requirements Guideline,[4] are eligible to apply a simplified treatment to the following asset class groupings, provided the total exposure to the asset class grouping to which the simplified treatment is being applied does not exceed $500 million:[5,6]

a. Banks, securities firms and other financials treated as banks as defined in section 4.1.4.
b. Covered bonds as defined in section 4.1.5.
c. Corporates, Small and Medium Size Enterprises (SMEs) treated as Corporates, securities firms and other financials treated as Corporates, and specialized lending (Project Finance, Object Finance, Commodity Finance) as defined in section 4.1.7.
d. Qualifying revolving retail (including credit cards, charge cards, overdraft facilities and lines of credit) that meet the criteria set out in paragraph 85.
e. Other qualifying retail (all exposures within the retail asset class as defined in section 4.1.9 excluding qualifying revolving retail exposures set out above) that meet the criteria set out in paragraph 85.
f. Residential real estate (including Home Equity Lines of Credit) as defined in section 4.1.11.
g. Commercial real estate as defined in section 4.1.12.

The simplified treatments for the asset class grouping are described under the corresponding asset class. A summary of the asset classes for which the simplified treatment is available is provided in Appendix I and further detail regarding the application of the simplified treatment is provided in Appendix II.

4.1 Individual exposures

3. All exposures subject to the standardized approach should be risk-weighted net of specific allowances. Under IFRS 9, Stage 3 allowances and partial write-offs are considered to

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1 The Basel Framework
2 Following the format: [Basel Framework XXX yy.zz].
3 SMSBs are banks (including federal credit unions), bank holding companies, federally regulated trust companies, and federally regulated loan companies that have not been designated by OSFI as domestic systemically important banks (D-SIBs). This includes subsidiaries of SMSBs or D-SIBs that are banks (including federal credit unions), federally regulated trust companies or federally regulated loan companies.
4 SMSB Capital and Liquidity Guideline.
5 As stated in footnote 6 in Chapter 1 of this guideline, all dollar values in this guideline are in Canadian dollars, unless otherwise noted.
6 Total exposure includes both on and off balance sheet, net of Stage 3 allowances but before taking into account credit risk mitigation.

be specific allowances, while Stage 1 and Stage 2 allowances are considered to be general allowances.

4. The risk weight categories apply to on-balance sheet and off-balance sheet credit equivalent amounts with the exception of items that are deducted from capital as regulatory adjustments pursuant to section 2.3 of Chapter 2. [Basel Framework, CRE 21.5]

5. For certain asset classes (i.e. exposures to sovereigns and central banks, non-central government public sector entities, multilateral development banks, banks, securities firms and other financial institutions treated as banks, covered bonds, and corporates) risk weights under the standardized approach are assigned based on eligible credit ratings provided by external credit assessment institutions (ECAI) recognized by OSFI (see section 4.2 of this chapter). These mappings are reflected in tables 1 through 9 (with the exception of tables 2 and 6). A complete list of risk weight tables can be found in Appendix III.

6. Consistent with the BCBS guidance on the assessment of credit risk[7] and paragraphs 20.12 to 20.14 of the Supervisory Review Process standard, institutions must perform due diligence to ensure that they have an adequate understanding, at origination and thereafter on a regular basis, of the risk profile and characteristics of their counterparties. In cases where ratings are used, due diligence is necessary to assess the risk of the exposure for risk management purposes and whether the risk weight applied is appropriate and prudent. The due diligence requirements do not apply to the exposures set out in paragraphs 10 to 19 of this chapter. The sophistication of the due diligence should be appropriate to the size and complexity of institutions' activities. Institutions must take reasonable and adequate steps to assess the operating and financial performance levels and trends through internal credit analysis and/or other analytics outsourced to a third party, as appropriate for each counterparty. Institutions must be able to access information about their counterparties on a regular basis to complete due diligence analyses. [Basel Framework, CRE 20.4]

7. Due diligence analyses may include such elements as reviews of the entity's historical and projected financial information (e.g. as gained from annual reports, audited financial statements, and quarterly financial statements), industry and/or economic data, peer comparisons, and the entity's business plan projecting the activities and financial condition for the next 12 months. In addition, the due diligence analysis may rely on qualitative factors, such as the rated entity's governance framework, financial strategy, and the experience, credibility and competence of its management. A rating may be used while a due diligence review of the associated exposure is being conducted. New ratings (either due to an updated external rating from an External Credit Assessment Institution (ECAI), or the results of an institution's due diligence review) must be employed for capital purposes immediately upon the new rating being identified. Due diligence analyses should be completed at least annually.

8. For exposures to entities belonging to consolidated groups, due diligence should, to the extent possible, be performed at the solo entity level to which there is a credit exposure. In evaluating the repayment capacity of the solo entity, institutions are expected to take into

[7] OSFI Guideline *IFRS 9 Financial Instruments and Disclosures*, June 2016.

account the support of the group and the potential for it to be adversely impacted by problems in the group. [Basel Framework, CRE 20.5]

9. Institutions should have in place effective internal policies, processes, systems and controls to ensure that the appropriate risk weights are assigned to counterparties. Institutions must be able to demonstrate to OSFI that their due diligence analyses are appropriate. As part of their supervisory review, OSFI will assess whether institutions have appropriately performed their due diligence analyses, and will take supervisory measures where these have not been done. [Basel Framework, CRE 20.6]

4.1.1 Exposures to sovereigns and central banks

10. Exposures to sovereigns and their central banks are risk weighted according to Table 1:

Table 1: Risk weights for sovereign and central bank exposures

	External rating of sovereign[8]					
	AAA to AA-	**A+ to A-**	**BBB+ to BBB-**	**BB+ to B-**	**Below B-**	**Unrated**
Risk Weight	0%	20%	50%	100%	150%	100%

[Basel Framework, CRE 20.7]

11. Under the BCBS framework, national regulatory authorities have national discretion to allow a lower risk weight to be applied to institutions' exposures to their sovereign (or central bank) of incorporation[9] denominated in domestic currency and funded[10] in that currency.[11] Institutions operating in Canada that have exposures to sovereigns meeting the above criteria may use the lower risk weight assigned to those sovereigns by their national regulatory authority. [Basel Framework, CRE 20.8]

12. For capital adequacy purposes, exposures to the Canadian sovereign and central bank are to be risk-weighted at 0%. Institutions should treat current tax assets[12] as sovereign exposures.

13. For exposures to sovereigns, institutions may use country risk scores assigned by Export Credit Agencies (ECAs). To qualify, an ECA must publish its risk scores and subscribe to the methodology agreed by the Organisation for Economic Cooperation and Development (OECD). Institutions may choose to use the consensus risk scores of ECAs participating in the

[8] This notation refers to the methodology used by Standard and Poor's. Refer to section 4.2.3 to determine the applicable risk weight using the rating methodology of other recognized ECAIs.

[9] In order to qualify for the lower risk weight, the institution needs to have a local presence (subsidiary or branch) in the country of the sovereign exposure.

[10] The institution would also have corresponding liabilities denominated in the domestic currency.

[11] This lower risk weight may be extended to the risk weighting of collateral and guarantees under the credit risk mitigation (CRM) framework. See section 4.3.2 of this chapter.

[12] Current tax assets are defined as an over installment of tax, or current year tax losses carried back to prior years that result in the recognition for accounting purposes of a claim or receivable from the government or local tax authority.

"Arrangement on Officially Supported Export Credits".[13] The OECD-agreed methodology establishes eight risk score categories associated with minimum export insurance premiums. These ECA risk scores correspond to risk weights as follows:

Table 2: Risk weights for sovereign and central bank exposures

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

[Basel Framework, CRE 20.9]

14. Exposures to the Bank for International Settlements, the International Monetary Fund, the European Central Bank, the European Union, the European Stability Mechanism and the European Financial Stability Facility receive a 0% risk weight. [Basel Framework, CRE 20.10].

4.1.2 Exposures to non-central government public sector entities (PSEs)

15. PSEs are defined as:

a. entities directly and wholly-owned by a government,

b. school boards, hospitals, universities and social service programs that receive regular government financial support, and

c. municipalities.

16. Exposures to PSEs receive a risk weight that is one category higher than the sovereign risk weight:

Table 3: Risk weights for PSE exposures

	External rating 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%

[Basel Framework, CRE 20.11]

17. Exposures to 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 will receive the same risk weight as the Government of Canada.

18. The PSE risk weight is meant for the financing of the PSE's own municipal and public services. Where PSEs other than Canadian provincial or territorial governments provide

[13] The consensus country risk classifications of the Participants to the Arrangement on Officially Supported Export Credits are available on the OECD's website.

guarantees or other support arrangements other than in respect of the financing of their own municipal or public services, the PSE risk weight in Table 3 must not be used. Instead, the exposure to the PSE must be treated as a corporate exposure based on the external risk rating of the PSE.

19. PSEs in foreign jurisdictions should be given the same capital treatment as that applied by the regulatory authorities in that jurisdiction. [Basel Framework, CRE 20.12]

4.1.3 Exposures to multilateral development banks

20. For the purposes of calculating capital requirements, a Multilateral Development Bank (MDB) is an institution created by a group of countries that provides financing and professional advice for economic and social development projects. MDBs have large sovereign memberships and may include both developed countries and/or developing countries. Each MDB has its own independent legal and operational status, but with a similar mandate and a considerable number of joint owners. [Basel Framework, CRE 20.13]

21. A 0% risk weight will be applied to exposures to MDBs that fulfil to the BCBS's satisfaction the eligibility criteria provided below.[14] The BCBS will continue to evaluate eligibility on a case-by-case basis. The eligibility criteria for MDBs risk-weighted at 0% are:

a. Very high quality long-term issuer ratings, i.e. a majority of an MDB's external assessments must be AAA,[15]

b. Either the 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,

c. 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,

d. Adequate level of capital and liquidity (a case-by-case approach is necessary in order to assess whether each MDB's capital and liquidity are adequate), and

e. Strict statutory lending requirements and conservative financial policies, which would include among other conditions a structured approval process, internal creditworthiness

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

[15] MDBs that request to be added to the list of MDBs eligible for a 0% risk weight must comply with the AAA rating criterion at the time of the application. Once included in the list of eligible MDBs, the rating may be downgraded, but in no case lower than AA–. Otherwise, exposures to such MDBs will be subject to the treatment set out in paragraph 22.

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.

[Basel Framework, CRE 20.14]

22. For exposures to all other MDBs, institutions will assign to their MDB exposures the corresponding "base" risk weights determined by the external ratings according to Table 4, and the following risk weights apply:

Table 4: Risk weights for MDB exposures

	External rating of MDB					
	AAA to AA-	**A+ to A-**	**BBB+ to BBB-**	**BB+ to B-**	**Below B-**	**Unrated**
Risk weight	20%	30%	50%	100%	150%	50%

[Basel Framework, CRE 20.15]

4.1.4 Exposures to banks

23. For the purposes of calculating capital requirements, an exposure to a deposit-taking institution or bank is defined as an exposure (including loans and senior debt instruments, unless considered as subordinated debt for the purposes of paragraph 80) to any federally and provincially regulated financial institution that is licensed to take deposits and lend money in the regular course of business and is subject to the appropriate prudential standards and level of supervision.[16] These include banks, trust or loan companies and co-operative credit societies. The treatment associated with subordinated bank debt and equities is addressed in section 4.1.8.

[Basel Framework, CRE 20.16]

24. The term bank refers to those institutions that are regarded as banks in the countries in which they are incorporated and are 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.

25. 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.

26. Exposures to a Canadian bank designated by OSFI as a Domestic Systemically Important Bank (D-SIB) can be assigned a risk weight of 15%. Exposures to a Canadian provincially regulated deposit-taking institution designated by a Canadian provincial regulator as a Domestic Systemically Important Financial Institutions (D-SIFI) and having total assets exceeding $400 billion can also be assigned a risk weight of 15%.

[16] For internationally active banks, appropriate prudential standards (e.g. capital and liquidity requirements) and level of supervision should be in accordance with the Basel framework. For domestic banks, appropriate prudential standards are determined by the national supervisors but should include at least a minimum regulatory capital requirement.

27. Category I and II SMSBs may apply a "base" risk weight of 40% (and a risk weight of 20% for short-term exposures with an original maturity of three months or less) to exposures to banks (as defined in paragraphs 23 to 25), and securities firms and other financial institutions treated as banks (see section 4.1.6), provided that these exposures do not cumulatively exceed $500 million. The calculation of this $500 million total can exclude exposures that are assigned a risk weight of 15% under paragraph 26.

28. For institutions that do not qualify for the simplified treatment in paragraph 27, bank exposures will be risk-weighted based on the following hierarchy:

a. External Credit Risk Assessment Approach (ECRA): This approach applies to all exposures to banks that are rated. Institutions will apply section 4.2 to determine which rating can be used and for which exposures.

b. Standardized Credit Risk Assessment Approach (SCRA): This approach is for all exposures to banks that are unrated.

[Basel Framework, CRE 20.17]

External Credit Risk Assessment Approach

29. Institutions will assign to all their bank exposures the "base" risk weights of the corresponding external ratings according to Table 5.

Table 5: Risk weights for bank exposures under the ECRA

	External rating of counterparty				
	AAA to AA-	**A+ to A-**	**BBB+ to BBB-**	**BB+ to B-**	**Below B-**
"Base" risk weight	20%	30%	50%	100%	150%
Risk weight for short-term exposures	20%	20%	20%	50%	150%

[Basel Framework, CRE 20.18]

30. Exposures to banks with an original maturity of three months or less, as well as exposures to banks that arise from the movement of goods across national borders with an original maturity of six months or less[17] can be assigned a risk weight that corresponds to the risk weights for short term exposures in Table 5. For the purposes of identifying exposures to banks as short-term, the original maturity should be based on the drawn amount. [Basel Framework, CRE 20.19]

31. Institutions must perform due diligence to ensure that the external ratings appropriately and conservatively reflect the creditworthiness of the bank counterparties. If the due diligence analysis reflects higher risk characteristics than that implied by the external rating bucket of the exposure (ie AAA to AA–; A+ to A– etc), the institution must assign a risk weight at least one

[17] This may include on-balance sheet exposures such as loans and off-balance sheet exposures such as self liquidating trade-related contingent items.

bucket higher than the "base" risk weight determined by the external rating. Due diligence analysis must never result in the application of a lower risk weight than that determined by the external rating. [Basel Framework, CRE 20.20]

Standardized Credit Risk Assessment Approach

32. Under the SCRA, institutions may choose to apply a 100% risk weight to *all* their unrated bank exposures, with prior notification to OSFI. If an institution chooses to adopt this option, it must use the 100% risk weight for all of its unrated bank exposures.

Alternatively, under the SCRA institutions may classify their unrated bank exposures into one of three risk-weight buckets (i.e. Grades A, B and C) and assign the corresponding risk weights in Table 6 below. For the purposes of the SCRA only, "published minimum regulatory requirements" in paragraphs 34 to 43 excludes liquidity standards. [Basel Framework, CRE 20.21]

Table 6: Risk weights for bank exposures

	Credit risk assessment of counterparty		
	Grade A	**Grade B**	**Grade C**
"Base" risk weight	40%	75%	150%
Bank risk weight for short-term exposures	20%	50%	150%

33. Under the Standardized Credit Risk Assessment Approach, exposures to banks without an external credit rating may receive a risk weight of 30%, provided that the counterparty bank has a Common Equity Tier 1 (CET1) ratio which meets or exceeds 14% and a Tier 1 leverage ratio which meets or exceeds 5%. The counterparty bank must also satisfy all the requirements for Grade A classification in paragraphs 34 to 37. [Basel Framework, CRE 20.21]

SCRA: Grade A

34. Grade A refers to exposures to banks, where the counterparty bank has adequate capacity to meet its financial commitments (including repayments of principal and interest) in a timely manner, for the projected life of the assets or exposures and irrespective of the economic cycle and business conditions. For the purposes of this paragraph, an assessment of a counterparty bank's capacity to meet its financial commitments should be conducted at least annually. [Basel Framework, CRE 20.22]

35. A counterparty bank classified into Grade A must meet or exceed the published minimum regulatory requirements and buffers established by its national regulatory authority as implemented in the jurisdiction where it is incorporated, except for bank-specific minimum regulatory requirements or buffers that may be imposed through supervisory actions (e.g. via Pillar 2) and not made public. If such minimum regulatory requirements and buffers (other than bank-specific minimum requirements or buffers) are not publicly disclosed or otherwise made

available by the counterparty bank then the counterparty bank must be assessed as Grade B or lower. [Basel Framework, CRE 20.23]

36. For exposures to counterparty banks incorporated in Canada, a counterparty bank classified into Grade A must meet or exceed the published minimum regulatory requirements and buffers established in this guideline and in the Leverage Requirements Guideline.[18] Minimum regulatory capital requirements as a percentage of risk weighted assets in Canada, as set out in Chapter 1 of this guideline, are: 4.5% CET1 capital, 6.0% Tier 1 capital, 8.0% Total capital. In addition, banks are required to hold a Capital Conservation Buffer of 2.5% and a Countercyclical Buffer as set out in section 1.7.2 of this guideline. Banks designated by OSFI as D-SIBs are also required to hold a 1% D-SIB surcharge. Banks are required to have a minimum Leverage Ratio of 3%. Banks designated by OSFI as D-SIB are expected to maintain a leverage ratio that meets or exceeds 3.5% at all times.

37. If, as part of its due diligence, an institution assesses that a counterparty bank does not meet the definition of Grade A in paragraphs 34 to 36, exposures to the counterparty bank must be classified as Grade B or Grade C. [Basel Framework, CRE 20.24]

SCRA: Grade B

38. Grade B refers to exposures to banks where the counterparty bank is subject to substantial credit risk, such as repayment capacities that are dependent on stable or favourable economic or business conditions. [Basel Framework, CRE 20.25]

39. A counterparty bank classified into Grade B must meet or exceed the published minimum regulatory requirements (excluding buffers) established by its national supervisor as implemented in the jurisdiction where it is incorporated, except for bank-specific minimum regulatory requirements that may be imposed through supervisory actions (e.g. via Pillar 2) and not made public. If such minimum regulatory requirements are not publicly disclosed or otherwise made available by the counterparty bank, then the counterparty bank must be assessed as Grade C. [Basel Framework, CRE 20.26]

40. For exposures to counterparty banks incorporated in Canada, a counterparty bank classified into Grade B must meet or exceed the published minimum regulatory requirements and buffers established in this guideline and in the Leverage Requirements Guideline.

41. Institutions will classify all exposures that do not meet the requirements outlined in paragraphs 34 and 35 into Grade B, unless the exposure falls within Grade C under paragraphs 42 and 43. [Basel Framework, CRE 20.27]

SCRA: Grade C

42. Grade C refers to higher credit risk exposures to banks, where the counterparty bank has material default risks and limited margins of safety. For these counterparties, adverse business,

[18] OSFI, *Leverage Requirements Guideline*,

financial, or economic conditions are very likely to lead, or have led, to an inability to meet their financial commitments. [Basel Framework, CRE 20.28]

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

a. The counterparty bank does not meet the criteria for being classified as Grade B with respect to its published minimum regulatory requirements, as set out in paragraphs 38 and 39; or

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

Even if these triggers are not breached, an institution may assess that the counterparty bank meets the definition in paragraph 42. In that case, the exposure to such counterparty bank must be classified into Grade C. [Basel Framework, CRE 20.29-20.30]

44. Exposures to banks with an original maturity of three months or less, as well as exposures to banks that arise from the movement of goods across national borders with an original maturity of six months or less,[19] can be assigned a risk weight that corresponds to the risk weights for short term exposures in Table 6. [Basel Framework, CRE 20.31]

45. To reflect transfer and convertibility risk under the SCRA, a risk-weight floor based on the risk weight applicable to exposures to the sovereign of the country where the bank counterparty is incorporated will be applied to the risk weight assigned to bank exposures. The sovereign floor applies when (i) the exposure is not in the local currency of the jurisdiction of incorporation of the debtor bank and (ii) for a borrowing booked in a branch of the debtor bank in a foreign jurisdiction, when the exposure is not in the local currency of the jurisdiction in which the branch operates. The sovereign floor will not apply to short-term (i.e. with a maturity below one year) self-liquidating, trade-related contingent items that arise from the movement of goods. [Basel Framework, CRE 20.32]

46. Exposures to parents of banks that are non-financial institutions are treated as corporate exposures.

4.1.5 Exposures to covered bonds

47. Covered bonds are bonds issued by a bank or mortgage institution that are subject by law to special public supervision designed to protect bond holders.[20] Proceeds deriving from the issue of these bonds must be invested in conformity with the law in assets which, during the whole period of the validity of the bonds, are capable of covering claims attached to the bonds

[19] This may include on-balance sheet exposures such as loans and off-balance sheet exposures such as self-liquidating trade-related contingent items.

