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# **CAPITAL ADEQUACY FRAMEWORK**

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## PART A: OVERVIEW

### A1: INTRODUCTION

1. Capital is important to a bank<sup>1</sup> as, apart from being a permanent source of funding for business operations and growth, it provides a buffer to absorb losses. In so doing, capital not only reduces the risk of insolvency of a bank but can also enable the bank to continue to conduct its credit intermediation activities in times of stress, thereby reducing any propensity for the banking sector to amplify the effects of a financial and economic downturn. The prudential regulation of banks therefore seeks to ensure that banks hold sufficient capital (and reserves) against the inherent risks in their business.

### A2: POLICY OBJECTIVE

2. The Capital Adequacy Framework sets out the approach for computing regulatory capital adequacy ratios, which has been developed based on internationally-agreed standards on capital adequacy promulgated by the Basel Committee on Banking Supervision (BCBS).
3. The computation of the risk-weighted assets (RWAs) is consistent with Pillar 1 requirements set out by the BCBS in its document - "*International Convergence of Capital Measurement and Capital Standards: A Revised Framework*" issued in June 2006. **Appendix 1** summarises the options exercised by AMBD in areas where national discretion is provided by the BCBS to the national supervisory authority.

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<sup>1</sup> Bank in this Annex 1 refers to all banks licensed under the Banking Order, 2006 and all Islamic banks licensed under the Islamic Banking Order, 2008.

## PART B: APPLICATION

### B1: APPLICABILITY

4. A Bank shall comply with the Capital Adequacy Ratio (CAR) requirements in this framework at two levels:
  - 4.1. the bank standalone (“Solo”) level CAR requirements, which measure the capital adequacy of a Bank based on its standalone capital strength and risk profile; and
  - 4.2. the consolidated (“Group”) level CAR requirements, which measure the capital adequacy of a Bank based on its capital strength and risk profile after consolidating the assets and liabilities of its banking group entities as specified by AMBD.
5. For the avoidance of doubt, the level of CAR requirements for branches of foreign banks registered in Brunei Darussalam shall be based on their related assets, liabilities and transactions of their operations in Brunei Darussalam, and not on the bank as a whole.

### B2: SCOPE OF CONSOLIDATION

6. When preparing the consolidated financial statements of the banking group for the purpose of calculating its capital adequacy ratio requirements at the Group level, the following shall apply: -
  - 6.1. The assets and liabilities of the financial entities engaged in the following activities listed below shall be consolidated on a line-by-line basis. Non-financial subsidiaries shall be consolidated using the equity method. Unless agreed with AMBD, the scope of consolidation shall include majority-owned or controlled banking entities, securities entities and other financial entities that engage in the following financial activities: -
    - 6.1.1. finance leasing;
    - 6.1.2. issuing credit cards;
    - 6.1.3. portfolio management;
    - 6.1.4. investment advisory;
    - 6.1.5. custodial and safekeeping services; and
    - 6.1.6. other similar activities that are ancillary to the business of banking
  - 6.2. Any investment in an insurance/takaful subsidiary shall be excluded from consolidation;

- 6.3. Minority interests by third parties in the share capital of subsidiaries which are less than wholly-owned by the parent bank will not be recognized unless the amount of such minority interests can be shown by the bank to be readily available to support other group entities or the parent bank itself. This means such minority interests should not be added into the capital of the consolidated bank group unless the concerned minority shareholders have explicitly stated in writing that their holdings are available to support the bank.
7. In the event that any majority-owned securities and other financial subsidiaries are not consolidated for capital adequacy purposes, all equity and other regulatory capital investments in those entities attributable to the group will be deducted, and the assets and liabilities, as well as third-party capital investments in the subsidiary will be removed from the parent bank's balance sheet. This deduction approach shall also be used for all investments in subsidiaries at the 'solo' level (see also paragraph 16 onwards).
8. The AMBD will ensure that the entity that is not consolidated and for which the capital investment is deducted meets any applicable regulatory capital requirements.
9. The AMBD will monitor actions taken by the concerned subsidiary to correct any capital shortfall and, if it is not corrected in a timely manner, the shortfall will also be deducted from the parent bank's capital.

## PART C: CAPITAL ADEQUACY RATIO (CAR)

### C1: CAR COMPUTATION

10. A bank shall compute the respective ratios in accordance with the following formula: -

$$\text{Tier 1 CAR} : \frac{\text{Tier 1 Capital}}{\text{RWAs (Credit + Market + Operational)}}$$

$$\text{Total CAR} : \frac{\text{Total Capital}}{\text{RWAs (Credit + Market + Operational)}}$$

11. The amount of Risk Weighted Assets (RWAs) would be derived from different categories of assets and off-balance sheet exposures, weighted according to broad categories of relevant riskiness.
12. The RWAs consist of the following:
- 12.1. Credit RWAs, which aim to measure the amount of credit risk associated with a particular types of asset depending on the obligor;
  - 12.2. Market RWAs, which aim to measure the amount of market risk associated with a particular type of asset depending on the obligor and tenor of the assets. This is specifically applicable to the interest/profit rate risk and equity risk in the trading book, as well as foreign exchange risk and commodity risk in the entire balance sheet of the banking institution;
  - 12.3. Operational RWAs, which aim to measure the amount of operational risk resulting from inadequate or failed internal processes, people and systems or from external events

## PART D: COMPONENTS OF CAPITAL

### D1: TOTAL CAPITAL

13. In determining its Total Capital, the Bank shall add the components of qualifying Tier 1 Capital and Tier 2 Capital respectively, after taking the necessary capital adjustments and deductions.
  - 13.1. In applying the regulatory adjustments against a particular tier of capital and if the Bank does not have enough of that tier of capital to satisfy the deduction, any shortfall shall be deducted in the calculation of the next highest tier of capital.
  - 13.2. Where AMBD specifies in writing a specific regulatory adjustment in this framework in respect of a Bank after having regard to the specific risk profile of the Bank, the Bank shall comply with such adjustment.

#### **Tier 1 Capital**

14. Tier 1 Capital is a bank's primary source of strength. Tier 1 Capital, **which** is intended to absorb losses on a going concern basis, consists of the following: -
  - 14.1. Paid up Ordinary Shares
  - 14.2. Head Office Funds (in the case of branches of foreign banks)
  - 14.3. Non-cumulative, Non-redeemable Preference Shares
  - 14.4. Share Premium resulting from the issuance of ordinary shares
  - 14.5. Statutory Reserve Funds
  - 14.6. Retained Earnings net of any interim and/or final dividend declared and any interim losses. Any quarterly interim profits may be included in Tier 1 Capital, subject to a review/audit by the financial institution's external auditors<sup>2</sup>
  - 14.7. General reserves<sup>3</sup>
  - 14.8. Fair Value Reserves arising from fair valuing *financial instruments*

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<sup>2</sup> Quarterly financial statements shall be reviewed in a timely manner by the financial institution's approved external auditors, and no qualified opinion has been made on any of the financial institution's quarterly financial statements in the preceding 12 months.

<sup>3</sup> Disclosed reserves including other accumulated comprehensive income, but excluding share premium.

### **Tier 2 Capital**

15. Tier 2 Capital is intended as a complement to Tier 1 Capital. Tier 2 Capital is subject to certain limits outlined in Paragraph 16 below. Tier 2 Capital is intended to absorb losses on a gone concern basis, and consists of the following: -
  - 15.1. Collective impairment allowances created against the possibility of potential losses.
    - 15.1.1. Where they are not ascribed to particular assets and do not reflect deduction in the valuation of particular assets, they qualify for inclusion in Tier 2 capital.
    - 15.1.2. Collective impairment allowances eligible for inclusion in Tier 2 are capped at 1.25% of the sum of credit risk-weighted assets.
    - 15.1.3. Banks are free to take higher levels of collective impairment allowances but these will not be included in Tier 2 capital.
  - 15.2. Capital instruments which combine certain characteristics of equity capital and debt that satisfy the following characteristics:
    - 15.2.1. Prior written approval of AMBD has been obtained for inclusion of such items in the capital.
    - 15.2.2. Unsecured, fully paid up and subordinated to the interests of creditors.
    - 15.2.3. Not redeemable in less than 5 years or without the prior approval of authority.
    - 15.2.4. Available to participate in losses without the Bank being obliged to cease trading.
    - 15.2.5. Obligation to pay interest/profit can be deferred where the profitability of the Bank would not support such payment.
    - 15.2.6. Any other condition stipulated by AMBD on prudential grounds.
  - 15.3. Subordinated term debt that satisfies the following conditions: -
    - 15.3.1. The prior written approval of AMBD has been obtained for inclusion as Tier 2 capital.
    - 15.3.2. Unsecured and subordinated to the interests of creditors, at fully paid up value in the case of coupon bonds or paid up value plus accrued interest/profit in the case of zero coupon bonds.
    - 15.3.3. A minimum original maturity of 5 years.

- 15.3.4. Early repayment or redemption shall not be made without the prior consent of Authority. The instrument may not contain any features such as 'step-up' features which have the effect of triggering early repayment prior to original maturity.
- 15.3.5. The amount counted as capital shall be discounted by a cumulative discount factor of 20% at the beginning of each year during the five years preceding maturity (i.e. discounted to zero during final 12 months prior to maturity).

Years to Maturity (x)	Amortised amount eligible to be included in Tier 2 Capital
$x > 4$	80%
$3 < x \leq 4$	60%
$2 < x \leq 3$	40%
$1 < x \leq 2$	20%
$x \leq 1$	0%

## D2: ADJUSTMENTS AND DEDUCTIONS

16. A Bank shall apply the following regulatory adjustments and deductions in the calculation of Tier 1 and Tier 2 Capitals at the Solo or Consolidation level, as the case may be:
- 16.1. Reciprocal crossholdings of bank capital artificially designed to inflate the capital position of banks will be deducted for capital adequacy purposes from the concerned Tier of Capital at which the investment is made.
- 16.2. Goodwill relating to investments in consolidated subsidiaries and other entities subject to a deduction approach (see below) pursuant to this part should be deducted from Tier 1.
- 16.3. Significant minority investments by the bank in banking, securities and other financial entities, where control does not exist, will be deducted from the banking group's capital by deduction of the equity and other regulatory investments.
- 16.3.1. The threshold above which minority investments will be deemed significant and be thus deducted is defined as equity interests of between 20% and 50% in the concerned financial entity (**Refer to Appendix 6**).
- 16.3.2. For solo reporting, banks must additionally deduct their equity investments in financial subsidiaries from total capital. Banks must also ensure that all assets and liabilities of such financial subsidiary companies are not included in solo reporting.
- 16.4. A Bank shall deduct any equity and other regulatory capital investments in insurance/takaful subsidiaries and also significant minority investments by the bank in insurance/takaful entities.

- 16.4.1. Under this approach the bank must remove from its balance sheet assets and liabilities, as well as third party (minority interest) capital investments in an insurance/takaful subsidiary.
- 16.5. Significant minority and majority investments by a bank in commercial entities which exceed certain materiality levels will be deducted from banks' Total Capital.
- 16.5.1. Materiality levels (or deduction thresholds) of 15% of the bank's capital for individual significant investments in commercial entities and 60% of the bank's capital for the aggregate of such investments will be applied. An example of the effect of the two deduction thresholds is shown in **Appendix 7** to this framework.
- 16.5.2. The amount(s) to be deducted will be that portion of the investment(s) that exceed(s) the concerned materiality level(s).
- 16.5.3. The ownership threshold above which minority investments will be deemed 'significant' and trigger the above materiality thresholds for deduction is defined as any equity interests of 20% or above in the equity of the concerned commercial entity.
- 16.5.4. Deduction of investments pursuant to this part will be 50% from Tier 1 and 50% from Tier 2 capital.
- 16.6. Tier 2 Capital may not exceed Tier 1 Capital. Furthermore, subordinated term debt may not exceed 50% of Tier 1 Capital. The limits on Tier 2 capital instruments will be based on the amount of Tier 1 capital after deduction of goodwill but before the deductions of investments pursuant to scope of application. Please also note the limit on collective impairment provisions in paragraph 15.1.2.
- 16.7. Minority interests arising as a result of any holding by a third party in any of the consolidated subsidiaries of the bank are not eligible for inclusion in Total Capital.
- 16.8. Any advances or financing facilities offered by the bank to its employees for the purchase of the bank's shares under an employee ownership plan must be deducted from the bank's regulatory capital.
- 16.9. Banks must deduct any first loss positions or holdings rated below BB- acquired for securitisation and resecuritisation exposures from their regulatory capital.

## PART E: CREDIT RISK

### E1: INTRODUCTION

17. The Credit RWAs must be measured by classifying on-balance sheet assets and assigning risk weights to each class of assets according to the relevant riskiness. Credit RWAs also incorporate off-balance sheet exposures, which bear a significant credit risk by converting off-balance sheet exposures into a credit equivalent amount (CEA) and the application of a risk weight to the CEA according to the nature of the obligor.
18. A bank shall determine its capital requirements for credit risk using the *Standardised Approach*, that links predefined risk weights for exposures to sovereigns, central banks, public sector entities, banks, corporates as well as certain other specific portfolios, as defined by AMBD. This framework further allows a bank: -
  - 18.1. to use External Credit Assessments (or external ratings) on the borrower (or the issuer of securities) as the basis for determining the appropriate risk weights;
  - 18.2. to apply Credit Risk Mitigation (CRM) techniques to obtain Capital Relief in the form of on-balance sheet netting arrangements and credit protection through financial collateral as well as guarantees; and
  - 18.3. to apply a risk weight of 75% to its retail portfolio segment, subject to meeting the necessary criteria; and
  - 18.4. to apply three differential risk weights to the residential mortgage portfolio subject to meeting the necessary criteria.
19. Whilst the *Standardised Approach* specifies the applicable risk weight for a particular exposure, AMBD reserves the right to exercise its discretion to apply a different risk weight to particular counterparties or asset classes from that specified under this framework in certain circumstances such as in situations where there is enough evidence to suggest that loss experience in a particular asset class had increased or the overall asset quality of certain institutions have been deteriorating.

### E2: EXTERNAL CREDIT ASSESSMENTS

20. External credit assessments (or external ratings) on the counterparty (borrower) or specific securities issued by the counterparty (the issuer) are the basis for the determination of risk weights under the *Standardised Approach* for exposures to sovereigns, central banks, public sector entities, banks, corporates as well as certain other specific portfolios.
21. In accordance with the rules and principles laid down by the Basel Committee, the AMBD has identified the following international rating agencies as External Credit Assessment Institutions (ECAIs) for the purposes of risk weighting exposures for capital adequacy purposes:

- 21.1. Moody's
  - 21.2. Standard and Poor's; and
  - 21.3. Fitch Ratings
22. Banks are required to obtain the prior approval of the AMBD before using other ECAs.
  23. Banks should use the chosen ECAs and their ratings consistently for each type of claim, for both risk weighting and risk management purposes. Banks will not be allowed to "cherry pick" the assessments provided by different ECAs.
  24. Banks shall not use one ECA's rating for one exposure, while using another ECA's rating for another exposure to the same counterpart, unless the respective exposures are rated by only one of the chosen ECAs whose ratings the bank has decided to use. External assessments for one entity within a corporate group cannot be used to risk weight other entities within the same group (e.g. where such other entities are not rated).
  25. *For banks registered and incorporated abroad*, the rating applicable to the Head Office may be used as the rating applicable to the particular branch, if the branch is not rated locally.
  26. Banks shall be guided by the following in respect of exposures/ obligors having multiple ratings from the eligible ECAs chosen by the bank for the purpose of risk weight computation: -
    - 26.1. If there is only one rating by an eligible ECA for a particular claim, that rating shall be used to determine the risk weight of the claim.
    - 26.2. If there are two ratings accorded by an eligible ECA, which map into different risk weights, the higher risk weight shall be applied.
    - 26.3. If there are three or more ratings accorded by eligible ECA with different risk weights, the ratings corresponding to the two lowest risk weights shall be referred to and the higher of those two risk weights shall be applied, i.e., the second lowest risk weight.
    - 26.4. Where a bank invests in a particular issue (of a bond or sukuk, for example) that has an issue-specific assessment, the risk weight of the claim shall be based on this assessment.
    - 26.5. Other unassessed claims of an issuer will be treated as unrated.

