MEASUREMENT OF CREDIT RISK-STANDARDISED APPROACH

INTRODUCTION

1. This Guideline is applicable to all entities that are incorporated in Barbados and licensed under the Financial Institutions Act, Cap. 324A of the Laws of Barbados and the International Financial Services Act, Cap. 325 of the Laws of Barbados. It sets out the rules which the Central Bank of Barbados (Bank) requires licensees to apply in calculating their regulatory capital requirements for credit risk.

2. The principles in this Guideline are based solely on the Standardised Approach option outlined in the Basel Committee's Revised Framework on Capital Measurement and Capital Standards[1]. The Guideline is intended for use at both the consolidated and solo levels. The Bank will devise and publish rules for banks wishing to use an Internal Ratings-based approach to credit risk at a later stage.

3. The Guideline provides the framework for calculating risk-weighted assets by assigning on-balance sheet assets and off-balance sheet exposures in the banking book to broad categories of credit risk for the purpose of computing a licensee's capital adequacy ratio as defined in the Capital Adequacy: Measurement of Capital Guideline. In addition, licensees are required to include in their calculation, exposures to counterparties for over the counter derivative instruments and repo-style transactions that are booked in the trading book.

4. The Guideline is set out in three main sections:

   a. On-Balance Sheet Items;
   b. Off-Balance Sheet Items; and
   c. Credit Risk Mitigation.

   Please note that the framework for determining regulatory capital requirements on exposures arising from traditional and synthetic securitisations will be published separately at a later date.

[1] For complete review of all the options, see Basel Committee on Banking Supervision (2005), International Convergence of Capital Measurement and Capital Standards.

5. The Guideline is broad in its coverage of credit risks and includes sections on the capital treatment for on and off balance sheet exposures and credit risk mitigation. The Bank recognizes that the varied nature of activities in which licensees engage may render parts of the Guideline inapplicable to individual institutions.

6. Licensees are required to submit on a quarterly basis, capital adequacy returns which are issued by the bank. The Bank reserves the right to determine the risk-weighted amount of an on-balance sheet asset or off-balance sheet exposure if it considers that the licensee has risk-weighted the exposure incorrectly.

Credit Risk – The Standardised Approach

7. Under the standardised approach for measuring credit risk, licensees are required to allocate a supervisory risk weight to each asset and off-balance sheet item to produce a sum of risk weighted assets by multiplying the amount of the exposures by their relevant risk weight.

8. The supervisory risk weight is an estimate of the credit risk associated with an exposure. In determining risk weights, licensees are able to make use of certain approved external ratings, subject to the provisions set out in section A below.

9. In calculating their capital requirements for credit risk, licensees should exclude from their balance sheet:
   a. Assets or investments that are deducted from the measurement of regulatory capital;
   b. Debt and equity instruments used in the computation of market risk[2].

10. All exposures subject to the standardized approach are expressed at current book value (including accrued interest or revaluations) and should be risk-weighted net of specific provisions or associated depreciation.

11. Where the transaction is secured by eligible collateral, or there is an eligible guarantee, credit derivative or netting arrangement in place, the credit mitigation techniques detailed in section C of this Guideline may be used to reduce the capital requirement of the exposure.

[2] Measuring Capital Adequacy for Market Risk Guideline March 2014

A. On-Balance Sheet Items

12. A summary of on-balance sheet risk weights is presented in Annex 1.

i. Claims on Sovereigns

13. Claims on sovereigns and their central banks will be risk weighted in accordance with the risk weightings provided by eligible ECAIs[3].

Credit Assessment[4]	AAA to AA-	A+ to A-	BBB+ to BBB-	BB+ to B-	Below B-	Unrated
Risk Weight	0%	20%	50%	100%	150%	100%

14. Alternatively, the Bank is prepared to recognise the country risk scores assigned by Export Credit Agencies (ECAs)[5]. Licensees may choose to use the risk scores published by individual ECAs that are recognised by the Bank, or alternatively the consensus risk scores of ECAs participating in the "Arrangement on Officially Supported Export Credits". The ECA risk scores will correspond to the risk weight categories detailed below:

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

15. Under national discretion, Barbados Government Debt or Central Bank Debt or Barbados Government guaranteed debt denominated in domestic currency, where the licensee has at least an equivalent amount of liabilities in that currency, will attract a zero percent (0%) risk weight.

16. Barbados sovereign or central bank debt that is denominated in currencies other than in BD$ must be rated in accordance with ECAI or ECA scores in the normal way.

[3] The implementation issues associated with the selection and use of ECAIs are explained in Annex 2.
[4] The notation for ECAIs throughout this Guideline refers to the methodology of Standard & Poor's. See Annex 3 for the mappings of risk weighting of recognised rating agencies and ECA scores.
[5] To qualify, an ECA must publish its risk scores and subscribe to the OECD agreed methodology.

17. Banks with exposures (that are funded and denominated in that domestic currency) to other sovereigns (i.e. overseas central governments or central banks) may apply the preferential risk weight assigned to those sovereign by their national supervisors.

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

ii. Claims on Public Sector Entities (PSEs)

19. Claims on Barbados' PSEs will receive a risk weighting one category less favourable than the sovereign weighting. Claims on foreign PSEs will attract a risk weighting of 100%, except where the supervisory authority in the jurisdiction of the PSE permits 'one category less favourable' treatment to be applied to its PSEs. Under national discretion, claims on PSEs that are guaranteed by Barbados government will be treated as claims of sovereigns. PSEs in foreign jurisdictions should be given the same capital treatment as that applied by their national supervisor.

Credit Assessment of Sovereign	**AAA to AA-**	**A+ to A-**	**BBB+ to BBB-**	**BB+ to B-**	**Below B-**	**Unrated**
PSE Risk Weight	20%	50%	100%	100%	150%	100%

iii. Claims on Multilateral Development Banks (MDBs)

20. Exposures to certain highly rated approved MDBs may be risk-weighted at 0%. These are listed in Annex 4. For all other MDBs the following risk weights apply:

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

iv. Claims on Banks and Trust & Finance Companies

21. The risk weight applied to a claim on a bank is dependent on the credit assessment of the sovereign in the bank's country of incorporation (option 1). The bank risk weight is one notch less favourable than that which applies to its sovereign of incorporation. The following risk weights apply to claims on banks and trust & finance companies. Under national discretion, claims on banks and trust & finance companies with an original maturity of 3 months or less and denominated and funded in the domestic currency are risk weighted at 20%.

Credit Assessment of Sovereign	**AAA to AA-**	**A+ to A-**	**BBB+ to BBB-**	**BB+ to B-**	**Below B-**	**Unrated**
Bank Risk Weight	20%	50%	100%	100%	150%	100%

22. The claims on parents of banks that are non-financial institutions are treated as corporate exposures.

v. Claims on Securities Firms and Credit Unions

23. Claims on securities firms and credit unions are to be treated as claims on banks provided that they are subject to supervisory and regulatory arrangements comparable to those under this Framework (including, in particular, risk based requirements).[6] Otherwise such claims would follow the rules for claims on corporates.

vi. Claims on Corporates and Insurance Companies

24. Claims on corporates consist of any exposures to any corporation, partnership, sole proprietorship or trust, other than exposures categorised in paragraphs 13 to 23 and paragraphs 27 to 32. The risk weights below illustrate the risk weighting of rated corporate claims and rated insurance company claims.

[6] That is, capital requirements that are comparable to those applied to banks in this framework. Implicit in the meaning of the word "comparable" is that the securities firm (but not necessarily its parent) is subject to consolidated regulation and supervision with respect to any downstream affiliates.