[20] In Canada, CMHC's Covered Registered Bond Programs Guide establishes the legal framework for covered bond programs in Canada.

and which, in the event of the failure of the issuer, would be used on a priority basis for the reimbursement of the principal and payment of the accrued interest. [Basel Framework, CRE 20.33]

48. Rated and unrated covered bonds issued by a Canadian bank designated by OSFI as a D-SIB, or by a Canadian provincially regulated deposit-taking institution designated by a Canadian provincial regulator as a D-SIFI and having total assets exceeding $400 billion, can be assigned a risk weight of 15%. Category I and II SMSBs using the simplified treatment may apply the risk weight of 15% to exposures to covered bonds issued by a Canadian D-SIB or an eligible D-SIFI.

49. Category I and II SMSBs may apply a risk weight of 20% to exposures to covered bonds provided that these exposures meet the criteria set out in paragraphs 50 to 5353 and do not cumulatively exceed $500 million. The calculation of this $500 million total can exclude exposures to covered bonds that are assigned a risk weight of 15% under paragraph 48.

Eligible assets

50. In order to be eligible for the risk weights set out in paragraph 54, the underlying assets (the cover pool) of covered bonds as defined in paragraph 47 shall meet the requirements set out in paragraph 53 and shall include any of the following:

a. Exposures to, or exposures guaranteed by, sovereigns, their central banks, public sector entities or multilateral development banks;

b. Exposures secured by residential real estate that meet the criteria set out in paragraph 92 and with a loan-to-value ratio of 80% or lower;

c. Exposures secured by commercial real estate that meets the criteria set out in paragraph 92 and with a loan-to-value ratio of 60% or lower; or

d. Exposures to, or exposures guaranteed by banks that qualify for a 30% or lower risk weight. However, such assets cannot exceed 15% of the cover pool.

[Basel Framework, CRE 20.34]

51. The nominal value of the pool of assets assigned to the covered bond instrument(s) by its issuer should exceed its nominal outstanding value by at least 5%. The value of the pool of assets for this purpose does not need to be that required by the legislative framework. However, if the legislative framework does not stipulate a requirement of at least 5%, the issuing institution needs to publicly disclose on a regular basis that their cover pool meets the 5% requirement in practice. In addition to the primary assets listed in this paragraph, additional collateral may include substitution assets (cash or short term liquid and secure assets held in substitution of the primary assets to top up the cover pool for management purposes) and derivatives entered into for the purposes of hedging the risks arising in the covered bond program. [Basel Framework, CRE 20.35]

52. The conditions set out in paragraphs 50 and 51 must be satisfied at the inception of the covered bond and throughout its remaining maturity. [Basel Framework, CRE 20.36]

Disclosure requirements

53. Exposures in the form of covered bonds are eligible for the treatment set out in paragraph 54, provided that the institution investing in the covered bonds can demonstrate to OSFI upon request that:

a. it receives portfolio information at least on: (i) the value of the cover pool and outstanding covered bonds; (ii) the geographical distribution and type of cover assets, loan size, interest rate and currency risks; (iii) the maturity structure of cover assets and covered bonds; and (iv) the percentage of loans more than 90 days past due; and

b. the issuer makes the information referred to in point (a) available to the institution at least semi-annually.

[Basel Framework, CRE 20.37]

54. Covered bonds that meet the criteria set out in paragraphs 50 to 53 shall be risk-weighted based on the issue-specific rating or the issuer's risk weight according to the rules outlined in Section 4.2. For covered bonds with issue-specific ratings,[21] the risk weight shall be determined according to Table 7:

Table 7: Risk weights for rated covered bond exposures

	Issue-specific rating of the covered bond				
	AAA to AA-	**A+ to A-**	**BBB+ to BBB-**	**BB+ to B-**	**Below B-**
"Base" risk Weight	20%	30%	50%	100%	150%

[Basel Framework, CRE 20.38]

55. For unrated covered bonds, the risk weight would be inferred from the issuer's ECRA or SCRA risk weight according to Table 8:

Table 8: Risk weights for unrated covered bond exposures

	Risk weights						
Risk weight of issuing institution	20%	30%	40%	50%	75%	100%	150%
"Base" covered bond risk weight	20%	30%	40%	50%	75%	100%	150%

[21] An exposure is rated from the perspective of an institution if the exposure is rated by a recognized ECAI which has been nominated by the institution (i.e. the institution has informed OSFI of its intention to use the ratings of such ECAI for regulatory purposes in a consistent manner (see paragraph187). In other words, if an external rating exists but the credit rating agency is not a recognized ECAI by OSFI, or the rating has been issued by an ECAI which has not been nominated by the institution, the exposure would be considered as being unrated from the perspective of the institution.

[Basel Framework, CRE 20.38]

56. Institutions must perform due diligence to ensure that the external ratings appropriately and conservatively reflect the creditworthiness of the covered bond and the issuing institution. If the due diligence analysis reflects higher risk characteristics than that implied by the external rating bucket of the exposure (i.e. AAA to AA–; A+ to A–; etc), the institution must assign a risk weight at least one bucket higher than the "base" risk weight determined by the external rating. Due diligence analysis must never result in the application of a lower risk weight than that determined by the external rating. [Basel Framework, CRE 20.39]

57. Covered bonds that do not meet the criteria set out in paragraphs 50 and 53 should be risk-weighted based on the external rating of the issuing institution.

4.1.6 Exposures to securities firms and other financial institutions

58. Exposures to securities firms and other financial institutions will be treated as exposures to banks provided these firms are subject to prudential standards and a level of supervision equivalent to those applied to banks under the Basel III framework (including, in particular, capital and liquidity requirements).[22] For the purposes of this guideline, exposures to insurance companies regulated by OSFI should be treated as exposures to banks. Exposures to all other securities firms and financial institutions will be treated as exposures to corporates. [Basel Framework CRE 20.40]

4.1.7 Exposures to corporates

59. For the purposes of calculating capital requirements, exposures to corporates include exposures (loans, bonds, receivables, etc) to incorporated entities, associations, partnerships, proprietorships, trusts, funds and other entities with similar characteristics, except those which qualify for one of the other exposure classes. The treatment associated with subordinated debt and equities of these counterparties is addressed in section 4.1.8. The corporate exposure class includes exposures to insurance companies and other financial corporates that do not meet the definitions of exposures to banks, or securities firms and other financial institutions, as determined in paragraphs 23 and 58, respectively. The corporate asset class also includes exposures to US Government Sponsored Enterprises (GSEs). The corporate exposure class does not include exposures to individuals. [Basel Framework CRE 20.41]

60. Category I and II SMSBs may apply a risk weight of 100% to exposures to corporates, securities firms and other financial institutions treated as corporates (see paragraph 58), and specialized lending (see paragraphs 67 to 71), provided these exposures do not cumulatively exceed $500 million. The calculation of this $500 million total can exclude exposures to unrated corporate Small and Medium Sized Enterprises (SMEs) subject to the treatment under paragraph 66.

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

61. For institutions that do not qualify for the simplified treatment in paragraph 60, the corporate exposure class differentiates between the following subcategories:

a. *General corporate exposures:*
   i. U.S. GSEs must be risk-weighted at 20%.
   ii. Rated general corporate exposures must be risk-weighted according to either paragraph 62 or paragraph 63.
   iii. Unrated general corporate exposures can be risk-weighted at 100% (together with all other corporate exposures as allowed in paragraph 62), or according to paragraph 64.
   iv. Unrated exposures to corporate SMEs must be treated according to paragraph 66.

b. *Specialized lending exposures* (as defined in paragraph 67).

[Basel Framework, CRE 20.41]

General corporate exposures

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

63. Alternatively, institutions will assign "base" risk weights to their corporate exposures according to Table 9 and according to the rules for external ratings outlined in section 4.2. Institutions must perform due diligence to ensure that the external ratings appropriately and conservatively reflect the creditworthiness of the counterparties. If the due diligence analysis reflects higher risk characteristics than that implied by the external rating bucket of the exposure (i.e. AAA to AA–; A+ to A–; etc), the institution must assign a risk weight at least one bucket higher than the "base" risk weight determined by the external rating. Due diligence analysis must never result in the application of a lower risk weight than that determined by the external rating.

Table 9: Risk weights for rated corporate exposures

	External rating of corporate				
	AAA to AA-	**A+ to A-**	**BBB+ to BBB-**	**BB+ to BB-**	**Below BB-**
Risk weight	20%	50%	75%	100%	150%

[Basel Framework, CRE 20.42-20.43]

64. Institutions may assign a 65% risk weight to unrated corporate exposures identified as "investment grade" in paragraph 65. Unrated corporate exposures that are not identified as "investment grade" pursuant to paragraph 65 will be assigned a risk weight of 135%. If an institution chooses not to identify all of its unrated corporate exposures as "investment grade"

and "non-investment grade" according to paragraph 65, the risk weight for all of its unrated corporate exposures will be 100%.[23] [Basel Framework, CRE 20.44]

65. Institutions may assign a 65% risk weight to unrated exposures to corporates, excluding SMEs as defined in paragraph 66, that qualify for an "investment grade." An "investment grade" corporate is a corporate entity that has been determined to have adequate capacity to meet its financial commitments in a timely manner and its ability to do so is assessed to be robust against adverse changes in the economic cycle and business conditions. The entity must be assessed as "investment grade" according to an institution's own internal credit grading system. When making this determination, the institution should assess the corporate entity against the investment grade definition taking into account the complexity of its business model, performance against industry and peers, and risks posed by the entity's operating environment. Moreover, the corporate entity (or its parent company) must either have: (1) securities outstanding on a recognized securities exchange; or (2) reported annual sales for the consolidated group of which the corporate counterparty is a part of more than $75 million for the most recent financial year, and information on the corporate entity that institutions are able to access on a regular basis to complete due diligence analyses as described in paragraph 5 (e.g. annual reports, audited financial statements, quarterly financial statements, and business plans projecting the activities and financial condition for the next 12 months). [Basel Framework, CRE 20.46]

66. For unrated exposures to corporate SMEs (defined as corporate exposures where the reported annual sales for the consolidated group of which the corporate counterparty is a part is less than or equal to $75 million for the most recent financial year), a 75% risk weight will be applied. This treatment is to be applied independently of the option used for non-SMEs. Unrated exposures to SMEs that meet the criteria in paragraph 85 will be treated as regulatory retail SBE exposures and risk weighted at 75%. [Basel Framework, CRE 20.47]

Specialized lending

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

a. The exposure is not related to real estate and is within the definitions of object finance, project finance or commodities finance under paragraph 68. If the activity is related to real estate, the treatment would be determined in accordance with paragraphs 91 to 130;

b. The exposure is to an entity (often a special purpose vehicle (SPV)) that was created specifically to finance and/or operate physical assets;

c. The borrowing entity has few or no other material assets or activities, and therefore little or no independent capacity to repay the obligation, apart from the income that it receives from the asset(s) being financed. The primary source of repayment of the obligation is

[23] Paragraph 64 allows institutions to choose to identify whether their unrated corporate exposures meet the "investment grade" definition. Institutions may not choose to identify only a portion of their unrated corporate exposures. An institution that chooses to identify their "investment grade" unrated exposures must do so consistently for both pre-floor RWA and for the purposes of the output floor.

the income generated by the asset(s), rather than the independent capacity of the borrowing entity; and

d. The terms of the obligation give the lender a substantial degree of control over the asset(s) and the income that it generates.

[Basel Framework, CRE 20.48]

68. The exposures described in paragraph 67 will be classified in one of the following three subcategories of specialized lending:

a. *Project finance* refers to the method of funding in which the lender looks primarily to the revenues generated by a single project, both as the source of repayment and as security for the loan. This type of financing is usually for large, complex and expensive installations such as power plants, chemical processing plants, mines, transportation infrastructure, environment, media, and telecoms. Project finance may take the form of financing the construction of a new capital installation, or refinancing of an existing installation, with or without improvements.

b. *Object finance* refers to the method of funding the acquisition of equipment (e.g. ships, aircraft, satellites, railcars, and fleets) where the repayment of the loan is dependent on the cash flows generated by the specific assets that have been financed and pledged or assigned to the lender.

c. *Commodities finance* refers to short-term lending to finance reserves, inventories, or receivables of exchange-traded commodities (e.g. crude oil, metals, or crops), where the loan will be repaid from the proceeds of the sale of the commodity and the borrower has no independent capacity to repay the loan.

[Basel Framework, CRE 20.49]

69. Institutions will assign to their specialized lending exposures the risk weights determined by the *issue-specific* external ratings, if these are available, as provided in Table 9. Issuer ratings must not be used (i.e. paragraph 191 does not apply in the case of specialized lending exposures).
[Basel Framework, CRE 20.50]

70. For specialized lending exposures for which an issue-specific external rating is not available, the following risk weights will apply:

a. Object and commodities finance exposures will be risk-weighted at 100%;

b. Project finance exposures will be risk-weighted at 130% during the pre-operational phase and 100% during the operational phase. Project finance exposures in the operational phase which are deemed to be high quality, as described in paragraph 71, will be risk weighted at 80%. For this purpose, operational phase is defined as the phase in which the entity that was specifically created to finance the project has (i) a positive net cash flow that is sufficient to cover any remaining contractual obligation, and (ii) declining long term debt.

[Basel Framework, CRE 20.51]

71. A high quality project finance exposure refers to an exposure to a project finance entity

that is able to meet its financial commitments in a timely manner and its ability to do so is assessed to be robust against adverse changes in the economic cycle and business conditions. The following conditions must also be met:

a. The project finance entity is restricted from acting to the detriment of the creditors (e.g. by not being able to issue additional debt without the consent of existing creditors);

b. The project finance entity has sufficient reserve funds or other financial arrangements to cover the contingency funding and working capital requirements of the project;

c. The revenues are availability-based[24] or subject to a rate-of-return regulation or take-or-pay contract;

d. The project finance entity's revenue depends on one main counterparty and this main counterparty shall be a central government, PSE or a corporate entity with a risk weight of 80% or lower;

e. The contractual provisions governing the exposure to the project finance entity provide for a high degree of protection for creditors in case of a default of the project finance entity;

f. The main counterparty or other counterparties which similarly comply with the eligibility criteria for the main counterparty will protect the creditors from the losses resulting from a termination of the project;

g. All assets and contracts necessary to operate the project have been pledged to the creditors to the extent permitted by applicable law; and

h. Creditors may assume control of the project finance entity in case of its default.

[Basel Framework, CRE 20.52]

[24] Availability-based revenues mean that once construction is completed, the project finance entity is entitled to payments from its contractual counterparties (e.g. the government), as long as contract conditions are fulfilled. Availability payments are sized to cover operating and maintenance costs, debt service costs and equity returns as the project finance entity operates the project. Availability payments are not subject to swings in demand, such as traffic levels, and are adjusted typically only for lack of performance or lack of availability of the asset to the public.

4.1.8 Subordinated debt, equity and other capital instruments

72. The treatment described in paragraphs 73 to 81 applies to subordinated debt, equity and other regulatory capital instruments issued by either corporates or other institutions, provided that such instruments are not deducted from regulatory capital or risk-weighted at 250% according to section 2.3.1 of Chapter 2 of this guideline[25]. It also excludes equity investments in funds treated under paragraphs 156 to 174. [Basel Framework, CRE 20.53]

73. Equity exposures are defined on the basis of the economic substance of the instrument. They include both direct and indirect ownership interests,[26] whether voting or non-voting, in the assets and income of a commercial enterprise or of a financial institution that is not consolidated or deducted. [Basel Framework, CRE 20.54]

74. An instrument is considered to be an equity exposure if it meets all of the following requirements:

a. It is irredeemable in the sense that the return of invested funds can be achieved only by the sale of the investment or sale of the rights to the investment or by the liquidation of the issuer;

b. It does not embody an obligation on the part of the issuer; and

c. It conveys a residual claim on the assets or income of the issuer.

[Basel Framework, CRE 20.54]

75. Additionally, any of the following instruments must be categorized as an equity exposure:

a. An instrument with the same structure as those permitted as Tier 1 capital for banking organizations.
b. An instrument that embodies an obligation on the part of the issuer and meets any of the following conditions:

   i. The issuer may defer indefinitely the settlement of the obligation;

   ii. The obligation requires (or permits at the issuer's discretion) settlement by issuance of a fixed number of the issuer's equity shares;

[25] For investments in the capital and/or Other TLAC Instruments of banking, financial, or insurance entities, institutions should also refer to section 2.3 of Chapter 2 of this guideline and apply the applicable regulatory adjustment.

[26] Indirect equity interests include holdings of derivative instruments tied to equity interests, and holdings in corporations, partnerships, limited liability companies or other types of enterprises that issue ownership interests and are engaged principally in the business of investing in equity instruments.

iii. The obligation requires (or permits at the issuer's discretion) settlement by issuance of a variable number of the issuer's equity shares and (ceteris paribus) any change in the value of the obligation is attributable to, comparable to, and in the same direction as, the change in the value of a fixed number of the issuer's equity shares;[27] or

iv. The holder has the option to require that the obligation be settled in equity shares, unless either (i) in the case of a traded instrument, OSFI is content that the institution has demonstrated that the instrument trades more like the debt of the issuer than like its equity, or (ii) in the case of non-traded instruments, OSFI is content that the institution has demonstrated that the instrument should be treated as a debt position. In cases (i) and (ii), the institution may decompose the risks for regulatory purposes, with OSFI's consent.

[Basel Framework, CRE 20.55]

76. Debt obligations and other securities, partnerships, derivatives or other vehicles structured with the intent of conveying the economic substance of equity ownership are considered an equity holding.[28] This includes liabilities from which the return is linked to that of equities.[29] Conversely, equity investments that are structured with the intent of conveying the economic substance of debt holdings or securitization exposures would not be considered an equity holding.[30]
[Basel Framework, CRE 20.56]

77. Institutions will assign a risk weight of 400% to speculative unlisted equity exposures described in paragraph **Error! Reference source not found.** and a risk weight of 250% to all other equity holdings, with the exception of those equity holdings referred to in paragraph 79**Error! Reference source not found.**.
[Basel Framework, CRE 20.57]

[27] For certain obligations that require or permit settlement by issuance of a variable number of the issuer's equity shares, the change in the monetary value of the obligation is equal to the change in the fair value of a fixed number of equity shares multiplied by a specified factor. Those obligations meet the conditions of item (c) if both the factor and the referenced number of shares are fixed. For example, an issuer may be required to settle an obligation by issuing shares with a value equal to three times the appreciation in the fair value of 1,000 equity shares. That obligation is considered to be the same as an obligation that requires settlement by issuance of shares equal to the appreciation in the fair value of 3,000 equity shares.

[28] Equities that are recorded as a loan but arise from a debt/equity swap made as part of the orderly realization or restructuring of the debt are included in the definition of equity holdings. However, these instruments may not attract a lower capital charge than would apply if the holdings remained in the debt portfolio.

[29] Supervisors may decide not to require that such liabilities be included where they are directly hedged by an equity holding, such that the net position does not involve material risk.

[30] OSFI may re-characterize debt holdings as equites for regulatory purposes to ensure the proper treatment of holdings under the supervisory review process.