## E3: TYPES OF EXPOSURES AND RISK WEIGHTS

27. The various categories of exposures and their corresponding risk weights are applicable to all **on-balance sheet** and **off-balance sheet exposures** in the banking book of banking institutions<sup>4</sup>.
- 27.1. On-balance sheet exposures shall be multiplied by the appropriate risk weight to determine the risk-weighted asset amount.
- 27.2. Off-balance sheet exposures shall be multiplied by the appropriate credit conversion factor to obtain the CEA before applying the respective risk weights of the concerned counterparty.
28. For purposes of capital adequacy computation, exposures shall be reported using the accounting standards adopted by the Brunei Darussalam Accounting Standard Committee (BDASC), net of specific provisions.

### **Exposures to Sovereigns and Central Banks**

29. Claims on and placements with the Government of Brunei Darussalam and the AMBD, denominated and funded in Brunei Dollar (BND) shall be accorded a preferential risk weight of 0%.
30. Any exposures in BND where there is an explicit guarantee provided by the Government of Brunei Darussalam or the AMBD, shall also be accorded a preferential risk weight of 0%, provided the guarantee satisfies the conditions in section E4.

<b>Table 1: Risk Weights for Sovereigns and Central Banks in home currency</b>				
<b>Rating Category</b>	<b>Standard and Poor's Rating Services (S&amp;P)</b>	<b>Moody's Investors Service (Moody's)</b>	<b>Fitch Ratings (Fitch)</b>	<b>Risk Weight</b>
1	AAA to AA-	Aaa to Aa3	AAA to AA-	0%
2	A+ to A-	A1 to A3	A+ to A-	20%
3	BBB+ to BBB-	Baa1 to Baa3	BBB+ to BBB-	50%
4	BB+ to B-	Ba1 to B3	BB+ to B-	100%
5	CCC+ to D	Caa1 to C	CCC+ to D	150%
Unrated				150%

31. Other Sovereigns and Central Banks and Sovereigns exposures shall be risk-weighted based on the external credit rating of the sovereigns as provided in **Table 1**.
32. Exposures on other sovereigns and central banks denominated in currencies other than the home currency must be weighted at 150% unless the concerned bond or sukuk issue is given a credit rating.

<sup>4</sup> Exposures in the trading book shall be subject to the requirements under the Part G: Market Risk section.

### **Exposures to Public Sector Entities (PSEs)**

33. Exposures on domestic PSEs shall be risk-weighted at 0% if all of the following criteria are met: -
- 33.1. the PSE has been established under its own statutory act;
  - 33.2. the PSE and its subsidiaries are not involved in any commercial undertakings;
  - 33.3. a declaration of bankruptcy against the PSE is not possible; and
  - 33.4. the PSE is fully funded by Government of Brunei Darussalam and any lending facilities obtained by the PSE are subjected to strict internal lending rules by the PSE.
34. The definition of Domestic PSEs includes an administrative or regulatory body or non-commercial undertaking responsible to, or owned by the Government of Brunei Darussalam.
35. All other PSEs outside Brunei Darussalam shall be risk weighted at one grade less favourable than their sovereigns, subject to a minimum risk weight of 20%. Such PSEs must be either listed by the concerned foreign government or must satisfy the criteria in paragraph 33 in respect of its home government.

### **Exposures to Multilateral Development Banks (MDBs)**

36. Claims on and placements with MDBs shall be risk-weighted according to their external credit assessments as provided in **Table 2 below**.

<b>Table 2: Risk Weights for MDBs</b>				
<b>Rating Category</b>	<b>Standard and Poor's Rating Services (S&amp;P)</b>	<b>Moody's Investors Service (Moody's)</b>	<b>Fitch Ratings (Fitch)</b>	<b>Risk Weight</b>
1	AAA to AA-	Aaa to Aa3	AAA to AA-	20%
2	A+ to A-	A1 to A3	A+ to A-	50%
3	BBB+ to BBB-	Baa1 to Baa3	BBB+ to BBB-	50%
4	BB+ to B-	Ba1 to B3	BB+ to B-	100%
5	CCC+ to D	Caa1 to C	CCC+ to D	150%
Unrated				150%

37. A Reporting Bank may apply a 0% risk weight to any exposure the following 'qualifying MDBs' as provided below: -
- 37.1. the African Development Bank (AfDB)
  - 37.2. the Asian Development Bank (ADB)
  - 37.3. Bank for International Settlements (BIS)
  - 37.4. the Caribbean Development Bank (CDB)
  - 37.5. the Council of Europe Development Bank (CEDB)
  - 37.6. the European Bank for Reconstruction and Development (EBRD)
  - 37.7. European Central Bank (ECB)
  - 37.8. European Community (EC)
  - 37.9. the European Investment Bank (EIB)
  - 37.10. the European Investment Fund (EIF)
  - 37.11. the Inter-American Development Bank (IADB)
  - 37.12. the International Monetary Fund (IMF)
  - 37.13. the International Finance Facility for Immunization (IFFIm)
  - 37.14. the Islamic Development Bank (IDB)
  - 37.15. the Nordic Investment Bank (NIB)
  - 37.16. the World Bank Group including the International Bank for Reconstruction and Development (IBRD) and the International Finance Corporation (IFC)

### **Exposures to Banks**

38. On-balance sheet claims on and placements with banks shall be risk weighted according to the external credit assessment of the bank entity as provided in **Table 3**.

<b>Table 3: Risk Weights for Banks</b>					
<b>Rating Category</b>	<b>Standard and Poor's Rating Services (S&amp;P)</b>	<b>Moody's Investors Service (Moody's)</b>	<b>Fitch Ratings (Fitch)</b>	<b>Risk Weight</b>	<b>Risk weight Short Term Maturity*</b>
1	AAA to AA-	Aaa to Aa3	AAA to AA-	20%	20%
2	A+ to A-	A1 to A3	A+ to A-	50%	20%
3	BBB+ to BBB-	Baa1 to Baa3	BBB+ to BBB-	50%	20%
4	BB+ to B-	Ba1 to B3	BB+ to B-	100%	50%
5	CCC+ to D	Caa1 to C	CCC+ to D	150%	150%
Unrated				50%	20%

\*(with original maturity of 3 months or less)

39. Exposures on banks with an original maturity of three months or less may be accorded with a preferential risk weight that is one category more favourable, subject to a floor of 20%. This treatment shall be available to both rated and unrated banks, but not to banks risk weighted at 150%. See final column of **Table 3** above.

### **Exposures to other deposit taking institutions and Securities Firms**

40. Claims on and placements with *Securities Firms and other deposit taking institutions such as finance companies and TAIB* may be treated as claims on banks provided these firms are subject to supervision by the AMBD.

40.1. In such cases, such exposures shall be risk weighted according to the external credit risk assessment as shown in **Table 3** above, but without the short term maturity concession.

40.2. Otherwise, claims on all other foreign financial institutions which are not banks will be risk weighted at 100%.

### **Exposures to Corporates**

41. Exposures on rated *Corporates*, including claims on insurance/takaful companies shall be risk weighted according to the external credit assessment of the entity as provided in **Table 4**.
42. The risk weight for unrated claims on *Corporates* incorporated in Brunei Darussalam, shall be 100%.
43. No claim on an unrated *Corporate* incorporated outside Brunei Darussalam, may be given a risk weight preferential to that assigned to its sovereign of incorporation.

<b>Table 4: Risk Weights for Corporates (including Insurance/Takaful Companies)</b>				
<b>Rating Category</b>	<b>Standard and Poor's Rating Services (S&amp;P)</b>	<b>Moody's Investors Service (Moody's)</b>	<b>Fitch Ratings (Fitch)</b>	<b>Risk Weight</b>
1	AAA to AA-	Aaa to Aa3	AAA to AA-	20%
2	A+ to A-	A1 to A3	A+ to A-	50%
3	BBB+ to BBB-	Baa1 to Baa3	BBB+ to BBB-	100%
4	BB+ to BB-	Ba1 to Ba3	BB+ to BB-	100%
5	B+ to D	B1 to C	B+ to D	150%
Unrated				100%

### **The Regulatory Retail Portfolio**

44. Subject to meeting the required criteria, exposures included in the *Regulatory Retail Portfolio* (excluding qualifying residential mortgage loans/financing and defaulted regulatory retail exposures) may be risk-weighted at 75%.
45. To be included in the *Regulatory Retail Portfolio*, the following criteria must be met: -
- 45.1. **Orientation criterion** — The exposure is to an individual person or persons or to a small business, which may sole-proprietorships, partnerships or small and medium-sized enterprises (SMEs). In this case, the small business must be a locally incorporated and It must not be a subsidiary or associate of another company;
- 45.2. **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/financing and leases (e.g. instalment loans/financing, auto loans/financing and leases, student and educational loans/financing, personal finance) and small business facilities and commitments.
- 45.2.1. Securities (such as bonds and equities), whether listed or not, are specifically excluded from this category.
- 45.2.2. Mortgage loans/financing are excluded from the retail portfolio if they qualify for treatment as claims secured by residential property.
- 45.3. **Granularity criterion** — The portfolio must be sufficiently diversified to a degree that reduces the risks in the portfolio warranting the 75% risk weight.
- 45.3.1. No aggregate exposure to one counterpart can exceed 0.2% of the overall *Regulatory Retail Portfolio*.
- 45.3.2. The 0.2% limit does not apply where the *Regulatory Retail Portfolio* has less than 1,000 customers.
- 45.4. **Low value of individual exposures** - The maximum aggregated retail exposure to any one counterpart cannot exceed an absolute threshold of BND 1 million.

46. Where an exposure or counterparty does not fulfill the criteria above, the exposure shall be risk-weighted at 100%.

**Claims Secured by Residential Property**

47. Exposure to lending fully secured by mortgages on residential property that is or will be occupied by the borrower, or that is rented, may be risk weighted at 35%, subject to meeting the following criteria: -
- 47.1. The value of the property must exceed the amount of funds outstanding by a margin of at least 25% based on the latest valuation report, subject to the report satisfying the conditions below;
- 47.2. Valuation of property is carried out by an external independent valuer;
- 47.3. The valuation report shall not be more than four years old.
48. Where an exposure does not fulfill the criteria above, the following risk-weightings should be applied: -

Exposure threshold	Risk Weights applicable
Below BND 1 million	75%
Exceeds BND 1 million	100%

**Claims Secured by Commercial Real Estate**

49. Exposure to lending fully secured by mortgages on commercial real estate shall be risk weighted at 100%, irrespective of the risk weighting of the counterparty.

**Past Due/Impaired Credit Facilities & Financial Instruments**

50. In accordance with Notice No. BU/N-5/2017/40, past due/impaired credit facilities and financial instruments which have had specific impairment provisions applied to them must be taken out of each category and placed separately in the past due/impaired section where they are subject to special risk weighting and applicable specific impairment allowances may be deducted to give net amount as explained in paragraph 51 and below.
51. In Column C of the Worksheet CAR-3.2 in the CAR Template (Line item 1.2.1.3.2.19.1 and 1.2.1.3.2.19.2), the amount shown should be the carrying amount (as defined in IFRS) of the asset less the specific provision.
- 51.1. The provision taken for Substandard category assets should not take into account any collateral (i.e. it must be 20% of the carrying amount of the asset). If the asset has any eligible collateral, the value of this eligible collateral may be entered into the template as would be the case for an unimpaired asset.

- 51.2. In the case of Doubtful category assets, a provision of 50% of the carrying amount of the asset must be taken where there is no collateral. However, in the case of assets where there is eligible collateral or real estate, the value of such collateral may be deducted from the carrying amount before making the required specific provisions. The effect of this process is shown in **Appendix 9**. Further details of recognition of collaterals for provisioning purposes are available in Notice No. BU/N-5/2017/40.
- 51.3. In the case of Loss category assets, a provision of 100% of the carrying amount of the asset must be taken where there is no collateral. However, in the case of assets where there is eligible collateral or real estate, the value of such collateral may be deducted from the carrying amount before making the required specific provisions. The effect of this process is shown in **Appendix 9**. Further details of recognition of collaterals for provisioning purposes are available in Notice No. BU/N-5/2017/40.
- 51.4. For Doubtful and Loss category assets, property with a primary mortgage upon it may be taken into account in the setting of specific provisions as described in **Appendix 9**. As outlined in the Notice No. BU/N-5/2017/40, primary mortgages on properties can only be considered for provisioning purposes up to a **maximum of 5 years in the loss category**.
52. The unsecured portion of any loan/financing (other than a qualifying residential mortgage loan/financing) that is past due for more than 90 days, net of specific provisions, shall be risk-weighted as follows: -
- 52.1. 150% risk weight when provisions are less than 20% of the outstanding principal amount of the loan/financing;
- 52.2. 100% risk weight when provisions are no less than 20% of the outstanding principal amount of the loan/financing.
53. A Bank shall apply a 100% risk weight to any exposure in the qualifying residential mortgage loans/financing that is past due for more than 90 days, net of specific provisions.

#### **Other Assets**

54. Cash and gold<sup>5</sup> will be risk-weighted at 0%.
55. 150% risk weight shall apply to venture capital and private equity investments<sup>6</sup>.
56. The standard risk weight for all other assets will be 100%.

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<sup>5</sup> Refers to holding of gold bullion held in own vaults or on an allocated basis to the extent backed by bullion liabilities. Cash items in the process of collection can be risk weighted at 20%

<sup>6</sup> Subject to Capital deduction threshold in **Section D2 – Adjustments and Deductions**

**Investments Which Are Below Threshold for Deductions**

57. Investments for this category include investments in the capital instruments of banks, financial institutions, and commercial entities (including insurance/takaful companies).
58. Any investments which are not eligible for deduction from the bank’s capital shall be risk weighted based on the external credit rating as provided in **Table 5**.

<b>Table 5: Risk Weights for Investments Below Deduction Threshold</b>				
<b>Rating Category</b>	<b>Standard and Poor’s Rating Services (S&amp;P)</b>	<b>Moody’s Investors Service (Moody’s)</b>	<b>Fitch Ratings (Fitch)</b>	<b>Risk Weight</b>
1	AAA to AA-	Aaa to Aa3	AAA to AA-	100%
2	A+ to A-	A1 to A3	A+ to A-	100%
3	BBB+ to BBB-	Baa1 to Baa3	BBB+ to BBB-	100%
4	BB+ to BB-	Ba1 to B3	BB+ to BB-	100%
5	B+ to D	B1 to C	B+ to D	150%
Unrated				150%

**E4: OFF-BALANCE SHEET ITEMS**

59. Off-balance-sheet items shall be treated as follows: -
- 59.1. The notional amount of the transaction is converted into credit exposure equivalents (CEAs) through the use of credit conversion factors (CCF); and
- 59.2. the resulting amount shall then be weighted according to the risk weight of the counterparty.
60. The CCFs for the various types of off-balance sheet instruments are provided in **Table 6** below: -

<b>Table 6: Credit Conversion Factors (CCF)</b>		
	<b>Off-Balance Sheet Instruments</b>	<b>CCF</b>
1	Direct credit substitutes, such as general guarantees of indebtedness including standby letters of credit serving as financial guarantees for loans/financing and securities) and acceptances (including endorsements with the character of acceptances).	100%
2	Certain transaction-related contingent items, such as performance bonds, bid bonds, warranties and standby letters of credit related to particular transactions.	50%

3	Short-term self-liquidating trade-related contingencies, such as documentary letters of credit collateralised by the underlying shipments. The credit conversion factor shall be applied to both the issuing and confirming banks.	20%
4	Sale and repurchase agreements and asset sales with recourse where the credit risk remains with the bank.	100%
5	Forward asset purchases, and partly-paid shares and securities, which represent commitments with certain drawdown.	100%
6	Lending of bank's securities or the posting of securities as collateral by banking institutions, including instances where these arise out of repo-style transactions. (i.e. repurchase / reverse repurchase and securities lending / borrowing transactions).	100%
7	Obligations under an on-going underwriting agreement such as underwriting of shares/securities issue, note issuance facilities (NIFs) and revolving underwriting facilities (RUFs)	50%
8	Other commitments with an original maturity of over one year (not cancellable), such as formal standby facilities and credit lines, undrawn term loans/financing and undrawn overdraft facilities/unused credit card lines.	50%
9	Other commitments, such as formal standby facilities and credit lines, with an original maturity of up to one year (not cancellable).	20%
10	Any commitments that are unconditionally cancellable at any time by the banking institution without prior notice or that effectively provide for automatic cancellation due to deterioration in a borrower's creditworthiness.	0%
11	Foreign Exchange and Gold Contracts	Refer to Appendix 4
12	Interest/Profit Rate Contracts	
13	Equities Derivatives Contracts	
14	Precious Metals Contracts (Excluding Gold)	
15	Other Commodities Contracts	

61. Where there is an undertaking to provide a commitment on an off-balance sheet item<sup>7</sup>, banks shall apply the lower of the two applicable credit conversion factors.
62. Where the off-balance sheet item is secured by cash collateral or guarantee, the respective rules detailed in Section E4 (Credit Risk Mitigation) may be applied.
63. The credit equivalent amount of OTC derivatives and Securities Financing Transactions (SFT)<sup>8</sup> that expose a bank to counterparty credit risk shall be determined based on the external rating of the counterparty and will not be subject to any specific ceiling<sup>9</sup>.
64. Banks must closely monitor securities, commodities, and foreign exchange transactions that have failed, starting from the first day they fail. The capital treatment for these failed trades shall be calculated based on **Appendix 2**.
65. With regard to unsettled securities, commodities, and foreign exchange transactions that are not processed through a delivery-versus-payment (DvP) or payment-versus-payment (PvP) mechanism, banks must calculate a capital charge as set in **Appendix 2 for such non-DVP transactions**.