Credit Assessment of Corporate	**AAA to AA-**	**A+ to A-**	**BBB+ to BB-**	**Below BB-**	**Unrated**
Risk Weight	20%	50%	100%	150%	100%

25. Unrated corporate and unrated insurance company exposures will be risk weighted at 100%. However, also note that an unrated exposure must never be given a risk weight that is preferential to that assigned to its sovereign of incorporation. As part of the supervisory review process, the Bank will also consider whether overall default experience of Barbadian banks indicates that a higher risk weight than 100% may be warranted for unrated corporate or insurance company claims either generally or in individual cases.

26. As an alternative approach, the Bank is prepared to consider applications[7] from individual licensees who wish to opt to weight **all** their corporate and insurance company claims at 100% without regard to external ratings. Before giving approval to such treatment, the Bank will need, in particular, to be satisfied that the 100% weight would be used consistently and with no 'cherry-picking' of lower external ratings in particular cases where it would be advantageous to the licensee to do so.

vii. Retail Portfolios

27. Claims that qualify under the criteria listed in this section may be considered as retail claims for regulatory capital purposes and included in a regulatory retail portfolio. Exposures included in such a portfolio may be risk-weighted at 75%, except as provided for past due loans *(see section x below)*.

28. For inclusion in the regulatory retail portfolio, claims must meet the following four criteria. Exposures which do not meet the criteria will be risk weighted at 100%:

    a. Orientation criterion - The exposure is to an individual, a group of individuals or to a small business[8];

[7] Licensees should send a letter to the Director of Bank Supervision requesting approval to use the alternative approach.
[8] Small business loans, are defined as business loans to companies that meet the requirements of the Small Business Act.

b. Product Criterion - The exposure takes the form of any of the following:

   i. revolving credits and lines of credit (including credit cards and overdrafts); personal term loans and leases (e.g. instalment loans, auto loans and leases, student and educational loans, personal finance); and
   ii. small business facilities and commitments.

   Securities (such as bonds and equities), whether listed or not, are specifically excluded from this category. Mortgage loans are excluded to the extent that they qualify for treatment as claims secured by residential property (See section viii below).

c. Granularity criterion - The Bank is satisfied that the regulatory retail portfolio is sufficiently diversified to a degree that reduces the risks in the portfolio, warranting the 75% risk weight. Aggregate exposures[9] to one counterparty hold no exceed 0.2% of the regulatory portfolio.

d. Low value of individual exposures - The maximum aggregated retail exposure to one counterpart cannot exceed an absolute threshold of BDS$0.25 million.

29. As part of the supervisory review process, the Bank may also consider whether the default experience of these claims held by individual banks should warrant a standard risk weight higher than 75%. In addition, based on the level of diversification of a licensee's retail portfolio, the Bank may require a standard risk weight higher than 75% or impose an additional capital charge.

viii. Claims Secured by Residential Real Estate

30. Lending fully secured by first mortgages[10] on residential real estate that is or will be occupied by the borrower or rented out by him is risk weighted at 35%, provided that:

[9] Aggregated exposures means gross amount (i.e. not taking any credit risk mitigation into account) of all forms of debt exposures (e.g. loans or commitments) that individually satisfy the three other criteria. 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 bank's aggregated exposure on both business).

[10] If a loan is secured against a second mortgage, to qualify for a risk weight less than 100% the licensee must confirm the outstanding exposure with the first mortgagee and obtain written consent for the second mortgage. The outstanding amount of the loan is calculated as the sum of all claims on the borrower secured by both the first and second mortgages over the same residential property.

a. the outstanding amount of the loan to value ratio[11] is less than 80%; and
b. the loan is not 90 days or more past due.

If the loan is secured by more than one property, the loan to value ratio will be determined by the outstanding amount of all claims on the borrower that are secured against the mortgaged residential properties to the aggregate value of the properties.

If a bank does not hold information regarding LTV for individual exposures, a risk weight of 50% will be applied to the entire portfolio of residential real estate exposures.

Mortgages with outstanding loan to value ratios of 80% or over will attract a risk weight of 35% for the portion up to 80% and 50% for the portion in excess of 80%.

31. Additionally, the Bank may, based on its supervisory review, review institutions that fail to meet the qualitative criteria such as legal enforceability, ongoing valuations and good collateral management, and assign higher risk weights for all residential mortgages.

ix. Claims Secured by Commercial Real Estate

32. Commercial mortgages are risk weighted at 100%.

x. Past Due Loans

33. The unsecured[12] portion of any loan (other than a qualifying residential mortgage loan) that is past due for more than 90 days, net of specific provisions (including partial write-offs), will be risk-weighted as follows:

    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 more than 20% of the outstanding amount of the loan.

[11] The loan to value ratio must be calculated consistently across the residential mortgage portfolio at the inception of the exposure and on an on-going basis.
[12] For the purpose of defining the secured portion of the loan, eligible collateral and guarantees will be the same as set out in Section C.

34. Residential mortgage loans that are past due for more than 90 days will carry a 100% risk weight.

35. Past due retail loans are to be excluded from the overall regulatory retail portfolio when assessing the degree of diversification for risk-weighting purposes as set out in paragraph 28c.

36. Where a past due loan is fully secured by real estate, independently valued at more than 120% of the amount of the loan, a 100% risk weight may be applied when provisions amount to at least 15% of the outstanding amount of the loan.

xi. Other Assets

37. The following items are:

i. 0% weighted:

a. Cash.
b. Gold bullion held in own vaults or on an allocated basis.

ii. 20% weighted:

Cash items in course of collection attract a risk weight of 20%.

38. The standard risk weight for all other items is 100%. This includes:

a. Premises, plant, equipment and other fixed assets;
b. Real estate and other investments (including non-consolidated investment participation in other companies);
c. Investments in equity of other entities and holdings of investment funds (including investments in commercial entities) (where there is no capital deduction);
d. Unallocated prepayments and accrued interest; and
e. All other assets not included elsewhere.

xii. Higher-risk Categories

39. As noted in the relevant paragraphs above, licensees are required to apply a 150% weight to:

    a. Claims on sovereigns (not domestic), PSEs, banks, and securities firms rated below B-;
    b. Claims on corporates rated below BB-;
    c. Past due loans when specific provisions are less than 20%; and
    d. Venture capital and private equity investments.

40. The Bank will keep under careful review licensees' loss experience with higher risk assets and may opt to subject further categories of lending to 150% or higher weights.

B. Off-balance Sheet Items

41. Off-balance sheet items relate to guarantees, commitments, derivatives and similar contractual arrangements whose full notional principal amount may not be reflected on the balance sheet. In determining their contribution to risk weighted assets, licensees need to distinguish between OTC derivative contracts and other off-balance items. A summary of typical off-balance sheet items is captured in Annex 5. Where the off-balance-sheet item is secured by eligible collateral or guarantee, the credit risk mitigation rules set out in section C apply.

i. Non-derivative Items

42. Non-derivative items, such as commitments and guarantees, are included in the risk-based capital ratio by risk- weighting the amount of an off-balance sheet transaction that gives rise to credit exposure. This is achieved by:

    a. Converting the notional amount of the transaction into an on-balance sheet credit equivalent amount (CEA), by multiplying the amount by a specified credit conversion factor (CCF) set out in table 1; and
    b. Multiplying the CEA by the risk weight applicable to the counterparty or, if relevant, the guarantor or collateral.

43. For the purpose of this guidance note, commitments are arrangements that obligate a licensee, at a client's request, to:

    a. extend credit in the form, for example of loans or participations in loans, lease financing, mortgages, overdrafts, acceptances, letters of credit, guarantees or loan substitutes, or
    b. purchase loans, securities or other assets.

44. The CCF applied to a commitment is dependent on its maturity, with longer maturity commitments considered as of higher risk. The maturity of a commitment should be measured from the date when the commitment was accepted by the customer, regardless of whether the commitment is revocable or irrevocable, conditional or unconditional, until the earliest date on which:

    a. The commitment is scheduled to expire, or
    b. The licensee can, at its option, unconditionally cancel the commitment.

