# SUPERVISION GUIDELINE NO. 14

**ISSUED UNDER THE AUTHORITY OF PART II, SECTION 7(4) OF THE FINANCIAL INSTITUTIONS ACT 1995, (NO. 1 OF 1995)**

# CAPITAL ADEQUACY FRAMEWORK

## Minimum Capital Requirements

### Pillar I of the Basel II/III Framework

**Bank of Guyana**

**December 02, 2019**

## ADVISORY

Supervision Guideline No. 14 – Capital Adequacy Framework Minimum Capital Requirements Pillar I of the Basel II/III Framework will run concurrently with the existing Supervision Guideline No. 4 - Capital Adequacy Ratio until such time that the Bank of Guyana withdraws Supervision Guideline No. 4 – Capital Adequacy Ratio.

## CONTENTS

## Tables

## GLOSSARY

| | |
|---|---|
| AT1 | Additional Tier 1 |
| BCBS | Basel Committee on Banking Supervision |
| BI | Business Indicator |
| BIC | Business Indicator Component |
| BoG | Bank of Guyana |
| CAR | Capital Adequacy Ratio |
| CCF | Credit Conversion Factor |
| CCR | Counterparty Credit Risk |
| CEA | Credit Equivalent Amount |
| CET | Common Equity Tier 1 |
| DTAs | Deferred Tax Assets |
| FIA | Financial Institutions Act |
| LDFIs | Licensed Depository Financial Institutions |
| LTV | Loan-to-Value |
| OBS | Off-Balance Sheet |
| OTC | Over The Counter |
| RWA | Risk Weighted Assets |
| SFT | Securities Financing Transactions |
| SA | Standardized Approach |

## I. SCOPE OF APPLICATION

1. The Bank of Guyana (hereinafter also referred to as the "Bank" or "BoG" interchangeably), in furtherance of its responsibility for the regulation and supervision of licensees under the Financial Institutions Act (FIA) 1995, has developed this Guideline to provide guidance to licensees on how to calculate the minimum capital requirements for credit, market and operational risk.

2. The scope of application of this Guideline includes, on a consolidated basis, all Licensed Depository Financial Institutions, (LDFIs) incorporated in Guyana and supervised by the Bank of Guyana as required by the FIA. The requirement also include, on a fully consolidated basis, any holding company that is the parent entity within a banking group. The capital guidelines apply to every tier within a banking group, and also on a consolidated basis to ensure that the risk of the whole banking group is fully captured.

3. All financial institutions licensed under the FIA must provide the Bank of Guyana with reports on the components of their capital adequacy calculations on the schedule provided on a quarterly basis (or more frequently if required.)

## II. CALCULATION OF MINIMUM CAPITAL REQUIREMENTS

4. All licensees are required to maintain at least a capital adequacy ratio (CAR) of at least 8% at all times. The capital adequacy ratio is calculated by dividing a licensee's total eligible capital (as defined in Section III) by its total risk-weighted assets (RWA). Total risk weighted assets are determined by multiplying the capital requirements for market risk and operational risk by 12.5 (i.e. the reciprocal of the minimum capital ratio of 8%) and adding the resulting figures to the sum of risk weighted assets for credit risk.

5. Each licensee must maintain a minimum ratio of eligible Tier 1 capital to total risk-weighted assets of 6%. The predominant form of Tier 1 capital must be common equity, by maintaining a minimum of 4.5% of risk weighted assets consisting of Common Equity Tier 1 (CET 1) capital. These relationships can be expressed by the following formulae:

$$Minimum\ Capital\ Adequacy\ Ratio = \frac{Total\ regulatory\ capital}{Total\ RWA} \geq 8\%$$

$$Tier\ 1\ ratio = \frac{Tier\ 1\ capital}{Total\ RWA} \geq 6\%$$

$$CET\ 1\ ratio = \frac{CET\ 1\ capital}{Total\ RWA} \geq 4{,}5\%$$

## III. DEFINITION OF CAPITAL

6. This Section provides a framework for the constituents of capital for licensees in line with the Basel III requirements, by outlining the characteristics that an instrument must have in order to qualify and the adjustments to be made in determining the regulatory capital of all licensees.

### A. Components of Capital

#### *1. Elements of capital*

7. Total regulatory capital shall consist of the sum of the following elements:

- Tier 1 Capital (going-concern capital), which will comprise:
    - Common Equity Tier 1 (CET1) capital; and
    - Additional Tier 1 (AT1) capital.
- Tier 2 capital (gone-concern capital).

8. Going-concern capital refers to capital against which losses can be written off while the licensee continues to operate. Gone-concern capital refers to capital that would not absorb losses until such time as a licensee is wound up or the capital is otherwise written off or converted to ordinary shares.

9. For each of the categories above, there is an individual set of criteria that the instruments are required to meet before they can be included in the relevant category.

#### *2. Limits and Minima*

10. All elements above are net of the associated regulatory adjustments and are subject to the following restrictions:

- CET 1 capital must be at least 4.5% of risk-weighted assets at all times
- Tier 1 capital must be at least 6% of risk-weighted assets at all times
- Total Capital (Tier 1 Capital plus Tier 2 Capital) must be at least 8% of risk weighted assets at all times.

11. For the purpose of determining the capital adequacy ratio of a licensed financial institution, the total capital of the licensee shall be the sum of Tier 1 and Tier 2 Capital net of regulatory adjustments applied.

12. A licensee must ensure that any component of capital included in its capital base satisfies, in both form and substance, all applicable requirements in this framework for the particular category of capital in which it is included.

## B. Constituents of Capital

### *1. Common Equity Tier 1 (CET1)*

13. Common Equity Tier 1 capital consists of the sum of the following elements:

- Common shares issued by the licensed financial institution that meet the criteria for classification as common shares for regulatory purposes as required below,
- Stock surplus (share premium) resulting from the issue of instruments included in Common Equity Tier 1 capital;
- Retained earnings, after deducting any interim or final dividends which have been declared by the Board of the reporting licensee or banking group entity on any class of shares and any interim losses incurred since the end of the last financial reporting period;
- Accumulated other comprehensive income and other disclosed reserves[1];
- Common shares issued by consolidated subsidiaries of the licensed financial institution and held by third parties (i.e. minority interest) that meet the criteria for inclusion in Common Equity Tier 1 capital; and
- Regulatory adjustments applied in the calculation of Common Equity Tier 1, as required below.

#### *i. Criteria for classification as common shares for regulatory capital purposes*

14. For an instrument to be included in Common Equity Tier 1 capital it must meet all of the criteria that follow.

- Represents the most subordinated claim in liquidation of the licensed financial institution.
- The investor is entitled to a claim on the residual assets that is proportional with its share of issued capital, after all senior claims have been repaid in liquidation (i.e. has an unlimited and variable claim, not a fixed or capped claim).
- The principal is perpetual and never repaid outside of liquidation (setting aside discretionary repurchases or other means of effectively reducing capital in a discretionary manner that is allowable under relevant law).
- The licensee does nothing to create an expectation at issuance that the instrument will be bought back, redeemed or cancelled nor do the statutory or contractual terms provide any feature which might give rise to such an expectation.
- Distributions are paid out of distributable items (retained earnings included). The level

[1] There is no adjustment applied to remove from Common Equity Tier 1 unrealized gains or losses recognized on the balance sheet.

of distributions is not in any way tied or linked to the amount paid in at issuance and is not subject to a contractual cap (except to the extent that a licensed financial institution is unable to pay distributions that exceed the level of distributable items).

- There are no circumstances under which the distributions are obligatory. Nonpayment is therefore not an event of default.
- Distributions are paid only after all legal and contractual obligations have been met and payments on more senior capital instruments have been made. This means that there are no preferential distributions, including in respect of other elements classified as the highest quality issued capital.
- It is the form of issued capital that takes the first and proportionately greatest share of any losses as they occur.[2] Within the highest quality capital, each instrument absorbs losses on a going concern basis proportionately and pari passu with all the others.
- The paid-in amount is recognized as equity capital (i.e. not recognized as a liability) for determining balance sheet insolvency.
- The paid-in amount is classified as equity under the relevant accounting standards.
- It is directly issued and paid-in[3] and the licensed financial institution cannot directly or indirectly have funded the purchase of the instrument.
- The paid in amount is neither secured nor covered by a guarantee of the issuer or related entity[4] or subject to any other arrangement that legally or economically enhances the seniority of the claim.
- It is only issued with the approval of the owners of the issuing licensed financial institution, either given directly by the owners or, if permitted by applicable law, given by the Board of Directors or by other persons duly authorized by the owners.
- It is clearly and separately disclosed as equity on the licensed financial institution's balance sheet prepared in accordance with the relevant accounting standards.

### *ii. Regulatory Adjustments in the Calculation of CET1 Capital*

15. A licensee must make the following regulatory adjustments to determine CET1 capital at the solo or consolidated level, as the case may be. Assets deducted from CET1 capital should not be included in risk-weighted assets.

#### *ii.a. Goodwill and Other Intangibles*

16. Goodwill and all other intangibles[5] must be deducted in the calculation of Common Equity Tier 1, including any goodwill included in the valuation of significant investments in the

[2] In cases where capital instruments have a permanent write-down feature, this criterion is still deemed to be met by common shares.

[3] Paid-in capital generally refers to capital that has been received with finality by the institution, is reliably valued, fully under the bank's control and does not directly or indirectly expose the bank to the credit risk of the investor.

[4] A related entity can include a parent company, a sister company, a subsidiary or any other affiliates. A holding company is a related entity

[5] Intangible assets include but are not limited to copyright, patents, intellectual property and capitalized information technology software costs.

capital of banking, financial and insurance entities that are outside the scope of regulatory consolidation. With the exception of mortgage servicing rights, the full amount is to be deducted net of any associated deferred tax liability which would be extinguished if the intangible assets become impaired or derecognized under the relevant accounting standards. The amount to be deducted in respect of mortgage servicing rights is set out in the threshold deductions section below.

17. Subject to prior supervisory approval, institutions that report under local GAAP may use the IFRS definition of intangible assets to determine which assets are classified as intangible and are thus required to be deducted.

*ii.b Deferred Tax Assets*

18. Deferred tax assets (DTAs) that rely on future profitability of the licensed financial institution to be realized are to be deducted in the calculation of CET1 capital. Deferred tax assets may be netted with associated deferred tax liabilities (DTLs) only if the DTAs and DTLs relate to taxes levied by the same taxation authority and offsetting is permitted by the relevant taxation authority. Where these DTAs relate to temporary differences (e.g. allowance for credit losses) the amount to be deducted is set out in the "threshold deductions" section below. All other such assets, e.g. those relating to operating losses, such as the carry forward of unused tax losses, or unused tax credits, are to be deducted in full net of deferred tax liabilities as described above. The DTLs permitted to be netted against DTAs must exclude amounts that have been netted against the deduction of goodwill, intangibles and defined benefit pension assets, and must be allocated on a pro rata basis between DTAs subject to the threshold deduction treatment and DTAs that are to be deducted in full.

19. DTAs arising from any other source will be required to be deducted from CET1 capital as a prudent measure. An over installment of tax or, in some jurisdictions, current year tax losses carried back to prior years may give rise to a claim or receivable from the government or local tax authority. Such amounts are typically classified as current tax assets for accounting purposes. The recovery of such a claim or receivable would not rely on the future profitability of the licensed financial institution and would be assigned the relevant sovereign risk weighting.

*ii.c. Cash Flow Hedge Reserve*

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

21. This treatment specifically identifies the element of the cash flow hedge reserve that is to be derecognized for prudential purposes. It removes the element that gives rise to artificial volatility in common equity, as in this case the reserve only reflects one half of the picture (the fair value of the derivative, but not the changes in fair value of the hedged future cash flow).

*ii.c. Gain on Sale Related to Securitization Transactions*

22. Increases in equity capital resulting from securitization transactions (e.g., capitalized future margin income, gains on sale) should be deducted in the calculation of CET 1 capital.

*ii.d. Cumulative Gains and Losses Due to Changes in Own Credit Risk on Fair Valued Financial Liabilities*

23. Derecognize in the calculation of CET1 capital, all unrealized gains and losses that have resulted from changes in the fair value of liabilities that are due to changes in the licensed financial institution's own credit risk.

*ii.e. Defined Benefit Pension Fund Assets and Liabilities*

24. Defined benefit pension fund liabilities, as included on the balance sheet, must be fully recognized in the calculation of Common Equity Tier 1 (i.e. Common Equity Tier 1 cannot be increased through derecognizing these liabilities). For each defined benefit pension fund that is an asset on the balance sheet, the asset should be deducted in the calculation of Common Equity Tier 1 net of any associated deferred tax liability which would be extinguished if the asset should become impaired or derecognized under the relevant accounting standards. Assets in the fund to which the licensee has unrestricted and unfettered access can, with supervisory approval, offset the deduction. Such offsetting assets should be given the risk weight they would receive if they were owned directly by the licensee.

*ii.f. Investment in Own Shares (Treasury Stock)*

25. All of a licensee's investments in its own common shares, whether held directly or indirectly, will be deducted in the calculation of Common Equity Tier 1 (unless already derecognized under the accounting standards). In addition, any own stock which the licensee could be contractually obliged to purchase should be deducted in the calculation of Common Equity Tier 1. The treatment described will apply irrespective of the location of the exposure in the banking book or the trading book. In addition:

- Gross long positions may be deducted net of short positions in the same underlying exposure only if the short positions involve no counterparty risk.
- Licensees should look through holdings of index securities to deduct exposures to own shares. However, gross long positions in own shares resulting from holdings of index securities may be netted against short position in own shares resulting from short positions in the same underlying index. In such cases the short positions may involve counterparty risk (which will be subject to the relevant counterparty credit risk charge).

26. This deduction is necessary to avoid the double counting of a licensee's own capital. This deduction is only relevant where recognition on the balance sheet is permitted by the accounting standards. The treatment seeks to remove the double counting that arises from direct

holdings, indirect holdings via index funds and potential future holdings as a result of contractual obligations to purchase own shares.

27. Following the same approach outlined above, licensees must deduct investments in their own Additional Tier 1 in the calculation of their Additional Tier 1 capital and must deduct investments in their own Tier 2 in the calculation of their Tier 2 capital.

*ii.g. Reciprocal Cross Holdings in the Capital of Banking, Financial and Insurance Entities*

28. Reciprocal cross holdings in common share capital (e.g. bank A holds shares of bank B and bank B in return holds shares of bank A) that are designed to artificially inflate the capital position of the licensed financial institution shall be fully deducted in the calculation of CET1 capital. This means the deduction should be applied to the same component of capital for which the capital would qualify if it was issued by the licensee itself.

*ii.h. Investments in the capital of banking, financial and insurance entities that are outside the scope of regulatory consolidation and where the licensee does not own more than 10% of the issued common share capital of the entity*

29. The regulatory adjustment described in this section applies to investments in the capital of banking, financial and insurance entities that are outside the scope of regulatory consolidation and where the licensee does not own more than 10% of the issued common share capital of the entity. In addition:

- Investments include direct, indirect[6] and synthetic holdings of capital instruments. For example, a licensee should look through holdings of index securities to determine their underlying holdings of capital.
- Holdings in both the banking book and trading book are to be included. Capital includes common stock and all other types of cash and synthetic capital instruments (e.g. subordinated debt). It is the net long position that is to be included (i.e. the gross long position net of short positions in the same underlying exposure where the maturity of the short position either matches the maturity of the long position or has a residual maturity of at least one year); and
- Underwriting positions held for five working days or less can be excluded. Underwriting positions held for longer than five working days must be included.
- If the capital instrument of the entity in which the licensee has invested does not meet the criteria for CET1, AT1, or Tier 2 capital of the licensee, the capital is to be considered common shares for the purposes of this regulatory adjustment.[7]
- The licensee may, with the prior approval of the Bank of Guyana, temporarily exclude certain investments where these have been made in the context of resolving or providing

[6] Indirect holdings are exposures or parts of exposures that, if a direct holding loses its value, will result in a loss to the bank substantially equivalent to the loss in value of the direct holding.
[7] If the investment is issued out of a regulated financial entity and not included in regulatory capital in the relevant sector of the financial entity, it is not required to be deducted.

financial assistance to reorganize a distressed institution.

30. If the total of all holdings listed in paragraph above in aggregate exceed 10% of the licensee's common equity (after applying all other regulatory adjustments in full) then the amount above 10% is required to be deducted, applying a corresponding deduction approach. This means the deduction should be applied to the same component of capital for which the capital would qualify if it was issued by the licensee itself. Accordingly, the amount to be deducted is to be calculated as follows:

- Aggregate all of the licensee's holdings which in aggregate exceed 10% of the licensee's common equity (as per above) multiplied by the common equity holdings as a percentage of the total capital holdings (i.e. CET 1 capital).
- The same approach is to be applied for a licensee's non-significant capital investments in financial sector entities that are to be deducted from AT 1 capital and Tier 2 capital.