78. Speculative unlisted equity exposures are defined as equity investments in unlisted companies that are invested for short-term resale purposes, or are considered venture capital or similar investments which are subject to price volatility and are acquired in anticipation of significant future capital gains, or are held with trading intent.[31] Investments in unlisted equities of corporate clients with which the institution has or intends to establish a long-term business relationship and debt-equity swaps for corporate restructuring purposes would be excluded. [Basel Framework, CRE 20.58]

79. Institutions may assign a risk weight of 100% to equity holdings made pursuant to national legislated programmes that provide significant subsidies for the investment to the institution and involve government oversight and restrictions on the equity investments. Such treatment can only be accorded to equity holdings up to an aggregate of 10% of the institution's Total capital. Examples of relevant government restrictions are limitations on the size and types of businesses in which the institution is investing, allowable amounts of ownership interests, geographical location and other pertinent factors that limit the potential risk of the investment to the institution. Equity investments made pursuant to the *Specialized Financing (Banks) Regulations* of the *Bank Act* qualify for this exclusion and are risk weighted at 100%.[32] [Basel Framework, CRE 20.59]

80. Institutions will assign a risk weight of 150% to subordinated debt and capital instruments other than equities. Any liabilities that meet the definition of "other TLAC liabilities" according to section 2.3.1 of Chapter 2 of this guideline and that are not deducted from regulatory capital are considered to be subordinated debt for the purposes of this paragraph. [Basel Framework, CRE 20.60]

81. Significant investments[33] in commercial entities that, in aggregate, exceed 10% of CET1 capital should be fully deducted in the calculation of CET1 capital. Amounts less than this threshold are subject to a 250% risk-weight. [Basel Framework, CRE 20.62]

4.1.9 Retail exposures

82. The retail exposure class excludes exposures within the real estate exposure class. The retail exposure class includes the following types of exposures:

a. exposures to an individual person or persons, and
b. exposures to SBEs (that meet the definition in paragraph 66 and the criteria set out in paragraph 85).

[Basel Framework, CRE 20.63]

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[31] As in section 9.2 of this guideline, 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. Investments in unlisted equities of corporate clients with which the institution has or intends to establish a long-term business relationship and debt-equity swaps for corporate restructuring purposes would be excluded.

[32] This treatment is extended to a Canadian institution's foreign operations' holdings of equities made under nationally legislated programs of the countries in which they operate.

[33] Refer to section 2.3.1 of Chapter 2 for the definition of significant investment.

83. Category I and II SMSBs may apply a risk weight of 75% to all revolving retail exposures (which include credit cards, charge cards, overdraft facilities and lines of credit) provided that these exposures meet the criteria set out in paragraph 85 and do not cumulatively exceed $500 million. Category I and II SMSBs may also separately apply a risk weight of 75% to non-revolving retail exposures (i.e. retail exposures excluding revolving retail exposures), provided that these exposures meet the criteria set out in paragraph 85 and do not cumulatively exceed $500 million.

84. Exposures within the retail asset class will be treated according to paragraphs 85 to 90 below. For the purpose of determining risk-weighted assets, the retail exposure asset class consists of the following three sets of exposures:

a. Regulatory retail exposures to transactors.

b. Regulatory retail exposures that do not arise from exposures to transactors.

c. Non-regulatory retail exposures.

[Basel Framework, CRE 20.64]

85. Regulatory retail exposures are defined as retail exposures that meet all of the criteria listed below:

a. Orientation criterion ─ the exposure is to an individual person or persons or to a small business.

b. Product criterion ─ the exposure takes the form of any of the following: revolving credits and lines of credit (including credit cards, charge 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. Mortgage loans, derivatives and other securities (such as bonds and equities) whether listed or not, are specifically excluded from this category.

c. Low value of individual exposures ─ the maximum aggregated retail exposure to one counterparty cannot exceed an absolute threshold of $2.50 million. Small business loans extended through or guaranteed by an individual are subject to the same exposure threshold.

d. Granularity criterion ─ no aggregated exposure to one counterparty[34] can exceed 0.2%[35] of the overall regulatory retail portfolio, unless an alternative measure of granularity has

[34] Aggregated exposure means gross amount (i.e. not taking any credit risk mitigation into account) of all forms of retail exposures, excluding residential real estate exposures. In case of off-balance sheet claims, the gross amount would be calculated after applying credit conversion factors. In addition, "to one counterparty" means one or several entities that may be considered as a single beneficiary (e.g. in the case of a small business that is affiliated to another small business, the limit would apply to the institution's aggregated exposure on both businesses).

[35] To apply the 0.2% threshold of the granularity criterion, banks must: first, identify the full set of exposures in the retail exposure class (as defined by paragraph 82); second, identify the subset of exposure that meet product criterion and do not exceed the threshold for the value of aggregated exposures to one counterparty (as defined

been specifically approved by OSFI to ensure sufficient diversification of the retail portfolio. Defaulted retail exposures are to be excluded from the overall regulatory retail portfolio when assessing the granularity criterion.

[Basel Framework, CRE 20.65]

86. Transactors are a sub-set of exposures under the qualifying revolving retail (QRR) asset class. QRR exposures are exposures to individuals that are revolving, unsecured, and uncommitted (both contractually and in practice). In this context, revolving exposures are defined as those where customers' outstanding balances are permitted to fluctuate based on their decisions to borrow and repay, up to a limit established by the institution. In addition, the maximum exposure to a single individual cannot exceed $150,000.

87. Obligors are considered transactors in relation to facilities with an interest-free grace period, such as credit cards and charge cards, where the total accrued interest over the previous 12 months is less than $50. Obligors are considered transactors in relation to overdraft facilities or lines of credit if the facility has not been drawn down at any point in time over the preceding 12 months.[36] [Basel Framework, CRE 20.66]

88. In cases where institutions are unable to ensure compliance with the retail thresholds (for both QRR and total aggregate exposures), they must be able to, on at least an annual basis, verify and document that the amount of exposures that breach these thresholds are less than 2% of retail exposures, and upon request, provide this documentation to OSFI. If the amount of exposures that breach the exposure threshold is above 2% of retail exposures, the institution must notify OSFI immediately and develop a plan to either reduce the materiality of these exposures or move these exposures to the Corporate asset class.

89. Non-regulatory retail exposures are defined as exposures to an individual person or persons that do not meet all of the criteria in paragraph 85. [Basel Framework, CRE 20.67]

90. The risk weights that apply to exposures in the retail asset class are as follows:

a. Regulatory retail exposures that arise from exposures to transactors (as defined in paragraph 86) will be risk-weighted at 15%.
b. Regulatory retail exposures that do not arise from exposures to transactors (as defined in paragraph 86) will be risk-weighted at 75%.
c. Non-regulatory retail exposures will be risk weighted at 100%.

[Basel Framework, CRE 20.68]

by criteria (a) and (b) in paragraph 85); and third, exclude any exposures that have a value greater than 0.2% of the subset before exclusions.

[36] New accounts will not be deemed transactors until the account has been open for at least 12 months and the definition of a transactor is satisfied.

4.1.10 Real estate exposures

91. Real estate is immovable property that is land, including agricultural land and forest, or anything treated as attached to land, in particular buildings, in contrast to being treated as movable/personal property. The risk weights for real estate exposures are described in section 4.1.11 (residential real estate) and section 4.1.12 (commercial real estate).

92. To apply the risk weights for real estate exposures set out in sections 4.1.11 and 4.1.12, the loan must meet the following six requirements:

a. Finished property: the property securing the exposure must be fully completed[37]. This requirement does not apply to forest and agricultural land. Loans to individuals that are secured by residential property under construction or land upon which residential property would be constructed, may apply the risk-weight treatments described in paragraph 100 provided that: (i) the property is a one-to-four family residential housing unit that will be the primary residence of the borrower[38] and the lending to the individual is not, in effect, indirectly financing land acquisition, development and construction exposures described in paragraph 113; or (ii) they meet the four qualifying criteria for regulatory retail exposures set out in paragraph 85.

b. Legal enforceability: any claim on the property taken must be legally enforceable in all relevant jurisdictions. The collateral agreement and the legal process underpinning it must be such that they provide for the institution to realize the value of the property within a reasonable time frame.

c. Claims over the property: the loan is a claim over the property where the lender institution holds the senior lien over the property, or a single institution holds the senior lien and any sequentially lower ranking lien(s) (i.e. no other party holds a senior or intervening lien on the property to which the collateral mortgage applies) over the same property. However, where junior liens provide the holder with a claim for collateral that is legally enforceable and constitute an effective credit risk mitigant, junior liens held by a different institution than the one holding the senior lien may also be recognized,[39] provided that: (i) each institution holding a lien on a property can initiate the sale of the property independently from other entities holding a lien on the property; (ii) where the sale of the property is not carried out by means of a public auction, entities holding a senior lien take reasonable steps to obtain a fair market value or the best price that may be obtained in the circumstances when exercising any power of sale on their own (i.e. it is not possible for the entity holding the senior lien to sell the property on its own at a discounted value in detriment of the junior lien);[40] and (iii) the loans are not more than 90 days past due and do not, collectively, exceed a loan-to-value (LTV) ratio of 80%.

[37] Substantially completed ADC exposures that meet the conditions in paragraph 122 may be risk-weighted using the risk weights for income producing commercial real estate in section 4.1.12 below.

[38] The primary residence of a borrower is the residence ordinarily inhabited by the borrower.

[39] Likewise, this would apply to junior liens held by the same institution that holds the senior lien in case there is an intermediate lien from another institution (ie the senior and junior liens held by the institution are not in sequential ranking order).

[40] Loans to individuals for the purchase of residential property that are provided as loans guaranteed by a highly rated monoline guarantor that is required to repay the institution in full if the borrower defaults, and where the

d. Ability of the borrower to repay: the borrower must meet the underwriting requirements set according to paragraph 93.

e. Prudent value of property: the property must be valued according to the criteria in paragraph 95 for determining the value in the LTV ratio. Moreover, the value of the property must not depend materially on the performance of the borrower.

f. Required documentation: all the information required at loan origination and for monitoring purposes must be properly documented, including information on the ability of the borrower to repay and on the valuation of the property.

[Basel Framework, CRE 20.71]

93. Institutions should have in place underwriting policies with respect to the granting of mortgage loans that include the assessment of the ability of the borrower to repay. Underwriting policies must define a metric(s) (such as the loan's debt service coverage ratio) and specify its (their) corresponding relevant level(s) to conduct such an assessment.[41] Underwriting policies must also be appropriate when the repayment of the mortgage loan depends materially on the cash flows generated by the property, including relevant metrics (such as an occupancy rate of the property). [Basel Framework, CRE 20.73]

94. The LTV ratio is the amount of the loan divided by the value of the property. The value of the property will be maintained at the value measured at origination unless OSFI elects to require institutions to revise the property value downward. The value must be adjusted if an extraordinary, idiosyncratic event occurs resulting in a permanent reduction of the property value. If the value has been adjusted downwards, a subsequent upwards adjustment can be made but not to a higher value than the value at origination. Modifications made to the property that unequivocally increase its value could also be considered in the LTV. [Basel Framework, CRE 20.74]

95. When calculating the LTV ratio, the loan amount will be reduced as the loan amortizes. The LTV ratio should be re-calculated upon any refinancing, and whenever deemed prudent. The LTV ratio must be prudently calculated in accordance with the following requirements:

institution has legal right to take a mortgage on the property in the event that the guarantor fails, may be treated as residential real estate exposures (rather than guaranteed loans) if the following additional conditions are met:
(i) the borrower shall be contractually committed not to grant any mortgage lien without the consent of the institution that granted the loan;
(ii) the guarantor shall be either a bank or a financial institution subject to capital requirements comparable to those applied to banks or an insurance undertaking;
(iii) the guarantor shall establish a fully-funded mutual guarantee fund or equivalent protection for insurance undertakings to absorb credit risk losses, whose calibration shall be periodically reviewed by its supervisors and subject to periodic stress testing; and
(iv) the institution shall be contractually and legally allowed to take a mortgage on the property in the event that the guarantor fails.

[41] Metrics and levels for measuring the ability to repay should mirror the FSB *Principles for sound residential mortgage underwriting practices (April 2012)*.

a. *Amount of the loan*: includes the outstanding loan amount and any undrawn committed amount of the mortgage loan.[42] The loan amount must be calculated gross of any provisions and other risk mitigants, except for pledged deposits accounts with the lending institution that meet all requirements for on-balance sheet netting and have been unconditionally and irrevocably pledged for the sole purposes of redemption of the mortgage loan.[43]

b. *Value of the property*: the valuation must be assessed independently using prudently conservative valuation criteria. The valuation must be done independently from the institution's mortgage acquisition, loan processing and loan decision process. To ensure that the value of the property is appraised in a prudently conservative manner, the valuation must exclude expectations on price increases and must be adjusted to take into account the potential for the current market price to be significantly above the value that would be sustainable over the life of the loan.[44] In addition, institutions should assess and adjust, as appropriate, the value of the property for the purposes of calculating the LTV ratio by considering relevant risk factors that make the underlying property more vulnerable to a significant house price correction or that may significantly affect the marketability of the property. If a market value can be determined, the valuation should not be higher than the market value.[45]

[Basel Framework, CRE 20.75]

96. Mortgage insurance in Canada is considered a guarantee and institutions may recognize the risk-mitigating effect of the guarantee where the operational requirements included in paragraphs 274 and 275 for guarantees as well as the additional operational requirements for

[42] If an institution grants different loans secured by the same property and they are sequential in ranking order (i.e. there is no intermediate lien from another institution), the different loans should be considered as a single exposure for risk-weighting purposes, and the amount of the loans should be added to calculate the LTV ratio.

[43] Where a junior lien held by a different institution than that holding the senior lien is recognized (in accordance with paragraph 92), the loan amount of the junior liens must include all other loans secured with liens of equal or higher ranking than the institution's lien securing the loan for purposes of defining the LTV bucket and risk weight for the junior lien. If there is insufficient information for ascertaining the ranking of the other liens, the institution should assume that these liens rank pari passu with the junior lien held by the institution. The institution will first determine the "base" risk weight based on Tables 10, 11, 12, or 13 as applicable and adjust the "base" risk weight by a multiplier of 1.25, for application to the loan amount of the junior lien. If the "base" risk weight corresponds to the lowest LTV bucket, the multiplier will not be applied. The resulting risk weight of multiplying the "base" risk weight by 1.25 will be capped at the risk weight applied to the exposure when the requirements in paragraph 92 are not met.

[44] In line with OSFI's Guideline B-20: Residential Mortgage Insurance Underwriting Practices and Procedures, FRFIs should have clear and transparent property valuation policies and procedures including a framework for critically reviewing and, where appropriate, effectively challenging the assumptions and methodologies underlying valuations and property appraisals. In assessing the value of a property, FRFIs should take a risk-based approach, and consider a combination of valuation tools and appraisal processes appropriate to the risk being undertaken. FRFIs should have robust processes in place for regularly monitoring, reviewing and updating their LTV ratio frameworks. The valuation process can include various methods such as on-site inspections, third-party appraisals and/or automated valuation tools.

[45] In the case where the mortgage loan is financing the purchase of the property, the value of the property for LTV ratio purposes will not be higher than the effective purchase price.

mortgage insurance are met.[46] The risk weight applied to the insured mortgage after the recognition of the guarantee will be calculated according to paragraph 283 to 285. [Basel Framework, CRE 20.76]

4.1.11 Exposures secured by residential real estate

97. A residential property is an immovable property that has the nature of a dwelling and satisfies all applicable laws and regulations enabling the property to be occupied for housing purposes. A residential real estate exposure is an exposure secured by a residential property (such as 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.[47] Investments in hotel properties and time-shares are excluded from the definition of qualifying residential property. [Basel Framework, CRE 20.77]

98. Category I and II SMSBs may apply a risk weight of 35% to all residential real estate exposures with an LTV ratio equal to or below 80% and a risk weight of 75% all residential real estate exposures with an LTV ratio above 80%, provided that these exposures meet the criteria set out in paragraph 92 and do not cumulatively exceed $500 million.

99. Guideline B-20 states: "OSFI expects that FRFIs will maintain adequate regulatory capital levels to properly reflect the risks being undertaken through the underwriting and/or acquisition of residential mortgages." Residential real estate exposures that do not meet OSFI's expectations related to Guideline B-20, are subject to either the risk weights outlined in Table 11 of Chapter 4 or to a 0.22 correlation (R) factor in paragraph 79 of Chapter 5.[48] [49]

100. For institutions that do not qualify for the simplified treatment in paragraph 98, residential real estate exposures are divided into two categories:

a. General residential real estate: exposures where paragraph 103 (income-producing real estate), and paragraph 113 (land acquisition, development and construction) are not applicable.

b. Income producing residential real estate: exposures where the criteria in paragraph 103 are met, but those in paragraph 113 (land acquisition, development and construction) are not applicable.

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[46] An institution's use of mortgage insurance should mirror the *FSB Principles for sound residential mortgage underwriting* (April 2012).

[47] For residential property under construction described in paragraph 92, this means there should be an expectation that the property will satisfy all applicable laws and regulations enabling the property to be occupied for housing purposes.

[48] This treatment applies to all exposures secured by the same residential real estate collateral where one or more of the exposures do not meet OSFI's expectations related to Guideline B-20.

[49] Exposures for which paragraph 113 (land acquisition, development and construction) is applicable and exposures that do not meet the requirements of paragraph 97 (residential real estate) are not eligible for this treatment.

101. Where the requirements for real estate exposures in paragraph 92 are met and provided that the exposure does not meet the requirements for income-producing residential real estate in paragraph 103 nor the requirements for land acquisition, development and construction in paragraph 113, the risk weight to be assigned to the total exposure amount will be determined based on the exposure's LTV ratio in Table 10. In calculating the LTV ratio for purposes of Home equity lines of credit (HELOC), a 75% credit conversion factor should be applied to the undrawn exposure of the HELOC.

Table 10: Risk weights for general residential real estate exposures
(Repayment is not materially dependent on cash flows generated by property)

	LTV ≤ 50%	**50% < LTV ≤ 60%**	**60% < LTV ≤ 70%**	**70% < LTV ≤ 80%**	**80% < LTV ≤ 90%**	**90% < LTV ≤ 100%**	**LTV > 100**
Risk weight	20%	25%	30%	35%	40%	50%	70%

[Basel Framework, CRE 20.82]

102. For exposures where any of the requirements for real estate exposures described in paragraph 92 are not met and paragraphs 103 (income-producing real estate), and 113 (land acquisition, development and construction) are not applicable, the risk weight applicable will be the risk weight of the counterparty. For exposures to individuals and SBEs (as defined in paragraph 82) the risk weight applied will be 75%. For exposures to SMEs, the risk weight applied will be 85%. For exposures to other counterparties, the risk weight applied is the risk weight that would be assigned to an unsecured exposure to that counterparty. [Basel Framework, CRE 20.88-20.89]

103. For an exposure to (i) a variable rate fixed-payment residential mortgage with an LTV above 65% for which payments are insufficient to cover the interest component of the mortgage for three or more consecutive months due to increases in interest rates; (ii) when the prospects for servicing the loan materially depend[50] on the cash flows generated by the property securing the loan rather than on the underlying capacity of the borrower to service the debt from other sources, and provided that paragraph 113 is not applicable, the exposure will be risk-weighted as follows:

a. if the requirements for real estate exposures in paragraph 92 are met, according to the LTV ratio as set out in Table 11 below; and

b. if any of the requirements for real estate exposures in paragraph 92 are not met, at 150%.

Table 11: Risk weights for income-producing residential real estate exposures
(Repayment is materially dependent on cash flows generated by property)

	LTV ≤ 50%	**50% < LTV ≤ 60%**	**60% < LTV ≤ 70%**	**70% < LTV ≤ 80%**	**80% < LTV ≤ 90%**	**90% < LTV ≤ 100%**	**LTV > 100**

[50] It is expected that the material dependence condition would predominantly apply to loans to corporates, SMEs or SPVs, but is not restricted to those borrower types.