45. Where a licensee commits to granting a facility at a future date, the original maturity is to be measured from the date of acceptance until the earliest date that the licensee can at its option cancel unconditionally the facility.

46. For example, a six-month commitment to make a 12-month commitment is considered to be a single 18-month commitment.

47. Where there is an undertaking to provide a commitment on an off-balance sheet item, licensees are required to apply the lower of the two applicable CCFs. For example, an irrevocable commitment with an original maturity of 15 months (CCF – 50%) to issue a six-month documentary letter of credit (CCF-20%) would attract 20% risk weight.

Table 1

Conversion Factor	Item
0%	❑ Commitments with an original maturity of one year or less or that are unconditionally cancellable[13] at any time by the licensee without prior notice e.g. undrawn overdraft and credit card facilities or provide for automatic cancellation due to deterioration in a borrower's creditworthiness.
20%	❑ Commitments with an original maturity up to one year e.g. undrawn formal standby facilities and credit lines. ❑ Short-term self-liquidating trade related contingencies, including letters of credit arising from the movement of goods.
50%	❑ Commitments with an original maturity over one year e.g. undrawn formal standby facilities and credit lines. ❑ Transaction-related contingent items e.g. performance bonds, bid bonds, warranties and standby letter of credit related to particular transactions. ❑ Note issuance facilities (NIFs) and revolving underwriting facilities (RUFs).
100%	❑ Direct credit substitutes, e.g. general guarantees of indebtedness (including standby letters of credit serving as financial guarantees for, or supporting, loans and securities) and acceptances (including endorsements with the character of acceptances). ❑ Sale and repurchase agreements and asset sales with recourse. ❑ Security lending or securities borrowing. ❑ Forward asset purchases, ❑ Forward forward deposits; and ❑ Partly-paid shares and securities which represent commitments with certain drawdown.

[13] It is not considered unconditional if the licensee has to give advance notice of cancellation or if automatic rollover is permissible.

48. Licensees are required to apply a 100% CCF to the off-balance sheet component of a repurchase agreement or securities lending or borrowing transaction. The off-balance sheet component of a repurchase agreement equals the sum of current market values of all positions the licensee has sold subject to repurchase. The off-balance sheet component of a securities lending transaction is the sum of current market values of all positions the licensee has lent under the transaction. The off-balance sheet component of a securities borrowing transaction is the sum of current market values of all non-cash positions the licensee has posted as collateral.

49. Licensees are required to monitor closely any securities, foreign exchange or commodity transactions which fail to settle on the due date so that credit risk exposures can be carefully tracked. Moreover, additional capital charges apply to trades which fail to settle on a timely basis. This is also the case for transactions that are not processed through a delivery-versus-payment (DvP) or Payment-versus-Payment (PvP) mechanism. The relevant rules for these additional charges are set out in Annex 7 to this paper.

50. Where derivatives contracts or securities' financing transactions such as repos and stock lending are conducted with a central counterparty such as a clearing house (which interposes itself between counterparties and which requires fully daily collateralization of its counterparty exposures) an exposure value of zero can be attributed to them. This extends in particular to credit exposures from clearing deposits and collateral posted with the central counterparty.

ii. Derivative *Off-balance Sheet Items*

51. It is necessary for licensees to bring into their credit risk computation all Counterparty Credit Risks (CRR) on their OTC derivatives transactions, whether these are held in the banking book or in the trading book – i.e. they need to capture the cost to the licensee of replacing cash-flows (on contracts showing a positive value) specified in the contracts in the event of a counterparty default. To derive 'the Exposure at Default (EAD) or counterparty credit risk capital requirements, a licensee must calculate the CEA of its contracts by using *the current exposure method* ,as set out below, and assigning the risk weight appropriate to the counter-party, eligible guarantor or recognised collateral. (Securities Financing transactions such as repos, reverse repos and stock borrowing/lending transactions are to be dealt with in accordance with the provisions of Part C of this Guideline (Credit Risk Mitigation), below.)

52. The CEA is calculated by summing:

    a. the current credit exposure (replacement cost); and
    b. an add-on for the potential future credit exposure (PFCE) of these contracts[14].

53. The current credit exposure is defined as the sum of the positive marked to market value or replacement cost of the contracts. If the mark to market value is zero or negative, then the current exposure is zero. The replacement cost of any exchange rate contracts whose initial maturity does not exceed 14 calendar days is zero.

54. The PFCE of all contracts, including those with negative marked to market values is calculated by multiplying the notional principal amounts by the add-on factors in table 2[15] [16]. The notional amount is the reference amount used to calculate payment streams between counterparties, but where the notional amount is leveraged or enhanced by the structure of the transaction, licensees should use the effective amount rather than the notional.

[14] No potential future credit exposure should be calculated for single currency floating/floating interest rate swaps. The credit exposure on these contracts should be evaluated solely on the basis of their mark to market value.
[15] For variable rate swaps in the same currency, credit risk is calculated without an add-on for potential future risk.
[16] For contracts involving multiple exchanges of principal, the add-on factors are multiplied by the number of payments remaining in the contract.

55. The add on[17] applied in calculating the credit equivalent amount depends on the maturity of the contract and on the volatility of the rates and prices underlying that type of instrument. Options purchased over the counter are included with the same conversion factors as other instruments.

   a. The relevant risk weight is that of the counterparty or, where applicable, guarantor or collateral, to the credit equivalent amount of the contract. A sample worksheet for calculating the risk-weighted equivalent of non-netted contracts is set out in Annex 6.

   b. For a contract that is structured such that outstanding exposures are settled on specified dates and the terms are reset so that the market value of the contract is zero, the remaining maturity is set equal to the time until the next reset date. In the case of interest rate contracts with remaining maturities of more than one year that meet the above criteria, the add-on factor is subject to a floor of 0.5%.

Table 2: Derivative Credit Conversion Factors

Residual Maturity[18]	Interest Rate Contracts (0%)	Foreign Exchange And Gold Contracts (0%)	Equity Contracts (0%)	Precious Metals (0%)	Other Commodities[19] (0%)
One year or less	0.0	1.0	6.0	7.0	10
Over one year to five years	0.5	5.0	8.0	7.0	12
Over five years	1.5	7.5	10	8.0	15

[17] For contracts that are structured to settle outstanding exposure following specified payment dates and where the terms are reset such that the market value of the contract is zero on these specified dates, the residual maturity should be set equal to the time until the next reset date.
[18] For contracts whose value is automatically reset after a payment, the residual maturity is the interval between two resettings, with a minimum add-on of 0.5% for interest rate contracts which have a residual maturity of more than one year.
[19] Includes any forward, swap, purchased option and other similar derivative contracts not classified elsewhere.

Bilateral Netting of OTC Derivative Contracts

56. The Bank will issue guidance on the treatment of net gross claims on OTC derivative transactions with the same legal counterparties for capital adequacy purposes at a later date.

C. Credit Risk Mitigation

57. Credit risk mitigation techniques (CRM) are used to reduce credit risk and, under certain circumstances, licensees may benefit from such techniques in measuring their capital adequacy for credit risk. Techniques include

    i. Collateralised transactions;
    ii. Netting; and
    iii. Guarantees and purchase of credit derivatives.

58. CRM techniques may only be used to determine risk weights where:
    a. the documentation used for CRM is binding on all parties and enforceable in each relevant jurisdiction regardless of whether the counterparty is insolvent or bankrupt;
    b. the enforceability of the documentation is verified through periodic legal reviews.

59. Where CRM techniques are used, such transactions should not receive a higher capital requirement than an otherwise identical transaction where such techniques are not used. In addition, no additional supervisory recognition of CRM will be granted on claims for which an issue-specific rating is used that already reflects that CRM.