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<sup>7</sup> Such as commitments to provide letters of credit or guarantees for trade purposes. For example, if a banking institution provides the customer a committed limit on the amount of letters of credit they can issue over a one-year period, with the customer drawing on this committed limit over time.

<sup>8</sup> 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.

<sup>9</sup> As set out under the rules set forth in Annex 4 of the Basel 2 paper dated June 2006.

## E4: CREDIT RISK MITIGATION

66. Banks may use the following techniques to mitigate the credit risks to which they are exposed. The following outlines the general requirements for the use of credit risk mitigation (CRM) and eligibility criteria, detailed methodologies and specific requirements with respect to the following CRM techniques: -
- 66.1. Collateralised transactions; and
  - 66.2. On-balance sheet netting.
67. The CRM is only applicable to banking book exposures.
68. No additional CRM will be recognised for capital adequacy purposes on exposures where the risk weight is mapped from a rating specific to a debt security where that rating already reflects CRM. For example, if the rating has already taken into account a guarantee pledged by the parent of the borrower, then the guarantee shall not be considered again for credit risk mitigation purposes.
69. While the use of CRM techniques reduces or transfers credit risk, it may introduce or increase other risks such as legal, operational, liquidity and market risk. Therefore, it is imperative that banks control these risks by employing robust policies, procedures and processes including strategies to manage these risks, valuation, systems, monitoring and internal controls. Banks must be able to demonstrate to the AMBD that they have adequate risk management policies and procedures in place to control these risks arising from the use of CRM techniques.
- 69.1. In any case, AMBD reserves the right to take supervisory action under Pillar 2<sup>10</sup> should the bank's risk management in relation to the application of CRM techniques be insufficient.
  - 69.2. In addition, banks will also be expected to observe Pillar 3 requirements<sup>11</sup> in order to obtain capital relief in respect of any CRM techniques.

### **Minimum Conditions for the Recognition of Credit Risk Mitigation Techniques and Collateralised Transactions**

70. In order for banks to obtain capital relief, all CRM arrangements must satisfy the eight general conditions for *legal certainty* below in all relevant jurisdictions for the bank and its customers. Banks must have conducted a review with a sufficiently well-founded legal basis to verify compliance with these conditions and undertake such further review as necessary to ensure continuing compliance.
- 70.1. *Documented* (All CRM tools must be documented and not be verbal or implied).
  - 70.2. *Explicit* (The CRM provider or guarantor has taken on an explicit obligation and the purpose is clearly explained so that the collateral is not used for other purposes and the arrangement cannot be terminated without mutual written agreement).

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<sup>10</sup> Pillar 2 refers to the Supervisory Review Process of the Basel II Framework

<sup>11</sup> Pillar 3 refers to the Disclosure Requirements under the Basel II Framework

- 70.3. *Enforceable* (All CRM tools must be binding on parties such as the guarantor or custodian in all relevant jurisdictions where the collateral is placed or the guarantor is resident. Arrangements must not be ‘ultra vires’)
- 70.4. *Direct* (The arrangement is not via a third party. The bank has the right to receive payments direct from the guarantor without first having to take legal actions against the customer. Collateral such as cash is placed directly with the bank or with a custodian with a lien in the name of the bank so that the custodian is aware of the arrangement and must comply with any request to sell or release collateral).
- 70.5. *Specific* (the arrangement must refer to specific exposures or a group of exposures so that the extent of cover is clearly defined and incontrovertible. This is particularly important where a facility is partly collateralized or multiple CRM arrangements are in place).
- 70.6. *Unconditional* (There must be no restrictive covenants. The CRM covers all types of payments that the underlying obligor is expected to make under the documentation governing the transaction and there are no clauses in the documentation that could prevent the guarantor or collateral provider from being obliged to pay out or release collateral).
- 70.7. *Irrevocable* (The collateral (or guarantee) must be pledged for at least the life of the exposure. The guarantee or CRM arrangement cannot be unilaterally cancelled by the guarantor or collateral provider without the consent of the bank).
- 70.8. *Timely* (Upon default or non-payment of the counterparty, the bank may pursue the guarantor or collateral provider promptly and the payment or release of collateral is made in a timely manner. In this context, ‘prompt’ would generally mean within 7 days of the due date and ‘timely’ would generally mean within 90 days of non-payment).

### **Credit Risk Mitigation Techniques - Collateralised Transactions**

- 71. A collateralised transaction is one in which: -
  - 71.1. Banks have a credit exposure or potential credit exposure; and
  - 71.2. that credit exposure or potential credit exposure is hedged in whole or in part by collateral posted by a counterparty or by a third party on behalf of the counterparty.
- 72. For collateralised transactions, banks shall apply the **simple approach** which, consistent with the Basel I framework, substitutes the risk weight of the collateral for the risk weight of the counterparty for the collateralised portion of the exposure.
- 73. Under this approach, where an exposure on a counterparty is secured against eligible collateral, the secured portion of the exposure must be weighted according to the risk weight appropriate to the collateral. The unsecured portion of the exposure must be weighted according to the risk weight applicable to the original counterparty.
- 74. The collateral must be pledged for at least the life of the exposure and marked-to-market and re-valued at a minimum frequency of **6 months**.

75. The risk weight on the collateralised portion will be subject to a floor of 20% except under the conditions specified in paragraph 76.
76. The 20% floor for the risk weight on a collateralized transaction will not be applied and a 0% risk weight can be applied where any of the following applies: -
- 76.1. The exposure is collateralized by cash in the same currency placed on deposit with the concerned bank; or
- 76.2. The collateral is in the form of sovereign securities denominated in the same currency as the exposure and the sovereign securities are eligible for a 0% risk weight and its market value has been discounted by 20%; or
- 76.3. There is a guarantee satisfying the legal certainty conditions in paragraph 70 above from the Government of Brunei Darussalam; or
- 76.4. The exposure is denominated in BND and is collateralized by SGD deposits placed with the concerned bank.

**Eligible Collateral**

77. The risk weighting of certain exposures may be substituted by that of certain eligible collateral, subject to the floor of 20%. In the computation of capital adequacy requirements for collateralised transactions, the following collateral instruments are eligible for recognition under the simple approach subject to the minimum conditions specified above being met:

Approach	Collateral Recognised
Simple Approach	<p>a) Cash (including certificate of deposits or comparable instruments issued by the lending banking institution) on deposit with the bank which is incurring the counterparty exposure. Risk weight is 20% (unless in same currency as exposure – see 76 above).</p> <p>b) Brunei Government Securities (Market value discounted by 20%). Risk weight is 0%.</p> <p>c) Brunei Government Guarantees. Risk weight is 0% for BND denominated exposures, otherwise minimum RW is 20%.</p> <p>d) Gold. Risk weight is 20%.</p> <p>e) Foreign Governments/Central Banks Securities held as collateral, discounted by 20%, subject to the following ratings: -</p>

**Table 7: Risk Weights For Foreign Governments / Central Banks Securities**

Rating Category	Standard and Poor's Rating Services (S&P)	Moody's Investors Service (Moody's)	Fitch Ratings (Fitch)	Risk Weight
1	AAA to AA-	Aaa to Aa3	AAA to AA-	20%
2	A+ to A-	A1 to A3	A+ to A-	20%
3	BBB+ to BBB-	Baa1 to Baa3	BBB+ to BBB-	50%
4	BB+ to BB-	Ba1 to Ba3	BB+ to BB-	100%
5	Below BB-	Below Ba3	Below BB-	Not eligible as collateral
Unrated				

f) Exposures covered by guarantees from Foreign Sovereigns/Central Banks, subject to the following ratings: -

**Table 8: Risk Weights For Guarantees by Foreign Sovereigns / Central Banks**

Rating Category	Standard and Poor's Rating Services (S&P)	Moody's Investors Service (Moody's)	Fitch Ratings (Fitch)	Risk Weight
1	AAA to AA-	Aaa to Aa3	AAA to AA-	20%
2	A+ to A-	A1 to A3	A+ to A-	20%
3	BBB+ to BBB-	Baa1 to Baa3	BBB+ to BBB-	50%
4	BB+ to B-	Ba1 to B3	BB+ to B-	100%
5	Below B-	Below B3	Below B-	Not eligible as collateral
Unrated				

g) Guarantees by banks in Brunei Darussalam which are regulated by AMBD. Risk weight is the higher of 20% or the risk weighting of the applicable bank.

h) Exposures covered by guarantees from Multilateral Development Banks (MDBs) and other Financial Institutions outside Brunei Darussalam, subject to the following rating: -

<b>Table 9: Risk Weights for Guarantees by Multilateral Development Banks (MDBs), Foreign Banks &amp; Financial institutions</b>				
<b>Rating Category</b>	<b>Standard and Poor's Rating Services (S&amp;P)</b>	<b>Moody's Investors Service (Moody's)</b>	<b>Fitch Ratings (Fitch)</b>	<b>Risk Weight</b>
1	BIS, IMF, ECB and other eligible MBDs			20%
2	AAA to AA-	Aaa to Aa3	AAA to AA-	20%
3	A+ to BBB-	A1 to Baa3	A+ to BBB-	50%
4	BB+ to B-	Ba1 to B3	BB+ to B-	100%
5	Below B-	Below B3	Below B-	Not eligible as collateral
Unrated				

**Credit Risk Mitigation Techniques - On-Balance Sheet Netting**

- 78. Banking institutions are allowed to compute credit exposures on a net basis for capital requirements where banking institutions have legally enforceable netting arrangements for loans/financing and deposits to the same counterparty where recognised by IFRS for financial reporting purposes.
- 79. In addition, banks can only apply on-balance sheet netting on an exposure if the following conditions have been met:
  - 79.1. There is a strong legal basis that the netting or off-setting agreement is enforceable in each relevant jurisdiction regardless of whether the counterparty is in default, insolvent or bankrupt;
  - 79.2. the bank is able to determine at any time all assets and liabilities with the same counterparty that are subject to netting agreement;
  - 79.3. the bank monitors and controls roll-off risks<sup>12</sup>; and
  - 79.4. the bank internally monitors and controls the relevant exposure on a net basis.
- 80. All exposures shall be risk-weighted net of specific impairment allowances that have been charged to the respective customer account.

<sup>12</sup> Roll-off risks relate to the sudden increases in exposure which can happen when short dated obligations (for example deposits) used to net long dated claims (for example loans/financing) mature.

## PART F: SECURITISATION FRAMEWORK

81. Banks shall apply the *Securitisation* Framework for determining regulatory capital requirements on exposures arising from allowable *securitisations*.
82. Since *securitisations* may be structured in many different ways, the capital treatment of a *securitisation* exposure must be determined on the basis of its economic substance rather than its legal form. Similarly, AMBD considers the economic substance of a transaction to determine whether it should be subject to the *Securitisation* Framework for purposes of determining regulatory capital.

### F1: SCOPE OF TRANSACTIONS

83. The scope of transactions covered under this *Securitisation* Framework are as follows:
  - 83.1. The Framework includes traditional *securitisation* structures where the cash flow from an underlying pool of exposures is used to service at least two different stratified risk positions or tranches reflecting different degrees of credit risk.
  - 83.2. Payments to the investors depend upon the performance of the specified underlying exposures, as opposed to being derived from an obligation of the entity originating those exposures.
  - 83.3. The stratified/tranched structures that characterise *securitisations* differ from ordinary senior/subordinated debt instruments in that junior *securitisation* tranches can absorb losses without interrupting contractual payments to more senior tranches, whereas subordination in a senior/subordinated debt structure is a matter of priority of rights to the proceeds of a liquidation.
  - 83.4. Banks' exposures to such *securitisations* referred to above are termed "*Securitisation Exposures*".

### F2: PERMISSABLE ROLE OF BANKS

84. Since banks are required to apply the *Standardised Approach* for the type of underlying exposure(s) securitized, banks can only assume the role of an investing bank in a traditional *securitisation*.
85. An investing bank is an institution, other than the originator or the servicer that assumes the economic risk of a *securitisation* exposure.
  - 85.1. A bank is considered to be an originator if it originates directly or indirectly credit exposures included in the *securitisation*. Banks are not allowed to be originators.
  - 85.2. A servicer bank is one that manages the underlying credit exposures of a *securitisation* on a day-to-day basis in terms of collection of principal and interest/profit, which is then forwarded to investors in *securitisation* exposures. Banks are not allowed to be servicers.

86. Banks shall not offer credit enhancement, liquidity facilities or other financial support to a *securitisation*.

### F3: TREATMENT OF *SECURITISATION* EXPOSURES

87. Banks shall hold regulatory capital against all of their *securitisation* exposures and when a bank is required to deduct a *securitisation* exposure from regulatory capital such as first loss positions acquired, the deduction shall be taken 50% from Tier 1 and 50% from Tier 2.
88. The risk weights applicable for *securitisations* and *resecuritisations* are provided in **Table 10** and **Table 11**.

**Table 10: Risk Weights for *Securitisation* – Long Term Rating**

Rating Category	Standard and Poor's Rating Services (S&P)	Moody's Investors Service (Moody's)	Fitch Ratings (Fitch)	<i>Securitisation</i> Exposures	<i>Resecuritisation</i> Exposures
1	AAA to AA-	Aaa to Aa3	AAA to AA-	20%	40%
2	A+ to A-	A1 to A3	A+ to A-	50%	100%
3	BBB+ to BBB-	Baa1 to Baa3	BBB+ to BBB-	100%	225%
4	BB+ to BB-	Ba1 to B3	BB+ to BB-	350%	650%
5	B+ and below	B1 and below	B+ and below	Deduction	Deduction
Unrated and First Loss				Deduction	Deduction

**Table 11: Risk Weights for *Securitisation* – Short Term Rating**

Rating Category	Standard and Poor's Rating Services (S&P)	Moody's Investors Service (Moody's)	Fitch Ratings (Fitch)	<i>Securitisation</i> Exposures	<i>Resecuritisation</i> Exposures
1	A-1+, A-1	P-1	F1+, F1	20%	40%
2	A-2	P-2	F2	50%	100%
3	A-3	P-3	F3	100%	225%
All Others, including Unrated and First Loss				Deduction	Deduction

89. A *resecuritisation* exposure is defined as a *securitisation* exposure in which the risk associated with an underlying pool of exposures is tranching and at least one of the underlying exposures is a *securitisation* exposure. In addition, an exposure to one or more *resecuritisation* exposures is a *resecuritisation* exposure.
90. Given the complexity of many *securitisation* transactions, banks should consult with the AMBD when there is uncertainty about whether a particular structured credit position should be considered a *resecuritisation* exposure. When making such determinations, the AMBD will look to the exposure's economic substance.