Risk weight	30%	35%	45%	50%	60%	75%	105%

[Basel Framework, CRE 20.80 and 20.84]

104. The primary source of these cash flows would generally be lease or rental payments, or the sale of the residential property. The distinguishing characteristic of these exposures compared to other residential real estate exposures is that both the servicing of the loan and the prospects for recovery in the event of default depend materially on the cash flows generated by the property securing the exposure. The loan should be considered materially dependent on cash flows generated by the property and subject to the risk weights in Table 11, if more than 50% of the borrower's income used in the institution's assessment of the borrower's ability to service the loan is from cash flows generated from the residential property. Income generated from other residential real estate properties should not be considered when determining whether the loan is materially dependent on the borrower's income. In cases where the borrower has multiple mortgages, the income used for this assessment should be adjusted by removing income used to service mortgages[51] on other properties. Institutions may alternatively categorize all investment or rental properties as identified using their internal property purpose indicators, provided that their internal policies for classifying exposures can be shown, at OSFI's request, to be at least as conservative as the 50% borrower income criterion above. [Basel Framework, 20.79]

105. The following types of exposures are excluded from the treatment described in paragraph 103 and are subject to the treatment described in paragraphs 101 to 102:

a. An exposure secured by a property that is the borrower's primary residence;

b. An exposure secured by residential real estate property to associations or cooperatives of individuals that are regulated under national law and exist with the only purpose of granting its members the use of a primary residence in the property securing the loans; and

c. An exposure secured by residential real estate property to public housing companies and not-for-profit associations regulated under national law that exist to serve social purposes and to offer tenants long-term housing.

[Basel Framework, CRE 20.81]

4.1.12 Exposures secured by commercial real estate

106. A commercial real estate exposure is an exposure secured by any immovable property that is not a residential real estate as defined in paragraph 97. [Basel Framework, CRE 20.78]

107. Category I and II SMSBs may apply a risk weight of 100% to all commercial real estate exposures, provided that these exposures meet the criteria set out in paragraph 92 and do not cumulatively exceed $500 million.

[51] This includes other mortgages issued by the lender itself as well as mortgages issued by other lenders.

108. Commercial real estate exposures are divided into two categories:

a. General commercial real estate: exposures where paragraphs 111 (income-producing real estate), and 113 (land acquisition, development and construction) are not applicable.

b. Income producing commercial real estate: exposures where the criteria in paragraph 111 are met, but those in paragraph 113 (land acquisition, development and construction) are not applicable.

109. Where the requirements in paragraph 92 are met and provided that paragraphs 111 and 113 are not applicable, the risk weight to be assigned to the total exposure amount will be determined based on the exposure's LTV ratio in Table 12. For the purpose of paragraphs 109 to 110, "risk weight of the counterparty" refers to 75% for exposures to individuals and SBEs (as defined in paragraph 82), 85% for exposures to SMEs and for exposures to other counterparties, the risk weight applied is the risk weight that would be assigned to an unsecured exposure to that counterparty.

Table 12: Risk weights for general commercial real estate exposures
(Repayment is not materially dependent on cash flows generated by property)

	LTV ≤ 60%	**LTV > 60%**
Risk weight	Min (60%, RW of counterparty)	RW of counterparty

[Basel Framework, CRE 20.85]

110. Where any of the requirements in paragraph 92 are not met and paragraphs 111 to 115 are not applicable, the risk weight applied will be the risk weight of the counterparty. [Basel Framework, CRE 20.88-20.89]

111. When the prospects for servicing the loan materially depend[52] on the cash flows generated by the property securing the loan rather than on the underlying capacity of the borrower to service the debt from other sources,[53] and provided that paragraph 113 is not applicable, the exposure will be risk-weighted as follows:

a. If the requirements in paragraph 92 are met, according to the LTV ratio as set out in the risk-weight Table 13 below; and

b. If any of the requirements of paragraph 92 are not met, at 150%.

[52] It is expected that the material dependence condition would predominantly apply to loans to corporates, SMEs or SPVs, but is not restricted to those borrower types.

[53] For such exposures, institutions may apply the treatment described in paragraph 109 subject to the following conditions: (i) the losses stemming from commercial real estate lending up to 60% of LTV must not exceed 0.3% of the outstanding loans in any given year and (ii) overall losses stemming from commercial real estate lending must not exceed 0.5% of the outstanding loans in any given year. If either of these tests are not satisfied in a given year, the eligibility of the exemption will cease and the exposures where the prospect for servicing the loan materially depend on cash flows generated by the property securing the loan rather than the underlying capacity of the borrower to service the debt from other sources will again be risk weighted according to paragraph 111 until both tests are satisfied again in the future. Institutions applying such treatment must publicly disclose whether these conditions are met.

Table 13: Risk weights for income-producing commercial real estate exposures
(Repayment is materially dependent on cash flows generated by property)

	LTV ≤ 60%	**60% < LTV ≤ 80%**	**LTV > 80%**
Risk weight	70%	90%	110%

[Basel Framework, CRE 20.87-20.89]

112. The primary source of these cash flows would generally be lease or rental payments, or the sale, of the commercial property. The distinguishing characteristic of these exposures compared to other commercial real estate exposures is that both the servicing of the loan and the recovery in the event of default depend materially on the cash flows generated by the property securing the exposure. The loan should be considered materially dependent on cash flows from the property if more than 50% of the borrower's income used in the institution's assessment of the borrower's ability to service the loan is from cash flows generated by the commercial property. Income generated from other commercial real estate properties should not be considered when determining whether the loan is materially dependent on the borrower's income. Institutions may alternatively categorize all investment or rental properties, as identified using their internal property purpose indicators, as income producing and subject to the risk-weights in Table 13, provided that their internal policies for investment and rental properties can be shown, at OSFI's request, to require that less than 50% of the gross income from the property be used in the institution's assessment of the borrower's ability to service the loan. [Basel Framework CRE 20.79 and CRE 20.80]

4.1.13 Land acquisition, development and construction exposures

113. Land acquisition, development and construction (ADC) exposures[54] refers to loans to companies or SPVs financing any of the land acquisition for development and construction purposes, or development and construction of any residential or commercial property. [Basel Framework, CRE 20.90]

114. An ADC exposure is one for which the source of repayment is either the future uncertain sale of the property or cash flows which are substantially uncertain. Loans to corporates or SPVs where repayment of the loan depends on the credit quality of the corporate and not on the future income generated by the property, will be out of scope for the ADC treatment, and should be treated as a corporate exposure. Accordingly, ADC loans may be treated as corporate exposures provided any of the following criteria are met: (i) the property is being developed for the borrower's own use, with a reasonable expectation that no more than 50% of the total property will be leased; or (ii) based on a 3-year average, and for either the borrower or guarantor of an ADC loan, revenue generated from all ADC activities does not total more than 25% of the total revenue of the borrower or guarantor of the ADC loan.

115. All ADC exposures where the prudential underwriting standards do not satisfy the requirements in paragraph 93, where applicable, will be risk weighted at 150%. All other ADC

[54] ADC exposures do not include the acquisition of forest or agricultural land, where there is no planning consent or intention to apply for planning consent.

exposures to residential real estate[55] projects will be risk weighted as follows:

Table 14 – Risk weights for high-rise residential real estate projects

Level of pre-sales[56]	Risk Weight
Less than 50%	150%
Equal to or greater than 50% and less than 75%	100%
Equal to or greater than 75%	90%

Table 15 – Risk weights for low-rise residential real estate projects

Level of pre-sales	Risk Weight
Less than 50%	130%
Equal to or greater than 50% and less than 75%	100%
Equal to or greater than 75%	90%

116. High-rise residential construction projects are defined as those with seven or more stories.

117. Pre-sale and pre-lease contracts must be legally binding written contracts, and the purchaser or renter must have made a substantial cash deposit which is subject to forfeiture if the contract is terminated.

118. All low-rise residential real estate projects and all purpose built rental projects are eligible for a risk weight of 100% if equity at risk, subject to the constraints in paragraph 119, equivalent to at least 25% of the real estate's appraised as completed value has been contributed by the borrower, irrespective of the level of pre-sales.

119. Equity at risk can be made up of the following components:

a. Cash contributions.
b. Land lift included in the “appraised as completed” value of the property, consistent with expectations set out in paragraph 94 and in Guideline B-20: Residential Mortgage Insurance Underwriting Practices and Procedures.
c. Deposits from future purchasers and/or cash equity from the borrower injected into the construction project prior to senior loan disbursement and that insulate the lender from loss should the borrower default.

Senior lenders may also treat debt subordinated to the senior exposure, that would insulate the lender from loss in the amount of the subordinated tranche in the case of borrower default, as equity at risk for an ADC project.

[55] A construction or development property can be considered residential if at least 50% of its square footage is intended for residential purposes.

[56] For clarity, pre-sales of 50% means that 50% of total contracts by value have been sold. Risk weights apply when the level of pre-sales is met at any time during construction.

To qualify for the 100% risk weight, a minimum of 5% equity at risk must be made up of cash contributions and a maximum of 10% equity at risk can be made up of subordinated debt.

120. All other ADC exposures to commercial real estate projects (not included in paragraph 115) will be risk weighted at 150%, unless the following conditions are satisfied:

a. The level of pre-sales or pre-leases[57] is at least 50%, and
b. The LTV of the exposure is no more than 70%.

If both conditions are satisfied, ADC exposures to commercial real estate projects can be assigned a risk weight of 110%.

121. For mixed-use high-rise development projects, the percentage of total contracts that have been pre-sold should be based on the percentage of the overall project that has been pre-sold (i.e. residential and commercial combined). For mixed use low-rise projects, equity at risk should be calculated on a total project basis.

122. ADC projects which are substantially completed should be risk-weighted using the risk weights for income producing commercial real estate in Table 13 above, if the LTV of the exposure is no more than 80%. A project is considered substantially completed if the certificate of occupancy has been issued to the borrower.

123. In the event the institution holds the exposure in a subordinated or a mezzanine tranche of an ADC loan structure, the exposure should be risk-weighted at 300%. If an institution holds both the senior and the subordinated/mezzanine tranche(s) in the same ADC loan structure, the institution may treat the entire exposure as a single loan and use the risk weights noted in this section.

124. For residential land acquisition exposures, a 100% risk weight is assigned to exposures with an LTV that does not exceed 60%[58]. All other land acquisition exposures are assigned a risk weight of 150%.

4.1.14 Reverse mortgages

125. The Standardized Approach must be used for reverse mortgage exposures. Reverse mortgages are non-recourse loans secured by property that have no defined term and no monthly repayment of principal and interest. The amount owing on a reverse mortgage grows with time as interest is accrued and deferred. The loan is generally repaid from the net proceeds of the sale (i.e. net of disposition costs) after the borrower has vacated the property. Reverse mortgage lenders are repaid the lesser of the fair market value of the home (less disposition costs) at the time it is sold and the amount of the loan. Assuming there is no event of default (for example, failure to pay property taxes and insurance, or failure to keep the home in a good state of repair),

[57] Pre-leases of at least 50% means total pre-lease contracts are equivalent to at least 50% of the value of total contracts. Risk weights apply when the level of pre-sales or pre-leases is met at any time during construction.

[58] Land lift should not be reflected in the LTV calculations for land acquisition loans.

reverse mortgage lenders have no recourse to the borrower if the amount realized on the sale of the home is less than the amount owing on the reverse mortgage.

126. A reverse mortgage exposure includes all advances, plus accrued interest and 40% 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 40%. A reverse mortgage exposure qualifies for the risk weights set out in Table 16 provided that all of the following conditions are met:

a. Disposition costs on the mortgaged property and risk of appraisal error are not expected to exceed 15%-20% of the current appraised value

b. The criteria for qualifying residential mortgages set out in section 4.1.11 are met (except that there is no requirement for recourse to the borrower for a deficiency)

c. The value of the property must be appraised independently using prudently conservative valuation criteria. The valuation must be done independently from the institution's mortgage acquisition, loan processing and loan decision process. To ensure that the value of the property is appraised in a prudently conservative manner, the valuation must exclude expectations on price increases and must be adjusted to take into account the potential for the current market price to be significantly above the value that would be sustainable over the life of the loan.[59] In addition, institutions should assess and adjust, as appropriate, the value of the property for the purposes of calculating the LTV by considering relevant risk factors that make the underlying property more vulnerable to a significant house price correction or that may significantly affect the marketability of the property. If a market value can be determined, the valuation should not be higher than the market value.

127. Further, for a reverse mortgage to qualify for the risk weights set out in Table 16, the underwriting institution must have, at mortgage inception and at the time such risk weight is being considered, each of the following:

a. 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

[59] In line with OSFI's *Guideline B-20: Residential Mortgage Insurance Underwriting Practices and Procedures*, FRFIs should have clear and transparent property valuation policies and procedures including a framework for critically reviewing and, where appropriate, effectively challenging the assumptions and methodologies underlying valuations and property appraisals. In assessing the value of a property, FRFIs should take a risk-based approach, and consider a combination of valuation tools and appraisal processes appropriate to the risk being undertaken. FRFIs should have robust processes in place for regularly monitoring, reviewing and updating their LTV ratio frameworks. The valuation process can include various methods such as on-site inspections, third-party appraisals and/or automated valuation tools.

b. 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

c. 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%

d. 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%

e. Documented procedures for ensuring that borrowers remain in compliance with loan conditions

f. A rigorous method for stress testing the reverse mortgage portfolio that addresses expected occupancy, property value and interest rate assumptions

g. Ongoing monitoring of reverse mortgage stress testing that is incorporated in the institution's Internal Capital Adequacy Assessment Process and capital planning process.

128. For purposes of calculating risk weighted assets, current LTV is defined as:

a. The reverse mortgage exposure (as defined in paragraph 126) divided by:

b. The most recently appraised value of the property.

129. Table 16 sets out the risk weights that apply to reverse mortgage exposures:

Table 16: Risk weights for reverse mortgage exposures

Current LTV	Risk Weight
≤ 35%	30%
> 35% and ≤ 55%	35%
> 55% and ≤ 65%	45%
>65% and ≤ 80%	60%
>80%	Partial deduction

130. In particular:

a. A reverse mortgage exposure that has a current LTV less than or equal to 35% is risk weighted at 30%.

b. A reverse mortgage exposure that has a current LTV greater than 35%, but less than or equal to 55%, is risk weighted at 35%.

c. A reverse mortgage exposure that has a current LTV greater than 55%, but less than or equal to 65%, is risk weighted at 45%.

d. A reverse mortgage exposure that has a current LTV greater than 65%, but less than or equal to 80%, is risk weighted at 60%.

e. Where a reverse mortgage exposure has a current LTV greater than 80%, the exposure amount that exceeds 80% LTV is deducted from Common Equity Tier 1 (CET1) capital. The remaining amount is risk-weighted at 100%.

f. If a reverse mortgage exposure fails to meet the criteria set out in paragraphs 126 and 127, the exposure amount that exceeds 80% LTV is deducted from CET1 capital. The remaining amount is risk-weighted at 150%.

4.1.15 Mortgage-backed securities

131. Mortgage backed securities (MBS) will be risk-weighted as follows:[60]

a. *National Housing Act* (NHA) MBS that are guaranteed by the Canada Mortgage and Housing Corporation (CMHC), will receive a risk weight of 0% in recognition of the fact that obligations incurred by CMHC are legal obligations of the Government of Canada.
b. Pass-through mortgage-backed securities that are fully and specifically secured against residential mortgages (see section 4.1.11) that meet the requirements for real estate exposures in paragraph 92, and provided that the treatment for ADC exposures in section 4.1.13 is not applicable, will be risk weighted based on the underlying exposures' LTV ratios according to Tables 10 and 11. Risk weights of IPRE exposures as set out in Table 11 would only need to be included in the calculation of the risk weight of the MBS if IPRE exposures form a material portion of the underlying assets of the MBS.
c. Pass-through mortgage-backed securities that are fully and specifically secured against commercial mortgages (see section 4.1.12) that meet the requirements for real estate exposures in paragraph 92, and provided that the treatment for ADC exposures in section 4.1.13 is not applicable, will be risk weighted based on the underlying exposures' LTV ratios according to Tables 12 and 13. Risk weights of IPRE exposures as set out in Table 13 would only need to be included in the calculation of the risk weight of the MBS if IPRE exposures form a material portion of the underlying assets of the MBS.
d. Amounts receivable resulting from the sale of mortgages under NHA MBS programs should be risk-weighted at 250% according the treatment of other assets (see section 4.1.23).

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 the underlying assets. If an institution does not have access to the LTVs of all underlying mortgages, but only to the range of LTVs, then the risk weight for the MBS would be based on the upper bound of that range.

132. 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:

[60] For the treatment of mortgage-backed securities issued in tranches, refer to Chapter 6 – Securitization.

a. The underlying mortgage pool contains only mortgages that are fully performing when the mortgage-backed security is created.

b. The securities must absorb their pro-rata share of any losses incurred.

c. A special-purpose vehicle should be established for securitization and administration of the pooled mortgage loans.

d. 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.

e. The arrangements for the special-purpose vehicle and trustee must provide that the following obligations are observed:

   i. 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.

   ii. The vehicle and/or trustee must provide detailed and regular information on structure and performance of the pooled mortgage loans.

   iii. The vehicle and trustee must be legally separate from the originator of the pooled mortgage loans.

   iv. 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.

   v. The trustee must have a first priority charge on underlying assets on behalf of the holders of the securities.

   vi. The agreement must provide for the trustee to take clearly specified steps in cases when the mortgagor defaults.

   vii. 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.

   viii. The cash flows of the underlying mortgages must meet the cash flow requirements of the security without undue reliance on any reinvestment income.

   ix. 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 the risk-weight of the originating entity or SPV.

4.1.16 Risk weight multiplier to certain exposures with currency mismatch

133. For unhedged residential real estate exposures to individuals where the lending currency differs from the currency of the borrower’s source of income, and where more than 10% of the borrower’s income used to qualify for the loan is denominated in foreign currency,

institutions will apply a 1.5 times multiplier to the applicable risk weight according to paragraphs 97 to 105, subject to a maximum risk weight of 150%. [Basel Framework, CRE 20.92]

134. For the purposes of paragraph 133, an unhedged exposure refers to an exposure to a borrower that has no natural or financial hedge against the foreign exchange risk resulting from the currency mismatch between the currency of the borrower's income and the currency of the loan. A natural hedge exists where the borrower, in its normal operating procedures, receives foreign currency income that matches the currency of a given loan (e.g. remittances, rental incomes, salaries). A financial hedge generally includes a legal contract with a financial institution (e.g. forward contract). For the purposes of application of the multiplier, only these natural or financial hedges are considered sufficient where they cover at least 90% of the total loan instalment, regardless of the number of hedges. [Basel Framework, CRE 20.93]

4.1.17 Commitments

135. Commitments are arrangements that obligate an institution, at a client's request, to extend credit, purchase assets or issue credit substitutes. It includes any such arrangement that can be unconditionally cancelled by the institution at any time without prior notice to the obligor. It also includes any such arrangement that can be cancelled by the institution if the obligor fails to meet conditions set out in the facility documentation, including conditions that must be met by the obligor or third parties (conditions precedent) prior to any initial or subsequent drawdown under the arrangement. Counterparty risk weightings for OTC derivative transactions will not be subject to any specific ceiling. [Basel Framework, CRE 20.94]

136. Normally, commitments involve a written contract or agreement and some form of consideration, such as a commitment fee. Note that unfunded mortgage commitments are treated as commitments for risk-based capital purposes when the borrower has accepted the commitment extended by the institution and all conditions related to the commitment have been fully satisfied.