60. The use of CRM techniques reduces or transfers credit risk but, simultaneously, it may create other risks including counterparty, legal, operational, concentration, liquidity and market risks. Where these risks are not adequately controlled, the Bank may impose additional capital charges or take other supervisory actions.

61. Therefore, licensees must employ robust procedures and processes to control these risks, including:

    a. A clearly articulated strategy for the use of CRM techniques;
    b. On-going assessment of the obligor's credit worthiness;
    c. On-going valuation of collateral and monitoring of unsecured exposures;
    d. Clear policies and procedures in respect of collateral management;
    e. Effective systems for tracking the location and status of collateral;
    f. Monitoring and controlling the risks that arise when credit protection differs in maturity from the underlying credit exposure; and
    g. Management of concentration risk arising from the use of CRM techniques and its interaction with the licensee's overall credit risk profile.

Licensees need to pay close regard to the detailed operational requirements applying to the different CRM techniques as set out in Annex 8.

i. Collateralised transactions

62. A collateralised transaction is one in which:
    a. A licensee has 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[20] or by a third party on behalf of the counterparty.

Only financial collateral is eligible for capital relief. The forms of eligible collateral for credit risk mitigation are set out in Annex 9.

ii. On-balance sheet netting

63. On balance sheet netting may be applied in calculating capital adequacy where licensees have legally enforceable arrangements with counterparties to offset transactions and settle on a net basis. Licensees must have a well-founded legal basis for concluding that the netting or offsetting agreement is legally enforceable in each relevant jurisdiction, regardless of whether the counterparty is insolvent or bankrupt. They must also be able to determine at any time those assets and liabilities that are subject to the netting agreement with a particular counterparty, and to monitor and control them on a net basis. In addition, they must have systems and procedures which monitor and control effectively their roll-off risks. In such circumstances, the net exposure of loans and deposits may be used as the basis for calculating capital adequacy, treating assets (loans) as exposures and liabilities (deposits) as collateral.

iii. Guarantees and Credit Derivatives

64. Licensees may reduce risk by finding someone that is willing to replace the borrower in case of default. Where guarantees or credit derivatives are direct, explicit, irrevocable and unconditional, and the Bank is satisfied that a licensee fulfils certain minimum operational conditions set out in Annex 8 relating to risk management processes, it may allow the licensee to take account of such credit protection in calculating capital requirements.

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

65. **A range of guarantors and protection providers** is recognised but only guarantees issued by or protection provided by entities with a lower risk weight than the counterparty will lead to reduced capital charges. The protected portion of the counterparty exposure is assigned the risk weight of the guarantor or protection provider, while the uncovered portion retains the risk weight of the underlying counterparty.

CRM Approaches

66. Licensees are permitted to apply either the 'simple' approach or the 'comprehensive' approach to calculate their capital requirements. Details of the simple approach appear at paragraphs 68 to 74 below. The comprehensive approach is considerably more complex; its application is set out in paragraphs 75 to 95, below. Licensees must discuss with the Bank the approach that they intend to apply, and provide details of the arrangements they have in place for calculating and monitoring their CRM.

67. Licensees may operate under either, but not both, approaches in the banking book, but only under the comprehensive approach in the trading book. Partial collateralisation is recognised in both approaches. Mismatches in the maturity of the underlying exposure and the collateral are only allowed under the comprehensive approach.

The simple approach

68. In the simple approach, the secured portion of a claim may be weighted according to the higher of:
    a. the risk-weight appropriate to the collateral; or
    b. 20% (but see also the exceptions set out in paragraphs 71 to 74, below).

    The unsecured portion of the claim must be weighted according to the risk weight applicable to the original counterparty as set out in Annex 1.

69. Capital requirements apply to licensees on either side of a collateralised transaction. For example, both repos and reverse repos will be subject to capital requirements.

70. Collateral instruments eligible for recognition in the simple approach are set out in Annex 9. To qualify as eligible capital, the collateral must:

    a. be pledged for the life of the exposure;

b. be marked to market at least every six months; and
c. only be reduced in proportion to the amount of any reduction in the exposure amount.

It follows that, under the simple approach, there must be no maturity mismatch between the underlying credit exposure and the residual maturity of the CRM; where there is such a mismatch, no CRM can be applied.

Exceptions to the risk weight floor

71. Certain limited exceptions to the standard 20% risk weight floor are available. These relate to repo-style/securities financing transactions and to certain OTC derivative transactions. Lower risk weights may be applied to:

a. collateralised transactions where the exposure and the collateral are denominated in the same currency and either:

   i. the collateral is cash or deposits as defined in Annex 9; or
   ii. the collateral is in the form of sovereign or public sector entity securities eligible for zero percent risk weight in Annex 1 and the market value of the collateral has been discounted by 20%.

b. OTC derivative transactions that are subject to daily marking to market and where there is no currency mismatch.

72. To qualify for lower weighting, repo-style/securities financing transactions must, in addition to all the criteria in paragraph 71 above, meet the following conditions:

- the transactions are either overnight or else both the exposure and the collateral are marked to market daily and subject to daily remargining;
- 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 ability to liquidate the collateral is considered to be no more than 4 business days;
- the transaction is settled across a settlement system proven for that type of transaction;
- the documentation covering the agreement is standard market documentation for repo-style transactions in the securities concerned;
- 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

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

73. Where all the above conditions are met and the transactions are with a counterparty belonging to one of the following classes, they qualify for a zero percent risk weight. Where the counterparty does not fall within one of the designated classes but all the pre-conditions are met, transactions qualify for a 10% risk weight. The designated counterparty classes comprise the following:

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

74. Where OTC transactions meet the conditions of paragraph 72 above, in order to qualify for lower weighting they must be either fully collateralised by cash – in which case a zero percent weight applies – or else collateralised by sovereign or PSE securities qualifying for a 0% weight in the standardised approach, when a 10% risk weight applies.

The comprehensive approach

75. Under this approach licensees need to calculate their adjusted exposure to a counterparty to take into account the effects of eligible collateral. Licensees are required to adjust both the amount of the exposure to the counterparty (volatility-adjusted exposure amount) and the value of any collateral (volatility- adjusted collateral amount) received in support of that counterparty to take account of possible future fluctuations in the value of either, occasioned by market movements. These adjustments are referred to as ‘haircuts’. The difference between the two is the adjusted exposure amount which must be weighted according to the risk weight of the original counterparty to obtain the risk weighted amount for the collateralised transaction. Unless one side of the transaction is cash, the volatility adjusted amount for the exposure will be higher than the exposure and for the collateral it will be lower.

76. Additionally where the exposure and collateral are denominated in different currencies an additional downwards adjustment must be made to the volatility adjusted collateral amount to take account of possible future fluctuations in exchange rates.

77. As with the simple approach described above, licensees may opt to apply a zero percent haircut for repo-style/securities financing transactions meeting all the conditions provided under the risk floor exception and where counterparties belong to the classes of persons listed in paragraph 82 above.

Calculation of capital requirement

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

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

where:

E*	=	the exposure value after risk mitigation
E	=	current value of the exposure
He	=	haircut appropriate to the exposure
C	=	the current value of the collateral received
Hc	=	haircut appropriate to the collateral
Hfx	=	haircut appropriate for **currency** mismatch between the collateral and exposure

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

80. The treatment for transactions where there is a mismatch between the maturity of the counterparty exposure and the collateral is given in paragraphs 91 to 95 below.

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

$H = \sum a_i H_i$,

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.