91. The following describes how the definition of a *resecuritisation* exposure would be applied in practice to several common types of transactions: -
- 91.1. The definition of a *resecuritisation* exposure captures Collateralised Debt Obligations (CDOs) of asset-backed securities (ABS) including a CDO backed by residential mortgage-backed securities (RMBS). Moreover, it also captures a *securitisation* exposure where the pool contains many individual mortgage loans/financing and a single RMBS.
  - 91.2. Any tranching position (eg senior/subordinated ABS) exposed to that pool will be considered a *resecuritisation* exposure, even if only one of the underlying exposures is a *securitisation* exposure.
  - 91.3. Furthermore, when an instrument's performance is linked to one or more *resecuritisation* exposures, generally that instrument is a *resecuritisation* exposure. Thus, a credit derivative providing credit protection for a CDO<sup>2</sup> tranche is a *resecuritisation* exposure.
  - 91.4. The definition of *resecuritisation* also applies to Asset-Backed Commercial Paper (ABCP) programmes.

## PART G: MARKET RISK

### G1: INTRODUCTION

92. Market risk is the risk of financial losses in on and off-balance sheet positions arising from movements in market prices. When calculating market RWA, a Bank must include the following: -
- 92.1. The risks pertaining to interest/profit rate related instruments and equities in the trading book; and
  - 92.2. Foreign exchange risk and commodities risk throughout the bank.
93. In calculating eligible capital, it is necessary first to calculate the bank's minimum capital requirement for credit and operational risks, and only afterwards its market risk requirement, to establish how much Tier 1 and Tier 2 capital is available to support market risk.
- 93.1. The quoted capital ratio thus represents capital that is available to meet credit risk, operational risk, and market risk.
  - 93.2. Positions in the bank's own eligible regulatory capital instruments are deducted from capital.
  - 93.3. Positions in other banks', securities firms', and other financial entities' eligible regulatory capital instruments, as well as intangible assets, receive the same treatment as that set down by the AMBD for such assets held in the banking book.
94. In determining the consolidated minimum capital requirement, market risk positions in each subsidiary can be netted against positions in the remainder of the group if:
- 94.1. the risk positions of the group are centrally managed; and
  - 94.2. there are no obstacles to quick repatriation of profits from a foreign subsidiary or legal and procedural difficulties in operationalising timely risk management on a consolidated basis.

#### **Scope of Capital Charges**

95. The market risk capital charge applies as follows: -
- 95.1. The capital charges for interest/profit rate and equity are applied to the current market value of interest/profit rate and equity related financial instruments or positions in the trading book.

95.2. The capital charge for foreign exchange risk and commodities risk however are applied to all foreign currency and commodities positions. Some of the foreign exchange and commodity positions will be reported and hence evaluated at market value, while some may be reported and evaluated at book value.

### **Approach to Measure Market Risks**

- 95.3. All Banks must measure market risk according to the *Standardised Methodology* using the measurement frameworks described below for each of the four risks addressed i.e. interest/profit rate, equity position, foreign exchange and commodities risk.
96. The capital charge under the *Standardised Methodology* is the sum of measures of the above risks.
97. The *Standardised Methodology* uses a “building-block” approach in which *Specific Risk* and the *General Market Risk* arising from debt and equity positions are calculated separately.
98. Each bank subject to capital charges for market risk is expected to monitor and report the level of risk against which a capital requirement is to be applied.
99. All transactions, including forward sales and purchases, must be included in the calculation of capital requirements as from the date on which they were entered into.
100. Although regular reporting takes place at monthly intervals, 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.
101. Banks should not “window-dress” by showing significantly lower market risk positions on reporting dates. Banks are also expected to maintain strict risk management systems to ensure that intra-day exposures are not excessive.
102. If a bank fails to meet the capital requirements, the AMBD shall require that the bank takes immediate measures to rectify the situation.

### **Classification of Financial Instruments in the Trading Book**

103. 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: -
- 103.1. financial instruments must either be free of any restrictive covenants on their tradability or able to be hedged completely; and
- 103.2. positions should be frequently and accurately valued, and the portfolio should be actively managed. Generally, this would mean that all positions are revalued daily using prices provided by independent third parties.

104. 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.
- 104.1. Financial instruments include both primary financial instruments (or cash instruments) and derivative financial instruments.
- 104.2. A financial asset is any asset that is cash, the right to receive cash or another financial asset; or the contractual right to exchange financial assets on potentially favourable terms, or an equity instrument.
- 104.3. A financial liability is the contractual obligation to deliver cash or another financial asset or to exchange financial liabilities under conditions that are potentially unfavourable.
105. 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.
106. **Banks must have clearly defined policies and procedures** for determining which exposures to include in, and to exclude from, the trading book for purposes of calculating their regulatory capital, to ensure compliance with the criteria for trading book set forth and taking into account the bank's risk management capabilities and practices. **Compliance with these policies and procedures must be fully documented and subject to periodic internal audit.**
107. These policies and procedures should, at a minimum, address the general considerations listed<sup>13</sup> below.
- 107.1. The activities the bank considers to be trading and as constituting part of the trading book for regulatory capital purposes;
- 107.2. The extent to which an exposure can be marked-to-market daily by reference to an active, liquid two-way market;
- 107.3. For any exposures that are marked-to-model, the extent to which the bank can:
- 107.3.1. Identify the material risks of the exposure;
- 107.3.2. Hedge the material risks of the exposure and the extent to which hedging instruments would have an active, liquid two-way market;
- 107.3.3. Derive reliable estimates for the key assumptions and parameters used in the model.

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<sup>13</sup> The list is not intended to provide a series of tests that a product or group of related products must pass to be eligible for inclusion in the trading book. Rather, the list provides a minimum set of key points that must be addressed by the policies and procedures for overall management of a bank's trading book.

- 107.4. The extent to which the bank can and is required to generate valuations for the exposure that can be validated externally in a consistent manner;
  - 107.5. The extent to which legal restrictions or other operational requirements would impede the bank's ability to effect an immediate liquidation of the exposure;
  - 107.6. The extent to which the bank is required to, and can, actively risk manage the exposure within its trading operations; and
  - 107.7. The extent to which the bank may transfer risk or exposures between the banking and the trading books and criteria for such transfers.
108. For positions eligible to receive trading book capital treatment, the instruments and positions must have: -
- 108.1. Clearly documented trading strategy for the position/instrument or portfolios, approved by senior management (which would include expected holding horizon).
  - 108.2. Clearly defined policies and procedures for the active management of the positions, which must include:
    - 108.2.1. positions are managed on a trading desk;
    - 108.2.2. position limits are set and monitored for appropriateness;
    - 108.2.3. dealers have the autonomy to enter into/manage the position within agreed limits and according to the agreed strategy;
    - 108.2.4. positions are marked to market at least daily and when marking to model the parameters must be assessed on a daily basis;
    - 108.2.5. positions are reported to senior management as an integral part of the bank's risk management process; and
    - 108.2.6. positions are actively monitored with reference to market information sources (assessment should be made of the market liquidity or the ability to hedge positions or the portfolio risk profiles). This would include assessing the quality and availability of market inputs to the valuation process, level of market turnover, sizes of positions traded in the market, etc.
  - 108.3. Clearly defined policy and procedures to monitor the positions against the bank's trading strategy including the monitoring of turnover and stale positions in the bank's trading book.
109. All defaulted financial instruments in the trading book must be treated as banking book positions and must be subjected to the same treatment for such assets held in the banking book (see Appendix 2 for failed trades in respect of failed derivative contracts).

110. Generally, all derivative instruments should be classified in the trading book except for derivatives which qualify as hedges for banking book positions. However, certain credit derivatives instruments and structured investments may be classified as banking book positions particularly for long-term investments which are illiquid and/or have significant credit risk elements.
111. Repo and reverse repo transactions shall be assessed based on the trading book definition outlined above.

## **G2: PRUDENT VALUATION GUIDANCE**

112. This section provides banking institutions with guidance on prudent valuation for positions in the trading book. This guidance is especially important for less liquid positions which, although not excluded from the trading book solely on grounds of lesser liquidity, would raise issues relating to valuation.
113. A framework for prudent valuation practices that all banks should adhere to the minimum requirements specified below:

### **113.1. Systems and Controls**

113.1.1. Banks must establish and maintain adequate systems and controls sufficient to give management and the AMBD the confidence that their valuation estimates are prudent and reliable. These systems must be integrated with other risk management systems within the organisation (such as credit analysis). Such systems must include:

- a) Documented policies and procedures for the process of valuation. This includes clearly defined responsibilities of the various areas involved in the determination of the valuation, sources of market information and review of their appropriateness, frequency of independent valuation, timing of closing prices, procedures for adjusting valuations, end of the month and ad-hoc verification procedures; and
- b) Clear and independent (i.e. independent of front office) reporting lines for the department accountable for the valuation process.

### **113.2. Valuation Adjustments / Reserves**

113.2.1. Banks must establish and maintain procedures for considering valuation adjustments/reserves, which shall be deducted in the calculation of Tier-1 Capital.

- a) The following valuation adjustments shall be formally considered where relevant: unearned credit spreads, close-out costs,

operational risks, early termination, investing and funding costs, future administrative costs and, if appropriate, model risk.

- 113.2.2. In addition, banks must consider the need for establishing an appropriate adjustment for less liquid positions. The appropriateness of the adjustments shall be subjected to an ongoing review. Reduced liquidity could arise from structural and/or market events.
- 113.2.3. In addition, close-out prices for concentrated positions and/or stale positions are more likely to be adverse. Banks must, at the minimum, consider several factors when determining whether valuation adjustment is necessary for less liquid items.
- a) These factors include the amount of time it would take to hedge out the risks within the position, the average volatility of bid/offer spreads, the availability of market quotes (number and identity of market makers), and the average and volatility of trading volumes.

### **G3: INTEREST/PROFIT RATE RISK**

#### **Approach to Measure Interest/Profit Rate Risk**

114. This section describes the standard framework for measuring the risk of holding or taking positions in debt securities and other interest/profit rate related instruments in the trading book.
115. The financial instruments covered include all fixed-rate and floating-rate debt securities and instruments that share similar characteristics as debt securities including non-convertible preference shares. Interest/profit rate exposures arising from forward foreign exchange transactions, derivatives and forward sales and purchases of securities are also included.
116. Convertible bonds, that is debt issues or preference shares that are convertible into common shares of the issuer, must be treated as debt securities if the instruments trade like debt securities, or be treated as equities if the instruments trade like equities.
117. Banks must calculate two separate charges for determining the minimum capital requirement for interest/profit rate risk. These two components are termed 'general risk' and 'specific risk'.
118. Interest/profit rate sensitive instruments are normally affected by general changes in market interest/profit rate, known as **general risk**, and changes in factors related to a specific issuer, in particular issuer's credit quality, which would affect the instrument, known as **specific risk**.

119. The minimum capital requirement is expressed in terms of these two risks by two separately calculated charges for the following: -

119.1. Specific risk of each security, whether it is a short or a long position; and

119.2. General market risk where long and short positions in different securities or instruments may be offset.

**Specific Risk**

120. 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.

121. 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.

122. The capital charges for “government” and “other” categories are as **Table 12** (see also paragraph 157 for derivatives where there may sometimes be a specific risk charge)

<b>Table 12: Capital Charge for Interest/Profit Rate Risk (Specific Risk)</b>		
<b>Categories</b>	<b>External Credit Assessment</b>	<b>Specific Risk Capital Charge</b>
Government	AAA to AA-	0%
	A+ to BBB-	0.25% (residual term to final maturity 6 months or less)
		1.00% (residual term to final maturity greater than 6 and up to and including 24 months)
		1.60% (residual term to final maturity exceeding 24 months)
	BB+ to B-	8.00%
	Below B-	12.00%
Unrated	8.00%	
'Qualifying'	AAA to BBB-	0.25% (residual term to final maturity 6 months or less)
		1.00% (residual term to final maturity greater than 6 and up to and including 24 months)
		1.60% (residual term to final maturity exceeding 24 months)

Other - Similar to credit risk charges under the standardised approach	BB+ to B-	8.00%
	Below B-	12.00%
	Unrated	8.00%

123. The category “government” includes all forms of government paper including sukuk, bonds, Treasury bills and other short-term instruments. The AMBD 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.
124. When Brunei government paper is denominated in BND and funded by the bank in the same currency, a specific risk charge of 0% may be applied.
125. The “qualifying” category includes securities issued by multilateral development banks, plus other securities that are rated investment-grade by at least two credit rating agencies approved by the AMBD.

**Specific Risk Rules for Non-Qualifying Issuers (i.e. Other)**

126. Instruments issued by a non-qualifying issuer will receive the same specific risk charge as a non-investment grade corporate borrower under the standardised approach for credit risk under this Framework.
127. In cases where specific risk is considerably underestimated, often involving debt instruments which have a high yield to redemption relative to government debt securities/*sukūk*, the AMBD may:
- 127.1. require banking institutions to apply a higher specific risk charge to such instruments; and/or
- 127.2. disallow offsetting for the purposes of defining the extent of general market risk between such instruments and any other debt instruments.

**General Market Risk**

128. The capital requirements for general market risk are designed to capture the risk of loss arising from changes in market interest/profit rates. Banks must use the “maturity” method, unless they have received AMBD approval to use the “duration” method.
129. If banks wish to use the ‘Duration method’, they must apply to the AMBD before doing so, in order that the AMBD may assess the adequacy of internal systems for producing data for the calculation of the price sensitivity of each separate position.

130. The capital charge is the sum of three components:
- 130.1. The net short or long position in the whole trading book;
  - 130.2. A small proportion of the matched positions in each time-band (the “vertical disallowance”);
  - 130.3. A larger proportion of the matched positions across different time-bands (the “horizontal disallowance”);
131. 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.
- 131.1. In the case of those currencies in which business is insignificant, separate maturity ladders for each currency are not required.
  - 131.2. 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.
  - 131.3. 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.

### **Maturity Method**

132. In the **maturity method**, long or short positions in debt securities and other sources of interest/profit 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).
133. Fixed rate instruments shall be allocated according to the residual term to maturity and floating-rate instruments according to the residual term to the next repricing date.
134. 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/profit rate maturity framework, as well as closely matched swaps, forwards, futures and forward rate agreements which meet the conditions set out in the *Allowable Offsetting of Matched Positions* section below (paragraphs 150 to 153)
135. The first step in the calculation of the capital charge 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/profit rates. The risk weights for each time-band are set out in the **Table 9** below.
- 135.1. 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 **Table 13**.

<b>Table 13: Maturity method: time-bands and weights</b>			
<b>Coupon 3% or more</b>	<b>Coupon less than 3%</b>	<b>Risk weight</b>	<b>Assumed changes in yield</b>
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
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
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

### **Vertical Disallowance**

136. 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.
137. Since 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, in each time band.
- 137.1. Thus, if the sum of the weighted longs in a time-band is \$100 million and the sum of the weighted shorts \$90 million, the so-called “vertical disallowance” for that timeband would be 10% of \$90 million (i.e. \$9.0 million).

### **Horizontal Disallowance**

138. From the results of the above calculations, two sets of weighted positions, the net long or short position in each time band (\$10 million long in the example above), would be produced.

139. The maturity ladder is then divided into three zones defined as zero to one year, more than one year to four years and more than four years.
- 139.1. Banks will then conduct two further rounds of offsetting, first between the net time band positions within each zone and secondly between the net positions across the three different zones (that is, between adjacent zones and non-adjacent zones).
- 139.2. The residual net position in each zone may be carried over and offset against opposite positions in other zones when calculating net positions between zones 2 and 3, and 1 and 3.
- 139.3. The offsetting will be subjected to a scale of disallowances expressed as a fraction of the matched positions, as set out in **Table 14**.
- 139.4. The weighted long and short position 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.
- 139.5. The residual net position in each zone may be carried over and offset against opposite positions in other zones, subject to second set of disallowance factors.

<b>Table 14: Horizontal disallowances</b>				
<b>Zones</b>	<b>Time-band</b>	<b>Within the zone</b>	<b>Between adjacent zones</b>	<b>Between zones 1 and 3</b>
Z1	0 - 1 month	40%	40%	100%
	1 - 3 months			
	3 - 6 months			
	6 - 12 months			
Z2	1 - 2 years	30%	40%	
	2 - 3 years			
	3 - 4 years			
	4 - 5 years			
Z2	5 - 7 years	30%	40%	
	7 - 10 years			
	10 - 15 years			
	15 - 20 years			
	over 20 years			

### **Duration Method**

140. Under the alternative **duration method**, banks with the necessary capability may, with AMBD's consent, use a more accurate method of measuring their general market risk by calculating the price sensitivity of each position separately.

140.1. Banks must use the method on a continuous basis (unless a change in method is approved by the AMBD) and will be subject to supervisory monitoring of the systems used.