4.1.18 Off-balance sheet items

137. Off-balance sheet items will be converted into credit exposure equivalent amounts through the use of credit conversion factors (CCF). In the case of commitments, the committed but undrawn amount of the exposure would be multiplied by the CCF. [Basel Framework, CRE 20.94]

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

a. Direct credit substitutes, e.g. general guarantees of indebtedness or equivalent instruments backing financial claims (including standby letters of credit serving as financial guarantees for loans and securities). With a direct credit substitute, the risk of loss to the institution is directly dependent on the creditworthiness of the counterparty.

b. Sale and repurchase agreements and asset sales with recourse where the credit risk remains with the institution. 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.

c. The lending of an institution's securities or the posting of securities as collateral by an institution, including instances where these arise out of repo-style transactions (i.e. repurchase/reverse repurchase and securities lending/securities borrowing transactions). The risk-weighting treatment for counterparty credit risk must be applied in addition to the credit risk charge on the securities or posted collateral, where the credit risk of the securities lent or posted as collateral remains with the institution. This paragraph does not apply to posted collateral related to derivative transactions that is treated in accordance with the counterparty credit risk standards.

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

e. Forward forward deposits. Forward forward deposits are agreements 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.

f. Partly paid shares and securities.[61] Partly paid shares and securities are 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 installment), either on a date pre-determined at the time of issue or at an unspecified future date. These items are to be weighted according to the type of asset and not according to the type of counterparty with whom the transaction has been entered into.

g. Off-balance sheet items that are credit substitutes not explicitly included in any other category. [Basel Framework, CRE 20.95]

139. A 50% CCF will be applied to note issuance facilities (NIFs) and revolving underwriting facilities (RUFs) regardless of the maturity of the underlying facility. 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

[61] These items are to be weighted according to the type of asset and not according to the type of counterparty with whom the transaction has been entered into.

acceptable price, an underwriter (or group of underwriters) undertakes to buy them at a prescribed price. [Basel Framework, CRE 20.96]

140. A 50% CCF will be applied to certain transaction-related contingent items (e.g. performance-related guarantees). 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. [Basel Framework, CRE 20.97]

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

a. 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:
   i. Subcontractors' and supplies' performance
   ii. Labour and material contracts
   iii. Delivery of merchandise, bids or tender bonds
   iv. Guarantees of repayment of deposits or prepayments in cases of non-performance
b. Customs and excise bonds. The amount recorded for such bonds should be the reporting institution's maximum liability.

142. A 40% CCF will be applied to commitments, regardless of the maturity of the underlying facility, unless they qualify for a lower CCF. [Basel Framework, CRE 20.98]

143. A 25% CCF will be applied to undrawn balances of credit card and charge card exposures even if they meet the criteria in paragraph 145.

144. A 20% CCF will be applied to both the issuing and confirming institutions of short-term (i.e. with a maturity below one year) self-liquidating trade letters of credit arising from the movement of goods (e.g. 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. [Basel Framework, CRE 20.99]

145. A 10% CCF will be applied to commitments that are unconditionally cancellable at any time by the institution without prior notice, or that effectively provide for automatic cancellation due to deterioration in a borrower's creditworthiness. [Basel Framework, CRE 20.100]

146. Where there is an undertaking to provide a commitment on an off-balance sheet item, institutions are to apply the lower of the two applicable CCFs.[62] [Basel Framework, CRE 20.101]

4.1.19 Exposures that give rise to counterparty credit risk

147. The credit equivalent amount of SFTs that expose an institution to counterparty credit risk is to be calculated under the comprehensive approach in paragraphs 241 to 266. The credit equivalent amount of OTC derivatives that expose an institution to counterparty credit risk is to be calculated under the rules for counterparty credit risk in paragraph 267. [Basel Framework, CRE 20.102]

148. Institutions must closely monitor securities, commodities and foreign exchange transactions that have failed, starting from the first day they fail. A capital charge on failed transactions must be calculated in accordance with section 7.2 of Chapter 7 of this guideline. [Basel Framework, CRE 70.2]

149. Institutions are exposed to the risk associated with unsettled securities, commodities, and foreign exchange transactions from trade date. Irrespective of the booking or the accounting of the transaction, unsettled transactions must be taken into account for regulatory capital requirements purposes. Where they do not appear on the balance sheet (ie settlement date accounting), the unsettled exposure amount will receive a 100% CCF. Institutions are encouraged to develop, implement and improve systems for tracking and monitoring the credit risk exposure arising from unsettled transactions as appropriate so that they can produce management information that facilitates timely action. Furthermore, when such transactions are not processed through a delivery-versus-payment (DvP) or payment-versus-payment (PvP) mechanism, institutions must calculate a capital charge as set forth in section 7.2 in Chapter 7 of this guideline. [Basel Framework, CRE 70.1, CRE 70.2, CRE 70.6, and CRE 70.10]

4.1.20 Credit derivatives

150. An institution providing credit protection through a first-to-default or second-to-default credit derivative is subject to capital requirements on such instruments. For first-to-default credit

[62] For example if an institution has a commitment to open short-term self liquidating trade letters of credit arising from the movement of goods, a 20% CCF will be applied (instead of a 40% CCF); and if an institution has an unconditionally cancellable commitment described in paragraph 145 to issue direct credit substitutes, a 10% CCF will be applied (instead of a 100% CCF).

derivatives, the risk weights of the assets included in the basket must be aggregated up to a maximum of 1250% and multiplied by the nominal amount of the protection provided by the credit derivative to obtain the risk-weighted asset amount. Alternatively, an institution may deduct the nominal amount from CET1 that would qualify for a risk weight of 1250%. For second-to-default credit derivatives, the treatment is similar; however, in aggregating the risk weights, the asset with the lowest risk-weighted amount can be excluded from the calculation. This treatment applies respectively for nth-to-default credit derivatives, for which the n-1 assets with the lowest risk- weighted amounts can be excluded from the calculation. [Basel Framework, CRE 20.103]

4.1.21 Defaulted exposures

151. For risk-weighting purposes under the standardized approach, a defaulted exposure is defined as one that is past due for more than 90 days, or is an exposure to a defaulted borrower. A defaulted borrower is a borrower in respect of whom any of the following events have occurred:

a. Any material credit obligation that is past due for more than 90 days. Overdrafts will be considered as being past due once the customer has breached an advised limit or been advised of a limit smaller than current outstandings;

b. Any material credit obligation is on non-accrued status (e.g. the lending institution no longer recognizes accrued interest as income or, if recognized, makes an equivalent amount of provisions);

c. A write-off or account-specific provision is made as a result of a significant perceived decline in credit quality subsequent to the institution taking on any credit exposure to the borrower;

d. Any credit obligation is sold at a material credit-related economic loss;

e. A distressed restructuring of any credit obligation (ie a restructuring that may result in a diminished financial obligation caused by the material forgiveness, or postponement, of principal, interest or (where relevant) fees) is agreed by the institution;

f. The borrower's bankruptcy or a similar order in respect of any of the borrower's credit obligations to the banking group has been filed;

g. The borrower has sought or has been placed in bankruptcy or similar protection where this would avoid or delay repayment of any of the credit obligations to the banking group; or

h. Any other situation where the institution considers that the borrower is unlikely to pay its credit obligations in full without recourse by the institution to actions such as realizing security. Additional guidance on indications of unlikeliness to pay can be found in OSFI Implementation Notes, IFRS 9 Guidance and applicable accounting standards.

[Basel Framework, CRE 20.104]

152. For retail exposures, the definition of default can be applied at the level of a particular facility, rather than at the level of the borrower. As such, default by a borrower on one facility

does not require an institution to treat all other facilities from that borrower to the banking group as defaulted. All products secured by the same property issued as part of the same combined loan product (CLP) are to be considered a single facility. That is, if a retail borrower is deemed to have defaulted on any product within a CLP, it is deemed to have defaulted on all products in the CLP. [Basel Framework, CRE 20.104 and CRE 36.71]

153. With the exception of residential real estate exposures treated under paragraph 154, the unsecured or unguaranteed portion of a defaulted exposure shall be risk-weighted net of specific provisions and partial write-offs as follows:

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

b. 100% risk weight when specific provisions are equal or greater than 20% of the outstanding amount of the loan.

[Basel Framework, CRE 20.106]

154. Defaulted residential real estate exposures where repayments do not materially depend on cash flows generated by the property securing the loan shall be risk-weighted net of specific provisions and partial write-offs at 100%. Guarantees or financial collateral which are eligible according to the credit risk mitigation framework might be taken into account in the calculation of the exposure in accordance with paragraph 96. [Basel Framework, CRE 20.107]

155. For the purpose of defining the secured or guaranteed portion of the defaulted exposure, eligible collateral and guarantees will be the same as for credit risk mitigation purposes (see section 4.3). [Basel Framework, CRE 20.108]

4.1.22 Equity Investments in Funds

156. Chapter 2 of this guideline requires institutions to deduct certain direct and indirect investments in financial institutions from regulatory capital. Exposures, including underlying exposures held by funds, that are required to be deducted according to Chapter 2 should not be risk weighted and therefore are excluded from the treatment in paragraphs 157 to 174 below.

157. Equity investments in funds that are held in the banking book must be treated in a manner consistent with one or more of the following three approaches, which vary in their risk sensitivity and conservatism: the “look-through approach” (LTA), the “mandate-based approach” (MBA), and the “fall-back approach” (FBA). The requirements set out in this section apply to institutions’ equity investments in all types of funds, including off-balance sheet exposures (e.g. unfunded commitments to subscribe to a fund’s future capital calls). [Basel Framework, CRE 60.1]

(i) The look-through approach

158. The LTA requires an institution to risk weight the underlying exposures of a fund as if the exposures were held directly by the institution. This is the most granular and risk-sensitive approach. It must be used when:

a. there is sufficient and frequent information provided to the institution regarding the underlying exposures of the fund; and

b. such information is verified by an independent third party.

[Basel Framework, CRE 60.2]

159. To satisfy condition (a) above, the frequency of financial reporting of the fund must be the same as, or more frequent than, that of the institution's and the granularity of the financial information must be sufficient to calculate the corresponding risk weights. To satisfy condition (b) above, there must be verification of the underlying exposures by an independent third party, such as the depository or the custodian institution or, where applicable, the management company.[63] [Basel Framework, CRE 60.3]

160. Under the LTA institutions must risk weight all underlying exposures of the fund as if those exposures were directly held. This includes, for example, any underlying exposure arising from the fund's derivatives activities (for situations in which the underlying receives a risk weighting treatment under the calculation of the minimum risk-based capital requirements) and the associated counterparty credit risk (CCR) exposure. Instead of determining a credit valuation adjustment (CVA) charge associated with the fund's derivatives exposures in accordance with section 7.1.7 of Chapter 7, institutions must multiply the CCR exposure by a factor of 1.5 before applying the risk weight associated with the counterparty.[64] [Basel Framework, CRE 60.4]

161. Institutions may rely on third-party calculations for determining the risk weights associated with their equity investments in funds (i.e. the underlying risk weights of the exposures of the fund) if they do not have adequate data or information to perform the calculations themselves. In such cases, the applicable risk weight shall be 1.2 times higher than the one that would be applicable if the exposure were held directly by the institution.[65][Basel Framework, CRE 60.5]

162. The following is an example of the calculation of RWA using the LTA:

Consider a fund that replicates an equity index. Moreover, assume the following:

a. The institution uses the Standardized Approach for credit risk when calculating its capital requirements;

b. The institution owns 20% of the shares of the fund;

c. The fund presents the following balance sheet:

Assets:

[63] An external audit is not required.

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

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

- Cash: $20;
- Government bonds (AAA rated): $30; and
- Non-significant equity investments in commercial entities: $50

Liabilities:

- Notes payable $5

Equity

- Shares $95

Balance sheet exposures of $100 will be risk-weighted according to the risk weights applied for cash (RW=0%), government bonds (RW=0%), and non-significant equity holdings of commercial entities (RW = 250%).

The leverage of the fund is 100/95≈1.05.

Therefore, the risk-weighted assets for the institution's equity investment in the fund are calculated as follows:

$$Avg\ RW_{fund} \times Leverage \times Equity\ investment$$

$$= ((RWA_{cash} + RWA_{bonds} + RWA_{\text{equities}})/TotalAssets_{fund}) \times Leverage \times Equity\ investment$$

$$= (\$20\times 0\% + \$30\times 0\% + \$50\times 250\%)/\$100) \times 1.05 \times (20\%\times \$95)$$

$$= \$24.9375$$

(ii) The mandate-based approach

163. The second approach, the MBA, provides a method for calculating regulatory capital that can be used when the conditions for applying the LTA are not met. [Basel Framework, CRE 60.6]

164. Under the MBA institutions may use the information contained in a fund's mandate or in the national regulations governing such investment funds.[66] To ensure that all underlying risks are taken into account (including CCR) and that the MBA renders capital requirements no less than the LTA, the risk-weighted assets for the fund's exposures are calculated as the sum of the following three items:

a. Balance sheet exposures (i.e. the funds' assets) are risk weighted assuming the underlying portfolios are invested to the maximum extent allowed under the fund's mandate in those assets attracting the highest capital requirements, and then progressively in those other

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

assets implying lower capital requirements. If more than one risk weight can be applied to a given exposure, the maximum risk weight applicable must be used.[67]

b. Whenever the underlying risk of a derivative exposure or an off-balance-sheet item receives a risk weighting treatment under the risk-based capital requirements , the notional amount of the derivative position or of the off-balance sheet exposure is risk weighted accordingly.[68] [69]

c. The CCR associated with the fund's derivative exposures is calculated using the Standardized Approach for measuring Counterparty Credit Risk (SACCR), set out in section 7.1.7 of Chapter 7 of this guideline. SACCR calculates the counterparty credit risk exposure of a netting set of derivatives by multiplying (i) the sum of the replacement cost and aggregate add-on for potential future exposure (PFE); by (ii) a multiplier set at 1.4. Whenever the replacement cost is unknown, the exposure measure for CCR will be calculated in a conservative manner by using the notional amount of the derivatives in each netting set as a proxy for the replacement cost. Whenever the aggregate add-on for PFE is unknown, it will be calculated as 15% of the sum of the notional values of the derivatives in the netting set.[70] The risk weight associated with the counterparty is applied to the counterparty credit risk exposure. Instead of determining a CVA charge associated with the fund's derivative exposures in accordance with Chapter 8 of this guideline, institutions must multiply the CCR exposure by a factor of 1.5 before applying the risk weight associated with the counterparty.[71]

[Basel Framework, CRE 60.7]

165. The following is an example of the calculation of the RWA using the MBA

Consider a fund with assets of $100, where it is stated in the mandate that the fund replicates an equity index. In addition to being permitted to invest its assets in either cash or listed equities, the mandate allows the fund to take long positions in equity index futures up to a maximum nominal amount equivalent to the size of the fund's balance sheet ($100). This means that the total on balance sheet and off balance sheet exposures of the fund can reach $200. Consider also that a maximum financial leverage (fund assets/fund equity) of 1.1 applies according to the mandate. The bank holds 20% of the shares of the fund, which represents an investment of $18.18.

First, the on-balance sheet exposures of $100 will be risk weighted according to the risk weights applied to listed equity exposures (RW=250%), i.e. $RWA_{on\text{-}BS} = \$100 \times 250\% = \$250$.

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

[68] If the underlying is unknown, the full notional amount of derivative positions must be used for the calculation.

[69] If the notional amount of derivatives mentioned in paragraph 163164 is unknown, it will be estimated conservatively using the maximum notional amount of derivatives allowed under the mandate.

[70] For instance, if both replacement cost and add-on components are unknown, the CCR exposure will be calculated as 1.4 × (sum of the notionals in the netting set + 0.15 × sum of the notionals in the netting set).

[71] A bank is not required to apply the 1.5 factor for situations in which the CVA capital charge would not otherwise be applicable. This includes: (i) transactions with a central counterparty and (ii) securities financing transactions (SFTs), unless OSFI determines that the bank's CVA loss exposure arising from SFTs is material.

Second, we assume that the fund has exhausted its limit on derivative positions, ie $100 notional amount. The RWA for the maximum notional amount of underlying the derivatives positions calculated by multiplying the following three amounts: (1) the SA credit conversion factor of 100% that is applicable to forward purchases; (2) the maximum exposure to the notional of $100; and (3) the applicable risk weight for listed equities under the SA which is 250%. Thus, $RWA_{underlying}$ = 100% × $100 × 250% = $250.

Third, we would calculate the counterparty credit risk associated with the derivative contract. As set out in paragraph 164:

a. If we do not know the replacement cost related to the futures contract, we would approximate it by the maximum notional amount, i.e. $100.
b. If we do not know the aggregate add-on for potential future exposure, we would approximate this by 15% of the maximum notional amount (i.e. 15% of $100 = $15).
c. The CCR exposure is calculated by multiplying (i) the sum of the replacement cost and aggregate add-on for potential future exposure; by (ii) 1.4, which is the prescribed value of alpha.

The counterparty credit risk exposure in this example, assuming the replacement cost and aggregate add-on amounts are unknown, is therefore $161 (= 1.4 × ($100+$15)). Assuming the futures contract is cleared through a qualifying CCP, a risk weight of 2% applies, so that RWA_{CCR} = $161 × 2% = $3.2. There is no CVA charge assessed since the futures contract is cleared through a CCP.

The RWA of the fund is hence obtained by adding $RWA_{on\text{-}BS}$, $RWA_{underlying}$ and RWA_{CCR}, i.e. $503.2 (=$250 + $250 + $3.2).

The RWA ($503.2) will be divided by the total assets of the fund ($100) resulting in an average risk-weight of 503.2%. The bank's total RWA associated with its equity investment is calculated as the product of the average risk weight of the fund, the fund's maximum leverage and the size of the bank's equity investment. That is the bank's total associated RWA are 503.2% × 1.1 × $18.18 = $100.6.

(iii) The fall-back approach

166. Where neither the LTA nor the MBA is feasible, institutions are required to apply the FBA. Under the FBA, the institution's equity investment in the fund is to be deducted from CET1 capital. [Basel Framework, CRE 60.8]

(iv) Treatment of funds that invest in other funds

167. When an institution has an investment in a fund (e.g. Fund A) that itself has an investment in another fund (e.g. Fund B), which the institution identified by using either the LTA or the MBA, the risk weight applied to the investment of the first fund (i.e. Fund A's investment in Fund B) can be determined by using one of the three approaches set out above. For all

subsequent layers (e.g. Fund B's investments in Fund C and so forth), the risk weights applied to an investment in another fund (Fund C) can be determined by using the LTA under the condition that the LTA was also used for determining the risk weight for the investment in the fund at the previous layer (Fund B). Otherwise, the FBA must be applied. [Basel Framework, CRE 60.9]

(v) Partial use of an approach

168. An institution may use a combination of the three approaches when determining the capital requirements for an equity investment in an individual fund, provided that the conditions set out in paragraphs 158 to 167 are met. [Basel Framework, CRE 60.10]

(vi) Exclusions to the look-through, mandate-based and fall-back approaches

169. Equity holdings in entities whose debt obligations qualify for a zero risk weight are excluded from the LTA, MBA and FBA approaches (including those publicly sponsored entities where a zero risk weight can be applied). [Basel Framework, CRE 60.11]

170. Equity investments made pursuant to the *Specialized Financing (Banks) Regulations* of the *Bank Act* qualify for the exclusion contained in paragraph 79**Error! Reference source not found.** and are risk weighted at 100%. Equity holdings made under legislated programmes can only be excluded up to an aggregate of 10% of an institution's total regulatory capital. [Basel Framework, CRE 60.12

(vii) Leverage adjustment

171. Leverage is defined as the ratio of total assets to total equity. Leverage is taken into account in the MBA by using the maximum financial leverage permitted in the fund's mandate or in the national regulation governing the fund. [Basel Framework, CRE 60.13]

172. When determining the capital requirement related to its equity investment in a fund, an institution must apply a leverage adjustment to the average risk weight of the fund, as set out in paragraph 173, subject to a cap of 1250%. Alternatively, an institution may choose to deduct the investment in a fund from CET1 that is risk weighted at 1250% [Basel Framework, CRE 60.14]

173. After calculating the total risk-weighted assets of the fund according to the LTA or the MBA, institutions will calculate the average risk weight of the fund (Avg RWfund) by dividing the total risk-weighted assets by the total assets of the fund. Using Avg RWfund and taking into account the leverage of a fund (Lvg), the risk-weighted assets for an institution's equity investment in a fund can be represented as follows:

$$RWA_{investment} = Avg\ RW_{fund} \times Lvg \times equity\ investment$$

An institution may choose to deduct the investment in a fund from CET1 where the risk weight (accounting for the leverage of a fund) is 1250%.