Standard supervisory haircuts

82. 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[21, 22]	Other issuers[23]
AAA to AA-/A-1	≤ 1 year	0.5	1
	>1 year, ≤ 5 years	2	4
	> 5 years	4	8
A+ to BBB-/ A-2/A-3/P-3 and unrated bank securities	≤ 1 year	1	2
	>1 year, ≤ 5 years	3	6
	> 5 years	6	12
BB+ to BB-	All	15	
Main index equities (including convertible bonds) and Gold		15	
Other equities (including convertible bonds) listed on a recognised exchange		25	
UCITS/Mutual funds		Highest haircut applicable to any security in which the fund can invest	
Cash in the same currency[24]		0	

83. The standard supervisory haircuts applicable to securities issued by or guaranteed by the Barbados Government or the Central Bank of Barbados will be the same as applicable to AAA rated debt securities.

84. The standard supervisory haircut for currency risk where exposure and collateral are denominated in different currencies is 8% (also based on a 10-business day holding period and daily mark-to-market).

[21] Includes PSEs which are treated as sovereigns by the Bank.
[22] Multilateral development banks receiving a 0% risk weight will be treated as sovereigns.
[23] Includes PSEs which are not treated as sovereigns by the Bank.
[24] Eligible cash collateral specified in **Annex 9.**

85. For transactions in which a licensee lends non-eligible instruments (e.g. non-investment grade corporate debt securities), the haircut to be applied on the exposure should be the same as the one for equity traded on a recognised exchange that is not part of a main index -25%.

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

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

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

Transaction Type	**Minimum Holding Period**	**Condition**
Repo-style transaction	five business days	daily remargining
Other capital market transactions	ten business days	daily remargining
Secured lending	twenty business days	daily revaluation

88. Where standard minimum holding periods and remargining/revaluation frequencies are not met, standard haircuts should be scaled up or down depending on the type of transaction, using the formula below::

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

where:

H = haircut

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

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

T_M = minimum holding period for the type of transaction

89. For consolidated reporting, licensees with foreign operations will require explicit permission from the Bank to apply the preferential treatment to repo-styled transactions in respect of securities issued by foreign governments.

Collateralised OTC Derivatives Transactions

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

Counterparty charge = [(RC + Add-on) – CA] x r x 8%

where:

RC	=	the replacement cost,
Add-on	=	the amount for potential future exposure calculated according to paragraph 55 above,
CA	=	the volatility adjusted collateral amount under the comprehensive approach prescribed in paragraphs 75 to 89 above, or zero if no eligible collateral is applied to the
T		transaction, and
r	=	the risk weight of the counterparty.

Maturity mismatches

91. Where the residual maturity of the CRM is less than that of the underlying credit exposure a maturity mismatch occurs. Where there is a maturity mismatch and the CRM has an original maturity of less than one year, the CRM is not recognised for capital purposes. In other cases where there is a maturity mismatch, partial recognition is given to the CRM for regulatory capital purposes as detailed below in paragraphs 92 to 95.

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

Definition of maturity

93. The effective maturity of the underlying exposure is defined as the longest possible remaining time before the counterparty is scheduled to fulfil its obligation, taking into account any applicable grace period. For the hedge, embedded options which may reduce the term of the hedge should be taken into account so that the shortest possible effective maturity is used. Where a call is at the discretion of the protection seller, the maturity will always be at the first call date. If the call is at the discretion of the protection buying bank but the terms of the arrangement at origination of the hedge contain a positive incentive for the bank to call the transaction before contractual maturity, the remaining time to the first call date will be deemed to be the effective maturity. For example, where there is a step-up in cost in conjunction with a call feature or where the effective cost of cover increases over time even if credit quality remains the same or increases, the effective maturity will be the remaining time to the first call.

Risk weights for maturity mismatches

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

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

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

where:

Pa	=	value of the credit protection adjusted for maturity mismatch
P	=	credit protection (e.g. collateral amount, guarantee amount) adjusted for any haircuts
t	=	min (T, residual maturity of the credit protection arrangement) expressed in years
T	=	min (5, residual maturity of the exposure) expressed in years

Other items related to the treatment of CRM techniques

Treatment of pools of CRM techniques

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

First-to-default credit derivatives

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

Second-to-default credit derivatives

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

Annex 1: Risk Weights for On-Balance Sheet Assets

Risk weights shall be assigned to assets as shown on the balance sheet as follows:

Credit Assessments	AAA to AA-	A+ to A-	BBB+ to BBB-	BB+ to BB-	B+ to B-	Below B-	Unrated
Sovereign and Central Bank	0	20	50	100	100	150	100
PSEs	20	50	100	100	100	150	100
MDB	20	50	50	100	100	150	50
Banks	20	50	100	100	100	150	100
Corporates	20	50	100	100	150	150	100

Residential LTV <80%	35%
Residential LTV >80%	50%
No LTV information	50%
Retail	75%
Past Due Residential >90 days	100%
Other Past Due Loans with Provisions > 20%	100%
Other Past Due Loans with Provisions <20%	150%
Cash	0%
Barbados Government and Central Bank - denominated and funded in local currency	0%
Barbados Government - denominated in foreign currency	Risk weight depends on the external rating
Cheques in process of collection	20%
All other areas	100%

Schedule of Risk Weights

Zero Percent Risk Weight shall consist of:

a. Local and foreign currency notes and coins;
b. Gold bullion held in vaults or by another party on an allocated basis to the extent that is backed by gold bullion liabilities;
c. Claims on the Central Bank of Barbados that are denominated and funded in local currency;
d. Claims on the Barbados Government, including government guarantees that are denominated in local currency;
e. Claims on foreign Central Banks and Central Governments and other obligations fully guaranteed by these entities where the government has a credit rating of AAA to AA- or its equivalent;
f. Claims on the Bank for International Settlements, the International Monetary Fund and approved multilateral development banks and claims guaranteed or collateralized by securities issued by such entities;
g. Claims fully secured by cash on deposit at the reporting institution; and
h. Unrealised 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.

Twenty Percent Risk Weight shall consist of:

a. Claims on foreign Central Banks and Central Governments and other obligations fully guaranteed by these entities where the government has a credit rating of A+ to A- or its equivalent;
b. Claims on governments, statutory boards and other public sector entities where the government has a credit rating of AAA to AA- or its equivalent;
c. Claims on other multilateral development banks and claims guaranteed or collateralized by securities issued by such entities where the credit rating is AAA to AA- or its equivalent;
d. Claims on banks and securities firms incorporated in foreign countries where the claim has an original maturity of less than three months and the entity has a credit rating of AAA+ to BBB- or its equivalent or the entity is unrated;
e. Claims on banks and securities firms incorporated in foreign countries where the claim has an original maturity of greater than three months and the entity has a credit rating of AAA+ to AA-
f. Claims on corporates where the corporate has a credit rating of AAA to AA- or its equivalent;

g. Bankers' acceptances held as part of an institution's investment portfolio; and
h. Cash items in the process of collection (e.g. cheques, drafts and other items drawn on domestic or overseas banks that are payable immediately upon presentation.

Thirty Five Percent Risk Weight shall consist of:

a. Claims secured by qualifying residential mortgages on residences that are or will be occupied by the borrower or that are rented.

Fifty Percent Risk Weight shall consist of:

a. Claims on foreign Central Banks and Central Governments and other obligations fully guaranteed by these entities where the government has a credit rating of BBB^+ to BBB- or its equivalent;
b. Claims on governments, statutory boards and other public sector entities where the government has a credit rating of A+ to A- or its equivalent;
c. Claims on other multilateral development banks and claims guaranteed or collateralized by securities issued by such entities where the credit rating is A+ to BBB-- or its equivalent or the bank is unrated;
d. Claims on banks and securities firms incorporated in foreign countries where the claim has an original maturity of less than three months and the entity has a credit rating of BB+ to B- or its equivalent;
e. Claims on banks and securities firms incorporated in foreign countries where the claim has an original maturity of greater than three months and the entity has a credit rating of A+ to BBB- or its equivalent or the entity is unrated;
f. Claims on corporates where the corporate has a credit rating of A+ to A- or its equivalent;
g. Claims secured by other residential mortgages on residences that are or will be occupied by the borrower or that are rented; and
h. Credit risk equivalent of off-balance sheet exposures arising from forwards, swaps, purchased options and other similar derivatives to counter-parties that would otherwise attract a 100% risk weight.