141. The mechanics of this method are as follows:

141.1. calculate the price sensitivity of each instrument in terms of a change in interest/profit rates of between 0.6 and 1.0 percentage points depending on the maturity of the instrument (see the **Table 15** below);

141.2. slot the resulting sensitivity measures into a duration-based ladder with the fifteen time-bands set out in **Table 15** below and obtain the net position;

141.3. subject long and short positions in each time-band to a 5% vertical disallowance designed to capture basis risk;

141.4. Carry forward the net positions in each time-band for horizontal offsetting subject to the disallowances set out in **Table 14** above.

<b>Table 15: Duration method (time-bands and assumed changes in yield)</b>		
	<b>Time-band</b>	<b>Assumed change in yield</b>
<b>ZONE 1</b>	0 - 1 month	1.00
	1 - 3 months	1.00
	3 - 6 months	1.00
	6 - 12 months	1.00
<b>ZONE 2</b>	1.0 to 1.9 years	0.90
	1.9 to 2.8 years	0.80
	2.8 to 3.6 years	0.75
<b>ZONE 3</b>	3.6 to 4.3 years	0.75
	4.3 to 5.7 years	0.70
	5.7 to 7.3 years	0.65
	7.3 to 9.3 years	0.60
	9.3 to 10.6 years	0.60
	10.6 to 12 years	0.60
	12 to 20 years	0.60
	Over 20 years	0.60

142. In the case of **residual currencies** (refer to paragraph 131 above) the gross positions in each time-band will be subject to either the risk weightings of the maturity method, or the assumed change in yield, if positions are reported using the duration method, with no further offsets.

#### **Treatment of Interest/Profit Rate Derivatives**

143. The measurement system should include all interest/profit rate derivatives and off balance-sheet instruments in the trading book which react to changes in interest/profit rates, (e.g. forward rate agreements (FRAs), other forward contracts, bond futures, interest/profit rate and cross-currency swaps and forward foreign exchange positions). A summary of the rules for dealing with interest/profit rate derivatives is set out below.

#### **Calculation of Positions**

144. The derivatives should be converted into positions in the relevant underlying and become subject to *specific* and *general market risk* charges as described in the subsections on *Specific Risk* and *General Market Risk* above.
145. 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 resulting from the prudent valuation guidance (refer to Section G2: Prudent Valuation Guidance).

#### **Calculation of Positions: Futures and Forward Contracts, including Forward Rate Agreements**

146. 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 forward rate agreements (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 three month interest/profit 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.
147. Where a range of deliverable instruments may be delivered to fulfil the contract, the bank has flexibility to elect which deliverable security goes into the maturity or duration ladder but should take account of any conversion factor defined by the exchange. In the case of a future on a corporate bond index, positions will be included at the market value of the notional underlying portfolio of securities.

#### **Calculation of Positions: Swaps**

148. Swaps are treated as two notional positions in government securities with relevant maturities. For example, an interest/profit rate swap where a bank is receiving floating rate interest/profit and paying fixed is treated as a long position in a floating rate instrument of maturity equivalent to the period until the next interest/profit fixing date and a short position in a fixed-rate instrument of maturity equivalent to the residual life of the swap.

149. For swaps that pay or receive a fixed or floating interest/profit rate against some other reference price, e.g. a stock index, the interest/profit rate component should be slotted into the appropriate repricing maturity category, with the equity component being included in the equity framework. The separate legs of cross-currency swaps must be reported in the relevant maturity ladders for the currencies concerned.

**Calculation of capital charges for derivatives: Allowable Offsetting of Matched Positions**

150. Banks may exclude from the interest/profit 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.
151. 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.
152. 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.
153. 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: -
- 153.1. **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;
- 153.2. **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
- 153.3. **for swaps, FRAs and forwards:** the next interest/profit fixing date or, for fixed coupon positions or forwards, the residual maturity must correspond within the following limits:
- 153.3.1. less than one month hence: same day;
- 153.3.2. between one month and one year hence: within seven days;
- 153.3.3. over one year hence: within thirty days.

### **Calculation of capital charges for derivatives: Specific Risk**

154. Interest/profit rate and currency swaps, FRAs, forward foreign exchange contracts and interest/profit rate futures will generally not be subject to a specific risk charge. This exemption also applies to futures on an interest/profit rate index (e.g. LIBOR).
155. However, in the case of futures contracts where the underlying deliverable 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 above.

### **Calculation of capital charges for derivatives: General Market Risk**

156. 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 as defined below. The various categories of instruments should be slotted into the maturity ladder and treated according to the rules identified earlier.
157. **Table 16** below presents a summary of the regulatory treatment for interest/profit rate derivatives, for market risk purposes.

<b><u>Table 16: Summary of treatment of interest/profit rate derivatives</u></b>		
<b>Instrument</b>	<b>Specific Risk Charge</b>	<b>General Market Risk Charge</b>
<b>Exchange-traded future</b> <ul style="list-style-type: none"><li>– Government debt security</li><li>– Corporate debt security</li><li>– Index on interest/profit rates (e.g. LIBOR)</li></ul>	Yes Yes No	Yes, as two positions Yes, as two positions Yes, as two positions
<b>OTC forward</b> <ul style="list-style-type: none"><li>– Government debt security</li><li>– Corporate debt security</li><li>– Index on interest/profit rates</li></ul>	Yes Yes No	Yes, as two positions Yes, as two positions Yes, as two positions
<b>FRAs, Swaps</b>	No	Yes, as two positions
<b>Forward foreign exchange</b>	No	Yes, as one position in each currency

## **G4: EQUITY POSITION RISK**

158. This section sets out a minimum capital standard to cover the risk of holding or taking positions in equities in the trading book. It applies to long and short positions in all instruments that exhibit market behaviour similar to equities, but not to non-convertible preference shares (which are covered by the interest/profit rate risk requirements described in Section G4: Interest/profit Rate Risk).

159. Long and short positions in the same issue may be 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. The treatment of derivative products, stock indices and index arbitrage is described below.

#### **Specific and General Market Risk**

160. As with debt securities, the minimum capital standard for equities is expressed in terms of two separately calculated charges as follows: -

160.1. for the “specific risk” of holding a long or short position in an individual equity; and

160.2. for the “general market risk” of holding a long or short position in the market as a whole.

161. 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.

162. 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).

162.1. The capital charge for specific risk is 8%.

163. General market risk will be assessed 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).

163.1. The general market risk charge is 8%.

#### **Treatment of Equity Derivatives**

164. *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 instrument or index. The treatment of *equity derivatives* is summarised below.

#### **Calculation of Positions**

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

165.1. Futures and forward contracts relating to individual equities should in principle be reported at current market prices;

165.2. Futures relating to stock indices should be reported as the marked-to-market value of the notional underlying equity portfolio;

165.3. Equity swaps are to be treated as two notional positions;

### **Calculation of capital charges**

#### **Measurement of specific and general market risk**

166. 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**

167. The capital charge for index for specific and general market risk is 8% respectively.

**Table 17** below summarises the regulatory treatment of *equity derivatives* for market risk purposes.

<b>Table 17: Summary of treatment of equity derivatives</b>		
<b>Instrument</b>	<b>Specific Risk</b>	<b>General Market Risk</b>
<b>Exchange-traded or OTC-Future</b>		
– Individual Equity	Yes	Yes, as underlying
– Index	8%	Yes, as underlying
<b>OTC forward</b>		
– Individual Equity	Yes	Carve out together with the
– Index	8%	associated hedging positions

## **G5: FOREIGN EXCHANGE RISK**

168. This section sets out a minimum capital standard to cover the risk of holding or taking positions in foreign currencies, including gold. Positions in SGD are not considered foreign currency positions for the purpose of calculating market risk, because SGD and BND are subject to the currency peg.

169. Two processes are needed to calculate the capital requirement for foreign exchange risk.

169.1. The first is to measure the exposure in a single currency position.

169.2. The second is to measure the risks inherent in a bank's mix of long and short positions in different currencies.

#### **Measuring the Exposure in a Single Currency**

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

170.1. The net spot position (i.e. all asset items less all liability items, including accrued interest/profit, denominated in the currency in question);

- 170.2. 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);
- 170.3. Guarantees (and similar instruments) that are certain to be called and are likely to be irrecoverable;
- 170.4. Net future income/expenses not yet accrued but already fully hedged (at the discretion of the reporting bank);
- 170.5. Any other item representing a profit or loss in foreign currencies;
171. 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 as described in paragraph 189 below.
172. Three aspects call for more specific comment: *the treatment of interest/profit, other income and expenses; the measurement of forward currency positions and gold; and the treatment of "structural" positions.*

**The treatment of interest/profit, other income and expenses**

173. Interest/profit 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/profit and anticipated expenses may be excluded unless the amounts are certain and banks have taken the opportunity to hedge them.
174. 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**

175. 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/profit rate differentials to some extent.
176. 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/profit rates and valued at current spot rates, for measuring their forward currency and gold positions.

**The treatment of structural positions**

177. 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.

178. The AMBD will allow banks to protect their capital adequacy ratio in this way. 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: -

178.1. Such positions need to be of a “structural”, i.e. of a non-dealing, nature;

178.2. The structural position excluded does no more than protect the bank’s capital adequacy ratio;

178.3. 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.

179. 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.

**Measuring The Foreign Exchange Risk In A Portfolio Of Foreign Currency Positions And Gold**

180. Banks must measure all currencies equally. 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. The overall net open position is measured by aggregating:

180.1. The sum of the net short positions or the sum of the net long positions, whichever is the greater; plus

180.2. The net position (short or long) in gold, regardless of sign.

181. The capital charge will be 8% of the overall net open position (see example below).

<b>Example of the measure of foreign exchange risk</b>					
<b>YEN ¥</b>	<b>EUR €</b>	<b>GB £</b>	<b>CA \$</b>	<b>US \$</b>	<b>GOLD</b>
+50	+100	+150	-20	-180	-35
Aggregate	+300		-200		-35
The capital charge would be 8% of the higher of <b>either</b> the net long currency positions <b>or</b> the net short currency positions (i.e. 300 in this case) plus the net position in gold (35) = 335 x 8% = 26.8.					

182. A bank doing negligible business in foreign currency and which does not take foreign exchange positions for its own account may, at the discretion of the AMBD, be exempted from capital requirements on these positions provided that: -

182.1. 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 regulatory capital; and

182.2. Its overall net open position as defined in paragraph 180 above does not exceed 2% of its regulatory capital.

## **G6: COMMODITIES RISK**

183. 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). 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.

184. The price risk in commodities is often more complex and volatile than that associated with currencies and interest/profit rates. Commodity markets may also be less liquid than those for interest/profit rates and currencies and, as a result, changes in supply and demand can have a more dramatic effect on price and volatility<sup>14</sup>. These market characteristics can make price transparency and the effective hedging of commodities risk more difficult.

185. For spot or physical trading, the directional risk arising from a change in the spot price is the most important risk. However, banks using portfolio strategies involving forward and derivative contracts are exposed to a variety of additional risks, which may well be larger than the risk of a change in spot prices. These include:

185.1. Basis risk (the risk that the relationship between the prices of similar commodities alters through time);

185.2. Interest/profit rate risk (the risk of a change in the cost of carry for forward positions);

185.3. Forward gap risk (the risk that the forward price may change for reasons other than a change in interest/profit rates).

186. In addition, banks may face credit counterparty risk on over-the-counter derivatives and this is captured by the credit risk component of this framework.

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<sup>14</sup> Banks need also to guard against the risk that arises when the short position falls due before the long position. Owing to a shortage of liquidity in some markets it might be difficult to close the short position and the bank might be squeezed by the market.

187. The funding of commodities positions may well open a bank to interest/profit rate or foreign exchange exposure and if that is so the relevant positions should be included in the measures of interest/profit rate and foreign exchange risk.

**Measuring Commodities Position Risk (Simplified Approach)**

188. Commodities risk is measured in a standardised manner, using a simple framework which takes the long and short positions in each commodity on a net basis for the purposes of calculating open positions.

188.1. Positions in different commodities will not be offsettable except where different sub-categories of the same commodity are deliverable against each other and a minimum correlation of 0.9 between the price movements can be clearly established over a minimum period of one year.

188.1.1. A bank wishing to base its calculation of capital charges for commodities on correlations will have to satisfy the AMBD of the accuracy of the method which has been chosen and obtain its prior approval.

189. Banks must express each commodity position (spot plus forward) in terms of the standard unit of measurement (barrels, kilos, grams etc.). The net position in each commodity is then converted at current spot rates into BND. A capital charge equal to 15% of the net position in each commodity is then applied.

190. All commodity derivatives and off-balance-sheet positions which are affected by changes in commodity prices should be included in this measurement framework. This includes commodity futures, commodity swaps. In order to calculate the risk, commodity derivatives should be converted into notional commodities positions as follows:

190.1. futures and forward contracts relating to individual commodities should be incorporated in the measurement system as notional amounts of barrels, kilos etc;

190.2. commodity swaps where one leg is a fixed price and the other the current market price should be incorporated as a series of positions equal to the notional amount of the contract, with one position corresponding with each payment on the swap. The positions would be long positions if the bank is paying fixed and receiving floating, and short positions if the bank is receiving fixed and paying floating;

190.3. commodity swaps where the legs are in different commodities are to be incorporated under the relevant commodity. No offsetting will be allowed in this regard except where the commodities belong to the same sub-category.

191. In order to protect the bank against basis risk, interest/profit rate risk and forward gap risk, the capital charge for each commodity as described above is subject to an additional capital charge equivalent to 3% of the bank's gross positions, long plus short, in that particular commodity. In valuing the gross positions in commodity derivatives for this purpose, banks should use the current spot price.

## PART H: OPERATIONAL RISK

### H1: INTRODUCTION

192. 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.
193. A bank shall have in place internal operational risk management framework that commensurate with the nature, complexity and sophistication of their business activities.
- 193.1. A Bank should adopt the practices set out in the report “*Principles for the Sound Management of Operational Risk*” issued by the BCBS in June 2011.

### H2: THE BASIC INDICATOR APPROACH (BIA)

194. In this regard, banks shall hold capital for operational risk equal to the average over the previous three years of a fixed percentage (denoted  $\alpha$ ) of positive annual gross income<sup>15</sup>.
195. The charge for operational risk may be expressed as follows:

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

where:

- $K_{BIA}$  = the capital charge under the Basic Indicator Approach
- GI = annual gross income, where positive, over the previous three years
- n = number of the previous three years for which gross income is positive
- $\alpha$  = 15%

<sup>15</sup> If the annual gross income for any given year is negative or zero, the figure shall not be included for the purposes of calculating the operational risk capital charge.

196. A Bank shall calculate its gross income<sup>16</sup> as the sum of its net interest/profit income<sup>17</sup> and non-interest/profit income<sup>18</sup>, taking into account the following:-

196.1. be gross of any provisions (e.g. for unpaid interest/profit);

196.2. be gross of operating expenses, including fees paid to outsourcing service providers<sup>19</sup>;

196.3. *exclude* realised profits/losses from the sale of securities in the banking book<sup>20</sup>;

196.4. *exclude* extraordinary or irregular items; and

196.5. *exclude* any income derived from any insurance/takaful recoveries.

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<sup>16</sup> Audited gross income figures shall be used where available. Where audited figures are not available, unaudited gross income figures may be used, provided that the Reporting Bank shall reconcile, on a timely basis, such unaudited gross income figures with its audited financial statements (as well as any quarterly and half-yearly financial statement which has been reviewed by external auditors, where available), and use the latest reconciled numbers for future calculations.

<sup>17</sup> Net interest/profit income is defined as interest/profit income less interest/profit expense.

<sup>18</sup> Non-interest/profit income includes fees and commissions income after deducting fees and commissions expense.

<sup>19</sup> In contrast to fees paid for outsourced services, any fee received by any Reporting Bank for its outsourcing services shall be included in the definition of gross income.

<sup>20</sup> Realised profits/losses from securities classified as "held to maturity" and "available for sale", which typically constitute items of the banking book, are also excluded from the definition of gross income.