[Basel Framework, CRE 60.15]

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

$$RWA_{investment} = RWA_{fund} \times percentage\ of\ shares$$

[Basel Framework, CRE 60.16]

4.1.23 Other assets

175. Other assets will be risk weighted as follows:

0% Risk weight

- cash and gold bullion held in the institution's own vaults or on an allocated basis to the extent backed by bullion liabilities,
- unrealized gains and accrued receivables on foreign exchange and interest rate-related off-balance sheet transactions where they have been included in the off-balance sheet calculations.

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),
- prepaid expenses,
- deferred charges,
- non-credit enhancing interest-only strips on transactions that are not subject to prepayment risk,
- right-of-use (ROU) assets where the leased asset is a tangible asset,[72]
- corporate and retail receivables for which the counterparty cannot be identified,[73]
- prepaid portfolio insurance (unamortized portion), subject to the following amortization expectations: the lesser of 5 years or the expected life (assuming no renewals) of the first term of the underlying mortgage loans or MBS pool, and

[72] ROU assets where the leased asset is an intangible asset are subject to the same capital treatment as if the leased asset was owned, as specified in section 2.3.1 of this guideline.

[73] When the counterparty for a receivable can be identified, receivables (including from related entities) should be included under the appropriate asset class rather than in "other assets."

- all other assets.

250% Risk weight

- Items described as *Threshold Deductions (basket)* in Chapter 2 - Definition of Capital, section 2.3.1 which fall below the applicable thresholds.
- Deferred placement fees receivable, non-credit-enhancing interest-only strips, and any other assets that represent the present value of future spread income subject to prepayment risk.

1250% Risk weight or deduction from CET1 capital

- The following securitization exposures:
    - Credit-enhancing interest-only strips, net of any related gain on sale deducted from capital
    - Certain unrated securitization exposures (refer to Chapter 6 – Securitization)

Deduction from CET1 capital

- Non-payment/delivery on non-DvP and non-PvP transactions (refer to section 2.3.4 of Chapter 2 – Definition of Capital),
- Significant investments in commercial entities (refer to section 2.3.4 of Chapter 2 – Definition of Capital), and
- Intangible assets (refer to section 2.3.1 of Chapter 2 – Definition of Capital)
- Exposures to non-qualifying central counterparties (refer to section 7.1.9.2 of Chapter 7 – Settlement and Counterparty Risk)
- Any other assets that are required to be deducted from CET1 capital pursuant to Chapter 2 of this guideline.

[Basel Framework, CRE 20.109-20.110]

4.1.24 Treatment of purchased receivables

176. Purchased retail receivables that meet the four criteria for regulatory retail exposures, as specified in paragraph 85, are risk weighted at 75%. Purchased receivables to corporate entities or exposures that do not meet the retail definition, are risk-weighted as corporate exposures as per section 4.1.7.

177. In addition, as part of the institution's risk management processes, it should establish underwriting criteria and monitoring procedures for all purchased assets/receivables, particularly where an institution regularly purchases assets from a seller pursuant to a facility or program. Therefore, an institution is expected to:

a. establish quality criteria both for receivables to be purchased and for the seller/servicer of the receivables,

b. regularly monitor the purchased receivables to ensure they meet the criteria,

c. regularly monitor the financial condition of the seller/servicer of the receivables,

d. have legal certainty that the institution has ownership of the receivables and all associated cash remittances,

e. have confidence that current and future advances or purchases can be repaid from the liquidation or collections from the receivables pool,

f. periodically verify the accuracy of reports related to both the seller/servicer and the receivables/obligors,

g. periodically verify the credit and collection policies of the seller/servicer, and

h. establish procedures for monitoring adherence to all contractual terms by the seller/servicer and regular audits of critical phases of the program.

4.2 External credit assessments and the mapping process

4.2.1 The recognition process

178. For purposes of using external ratings for regulatory purposes, only credit assessments from credit rating agencies recognized by OSFI as external credit assessment institutions (ECAIs) will be allowed. OSFI's review of applicants in determining ECAI eligibility is consistent with the International Organization of Securities Commissions (IOSCO) Code of Conduct Fundamentals for Credit Rating Agencies.[74] As part of its recognition process,[75] OSFI determines whether a rating agency initially meets and subsequently continues to meet the criteria listed in paragraph 180. OSFI's recognition is provided only in respect of ECAI ratings for types of exposures where all criteria and conditions are met. As such, ECAIs may be recognized on a limited basis, e.g. by type of exposure or by jurisdiction. OSFI will communicate changes to recognized ECAIs through this guideline. [Basel Framework, CRE 21.1]

179. OSFI will permit institutions to recognize credit ratings from the following rating agencies for capital adequacy purposes:

a. DBRS

b. Moody's Investors Service

c. Standard and Poor's (S&P)

d. Fitch Rating Services

e. Kroll Bond Rating Agency, Inc. (KBRA)

[74] Available at Code of Conduct Fundamentals for Credit Rating Agencies

[75] The recognition process included completion of a self-assessment template and submission of data required to complete a mapping exercise (see paragraph184).

4.2.2 Eligibility criteria

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

a. ***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 OSFI, an assessment methodology for each market segment, including rigorous backtesting, must have been established for at least one year and preferably three years.

b. ***Independence***: An ECAI should be independent and should not be subject to political or economic pressures that may influence the rating. In particular, an ECAI should not delay or refrain from taking a rating action based on its potential effect (economic, political or otherwise). The rating process should be as free as possible from any constraints that could arise in situations where the composition of the board of directors or the shareholder structure of the CRA may be seen as creating a conflict of interest. Furthermore, an ECAI should separate operationally, legally and, if practicable, physically its rating business from other businesses and analysts.

c. ***International access/transparency***: The individual ratings, the key elements underlining the assessments and whether the issuer participated in the assessment process should be publically available on a non-selective basis, unless they are private ratings, which should be at least available to both domestic and foreign insitutions with legitimate interest and on equivalent terms. In addition, the ECAI's general procedures, methodologies and assumptions for arriving at ratings should be publicly available.

d. ***Disclosure***: An ECAI should disclose the following information: its code of conduct; the general nature of its compensation arrangements with assessed entities; any conflict of interest,[76] the ECAI's compensation arrangements,[77] its rating assessment methodologies,

[76] At a minimum, the following situations and their influence on the ECAI's credit rating methodologies or credit rating actions shal be disclosed:

- The ECAI is being paid to issue a credit rating by the rated entity or by the obligor, originator, underwriter, or arranger of the rated obligation;
- The ECAI is being paid by subscribers with a financial interest that could be affected by a credit rating action of the ECAI;
- The ECAI is being paid by rated entities, obligors, originators, underwriters, arrangers, or subscribers for services other than issuing credit ratings or providing access to the ECAI's credit ratings;
- The ECAI is providing a preliminary indication or similar indication of credit quality to an entity, obligor, originator, underwriter, or arranger prior to being hired to determine the final credit rating for the entity, obligor, originator, underwriter, or arranger; and
- The ECAI has a direct or indirect ownership interest in a rated entity or obligor, or a rated entity or obligor has a direct or indirect ownership interest in the ECAI.

[77] An ECAI should disclose the general nature of its compensation arrangements with rated entities, obligors, lead underwriters, or arrangers. When the ECAI receives from a rated entity, obligor, originator, lead underwriter, or arranger compensation unrelated to its credit rating services, the ECAI should disclose such unrelated

including the definition of default, the time horizon, and the meaning of each rating; the actual default rates experienced in each assessment category; and the transitions of the ratings, e.g. the likelihood of AA ratings becoming A over time. A rating should be disclosed as soon as practicably possible after issuance. When disclosing a rating, the information should be provided in plain language, indicating the nature and limitation of credit ratings and the risk of unduly relying on them to make investments.

e. ***Resources***: An ECAI should have sufficient resources to carry out high quality credit assessments. These resources should allow for substantial ongoing contact with senior and operational levels within the entities assessed in order to add value to the credit assessments. In particular, ECAIs should assign analysts with appropriate knowledge and experience to assess the creditworthiness of the type of entity or obligation being rated. Such assessments should be based on methodologies combining qualitative and quantitative approaches.

f. ***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.

g. ***No abuse of unsolicited ratings***: ECAIs must not use unsolicited ratings to put pressure on entities to obtain solicited ratings. OSFI may initiate a review of an ECAI's continued recognition as eligible for capital adequacy purposes, if such behaviour is identified.

h. ***Cooperation with OSFI:*** ECAIs should notify OSFI of any significant changes to methodologies and provide access to external ratings and other relevant data in order to support initial and continued determination of eligibility.

[Basel Framework, CRE 21.2]

181. Regarding the disclosure of conflicts on interest referenced in criterion (4) in paragraph 180 above, at a minimum, the following situations and their influence on the ECAI's credit rating methodologies or credit rating actions shall be disclosed:

a. The ECAI is being paid to issue a credit rating by the rated entity or by the obligor, originator, underwriter, or arranger of the rated obligation;
b. The ECAI is being paid by subscribers with a financial interest that could be affected by a credit rating action of the ECAI;

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

c. The ECAI is being paid by rated entities, obligors, originators, underwriters, arrangers, or subscribers for services other than issuing credit ratings or providing access to the ECAI's credit ratings;
d. The ECAI is providing a preliminary indication or similar indication of credit quality to an entity, obligor, originator, underwriter, or arranger prior to being hired to determine the final credit rating for the entity, obligor, originator, underwriter, or arranger; and
e. The ECAI has a direct or indirect ownership interest in a rated entity or obligor, or a rated entity or obligor has a direct or indirect ownership interest in the ECAI.

[Basel Framework, CRE 21.3]

182. Regarding the disclosure of conflicts on interest referenced in criterion (4) in paragraph 180 above:

a. An ECAI should disclose the general nature of its compensation arrangements with rated entities, obligors, lead underwriters, or arrangers.
b. When the ECAI receives from a rated entity, obligor, originator, lead underwriter, or arranger compensation unrelated to its credit rating services, the ECAI should disclose such unrelated compensation as a percentage of total annual compensation received from such rated entity, obligor, lead underwriter, or arranger in the relevant credit rating report or elsewhere, as appropriate.
c. An ECAI should disclose in the relevant credit rating report or elsewhere, as appropriate, if it receives 10% or more of its annual revenue from a single client (e.g. a rated entity, obligor, originator, lead underwriter, arranger, or subscriber, or any of their affiliates).

[Basel Framework, CRE 21.4]

183. In addition to the above criteria, OSFI requires that an ECAI be recognized as a designated rating organization by the Canadian Securities Administrators National Instrument 25-101 in order to be an eligible ECAI in Canada.

4.2.3 Implementation considerations

4.2.3.1 The mapping process

184. As part of the mapping process, OSFI will assign eligible ECAIs' ratings to the risk weights available under the standardized approach (i.e. deciding which rating categories correspond to which risk weights). The objective of this mapping process is a risk weight assignment consistent with that of the level of credit risk reflected in Tables 1 through 16 in this chapter. This process is intended to cover the full spectrum of risk weights. [Basel Framework, CRE 21.5]

Long-term rating					
Standardized risk weight category	**DBRS**	**Moody's**	**S&P**	**Fitch**	**KBRA**
1 (AAA to AA-)	AAA to AA(low)	Aaa to Aa3	AAA to AA-	AAA to AA-	AAA to AA-
2 (A+ to A-)	A(high) to A(low)	A1 to A3	A+ to A-	A+ to A-	A+ to A-
3 (BBB+ to BBB-)	BBB(high) to BBB(low)	Baa1 to Baa3	BBB+ to BBB-	BBB+ to BBB-	BBB+ to BBB-
4 (BB+ to BB-)	BB(high) to BB(low)	Ba1 to Ba3	BB+ to BB-	BB+ to BB-	BB+ to BB-
5 (B+ to B-)	B(high) to B(low)	B1 to B3	B+ to B-	B+ to B-	B+ to B-
6 Below B-	CCC or lower	Below B3	Below B-	Below B-	Below B-

185. For mapping purposes OSFI considers factors such as: 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. [Basel Framework, CRE 21.6]

186. The OSFI process for mapping of ratings into risk weights is intended to be consistent with BCBS guidance published in the Standardized approach – implementing the mapping process (April 2019).[78] [Basel Framework, CRE 21.7]

187. Institutions must use the chosen ECAIs and their ratings consistently for each type of exposure where they have been recognized by OSFI as an eligible ECAI, for both risk weighting and risk management purposes. Institutions will not be allowed to "cherry-pick" the assessments provided by different ECAIs and to arbitrarily change the use of ECAIs. [Basel Framework, CRE 21.8]

4.2.3.2 Multiple external ratings

188. If there is only one rating by an ECAI chosen by an institution for a particular exposure, that rating should be used to determine the risk weight of the exposure. [Basel Framework, CRE 21.9]

189. If there are two ratings by ECAIs chosen by an institution which map into different risk weights, the higher risk weight will be applied. [Basel Framework, CRE 21.10]

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

[78] Standardised approach – implementing the mapping process

weight, that risk weight should be applied. If different, the higher risk weight should be applied. [Basel Framework, CRE 21.11]

4.2.3.3 Determination of whether an exposure is rated: Issue-specific and issuer-specific ratings

191. Where an institution invests in a particular issue that has an issue-specific rating, the risk weight of the exposure will be based on this rating. Where the institution's exposure is not an investment in a specific rated issue, the following general principles apply.[79]

a. In circumstances where the borrower has a specific rating for an issued debt – but the institution's exposure is not an investment in this particular debt – a high-quality credit rating (one which maps into a risk weight lower than that which applies to an unrated exposure) on that specific debt may only be applied to the institution's unrated exposure if this exposure ranks in all respects *pari passu* or senior to the exposure with a rating. If not, the external rating cannot be used and the unassessed exposure will receive the risk weight for unrated exposures.

b. In circumstances where the borrower has an issuer rating, this rating typically applies to senior unsecured exposures to that issuer. Consequently, only senior exposures to that issuer will benefit from a high-quality issuer rating. Other unassessed exposures of a highly rated issuer will be treated as unrated. If either the issuer or a single issue has a low-quality rating (mapping into a risk weight equal to or higher than that which applies to unrated exposures), an unassessed exposure to the same counterparty that ranks *pari passu* or is subordinated to either the senior unsecured issuer rating or the exposure with a low-quality rating will be assigned the same risk weight as is applicable to the low-quality rating.

c. In circumstances where the issuer has a specific high-quality rating (one which maps into a lower risk weight) that only applies to a limited class of liabilities (such as a deposit rating or a counterparty risk rating), this may only be used in respect of exposures that fall within that class.

[Basel Framework, CRE 21.12]

192. Whether the institution intends to rely on an issuer- or an issue-specific rating, the rating must take into account and reflect the entire amount of credit risk exposure the 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 repayment of both principal and interest. [Basel Framework, CRE 21.13]

193. In order to avoid any double counting of credit enhancement factors, OSFI will not take into account any credit risk mitigation techniques if the credit enhancement is already reflected in the issue specific rating (see paragraph 205). [Basel Framework, CRE 21.14]

[79] Long-term high-quality credit ratings (issue-specific or issuer-specific) can be applied to unrated short-term exposures subject to the conditions presented in sections 4.2.3.3 to 4.2.3.6.

4.2.3.4 Domestic currency and foreign currency assessments

194. 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 exposures denominated in the domestic currency.[80] [Basel Framework, CRE 21.15]

4.2.3.5 Short-term/long-term assessments

195. For risk-weighting purposes, short-term ratings are deemed to be issue-specific. They can only be used to derive risk weights for exposures arising from the rated facility. They cannot be generalized to other short-term exposures, except under the conditions of paragraph 197. In no event can a short-term rating be used to support a risk weight for an unrated long-term exposure. Short-term ratings may only be used for short-term exposures against banks and corporates. The table below provides a framework for institutions' exposures to specific short-term facilities, such as a particular issuance of commercial paper:

Table 17: Risk weights for issue-specific short-term ratings

	External rating			
	A-1/P-1[81]	**A-2/P-2**	**A-3/P-3**	**Others[82]**
Risk weight	20%	50%	100%	150%

[Basel Framework, CRE 21.16]

[80] 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 to be effectively mitigated. To qualify, MDBs must have preferred creditor status recognized in the market and be included in section 4.1.3. 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.

[81] The notations follow the methodology used by S&P and by Moody's Investors Service. The A-1 rating of S&P includes both A-1+ and A-1-.

[82] The "others" category includes all non-prime and B or C ratings.

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

196. If a short-term rated facility attracts a 50% risk-weight, unrated short-term exposures cannot attract a risk weight lower than 100%. If an issuer has a short-term facility with an assessment that warrants a risk weight of 150%, all unrated exposures, whether long-term or short-term, should also receive a 150% risk weight, unless the institution uses recognized credit risk mitigation techniques for such exposures. [Basel Framework, CRE 21.17]

197. In cases where short-term ratings are available, the following interaction with the general preferential treatment for short-term exposures to banks as described in paragraph 30 will apply:

a. The general preferential treatment for short-term exposures applies to all exposures to banks of up to three months original maturity when there is no specific short-term exposure assessment.

b. When there is a short-term rating and such a rating maps into a risk weight that is more favourable (i.e. lower) or identical to that derived from the general preferential treatment, the short-term rating should be used for the specific exposure only. Other short-term exposures would benefit from the general preferential treatment.

c. When a specific short-term rating for a short term exposure to a bank maps into a less favourable (higher) risk weight, the general short-term preferential treatment for interbank exposures cannot be used. All unrated short-term exposures should receive the same risk weighting as that implied by the specific short-term rating.