Seventy Five Percent Risk Weight shall consist of:

a. Claims on qualifying retail exposures.

One Hundred Percent Risk Weight shall consist of:

a. Claims on foreign Central Banks and Central Governments and other obligations fully guaranteed by these entities where the government has a credit rating of BB+ to B- or its equivalent or the government is unrated;
b. Claims on governments, statutory boards and other public sector entities where the government has a credit rating of BBB^+ to B- or its equivalent. Or the government is unrated;
c. Claims on other multilateral development banks and claims guaranteed or collateralized by securities issued by such entities where the credit rating is BB+ to B- or its equivalent;
d. Claims on corporates, including insurance companies, where the corporate has a credit rating of BBB^+ to B- or its equivalent or the corporate is unrated;
e. Other loans and advances;
f. The unsecured portion of any claim other than a loan or claim secured against eligible residential mortgages that is past due for more than 90 days, where the specific provisions are more than 20 percent and less than 100% of the outstanding amount of the loan;
g. Investments in premises, plant and equipment and other fixed assets;
h. Real estate and equity investments (including non-consolidated investment participation in other companies);
i. Capital instruments issued by other financial institutions (unless deducted from capital); and
j. All other assets, apart from those designated in the 150% category below.

One Hundred and Fifty Percent Risk Weight shall consist of:

a. Claims on foreign Central Banks and Central Governments and other obligations fully guaranteed by these entities where the government has a credit rating below B- or its equivalent;
b. Claims on governments, statutory boards and other public sector entities where the government has a credit rating below B- or its equivalent;
c. Claims on other multilateral development banks and claims guaranteed or collateralized by securities issued by such entities where the credit rating is below B- or its equivalent;
d. Claims on banks and securities firms incorporated in foreign countries where the entity has a credit rating below B- or its equivalent;
e. Claims on corporates, including insurance companies, where the corporate has a credit rating below B- or its equivalent; and

f. The unsecured portion of any claim other than a loan or claim secured against eligible residential mortgages that is past due for more than 90 days, where the specific provisions are less than 20 percent of the outstanding amount of the loan.

Annex 2

External Credit Assessments

Eligibility Criteria

1. The Basel Committee has established criteria for the recognition of ECAIs. These relate to:

   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 recognition, the 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. The assessment process should be as free as possible from any constraints that could arise in situations where the composition of the board of directors or the shareholder structure of the assessment institution may be seen as creating a conflict of interest.

   c. ***International Access/Transparency***: The individual assessments should be available to both domestic and foreign institutions with legitimate interests and at equivalent terms. In addition, the general methodology used by the ECAI should be publicly available.

   d. ***Disclosure***: An ECAI should disclose the following information: its assessment methodologies, including the definition of default, the time horizon, and the meaning of each rating; the actual default rates experienced in each assessment category; and the transitions of the assessments, e.g. the likelihood of AA ratings becoming A over time.

   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. 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.

Implementation Considerations

i. The Mapping Process

2. The Bank is responsible for assigning eligible ECAIs' assessments to the risk weights available under the standardised risk weighting framework, i.e. deciding which assessment categories correspond to which risk weights. The mapping of the risk weights for currently eligible ECAIs is set out in Annex 3.

3. When conducting the mapping process**,** the Bank will assess, inter alia, the size and scope of the pool of issuers that an ECAI covers, the range and meaning of the assessments that it assigns, and the definition of default used by the ECAI.

4. Licensees must use the chosen ECAIs and their ratings consistently for each type of claim, for both risk weighting and risk management purposes. Licensees are not allowed to "cherry-pick" the assessments provided by different ECAIs.

5. Licensees must disclose ECAIs that they use for the risk weighting of their assets by type of claims, the risk weights associated with the particular rating grades as determined by the Bank through the mapping process as well as the aggregated risk-weighted assets for each risk weight based on the assessments of each eligible ECAI.

ii. Multiple Assessments

6. If there is only one assessment by an ECAI chosen by a licensee for a particular claim, that assessment should be used to determine the risk weight of the claim.

7. If there are two assessments by ECAIs chosen by a licensee which map into different risk weights, the higher risk weight will be applied.

8. If there are three or more assessments with different risk weights, the assessments corresponding to the two lowest risk weights should be referred to and the higher of those two risk weights will be applied[25].

Issuer Versus Issues Assessment

9. Where a licensee invests in a particular issue that has an issue-specific assessment, the risk weight of the claim will be based on this assessment. Where the licensee's claim is not an investment in a specific assessed issue, the following general principles apply.

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

   b. In circumstances where the borrower has an issuer assessment, this assessment typically applies to senior unsecured claims on that issuer. Consequently, only senior claims on that issuer will benefit from a high quality issuer assessment. Other unassessed claims of a highly assessed issuer will be treated as unrated. If either the issuer or a single issue has a low quality assessment (mapping into a risk weight equal to or higher than that which applies to unrated claims), an unassessed claim on the same counterparty will be assigned the same risk weight as is applicable to the low quality assessment.

10. Whether the licensee intends to rely on an issuer- or an issue-specific assessment, the assessment must take into account and reflect the entire amount of credit risk exposure, i.e. principal and interest, the licensee has with regard to all payments owed to it.

[25] For illustration, if there are three external credit assessments mapping into credit quality grades with risk weights of 20% and 50%, then the applicable risk weight is 20%. If the external credit assessments map into credit quality grades with risk weights of 20%, 50% and 50%, then the applicable risk weight is 50%.

11. In order to avoid any double counting of credit enhancement factors, no supervisory recognition of credit risk mitigation techniques will be taken into account if the credit enhancement is already reflected in the issue specific rating.

Domestic currency and foreign currency assessments

12. Where unrated exposures are risk weighted based on the rating of an equivalent exposure to that borrower, the general rule is that foreign currency ratings would be used for exposures in foreign currency. Domestic currency ratings, if separate, would only be used to risk weight claims denominated in the domestic currency.

Short-term/long-term assessments

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

Credit Assessment	**A-1/P-1**	**A-2/P-2**	**A-3/P-3**	**Unrated**
Risk weight	20%	50%	100%	150%

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

15. When a short-term assessment is to be used, the institution making the assessment needs to meet all of the eligibility criteria for recognising ECAIs as presented in paragraph 1 of this annex in terms of its short-term assessment.

Unsolicited ratings

16. Licensees must use only solicited ratings from eligible ECAIs. Where there is evidence of a recognized ECAI using unsolicited ratings to put pressure on entities to obtain solicited ratings, the Bank may review the continued appropriateness of its recognition.

Annex 3

Table 1: Mapping Long-term ECAI and ECA Ratings

Standardised Risk Weights	Moody's	Standard & Poors	Fitch	ECA
0%	Aaa to Aa3	AAA to AA-	AAA to AA-	0 to 1
20%	A1 to A3	A+ to A-	A+ to A-	2
50%	Baa1 to Baa3	BBB+ to BBB-	BBB+ to BBB-	3
100%	Ba1 to B3	BB+ to B-	BB+ to B-	4 to 6
150%	Below B-	Below B-	Below B-	7
100%	Unrated			

Table 2: Mapping Short-term ECAI ratings

Standardized Risk Weight Category	Moody's	S&P	Fitch
20%	P-1	A-1+, A-1	F1+, F1
50%	P-2	A-2	F2
100%	P-3	A-3	F3
Others	NP	All short-term ratings below A-3	Below F3

Annex 4

Multilateral Development Banks

1. A 0% weighting applies where MTBs are judged to be of very high quality. Specifically, this involves cases where:

   a. The MDB has very high quality long-term issuer ratings, i.e. a majority of an MDB's external assessments must be AAA;

   b. 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 comes 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 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.