## Appendix 1: National Discretion

Paragraph in Basel II document (June 2006 version)	Summary of National discretion	AMBD Treatment
<b>PART B: SCOPE OF APPLICATION</b>		
28	Threshold for minority investments in banking and financial entities to be deemed significant and be either deducted or consolidated on a pro-rata basis.	The threshold level for pro-rata consolidation is ownership equal to or above 20% but less than 50%. Deduction where these criteria are not met.
30-34	Treatment of significant investments in insurance/takaful subsidiaries	<i>Deduct</i> any equity and other regulatory capital investments in insurance/takaful subsidiaries and also significant minority investments by the bank in insurance/takaful entities.
<b>PART E: CREDIT RISK</b>		
54	Lower risk weight to claims on sovereign (or Central Bank) in domestic currency, if funded in that currency	Apply 0% risk weight for exposures to Government of Brunei Darussalam and AMBD.
55	Recognition of Export Credit Agencies assessment.	Not recognized.
57	Claims on domestic PSEs	Domestic PSEs accorded 0% if criteria specified under paragraph 33 met.  Otherwise, treated as corporates.
58	Claims on domestic PSEs as if sovereigns (Treatment if other regulators adopt preferential treatment)	Exercised for Brunei PSEs.  All other PSEs outside Brunei Darussalam shall be risk weighted at one grade less favourable than their sovereigns.
60-64	Claims on banks Option 1: risk weight one category less than sovereign. Option 2: risk-weight on the bank's external credit assessment	Option 2 applied.

64	Preferential risk weight treatment for claims on banks with an original maturity of 3 months or less and denominated and funded in local currency.	Exercised.
65	Allow securities firm to be treated as banks.	Allowed provided firms are subject to supervisory and regulatory arrangements comparable to the Basel 2 or 3 Framework (including, in particular, risk-based capital requirements).  Otherwise, treated as Corporates.
67	Increase standard risk weight for unrated claims when a higher risk weight is warranted by the default experience in their jurisdiction.	Unrated corporates accorded with 100% risk-weight.
68	To risk weight all corporate claims at 100% without regard to external ratings.	Not exercised.
69	Definition of claims included in Regulatory Retail Portfolio.	Definition provided under paragraphs 44-46.
70	Granularity criterion for the retail portfolio, limit of 0.2% of the overall retail portfolio.	0.2% threshold applied.  The 0.2% limit not applicable where the <i>Regulatory Retail Portfolio</i> has less than 1,000 customers.
71	To increase risk-weights for regulatory retail portfolio exposures.	Risk-weight maintained at 75%.
72	Definition of claims secured by residential mortgages.	Definition provided under paragraph 47.
72-73	To increase preferential risk-weight for claims secured by residential properties.	Risk-weights for residential mortgages subject to above criteria.
74 Footnote 29	Commercial real estate 50% risk weight only if strict conditions are met.	Not exercised.
75 & 78	Risk-weight for the unsecured portion of a loan/financing past due, net of specific provisions, reduced to 50% when specific provisions are more than 50%.	Not exercised.

75 Footnote 30	Past due treatment for non-past due loans/financing to counterparties subject to a 150% risk-weight.	Not exercised.
76 Footnote 31	Transitional period of 3 years for recognition of a wider range of collateral for higher risk categories (past due assets).	Not exercised.
77	If a past due loan/financing is fully secured by other forms of collateral, a 100% risk weight may apply when provisions reach 15% of the outstanding amount.	Not exercised.
80	150% or higher risk weight to other assets.	Exercised. Risk-weight applies to: - 1. Venture Capital and Private Equities Investments
81 Footnote 32	Risk weight gold bullion at 0%.	Exercised.
90-91	Acceptable Credit Rating Agencies	Banks may choose from the following: -  1. Moody's 2. Standard & Poor's 3. Fitch IBCA  Others are subject to prior approval of AMBD.
92	Mapping of ECAI assessments to Risk Weights.	Exercised.
102	Use of borrower's domestic currency rating for exposure in foreign exchange transactions when loan/financing extended by Multilateral Development Banks	
108	Use of unsolicited ratings	Not exercised.
<b>PART H: OPERATIONAL RISK</b>		
650	Definition of Gross Income.	Definition provided under paragraph 196.
652 Footnote 104	Allow banks to use the alternative standardized approach.	Not exercised.
654 Footnote 105	Treatment of negative gross income.	Negative numbers should be excluded.

<p>663 Footnote 108</p>	<p>As some internationally active banks will wish to use the Standardised Approach, it is important that such banks have adequate operational risk management systems. Consequently, an internationally active bank using the Standardised Approach must meet the criteria in paragraph 663. For other banks, these criteria are recommended, with national discretion to impose them as requirements.</p>	<p>All banks are expected have in place internal operational risk management framework that commensurate with the nature, complexity and sophistication of their business activities.</p> <p>A Bank should adopt the practices set out in the report “<i>Principles for the Sound Management of Operational Risk</i>” issued by the BCBS in June 2011.</p>
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## Appendix 2: Capital Treatment for Failed Trades and Non-DvP Transactions

1. The capital treatment specified in this appendix is applicable to all transactions on securities, foreign exchange instruments and commodities that give rise to a risk of delayed settlement or delivery. This may include transactions through recognised clearing houses that are subject to daily mark-to-market and payment of daily variation margins and that involve a mismatched trade.
2. Transactions on securities, foreign exchange contracts or commodities may be settled via the following: -
  - 2.1. delivery-versus-payment system (DvP)<sup>21</sup>, which provides simultaneous exchanges of securities for cash, hence exposing banking institutions to a risk of loss on the difference between the transaction valued at the agreed settlement price and the transaction valued at current market price (i.e. positive current exposure); or
  - 2.2. non-DvP or free-delivery system, whereby 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, hence exposing banking institutions to a risk of loss on the full amount of cash paid or deliverables delivered.
3. The Bank shall apply a risk weight to any exposure (irrespective of counterparty) arising from receivables that remain unpaid or undelivered (i.e. a 'failed trade') in respect of an unsettled DvP transaction in accordance with the following: -

Number of working days after the agreed settlement date	Risk Weight
From 0 to 4	0%
From 5 to 15	100%
From 16 to 30	625%
From 31 to 45	937.5%
46 or more	1250%

4. The Bank which has fulfilled its obligations under the first contractual payment or delivery leg of a non-DvP transaction shall regard as a loan/financing exposure to its counterparty any outstanding receivables after the end of the first contractual payment or delivery date<sup>22</sup>.
5. The Bank shall risk weight any such exposure arising from receivables that remain unpaid or undelivered up to and including the fourth business day after the second contractual payment or delivery date in accordance with the standardised risk weights for the exposure to the counterparty, in the same way as it does for all other banking book exposures. 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.

<sup>21</sup> includes payment-versus-payment (PvP) transactions.

<sup>22</sup> If the dates when two payment legs are made are the same according to the time zones where each payment is made, they are deemed to have been settled on the same day.

6. If the receivables arising from the non-DvP transaction remain unpaid or undelivered on or after the fifth business day after the second contractual payment or delivery date, the Bank shall apply a 1250% risk weight to such receivables and the replacement cost of the transaction, if any. This treatment shall continue until the second payment or delivery leg is effectively completed.

<b>Number of working days after the agreed settlement date</b>	<b>Risk Weight</b>
From 0 to 4	100%
From 5 to 15	1250%
From 16 to 30	
From 31 to 45	
46 or more	

7. AMBD may use its discretion to waive capital charges in cases of a system wide failure of a settlement or clearing system, until the situation is rectified. Failure by a counterparty to settle a trade in itself will not be deemed a default for purposes of credit risk under this framework.

### Appendix 3: Components of Total Regulatory Capital (Capital Base)

Line Code	Line Item	Definition
1.2.1.2.1.0.0	Tier 1 Capital	Tier 1 capital includes only permanent capital stated at item 1.2.1.2.1.1.1 to 1.2.1.2.1.1.7 below less total amount of deductions/adjustments to Tier 1 capital at item 1.2.1.2.1.2.0. Tier 1 capital must represent at least half (50%) of Total Capital, i.e. the sum total of Tier 2 capital should not exceed Tier 1 capital.
51.2.1.2.1.1.1	Paid-up Ordinary Shares/Assigned Head Office Funds	<b>In the case of Banks incorporated in <u>Brunei Darussalam</u>:</b> Issued and fully paid ordinary shares in terms of the Banking Order 2006 and Islamic Banking Order 2008. <b>Banks incorporated or established outside <u>Brunei Darussalam</u>:</b> Funds that shall be assigned by the Head Office of a Bank.
1.2.1.2.1.1.2	Non-cumulative, Non-redeemable Preference Shares	Issued and fully paid non-cumulative, non-redeemable preference shares where the payment of dividend could be reduced or waived permanently in the event of profitability being inadequate to support such payment in part or full.
1.2.1.2.1.1.3	Share Premium	The excess of issue price over the par value of the ordinary shares or common stock or non-cumulative, non-redeemable preference shares.
1.2.1.2.1.1.4	Statutory Reserve Fund	Statutory reserve fund created in terms of Section 24 of the Banking Order 2006 and Islamic Banking Order 2008.
1.2.1.2.1.1.5	Published Retained Profit	Balance in the statement of profit or loss brought forward from the previous financial years and as reported in the last audited financial statements. Accumulated losses should be reported in parenthesis and deducted.
1.2.1.2.1.1.6	General Reserve	Disclosed reserves in the form of general or other reserves created or increased by appropriation of retained earnings, share premium or other surplus as per last audited financial statements.
1.2.1.2.1.1.7	Fair Value Reserve	Any gain/ (loss) after tax arising from changes in fair value in financial instruments as shown in the last audited financial statements. Net losses arising from changes in fair value should be reported in parenthesis and deducted.
1.2.1.2.1.2.0	Deductions-1 to Tier 1 Capital	<b>Total amount of deductions/adjustments to core capital of item 1.2.1.2.1.2.1 to 1.2.1.2.1.2.5.</b>
1.2.1.2.1.2.1	Reciprocal Crossholdings of Ordinary Shares	Refer to paragraph 16.1.

Line Code	Line Item	Definition
1.2.1.2.1.2.2	Goodwill	Report the amount of goodwill as shown in the statement of financial position.  Refer to paragraph 16.2.
1.2.1.2.1.2.3	Intangible Assets, other than Goodwill	Intangible assets and losses in the current period and those brought forward from previous periods should be deducted from core capital.
1.2.1.2.1.2.4	Advances/Financing granted to employees of the bank for the purchase of shares of the bank under a share ownership plan	Report the amount of advances/financing granted to employees for in this regard.
1.2.1.2.1.2.5	Minority interests held by third parties	Report the amount of minority interests in the equity capital of financial subsidiaries held by third parties.
<b>1.2.1.2.2.0.0</b>	<b>Supplementary Capital (Tier 2 Capital)</b>	<b>Supplementary capital is the sum of item 1.2.1.2.2.0.1 to 1.2.1.2.2.0.3.</b>
1.2.1.2.2.0.1	Collective Impairment allowances	Refer to paragraph 15.1.
1.2.1.2.2.0.2	Hybrid (debt/equity) Capital Instruments	Refer to paragraph 15.2.
1.2.1.2.2.0.3	Approved Subordinated Term Debt	Refer to paragraph 15.3.
<b>1.2.1.2.2.1.0</b>	<b>Deductions-2 to Tier 2 Capital</b>	<b>Total amount of deductions/adjustments to Tier 2 capital of item 1.2.1.2.2.1.1 to 1.2.1.2.2.2.2.</b>
1.2.1.2.2.1.1	Reciprocal Crossholdings of Tier 2 Capital Instruments (As required by AMBD)	Refer to paragraph 16.1.
1.2.1.2.2.1.2	Minority Interests Arising From holdings of Tier Two instruments	Minority interests in Tier Two capital instruments of financial subsidiaries held by third parties should be reported here for deduction.  Refer to Paragraph 16.7.
<b>1.2.1.2.2.2.0</b>	<b>Sub-Total (Tier 2 Capital after Deduction)</b>	<b>Item 1.2.1.2.2.0.0 deduct item 1.2.1.2.2.1.0.</b>
1.2.1.2.2.3.0	Allowable Supplementary Capital (Tier 2 Capital)	Tier 2 capital should not exceed Tier 1 capital

<b>Line Code</b>	<b>Line Item</b>	<b>Definition</b>
<b>1.2.1.2.3.0.0</b>	<b>Total of Tier I and Tier II Capital</b>	<b>The total amount of Tier I capital and Tier II capital. The amount must agree to sum of items 1.2.1.2.1.0.0 and 1.2.1.2.2.0.0</b>
<b>1.2.1.2.4.0.0</b>	<b>Deductions-3 to total Amount of Tier 1 and Tier II capital</b>	<b>Total amount of deductions/adjustments equally to Tier 1 and Tier 2 capital of item 1.2.1.2.4.1.0 to 1.2.1.2.4.5.0</b>
1.2.1.2.4.1.0	Significant Investment in Banking, Securities and Other Financial Entities	Refer to Paragraph 16.3.
1.2.1.2.4.2.0	Significant Investment in Insurance/Takaful Entities & Subsidiaries	Refer to Paragraph 16.4.
1.2.1.2.4.3.0	Significant Investments in Commercial Entities	Refer to Paragraph 16.5.
1.2.1.2.4.4.0	Securitisation exposures	Unrated securitisation exposures and securitisation exposures rated B+ or below.  Refer to Paragraph 88.
1.2.1.2.4.5.0	Resecuritisation exposures	Unrated resecuritisation exposures and resecuritisation exposures rated B+ or below.  Refer to Paragraph 88.
<b>1.2.1.2.5.0.0</b>	<b>Total Regulatory Capital</b>	<b>Total regulatory capital of the bank. Total of Tier I and Tier II Capital (1.2.1.2.3.0.0) less Sub-total of Deductions 2 and 3 (1.2.1.2.4.0.0)</b>

## Appendix 4: Components of Off-Balance Sheet Items

Line Code	Off Balance Sheet Items	Definition
<b>1.2.1.3.3.1.0</b>	<b>Direct Credit Substitutes</b>	<b>Conversion Factor is 100%.</b>
1.2.1.3.3.1.1	General Guarantees of Indebtedness	General guarantees of indebtedness where the risk of loss in the transaction may crystallise into a direct liability and become a direct claim on the counterparty. These include Guarantees in respect of counterparties like insurance/takaful agents, sales agents, etc. to cover any non-payment by them of premium, sales proceeds, etc. to their beneficiaries.
1.2.1.3.3.1.2	Standby LCs serving as Financial Guarantees	Stand-by Letters of Credit, which are direct, credit substitutes where the risk of loss in the transaction is equivalent to that of a direct claim on the counterparty. This includes stand-by Letters of Credit serving as financial guarantees for loans/financing, securities and other financial liabilities.
1.2.1.3.3.1.3	Bank Acceptances	Liabilities arising from acceptances on accommodation of bills but excludes bills that have been discounted by the bank itself. Risk participation and other similar commitments undertaken to repay the financial obligation of a customer, on his failure to do so, should be included.
1.2.1.3.3.1.4	Others	Any other obligation which carries the same risk of loss in the transaction and is equivalent to that of a direct claim on the counterparty.
<b>1.2.1.3.3.2.0</b>	<b>Transaction-related Contingencies</b>	<b>Conversion Factor is 50%.</b>
1.2.1.3.3.2.1	Performance Bonds, Bid Bonds & Warranties	Transaction-related contingent items such as Performance Bonds, Bid Bonds and Warranties, where the risk of loss arises from an irrevocable obligation to pay a third party, the non-financial obligation of the customer upon his failure to fulfill obligations under a contract or a transaction. Such contingencies would crystallise into actual liabilities dependent upon the occurrence or non-occurrence of an event other than that of a default in payment by the counterparty.