31. If a licensee is required to make a deduction from a particular tier of capital and it does not have sufficient capital to make that deduction, the shortfall will be deducted from the next higher tier of capital (for example, if an institution does not have sufficient AT 1 capital to satisfy the deduction, the shortfall will be deducted from CET 1 capital).

32. The amounts of such capital investments that are below the threshold (i.e. do not exceed the 10%) and are not deducted shall continue to be risk weighted according to the banking and trading book rules.

*ii.i. Significant investments in the capital of banking, financial and insurance entities that are outside the scope of regulatory consolidation*

33. The regulatory adjustment described in this section applies to investments in the capital of banking, financial and insurance entities that are outside the scope of regulatory consolidation where the licensee owns more than 10% of the issued common share capital of the issuing entity or where the entity is an affiliate[8] of the licensee. In addition:

- Investments include direct, indirect and synthetic holdings of capital instruments. For example, licensees should look through holdings of index securities to determine their underlying holdings of capital.
- Holdings in both the banking book and trading book are to be included. Capital includes common stock and all other types of cash and synthetic capital instruments (e.g. subordinated debt). It is the net long position that is to be included (i.e. the gross long position net of short positions in the same underlying exposure where the maturity of the short position either matches the maturity of the long position or has a residual maturity of at least one year).

[8] An affiliate of a bank is defined as a company that controls, or is controlled by, or is under common control with, the bank. Control of a company is defined as (1) ownership, control, or holding with power to vote 20% or more of a class of voting securities of the company; or (2) consolidation of the company for financial reporting purposes.

- Underwriting positions held for five working days or less can be excluded. Underwriting positions held for longer than five working days must be included.
- If the capital instrument of the entity in which the licensee has invested does not meet the criteria for Common Equity Tier 1, Additional Tier 1, or Tier 2 capital of the licensee, the capital is to be considered common shares for the purposes of this regulatory adjustment.
- Licensees may, with the prior approval of the bank of Guyana, temporarily exclude certain investments where these have been made in the context of resolving or providing financial assistance to reorganize a distressed institution.

34. All investments included above that are not common shares must be fully deducted from the corresponding tier of capital. This means the deduction should be applied to the same tier of capital for which the capital would qualify if it were issued by the institution itself (e.g. investments in the Additional Tier 1 capital of other entities must be deducted from the institution's Additional Tier 1 capital).

35. If a licensee is required to make a deduction from a particular tier of capital and it does not have sufficient capital to make that deduction, the shortfall will be deducted from the next highest tier of capital (e.g. if an institution does not have sufficient Additional Tier 1 capital to satisfy the deduction, the shortfall will be deducted from Common Equity Tier 1 capital).

36. Investments included above that are common shares will be subject to the threshold deductions as described below.

*ii.j. Threshold deductions*

37. Instead of a full deduction, the following items may each receive limited recognition when calculating Common Equity Tier 1, with recognition capped at 10% of the licensee's common equity (after the application of all regulatory adjustments):

- Significant investments in the common shares of unconsolidated financial institutions (licensees, insurance and other financial entities where the licensee owns more than 10% of common equity)
- Mortgage servicing rights (MSRs); and
- DTAs that arise from temporary differences.

38. A licensee must deduct the amount by which the aggregate of the three items above exceeds 15% of its common equity component of Tier 1 capital, calculated after the deduction of these items and of all other regulatory adjustments applied in the calculation of Common Equity Tier 1 capital.

39. The amount of the three items that are not deducted in the calculation of CET 1 capital will be risk weighted at 250%.

*ii.k. Other Adjustments*

40. A licensee shall make any other deductions required as may be required by the Bank of Guyana.

### *2. Additional Tier 1 Capital (AT1)*

41. Additional Tier 1 capital consists of the sum of the following elements:

- Instruments issued by the licensee that meet the criteria for inclusion in AT1 capital (and are not included in CET 1);
- Stock surplus (share premium) resulting from the issue of instruments included in AT1 capital;
- Instruments issued by consolidated subsidiaries of the licensee and held by third parties that meet the criteria for inclusion in AT 1 capital and are not included in CET 1; and
- Regulatory adjustments applied in the calculation of AT1 Capital.

### *i. Criteria for inclusion in Additional Tier 1 Capital*

42. An instrument must satisfy the following criteria to be included in Additional Tier 1 Capital.

- The instrument is issued and fully paid-in in cash;
- Subordinated to depositors, general creditors and subordinated debt of the licensee;
- Is neither secured nor covered by a guarantee of the issuer or related entity or other arrangement that legally or economically enhances the seniority of the claim vis-à-vis the licensee's depositors and/or creditors.
- Is perpetual, i.e. there is no maturity date and there are no other incentives to redeem.
- May be callable at the initiative of the issuer only after a minimum of five years from the issue date, subject to the following requirements:
    - A call option can be exercised only with the prior approval of the Bank of Guyana;
    - The institution shall not create an expectation that the call option will be exercised; and
    - The institution must not exercise a call option unless:
        - The institution replaces the called instrument with capital of the same or better quality and the replacement of this capital is done at conditions which are sustainable for the income capacity of the licensee; or
        - The institution demonstrates that its capital position is well above the minimum capital requirements after the call option is exercised.
- Any repayment of principal (e.g. through repurchase or redemption) must be with prior approval of the Bank of Guyana and licensees should not assume or create market expectations that supervisory approval will be given;
- With regard to dividend or coupon discretion;
    - the institution must have full discretion at all times to cancel distributions/payments;
    - cancellation of discretionary payments must not be an event of default;

    - institution must have full access to cancelled payments to meet obligations as they fall due;
    - cancellation of distributions/payments must not impose restrictions on the institution except in relation to distributions to common stockholders;
- Dividends/coupons on the instrument must be paid out of distributable items;
- The instrument cannot have a credit sensitive dividend feature, that is a dividend/coupon that is reset periodically based in whole or in part on the credit standing of the institution or the group or any related party;
- The instrument cannot contribute to liabilities exceeding assets if such a balance sheet test forms part of national insolvency law governing the provisions of the capital instrument;
- Where the instrument is classified as a liability for accounting purposes, it must have principal loss absorption through either (i) conversion to common shares at an objective pre-specified trigger point; or (ii) a write-down mechanism which allocates losses to the instrument at a pre-specified trigger point. The write-down will have the following effects:
    - Reduces the claim of the capital instrument in liquidation of the licensee;
    - Reduces the amount to be repaid when a call option is exercised; and
    - Partially or fully reduces dividend or coupon payments on the capital instrument.
- Neither the licensee nor a related party over which the licensee exercises control or significant influence can have purchased the instrument, nor can the licensee directly or indirectly have funded the purchase of the instrument.
- The instrument cannot have any features that hinder recapitalization, such as provisions that require the issuer to compensate investors if a new instrument is issued at a lower price during a specified time frame.
- If the instrument is not issued out of an operating entity or the holding company in the consolidated group (e.g. a special purpose vehicle – "SPV"), proceeds must be immediately available without limitation to an operating entity[9] or the holding company in the consolidated group in a form which meets or exceeds all of the other criteria for inclusion in AT1 capital.
- The main features of the capital instruments are disclosed clearly and accurately.
- The agreement governing the issuance of the capital instrument shall not be changed without the prior approval of the bank of Guyana where such proposed changes could impact its eligibility as AT1 Capital.

### *ii. Regulatory Adjustments to Additional Tier 1 Capital*

43. A licensee shall apply the following regulatory adjustments in the calculation of AT1 Capital at the solo or consolidated level, as the case may be.

44. Where the amount of AT1 Capital is insufficient to cover the amount of deductions required to be made from this category of capital, the shortfall must be deducted from CET1 Capital.

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

*ii.a. Investment in own Additional Tier 1 Capital*

45. Investments in the licensee's own AT1 capital instruments, whether held directly or indirectly by the institution or any of its banking group entities, shall be deducted in the calculation of AT1 Capital. Any AT1 capital instruments, which the reporting licensee or any of its banking group entities could be contractually obliged to purchase, shall also be included in the deduction. This adjustment shall apply to exposures in both the banking book and trading books.

*ii.b. Investments (significant and non-significant investments) in the capital of banking, financial and insurance entities that are outside the scope of regulatory consolidation*

46. These comprise of direct, indirect and synthetic holdings of AT1 Capital instruments in banking, financial and insurance entities. This includes:

- Holdings of AT1 Capital instruments held in the banking book;
- Net long positions[10] in AT1 Capital Instruments[11] held in the trading book; and
- Underwriting positions in AT1 Capital instruments held for more than five working days.

47. The amount of such capital investments to be deducted in the calculation of AT1 Capital shall be in accordance with paragraphs 33 to 39 above.

### *3. Tier 2 Capital*

48. Tier 2 Capital includes other components of capital that, to varying degrees, fall short of the quality of Tier 1 Capital, but nonetheless contribute to the overall strength of a licensee and its capacity to absorb losses. Tier 2 capital (prior to regulatory adjustments) consists of the sum of the following elements:

- Instruments issued by the institution that meet the criteria for inclusion in Tier 2 capital (and are not included in Tier 1 capital);
- Stock surplus (share premium) resulting from the issue of instruments included in Tier 2 capital;
- Instruments issued by consolidated subsidiaries of the licensee and held by third parties that meet the criteria for inclusion in Tier 2 capital and are not included in Tier 1 capital.
- Certain loan loss provisions such as general provisions/general loan-loss reserve; and

[10] 'Net long positions' are the gross long positions net of short positions in the same underlying exposures where the maturity of the short positions either match the maturity of the long positions or have residual maturities of at least one year. They include netting positions in physical instruments and derivatives over the same underlying exposure (including those associated with looking through holdings of index securities).

[11] This includes investments in capital instruments resulting from the holdings of index securities. Financial institutions are permitted to net long short positions in the same index security subject to maturity matching provisions.

- Regulatory adjustments applied in the calculation of Tier 2 Capital.

### *i. Criteria for inclusion in Tier 2 Capital*

49. The objective of Tier 2 is to provide loss absorption on a gone-concern basis. The following sets out the minimum set of criteria for an instrument to meet or exceed in order for it to be included in Tier 2 capital.

- The instrument should be issued by the institution and fully paid-in in cash.
- The instrument is subordinated to depositors and general creditors of the institution.
- Is neither secured nor covered by a guarantee of the issuer or related entity or other arrangement that legally or economically enhances the seniority of the claim vis-à-vis depositors and general licensee creditors.
- The instrument must have a minimum original maturity of at least five years and there are no step-ups or other incentives to redeem. The amount of the instrument that will be eligible for inclusion in Tier 2 capital shall be amortized on a straight line basis as follows:

| **Years to Maturity** | **Amount Eligible for Inclusion in Tier 2 Capital** |
|---|---|
| 5 years or more | 100 percent |
| 4 years and less than 5 years | 80 percent |
| 3 years and less than 4 years | 60 percent |
| 2 years and less than 3 years | 40 percent |
| 1 year and less than 2 years | 20 percent |
| Less than 1 year | 0 percent |

- The instrument may be callable at the initiative of the issuer only after a minimum of five years, subject to the following requirements:
- To exercise a call option a licensee must receive approval of the Bank of Guyana;
- A licensee must not do anything that creates an expectation that the call will be exercised[12]; and
- Licensees must not exercise a call unless:
    i. They replace the called instrument with capital of the same or better quality and the replacement of this capital is done at conditions which are sustainable for the income capacity of the licensee[13]; or
    ii. The licensee demonstrates that its capital position is well above the minimum capital requirements after the call option is exercised[14].
- The investor must have no rights to accelerate the repayment of future scheduled payments (coupon or principal), except in bankruptcy and liquidation.

[12] An option to call the instrument after five years but prior to the start of the amortization period will not be viewed as an incentive to redeem as long as the bank does not do anything that creates an expectation that the call will be exercised at this point.
[13] Replacement issues can be concurrent with but not after the instrument is called.
[14] Minimum refers to the regulator's prescribed minimum requirement, which may be higher than the Basel III Pillar 1 minimum requirement.

- The instrument cannot have a credit sensitive dividend feature, that is a dividend/coupon that is reset periodically based in whole or in part on the credit standing of the licensee, or the group or any related party.
- Neither the licensee nor a related party over which the licensee exercises control or significant influence can have purchased the instrument, nor can the licensee directly or indirectly have funded the purchase of the instrument.
- If the instrument is not issued out of an operating entity or the holding company in the consolidated group (e.g. a special purpose vehicle – "SPV"), proceeds must be immediately available without limitation to an operating entity[15] or the holding company in the consolidated group in a form which meets or exceeds all of the other criteria for inclusion in Tier 2 Capital.

*i.a Stock surplus (share premium) resulting from the issue of instruments included in Tier 2 capital;*

50. Stock surplus (i.e. share premium) that is not eligible for inclusion in Tier 1, will only be permitted to be included in Tier 2 capital if the shares giving rise to the stock surplus are permitted to be included in Tier 2 capital.

*i.b. General provisions/general loan-loss reserves for licensees using the Standardized Approach for credit risk*

51. Provisions or loan-loss reserves held against future, presently unidentified losses are freely available to meet losses which subsequently materialize and therefore qualify for inclusion within Tier 2. Provisions ascribed to identify deterioration of particular assets or known liabilities, whether individual or grouped, should be excluded. Furthermore, general provisions/general loan-loss reserves eligible for inclusion in Tier 2 will be limited to a maximum of 1.25 percentage points of credit risk weighted assets calculated under the Standardized Approach for credit risk.

### *ii. Regulatory Adjustments to Tier 2 Capital*

52. Net Tier 2 Capital is defined as Tier 2 capital including all regulatory adjustments, but may not be lower than zero. If the total of all Tier 2 deductions exceeds Tier 2 Capital available, the excess must be deducted from Tier 1 Capital.

53. A licensee shall apply the following regulatory adjustments in the calculation of Tier 2 Capital at the solo or consolidated level, as the case may be.

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

*iia. Investment in own Tier 2 Capital*

54. Investments in the institution's own Tier 2 capital instruments, whether held directly or indirectly by the institution or any of its banking group entities, shall be deducted in the calculation of Tier 2 Capital. Any own Tier 2 capital instruments, which the reporting institution or any of its banking group entities could be contractually obliged to purchase, shall also be included in the deduction. This adjustment shall apply to exposures in both the banking book and trading books.

*ii.b. Investments (significant and non-significant investments) in the capital of banking, financial and insurance entities that are outside the scope of regulatory consolidation*

55. These comprise of direct, indirect and synthetic holdings of Tier 2 Capital instruments in banking, financial and insurance entities. This includes:

- Holdings of Tier 2 Capital instruments held in the banking book;
- Net long positions in Tier 2 Capital Instruments held in the trading book; and
- Underwriting positions in Tier 2 Capital instruments held for more than five working days.

56. The amount of such capital investments to be deducted in the calculation of Tier 2 Capital shall be in accordance with paragraphs 29 to 36 above.

### *4. Minority interest and capital held by third parties in subsidiaries*

#### *i. Common Shares Issued by Consolidated Subsidiaries*

57. Minority interest arising from the issue of ordinary shares by a fully consolidated subsidiary of a licensed financial institution may receive recognition in Common Equity Tier 1 capital only if:

(i) The instrument giving rise to the minority interest would, if issued by the licensed financial institution, meet all the criteria for classification as ordinary shares for regulatory capital purposes; and

(ii) The subsidiary that issued the instrument is itself a licensed financial institution.

58. The amount of minority interest meeting the criteria above that will be recognized in consolidated Common Equity Tier 1 will be calculated as follows:

- Total minority interest meeting the two criteria above minus the amount of the surplus Common Equity Tier 1 of the subsidiary attributable to the minority shareholders.
- Surplus Common Equity Tier 1 of the subsidiary is calculated as the Common Equity Tier 1 of the subsidiary minus the lower of: (1) the minimum Common Equity Tier 1 requirement of the subsidiary plus the capital conservation buffer (i.e. 7.0% of risk weighted assets) and (2) the portion of the consolidated minimum Common Equity Tier 1 requirement plus the capital conservation buffer (i.e. 7.0% of consolidated risk weighted assets) that relates to the subsidiary.
- The amount of the surplus Common Equity Tier 1 that is attributable to the minority

shareholders is calculated by multiplying the surplus Common Equity Tier 1 by the percentage of Common Equity Tier 1 that is held by minority shareholders.