[Basel Framework, CRE 21.18]

198. When a short-term rating is to be used, the institution making the assessment needs to meet all of the eligibility criteria for recognizing ECAIs, as described in paragraph 180, in terms of its short-term ratings. [Basel Framework, CRE 21.19]

4.2.3.6 Level of application of the rating

199. External ratings for one entity within a corporate group cannot be used to risk weight other entities within the same group. [Basel Framework, CRE 21.20]

4.2.3.7 Unsolicited ratings

200. As a general rule, institutions should use *solicited* ratings from eligible ECAIs. Institutions can use *unsolicited* ratings in the same way as solicited ratings for sovereign ratings in cases were solicited ratings are not available. [Basel Framework, CRE 21.21]

4.3 Credit Risk Mitigation – Standardized Approach

4.3.1 Overarching Issues

(i) Introduction

201. 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 an 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.[83] [Basel Framework, CRE 22.1]

202. The framework set out in this section is applicable to banking book exposures that are risk-weighted under the standardized approach. [Basel Framework, CRE 22.2]

(ii) General requirements

203. No transaction in which credit risk mitigation (CRM) techniques are used shall receive a higher capital requirement than an otherwise identical transaction where such techniques are not used. [Basel Framework, CRE 22.3]

204. The requirements set out in OSFI's *Pillar 3 Disclosure Requirements* Guideline[84] must be fulfilled for institutions to obtain capital relief in respect of any CRM techniques. [Basel Framework, CRE 22.4]

205. The effects of CRM must not be double-counted. Therefore, no additional supervisory recognition of CRM for regulatory capital purposes will be granted on exposures for which the risk weight already reflects that CRM. Consistent with paragraph 192, principal-only ratings will also not be allowed within the CRM framework. [Basel Framework, CRE 22.5]

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

[84] Pillar 3 Disclosure Requirements

206. While the use of CRM techniques reduces or transfers credit risk, it may simultaneously increase other risks (i.e. residual risks). Residual risks include legal, operational, liquidity and market risks. Therefore, institutions must employ robust procedures and processes to control these risks, including strategy; consideration of the underlying credit; valuation; policies and procedures; systems; control of roll-off risks; and management of concentration risk arising from the institution's use of CRM techniques and its interaction with the institution's overall credit risk profile. Where these risks are not adequately controlled, OSFI may impose additional capital charges or take other supervisory actions as outlined in OSFI's Supervisory Framework[85]. [Basel Framework, CRE 22.6]

207. In order for CRM techniques to provide protection, the credit quality of the counterparty must not have a material positive correlation with the employed CRM technique or with the resulting residual risks (as defined in paragraph 206). For example, securities issued by the counterparty (or by any counterparty-related entity) provide little protection as collateral and are thus ineligible. [Basel Framework, CRE 22.7]

208. In the case where an institution has multiple CRM techniques covering a single exposure (e.g. an institution has both collateral and a guarantee partially covering an exposure), the institution must 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. [Basel Framework, CRE 22.8]

(iii) Legal requirements

209. In order for institutions to obtain capital relief for any use of CRM techniques, all documentation used in collateralized transactions, on-balance sheet netting agreements, 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. [Basel Framework, CRE 22.9]

(iv) General treatment of maturity mismatches

210. For the purposes of calculating risk-weighted assets, a maturity mismatch occurs when the residual maturity of a credit protection arrangement (e.g. hedge) is less than that of the underlying exposure. [Basel Framework, CRE 22.10]

211. In the case of financial collateral, maturity mismatches are not allowed under the simple approach (see paragraph 234). [Basel Framework, CRE 22.11]

212. Under the other approaches, when there is a maturity mismatch the credit protection arrangement may only be recognized if the original maturity of the arrangement is greater than or

[85] OSFI's Supervisory Framework

equal to one year, and its residual maturity is greater than or equal to three months. In such cases, credit risk mitigation may be partially recognized as detailed below in paragraph 213. [Basel Framework, CRE 22.12]

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

$$\text{Pa} = \text{P} * \frac{\text{t} - 0.25}{\text{T} - 0.25}$$

Where:

Pa = value of the credit protection adjusted for maturity mismatch

P = credit protection amount (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 {five years, residual maturity of the exposure expressed in years}

[Basel Framework, CRE 22.13]

214. The maturity of the underlying exposure and the maturity of the hedge must both be defined conservatively. The effective maturity of the underlying must be gauged as the longest possible remaining time before the counterparty is scheduled to fulfil its obligation, taking into account any applicable grace period. For the hedge, (embedded) options that may reduce the term of the hedge must be taken into account so that the shortest possible effective maturity is used. For example: where, in the case of a credit derivative, the protection seller has a call option, the maturity is the first call date. Likewise, if the protection buyer owns the call option and has a strong incentive to call the transaction at the first call date, for example because of a step-up in cost from this date on, the effective maturity is the remaining time to the first call date. [Basel Framework, CRE 22.14]

(v) Currency mismatches

215. Currency mismatches are allowed under all approaches. Under the simple approach there is no specific treatment for currency mismatches, given that a minimum risk weight of 20% (floor) is generally applied. Under the comprehensive approach and in case of guarantees and credit derivatives, a specific adjustment for currency mismatches is prescribed in paragraphs 251 and 288, respectively. [Basel Framework, CRE 22.15]

4.3.2 Overview of Credit Risk Mitigation Techniques

(i) Collateralized transactions

216. A collateralized transaction is one in which:

a. institutions have a credit exposure or potential credit exposure; and

b. that credit exposure or potential credit exposure is hedged in whole or in part by collateral posted by a counterparty or by a third party on behalf of the counterparty.

[Basel framework, CRE 22.16]
Where institutions take eligible financial collateral, they may reduce their regulatory capital requirements through the application of CRM techniques. [Basel Framework, CRE 22.17]

217. Institutions may opt for either:

a. The simple approach, which replaces the risk weight of the counterparty with the risk weight of the collateral for the collateralized portion of the exposure (generally subject to a 20% floor as per paragraph 234); or

b. The comprehensive approach, which allows a more precise offset of collateral against exposures, by effectively reducing the exposure amount by a volatility-adjusted value ascribed to the collateral.

[Basel Framework, CRE 22.18]

218. Detailed operational requirements for the simple approach and comprehensive approach are given in paragraphs 233 to 266. Institutions may operate under either, but not both, approaches in the banking book. [Basel Framework, CRE 22.19]

219. For collateralized OTC transactions, exchange traded derivatives and long settlement transactions, institutions may use the standardized approach for counterparty credit risk (SA-CCR) or the Internal Models Method to calculate the exposure amount, in accordance with paragraph 267. Only those institutions that are subject to the market risk requirements as defined in section 1.3.2 of Chapter 1 of this guideline are eligible to apply to use IMM to calculate counterparty credit risk exposure amounts. [Basel Framework, CRE 22.20]

(ii) On-balance sheet netting

220. Where institutions have legally enforceable netting arrangements for loans and deposits that meet the conditions in paragraph 268 they may calculate capital requirements on the basis of net credit exposures as set out in that paragraph. [Basel Framework, CRE 22.21]

(iii) Guarantees and credit derivatives

221. Where guarantees or credit derivatives fulfil the minimum operational conditions set out in paragraphs 270 to 272, institutions may take account of the credit protection offered by such credit risk mitigation techniques in calculating capital requirements. [Basel Framework, CRE 22.22]

222. A range of guarantors and protection providers are recognized and a substitution approach applies for capital requirement calculations. Only guarantees issued by or protection provided by entities with a lower risk weight than the counterparty lead to reduced capital charges for the guaranteed exposure, since the protected portion of the counterparty exposure is assigned the risk weight of the guarantor or protection provider, whereas the uncovered portion retains the risk weight of the underlying counterparty. [Basel Framework, CRE 22.23]

223. Detailed conditions and operational requirements for guarantees and credit derivatives are given in paragraphs 270 to 291. [Basel Framework, CRE 22.24]

4.3.3 Collateralized transactions

(i) General Requirements

224. Before capital relief is granted in respect of any form of collateral, the standards set out below in paragraphs 225 to 232 must be met, irrespective of whether the simple or the comprehensive approach is used. Institutions that lend securities or post collateral must calculate capital requirements for both of the following: (i) the credit risk or market risk of the securities, if this remains with the institution; and (ii) the counterparty credit risk arising from the risk that the borrower of the securities may default. [Basel Framework, CRE 22.25]

225. 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). Additionally, 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 the title transfer of the collateral. [Basel Framework, CRE 22.26]

226. For property taken as collateral, institutions may use title insurance in place of a title search to achieve compliance with paragraph 225. OSFI expects institutions that rely on title insurance to reflect the risk of non-performance on these insurance contracts in their estimates of LGD if this risk is material.

227. 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. [Basel Framework, CRE 22.27]

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

a. the risk to which margin agreements expose them (such as the volatility and liquidity of the securities exchanged as collateral);

b. the concentration risk to particular types of collateral;

c. the reuse of collateral (both cash and non-cash) including the potential liquidity shortfalls resulting from the reuse of collateral received from counterparties; and

d. the surrender of rights on collateral posted to counterparties

[Basel Framework, CRE 22.28]

229. 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. [Basel Framework, CRE 22.29]

230. A capital requirement must be applied on both sides of a transaction. For example, both repos and reverse repos will be subject to capital requirements. Likewise, both sides of a securities lending and borrowing transaction will be subject to explicit capital charges, as will the posting of securities in connection with derivatives exposures or with any other borrowing transaction. [Basel Framework, CRE 22.30]

231. Where an institution, acting as an agent, arranges a repo-style transaction (ie repurchase/reverse repurchase and securities lending/borrowing transactions) between a customer and a third party and provides a guarantee to the customer that the third party will perform on its obligations, then the risk to the institution is the same as if the institution had entered into the transaction as a principal. In such circumstances, an institution must calculate capital requirements as if it were itself the principal. [Basel Framework, CRE 22.31]

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

(ii) The simple approach

(a) General requirements for the simple approach

233. Under the simple approach, the risk weight of the counterparty is replaced by the risk weight of the collateral instrument collateralizing or partially collateralizing the exposure. [Basel Framework, CRE 22.32]

234. For collateral to be recognized in the simple approach, it must be pledged for at least the life of the exposure and it must be marked to market and revalued with a minimum frequency of six months. Those portions of exposures collateralized by the market value of recognized collateral receive the risk weight applicable to the collateral instrument. The risk weight on the collateralized portion is subject to a floor of 20% except under the conditions specified in paragraphs 237 to 240. The remainder of the exposure must be assigned the risk weight appropriate to the counterparty. Maturity mismatches are not allowed under the simple approach (see paragraphs 210 and 211). [Basel Framework, CRE 22.33]

(b) Eligible financial collateral under the simple approach

235. 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.[86] [87]

b. Gold

c. Debt securities rated by a recognized ECAI where these are either:

   i. at least BB- when issued by sovereigns or PSEs that are treated as sovereigns by the national regulatory authority; or

   ii. at least BBB- when issued by other entities (including banks and securities firms); or

   iii. at least A-3/P-3 for short-term debt instruments.

d. Debt securities not rated by a recognized ECAI where these are:

   i. issued by a bank; and

   ii. listed on a recognized exchange; and

   iii. classified as senior debt; and

   iv. 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 ECAI; and

   v. 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) and

   vi. OSFI 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:

   i. a price for the units is publicly quoted daily; and

   ii. the UCITS/mutual fund is limited to investing in the instruments listed in this paragraph.[88]

[Basel Framework, CRE 22.34]

[86] 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.

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

[88] However, the use or potential use by a UCITS/mutual fund of derivative instruments solely to hedge investments listed in this paragraph and paragraph 246 shall not prevent units in that UCITS/mutual fund from being eligible financial collateral.

236. Resecuritizations as defined in Chapter 6 of this guideline are not eligible collateral.

(c) Exemptions under the simple approach to the risk-weight floor

237. Repo-style transactions that fulfil all of the following conditions are exempted from the risk-weight floor under the simple approach:

a. Both the exposure and the collateral are cash or a sovereign security or PSE security qualifying for a 0% risk weight under the standardized approach;

b. Both the exposure and the collateral are denominated in the same currency;

c. Either the transaction is overnight or both the exposure and the collateral are marked to market daily and are subject to daily remargining;

d. Following a counterparty's failure to remargin, the time that is required between the last mark-to-market before the failure to remargin and the liquidation of the collateral is considered to be no more than four business days;

e. The transaction is settled across a settlement system proven for that type of transaction;

f. The documentation covering the agreement is standard market documentation for repo-style transactions in the securities concerned;

g. The transaction is governed by documentation specifying that if the counterparty fails to satisfy an obligation to deliver cash or securities or to deliver margin or otherwise defaults, then the transaction is immediately terminable; and

h. Upon any default event, regardless of whether the counterparty is insolvent or bankrupt, the institution has the unfettered, legally enforceable right to immediately seize and liquidate the collateral for its benefit.

[Basel Framework, CRE 22.36]

238. Core market participants include, the following entities:

a. Sovereigns, central banks and PSEs;

b. Banks and securities firms;

c. Other financial companies (including insurance companies) eligible for a 20% risk weight in the standardized approach;

d. Regulated mutual funds that are subject to capital or leverage requirements;

e. Regulated pension funds; and

f. Qualifying central counterparties (QCCPs).

[Basel Framework, CRE 22.37]

239. Repo transactions that fulfil the requirement in paragraph 237 receive a 10% risk weight, as an exemption to the risk weight floor described in paragraph 234. If the counterparty to the transaction is a core market participant, institutions may apply a risk weight of 0% to the transaction. [Basel Framework, CRE 22.38]

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

a. the collateral is cash on deposit as defined in paragraph 235(a); or

b. 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%.

[Basel Framework, CRE 22.39]

(iii) The comprehensive approach

(a) General requirements for the comprehensive approach

241. In the comprehensive approach, when taking collateral, institutions must calculate their adjusted exposure to a counterparty in order to take account of the risk mitigating effect of that collateral. Institutions must use the applicable supervisory haircuts to adjust both the amount of the exposure to the counterparty and the value of any collateral received in support of that counterparty to take account of possible future fluctuations in the value of either,[89] as occasioned by market movements. Unless either side of the transaction is cash or a zero haircut is applied, the volatility-adjusted exposure amount is higher than the nominal exposure and the volatility-adjusted collateral value is lower than the nominal collateral value. [Basel Framework, CRE 22.40]

242. The size of the haircuts that banks must use depends on the prescribed holding period for the transaction. For the purposes of this guideline, the holding period is the period of time over which exposure or collateral values are assumed to move before the bank can close out the transaction. The supervisory prescribed minimum holding period is used as the basis for the calculation of the standard supervisory haircuts. [Basel Framework, CRE 22.41]

243. The holding period, and thus the size of the individual haircuts depends on the type of instrument, type of transaction, residual maturity and the frequency of marking to market and remargining as provided in paragraphs 250 and 251. 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. Haircuts must be scaled up using the square root of time formula depending on the frequency of remargining or marking to market. This formula is included in paragraph 259. [Basel Framework, CRE 22.42]

244. Additionally, where the exposure and collateral are held in different currencies, institutions must apply an additional haircut to the volatility-adjusted collateral amount in accordance with paragraphs 251 and 288 to take account of possible future fluctuations in exchange rates. [Basel Framework, CRE 22.43]

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

245. The effect of master netting agreements covering securities financing transactions can be recognized for the calculation of capital requirements subject to the conditions and requirements in paragraphs 263 to 266. Where SFTs 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. [Basel Framework, CRE 22.44]

(b) Eligible financial collateral under the comprehensive approach

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

a. All of the instruments in paragraph 235;

b. Equities and convertible bonds which are not included in a main index but which are listed on a recognized exchange;

c. UCITS/mutual funds which include the instruments in point (2) above.

[Basel Framework, CRE 22.45]

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

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

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

where:

E' = the exposure value after risk mitigation

E = current value of the exposure

H_e = haircut appropriate to the exposure

C = the current value of the collateral received

H_c = haircut appropriate to the collateral

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

[Basel Framework, CRE 22.46]

248. In the case of maturity mismatches, the value of the collateral received (collateral amount) must be adjusted in accordance with paragraphs 210 to 213. [Basel Framework, CRE 22.47]

249. The exposure amount after risk mitigation (E') must be multiplied by the risk weight of the counterparty to obtain the risk-weighted asset amount for the collateralized transaction. [Basel Framework, CRE 22.48]

Standard supervisory haircuts for comprehensive approach

250. 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	Sovereigns[90]	Other issuers[91]	Securitization Exposures[92]
AAA to AA-/A-1	≤ 1 year	0.5	1	2
	>1 year, ≤ 3 years	2	3	8
	>3 year, ≤ 5 years	2	4	8
	>5 year, ≤ 10 years	4	6	16
	> 10 years	4	12	16
A+ to BBB-/ A-2/A-3/P-3 and unrated institution securities per para. 235	≤ 1 year	1	2	4
	>1 year, ≤ 3 years	3	4	12
	>3 year, ≤ 5 years	3	6	12
	>5 year, ≤ 10 years	6	12	24
	> 10 years	6	20	24
BB+ to BB-	All	15	Not eligible	Not eligible
Main index equities (including convertible bonds) and Gold		20		
Other equities and convertible bonds listed on a recognized exchange		30		
UCITS/Mutual funds		Highest haircut applicable to any security in which the fund can invest, unless the institution can apply the look-through approach (LTA) for equity investments in funds, in which case the institution may use a weighted average of haircuts applicable to instruments held by the fund.		
Cash in the same currency[93]		0		

[Basel Framework, CRE 22.49]

[90] "Sovereigns" includes PSEs that are treated as sovereigns by the national supervisor as well MDBs receiving a 0% risk weight.
[91] "Other issuers" includes PSEs which are not treated as sovereigns by the national supervisor.
[92] "Securitization exposures" are defined as those exposures that meet the definition set forth in Chapter 6.
[93] "Cash in the same currency" refers to eligible cash collateral specified in paragraph235.

251. The haircut for currency risk (H_{fx}) where exposure and collateral are denominated in different currencies is 8% (also based on a 10-business day holding period and daily mark-to-market). [Basel Framework, CRE 22.52]

252. For SFTs and secured lending transactions, a haircut adjustment may need to be applied in accordance with paragraphs 256 to 259. [Basel Framework, CRE 22.53]

253. Cash variation margin (VM) is not subject to any additional haircut provided the variation margin is posted in a currency that is agreed to and listed in the applicable contract.[94] Cash initial margin (IM) that is exchanged in a currency other than the termination currency (that is, the currency in which the institution will submit its claim upon a counterparty default) is subject to the additional haircut for foreign currency risk.

254. For SFTs in which the institution lends, or posts as collateral, non-eligible instruments, the haircut to be applied on the exposure must be 30%. For transactions in which the institution borrows non-eligible instruments, credit risk mitigation may not be applied. [Basel Framework, CRE 22.54]

255. Where the collateral is a basket of assets, the haircut (H) on the basket must be calculated as follows:

$$H = \sum_i a_i H_i$$

Where:

a_i is the weight of the asset (as measured by units of currency) in the basket and H_i the haircut applicable to that asset.

[Basel Framework, CRE 22.55]

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

256. For some transactions, depending on the nature and frequency of the revaluation and remargining provisions, different holding periods are appropriate and thus different haircuts must be applied. 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. [Basel Framework, CRE 22.56]

257. 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	10 business days	daily remargining

[94] Currencies listed in the CSA are not subject to additional haircuts.

Secured lending	20 business days	daily revaluation

[Basel Framework, CRE 22.57]

258. Regarding the minimum holding periods set out in paragraph 257, if a netting set includes both repo-style and other capital market transactions, the minimum holding period of ten business days must be used. Furthermore, a higher minimum holding period must be used in the following cases:

a. For all netting sets where the number of trades exceeds 5,000 at any point during a quarter, a 20 business day minimum holding period for the following quarter must be used.
b. For netting sets containing one or more trades involving illiquid collateral, a minimum holding period of 20 business days must be used. "Illiquid collateral" must be determined in the context of stressed market conditions and will be characterized by the absence of continuously active markets where a counterparty would, within two or fewer days, obtain multiple price quotations that would not move the market or represent a price reflecting a market discount. Examples of situations where trades are deemed illiquid for this purpose include, but are not limited to, trades that are not marked daily and trades that are subject to specific accounting treatment for valuation purposes (eg repo-style transactions referencing securities whose fair value is determined by models with inputs that are not observed in the market).
c. If a bank has experienced more than two margin call disputes on a particular netting set over the previous two quarters that have lasted longer than the bank's estimate of the margin period of risk (as defined in CRE50.19), then for the subsequent two quarters the bank must use a minimum holding period that is twice the level that would apply excluding the application of this sub-paragraph.

259. 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. The 10-business day haircuts provided in paragraph 250 are the default haircuts and these haircuts must be scaled up or down using the formula below:

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

where:

H = haircut

H_{10} = 10-business day haircut for instrument

N_R = actual number of business days between remargining for capital market transactions or revaluation for secured transactions.

T_M = minimum holding period for the type of transaction

[Basel Framework, CRE 22.59]

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

260. For repo-style transactions with core market participants as defined in paragraph 238 and that satisfy the conditions in paragraph 237 OSFI will permit a haircut of zero. [Basel Framework, CRE 22.60]

261. Under the comprehensive approach, OSFI applies a specific carve-out to repo-style transactions in securities issued by the Government of Canada and securities issued by Canadian provinces and territories. This carve out is available, provided the following conditions are satisfied:

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;[95]

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[96] of the collateral is considered to be no more than four business days;

e. The transaction is settled across a settlement system proven for that type of transaction;

f. The documentation covering the agreement is standard market documentation for repo-style transactions in the securities concerned;

Institutions applying this carve-out must be able to confirm that the above criteria are met.