Line Code	Off Balance Sheet Items	Definition
1.2.1.3.3.2.2	Standby LCs Related to Particular Transactions	Contingent liabilities relating to particular transactions. Here too, there is a likelihood of the contingencies crystallizing into actual liabilities depending upon the occurrence or non-occurrence of an event other than that of a default in payment by counterparty.
1.2.1.3.3.2.3	Others	Other contingent liabilities arising from an irrevocable obligation to pay a third party, the non-financial obligation of a customer upon his failure to fulfil such obligation or terms under contract or transaction.
<b>1.2.1.3.3.3.0</b>	<b>Short-Term Self-Liquidating Trade-Related Contingencies</b>	<b>Conversion Factor is 20%. Short term is an original maturity period of one year or less for off balance sheet instruments.</b>
1.2.1.3.3.3.1	Shipping Guarantees	Guarantees issued by the reporting bank to customers where the reporting bank agrees to indemnify fully, to a named shipping agent, against all liabilities arising from the release of goods without production of Bills of Lading and/or other shipping documents by the receiving party.
1.2.1.3.3.3.2	Documentary Letters of Credit	Documentary credits collateralised by the underlying shipments which are short-term self-liquidating and trade-related transactions.
1.2.1.3.3.3.3	Trade Related Acceptances	Liabilities arising from acceptances that are based on a specific trade transaction either domestic or foreign.
1.2.1.3.3.3.4	Others	Contingent liabilities arising from short-term self-liquidating trade related obligations.
<b>1.2.1.3.3.4.0</b>	<b>Sale and Repurchase Agreements and Asset Sales with recourse where the credit risk remains with the Bank</b>	<b>Conversion Factor is 100%.</b>
1.2.1.3.3.4.1	Sale and Repurchase Agreements	Sale and Repurchase Agreement (REPO) is an agreement whereby a bank sells an asset to a third party with a commitment to repurchase it at an agreed price on an agreed future date. Purchase and Resale Agreements (Reverse REPOS) should be considered as collateralised loans/financing. The risk is to be measured as an exposure to the counterparty unless the underlying asset has been reported as an on-

Line Code	Off Balance Sheet Items	Definition
		balance sheet item where the risk weight appropriate to the underlying asset should be used.
1.2.1.3.3.4.2	Housing Loans/financing Sold with Recourse	The amount of housing loans/financing sold to a counterparty with recourse where the credit risk remains with the Bank.
1.2.1.3.3.4.3	Other Assets Sold with Recourse	Assets sold with recourse where the credit risk remains with the reporting bank. The holder of the asset is entitled to put the assets back to the reporting institution within an agreed period or under certain prescribed circumstances
1.2.1.3.3.4.4	Forward Assets Purchase	Commitment to purchase, at a specified future date and/or on pre-arranged terms, a loan/financing, security or other asset from another party.
1.2.1.3.3.4.5	Partly Paid Shares/Securities	Unpaid amounts on partly-paid shares and securities where the issuer may call upon the bank to pay at a pre-determined or unspecified date in the future.
1.2.1.3.3.4.6	Others	Placements of forward deposits and other commitments with certain drawdown. A forward deposit is an agreement between two parties whereby one will place and the other will receive, at a pre-determined future date, a deposit, at an agreed rate of interest/profit. A commitment to place a forward deposit should be reported under this item and weighted according to the risk-weight appropriate to the counterparty.
<b>1.2.1.3.3.5.0</b>	<b>Obligations under an On-going Underwriting Agreement</b>	<b>Conversion Factor is 50%.</b>
1.2.1.3.3.5.1	Underwriting of Shares/Securities Issue	Obligations due to underwriting of shares and securities, net of the amount sub-underwritten by another institution.
1.2.1.3.3.5.2	Note Issuance Facilities and Revolving Underwriting Facilities	Arrangements where a borrower may draw funds up to a prescribed limit over a pre-defined period through the issue of notes which the reporting bank has committed to underwrite.
1.2.1.3.3.5.3	Others	Other obligations due to on-going underwriting agreements.

Line Code	Off Balance Sheet Items	Definition
<b>1.2.1.3.3.6.0</b>	<b>Other Commitments with an Original Maturity of over one year (not cancellable)</b>	<b>Conversion Factor is 50%.</b>
1.2.1.3.3.6.1	Formal Standby Facilities and Credit Lines	Commitments include the undrawn portion of any binding arrangements which obligate the reporting institution to provide funds at some future date with original maturity over one year. Formal stand-by facilities and credit lines for Letters of Credit, Trust Receipts, etc; should be included under the item.
1.2.1.3.3.6.2	Undrawn Term Loans/financing	Undrawn portion of a term loans/financing with original maturity over one year.
1.2.1.3.3.6.3	Undrawn Overdraft Facilities/Unused Credit Card Lines	The undrawn portion of overdraft facilities and credit card lines with an original maturity of over one year.
1.2.1.3.3.6.4	Others	Any other commitment with an original maturity over one year.
<b>1.2.1.3.3.7.0</b>	<b>Commitments with an original maturity up to 1 year (not cancellable)</b>	<b>Conversion Factor is 20%.</b>
1.2.1.3.3.7.1	Formal Standby Facilities and Credit Lines	Commitments include the undrawn portion of any binding arrangements which obligate the reporting institution to provide funds at some future date which cannot be cancelled at any time. Formal stand-by facilities and credit lines for Letters of Credit, Trust Receipts, etc; should be included under the item.
1.2.1.3.3.7.2	Undrawn Term Loans/financing	Undrawn portion of a term loans/financing with an original maturity of less than one year or which cannot be cancelled at any time by the reporting bank.
1.2.1.3.3.7.3	Undrawn Overdraft Facilities/Unused Credit Card Lines	The undrawn portion of overdraft facilities and credit card lines with an original maturity of less than one year or which cannot be cancelled at any time by the reporting bank.
1.2.1.3.3.7.4	Others (please identify)	Any other commitment with an original maturity up to one year which cannot be cancelled at any time.
<b>1.2.1.3.3.8.0</b>	<b>Commitments which can be unconditionally cancelled at any time</b>	<b>Conversion Factor is 0%.</b>

Line Code	Off Balance Sheet Items	Definition				
1.2.1.3.3.8.1	Formal Standby Facilities and Credit Lines	Commitments include the undrawn portion of any binding arrangements which obligate the reporting institution to provide funds at some future date. Formal stand-by facilities and credit lines for Letters of Credit, Trust Receipts, etc; should be included under the item as long as they are unconditionally cancellable at any time by the reporting bank.				
1.2.1.3.3.8.2	Undrawn Term Loans/financing	Undrawn portion of a term loans/financing with an original maturity of less than one year or which can be unconditionally cancelled at any time by the reporting bank.				
1.2.1.3.3.8.3	Undrawn Overdraft Facilities/Unused Credit Card Lines	The undrawn portion of overdraft facilities and credit card lines with an original maturity of less than one year or which can be unconditionally cancelled at any time by the reporting bank.				
1.2.1.3.3.8.4	Others (please identify)	Any other commitment with an original maturity up to one year which can be unconditionally cancelled at any time.				
1.2.1.3.3.9.0	Foreign Exchange and Gold Contracts	<p>Exchange rate contracts include the following:</p> <ol style="list-style-type: none"> <li>Forward foreign exchange contracts</li> <li>Currency futures</li> <li>Cross currency FX swaps</li> <li>Other similar instruments including contracts to buy or sell gold</li> </ol> <p>To arrive at the credit equivalent amounts of foreign exchange contracts, applying the current exposure method, a bank must calculate the current replacement cost of the contract by marking the contract to market, thus capturing the current exposure without need for estimation, and then adding a factor (the add-on) to reflect the potential future exposure over the life of the contract. A bank must then sum the total replacement cost of all contracts with positive value and an amount for potential future exposure calculated on the total notional principal amount of the foreign exchange contracts book, split by residual maturity as follows: -</p> <table border="1" data-bbox="837 1944 1348 2042"> <thead> <tr> <th>Residual Maturity</th> <th>Add-on Factor</th> </tr> </thead> <tbody> <tr> <td>One year or less</td> <td>2%</td> </tr> </tbody> </table>	Residual Maturity	Add-on Factor	One year or less	2%
Residual Maturity	Add-on Factor					
One year or less	2%					

Line Code	Off Balance Sheet Items	Definition								
		<table border="1"> <tr> <td data-bbox="837 280 1121 344">Over one year to five years</td> <td data-bbox="1121 280 1348 344">5%</td> </tr> <tr> <td data-bbox="837 344 1121 387">Over five years</td> <td data-bbox="1121 344 1348 387">7.5%</td> </tr> </table>	Over one year to five years	5%	Over five years	7.5%				
Over one year to five years	5%									
Over five years	7.5%									
1.2.1.3.3.10.0	Interest/Profit Rate Contracts	<p>Interest/profit rate contracts include:</p> <ol style="list-style-type: none"> <li>Single currency interest/profit rate swaps</li> <li>Basis swaps</li> <li>Forward rate agreements</li> <li>Interest/profit rate futures</li> <li>Other similar instruments</li> </ol> <p>To arrive at the credit equivalent amounts of interest rate/profit rate contracts, applying the current exposure method, a bank must calculate the current replacement cost of the contract by marking the contract to market, thus capturing the current exposure without need for estimation, and then adding a factor (the add-on) to reflect the potential future exposure over the life of the contract. A bank must then sum the total replacement cost of all contracts with positive value and an amount for potential future exposure calculated on the total notional principal amount of the interest/profit rate contracts book, split by residual maturity as follows: -</p> <table border="1"> <thead> <tr> <th data-bbox="829 1312 1121 1406">Residual Maturity</th> <th data-bbox="1121 1312 1348 1406">Conversion Factor</th> </tr> </thead> <tbody> <tr> <td data-bbox="829 1406 1121 1442">One year or less:</td> <td data-bbox="1121 1406 1348 1442">0.5%</td> </tr> <tr> <td data-bbox="829 1442 1121 1516">Over one year to Five years</td> <td data-bbox="1121 1442 1348 1516">1%</td> </tr> <tr> <td data-bbox="829 1516 1121 1552">Over Five Years</td> <td data-bbox="1121 1516 1348 1552">2%</td> </tr> </tbody> </table>	Residual Maturity	Conversion Factor	One year or less:	0.5%	Over one year to Five years	1%	Over Five Years	2%
Residual Maturity	Conversion Factor									
One year or less:	0.5%									
Over one year to Five years	1%									
Over Five Years	2%									
1.2.1.3.3.11.0	Equities Derivatives Contracts	<p>Equities derivatives contracts include:</p> <ol style="list-style-type: none"> <li>Stock index futures.</li> <li>Forward purchases or sales of equities where the settlement date is more than 3 days in the future.</li> </ol> <p>To arrive at the credit equivalent amounts of equities contracts, applying the current exposure method, a bank must calculate the current replacement cost of the contract by marking the contract to market, thus capturing the current exposure without need for estimation, and then adding a factor (the add-</p>								

Line Code	Off Balance Sheet Items	Definition								
		<p>on) to reflect the potential future exposure over the life of the contract. A bank must then sum the total replacement cost of all contracts with positive value and an amount for potential future exposure calculated on the total notional principal amount of the equities derivatives book, split by residual maturity as follows: -</p> <table border="1" data-bbox="810 555 1378 734"> <thead> <tr> <th>Residual Maturity</th> <th>Conversion Factor</th> </tr> </thead> <tbody> <tr> <td>One year or less</td> <td>6.0%</td> </tr> <tr> <td>Over one year to five years</td> <td>8.0%</td> </tr> <tr> <td>Over five years</td> <td>10.0%</td> </tr> </tbody> </table>	Residual Maturity	Conversion Factor	One year or less	6.0%	Over one year to five years	8.0%	Over five years	10.0%
Residual Maturity	Conversion Factor									
One year or less	6.0%									
Over one year to five years	8.0%									
Over five years	10.0%									
1.2.1.3.3.12.0	Precious Metals Contracts (except Gold)	<p>Precious metals contracts include:</p> <ul style="list-style-type: none"> <li>a. Forward purchases or sales of precious metals</li> <li>b. Precious metals futures contracts</li> <li>c. Swaps involving precious metals.</li> </ul> <p>To arrive at the credit equivalent amounts of precious metals contracts, applying the current exposure method, a bank must calculate the current replacement cost of the contract by marking the contract to market, thus capturing the current exposure without need for estimation, and then adding a factor (the add-on) to reflect the potential future exposure over the life of the contract. A bank must then sum the total replacement cost of all contracts with positive value and an amount for potential future exposure calculated on the total notional principal amount of the precious metals book, split by residual maturity as follows: -</p> <table border="1" data-bbox="799 1554 1350 1733"> <thead> <tr> <th>Residual Maturity</th> <th>Conversion Factor</th> </tr> </thead> <tbody> <tr> <td>One year or less</td> <td>7%</td> </tr> <tr> <td>Over one year to five years</td> <td>7%</td> </tr> <tr> <td>Over five years</td> <td>8%</td> </tr> </tbody> </table>	Residual Maturity	Conversion Factor	One year or less	7%	Over one year to five years	7%	Over five years	8%
Residual Maturity	Conversion Factor									
One year or less	7%									
Over one year to five years	7%									
Over five years	8%									
1.2.1.3.3.13.0	Other Commodities Contracts	<p>Commodities include oil and other products where contracts may be traded on financial markets. Such contracts may include:</p> <ul style="list-style-type: none"> <li>a. Forward purchases or sales of commodities</li> <li>b. Commodities futures contracts</li> <li>c. Swaps involving commodities.</li> </ul>								

Line Code	Off Balance Sheet Items	Definition								
		<p>To arrive at the credit equivalent amounts of commodities contracts, applying the current exposure method, a bank must calculate the current replacement cost of the contract by marking the contract to market, thus capturing the current exposure without need for estimation, and then adding a factor (the add-on) to reflect the potential future exposure over the life of the contract. A bank must then sum the total replacement cost of all contracts with positive value and an amount for potential future exposure calculated on the total notional principal amount of the commodities book, split by residual maturity as follows: -</p> <table border="1" data-bbox="810 898 1377 1084"> <thead> <tr> <th data-bbox="810 898 1182 969">Residual Maturity</th> <th data-bbox="1182 898 1377 969">Conversion Factor</th> </tr> </thead> <tbody> <tr> <td data-bbox="810 969 1182 1003">One year or less</td> <td data-bbox="1182 969 1377 1003">10%</td> </tr> <tr> <td data-bbox="810 1003 1182 1043">Over one year to five years</td> <td data-bbox="1182 1003 1377 1043">12%</td> </tr> <tr> <td data-bbox="810 1043 1182 1084">Over five years</td> <td data-bbox="1182 1043 1377 1084">15%</td> </tr> </tbody> </table>	Residual Maturity	Conversion Factor	One year or less	10%	Over one year to five years	12%	Over five years	15%
Residual Maturity	Conversion Factor									
One year or less	10%									
Over one year to five years	12%									
Over five years	15%									
1.2.1.3.3.14.0	Treatment of failed trades and non-DVP transactions for Contracts listed above (Foreign Exchange & Gold, Interest/Profit Rate, Equities Derivatives, Precious Metals (except Gold) and other Commodities)	<p>Contracts listed which are settled through a Delivery versus Payment (DVP) system, providing for simultaneous exchanges of securities for cash, expose banks to a risk of loss on the difference between the transaction valued at the agreed settlement price and the transaction valued at the current market price (this would be a positive current exposure) if the counterparty fails to honour his part of the transaction (i.e. a 'failed trade').</p> <p>More commonly, transactions where cash is paid without receipt of the corresponding receivable (securities, FX, gold or commodities) or vice versa (i.e. non-DvP, or free delivery) expose banks to immediate risk of loss on the amount of cash paid or deliverables delivered.</p> <p>These failed trades and non-DvP transactions are covered in <b>Appendix 2</b>.</p>								

## Appendix 5: Components of Operational Risk Calculations

Line Code	Line Item	Definition
1.2.1.4.1.0.0	Gross Income	The total gross income should be total net income less total exclude items.
1.2.1.4.2.0.0	Net Income	The total net income should be sum of total net interest/profit income and total non-interest/profit income.
1.2.1.4.2.1.0	Net Interest/profit Income	The total net interest/profit income should be the total interest/profit income less total interest/profit expenses as reported in the annual audited profit and loss statement.
1.2.1.4.2.2.0	Non-interest/profit Income	The total non-interest/profit income should be the total income other than the interest/profit income as reported in the annual audited profit and loss statement.
1.2.1.4.3.1.0	Realised Profits from the Sale of Securities in the Banking Book	Exclude realised profits/losses from the sale of securities in the "held to maturity" category
1.2.1.4.3.2.0	Extraordinary / Irregular Item of Income	Exclude other extraordinary or irregular items of income and expenditure; and exclude income derived from insurance/takaful activities (i.e. income derived by writing insurance/takaful policies) and insurance/takaful claims in favour of the bank.

## Appendix 6: Example of Significant Investments in Banks, Securities Firms and Other Financial Entities

This appendix explains how ‘significant’ minority investments in the regulatory capital of other financial entities cause deductions to a bank’s capital.