### *ii. Tier 1 Qualifying Capital Issued by Consolidated Subsidiaries*

59. Tier 1 capital instruments issued by a fully consolidated subsidiary of the licensee to third party investors (including amounts under paragraph 57) may receive recognition in Tier 1 capital only if the instruments would, if issued by the licensee, meet all of the criteria for classification as Tier 1 capital. The amount of this capital that will be recognized in Tier 1 will be calculated as follows:

- Total Tier 1 of the subsidiary issued to third parties minus the amount of the surplus Tier 1 of the subsidiary attributable to the third party investors.
- Surplus Tier 1 of the subsidiary is calculated as the Tier 1 of the subsidiary minus the lower of: (1) the minimum Tier 1 requirement of the subsidiary (i.e. 8.5% of risk weighted assets) and (2) the portion of the consolidated minimum Tier 1 requirement (i.e. 8.5% of consolidated risk weighted assets) that relates to the subsidiary.
- The amount of the surplus Tier 1 that is attributable to the third party investors is calculated by multiplying the surplus Tier 1 by the percentage of Tier 1 that is held by third party investors.

60. The amount of this Tier 1 capital that will be recognized in Additional Tier 1 will exclude amounts recognized in Common Equity Tier 1

### *iii. Tier 1 and Tier 2 Qualifying Capital Issued by Consolidated Subsidiaries*

61. Total capital instruments (i.e. Tier 1 and Tier 2 capital instruments) issued by a fully consolidated subsidiary of a licensed financial institution to third party investors (including amounts under paragraph 57 and 59) may receive recognition in Total Capital only if the instruments would, if issued by the licensed financial institution, meet all of the criteria for classification as Tier 1 or Tier 2 capital. The amount of this capital that will be recognized in consolidated Total Capital will be calculated as follows:

- Total capital instruments of the subsidiary issued to third parties minus the amount of the surplus Total Capital of the subsidiary attributable to the third party investors.

- Surplus Total Capital of the subsidiary is calculated as the Total Capital of the subsidiary minus the lower of: (1) the minimum Total Capital requirement of the subsidiary plus the capital conservation buffer (i.e. 10.5% of risk weighted assets) and (2) the portion of the consolidated minimum Total Capital requirement plus the capital conservation buffer (i.e. 10.5% of consolidated risk weighted assets) that relates to the subsidiary.
- The amount of the surplus Total Capital that is attributable to the third party investors is calculated by multiplying the surplus Total Capital by the percentage of Total Capital that is held by third party investors.

62. The amount of this Total Capital that will be recognized in Tier 2 will exclude amounts recognized in Common Equity Tier 1 under paragraph 57 and amounts recognized in Additional Tier 1 under paragraph 59.

63. Where capital has been issued to third parties out of a special purpose vehicle (SPV), none of this capital can be included in Common Equity Tier 1. However, such capital can be included in consolidated Additional Tier 1 or Tier 2 and treated as if the licensee itself had issued the capital directly to the third parties only if it meets all the relevant entry criteria and the only asset of the SPV is its investment in the capital of the licensee in a form that meets or exceeds all the relevant entry criteria (as required by the respective criteria for Additional Tier 1 and Tier 2). In cases where the capital has been issued to third parties through an SPV via a fully consolidated subsidiary of the licensee, such capital may, subject to the requirements of this paragraph, be treated as if the subsidiary itself had issued it directly to the third parties and may be included in the licensee's consolidated Additional Tier 1 or Tier 2 in accordance with the treatment outlined above.

## IV. CREDIT RISK. THE STANDARDIZED APPROACH

64. The requirements set forth in this framework are based on the Standardized Approach for Credit Risk outlined in the Basel Committee's Framework on Capital Measurement and Capital Standards ("Basel II").[16]

65. 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 section II. 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.

66. The Credit Risk capital charge is organized in three main sections:

A. On-Balance Sheet Items;
B. Off-Balance Sheet Items; and
C. Credit Risk Mitigation.

67. The framework for determining regulatory capital requirements on exposures arising from traditional and synthetic securitizations will be published separately at a later date. In the meantime, if a licensee has or will incur a securitization exposure, it should seek permission from the BoG. The BoG will determine the risk weight to be applied on an interim basis in lieu of a published guideline or framework.

68. Licensees are required to submit on a quarterly basis, capital adequacy returns which are issued by the BoG. The BoG 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.

69. Under the standardized 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.

70. The supervisory risk weight is an estimate of the credit risk associated with an exposure. In determining the risk weights in the standardized approach, licensees may use assessments by external credit assessment institutions recognized as eligible for capital purposes by the BoG in accordance with the criteria defined in Annex I. Exposures should be risk-weighted net of specific provisions.

71. In calculating their capital requirements for credit risk, licensees should exclude from their balance sheet:

- Assets or investments that are deducted from the measurement of regulatory capital;

[16] Basel Committee on Banking Supervision (BCBS), International Convergence of Capital Measurement and Capital Standards. A Revised Framework. Comprehensive Version. June 2006.

- Financial instruments used in the computation of market risk (refers **only** to those instruments held for trading as defined in paragraph 231).

72. 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 IV.C of this Guideline may be used to reduce the capital requirement of the exposure.

## A. On-Balance Sheet Items

73. Institutions must categorize an exposure into one of the following asset classes:

a) Cash items;
b) Sovereign exposures;
c) Public Sector Entities (PSE);
d) Multi-Lateral Development Banks (MDB);
e) Banks;
f) Securities firms
g) Corporates and Insurance Companies;
h) Short term issue specific rated assets;
i) Regulatory retail portfolio;
j) Residential mortgages;
k) Commercial real estate;
l) Past due loans;
m) Higher risk assets;
n) Other exposures; and
o) Exposures with currency mismatch.

### *1. Cash Items*

74. Institutions should apply a 0% risk weight to claims on notes and coins.

75. Institutions may apply a 0% risk on claims on gold bullion held in its own vaults or on an allocated basis to the extent they are backed by bullion liabilities can be treated as cash.

76. Institutions should apply a 20% risk weight to cash items in the process of collection.

### *2. Claims on Sovereigns*

77. Claims on sovereigns and their central banks will be risk weighted in accordance with the risk weightings provided by eligible External Credit Assessment Institution (ECAIs).[17]

[17] The notations follow the methodology used by one institution, Standard & Poor's. The use of Standard & Poor's credit ratings is an example only; those of some other external credit assessment institutions could equally well be used. The ratings used throughout this document, therefore, do not express any preferences or determinations on external assessment institutions.

**Table 1. Claims on Sovereigns. ECAIs**

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

78. Institutions may apply a risk weight of 0% to exposures with the Government of Guyana and the Bank of Guyana provided that such exposures are denominated and funded in Guyanese Dollars (GYD).[18] When this option is exercised by an institution, its exposures with the Government of Guyana and the Bank of Guyana that are not denominated in Guyanese dollars are to be risk weighted in accordance with the risk weighs above.

79. Alternatively, the BoG is prepared to recognize the country risk scores assigned by Export Credit Agencies (ECAs). To qualify, an ECA must publish its risk scores and subscribe to the OECD agreed methodology. Institutions may use the consensus risk scores of ECAs participating in the "Arrangement on Officially Supported Export Credits".[19] The OECD agreed methodology establishes eight risk score categories associated with minimum export insurance premiums. These ECA risk scores will correspond to risk weight categories as detailed below.

**Table 2. Claims on Sovereigns. ECAs**

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

80. Exposures to the Bank for International Settlements, the International Monetary Fund, the European Central Bank, the European Union, the European Stability Mechanism (ESM), and the European Financial Stability Facility (EFSF) may receive a 0% risk weight.

### *3. Claims on non-central government public sector entities (PSEs)*

81. Financial institutions should apply a risk weight to claims on domestic PSE that is one category higher than the sovereign risk weight.

[18] This is to say that the bank would also have corresponding liabilities denominated in the domestic currency.
[19] The consensus country risk classification is available on the OECD's website (http://www.oecd.org) in the Export Credit Arrangement web-page of the Trade Directorate.

**Table 3. Claims on PSEs**

| 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% |

82. Claims on domestic PSEs that are explicitly guaranteed by the central Government of Guyana may be treated as claims of sovereigns, on the condition that the guarantee must be explicit, unconditional, legally enforceable and irrevocable. PSEs whose major shareholder is the state, a regional authority or a local authority will be treated as a commercial undertaking where the entity operates like a corporate in a competitive market. Claims on such PSEs will be risk weighted as claim on corporates.

### *4. Claims on Multilateral Development Banks (MDBs)*

83. The risk weights applied to claims on MDBs will be based on the external credit assessments of the MDBs themselves, as follows.[20]

**Table 4. Claims on MDBs**

| 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% |

84. A 0% risk weight will be applied to claims on highly rated MDBs that fulfil the criteria provided below.[21] The eligibility criteria for MDBs risk weighted at 0% are:

- very high quality long-term issuer ratings, i.e. a majority of an MDB's external assessments must be AAA;
- shareholder structure is comprised of a significant proportion of sovereigns with long-term issuer credit assessments of AA- or better, or the majority of the MDB's fund-raising are in the form of paid-in equity/capital and there is little or no leverage;
- strong shareholder support demonstrated by the amount of paid-in capital contributed by the shareholders; the amount of further capital the MDBs have the right to call, if required, to repay their liabilities; and continued capital contributions and new pledges from sovereign shareholders;
- adequate level of capital and liquidity (a case-by-case approach is necessary in order to assess whether each MDB's capital and liquidity are adequate); and,

[20] Same risk weights than option 2 for claims on banks.
[21] The Basel Committee will continue to evaluate eligibility on a case-by-case basis.

- 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.

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

### *5. Claims on Banks*

86. The risk weighting is based on the external credit assessment of the bank itself. No claim on an unrated bank may receive a risk weight lower than that applied to claims on its sovereign of incorporation.

**Table 5. Claims on Banks**

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

87. A preferential risk weight that is one category more favorable may be applied to claims with an original maturity of three months or less, subject to a floor of 20%, as follows:

**Table 6. Claims on Banks. Short term**

| **Credit assessment of the bank** | **AAA to AA-** | **A+ to A-** | **BBB+ to BBB-** | **BB+ to B-** | **Below B-** | **Unrated** |
|---|---|---|---|---|---|---|
| **Risk weight for short term claims (maturity 3 months or less)** | 20% | 20% | 20% | 50% | 150% | 20% |

### *6. Claims on Securities Firms*

88. Claims on securities firms may be treated as claims on banks provided these firms are subject to supervisory and regulatory arrangements comparable to the Basel II/III Framework, such that they are subject to risk-based capital requirements and consolidated supervision. If securities firms do not meet these criteria, such claims would follow the rules for claims on corporates.

### *7. Claims on Corporates and Insurance Companies*

89. The table below illustrates the risk weighting of corporate claims, including claims on insurance companies. No claim on an unrated corporate may be given a risk weight preferential to that assigned to its sovereign of incorporation.

**Table 7. Claims on Corporates and Insurance Companies**

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

90. The BoG may eventually increase the standard risk weight for unrated claims if it judges that a higher risk weight is warranted by the overall default experience in the jurisdiction. As part of the supervisory review process, supervisors may also consider whether the credit quality of corporate claims held by individual licensees should warrant a standard risk weight higher than 100%.

91. As an alternative approach, the BoG is prepared to consider applications 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 BoG will need, in particular, to be satisfied that the 100% risk 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.

### *8. Regulatory retail portfolios*

92. Claims that qualify under the four criteria listed below 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 (section A.11).

93. For inclusion in the regulatory retail portfolio, claims must meet the following four criteria.

- **Orientation criterion.** The exposure is to an individual person or persons or to a small business;
- **Product criterion.** The exposure takes the form of any of the following: revolving credits and lines of credit (including credit cards and overdrafts), personal term loans and leases (e.g. instalment loans, auto loans and leases, student and educational loans, personal finance) and small business facilities and commitments. Securities (such as bonds and equities), whether listed or not, are specifically excluded from this category. Mortgage loans are excluded to the extent that they qualify for treatment as claims secured by residential property (Section A.9)
- **Granularity criterion.** The supervisor must be satisfied that the regulatory retail portfolio is sufficiently diversified to a degree that reduces the risks in the portfolio, warranting the 75% risk weight. One way of achieving this may be to set a numerical limit that no aggregate exposure to one counterpart can exceed 0.2% of the overall regulatory retail portfolio. Past due retail loans are to be excluded from the overall regulatory retail portfolio when assessing this granularity criterion.
- **Low value of individual exposures**. The maximum aggregated retail exposure to one counterpart cannot exceed an absolute threshold of G$10 million.

94. If the claim does not meet the above criteria, the licensee should apply a risk weighting of 100%.

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

### *9. Claims Secured by Residential Property*

96. Loans secured by residential property (residential mortgage loans) will be risk weighted at 50% provided all the following conditions are met:

a. The property is or will be occupied by the borrower or is rented;

b. The loan is not past due for more than 89 days; and

c. The loan has a loan to value (LTV) ratio which does not exceed 80%.

97. Where a residential mortgage loans satisfies (a) and (b) above but the LTV ratio exceeds 80%, a 75% risk weight will be applied.

98. Where a residential mortgage loan satisfies (a) and (b) above but LDFIs hold no LTV information for their individual exposures, a 75% risk weight should be applied to the entire portfolio of exposures.

99. Where a residential mortgage loan does not satisfy the conditions (a), (b) and (c) above, a 100% risk weight should be applied.

100. Bank of Guyana will maintain under review the default experience with such claims to determine the continuing appropriateness of the concessionary weighting.

### *10. Claims Secured by Commercial Real Estate*

101. In view of the experience in numerous countries that commercial property lending has been a recurring cause of troubled assets in the banking industry over the past few decades, the commercial mortgages are risk weighted at 100%.

### *11. Past Due Loans*

*Unsecured Portions of Past Due Loans*

102. Banks should apply the following risk weighting to the unsecured portion of any loan (other than a qualifying residential mortgage loan) that is past due for more than 89 days, net of specific provisions:

a) 150% risk weight when specific provisions are less than 20% of the outstanding loan balance;
b) 100% risk weight when specific provisions are 20% or more of the outstanding loan balance.

*Secured Portions of Past Due Loans*

103. For the purpose of defining the secured portion of the past due loan, eligible collateral and guarantees are those recognized for credit risk mitigation purposes (see Section IV.C ). Banks should apply the same risk weight on past due loans that are secured by eligible collateral as if they were not past due provided the credit risk mitigation criteria under Section IV.C - Credit Risk Mitigation Framework continues to be satisfied.

104. Past due loans fully secured by collateral not recognized under the Credit Risk Mitigation Framework (Section IV.C.) may be risk-weighted at 100% (instead of 150%) when provisions reach 15% of the outstanding loan amount and there are strict operational criteria to ensure the quality of the collateral.

105. In the case of qualifying residential mortgages, where the past due loans are for more than 89 days, banks should apply a 100% risk weight to the loans, net of specific provisions.

### *12. Higher-risk categories*

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

- Claims on sovereigns, PSEs, banks, and securities firms rated below B-.
- Claims on corporates rated below BB-.
- Past due loans when specific provisions are less than 20%; and
- Venture capital and private equity investments.

107. The BoG 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.

### *13. Other Assets*

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

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

### *14. Risk weight multiplier to certain exposures with currency mismatch*

109. For unhedged retail and residential real estate exposures to individuals where the lending currency differs from the currency of the borrower's source of income, banks will apply a 1.5 times multiplier to the applicable risk weight, subject to a maximum risk weight of 150%.

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

## B. Off-balance Sheet Items

111. 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, Securities Financing Transactions (STFs) and other off-balance items. Where the off-balance-sheet item is secured by eligible collateral or guarantee, the Credit Risk Mitigation Framework set out in section IV.C applies.

### *1. Off-Balance Sheet Instruments Excluding OTC Derivatives and SFT*

112. Off-balance sheet items include guarantees, commitments, and similar contracts whose full notional principal amount may not necessarily be reflected on the balance sheet.

113. Off-balance sheet items are included in the risk-based capital ratio by:

- Converting the notional amount of the transaction into an on-balance sheet Credit Equivalent Amount (CEA) by multiplying the off-balance sheet amount by a Credit Conversion Factor (CCF); and
- Multiplying the CEA by the risk weight applicable to the counterparty or, if relevant, the guarantor or collateral.

114. Institutions should convert off-balance sheet items into credit equivalent exposures through the use of the following CCF:

**a) 0% Conversion factor**

i. Commitments that are unconditionally cancellable at any time by the bank without prior notice, or that effectively provide for automatic cancellation due to deterioration in a borrower's creditworthiness.