2. The list of eligible MDBs currently eligible for 0% risk weight comprises:

   - International Bank for Reconstruction and Development (IBRD)
   - International Finance Corporation (IFC)
   - Asian Development Bank (ADB)
   - African Development Bank (AfDB)

- European Bank for Reconstruction and Development (EBRD)
- Inter-American Development Bank (IADB)
- European Investment Bank (EIB)
- European Investment Fund (EIF)
- Nordic Investment Bank (NIB)
- Caribbean Development Bank (CDB)
- Islamic Development Bank (IDB)
- Council of Europe Development Bank (CEDB)

Annex 5

Descriptions of Off-balance Sheet Items

Direct Credit Substitutes

1. Direct credit substitutes are irrevocable off-balance sheet obligations that carry the same credit risk as a direct extension of credit. With a direct credit substitute, the risk of loss to the licensee is directly dependent on the creditworthiness of the counterparty.

2. Examples of direct credit substitutes include:

   a. Guarantees given on behalf of customers to stand behind the financial obligations of the customer and to satisfy these obligations should the customer fail to do e.g. guarantees of:

      - Payment for existing indebtedness for services;
      - Payment with respect to a purchase agreement;
      - Lease, loan or mortgage payments;
      - Payment of uncertified cheques;
      - Remittance of (sales) tax to the government;
      - Payment of an unfounded pension liability;
      - Reinsurance of financial obligations.

   b. Standby letters of credit or other equivalent irrevocable obligations, serving as financial guarantees, such as letters of credit supporting the issue of commercial paper.
   c. Risk participation in bankers' acceptances and risk participation in financial letters of credit. Risk participation constitutes guarantees by the participating institutions such that, if there is a default by the underlying obligor, they will indemnify the selling institution for the full principal and interest attributable to them.
   d. Securities lending transactions, where the institution is liable to its customer for any failure to recover the securities lent; and
   e. Credit derivatives in the banking book where a licensee is selling credit protection.

Transaction-related contingencies

3. These are contingent liabilities that involve an irrevocable obligation to pay a third party in the event that a counterparty does not fulfil or perform its contractual obligation. Performance-related guarantees specifically exclude items relating to non-performance of financial obligations.

4. 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 undertakings. These include arrangements backing:

      - subcontractors' and suppliers' performance;
      - labour and material contracts;
      - delivery of merchandise, bids or tender bonds;
      - guarantees of repayment of deposits or prepayments in cases of non-performance.

   b. customs and excise bonds. The amount recorded for such bonds should be the reporting institution's maximum liability.

Trade-related contingencies

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

6. 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.

Sale and Repurchase Agreements

7. 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 form the original buyer at a pre-determined price. A reverse repurchase agreement consists of the purchase of a security or other asset with the simultaneous commitment by the buyer that, after a stated period of time, the buyer will resell the asset to the original seller at a

pre-determined price. In any circumstance, where they are not reported on-balance sheet, they should be reported as an off-balance sheet exposure.

Forward Asset Purchases

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

Forward/Forward Deposits

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

Partly Paid Shares and Securities

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

Note Issuance/Revolving Underwriting Facilities

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

Future/Forward Rate Agreements

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

Interest Rate Swaps

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

interest payments may be provided in return for other variable interest rate payments.

Interest Rate Options and Currency Options

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

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

Forward Foreign Exchange Contracts

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

Cross Currency Swaps

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

Cross Currency Interest Rate Swaps

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

Financial and Foreign Currency Futures

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

Precious Metals Contracts and Financial Contracts on Commodities

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

Non-equity Warrants

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

Annex 6

Table 1: Calculating Credit Equivalent Amounts for Derivative Contracts

Type of Contract	Notional Principal	CCF	Potential Exposure	Mark-To-Market	Current Exposure	Credit Equivalent Amount
Total						

Table 2: Calculating Net Replacement Costs

		Counterparty 1			
Transaction	Notional	Add-on Factor	Potential Credit Exposure	Positive Replacement Cost	Negative Replacement Cost
1					
2					
Total			$PFCE_{gross}$	R+	R-

Annex 7

Capital Treatment for Failed Trades and Non-DvP Transactions

I. Overarching principles

1. Licensee should develop, implement and improve systems for tracking and monitoring the credit risk exposures arising from unsettled and failed transactions as appropriate for producing management information that facilitates action on a timely basis.

2. Transactions settled through a delivery-versus-payment system (DvP), providing simultaneous exchanges of securities for cash, expose firms to a risk of loss on the difference between the transaction valued at the agreed settlement price and the transaction valued at current market price (i.e. positive current exposure). Transactions where cash is paid without receipt of the corresponding receivable (securities, foreign currencies, gold, or commodities) or, conversely, deliverables were delivered without receipt of the corresponding cash payment (non-DvP, or free-delivery) expose firms to a risk of loss on the full amount of cash paid or deliverables delivered. The current rules set out specific capital charges that address these two kinds of exposures.

3. The following capital treatment is applicable to all transactions on securities, foreign exchange instruments, and commodities that give rise to a risk of delayed settlement or delivery. This includes transactions through recognised clearing houses that are subject to daily mark-to-market and payment of daily variation margins and that involve a mismatched trade. Repurchase and reverse-repurchase agreements as well as securities lending and borrowing that have failed to settle are excluded from this capital treatment.

4. In cases of a system wide failure of a settlement or clearing system, the Bank may waive capital charges until the situation is rectified.

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

II. Capital requirements

6. For DvP transactions, if the payments have not yet taken place five business days after the settlement date, licensees must calculate a capital charge by multiplying the positive current exposure of the transaction by the appropriate factor, according to the Table below

Number of working days after the agreed settlement date	Corresponding risk multiplier
From 5 to 15	8%
From 16 to 30	50%
From 31 to 45	75%
46 or more	100%

7. For non-DvP transactions (i.e. free deliveries), after the first contractual payment/delivery leg, a licensee, using the standardised risk weights set forth in this Guideline, should treat its exposure as a loan if it has made the payment but the second leg has not been received by the end of the business day. However, when exposures are not material, banks may choose to apply a uniform 100% risk-weight to these exposures, in order to avoid the burden of a full credit assessment. If five business days after the second contractual payment/delivery date the second leg has not yet effectively taken place, the licensee that has made the first payment leg will deduct from capital the full amount of the value transferred plus replacement cost, if any. This treatment will apply until the second payment/delivery leg is effectively made.

Annex 8

Operational Requirements for Credit Risk Mitigation

Collateral

1. To obtain capital relief for collateral, under either the simple or comprehensive approach, a licensee must:

    a. Have a formal written contractual agreement between the itself or the party holding the claim and the party lodging the collateral which establishes the licensee's direct, explicit, irrevocable and unconditional recourse to the collateral;
    b. satisfy itself that the documentation is binding on all parties and legally enforceable in all relevant jurisdictions;
    c. ensure that the legal mechanism by which collateral is pledged or transferred grants 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);
    d. take all steps necessary to fulfil those requirements under the law applicable to its interest in the collateral for obtaining and maintaining an enforceable security interest, e.g. by registering it with a registrar, or for exercising a right to net or set off in relation to title transfer collateral; and
    e. 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.

2. In order for collateral to provide protection, the credit quality of the counterparty and the value of the collateral must not have a material positive correlation. For example, securities issued by the counterparty ─ or by any related group entity ─ would provide little protection and so would be ineligible.

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

4. The release of collateral must be conditional on the repayment of the exposure. However, collateral may be reduced in proportion to the amount of any reduction in the exposure amount;

5. Cash collateral must not be lodged with an entity other than the licensee except where:

   a. The licensee and the entity holding the collateral belong to the consolidated banking group; and
   b. The entity holding the collateral must be bound to act in accordance with the agreement between the licensee and the party pledging the collateral.