Let us assume that Bank A has \$100mn of capital after deduction of goodwill and other items in worksheet CAR-2 at cell C16 of the Capital Adequacy Return.

Bank A has the following investments, only some of which are ‘significant’ because the bank owns 20% or more, but less than 50% of the issued share capital of the concerned financial entity.

<b>Financial Entity</b>	<b>% of Capital Financial Entity</b>	<b>Status</b>
Finance Company B	100%	Subsidiary
Insurance Company C	25%	Significant Investment
Securities Firm D	40%	Significant Investment
Bank E	15%	Investment

Having established the treatment of the Financial Entities, the regulatory treatment can then be decided upon as shown below.

<b>Financial Entity</b>	<b>% of Capital Financial Entity</b>	<b>Status</b>	<b>Regulatory Treatment</b>
Finance Company B	100%	Subsidiary	Full consolidation of assets and liabilities
Insurance Company C	25%	Significant Investment	Deduction of full amount of value of investment
Securities Firm D	40%	Significant Investment	Deduction of full amount of value of investment
Bank E	15%	Investment	Risk weighting of investment at 100% (listed) or 150% (unlisted), subject to accounting treatment and determination of ‘control’ of bank

In the case of Bank E, the auditor must make a determination whether Bank A exercises ‘control’ over Bank E by means other than voting control over shares held by Bank A. Control may be exercised by means of the holding of proxy votes, or board or management appointments. The AMBD will follow accounting treatment of investments where control is determined to exist. In cases of ‘control’, then the amount of investment will be deducted from the capital of Bank A.

## Appendix 7: Example for Significant Investments in Commercial Entities

This appendix explains how the materiality thresholds of 15% (M1) and 60% (M2) of a bank's Total Capital cause deductions to a bank's Total Capital where a bank makes 'significant investments' in another entity's share capital.

Let us assume that Bank A has \$100mn capital after deductions of goodwill and other deduction items in worksheet CAR-2 at cell C16 of the Capital Adequacy Return.

Bank A has the following commercial investments, all of which are 'significant' because the bank owns 20% or more of the issued share capital of the concerned entity.

Materiality threshold 1 (M1) is \$15mn. This means that the portion of any investment in a commercial entity which exceeds M1 shall be deducted as shown below.

Investee	Amount of Investment	M1 Deduction
B	\$11mn	N/A
C	\$12mn	N/A
D	\$16mn	\$1mn
E	\$20mn	\$5mn
F	\$40mn	\$25mn
<b>Aggregate</b>	<b>\$99mn</b>	<b>\$31mn</b>

This means that a deduction of \$31mn of Capital will be applied in respect of M1 deductions. We now need to check if there will be any deductions in respect of the aggregate of such investments. First we need to calculate the remaining residual amounts of significant investments after M1 deductions to check if they exceed the M2 limit of \$60mn (60% of total capital).

Investee	Amount of Investment	M1 Deduction	Residual Amount After M1 Deduction
B	\$11mn	N/A	\$11mn
C	\$12mn	N/A	\$12mn
D	\$16mn	\$1mn	\$15mn
E	\$20mn	\$5mn	\$15mn
F	\$40mn	\$25mn	\$15mn
<b>Aggregate</b>	<b>\$99mn</b>	<b>\$31mn</b>	<b>\$68mn</b>

As can be seen, the residual amount of investments after M1 deductions is \$68mn. This is \$8mn in excess of the M2 limit and therefore a second M2 deduction to total capital will be applied. This brings the total deductions to capital in respect of significant investments in commercial entities to \$39mn [i.e. \$31mn (M1) + \$8mn (M2)].

## Appendix 8: Example for calculation of Replacement Cost and Principal Amount for the generation of Credit Equivalent Amount (CEA) for forward FX Contracts in Worksheet 3.3 of the CAR return

This appendix explains how a bank should arrive at the CEAs for its FX forward instruments in worksheet 3.3. Its methodology is relevant for calculating the CEA of other derivatives contracts such as commodities contracts. We will take the example of a small portfolio of USD/GBP forward foreign exchange contracts that a bank has entered into.

Let us assume that Bank A bought GBP 1 million at a rate of \$1.48 on 23<sup>rd</sup> June 2016 on the eve of the Brexit Vote for delivery 6 months forward (23<sup>rd</sup> December 2016). It anticipated (like many) that Britain would remain in the EU and therefore Sterling would probably rise after the result of the referendum. The referendum result was for 'Brexit' and Sterling fell sharply as a result. On 21<sup>st</sup> November 2016, the bank buys more sterling at \$1.22. Let us assume yesterday's (i.e. 13<sup>th</sup> December) closing price was \$1.26, how does the bank report these contracts for the purpose of calculating counterparty credit risk in Worksheet 3.3? If we value the first contract where the bank has bought GBP 1mn for value date of 23<sup>rd</sup> December, it will have to deliver \$1.48mn. If it had bought the GBP yesterday, it would have paid \$1.26mn, therefore this contract has a negative replacement cost of \$220,000. In the second contract, the bank will have to deliver only \$1.22mn on 21<sup>st</sup> December and therefore this contract has a positive replacement value of \$40,000 (i.e. the bank would have to buy GBP at a higher rate of \$1.26 if the counterparty fails to deliver on the delivery date of 21<sup>st</sup> December). The positive and negative values in USD are shown in the table below.

FX GBP/USD	Amount of Contract	Mark to market value
23/6/16 for 23/12/16 delivery	\$1.48mn = GBP 1mn	(\$220,000)
21/11/16 for 21/12/16 delivery	\$1.22mn = GBP 1mn	\$40,000

For the purpose of Worksheet 3.3, the bank should take contracts with positive value and enter them into Column C. In this case, the bank ignores the first June contract and enters the November contract's positive value into Column C. Next, the bank must enter the notional principal amount of both the contracts (GBP2mn x 1.26) using the spot rate at the reporting date into column D. Since both contracts mature within one year, the amount of \$2.52mn must be entered into line 1.2.1.3.3.9.1.

1.2.1.3.3.9.0	Foreign Exchange & Gold Contracts	40,000	2,520,000		90,400
1.2.1.3.3.9.1	Residual Maturity – less than one year	40,000	2,520,000	2.0	90,400
1.2.1.3.3.9.2	Residual Maturity – more than one year and less than five years			5	-
1.2.1.3.3.9.3	Residual Maturity – more than five years			7.5	-

Of course, in the case of a Bruneian bank, the above amounts must be converted into BND at yesterday's BND/USD rates (1.41) and so the 'final' form of the CAR worksheet looks like this:

1.2.1.3.3.9.0	Foreign Exchange & Gold Contracts	56,400	3553,200		127,464
1.2.1.3.3.9.1	Residual Maturity – less than one year	56,400	3553,200	2.0	127,464
1.2.1.3.3.9.2	Residual Maturity – more than one year and less than five years			5	-
1.2.1.3.3.9.3	Residual Maturity – more than five years			7.5	-

## Appendix 9: The Effect of Collateral on Specific Provisioning Levels

This appendix gives several examples of how collateral may affect the level of specific provisioning and therefore the reported level of Credit Risk Weighted Assets (CRWAs). We start in 'Scenario 1' where there is a loan with carrying amount of \$1,000 secured by a cash deposit of \$1,000.

Scenario 1						
Category of Assets	Initial Carrying Amount	Specific Provision	Pre CRM Exposure (Carrying Amount Less Specific Provision)	'Eligible Collateral'	Credit RWAs	
				Deposit @ 0%	Secured	Unsecured
Substandard @ 20%	1000	Step 1: $1,000 \times 20\% = 200$	800	1000	0	0
Doubtful @ 50%	800	Step 1: $800 - 1000 = 0$ Step 2: $0 \times 50\% = 0$	800	1000	0	0
Loss @ 100%	800	Step 1: $800 - 1000 = 0$ Step 2: $0 \times 100\% = 0$	800	1000	0	0

Let us assume that the loan is 91 days past due and is therefore categorised as 'substandard'. According to Notice BU/N-5/2017/40, the bank must take a specific provision of minimum 20% of the carrying amount of the loan (with no allowance for collateral for provisioning purposes). This provision amounts to \$200 and is shown in the specific provision column and therefore the net loan amount to be shown in the CAR Template is \$800 (\$1,000 - \$200). The deposit qualifies as eligible collateral and so the value of the collateral is applied against the loan and since a cash deposit is weighted at 0%, the CRWAs amount to zero (\$800 x 0%).

If the loan moves to 181 days past due, it becomes 'doubtful' and a specific provision of minimum 50% of the carrying amount must be applied. Now collateral may be taken into consideration when taking specific provisions. The carrying amount is \$800, reflecting provisions already taken of \$200. The eligible collateral of \$1000 is applied against the carrying amount of \$800, meaning that no extra provision needs to be taken. CRWAs once again amount to zero.

If the loan moves to 361 days past due, it moves into the 'loss' category, and a specific provision of minimum 100% of the carrying amount must be applied. The carrying amount is still \$800, reflecting initial provisions of \$200. Once again, the eligible collateral of \$1000 is applied against the carrying amount of \$800. Since cash deposits are weighted at zero, the CRWAs are zero.

Scenario 2						
Category of Assets	Initial Carrying Amount	Specific Provision	Pre CRM Exposure (Carrying Amount Less Specific Provision)	'Eligible Collateral'	Credit RWAs	
				Gold @ 20%	Secured	Unsecured
Substandard @ 20%	1000	Step 1: $1,000 \times 20\% = 200$	800	600	120	200
Doubtful @ 50%	800	Step 1: $800 - 600 = 200$ Step 2: $200 \times 50\% = 100$	700	600	120	100
Loss @ 100%	700	Step 1: $700 - 600 = 100$ Step 2: $100 \times 100\% = 100$	600	600	120	0

This case is identical to scenario 1 above, except this time the eligible collateral is Gold, valued at \$600 and which is weighted at 20%. This scenario shows the effect when collateral does not fully cover the carrying amount of a loan and the collateral carries a risk weight.

Once again, let us assume that the loan is 91 days past due and is therefore categorised as 'substandard'. According to Notice BU/N-5/2017/40, the bank must take a specific provision of minimum 20% of the carrying amount of the loan (with no allowance for collateral for provisioning purposes). This provision amounts to \$200 and is shown in the specific provision column and therefore the net loan amount to be shown in the CAR Template is \$800 (\$1,000 - \$200). The gold qualifies as eligible collateral and so the value of the collateral is applied against the loan for risk weighting purposes. The gold only covers \$600 of the net carrying amount of \$800 and so the 'unsecured' \$200 of the loan is weighted at 100%. The 'secured' \$600 portion is weighted at 20% (the risk weight for gold). The CRWAs therefore amount to \$320.

If the loan moves to 181 days past due, it is now classified as 'doubtful' and a specific provision of minimum 50% of the carrying amount must be applied. The initial carrying amount is \$800, reflecting provisions already taken of \$200. To calculate the required specific provisions, the eligible collateral of \$600 is applied against the carrying amount of \$800, leaving a net amount of \$200, against which provisions must be taken. The additional provision required is \$100 (50% x \$200), and therefore the carrying amount is \$700. The gold qualifies as eligible collateral for risk weighting purposes and so the value of the gold is applied against the net carrying amount of the loan. The gold only covers \$600 of the net carrying amount of \$700 and so the 'unsecured' \$100 of the loan is weighted at 100%. The 'secured' \$600 portion is weighted at 20% (the risk weight for gold). The CRWAs amount to \$220.

If the loan moves to 361 days past due, it is classified as 'loss' and a specific provision of minimum 100% of the carrying amount must be applied. The initial carrying amount is now \$700, reflecting specific provisions already taken of \$300. To calculate the required specific provisions, the eligible collateral of \$600 is applied against the carrying amount of \$700, leaving a net amount of \$100, against which provisions must be taken. The additional provision required is \$100 (100% x \$100), and therefore the carrying amount of the loan is \$600. The gold qualifies as eligible collateral for risk weighting purposes and so the value of the gold is applied against the net carrying amount of the loan. The gold covers the \$600 net carrying amount of the loan and so the loan is fully 'secured' and is weighted at 20% (the risk weight for gold). The CRWAs amount to \$120.

Scenario 3						
Category of Assets	Initial Carrying Amount	Specific Provision	Pre CRM Exposure (Carrying Amount Less Specific Provision)	'Eligible Collateral'	Credit RWAs	
				Gold @ 20%	Secured	Unsecured
Substandard @ 20% (Plus LAND, FSV=500)	1000	Step 1: 1,000 x 20% = 200	800	600	120	200
Doubtful @ 50% (Plus LAND, FSV=500)	800	Step 1: 800 - [125+600] = 75 Step 2: 75 x 50% = 37.5	762.5	600	120	162.5
Loss @ 100% (Plus LAND, FSV=500)	762.5	Step 1: 762.5 - [125+600] = 37.5 Step 2: 37.5 x 100% = 37.5	725	600	120	125

This case is identical to scenario 2 above, except this time the scenario shows the effect of a first mortgage on a property for provisioning purposes. The Forced Sale Valuation for the property is \$500 thus giving a loan to Value ratio of 200% (i.e. \$1,000/\$500).

Once again, let us assume that the loan is 91 days past due and is therefore categorised as 'substandard'. According to Notice BU/N-5/2017/40, the bank must take a specific provision of minimum 20% of the carrying amount of the loan (with no allowance for collateral for provisioning purposes). This provision amounts to \$200 and is shown in the specific provision column and therefore the net loan amount to be shown in the CAR Template is \$800 (\$1,000 - \$200). The gold qualifies as eligible collateral and so the value of the collateral is applied against the loan for risk weighting purposes. The gold only covers \$600 of the net carrying amount of \$800 and so the 'unsecured' \$200 of the loan is weighted at 100%. The 'secured' \$600 portion is weighted at 20% (the risk weight for gold). The CRWAs therefore amount to \$320.

If the loan moves to 181 days past due, it is now classified as 'doubtful' and a specific provision of minimum 50% of the carrying amount must be applied. The initial carrying amount is \$800, reflecting provisions already taken of \$200. To calculate the required specific provisions, both the mortgage on the property and the value of the gold may be taken into account. First the FSV of the property is multiplied by 25% (\$500 x 25%) as required by Notice BU/N-5/2017/40. This gives a value for provisioning purposes of \$125. Next, the value of the gold (\$600) is applied against the carrying amount of \$800. The combined total of discounted FSV of the real estate and the gold amount to \$725. The carrying amount of the loan is \$800. The carrying amount of the loan exceeds the combined collateral value by \$75 (\$800 - [\$125 + \$600]). This 'unsecured' amount is subject to provisioning. Required provisioning is 50%. Therefore, an additional specific provision of \$37.5 is taken. The carrying amount is adjusted to \$762.5. The gold qualifies as eligible collateral for risk weighting purposes and so the value of the gold is applied against the net carrying amount of the loan. The gold only covers \$600 of the net carrying amount of \$762.5 and so the 'unsecured' \$162.5 of the loan is weighted at 100%. The 'secured' \$600 portion is weighted at 20% (the risk weight for gold). The CRWAs amount to \$282.5.

If the loan moves to 361 days past due, it is classified as 'loss' and a specific provision of minimum 100% of the carrying amount must be applied. The initial carrying amount is now \$762.5, reflecting specific provisions already taken of \$237.5. To calculate the required specific provisions, both the mortgage and the gold may be taken into account. The discounted FSV of the property (\$125) is applied and added to the value of the gold (\$600). The combined total of FSV and gold amounts to \$725. The carrying amount of the loan is \$762.5. The carrying amount of the loan exceeds the combined collateral value by \$37.5 ( $\$762.5 - [\$125 + \$600]$ ). This 'unsecured' amount is subject to provisioning. Required provisioning is 100%. Therefore, an additional specific provision of \$37.5 is taken. The carrying amount is adjusted to \$725. The gold qualifies as eligible collateral for risk weighting purposes and so the value of the gold is applied against the net carrying amount of the loan. The gold only covers \$600 of the net carrying amount of \$725 and so the 'unsecured' \$125 of the loan is weighted at 100%. The 'secured' \$600 portion is weighted at 20% (the risk weight for gold). The CRWAs amount to \$245.

Banks are free at any stage to take higher provisions than the examples given in these 3 scenarios. If IFRS requires higher provisioning, then IFRS provisioning levels should be adopted.