**b) 20% Conversion factor**

i. Commitments with an original maturity up to one year.
ii. Short-term self-liquidating trade letters of credit arising from the movement of goods (e.g. documentary credits collateralized by the underlying shipment). The 20% CCF will be applied to both issuing and confirming banks.

**c) 50% Conversion factor**

i. Commitments with an original maturity exceeding one year, including underwriting commitments and commercial credit lines.
ii. Certain transaction-related contingent items (e.g. performance bonds, bid bonds, warranties and standby letters of credit related to particular transactions).
iii. Note issuance facilities (NIFs) and revolving underwriting facilities (RUFs).

**d) 100% Conversion factor**

i. Direct credit substitutes, e.g. general guarantees of indebtedness (including standby letters of credit serving as financial guarantees for loans and securities) and acceptances (including endorsements with the character of acceptances).
ii. Sale and repurchase agreements and asset sales with recourse, where the credit risk remains with the bank. These items are to be weighted according to the type of asset and not according to the type of counterparty with whom the transaction has been entered into).
iii. Forward asset purchases, forward forward deposits and partly-paid shares and securities13, which represent commitments with certain drawdown.
iv. The lending of banks' securities or the posting of securities as collateral by banks, including instances where these arise out of repo-style transactions (i.e. repurchase/reverse repurchase and securities lending/securities borrowing transactions).

115. Where there is an undertaking to provide a commitment on an off-balance sheet item, banks should apply the lower of the two applicable CCFs.

### *2. Off-balance Sheet Instruments. OTC Derivatives*

116. This section sets out the permissible methods for calculating the counterparty credit risk (CCR) capital charge under this framework.

117. Banks must calculate the CCR charge for "over the counter" (OTC) derivatives in the banking and trading book. OTCs are not exposed to credit risk for the face value of their contracts and require a separate treatment. These instruments include forwards, swaps, purchased options and other similar derivatives. The credit equivalent amounts of OTC derivatives that expose banks to counterparty credit risk are to be calculated under the rules set forth in this section.

118. CCR is the risk that the counterparty to a transaction could default before the final settlement of the transaction's cash flows. An economic loss would occur if the transactions or portfolio of transactions with the counterparty has a positive economic value at the time of default. Unlike a firm's exposure to credit risk through a loan, where the exposure to credit risk is unilateral and only the lending bank faces the risk of loss, CCR creates a bilateral risk of loss: the market value of the transaction can be positive or negative to either counterparty to the transaction. The market value is uncertain and can vary over time with the movement of underlying market factors.

119. Banks must use the *Current Exposure Method* to calculate their CCR exposure, as explained below.

#### *i. Scope of application*

120. The method for computing the exposure amount described in this section is applicable to OTC derivatives.

121. Such instruments generally exhibit the following abstract characteristics:

- The transactions generate a current exposure or market value.
- The transactions have an associated random future market value based on market variables.
- The transactions generate an exchange of payments or an exchange of a financial instrument (including commodities) against payment.
- The transactions are undertaken with an identified counterparty against which a unique probability of default can be determined.[22]238.

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

- Collateral may be used to mitigate risk exposure and is inherent in the nature of some transactions.
- Short-term financing may be a primary objective in that the transactions mostly consist of an exchange of one asset for another (cash or securities) for a relatively short period of time, usually for the business purpose of financing. The two sides of the transactions are not the result of separate decisions but form an indivisible whole to accomplish a defined objective.
- Netting may be used to mitigate the risk.
- Positions are frequently valued (most commonly on a daily basis), according to market variables.
- Remargining may be employed.

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

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

124. Under the method described in this section, when a bank purchases credit derivative protection against a banking book exposure, or against a counterparty credit risk exposure, it will determine its capital requirement for the hedged exposure subject to the criteria and general rules for the recognition of credit derivatives, i.e. substitution or double default rules as appropriate. Where these rules apply, the exposure amount for counterparty credit risk from such instruments is zero.

125. The exposure amount for counterparty credit risk is zero for sold credit default swaps in the banking book where they are treated in the framework as a guarantee provided by the bank and subject to a credit risk charge for the full notional amount.

126. Under the *Current Exposure Method* described in this Section, the exposure amount for a given counterparty is equal to the sum of the exposure amounts calculated for each netting set with that counterparty.

### *ii. Current Exposure Method*

127. The current exposure method is to be applied to OTC derivatives only; SFTs are subject to the treatments set out in Section IV.B.3.

128. Under the Current Exposure Method, banks must calculate the current replacement cost (or exposure, E) by marking contracts to market, thus capturing the current exposure without any need for estimation, and then adding a factor (the "add-on") to reflect the potential future exposure over the remaining life of the contract. In order to calculate the credit equivalent amount of these instruments under this current exposure method, a bank would sum:

- The total replacement cost (obtained by "marking to market") of all its contracts with positive value; and
- An amount for potential future credit exposure calculated on the basis of the total notional principal amount of its book, split by residual maturity as follows:

**Table 8. Add-On Factors OTC Derivative Transactions**

| Residual Maturity | Interest Rate Contracts | Foreign Exchange And Gold Contracts | Equity Contracts | Precious Metals except gold | Other Commodities |
|---|---|---|---|---|---|
| One year or less | 0.0% | 1.0% | 6.0% | 7.0% | 10.0% |
| Over one year to five years | 0.5% | 5.0% | 8.0% | 7.0% | 12.0% |
| Over five years | 1.5% | 7.5% | 10.0% | 8.0% | 15.0% |

129. For contracts with multiple exchanges of principal, the factors are to be multiplied by the number of remaining payments in the contract.

130. For contracts that are structured to settle outstanding exposure following specified payment dates and where the terms are reset such that the market value of the contract is zero on these specified dates, the residual maturity would be set equal to the time until the next reset date. In the case of interest rate contracts with remaining maturities of more than one year that meet the above criteria, the add-on factor is subject to a floor of 0.5%.

131. Forwards, swaps, purchased options and similar derivative contracts not covered by any of the columns of this matrix are to be treated as "other commodities".

132. No potential future credit exposure would be calculated for single currency floating/floating interest rate swaps; the credit exposure on these contracts would be evaluated solely on the basis of their mark-to-market value.

133. The add-ons should be based on effective rather than apparent notional amounts. In the event that the stated notional amount is leveraged or enhanced by the structure of the transaction, banks must use the effective notional amount when determining potential future exposure.

134. Banks can obtain capital relief for collateral as described in the Credit Risk Mitigation Framework. The methodology for the recognition of eligible collateral is described in that section of this Framework.

*ii.a. Credit derivatives*

135. The counterparty credit risk exposure amount for single name credit derivative transactions **in the trading book** will be calculated using the following potential future exposure add-on factors:

**Table 9. Add-On Factors OTC. Credit Derivatives**

| | Protection Buyer | Protection Seller |
|---|---|---|
| **Total Return Swap** | | |
| "Qualifying" reference obligation | 5% | 5% |
| "Non-qualifying" reference obligation | 10% | 10% |
| **Credit Default Swap** | | |
| "Qualifying" reference obligation | 5% | 5% |
| "Non-qualifying" reference obligation | 10% | 10% |

136. Banks should note that:

a) the definition of qualifying is the same as for the "qualifying" category for the treatment of specific risk in the Market Risk Framework;
b) there will be no difference depending on residual maturity; and
c) the protection seller of a credit default swap will only be subject to the add-on factor where it is subject to closeout upon the insolvency of the protection buyer while the underlying is still solvent. Add-on should then be capped to the amount of the unpaid premiums.

137. Where the credit derivative is a first to default transaction, the add-on will be determined by the lowest credit quality underlying in the basket, i.e. if there are any no qualifying items in the basket, the non-qualifying reference obligation add-on should be used. For second and subsequent to default transactions, underlying assets should continue to be allocated according to the credit quality, i.e. the second lowest credit quality will determine the add-on for a second to default transaction etc.

*ii.b. Bilateral netting*

138. Banks should give careful consideration to the issue of bilateral netting, i.e. weighting the net rather than the gross claims with the same counterparties arising out of the full range of forwards, swaps, options and similar derivative contracts.

139. For capital adequacy purposes:

a) Banks may net transactions subject to novation under which any obligation between a bank and its counterparty to deliver a given currency on a given value date is automatically amalgamated with all other obligations for the same currency and value date, legally substituting one single amount for the previous gross obligations.
b) Banks may also net transactions subject to any legally valid form of bilateral netting not covered in (a), including other forms of novation.
c) In both cases (a) and (b), a bank will need to satisfy the BoG that it has:
    i. A netting contract or agreement with the counterparty which creates a single legal obligation, covering all included transactions, such that the bank would have either a claim to receive or obligation to pay only the net sum of the positive and negative mark-to-market values of included individual transactions in the event a counterparty fails to perform due to any of the following: default, bankruptcy, liquidation or similar circumstances;
    ii. Written and reasoned legal opinions that, in the event of a legal challenge, the relevant courts and administrative authorities would find the bank's exposure to be such a net amount under:
        - The law of the jurisdiction in which the counterparty is chartered and, if the foreign branch of a counterparty is involved, then also under the law of the jurisdiction in which the branch is located;

- The law that governs the individual transactions; and
- The law that governs any contract or agreement necessary to effect the netting.

iii. The Bank of Guyana, after consultation when necessary with other relevant supervisors, must be satisfied that the netting is enforceable under the laws of each of the relevant jurisdictions

iv. Procedures in place to ensure that the legal characteristics of netting arrangements are kept under review in the light of possible changes in relevant law.

140. Contracts containing walkaway clauses will not be eligible for netting for the purpose of calculating capital requirements. A walkaway clause is a provision which permits a non-defaulting counterparty to make only limited payments, or no payment at all, to the estate of a defaulter, even if the defaulter is a net creditor.

141. Credit exposure on bilaterally netted forward transactions will be calculated as the sum of the net mark-to-market replacement cost, if positive, plus an add-on based on the notional underlying principal. The add-on for netted transactions ($A_{Net}$) will equal the weighted average of the gross add-on ($A_{Gross}$) and the gross add-on ($A_{Gross}$) adjusted by the ratio of net current replacement cost to gross current replacement cost (NGR). This is expressed through the following formula:

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

where:

$A_{Net}$ = the netted figure for the weighted notional amounts on contracts with a given counterparty.

$A_{Gross}$ = the sum of individual add-on amounts (calculated by multiplying the notional amount of each OTC derivative transaction by the appropriate add-on factor set forth in Table 8. Add-On Factors OTC Derivative Transactions of all OTC derivative transactions with that counterparty.

*NGR* = the ratio of the net current replacement cost to the gross current replacement cost for all OTC derivative transactions subject to qualifying bilateral netting agreements with that counterparty.

142. The scale of the gross add-ons to apply in this formula will be the same as those for non-netted transactions as set out under the Current Exposure Method described in this section. For purposes of calculating potential future credit exposure to a netting counterparty for forward foreign exchange contracts and other similar contracts in which notional principal is equivalent to cash flows, notional principal is defined as the net receipts falling due on each value date in each currency. The reason for this is that offsetting contracts in the same currency maturing on the same date will have lower potential future exposure as well as lower current exposure.

*ii.c. Risk weighting*

143. Once the bank has calculated the credit equivalent amounts they are to be weighted according to the category of counterparty in the same way as in the main framework, including concessionary weighting in respect of exposures backed by eligible guarantees and collateral.

### *3. Off-Balance Sheet Instruments. Securities Financing Transactions (SFT)*

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

145. Collateralized transactions that take the form of SFTs are subject to special considerations. SFTs held in both the banking book and trading book are subject to counterparty credit risk (CCR). SFTs may or may not be subject to master netting agreements, and the respective treatments are set forth below.

#### *i. Securities Financing Transactions (SFT) Not Subject To Master Netting*

146. For SFTs that are not subject to master netting agreement, banks may use either:

a) the simple approach or comprehensive approach to recognize collateral for banking book exposures; and
b) the comprehensive approach to recognize collateral for trading book exposures.[23]

The treatment of the simple and comprehensive approach to collateral is set forth in Chapter IV, Section C.1 of this Framework.

#### *ii. Securities Financing Transactions (SFT) Subject To Master Netting*

147. For SFTs that are subject to master netting agreement, banks should apply the treatment set forth in Chapter IV, Section C.1.iii.g Treatment of SFTs covered under master netting agreements, on a counterparty-by-counterparty basis.

### *4. Capital Treatment for Failed Trades and Non-DvP Transactions*

#### *i. Overarching principles*

[23] The simple approach for recognizing collateral is not permitted for trading book exposures.

148. Banks 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.

149. Transactions settled through a delivery-versus-payment system (DvP),[24] 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.

150. The following capital treatment is applicable to all transactions on securities, foreign exchange instruments, and commodities that give rise to a risk of delayed settlement or delivery. This includes transactions through recognized clearing houses that are subject to daily mark-to-market and payment of daily variation margins and that involve a mismatched trade. Repurchase and reverse-repurchase agreements as well as securities lending and borrowing that have failed to settle are excluded from this capital treatment.[25]

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

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

### *ii. Capital requirements*

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

**Table 10. Risk Multiplier for DvP Transactions**

[24] For the purpose of this Framework, DvP transactions include payment-versus-payment (PvP) transactions.
[25] All repurchase and reverse-repurchase agreements as well as securities lending and borrowing, including those that have failed to settle, are treated in accordance with Chapter IV.B.3.

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

154. A reasonable transition period may be allowed for banks to upgrade their information system to be able to track the number of days after the agreed settlement date and calculate the corresponding capital charge.

155. For non-DvP transactions (i.e. free deliveries), after the first contractual payment/delivery leg, the bank that has made the payment will treat its exposure as a loan if the second leg has not been received by the end of the business day.[26] 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 bank 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.

### C. Credit Risk Mitigation Framework

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

1. **Collateralization.** Exposures may be collateralized by first priority claims, in whole or in part with cash or securities.
2. **Netting.** Banks may agree to net loans owed to them against deposits from the same counterparty.
3. **Use of guarantees and credit derivatives.** A loan exposure may be guaranteed by a third party; in addition banks may buy a credit derivative to offset various forms of credit risk.

157. No transaction in which CRM techniques are used should receive a higher capital requirement than an otherwise identical transaction where such techniques are not used.

[26] If the dates when two payment legs are made are the same according to the time zones where each payment is made, it is deemed that they are settled on the same day. For example, if a bank in Tokyo transfers Yen on day X (Japan Standard Time) and receives corresponding US Dollar via CHIPS on day X (US Eastern Standard Time), the settlement is deemed to take place on the same value date.

158. The effects of CRM will not be double counted. Therefore, no additional supervisory recognition of CRM for regulatory capital purposes will be granted on claims for which an issue-specific rating is used that already reflects that CRM. Principal-only ratings will also not be allowed within the framework of CRM as both principal and interest must be reported.

159. While the use of CRM techniques reduces or transfers credit risk, it simultaneously may increase other risks (residual risks). Residual risks include legal, operational, liquidity and market risks. Therefore, it is imperative that banks employ robust procedures and processes to control these risks, including strategy; consideration of the underlying credit; valuation; policies and procedures; systems; control of roll-off risks; and management of concentration risk arising from the bank's use of CRM techniques and its interaction with the bank's overall credit risk profile. Where these risks are not adequately controlled, the BoG may impose additional capital charges or take other supervisory actions.

*Legal certainty*

160. In order for banks to obtain capital relief for any use of CRM techniques, the following minimum standards for legal documentation must be met.

161. All documentation used in collateralized transactions and for documenting on balance sheet netting, guarantees and credit derivatives must be binding on all parties and legally enforceable in all relevant jurisdictions. Banks must have conducted sufficient legal review to verify this and have a well-founded legal basis to reach this conclusion, and undertake such further review as necessary to ensure continuing enforceability.

### *1. Collateralized transactions*

162. A collateralized transaction is one in which:

- banks have a credit exposure or potential credit exposure; and
- that credit exposure or potential credit exposure is hedged in whole or in part by collateral posted by a counterparty[27] or by a third party on behalf of the counterparty.

163. Where banks take eligible financial collateral (e.g. cash or securities, more specifically defined below), they are allowed to reduce their credit exposure to a counterparty when calculating their capital requirements to take account of the risk mitigating effect of the collateral.

[27] "Counterparty" in this section 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), of securities posted as collateral, of a commitment or of exposure under an OTC derivatives contract.

### *i. Overall framework and minimum conditions*

#### *Approaches for collateralized transactions*

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

165. However, before capital relief will be granted in respect of any form of collateral, the standards set out below must be met under either approach.