[Basel Framework, CRE 22.61]

262. Canadian institutions may apply carve-outs permitted by other G-10[97] supervisors to repo-style transactions in securities issued by their domestic governments to business in those markets. For the purposes of the carve out core market participants are defined in paragraph 238. [Basel Framework, CRE 22.61]

[95] Note that where a national regulatory authority has designated domestic-currency claims on its sovereign or central bank to be eligible for a 0% risk weight in the standardized approach, such claims will satisfy this condition.

[96] 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.

[97] For the purposes of this paragraph, G-10 refers to participants in the General Arrangements to Borrow (GAB) agreement.

(f) Treatment under the comprehensive approach of SFTs covered by master netting agreements

263. The effects of bilateral netting agreements covering securities financing 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 set-off of collateral upon the event of default; and
d. be, together with the rights arising from the provisions required in (1) to (3) above, legally enforceable in each relevant jurisdiction upon the occurrence of an event of default and regardless of the counterparty's insolvency or bankruptcy.

[Basel Framework, CRE 22.62]

264. 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;[98] and
b. The collateral instruments used in the transactions are recognized as eligible financial collateral in the banking book.

[Basel Framework, CRE 22.63]

265. The formula in paragraph 266 will be used to calculate the counterparty credit risk capital requirements for SFTs with netting agreements. This formula includes the current exposure, an amount for systematic exposure of the securities based on the net exposure, an amount for the idiosyncratic exposure of the securities based on the gross exposure, and an amount for currency mismatch. All other rules regarding the calculation of haircuts under the comprehensive approach stated in paragraphs 241 to 262 equivalently apply for institutions using bilateral netting agreements for SFTs. [Basel Framework, CRE 22.64]

266. For institutions using the standard supervisory haircuts for SFTs conducted under a master netting agreement must calculate their amount amount using the following formula:

a. E' is the exposure value of the netting set after risk mitigation
b. E_i is the current value of all cash and securities lent, sold with an agreement to repurchase or otherwise posted to the counterparty under the netting agreement

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

c. C_j is the current value of all cash and securities borrowed, purchased with an agreement to resell or otherwise held by the bank under the netting agreement
d. $net\ exposure = |\sum_s E_s \text{ x } H_s|$
e. $gross\ exposure = \sum_s E_s \text{ x } |H_s|$
f. E_s is the net current value of each security issuance under the netting set (always a positive value)
g. H_s is the haircut appropriate to E_s as described in the table in paragraph 250

   i. H_s has a positive sign if the security is lent, sold with an agreement to repurchased, or transacted in manner similar to either securities lending or a repurchase agreement
   ii. H_s has a negative sign if the security is borrowed, purchased with an agreement to resell, or transacted in a manner similar to either a securities borrowing or reverse repurchase agreement

h. N is the number of security issues contained in the netting set (except that issuances where the value E_s is less than one tenth of the value of the largest E_s in the netting set are not included the count)
i. E_{fx} is the absolute value of the net position in each currency fx different from the settlement currency
j. H_{fx} is the haircut appropriate for currency mismatch of currency fx

$$E' = \max\left\{0; \sum_i E_i - \sum_j C_j + 0.4 \times net\ exposure + 0.6 \times \frac{gross\ exposure}{\sqrt{N}} + \sum_{fx}\left(E_{fx} \times H_{fx}\right)\right\}$$ [99]

[Basel Framework, CRE 22.65]

(iv) Collateralized OTC derivatives transactions

267. Under the Standardized Approach for Counterparty Credit Risk (SA-CCR) described in section 7.1.7 of Chapter 7, the counterparty credit risk charge for an individual contract will be calculated using the following formula, where:

a. Alpha = 1.4;
b. RC = the replacement cost calculated according to section 7.1.7.1

[99] The starting point for this formula is the formula in paragraph 247 which can also be presented as the following: $E^{*} = (E\text{-}C) + (E \times H_e) + (C \times H_c) + (C \times H_{fx})$.

c. PFE = the potential future exposure calculated according to section 7.1.7.2

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

[Basel Framework, CRE 22.66]

4.3.4 On-balance sheet netting

268. An institution may use the net exposure of loans and deposits as the basis for its capital adequacy calculation in accordance with the formula in paragraph 247, when the 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.

[Basel Framework, CRE 22.68]

269. When calculating the net exposure described in the paragraph above, 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 250, 259, and 210 to 213 will apply. [Basel Framework, CRE 22.69]

4.3.5 Guarantees and credit derivatives

(i) Operational requirements for guarantees and credit derivatives

270. If conditions set below are met, institutions can substitute the risk weight of the counterparty with the risk weight of the guarantor. [Basel Framework, CRE 22.70]

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

a. it represents a direct claim on the protection provider;
b. it is explicitly referenced to specific exposures or a pool of exposures, so that the extent of the cover is clearly defined and incontrovertible;
c. other than non-payment by a protection purchaser of money due in respect of the credit protection contract it is irrevocable;
d. there is no clause in the contract that would allow the protection provider unilaterally to cancel the credit cover, change the maturity agreed ex-post, or that would increase the effective cost of cover as a result of deteriorating credit quality in the hedged exposure;
e. it must 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 underlying counterparty fails to make the payment(s) due.

[Basel Framework, CRE 22.71]

272. In the case of maturity mismatches, the amount of credit protection that is provided must be adjusted in accordance with paragraphs 210 to 213. [Basel Framework, CRE 22.72]

(ii) Specific operational requirements for guarantees

273. In addition to the legal certainty requirements in paragraphs 209, in order for a guarantee to be recognized, the following conditions must be satisfied:

a. On the qualifying default/non-payment of the counterparty, the institution may in a timely manner pursue the guarantor for any monies outstanding under the documentation governing the transaction. The guarantor may make one lump sum payment of all monies under such documentation to the institution, or the guarantor may assume the future payment obligations of the counterparty covered by the guarantee. The institution must have the right to receive any such payments from the guarantor without first having to take legal actions in order to pursue the counterparty for payment.
b. The guarantee is an explicitly documented obligation assumed by the guarantor.
c. Except as noted in the following sentence, the guarantee covers all types of payments the underlying obligor is expected to make under the documentation governing the transaction, for example notional amount, margin payments etc. Where a guarantee covers payment of principal only, interests and other uncovered payments should be treated as an unsecured amount in accordance with the rules for proportional cover in paragraph 286.

[Basel Framework, CRE 22.73]

(iii) Specific operational requirements for mortgage insurance

274. A protection purchaser must establish internal policies and procedures to implement and ensure compliance with the protection provider(s) credit underwriting and other contractual

requirements. In addition, institutions are expected to have appropriate policies and procedures in place to originate, underwrite and administer insured mortgages.

275. If, as part of its supervisory work, OSFI determines that there is evidence that an institution has not implemented the required policies and procedures from paragraph 274, a supervisory assessment will be made to determine whether recognition of the mortgage insurance as a guarantee for credit risk mitigation purposes should be reduced by OSFI. As part of this assessment, OSFI may use, but will not rely on, information available from third parties. In determining the size of the reduction of the risk mitigating impact of mortgage insurance, OSFI will take into account the scope and severity of the deficiencies identified as well as the time required to address deficiencies noting that contractual obligations of the protection provider are not a substitute for inadequate policies and/or procedures on the part of the institution. This does not preclude OSFI from imposing additional capital requirements under Pillar 2 as per paragraph 206 of this chapter.

(iv) Specific operational requirements for credit derivatives

276. In addition to the legal certainty requirements in paragraph 209, 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:
   i. 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);
   ii. 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
   iii. restructuring[100] 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 277.
b. If the credit derivative covers obligations that do not include the underlying obligation, section (7) below governs whether the asset mismatch is permissible.
c. The credit derivative shall not terminate prior to expiration of any grace period required for a default on the underlying obligation to occur as a result of a failure to pay. In the case of a maturity mismatch, the provisions of paragraphs 210 to 213 must be applied.
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

[100] When hedging corporate exposures, this particular credit event is not required to be specified provided that: (i) A 100% vote is needed to amend maturity, principal, coupon, currency or seniority status of the underlying corporate exposure; and (ii) The legal domicile in which the corporate exposure is governed has a well-established bankruptcy code that allows for a company to reorganize/restructure and provides for an orderly settlement of creditor claims. If these conditions are not met, then the treatment in paragraph 277 may be eligible.

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 (7) 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 (a) the reference obligation ranks pari passu with or is junior to the underlying obligation, and (b) 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 (a) the latter obligation ranks pari passu with or is junior to the underlying obligation, and (b) 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.

[Basel Framework, CRE 22.74]

277. When the restructuring of the underlying obligation is not covered by the credit derivative, but the other requirements in paragraph 276 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. [Basel Framework, CRE 22.75]

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

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

a. Sovereign entities,[101] PSEs, multilateral developments banks, banks, securities firms and other prudentially regulated financial institutions with a lower risk weight than the counterparty;[102]
b. Other entities that are externally rated except when credit protection is provided to a securitzation exposure. This would include credit protection provided by a parent, subsidiary, and affiliate companies when they have a lower risk weight than the obligor.
c. When credit protection is provided to a securitization exposure, other entities that currently are externally rated BBB- or better and that were externally rated A- or better at the time the credit protection was provided. This would include credit protection provided by parent, subsidiary, and affiliate companies when they have a lower risk weight than the obligor.

[Basel Framework, CRE 22.76]

279. An institution may not reduce the risk weight of an exposure to a third party because of a guarantee or credit protection provided by a related party (parent, subsidiary or affiliate) of the lending institution. This treatment follows the principle that guarantees within a corporate group are not a substitute for capital in the regulated Canadian institution. An exception is made for self-liquidating trade-related transactions that have a tenure of 360 days or less, are market-driven and are not structured to avoid the requirements of this guideline. The requirement that the transaction be "market-driven" necessitates that the guarantee or letter of credit is requested and paid for by the customer and/or that the market requires the guarantee in the normal course of business.

280. Only credit default swaps and total return swaps that provide credit protection equivalent to guarantees are eligible for recognition.[103] 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. [Basel Framework, CRE 22.77]

281. First-to-default and all other nth-to-default credit derivatives (i.e. by which an institution obtains credit protection for a basket of reference names and where the first- or nth–to-default among the reference names triggers the credit protection and terminates the contract) are not eligible as a credit risk mitigation technique and therefore cannot provide any regulatory

[101] This includes the Bank for International Settlements, the International Monetary Fund, the European Central Bank, the European Union, the European Stability Mechanism (ESM) and the European Financial Stability Facility (EFSF), as well as MDBs eligible for 0% risk weight as defined in section 4.1.3.

[102] A prudentially regulated financial institution is defined as: a legal entity supervised by a regulator that imposes prudential requirements consistent with international norms or a legal entity (parent company or subsidiary) included in a consolidated group where any substantial legal entity in the consolidated group is supervised by a regulator that imposes prudential requirements consistent with international norms. These include, but are not limited to, prudentially regulated insurance companies, broker/dealers, thrifts and futures commission merchants, and qualifying central counterparties as defined in Chapter 7 of this guideline.

[103] Cash-funded credit-linked notes issued by the bank against exposures in the banking book that fulfil all minimum requirements for credit derivatives are treated as cash-collateralized transactions. However, in this case the limitations regarding the protection provider as set out in paragraph 278278 do not apply.

capital relief. In transactions in which an institution provided credit protection through such instruments, it shall apply the treatment described in paragraph 150. [Basel Framework, CRE 22.78]

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

General risk weight treatment

282. The general risk weight treatment for transactions in which eligible credit protection is provided is as follows:

a. 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.
b. Materiality thresholds on payments below which the protection provider is exempt from payment in the event of loss are equivalent to retained first-loss positions. The portion of the exposure that is below a materiality threshold must be deducted from CET1 capital by the institution purchasing the credit protection.

[Basel Framework, CRE 22.79]

283. Residential mortgages insured under the NHA or equivalent provincial mortgage insurance programs may be assigned the risk weight of the guarantor, that is, the Government of Canada risk weight of 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 section 22 of the *Protection of Residential Mortgage or Hypothecary Insurance Act*), institutions may recognize the risk-mitigating effect of the government 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 an insured mortgage in accordance with the rules set out in this chapter.

284. To reflect the effect of the Government of Canada backstop guarantee on a privately insured mortgage exposure, institutions may separate the full amount of the privately insured mortgage exposure into a deductible portion and a backstop portion:

a. the deductible portion is calculated as 10% of the original loan amount (i.e. the deductible portion grows as a percentage of the full amount of the total exposure as the mortgage amortizes), and is to be risk weighted according to paragraph 285;
b. the backstop portion is the amount covered by the government guarantee (i.e. the total outstanding amount less the deductible portion), and is to be treated as a sovereign exposure as set out in section 4.1.

285. For residential mortgages insured by a private mortgage insurer having a Government of Canada backstop guarantee, institutions may choose not to recognize the mortgage insurance and/or the Government of Canada backstop guarantee if doing so would result in a higher capital requirement. Accordingly, the loan should be risk weighted in one of the following three ways:

a. As a loan to the private mortgage insurer recognizing the Government of Canada backstop. In this case, the deductible exposure defined in paragraph 284 can be risk weighted as either i) an exposure to the private mortgage insurer (according to paragraph 58) or ii) an exposure to the mortgage borrower (according to paragraphs 97 to 105), multiplied by a factor of 2.2.[104] The backstop exposure is treated as an exposure to the Governmnet of Canada.

b. As an uninsured residential mortgage according to paragraphs 97 to 105.

c. As a loan to the private mortgage insurer (without a Government of Canada backstop) according to paragraph 58.

286. Where losses are shared pari passu on a pro rata basis between the institution and the guarantor, capital relief is afforded on a proportional basis, i.e. the protected portion of the exposure receives the treatment applicable to eligible guarantees/credit derivatives, with the remainder treated as unsecured. [Basel Framework, CRE 22.80]

287. 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 6 - Securitization will apply. [Basel Framework, CRE 20.81]

(vii) Currency mismatches

288. 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}, using the formula:

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

where:

G_A = adjusted amount of the credit protection

G = nominal amount of the credit protection

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

289. The currency mismatch haircut for a 10-business day holding period (assuming daily marking-to-market) is 8%. This haircut must be scaled up using the square root of time formula, depending on the frequency of revaluation of the credit protection as described in paragraph 259. [Basel Framework, CRE 22.82]

[104] The 2.2 factor aligns the private mortgage insurer and mortgage borrower risk-weights with the application of a 100% LGD as prescribed under the IRB approach in section 5.4.2 of this guideline.

290. 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. [Basel Framework, CRE 22.83]

(viii) Sovereign guarantees and counter-guarantees

291. Institutions may apply a lower risk weight to an 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. This treatment applies to an exposure that is covered by a guarantee which is indirectly counter-guaranteed by a sovereign, provided that the following conditions are met:

a. the sovereign counter-guarantee covers all credit risk elements of the exposure;
b. both the original guarantee and the counter-guarantee meet all operational requirements for guarantees, except that the counter-guarantee need not be direct and explicit to the original exposure; and
c. OSFI 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.

[Basel Framework, CRE 22.84]

Appendix I – Summary of the simplified treatment under the standardized approach

Category I and II institutions as defined in OSFI's SMSB Guideline[105] will be eligible to apply a simplified treatment to certain asset classes provided the total exposure to the asset class grouping to which the simplified treatment is being applied does not exceed $500 million.

The following table provides a list of all of the asset classes outlined in this chapter and identifies those for which there is a simplified treatment available. For the remaining asset classes, there is no distinction between a simplified treatment and the more risk-sensitive treatment.

Section	Asset Class	Simplified treatment
4.1.1	Sovereigns and central banks	N/A
4.1.2	Non-central government public sector entities (PSEs)	N/A
4.1.3	Multilateral development banks (MDBs)	N/A
4.1.4	Banks	Paragraph 27
4.1.5	Covered bonds	Paragraph 49
4.1.6	Securities firms and other financial institutions	Paragraph 27
4.1.7	Corporates	Paragraph 60
4.1.8	Subordinated debt, equity and other capital instruments	N/A
4.1.9	Retail exposures	Paragraph 83
4.1.10	Real estate exposures	N/A
4.1.11	Exposures secured by residential real estate	Paragraph 98
4.1.12	Exposures secured by commercial real estate	Paragraph 107
4.1.13	Land acquisition, development and construction	N/A
4.1.14	Reverse mortgages	N/A
4.1.15	Mortgage-backed securities	N/A
4.1.16	Currency mismatch	N/A
4.1.17	Commitments	N/A
4.1.18	Off-balance sheet items	N/A
4.1.19	Counterparty credit risk exposures	N/A
4.1.20	Credit derivatives	N/A
4.1.21	Defaulted exposures	N/A
4.1.22	Equity investment in funds	N/A
4.1.23	Other assets	N/A
4.1.24	Purchased receivables	N/A

[105] SMSB Capital and Liquidity Guideline.

Appendix II –Use of the Simplified Treatment for Credit Risk for Category I and II SMSBs

As per paragraph 2 of this chapter, Category I and II SMSBs are eligible to use a simplified treatment for certain asset classes where they have less than $500 million in total exposure.[106] The exposure amount is based on an average of the end-of-quarter amounts calculated at fiscal year-end using data points from the BCAR[107] regulatory return.

The threshold calculation is performed on an annual basis. If a Category I or II SMSB's position relative to the thresholds has changed from the previous year, the institution would be given one year to implement the applicable treatment. For example, if an asset class that was considered material becomes immaterial (by falling below the $500 million threshold), the Category I or II SMSB has the option to use the simplified treatment for the asset class effective Q1 of the following year. Conversely, if an asset class that was previously considered immaterial becomes material (by rising above the $500 million threshold), the Category I or II SMSB would be required to use the more risk sensitive treatment for the asset class effective Q1 of the following year. In addition, to ensure some stability in the capital treatment, once a Category I or II SMSB treats a portfolio as material or immaterial, it would be required to maintain that treatment for two years.

The following examples illustrate how the exposure for an asset class would be calculated to determine if it is above or below the $500 million threshold.

For Q2 2023, the threshold for Corporate exposures would be assessed using fiscal 2021 data:[108]

Table 1

Total (measure 500 in BCAR Schedule 40.080)				
Q1 2021	Q2 2021	Q3 2021	Q4 2021	Average
$510M	$505M	$507M	$515M	$509M

Since the average using fiscal 2021 data is above $500 million, the Category I or II SMSB's Corporate exposures would be deemed material and capital requirements would need to be calculated using the regular treatment for fiscal years 2023 and 2024.

In Q1 2024, the calculation would be performed again using fiscal 2023 data:

Table 2

Total (measure 500 in BCAR Schedule 40.080)				
Q1 2023	Q2 2023	Q3 2023	Q4 2023	Average
$490M	$480M	$485M	$500M	$489M

[106] Total exposures includes both on and off balance sheet, net of Stage 3 allowances but before taking into account credit risk mitigation.

[107] Basel Capital Adequacy Reporting

[108] Data for the previous year is to be used to perform the materiality threshold calculations, with any changes only being implemented the following fiscal year.

Since the average exposure amount is below the $500 million threshold, the Category I or II SMSB would have the option of using the simplified treatment effective Q1 2025. If the Category I or II SMSB switched to the simplified treatment for 2025, it would be required to use this treatment for fiscal 2026 as well.

Appendix III – List of risk weight tables

Section	Asset Class	Table
4.1.1	Sovereigns and central banks	Table 1 Table 2
4.1.2	Non-central government public sector entities (PSEs)	Table 3
4.1.3	Multilateral development banks (MDBs)	Table 4
4.1.4	Banks	Table 5 Table 6
4.1.5	Covered bonds	Table 7 Table 8
4.1.7	Corporates	Table 9
4.1.11	Exposures secured by residential real estate	Table 10 Table 11
4.1.12	Exposures secured by commercial real estate	Table 12 Table 13
4.1.13	Exposures secured by land acquisition, development and construction	Table 14 Table 15
4.1.14	Reverse mortgages	Table 16
4.2.3.5	Issue-specific short-term ratings	Table 17