Netting

On-balance sheet netting

6. As noted in paragraph 63 of this Guideline, where a licensee:

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

   It may use the net exposure of loans and deposits as the basis for its capital adequacy calculation, using the formula set out in paragraph 78` of this paper for the comprehensive approach. Assets (loans) are treated as exposures and liabilities (deposits) as collateral. The haircuts will be zero except where a currency mismatch exists. A 10-business day holding period will apply when daily mark-to-market is conducted and all the requirements for the treatment of maturity mismatches must be met.

Operational requirements common to guarantees and credit derivatives

7. A guarantee (counter-guarantee) or credit derivative must represent a direct claim on the protection provider and must be explicitly referenced to specific exposures or a pool of exposures, so that the extent of the cover is clearly defined and incontrovertible. Other than non-payment by a protection purchaser of money due in respect of the credit protection contract it must be irrevocable; there must be no clause in the contract that would allow the protection provider unilaterally to cancel the credit cover or that would increase the effective cost of cover as a result of deteriorating credit quality in the hedged exposure. It must also be unconditional; there should be no clause in the protection contract outside the direct control of the bank that could prevent the protection provider from being obliged to pay out in a timely manner in the event that the original counterparty fails to make the payment(s) due.

Additional operational requirements for guarantees

8. In addition to the legal certainty requirements in paragraph 64 of the paper, in order for a guarantee to be recognised, the following conditions must be satisfied:

    a. On the qualifying default/non-payment of the counterparty, the licensee 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 licensee, or the guarantor may assume the future payment obligations of the counterparty covered by the guarantee. The licensee 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. 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. However, where a guarantee covers payment of principal only, interest and other uncovered payments should be treated as an unsecured amount in accordance with paragraph 16 below.

Additional operational requirements for credit derivatives

9. In order for a credit derivative contract to be recognised, the following conditions must be satisfied:

(a) failure to pay the amounts due under terms of the underlying obligation that are in effect at the time of such failure (with a grace period that is closely in line with the grace period in the underlying obligation);

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

- restructuring of the underlying obligation involving forgiveness or postponement of principal, interest or fees that results in a credit loss event (i.e. charge-off, specific provision or other similar debit to the profit and loss account). When restructuring is not specified as a credit event, refer to paragraph 10 below.

(b) If the credit derivative covers obligations that do not include the underlying obligation, section (g) below governs whether the asset mismatch is permissible.

(c) The credit derivative shall not terminate prior to expiration of any grace period required for a default on the underlying obligation to occur as a result of a failure to pay, subject to the provisions of paragraph 93 of this guideline.

(d) Credit derivatives allowing for cash settlement are recognised for capital purposes insofar as a robust valuation process is in place in order to estimate loss reliably. There must be a clearly specified period for obtaining post-credit-event valuations of the underlying obligation. If the reference obligation specified in the credit derivative for purposes of cash settlement is different than the underlying obligation, section (g) below governs whether the asset mismatch is permissible.

(e) If the protection purchaser's right/ability to transfer the underlying obligation to the protection provider is required for settlement, the terms of the underlying obligation must provide that any required consent to such transfer may not be unreasonably withheld.

(f) The identity of the parties responsible for determining whether a credit event has occurred must be clearly defined. This determination must not be the sole responsibility of the protection seller. The protection buyer must have the right/ability to inform the protection provider of the occurrence of a credit event.

(g) A mismatch between the underlying obligation and the reference obligation under the credit derivative (i.e. the obligation used for purposes of determining cash settlement value or the deliverable obligation) is permissible if (1) the reference obligation ranks pari passu with or is junior to the underlying obligation, and (2) the underlying obligation and reference obligation share the same obligor (i.e. the same legal entity) and legally enforceable cross-default or cross-acceleration clauses are in place.

(h) A mismatch between the underlying obligation and the obligation used for purposes of determining whether a credit event has occurred is permissible if (1) the latter obligation ranks pari passu with or is junior to the underlying obligation, and (2) the underlying obligation and reference obligation share the same obligor (i.e. the same legal entity) and legally enforceable cross-default or cross-acceleration clauses are in place.

10. When the restructuring of the underlying obligation is not covered by the credit derivative, but the other requirements in paragraph 9 above 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.

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

protection will not be recognised. The treatment of first-to-default and second-to-default products is covered separately in paragraphs 97 to100 of this guideline.

12. Other types of credit derivatives will not be eligible for recognition at this time.[26]

13. Credit protection given by the following entities will be recognised:

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

Risk weights

14. 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.

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

Proportional cover

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

Currency mismatches

17. 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 HFX, i.e.

[26] Cash funded credit linked notes issued by the bank against exposures in the banking book which fulfil the criteria for credit derivatives will be treated as cash collateralised transactions.

GA = G x (1 – HFX)

where:

G	=	nominal amount of the credit protection
HFX	=	haircut appropriate for currency mismatch between the credit protection and underlying obligation.

18. The appropriate haircut for a currency mismatch based on a 10-business day holding period (assuming daily marking-to-market) is 8%. The haircuts must be scaled up using the square root of time formula, depending on the frequency of revaluation of the credit protection as described in paragraph 88 of the paper.

Sovereign guarantees and counter-guarantees

19. The Bank has agreed that exposures of Barbados-incorporated licensees to their sovereign and central bank of incorporation which are denominated and funded in domestic currency can receive a zero percent risk weight. This treatment also applies to portions of claims guaranteed by the Government of Barbados or Central Bank of Barbados where the guarantee is denominated in Barbados dollars and the exposure is funded in that currency. A claim which is indirectly guaranteed by the Government or Central Bank may be similarly treated provided:

20.
- the sovereign counter-guarantee covers all the credit risk elements of the claim;
- both the original guarantee and the counter-guarantee meet all operational requirements for guarantees, except that the counter-guarantee need not be direct and explicit to the original claim; and
- the cover is robust, with no historical evidence suggesting that the coverage of the counter-guarantee is less than effectively equivalent to that of a direct sovereign guarantee.

Annex 9

Eligible Financial Collateral

Simple Approach

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

   a. Cash

   b. Certificates of deposit or comparable instruments issued by the licensee on deposit with the licensee which is incurring the counterparty exposure.[27,28]

   c. Gold.

   d. Debt securities issued or guaranteed by the Government of Barbados.

   e. Debt securities rated by a recognised external credit assessment institution where these are either:

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

   f. Debt securities not rated by a recognised external credit assessment institution where these are

      i. issued by a sovereign; and
      ii. the security and the exposure are denominated in the domestic currency of the sovereign;

[27] Cash funded credit linked notes issued by the bank against exposures in the banking book which fulfil the criteria for credit derivatives will be treated as cash collateralised transactions.

[28] 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.

g. Debt securities not rated by a recognised external credit assessment institution where these are:

    i. issued by a bank; and
    ii. listed on a recognised exchange; and
    iii. classified as senior debt; and
    iv. all rated issues of the same seniority by the issuing bank must be rated at least BBB- or A-3/P-3 by a recognised external credit assessment institution; and
    v. the licensee 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. the Bank has confirmed in writing that it is sufficiently confident about the market liquidity of the security

h. Equities (including convertible bonds) that are included in a main index.

i. Undertakings for Collective Investments in Transferable Securities (UCITS)[29] 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.

Collateral in the form of securities issued by the counterparty to the credit exposure (or by any person or entity related or associated with the counterparty) is not eligible collateral.

Comprehensive Approach

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

    a. All of the instruments in paragraph 1 above;
    b. Equities (including convertible bonds) which are not included in a main index but which are listed on a recognised exchange;
    c. UCITS/mutual funds which include such equities[30].

[29 , 42] Use or partial use by a UCITS/mutual fund of derivatives solely to hedge instruments listed in this Annex does not prevent its eligibility.