#### *Minimum conditions*

166. In addition to the general requirements for legal certainty, the legal mechanism by which collateral is pledged or transferred must ensure that the bank has the right to liquidate or take legal possession of it, in a timely manner, in the event of the default, insolvency or bankruptcy (or one or more otherwise-defined credit events set out in the transaction documentation) of the counterparty (and, where applicable, of the custodian holding the collateral). Furthermore banks must take all steps necessary to fulfil those requirements under the law applicable to the bank's interest in the collateral for obtaining and maintaining an enforceable security interest, e.g. by registering it with a registrar, or for exercising a right to net or set off in relation to title transfer collateral.

167. 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.

168. Banks must have clear and robust procedures for the timely liquidation of collateral to ensure that any legal conditions required for declaring the default of the counterparty and liquidating the collateral are observed, and that collateral can be liquidated promptly.

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

170. A capital requirement will be applied to a bank on either side of the collateralized transaction: for example, both repos and reverse repos will be subject to capital requirements. Likewise, both sides of a securities lending and borrowing transaction will be subject to explicit capital charges, as will the posting of securities in connection with a derivative exposure or other borrowing.

171. Where a bank, acting as an agent, arranges a repo-style transaction (i.e. repurchase/reverse repurchase and securities lending/borrowing transactions) between a customer and a third party and provides a guarantee to the customer that the third party will perform on its obligations, then the risk to the bank is the same as if the bank had entered into the transaction as a principal. In such circumstances, a bank will be required to calculate capital requirements as if it were itself the principal.

### *ii. The simple approach*

172. In the simple approach the risk weighting of the collateral instrument collateralizing or partially collateralizing the exposure is substituted for the risk weighting of the counterparty.

*ii.a. Eligible financial collateral*

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

**Table 11.Eligible collateral in the simple approach**

| |
|---|
| **(a)** Cash (as well as certificates of deposit or comparable instruments issued by the lending bank) on deposit with the bank which is incurring the counterparty exposure.[28] [29] |
| **(b)** Gold |
| **(c)** Debt securities rated by a recognized external credit assessment institution where these are either:<br>• at least BB- when issued by sovereigns or PSEs that are treated as sovereigns by the national supervisor; or<br>• at least BBB- when issued by other entities (including banks and securities firms); or<br>• at least A-3/P-3 for short-term debt instruments |
| **(d)** Debt securities not rated by a recognized external credit assessment institution where these are:<br>• issued by a bank; and<br>• listed on a recognized exchange; and<br>• classified as senior debt; and<br>• all rated issues of the same seniority by the issuing bank must be rated at least BBB- or A-3/P-3 by a recognized external credit assessment institution; and<br>• the bank holding the securities as collateral has no information to suggest that the issue justifies a rating below BBB- or A-3/P-3 (as applicable); and<br>• the supervisor is sufficiently confident about the market liquidity of the security. |
| **(e)** Equities (including convertible bonds) that are included in a main index. |
| **(f)** Undertakings for Collective Investments in Transferable Securities (UCITS) and mutual funds where:<br>• a price for the units is publicly quoted daily; and |

[28] 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 collateralized transactions.

[29] 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.

- the UCITS/mutual fund is limited to investing in the instruments listed in this paragraph[30].

*ii.b. Minimum conditions*

174. For collateral to be recognized in the simple approach, the collateral must be pledged for at least the life of the exposure and it must be marked to market and revalued with a minimum frequency of six months. Those portions of claims collateralized by the market value of recognized collateral receive the risk weight applicable to the collateral instrument.

*ii.c. Risk weight*

175. The risk weight on the collateralized portion will be subject to a floor of 20% except under the conditions specified in paragraphs below. The remainder of the claim should be assigned to the risk weight appropriate to the counterparty. A capital requirement will be applied to banks on either side of the collateralized transaction: for example, both repos and reverse repos will be subject to capital requirements.

*ii.d. Exceptions to the risk weight floor*

176. Transactions which fulfil the criteria outlined in the paragraph with Conditions for Zero haircut and are with a core market participant, as defined under the Comprehensive Approach, receive a risk weight of 0%. If the counterparty to the transactions is not a core market participant the transaction should receive a risk weight of 10%.

177. OTC derivative transactions subject to daily mark-to-market, collateralized by cash and where there is no currency mismatch should receive a 0% risk weight. Such transactions collateralized by sovereign or PSE securities qualifying for a 0% risk weight in the standardized approach can receive a 10% risk weight.

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

- the collateral is cash on deposit eligible under the simple approach, or
- the collateral is in the form of sovereign/PSE securities eligible for a 0% risk weight, and its market value has been discounted by 20%.

***iii. The comprehensive approach***

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

*iii.a Eligible financial collateral*

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

a) All of the instruments recognized as eligible collateral under the simple approach;
b) Equities (including convertible bonds) which are not included in a main index but which are listed on a recognized exchange;
c) UCITS/mutual funds which include such equities.

*iii.b. Using the Comprehensive Approach*

180. In the comprehensive approach, when taking collateral, banks will need to calculate their adjusted exposure to a counterparty for capital adequacy purposes in order to take account of the effects of that collateral. Using haircuts, banks are required to adjust both the amount of the exposure to the counterparty and the value of any collateral received in support of that counterparty to take account of possible future fluctuations in the value of either, occasioned by market movements. This will produce volatility adjusted amounts for both exposure and collateral. Unless either side of the transaction is cash, the volatility adjusted amount for the exposure will be higher than the exposure and for the collateral it will be lower.

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

182. Where the volatility-adjusted exposure amount is greater than the volatility-adjusted collateral amount (including any further adjustment for foreign exchange risk), banks shall calculate their risk-weighted assets as the difference between the two multiplied by the risk weight of the counterparty, as explained below.

183. Banks will only be permitted to use standard supervisory haircuts, which uses the parameters set by this Framework. The size of the individual haircuts will depend on the type of instrument, type of transaction and the frequency of marking-to-market and remargining. For example, repo-style transactions subject to daily marking-to-market and to daily remargining will receive a haircut based on a 5-business day holding period and secured lending transactions with daily mark-to-market and no remargining clauses will receive a haircut based on a 20-business day holding period. These haircut numbers will be scaled up using the square root of time formula depending on the frequency of remargining or marking-to-market.

184. Banks may only use the standard supervisory haircuts in calculating the exposure amount after risk mitigation.

185. The effect of master netting agreements covering repo-style transactions can be recognized for the calculation of capital requirements subject to the conditions in paragraph 199.

*iii.c. Calculation of capital requirement*

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

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

Where:

$E^*$= the exposure value after risk mitigation

E = current value of the exposure

$H_e$ = haircut appropriate to the exposure

C = the current value of the collateral received

$H_c$ = haircut appropriate to the collateral

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

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

188. The treatment for transactions where there is a mismatch between the maturity of the counterparty exposure and the collateral is given in Section IV.C.4.

189. Where the collateral is a basket of assets, the haircut on the basket (H) 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.

*iii.d. Standard supervisory haircuts*

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

**Table 12.Standard Supervisory Haircuts**

| Issue rating for debt securities | Residual Maturity | Sovereigns[31] (%) | Other issuers[32] (%) |
|---|---|---|---|
| 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[33] | | 0 | |

191. 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)

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

*iii.e. Adjustment for different holding periods and non-daily mark-to-market or remargining*

193. 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

[31] Includes PSEs which are treated as sovereigns by the national supervisor. Multilateral development banks receiving a 0% risk weight will be treated as sovereigns.
[32] Includes PSEs which are not treated as sovereigns by the national supervisor.
[33] Cash in the same currency refers to eligible cash collateral.

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.

194. The minimum holding period for various products is summarized in the following table.

**Table 13. Minimum Holding Periods**

| **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 |

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

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

Where:

H = haircut

$H_M$ = haircut under the minimum holding period ($H_{10}$ in the standard supervisory haircuts)

$T_M$= minimum holding period for the type of transaction (10 in the standard supervisory haircuts)

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

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

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

Where:

$H_M$ = haircut under the minimum holding period

$H_N$ = haircut based on the holding period *TN*

$T_N$ = holding period used by the Bank for deriving *HN*

*T*M = minimum holding period for the type of transaction

*iii.f. Conditions for zero H (Treatment of SFTs)*

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

a) Both the exposure and the collateral are cash or a sovereign security or PSE security qualifying for a 0% risk weight in the standardized approach;[34]
b) Both the exposure and the collateral are denominated in the same currency;
c) Either the transaction is overnight or both the exposure and the collateral are marked-to-market daily and are subject to daily remargining;
d) Following a counterparty's failure to remargin, the time that is required between the last mark-to-market before the failure to remargin and the liquidation[35] of the collateral is considered to be no more than four business days;
e) The transaction is settled across a settlement system proven for that type of transaction;
f) The documentation covering the agreement is standard market documentation for repo-style transactions in the securities concerned;
g) The transaction is governed by documentation specifying that if the counterparty fails to satisfy an obligation to deliver cash or securities or to deliver margin or otherwise defaults, then the transaction is immediately terminable; and
h) Upon any default event, regardless of whether the counterparty is insolvent or bankrupt, the bank has the unfettered, legally enforceable right to immediately seize and liquidate the collateral for its benefit.

198. *Core market participants* include the following entities:
a) Sovereigns, central banks and PSEs;
b) Banks and securities firms;
c) Other financial companies (including insurance companies) eligible for a 20% risk weight in the standardized approach for credit risk;
d) Regulated mutual funds that are subject to capital or leverage requirements;
e) Regulated pension funds; and
f) Recognized clearing organizations.

[34] Note that where the bank has chosen domestic-currency claims on its sovereign or central bank to be risk weighted at 0% risk weight, such claims will satisfy this condition.
[35] This does not require the bank to always liquidate the collateral but rather to have the capability to do so within the given time frame.

*iii.g. Treatment of repo-style transactions (SFT) covered under master netting agreements*

199. The effects of bilateral netting agreements covering repo-style transactions will be recognized on a counterparty-by-counterparty basis if the agreements are legally enforceable in each relevant jurisdiction upon the occurrence of an event of default and regardless of whether the counterparty is insolvent or bankrupt. In addition, netting agreements must:

a) provide the non-defaulting party the right to terminate and close-out in a timely manner all transactions under the agreement upon an event of default, including in the event of insolvency or bankruptcy of the counterparty;
b) provide for the netting of gains and losses on transactions (including the value of any collateral) terminated and closed out under it so that a single net amount is owed by one party to the other;
c) allow for the prompt liquidation or setoff of collateral upon the event of default; and
d) be, together with the rights arising from the provisions required in (a) to (c) above, legally enforceable in each relevant jurisdiction upon the occurrence of an event of default and regardless of the counterparty's insolvency or bankruptcy.

200. Netting across positions in the banking and trading book will only be recognized when the netted transactions fulfil the following conditions:
a) All transactions are marked to market daily;[36] and
b) The collateral instruments used in the transactions are recognized as eligible financial collateral in the banking book.

201. The formula in the comprehensive approach will be adapted to calculate the capital requirements for transactions with netting agreements. The framework below will apply to take into account the impact of master netting agreements.

$$E^{*} = max\left\{0; \left[\left(\sum(E) - \sum(C)\right) + \sum(E_s * H_S) + \sum\left(E_{fx} * H_{fx}\right)\right]\right\}$$

Where:

$E^{*}$= the exposure value after risk mitigation

E = current value of the exposure

C = the value of the collateral received

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

$E_S$ = absolute value of the net position in a given security

$H_S$ = haircut appropriate to $E_S$

$E_{fx}$ = absolute value of the net position in a currency different from the settlement currency

$H_{fx}$ = haircut appropriate for currency mismatch

202. The intention here is to obtain a net exposure amount after netting of the exposures and collateral and have an add-on amount reflecting possible price changes for the securities involved in the transactions and for foreign exchange risk if any. The net long or short position of each security included in the netting agreement will be multiplied by the appropriate haircut. All other rules regarding the calculation of haircuts stated under the Comprehensive Approach apply for banks using bilateral netting agreements for repo-style transactions.

*iii.h. Collateralized OTC derivatives transactions*

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

$$Counterparty\ Charge = \left[\left(RC + Add\ On\right) - CA\right] * r * 8\%$$

where:

*RC* = the replacement cost

Add-on = the amount for potential future exposure calculated according to the Current Exposure Method for Counterparty Credit Risk.

*CA* = the volatility adjusted collateral amount under the comprehensive approach for CRM, or zero if no eligible collateral is applied to the transaction, and

*r* = the risk weight of the counterparty.

204. When effective bilateral netting contracts are in place, RC will be the net replacement cost and the add-on will be ANet as calculated according to the rules for bilateral netting under the framework for counterparty credit risk. The haircut for currency risk ($H_{fx}$) should be applied when there is a mismatch between the collateral currency and the settlement currency. Even in the case where there are more than two currencies involved in the exposure, collateral and settlement currency, a single haircut assuming a 10-business day holding period scaled up as necessary depending on the frequency of mark-to-market will be applied.

### *2. On-balance sheet netting*

205. Where a bank,

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

it may use the net exposure of loans and deposits as the basis for its capital adequacy calculation in accordance with the formula under the comprehensive approach for collateralized transactions (paragraph 186). Assets (loans) are treated as exposure and liabilities (deposits) as collateral. The haircuts will be zero except when a currency mismatch exists. A 10-business day holding period will apply when daily mark-to-market is conducted and all the requirements below are completed:

a) recognition and calculation of the appropriate standard supervisory haircuts as in the comprehensive approach
b) adjustment for any maturity mismatches as in Section 4 below.

### *3. Guarantees and credit derivatives*

206. Where guarantees or credit derivatives are direct, explicit, irrevocable and unconditional, and supervisors are satisfied that banks fulfil certain minimum operational conditions relating to risk management processes they may allow banks to take account of such credit protection in calculating capital requirements.

207. A range of guarantors and protection providers are recognized. A substitution approach will be applied. Thus only guarantees issued by or protection provided by entities with a lower risk weight than the counterparty will lead to reduced capital charges since the protected portion of the counterparty exposure is assigned the risk weight of the guarantor or protection provider, whereas the uncovered portion retains the risk weight of the underlying counterparty.

#### *i. Operational requirements*

*i.a. Operational requirements common to guarantees and credit derivatives*

208. 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.54 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.

*i.b. Additional operational requirements for guarantees*

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

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

*i.c. Additional operational requirements for credit derivatives*

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

a) The credit events specified by the contracting parties must at a minimum cover:
   - failure to pay the amounts due under terms of the underlying obligation that are in effect at the time of such failure (with a grace period that is closely in line with the grace period in the underlying obligation);
   - bankruptcy, insolvency or inability of the obligor to pay its debts, or its failure or admission in writing of its inability generally to pay its debts as they become due, and analogous events; and
   - restructuring of the underlying obligation involving forgiveness or postponement of principal, interest or fees that results in a credit loss event (i.e. charge-off, specific provision or other similar debit to the profit and loss account). When restructuring is not specified as a credit event, refer to paragraph 211.
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.
d) Credit derivatives allowing for cash settlement are recognized for capital purposes insofar as a robust valuation process is in place in order to estimate loss reliably. There must be a clearly specified period for obtaining post-credit event valuations of the underlying obligation. If the reference obligation specified in the credit derivative for purposes of cash settlement is different than the underlying obligation, section (g) below governs whether the asset mismatch is permissible.
e) If the protection purchaser's right/ability to transfer the underlying obligation to the protection provider is required for settlement, the terms of the underlying obligation must provide that any required consent to such transfer may not be unreasonably withheld.
f) The identity of the parties responsible for determining whether a credit event has occurred must be clearly defined. This determination must not be the sole responsibility of the protection seller. The protection buyer must have the right/ability to inform the protection provider of the occurrence of a credit event.
g) A mismatch between the underlying obligation and the reference obligation under the credit derivative (i.e. the obligation used for purposes of determining cash settlement value or the deliverable obligation) is permissible if (1) the reference obligation ranks pari passu with or is junior to the underlying obligation, and (2) the underlying obligation and reference obligation share the same obligor (i.e. the same legal entity) and legally enforceable cross-default or cross-acceleration clauses are in place.
h) A mismatch between the underlying obligation and the obligation used for purposes of determining whether a credit event has occurred is permissible if (1) the latter obligation ranks pari passu with or is junior to the underlying obligation, and (2) the underlying obligation and reference obligation share the same obligor (i.e. the same legal entity) and legally enforceable cross-default or cross-acceleration clauses are in place.

211. When the restructuring of the underlying obligation is not covered by the credit derivative, but the other requirements in the previous paragraph 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.

212. 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 bank buys credit protection through a total return swap and records the net payments received on the swap as net income, but does not record offsetting deterioration in the value of the asset that is protected (either through reductions in fair value or by an addition to reserves), the credit protection will not be recognized. The treatment of first-to-default and second-to-default products is covered separately in paragraphs 224 to 227.

213. Other types of credit derivatives are not be eligible for recognition at this time.

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

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

- sovereign entities,[37] PSEs, banks[38] and securities firms with a lower risk weight than the counterparty;
- other entities rated A- or better. This would include credit protection provided by parent, subsidiary and affiliate companies when they have a lower risk weight than the obligor.

### *iii. Risk weights*

215. 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.

216. 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*

217. 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 bank 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.

### *iv. Currency mismatches*

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

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

where:

[37] This includes the Bank for International Settlements, the International Monetary Fund, the European Central Bank, the European Union, the European Stability Mechanism (ESM) and the European Financial Stability Facility (EFSF), as well as MDBs eligible for a 0% risk weight as defined in paragraph 85.
[38] This includes other MDBs.

G = nominal amount of the credit protection

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

The appropriate haircut based on a 10-business day holding period (assuming daily marking to-market) will be applied. If a bank uses the supervisory haircuts it will be 8%. The haircuts must be scaled up using the square root of time formula, depending on the frequency of revaluation of the credit protection as described under the Comprehensive Approach, in paragraph 195.

### *v. Sovereign guarantees and counter-guarantees*

219. As specified in paragraph 78, a lower risk weight may be applied to a bank's exposures to the Government of Guyana or the Central bank of Guyana where the exposures are denominated in Guyanese Dollars and funded in that currency. Banks may extend this treatment to portions of claims guaranteed by the Government of Guyana (or the Bank of Guyana), where the guarantee is denominated in the Guyanese Dollars and the exposure is funded in that currency. A claim may be covered by a guarantee that is indirectly counter-guaranteed by a sovereign. Such a claim may be treated as covered by a sovereign guarantee provided that:

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

## *4. Maturity mismatches*

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

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

### *i. Definition of maturity*

221. The maturity of the underlying exposure and the maturity of the hedge should both be defined conservatively. The effective maturity of the underlying should be gauged as the longest

possible remaining time before the counterparty is scheduled to fulfil its obligation, taking into account any applicable grace period. For the hedge, embedded options which may reduce the term of the hedge should be taken into account so that the shortest possible effective maturity is used. Where a call is at the discretion of the protection seller, the maturity will always be at the first call date. If the call is at the discretion of the protection buying 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

### *ii. Risk weights for maturity mismatches*

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

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

$$P_a = P \frac{(t - 0.25)}{T - 0.25}$$

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

## *5. Other items related to the treatment of CRM techniques*

### *i. Treatment of pools of CRM techniques*

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

### *ii. First-to-default credit derivatives*

224. There are cases where a bank 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 bank 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.

225. With regard to the bank providing credit protection through such an instrument, the risk weights of the assets included in the basket will be aggregated up to a maximum of 1250% and multiplied by the nominal amount of the protection provided by the credit derivative to obtain the risk-weighted asset amount.

### *iii. Second-to-default credit derivatives*

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

227. For banks providing credit protection through such a product, the capital treatment is the same as in paragraph 225 above with one exception. The exception is that, in aggregating the risk weights, the asset with the lowest risk weighted amount can be excluded from the calculation.

# V. MARKET RISK. THE STANDARDIZED APPROACH

## A. Introduction

228. The requirements set forth in this Guideline are based on the Standardized Approach for Market Risk outlined in the Basel Committee's Framework on Capital Measurement and Capital Standards ("Basel II"), and the relevant changes introduced by the Basel Committee through the 'Revisions to the Basel II market risk framework', July 2009 ('Basel 2.5').

229. Market risk is defined as the risk of losses in on and off-balance-sheet positions arising from movements in market prices of instruments. The risks subject to this requirement are:

- The risks pertaining to interest rate related instruments and equities in the trading book;
- Foreign exchange risk and commodities risk throughout the bank.

230. The capital charges for interest rate related instruments and equities will apply to the current trading book items prudently valued by banks. The definition of trading book is set out below. The capital charges for foreign exchange risk and for commodities risk will apply to banks' total currency and commodity positions, subject to some discretion to exclude structural foreign exchange positions. It is understood that some of these positions will be reported and hence evaluated at market value, but some may be reported and evaluated at book value.

*Trading book*

231. A *trading book* consists of positions in financial instruments and commodities held either with trading intent or in order to hedge other elements of the trading book. To be eligible for trading book capital treatment, financial instruments must either be free of any restrictive covenants on their tradability or able to be hedged completely. In addition, banks must fair-value daily any trading book instrument and recognize any valuation change in the profit and loss (P&L) account.

232. Positions held with trading intent are those held intentionally for short-term resale and/or with the intent of benefiting from actual or expected short-term price movements or to lock in arbitrage profits, and may include for example proprietary positions, positions arising from client servicing (e.g. matched principal broking) and market making.

233. Instruments comprise financial instruments, foreign exchange, and commodities. A financial instrument is any contract that gives rise to both a financial asset of one entity and a financial liability or equity instrument of another entity. Financial instruments include both primary financial instruments (and cash instruments) and derivative financial instruments. A financial asset is any asset that is cash, the right to receive cash or another financial asset or a commodity, or an equity instrument. A financial liability is the contractual obligation to deliver cash or another financial asset or a commodity.

234. Any instrument a bank holds for one or more of the following purposes must be designated as a trading book instrument:

a) short-term resale;
b) profiting from short-term price movements;
c) locking in arbitrage profits;
d) hedging risks that arise from instruments meeting criteria (a), (b) or (c) above.

235. Banks must have clearly defined policies, procedures and documented practices for determining which instruments to include in or to exclude from the trading book for purposes of calculating their regulatory capital, ensuring compliance with the criteria exposed, and taking into account the bank's risk management capabilities and practices. Compliance with the policies and procedures must be fully documented and subject to periodic (at least yearly) internal audit and the results must be available for supervisory review.

236. There is a strict limit on the ability of banks to move instruments between the trading book and the banking book by their own choice after initial designation. Switching instruments for regulatory arbitrage is strictly prohibited. In practice, switching should be rare and will be allowed by the BoG only in extraordinary circumstances. Market events, changes in the liquidity of a financial instrument, or a change of trading intent alone are not valid reasons for re-designating an instrument to a different book.

237. Without exception, a capital benefit as a result of switching will not be allowed in any case or circumstance. Any re-designation between books must be approved by senior management, thoroughly documented, determined by internal review to be in compliance with the bank's policies; subject to prior approval by the supervisor based on supporting documentation provided by the bank; and publicly disclosed.

## B. The standardized measurement approach

238. The standardized methodology uses a "building-block" approach, whereby the capital charge for interest rate risk, equity risk, foreign exchange risk and commodity risk are calculated separately and then summed arithmetically. Within the interest rate and equity risk categories, separate capital charges for specific risk and the general market risk arising from debt and equity positions are calculated. Specific risk is defined as the risk of loss caused by an adverse price movement of a debt instrument or security due principally to factors related to the issuer. General market risk is defined as the risk of loss arising from adverse changes in market prices. For commodities, options, and foreign exchange, there is only a general market risk capital requirement.

239. All transactions, including forward sales and purchases, shall be included in the calculation of capital requirements as from the date on which they were entered into. Although regular reporting will in principle take place only at intervals (in most countries quarterly), banks are expected to manage the market risk in their trading book in such a way that the capital requirements are being met on a continuous basis, i.e. at the close of each business day.

Supervisory authorities have at their disposal a number of effective measures to ensure that banks do not "window-dress" by showing significantly lower market risk positions on reporting dates. Banks will also, of course, be expected to maintain strict risk management systems to ensure that intra-day exposures are not excessive. If a bank fails to meet the capital requirements, the national authority shall ensure that the bank takes immediate measures to rectify the situation.

### 1. *Interest rate risk*

240. This section describes the standard framework for measuring the risk of holding or taking positions in debt securities and other interest rate related instruments in the trading book. The instruments covered include all fixed-rate and floating-rate debt securities and instruments that behave like them including non-convertible preference shares. Convertible bonds, i.e. debt issues or preference shares that are convertible, at a stated price, into common shares of the issuer, will be treated as debt securities if they trade like debt securities and as equities if they trade like equities

241. This section describes the standard framework for measuring the risk of holding or taking positions in debt securities and other interest rate related instruments in the trading book. The instruments covered include all fixed-rate and floating-rate debt securities and instruments that behave like them, including non-convertible preference shares. Convertible bonds, i.e. debt issues or preference shares that are convertible, at a stated price, into common shares of the issuer, will be treated as debt securities if they trade like debt securities and as equities if they trade like equities.

242. The minimum capital requirement is expressed in terms of two separately calculated charges, one applying to the "specific risk" of each security, and the other to the interest rate risk in the portfolio (termed "general market risk"). The total capital requirement for interest rate risk is the sum of the general market interest rate risk capital requirements across currencies, and the specific risk capital requirements.

#### *i. Interest rate risk. Specific Risk*

243. The capital charge for specific risk is designed to protect against an adverse movement in the price of an individual security owing to factors related to the individual issuer. In measuring the risk, offsetting will be restricted to matched positions in the identical issue (including positions in derivatives). Even if the issuer is the same, no offsetting will be permitted between different issues since differences in coupon rates, liquidity, call features, etc. mean that prices may diverge in the short run.

**Table 14. Specific risk capital charges for issuer risk**

| Categories | External credit assessment | Specific risk capital charge |
|---|---|---|
| Government | AAA to AA- | 0% |
| | A+ to BBB- | 0.25% (residual term to final maturity ≤ 6 months)<br>1.00% (residual term to final maturity > 6 and ≤ 24 months)<br>1.60% (residual term to final maturity > 24 months) |
| | BB+ to B- | 8.00% |
| | Below B- | 12.00% |
| | Unrated | 8.00% |
| Qualifying | | 0.25% (residual term to final maturity ≤ 6 months)<br>1.00% (residual term to final maturity > 6 and ≤ 24 months)<br>1.60% (residual term to final maturity > 24 months) |
| Other | BB+ to BB-<br>Below BB-<br>Other unrated | 8.00%<br>12.00%<br>8.00% |

244. The category "government"[39] will include all forms of government paper including bonds, Treasury bills and other short-term instruments, and the Bank of Guyana reserves the right to apply a specific risk weight to securities issued by certain foreign governments, especially to securities denominated in a currency other than that of the issuing government.

245. For government exposures with the Government of Guyana and the Bank of Guyana denominated in the domestic currency (Guyanese Dollars) and funded by the bank in the same currency, banks may apply a 0% capital charge as in the standardized approach for credit risk.

246. The "qualifying" category includes securities issued by public sector entities and multilateral development banks, plus other securities that are:

- rated investment-grade[40] by at least two credit rating agencies recognized by the Bank of Guyana; or

[39] Including, local and regional governments subject to a 0% risk weight.
[40] E.g. rated Baa or higher by Moody's and BBB or higher by Standard and Poor's.

- rated investment-grade by one rating agency and not less than investment-grade by any other rating agency recognized by the Bank of Guyana; or
- subject to the approval by the Bank of Guyana, unrated, but deemed to be of comparable investment quality by the reporting bank, and the issuer has securities listed on a recognized stock exchange.

247. The BoG reserves the right to include within the qualifying category and on a case by case basis, debt securities issued by banks in countries which have implemented this Framework, subject to the express understanding that supervisory authorities in such countries undertake prompt remedial action if a bank fails to meet the capital standards set forth in this Framework. Similarly, the BoG reserves the rights to include within the qualifying category debt securities issued by securities firms that are subject to equivalent rules.

248. Furthermore, the "qualifying" category shall include securities issued by institutions that are deemed to be equivalent to investment grade quality and subject to supervisory and regulatory arrangements comparable to those under this Framework.

*Specific risk rules for unrated debt securities*

249. Unrated securities may be included in the "qualifying" category when they are subject to supervisory approval, unrated, but deemed to be of comparable investment quality by the reporting bank, and the issuer has securities listed on a recognized stock exchange.

*Specific risk rules for non-qualifying issuers*

250. Instruments issued by a non-qualifying issuer will receive the same specific risk charge as a non-investment grade corporate borrower under the standardized approach for credit risk under this Framework.

251. However, since this may in certain cases considerably underestimate the specific risk for debt instruments which have a high yield to redemption relative to government debt securities, the Bank of Guyana will have the discretion, on a case by case basis:

- To apply a higher specific risk charge to such instruments; and/or
- To disallow offsetting for the purposes of defining the extent of general market risk between such instruments and any other debt instruments.

*Specific risk capital charges for positions hedged by credit derivatives*

252. Full allowance will be recognized when the values of two legs (i.e. long and short) always move in the opposite direction and broadly to the same extent. This would be the case in the following situations:

a) the two legs consist of completely identical instruments, or

b) a long cash position is hedged by a total rate of return swap (or vice versa) and there is an exact match between the reference obligation and the underlying exposure (i.e. the cash position).[41]

In these cases, no specific risk capital requirement applies to both sides of the position.

253. An 80% offset will be recognized when the value of two legs (i.e. long and short) always moves in the opposite direction but not broadly to the same extent. This would be the case when a long cash position is hedged by a credit default swap or a credit linked note (or vice versa) and there is an exact match in terms of the reference obligation, the maturity of both the reference obligation and the credit derivative, and the currency of the underlying exposure. In addition, key features of the credit derivative contract (e.g. credit event definitions, settlement mechanisms) should not cause the price movement of the credit derivative to materially deviate from the price movements of the cash position. To the extent that the transaction transfers risk (i.e. taking account of restrictive payout provisions such as fixed payouts and materiality thresholds), an 80% specific risk offset will be applied to the side of the transaction with the higher capital charge, while the specific risk requirement on the other side will be zero.

254. Partial allowance will be recognized when the value of the two legs (i.e. long and short) usually moves in the opposite direction. This would be the case in the following situations:

a) the position is captured in paragraph 252 under b) but there is an asset mismatch between the reference obligation and the underlying exposure. Nonetheless, the position meets the requirement that 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.
b) The position is captured in paragraph 252 under a) or 253 but there is a currency or maturity mismatch between the credit protection and the underlying asset.
c) The position is captured in paragraph 253 but there is an asset mismatch between the cash position and the credit derivative. However, the underlying asset is included in the (deliverable) obligations in the credit derivative documentation.

255. In each of these cases in paragraphs 252 to 254, the following rule applies. Rather than adding the specific risk capital requirements for each side of the transaction (i.e. the credit protection and the underlying asset) only the higher of the two capital requirements will apply.

256. In cases not captured in paragraphs 252 to 254, a specific risk capital charge will be assessed against both sides of the position.

257. With regard to banks' first-to-default and second-to-default products in the trading book, the basic concepts developed for the banking book will also apply. Banks holding long positions in these products (e.g. buyers of basket credit linked notes) would be treated as if they were protection sellers and would be required to add the specific risk charges or use the external rating if available. Issuers of these notes would be treated as if they were protection buyers and

[41] The maturity of the swap itself may be different from that of the underlying exposure.

are therefore allowed to off-set specific risk for one of the underlyings, i.e. the asset with the lowest specific risk charge.

### *ii. Interest rate risk. General Market Risk*

258. The capital requirements for general market risk are designed to capture the risk of loss arising from changes in market interest rates. The *'Maturity Method'* will be applied, whereas the capital charge is obtained from the sum of four components:

- The net short or long position in the whole trading book;
- A small proportion of the matched positions in each time-band (the "vertical disallowance");
- A larger proportion of the matched positions across different time-bands (the "horizontal disallowance");
- A net charge for positions in options, where appropriate.

259. Separate maturity ladders should be used for each currency and capital charges should be calculated for each currency separately and then summed with no offsetting between positions of opposite sign. In the case of those currencies in which business is insignificant (< 5% of the total), separate maturity ladders for each currency are not required. Rather, the bank may construct a single maturity ladder and slot, within each appropriate time-band, the net long or short position for each currency. However, these individual net positions are to be summed within each time-band, irrespective of whether they are long or short positions, to produce a gross position figure.

260. The long or short positions in debt securities and other sources of interest rate exposures including derivative instruments are slotted into a maturity ladder comprising thirteen time-bands (or fifteen time-bands in case of low coupon instruments). Fixed rate instruments should be allocated according to the residual term to maturity and floating-rate instruments according to the residual term to the next repricing date. Opposite positions of the same amount in the same issues (but not different issues by the same issuer), whether actual or notional, can be omitted from the interest rate maturity framework, as well as closely matched swaps, forwards, futures and FRAs.

261. The first step in the calculation is to weight the positions in each time-band by a factor designed to reflect the price sensitivity of those positions to assumed changes in interest rates. The weights for each time-band are set out in the table below. Zero-coupon bonds and deep-discount bonds (defined as bonds with a coupon of less than 3%) should be slotted according to the time-bands set out in the second column of the table:

**Table 15. Maturity method: time-bands and weights**

| | Coupon 3% or more | Coupon less than 3% | Risk weight | Assumed changes in yield |
|---|---|---|---|---|
| Zone 1 | 1 month or less | 1 month or less | 0.00% | 1.00 |
| | 1 to 3 months | 1 to 3 months | 0.20% | 1.00 |
| | 3 to 6 months | 3 to 6 months | 0.40% | 1.00 |
| | 6 to 12 months | 6 to 12 months | 0.70% | 1.00 |
| Zone 2 | 1 to 2 years | 1.0 to 1.9 years | 1.25% | 0.90 |
| | 2 to 3 years | 1.9 to 2.8 years | 1.75% | 0.80 |
| | 3 to 4 years | 2.8 to 3.6 years | 2.25% | 0.75 |
| Zone 3 | 4 to 5 years | 3.6 to 4.3 years | 2.75% | 0.75 |
| | 5 to 7 years | 4.3 to 5.7 years | 3.25% | 0.70 |
| | 7 to 10 years | 5.7 to 7.3 years | 3.75% | 0.65 |
| | 10 to 15 years | 7.3 to 9.3 years | 4.50% | 0.60 |
| | 15 to 20 years | 9.3 to 10.6 years | 5.25% | 0.60 |
| | over 20 years | 10.6 to 12 years | 6.00% | 0.60 |
| | | 12 to 20 years | 8.00% | 0.60 |
| | | over 20 years | 12.50% | 0.60 |

262. The next step in the calculation is to offset the weighted longs and shorts in each time-band, resulting in a single short or long position for each band. Since, however, each band would include different instruments and different maturities, a 10% capital charge to reflect basis risk and gap risk will be levied on the smaller of the offsetting positions, be it long or short.

263. The result of the above calculations is to produce two sets of weighted positions, the net long or short positions in each time-band and the vertical disallowances, which have no sign. In addition, however, banks will be allowed to conduct two rounds of "horizontal offsetting", first between the net positions in each of three zones (zero to one year, one year to four years and four years and over), and subsequently between the net positions in the three different zones. The offsetting will be subject to a scale of disallowances expressed as a fraction of the matched positions, as set out in the table below. The weighted long and short positions in each of three zones may be offset, subject to the matched portion attracting a disallowance factor that is part of the capital charge. The residual net position in each zone may be carried over and offset against opposite positions in other zones, subject to a second set of disallowance factors.

**Table 16. Horizontal disallowances**

| Zones | Time-band | Within the zone | Between adjacent zones | Between zones 1 and 3 |
|---|---|---|---|---|
| Zone 1 | 0 - 1 month<br>1 - 3 months<br>3 - 6 months<br>6 - 12 months | 40% | 40% | 100% |
| Zone 2 | 1 - 2 years<br>2 - 3 years<br>3 - 4 years<br>4 - 5 years | 30% | | |
| Zone 3 | 5 - 7 years<br>7 - 10 years<br>10 - 15 years<br>15 - 20 years<br>over 20 years | 30% | 40% | |

### *iii. Interest rate derivatives*

264. The measurement system should include all interest rate derivatives and off balance-sheet instruments in the trading book which react to changes in interest rates, (e.g. forward rate agreements –FRAs-, interest rate and cross-currency swaps and forward foreign exchange positions). Options can be treated in a variety of ways as described in below.

*Calculation of positions*

265. The derivatives should be converted into positions in the relevant underlying and become subject to specific and general market risk charges as described above. In order to calculate the standard formula described above, the amounts reported should be the market value of the principal amount of the underlying or of the notional underlying.

*Futures and forward contracts, including forward rate agreements*

266. These instruments are treated as a combination of a long and a short position in a notional government security. The maturity of a future or a FRA will be the period until delivery or exercise of the contract, plus - where applicable - the life of the underlying instrument. For example, a long position in a June 3 month interest rate future (taken in April) is to be reported as a long position in a government security with a maturity of five months and a short position in a government security with a maturity of two months.

*Swaps*

267. Swaps will be treated as two notional positions in government securities with relevant maturities. For example, an interest rate swap under which a bank is receiving floating rate interest and paying fixed will be treated as a long position in a floating rate instrument of

maturity equivalent to the period until the next interest fixing and a short position in a fixed-rate instrument of maturity equivalent to the residual life of the swap.

*Calculation of capital charges for derivatives under the standardized methodology*

*Allowable offsetting of matched positions*

268. Banks may exclude from the interest rate maturity framework altogether (for both specific and general market risk) long and short positions (both actual and notional) in identical instruments with exactly the same issuer, coupon, currency and maturity. A matched position in a future or forward and its corresponding underlying may also be fully offset, and thus excluded from the calculation. When the future or the forward comprises a range of deliverable instruments offsetting of positions in the future or forward contract and its underlying is only permissible in cases where there is a readily identifiable underlying security which is most profitable for the trader with a short position to deliver. The price of this security, sometimes called the "cheapest-to-deliver", and the price of the future or forward contract should in such cases move in close alignment. No offsetting will be allowed between positions in different currencies; the separate legs of cross-currency swaps or forward foreign exchange deals are to be treated as notional positions in the relevant instruments and included in the appropriate calculation for each currency.

269. In addition, opposite positions in the same category of instruments can in certain circumstances be regarded as matched and allowed to offset fully. To qualify for this treatment the positions must relate to the same underlying instruments, be of the same nominal value and be denominated in the same currency. In addition:

a) for futures: offsetting positions in the notional or underlying instruments to which the futures contract relates must be for identical products and mature within seven days of each other;
b) for swaps and FRAs: the reference rate (for floating rate positions) must be identical and the coupon closely matched (i.e. within 15 basis points); and
c) for swaps, FRAs and forwards: the next interest fixing date or, for fixed coupon positions or forwards, the residual maturity must correspond within the following limits:

    - less than one month hence: same day;
    - between one month and one year hence: within seven days;
    - over one year hence: within thirty days.

*Specific risk*

270. Interest rate and currency swaps, FRAs, forward foreign exchange contracts and interest rate futures will not be subject to a specific risk charge. This exemption also applies to futures on an interest rate index (e.g. LIBOR). However, in the case of futures contracts where the underlying is a debt security, or an index representing a basket of debt securities, a specific risk charge will apply according to the credit risk of the issuer as set out in paragraphs 709(iii) to 718 above.

*General market risk*

271. General market risk applies to positions in all derivative products in the same manner as for cash positions, subject only to an exemption for fully or very closely matched positions in identical instruments. The various categories of instruments should be slotted into the maturity ladder and treated according to the rules identified earlier.

272. The table below presents a summary of the regulatory treatment for interest rate derivatives, for market risk purposes.

**Table 17. Summary of treatment of interest rate derivatives**

| Instrument | Specific risk charge[42] | General market risk charge |
|---|---|---|
| **Exchange-traded future** | | |
| - Government debt security | No | Yes, as two positions |
| - Corporate debt security | Yes | Yes, as two positions |
| -Index on interest rates (e.g. LIBOR) | No | Yes, as two positions |
| **OTC forward** | | |
| - Government debt security | Yes | Yes, as two positions |
| - Corporate debt security | Yes | Yes, as two positions |
| - Index on interest rates | No | Yes, as two positions |
| **FRAs, Swaps** | No | Yes, as two positions |
| **Forward foreign exchange** | No | Yes, as one position in each currency |
| **Options** | | |
| - Government debt security | Yes[43] | Carve out together with the associated hedging positions |
| - Corporate debt security | Yes | - simplified approach |
| - Index on interest rates | No | |
| - FRAs, Swaps | No | |

### 2. *Equity position risk*

273. This section sets out a minimum capital standard to cover the risk of holding or taking positions in equities and all other instruments that exhibit market behavior similar to equities, but not to non-convertible preference shares. Long and short positions in the same issue may be

[42] This is the specific risk charge relating to the issuer of the instrument. Under the existing credit risk rules, there remains a separate capital charge for the counterparty risk.

[43] The specific risk capital charge only applies to government debt securities that are rated below AA- .

reported on a net basis. The instruments covered include common stocks, whether voting or non-voting, convertible securities that behave like equities, and commitments to buy or sell equity securities.

### *i. Capital charges*

274. The minimum capital standard for equities is expressed in terms of two separately calculated charges for the "specific risk" of holding a long or short position in an individual equity and for the "general market risk" of holding a long or short position in the market as a whole.

275. Specific risk is defined as the bank's gross equity positions (i.e. the sum of all long equity positions and of all short equity positions) and general market risk as the difference between the sum of the longs and the sum of the shorts (i.e. the overall net position in an equity market). The long or short position in the market must be calculated on a market-by-market basis, i.e. a separate calculation has to be carried out for each national market in which the bank holds equities.

276. Both the capital charge for specific risk and the charge for general market risk will be 8%.

### *ii. Equity derivatives*

277. Except for options, equity derivatives and off-balance-sheet positions which are affected by changes in equity prices should be included in the measurement system. This includes futures and swaps on both individual equities and on stock indices. The derivatives are to be converted into positions in the relevant underlying.

*Calculation of positions*

278. In order to calculate the standard formula for specific and general market risk, positions in derivatives should be converted into notional equity positions:

- Futures and forward contracts relating to individual equities should in principle be reported at current market prices;
- Futures relating to stock indices should be reported as the marked-to-market value of the notional underlying equity portfolio;
- Equity swaps are to be treated as two notional positions
- Equity options and stock index options should be either "carved out" together with the associated underlyings or be incorporated in the measure of general market risk described in this section according to the delta-plus method

*Calculation of capital charges*

*Measurement of specific and general market risk*

279. Matched positions in each identical equity or stock index in each market may be fully offset, resulting in a single net short or long position to which the specific and general market risk charges will apply. For example, a future in a given equity may be offset against an opposite cash position in the same equity

*Risk in relation to an index*

280. Besides general market risk, a further capital charge of 2% will apply to the net long or short position in an index contract comprising a diversified portfolio of equities. This capital charge is intended to cover factors such as execution risk. National supervisory authorities will take care to ensure that this 2% risk weight applies only to well-diversified indices and not, for example, to sectoral indices.

*Arbitrage*

281. In the case of the futures-related arbitrage strategies described below, the additional 2% capital charge described above may be applied to only one index with the opposite position exempt from a capital charge. The strategies are:

- When the bank takes an opposite position in exactly the same index at different dates or in different market centers;
- When the bank has an opposite position in contracts at the same date in different but similar indices, subject to supervisory oversight that the two indices contain sufficient common components to justify offsetting.

282. Where a bank engages in a deliberate arbitrage strategy, in which a futures contract on a broadly-based index matches a basket of stocks, it will be allowed to carve out both positions from the standardized methodology on condition that:

- The trade has been deliberately entered into and separately controlled;
- The composition of the basket of stocks represents at least 90% of the index when broken down into its notional components.

In such a case the minimum capital requirement will be 4% (i.e. 2% of the gross value of the positions on each side) to reflect divergence and execution risks. This applies even if all of the stocks comprising the index are held in identical proportions. Any excess value of the stocks comprising the basket over the value of the futures contract or excess value of the futures contract over the value of the basket is to be treated as an open long or short position.

283. If a bank takes a position in depository receipts against an opposite position in the underlying equity or identical equities in different markets, it may offset the position (i.e. bear no capital charge) but only on condition that any costs on conversion are fully taken into account.

284. The table below summarizes the regulatory treatment of equity derivatives for market risk purposes.

**Table 18. Summary of treatment of equity derivatives**

| Instrument | Specific risk[44] | General market risk |
|---|---|---|
| **Exchange-traded or OTC-Future** | | |
| - Individual equity | Yes | Yes, as underlying |
| - Index | 2% | Yes, as underlying |
| **Options** | | |
| - Individual equity | Yes | Carve out together with the associated hedging positions - simplified approach |
| - Index | 2% | |

### 3. *Foreign exchange risk*

285. This section sets out a minimum capital standard to cover the risk of holding or taking positions in foreign currencies, including gold.[45]

286. Two processes are needed to calculate the capital requirement for foreign exchange risk. The first is to measure the exposure in a single currency position. The second is to measure the risks inherent in a bank's mix of long and short positions in different currencies.

#### *i. Measuring the exposure in a single currency*

287. The bank's net open position in each currency should be calculated by summing:

- The net spot position, i.e. all asset items less all liability items, including accrued interest, denominated in the currency in question;
- The net forward position, i.e. all amounts to be received less all amounts to be paid under forward foreign exchange transactions, including currency futures and the principal on currency swaps not included in the spot position;
- Guarantees (and similar instruments) that are certain to be called and are likely to be irrecoverable;

[44] This is the specific risk charge relating to the issuer of the instrument. Under the existing credit risk rules, there remains a separate capital charge for the counterparty risk.

[45] Gold is to be dealt with as a foreign exchange position rather than a commodity because its volatility is more in line with foreign currencies and banks manage it in a similar manner to foreign currencies.

- Net future income/expenses not yet accrued but already hedged by forward foreign exchange contracts may be included provided that such anticipatory hedging is part of the bank's formal written policy and the items are included on a consistent basis
- Profits i.e. the net value of income and expense accounts held in the currency in question;
- The net delta-based equivalent of the total book of foreign currency options where the bank is using the delta-plus method to calculate its market risk capital requirement for options.

Positions in composite currencies need to be separately reported but, for measuring banks' open positions, may be either treated as a currency in their own right or split into their component parts on a consistent basis. Positions in gold should be measured in the same manner.

*The treatment of interest, other income and expenses*

288. Interest accrued (i.e. earned but not yet received) should be included as a position. Accrued expenses should also be included. Unearned but expected future interest and anticipated expenses may be excluded unless the amounts are certain and banks have taken the opportunity to hedge them. If banks include future income/expenses they should do so on a consistent basis, and not be permitted to select only those expected future flows which reduce their position.

*The measurement of forward currency and gold positions*

289. Forward currency and gold positions will normally be valued at current spot market exchange rates. Using forward exchange rates would be inappropriate since it would result in the measured positions reflecting current interest rate differentials to some extent. However, banks which base their normal management accounting on net present values are expected to use the net present values of each position, discounted using current interest rates and valued at current spot rates, for measuring their forward currency and gold positions.

*The treatment of structural positions*

290. A matched currency position will protect a bank against loss from movements in exchange rates, but will not necessarily protect its capital adequacy ratio. If a bank has its capital denominated in its domestic currency and has a portfolio of foreign currency assets and liabilities that is completely matched, its capital/asset ratio will fall if the domestic currency depreciates. By running a short position in the domestic currency the bank can protect its capital adequacy ratio, although the position would lead to a loss if the domestic currency were to appreciate.

291. The Bank of Guyana allows banks to protect their capital adequacy ratio in this way, subject to supervisory approval. Thus, any positions which a bank has deliberately taken in order to hedge partially or totally against the adverse effect of the exchange rate on its capital

ratio may be excluded from the calculation of net open currency positions, subject to each of the following conditions being met:

- Such positions need to be of a "structural", i.e. of a non-dealing, nature (the precise definition to be set by national authorities according to national accounting standards and practices);
- The bank of Guyana needs to be satisfied that the "structural" position excluded does no more than protect the bank's capital adequacy ratio;
- Any exclusion of the position needs to be applied consistently, with the treatment of the hedge remaining the same for the life of the assets or other items.

292. No capital charge need apply to positions related to items that are deducted from a bank's capital when calculating its capital base, such as investments in non-consolidated subsidiaries, nor to other long-term participations denominated in foreign currencies which are reported in the published accounts at historic cost. These may also be treated as structural positions.

### *ii. Measuring the foreign exchange risk in a portfolio of foreign currency positions and gold. The Shorthand Method*

293. Banks will calculate the minimum capital by using the *"Shorthand Method".* Under this method, the nominal amount (or net present value) of the net position in each foreign currency and in gold is converted at spot rates into the reporting currency (Guyanese Dollars). The overall net open position is measured by aggregating:

- The sum of the net short positions or the sum of the net long positions, whichever is the greater; plus
- The net position (short or long) in gold, regardless of sign.

294. The capital charge will be 8% of the overall net open position.

295. A bank doing negligible business in foreign currency and which does not take foreign exchange positions for its own account will be exempted from capital requirements on these positions provided that:

- Its foreign currency business, defined as the greater of the sum of its gross long positions and the sum of its gross short positions in all foreign currencies, does not exceed 100% of eligible capital; and
- Its overall net open position as defined in the paragraph above does not exceed 2% of its eligible capital.

## 4. *Commodities risk*

296. This section establishes a minimum capital standard to cover the risk of holding or taking positions in commodities, including precious metals, but excluding gold (which is treated as a foreign currency)

297. A commodity is defined as a physical product which is or can be traded on a secondary market, e.g. agricultural products, minerals (including oil) and precious metals.

298. The price risk in commodities is often more complex and volatile than that associated with currencies and interest rates. Commodity markets may also be less liquid than those for interest rates and currencies and, as a result, changes in supply and demand can have a more dramatic effect on price and volatility. These market characteristics can make price transparency and the effective hedging of commodities risk more difficult.

299. Commodities position risk will be measured under the '*simplified approach'*. The simplified approach is appropriate only for banks which, in relative terms, conduct only a limited amount of commodities business. Under this approach, long and short positions in each commodity may be reported on a net basis for the purposes of calculating open positions. However, positions in different commodities will as a general rule not be offsettable in this fashion.

### *i. Capital charges for commodities risk*

300. The capital charge for directional commodity risk will be the product of 15% times the net position, long or short (in absolute value), in each commodity.

301. In order to protect the bank against basis risk, interest rate risk and forward gap risk, an additional capital charge will be levied equivalent to 3% of the bank's gross positions, long plus short, in that particular commodity will be added.

## 5. *Treatment of options*

302. Those banks which solely use purchased options will be free to use the '*simplified approach'* described below. If a bank will write options, it should seek permission from the Bank of Guyana and the Bank of Guyana will determine the risk weight to be applied.

### *i. Simplified approach*

303. In the *simplified approach*, the positions for the options and the associated underlying, cash or forward, are not subject to the standardized methodology but rather are "carved-out" and subject to separately calculated capital charges that incorporate both general market risk and specific risk. The risk numbers thus generated are then added to the capital charges for the relevant category, i.e. interest rate related instruments, equities, foreign exchange and commodities.

304. Banks which handle a limited range of purchased options only will be free to use the simplified approach set out in the table below for particular trades. As an example of how the calculation would work, if a holder of 100 shares currently valued at $10 each holds an equivalent put option with a strike price of $11, the capital charge would be: $1,000 x 16% (i.e. 8% specific plus 8% general market risk) = $160, less the amount the option is in the money ($11 - $10) x 100 = $100, i.e. the capital charge would be $60. A similar methodology applies for options whose underlying is a foreign currency, an interest rate related instrument or a commodity.

**Table 19. Options. Simplified approach: capital charges**

| Position | Treatment |
|---|---|
| Long cash and Long put<br>or<br>Short cash and Long call | The capital charge will be the market value of the underlying security[46] multiplied by the sum of specific and general market risk charges[47] for the underlying less the amount the option is in the money (if any) bounded at zero[48] |
| Long call<br>or<br>Long put | The capital charge will be the lesser of:<br>(i) the market value of the underlying security multiplied by the sum of specific and general market risk charges for the underlying<br>(ii) the market value of the option[49] |

305. For options where the underlying is an interest rate, the capital charge is set equal to 16%, which is a conservative proxy of the sum of specific and general market risk for this kind of instrument.

[46] In some cases such as foreign exchange, it may be unclear which side is the "underlying security"; this should be taken to be the asset which would be received if the option were exercised. In addition the nominal value should be used for items where the market value of the underlying instrument could be zero, e.g. caps and floors, swaptions etc.

[47] Some options (e.g. where the underlying is an interest rate, a currency or a commodity) bear no specific risk but specific risk will be present in the case of options on certain interest rate related instruments (e.g. options on a corporate debt security or corporate bond index) for the relevant capital charges) and for options on equities and stock indices. The charge under this measure for currency options will be 8% and for options on commodities 15%.

[48] For options with a residual maturity of more than six months the strike price should be compared with the forward, not current, price. A bank unable to do this must take the in the money amount to be zero.

[49] Where the position does not fall within the trading book (i.e. options on certain foreign exchange or commodities positions not belonging to the trading book), it may be acceptable to use the book value instead.

## VI. OPERATIONAL RISK. THE STANDARDIZED APPROACH

306. The requirements set forth in this Guideline are based on the Standardized Approach for Operational Risk outlined in the Basel Committee's Basel III capital framework (Basel III: Finalizing post-crisis reforms, December 2017).

307. Operational risk is defined as the risk of loss resulting from inadequate or failed internal processes, people and systems or from external events. This definition includes legal risk, but excludes strategic and reputational risk. Legal risk includes, but is not limited to, exposure to fines, penalties, or punitive damages resulting from supervisory actions, as well as private settlements.

### A. The standardized approach

308. The standardized approach methodology is based on the following components:

1. the Business Indicator (BI) which is a financial-statement-based proxy for OR; and
2. the Business Indicator Component (BIC), which is calculated by multiplying the BI by a set of regulatory determined marginal coefficients, $\alpha_i$.

#### *1. The Business Indicator*

309. The Business Indicator (BI) is defined as

$$BI = ILDC + SC + FC$$

where:

ILDC = the interest, leases and dividend component

SC = the services component, and

FC = the financial component

These components are defined as follows:

$$ILDC = Min\left[\overline{Abs(Interest\ Income - Interest\ Expense)}; 2{,}25\% \cdot \overline{Interest\ Earning\ Assets}\right] + \overline{Dividend\ Income};$$

$$SC = Max\left(\overline{Other\ Operating\ Income}; \overline{Other\ Operating\ Expense}\right) + Max(\overline{Fee\ Income}; \overline{Fee\ Expense})$$

$$FC = \overline{Abs\left(Net\ Profit\ \&Loss\ Trading\ Book\right)} + \overline{Abs\left(Net\ Profit\ \&Loss\ Banking\ Book\right)}$$

Where a bar above a term indicates that it is calculated as the average over three years: t, t-1 and t-2. The time or 't' refers to the current quarter with '$t^1$' and '$t^2$' representing the corresponding quarters for previous two years. The amounts reported should be cumulative. The absolute value of net items (e.g., interest income – interest expense) should be calculated first year by year. Only after this year by year calculation should the average of the three years be calculated.

### *2. Definition of Business Indicator components*

310. The table below defines the BI components in detail.

**Table 20. Business Indicator definitions**

| BI Component | P&L or balance sheet items | Description | Typical sub-items |
|---|---|---|---|
| Interest, lease and dividend | Interest income | Interest income from all financial assets and other interest income (includes interest income from financial and operating leases and profits from leased assets) | • Interest income from loans and advances, assets available for sale, assets held to maturity, trading assets, financial leases and operational leases<br>• Interest income from hedge accounting derivatives<br>• Other interest income<br>• Profits from leased assets |
| | Interest expense | Interest expenses from all financial liabilities and other interest expenses (includes interest expense from financial and operating leases, losses, depreciation and impairment of operating leased assets) | • Interest expenses from deposits, debt securities issued, financial leases, and operating leases<br>• Interest expenses from hedge accounting derivatives<br>• Other interest expenses<br>• Losses from leased assets<br>• Depreciation and impairment of operating leased assets |

| | | | |
|---|---|---|---|
| | Interest earning assets (balance sheet item) | Total gross outstanding loans, advances, interest bearing securities (including government bonds), and lease assets measured at the end of each financial year | |
| | Dividend income | Dividend income from investments in stocks and funds not consolidated in the bank's financial statements, including dividend income from non-consolidated subsidiaries, associates and joint ventures. | |
| Services | Fee and commission income | Income received from providing advice and services. Includes income received by the bank as an outsourcer of financial services. | Fee and commission income from:<br>• Securities (issuance, origination, reception, transmission, execution of orders on behalf of customers)<br>• Clearing and settlement; Asset management; Custody; Fiduciary transactions; Payment services; Structured finance; Servicing of securitizations; Loan commitments and guarantees given; and foreign transactions |
| | Fee and commission expense | Expenses paid for receiving advice and services. Includes outsourcing fees paid by the bank for the supply of financial services, but not outsourcing fees paid for the supply of non-financial services (e.g. logistical, IT, human resources) | Fee and commission expenses from:<br>• Clearing and settlement; Custody; Servicing of securitizations; Loan commitments and guarantees received; and Foreign transactions |
| | Other operating income | Income from ordinary banking operations not included in other BI items but of similar nature<br>(income from operating leases should be excluded) | • Rental income from investment properties<br>• Gains from non-current assets and disposal groups classified as held for sale not qualifying as discontinued operations (IFRS 5.37) |
| | Other operating expense | Expenses and losses from ordinary banking operations not included in other BI items but of similar nature and from operational loss events (expenses from operating leases should be excluded) | • Losses from non-current assets and disposal groups classified as held for sale not qualifying as discontinued operations (IFRS 5.37)<br>• Losses incurred as a consequence of operational loss events (e.g. fines, penalties, settlements, replacement cost of damaged assets), which have not been provisioned/reserved for in previous years |

| | | | |
|---|---|---|---|
| | | | • Expenses related to establishing provisions / reserves for operational loss events |
| Financial | Net profit (loss) on the trading book | • Net profit/loss on trading assets and trading liabilities (derivatives, debt securities, equity securities, loans and advances, short positions, other assets and liabilities)<br>• Net profit/loss from hedge accounting<br>• Net profit/loss from exchange differences | |
| | Net profit (loss) on the banking book | • Net profit/loss on financial assets and liabilities measured at fair value through P&L<br>• Realized gains/losses on financial assets and liabilities not measured at fair value through profit and loss (loans and advances, assets available for sale, assets held to maturity, financial liabilities measured at amortized cost)<br>• Net profit/loss from hedge accounting<br>• Net profit/loss from exchange differences | |

311. The following P&L items do not contribute to any of the items of the BI:

- Income and expenses from insurance or reinsurance businesses
- Premiums paid and reimbursements/payments received from insurance or reinsurance policies purchased
- Administrative expenses, including staff expenses, outsourcing fees paid for the supply of non-financial services (e.g. logistical, IT, human resources), and other administrative expenses (e.g. IT, utilities, telephone, travel, office supplies, postage)
- Recovery of administrative expenses including recovery of payments on behalf of customers (e.g. taxes debited to customers)
- Expenses of premises and fixed assets (except when these expenses result from operational loss events)
- Depreciation / amortization of tangible and intangible assets (except depreciation related to operating lease assets, which should be included in financial and operating lease expenses)
- Provisions/reversal of provisions (e.g. on pensions, commitments and guarantees given) except for provisions related to operational loss events
- Expenses due to share capital repayable on demand
- Impairment/reversal of impairment (e.g. on financial assets, non-financial assets, investments in subsidiaries, joint ventures and associates)
- Changes in goodwill recognized in profit or loss
- Corporate income tax (tax based on profits including current tax and deferred).

### *3. The operational risk capital requirement. The Business Indicator Component*

312. For banks with BI ≤ €1 billion, the operational risk capital requirement is determined as 12% multiplied by BI.

### *4. Application of the standardized approach within a group*

313. At the consolidated level, the standardized approach calculations use fully consolidated BI figures, which net all the intragroup income and expenses. The calculations at a sub-consolidated level use BI figures for the banks consolidated at that particular sub-level. The calculations at the subsidiary level use the BI figures from the subsidiary.

## Annex I. External credit assessment

### *1. The recognition process*

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

### *2. Eligibility criteria*

2. An ECAI must satisfy each of the following six criteria.

- ***Objectivity***: The methodology for assigning credit assessments must be rigorous, systematic, and subject to some form of validation based on historical experience. Moreover, assessments must be subject to ongoing review and responsive to changes in financial condition. Before being recognized by supervisors, an assessment methodology for each market segment, including rigorous backtesting, must have been established for at least one year and preferably three years.
- ***Independence***: An ECAI should be independent and should not be subject to political or economic pressures that may influence the rating. The assessment process should be as free as possible from any constraints that could arise in situations where the composition of the board of directors or the shareholder structure of the assessment institution may be seen as creating a conflict of interest.
- ***International access/Transparency***: The individual assessments should be available to both domestic and foreign institutions with legitimate interests and at equivalent terms. In addition, the general methodology used by the ECAI should be publicly available.
- ***Disclosure***: An ECAI should disclose the following information: its assessment methodologies, including the definition of default, the time horizon, and the meaning of each rating; the actual default rates experienced in each assessment category; and the transitions of the assessments, e.g. the likelihood of AA ratings becoming A over time.
- ***Resources***: An ECAI should have sufficient resources to carry out high quality credit assessments. These resources should allow for substantial ongoing contact with senior and operational levels within the entities assessed in order to add value to the credit assessments. Such assessments should be based on methodologies combining qualitative and quantitative approaches.
- ***Credibility***: To some extent, credibility is derived from the criteria above. In addition, the reliance on an ECAI's external credit assessments by independent parties (investors, insurers, trading partners) is evidence of the credibility of the assessments of an ECAI. The credibility of an ECAI is also underpinned by the existence of internal procedures to prevent the misuse of confidential information. In order to be eligible for recognition, an ECAI does not have to assess firms in more than one country.

### *3. Implementation Considerations*

#### *i. The Mapping Process*

3. The BoG 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.

4. When conducting the mapping process, the BoG 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.

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

6. Banks 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*

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

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

9. 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.[50]

#### *iii. Issuer Versus Issues Assessment*

10. Where a bank 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 bank's claim is not an investment in a specific assessed issue, the following general principles apply.
    - In circumstances where the borrower has a specific assessment for an issued debt but the bank'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 bank's

[50] For illustration, if there are three external credit assessments mapping into credit quality grades with risk weights of 0%, 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%.

unassessed claim if this claim ranks *pari passu* or senior to the claim with an assessment in all respects. If not, the credit assessment cannot be used and the unassessed claim will receive the risk weight for unrated claims.

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

11. Whether the bank 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.

*12.* 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.

### *iv. Domestic currency and foreign currency assessments*

13. 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.

### *v. Recognized ECAIs*

14. The following ECAIs will be recognized for capital adequacy purposes:

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

15. The list of eligible ECAIs will be updated subject to applicants satisfying the eligibility criteria outlined above.

**Mapping Long Term and Short Term Ratings**

| Long Term Ratings | | |
|---|---|---|
| **Standard and Poors** | **Fitch** | **Moodys Investors Service** |
| AAA to AA- | AAA to AA- | Aaa to Aa3 |
| A1 to A3 | A+ to A- | A1 to A3 |
| BBB+ to BBB- | BBB+ to BBB- | Baa1 to Baa3 |
| BB+ to B- | BB+ to B- | Ba1 to B3 |
| Below B- | Below B- | Below B3 |
| Unrated | Unrated | Unrated |

| Short Term Ratings | | |
|---|---|---|
| **Standard and Poors** | **Fitch** | **Moodys Investors Service** |
| A-1 | F-1 | P-1 |
| A-2 | F-2 | P-2 |
| A-3 | F-3 | P-3 |

***vi. Short-term/long-term assessments***

16. 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% |

| Short Term Rating | | |
|---|---|---|
| **Standard and Poors / Moodys Investors Service** | **Fitch** | **Risk Weight** |
| A-I /P-I[51] | F1 | 20% |
| A2/P-2 | F2 | 50% |
| A3/P3 | F3 | 100% |

[51] The notations follow the methodology used by Standard & Poor's, Moody's Investors Service and Fitch Ratings. The A-1rating of Standard & Poor's includes both A-1+ and A-1- and the F rating of Fitch ratings includes both the modifiers "+" and "-".

| Short Term Rating | | |
|---|---|---|
| **Standard and Poors / Moodys Investors Service** | **Fitch** | **Risk Weight** |
| Others[52] | | 150% |

17. 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.
18. For short term interbank claims, the interaction with specific short-term assessments is expected to be the following:
    - The general preferential treatment for short-term claims applies to all claims on banks of up to three months original maturity when there is no specific short-term claim assessment.
    - When there is a short-term assessment and such an assessment maps into a risk weight that is more favorable (i.e. lower) or identical to that derived from the general preferential treatment, the short-term assessment should be used for the specific claim only. Other short-term claims would benefit from the general preferential treatment.
    - When a specific short-term assessment for a short term claim on a bank maps into a less favorable (higher) risk weight, the general short-term preferential treatment for interbank claims cannot be used. All unrated short-term claims should receive the same risk weighting as that implied by the specific short-term assessment.
19. 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.

### *vii. Level of application of the assessment*

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

### *viii. Unsolicited ratings*

21. Banks 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 BoG may review the continued appropriateness of its recognition.

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